

Woodfibre LNG Project: Waste Discharge Authorization Permit Application for Air Emissions to the BC Energy Regulator October 2026

This package contains:

- **Environmental Protection Notice**
- **Information Requirements Table for Air Emissions – Oil & Gas Sector**
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 - **Site Map**
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 - **Technical Data Report**
 - **Dispersion Modelling Plan**

ENVIRONMENTAL PROTECTION NOTICE

ENVIRONMENTAL PROTECTION NOTICE

Application for a Permit under the provisions of the *Environmental Management Act*

We, Woodfibre LNG General Partner Inc, as a General Partner on behalf of the Woodfibre LNG Limited Partnership, 900-1185 West Georgia Street, Vancouver, BC, V6E 4E6, intend to submit this application to the Director to authorize the discharge of air emissions from the Woodfibre liquefied natural gas (LNG) facility. The source(s) of air emissions include the heat medium furnace, thermal oxidizer, high pressure (HP) flare, low pressure (LP) flare, essential diesel generators, diesel fire water pumps and various LNG facility vents.

The Woodfibre LNG facility is located approximately seven kilometres from Squamish, British Columbia within the traditional territory of Skwxwú7mesh Úxwumixw (Squamish Nation) and səlilwətał (Tsleil-Waututh Nation). The land upon which the facility will be situated and air emissions will originate is at National Topographic System (NTS) A-001-K/092-G-11 on District Lot 2351 Group 1 New Westminster Dist., District Lot 8295 Group 1 New Westminster Dist., and District Lot 8296 Group 1 New Westminster Dist.

The facility is designed to run on electricity sourced from BC Hydro's grid, rather than natural gas. There will be continuous and intermittent sources of air emissions from the Woodfibre LNG facility, with a number of emission controls in place. The heat medium furnace is equipped with ultra-low nitrogen oxides (NOx) burners and the thermal oxidizer is equipped with low NOx burners; these minimize the amount of NOx produced when gas is burned. The HP flare uses a multi-nozzle style flare tip that automatically adjusts the opening size of the flare tip nozzles based on the flare header pressure, which results in high exit speed of the gas, keeping the gas burning efficiently across a wide range of conditions. The essential diesel generators and diesel fire water pumps will operate using low sulphur diesel.

The sources and characteristics of the air emissions are provided in the Table 1 and 2.

Table 1: Continuous (routine) Sources of Emissions

Source	Input Gas Flow Rate (sm ³ /h) ^a	Exhaust Gas Flow Rate (sm ³ /h)	Contaminants of Concern (kg/hr) ^b				
			Nitrogen Oxides (NO _x)	Sulphur Dioxide (SO ₂) ^d	Fine Particulate Matter (PM _{2.5})	Carbon Monoxide (CO)	Volatile Organic Compounds (VOC)
Heat Medium Furnace ^c	3,418	31,465	2.20	0.04	0.08	5.58	0.27
Thermal Oxidizer ^{c,d}	8,470	19,946	1.09	11.20	0.03	1.07	0.10
HP Flare ^e							
- Stabilizing Operations	3,887	-	4.52	0.19	0.19	18.61	39.60
- Steady State (normal) Operations	1,204	-	1.23	0.02	0.06	5.05	10.76
LP Flare ^e							
- Stabilizing Operations	1,565	-	1.50	0.01	0.08	6.16	13.10
- Steady State (normal) Operations	557	-	0.55	0.01	0.03	2.28	4.85
Notes: a) Gas flow rates are expressed at standard conditions of 101.325 kPa and 20°C on a dry basis and are reported in standard cubic metres per hour (sm ³ /h). b) Contaminant loading rates are based on the maximum/design emission rates used for the WDA assessment and have been converted from g/s to kg/h. c) Based on the equipment operating at 100% of the manufacture specifications. d) SO ₂ emission rates are based on the sulphur content and flow rate of the source-specific gas streams. The routine inlet feed gas has a total sulphur concentration of 24 ppm, which is the basis for the routine Thermal Oxidizer scenario and the stabilizing and steady state operating cases for the flare system. e) Stabilizing operations is applicable to the first two years of operations. Steady-state (normal) operations commences in year three of operations. Steady-state (normal) operations flare flow includes the continuous pilot and purge flows together with applicable minor process-gas sources such as design leakage and, for the LP flare, compressor seal gas. Stabilizing operation flare flow includes the steady state (normal) operation flare gases plus additional gas associated with passing valves.							

Table 2: Intermittent Sources of Emissions

[illegible]

The application also includes dispersion modelling for a commissioning case, when flaring is required to support the testing and start of commissioning; a cumulative case, which incorporates the emissions from the FortisBC Squamish V2 Compressor Station; plus the inclusion of baseline (existing conditions) and marine vessels associated with LNG export.

Air quality dispersion modelling was completed to assess potential effects from the facility emissions. Predicted concentrations at off-site receptors were below applicable BC ambient air quality objectives for the assessed contaminants and operating scenarios. These objectives are specifically designed to protect human health and the environment. Any person may review a printed copy of the application at the Squamish Public Library or download an electronic copy of the application material from the Woodfibre LNG website at <https://woodfibrelng.ca/about-woodfibre-ling/regulatory-overview/regulatory-filings/>

Any person who may be adversely affected by the proposed discharge of air emissions and wishes to provide relevant information may, within 30 days after the last date of posting, publishing, service or display, send written comments to the applicant, with a copy to Environmental Stewardship, BC Energy Regulator at 6534 100th Ave, Fort St John, BC, V1J 8C5. Comments may also be submitted to by email to the applicant (info@wlng.ca), with a copy to the BC Energy Regulator (waste.management@bc-er.ca). The identity of any respondents and the contents of anything submitted in relation to this application will become part of the public record.

Dated this 23 day of October, 2026.

Marnie Gohemas

Contact person: Janine Forrest

Email address: info@wlng.ca

Phone: 1-888-801-7929

INFORMATION REQUIREMENTS TABLE FOR AIR EMISSIONS – OIL & GAS SECTOR

Information Requirements Table for Air Emissions - Oil&Gas Sector

Application Tracking Number: 455458

Authorization Number: 113083

[Woodfibre LNG General Partner Inc / Woodfibre Liquefied Natural Gas Export Facility]

Applicant Summary		Ministry of Environment	
Application Tracking #	455458	Prepared by:	April Hauk (Stantec)
Authorization #	113083	Title	Associate, Air Quality
Applicant / Facility Name	Woodfibre LNG General Partner Inc / Woodfibre LNG Export Facility	Date	October 23, 2026

The *Information Requirements Table (IRT) for Air Emissions* is a tool used by staff of the Ministry of Environment and Climate Change Strategy (ENV) to document specific guidance and instructions given to an applicant pursuing authorization to discharge under the *Environmental Management Act*.

This specialized *IRT for Air Emissions – Oil&Gas Sector* is based on the more generic IRT with enhancements to specifically cater to complexities associated with air emissions for applications from the Oil & Gas sector. To assist in filling out this table, please refer to the accompanying guidance document: *Guidance for Air Emission Application - Oil & Gas Sector (Oil Gas Guidance)* <https://www2.gov.bc.ca/assets/download/EBAF0252930843F1976098BB34140946>

Please note: For any given application, not all the items will apply and not all required items will warrant detailed discussion of methods and other concerns. Meaning each application is unique with a unique set of requirements and level of detail.

As part of the Preliminary Application Phase, ENV will discuss with the applicant the items listed in this table to determine what will be required in support of their final application. A tick mark in the “Required” column of the table indicates an information item to be included into the application package as agreed to by both parties or as directed by ENV. Should it be determined that specific methods will be used to derive this information, this will be specified with a tick mark in the “Methods” column. Specific methods may not be necessary for applications that will not require a subject matter expert review. In cases where complex impact assessments are to be undertaken, agreement on the methods used will be required. For simple methods, the methods used could be discussed with the applicant in a meeting and noted as agreed to in the table. For more complex methods, the applicant may be required to submit a “Methods Package” by an agreed date for ENV review, comment and acceptance. Once methods are accepted by ENV they should be either described in the “Methods” column or a reference made to the document describing the Methods Package.

If required, this document will form part of an Application Instruction Document (AID) which documents application submission requirements for the applicant. The AID is issued by the Director after a preliminary application meeting has occurred.

When required, ENV will be assessing applications by way of this table and it is expected that the applicant does the same prior to any preliminary meetings and/or prior to any final submissions. The Ministry will be screening the final received application against the requirements noted in the AID to ensure it is complete before resources are dedicated to a full, detailed review.

Information Requirements Table for Air Emissions - Oil&Gas Sector

Application Tracking Number: 455458

Authorization Number: 113083

[Woodfibre LNG General Partner Inc / Woodfibre Liquefied Natural Gas Export Facility]

Information	Requirements	Comments	Location in Final Application
A. TECHNICAL ASSESSMENT REPORT			
1. Table of Contents	Required ☒		Technical Assessment Report (TAR) – Table of Contents
2. Executive Summary	Required ☒		TAR – Executive Summary
2.1. A brief description of the purpose of the application, including the proposed facilities and processes.	Required ☒	A brief description of the purpose of the application, confirming operation as a prescribed activity under the Waste Discharge Regulation (WDR), and under which category it is prescribed.	TAR – Executive Summary
2.2. A brief description of the proposed emissions and pollution control technology.	Required ☒	A brief description of the proposed emissions and pollution control technology. Indication of whether effluent and refuse are generated, how they are managed or disposed and whether disposal of either will be included in the application.	TAR – Executive Summary
2.3. A description of the key environmental and operational issues.	Required ☒	Identified during the application process, along with proposed solutions and/or mitigation measures	TAR – Executive Summary
3. Project Introduction	Required ☒	A list and brief description of the applicant's operations in Canada and BC. Project history leading up to the application, overview of products produced and markets.	TAR – §1.0 (including 1.1–1.2)
4. Operational System Description			TAR – §2.0
4.1. Detailed process, operational and relevant control system.	Required ☒	Control systems that may directly relate to emission quality and quantity. This information should include non-routine emission events such as emergency shut down, flaring, etc.	TAR – §2.1; 3.1–3.2
4.2. Include a sytem/block flow diagram showing the gas streams into and out of the facility, and the relationship with the associated gathering and sales gas system.	Required ☒		TAR – §2.2; Figure 2.1
4.3. Process Flow Diagrams (PFDs).	Required ☒		TAR – §2.3
4.4. The detailed Site Plan showing all point source emissions (including, but not limited to, flare stacks and flare pits, locations of on-site pig receivers and senders, and emergency blow-down points).	Required ☒	This site plan should include a table listing all emission points by number.	TAR – §2.4; Figure 2.2; §3.1
5. Air Discharges and Treatment			TAR – §3.0
5.1. Point emissions in tabulated format.	Required ☒	Source name, identification number (from the site plan), make (manufacturer), model, rating, and fuel source.	TAR – §3.1 (including 3.1.1 – 3.1.6)

Information Requirements Table for Air Emissions - Oil&Gas Sector

Application Tracking Number: 455458

Authorization Number: 113083

[Woodfibre LNG General Partner Inc / Woodfibre Liquefied Natural Gas Export Facility]

Information	Requirements	Comments	Location in Final Application
		<p>Characteristics of point source emissions including emission flow rate (m³/s, at STP and at stack conditions); maximum and average discharge rates (g/s) of NO_x, SO₂, PM_{2.5}, CO, and VOC; emission duration and frequency; and source of emissions data (methodologies by which the emission data are determined. These can be manufacturers' data, engineering and/or design specifications, combustion calculations, emission testing, emission factors or a combination of sources).</p> <p>Points and scenarios where and when venting may occur will be included in this section of technical assessment report but will not be quantified.</p>	<p>TAR Appendix A Technical Data Report (TDR) §4.1 (including Tables 4.1–4.2)</p> <p>Discharge Factors Form</p>
5.2. Non-routine emission scenarios.	Required ☒	<p>Describe emission scenarios other than normal operations and frequencies, such as operational upsets, maintenance and emergency discharges</p> <p>Provide a tabulated summary of relevant emissions resulting from such scenarios and indicate how these non-routine emission scenarios have been/will be handled in air dispersion modeling.</p>	<p>TAR – §3.2, esp. §3.2.4</p> <p>TAR Appendix A TDR – §4.1.5, 4.3, 6.7; Tables 4.5–4.6</p>
5.3. Fugitive emission sources and management.	Required ☒		TAR – §3.3
5.4. Pollution control works and treatment efficiencies.	Required ☒		TAR – §3.4
5.5. Discharge evaluation.	Required ☒	Compare existing and new emissions to current and anticipated regulatory requirements using the same units as presented in the published regulatory criteria, guidelines and industrial practices. If emissions do not meet emission standards or criteria, describe plans, if they exist, for upgrading or mitigation.	<p>TAR – §3.5; 5.1</p> <p>TAR Appendix A TDR – §6.0 (6.1–6.7)</p>
5.6. Comparison of proposed discharge quality to known discharge criteria, guidelines or industry practices.	Required ☒		<p>TAR – §3.6 (3.6.1–3.6.3)</p> <p>TAR Appendix A TDR – §2.3–2.4, 6</p>
5.7. Best Achievable Technology Assessment (BAT Assessment).	Required ☒	Following the Ministry's BAT Factsheet , execute a BAT assessment to justify the choice of technology for the proposed project overall, and the “best” technology and alternatives for major emission controls. Reviewed by an Engineer QP.	TAR – §3.7 (BAT summary)
6. Receiving Environment			TAR – §4.0
6.1. Geophysical information	Required ☒	Include a description of surrounding area terrain and local land use applicable to meteorology and air emissions dispersion	TAR – §4.1

Information Requirements Table for Air Emissions - Oil&Gas Sector

Application Tracking Number: 455458

Authorization Number: 113083

[Woodfibre LNG General Partner Inc / Woodfibre Liquefied Natural Gas Export Facility]

Information	Requirements	Comments	Location in Final Application
			TAR Appendix A TDR – §5.2
6.2. Ecosystems	Required ☒	Provide a description of onsite and adjacent terrestrial and aquatic ecosystems, and an inventory of potential biological receptors, including human populations	TAR – §4.2; 5.1.4 TAR Appendices C (aquatic) and D (terrestrial)
6.3. Meteorology	Required ☒	Provide statistical summaries of meteorological conditions that may affect the operations and discharge plume dispersion patterns	TAR – §4.3 (4.3.1–4.3.5) TAR Appendix A TDR – §3.1, 5.1; App. B (CALMET)
6.4. Airshed	Required ☒	Provide statistical summaries of baseline air quality conditions of the existing receiving environment. Include air quality concerns in the airshed where the project is located, including airshed capacity and sensitivity to incremental discharges.	TAR – §4.4, Table 4.1 TAR Appendix A TDR – §3.2, Table 3.1
7. Air Quality Assessment			TAR – §5.0
7.1. Impact assessment in context of airshed.	Required ☒	Approach air quality assessment in the context of airshed and land-use management, using a cumulative impact assessment approach. Dispersion modelling will be carried out following the BC Air Quality Dispersion Modelling Guidelines (ENV 2022) and an approved dispersion modelling plan. The assessment will include predicted incremental increases in relevant ambient parameters as a result of the Project; potential effects to sensitive receptors by comparison of predicted ambient concentrations to established provincial or federal ambient air quality guidelines.	TAR – §5.1, esp. §5.1.1 TAR Appendix A TDR – §4.2–4.3, 6.4–6.6
7.2. Potential impact on receiving air quality related to non-routine operational upsets and “worst case” scenarios.	Required ☒	Dispersion modelling will consider maximum emissions and non-routine flaring events. Evaluation of potential for impacts on the receiving environment will be evaluated by comparison against BC AQOs and critical levels.	TAR – §5.1.2 TAR Appendix A TDR – §4.1.5, 6.7.1–6.7.3
7.3. Emissions reduction plan for when ambient air quality objectives are not met, indicate the proposed plan that the QP suggests could be taken to meet them.	Required ☒	See Section 11.	TAR – §8.5; 5.1 and 9.0
7.4. Limitations of the modelling results and their significance to the predicted impacts.	Required ☒	Describe the limitations of the modelling results and their significance to the predicted impacts	TAR – §5.2 TAR Appendix A TDR – Limitations and §7
8. Identification of Receiving Environment Information Gaps			TAR – §6.0

Information Requirements Table for Air Emissions - Oil&Gas Sector

Application Tracking Number: 455458

Authorization Number: 113083

[Woodfibre LNG General Partner Inc / Woodfibre Liquefied Natural Gas Export Facility]

Information	Requirements	Comments	Location in Final Application
Identify and discuss gaps in information that are relevant to the assessment of this application.	Required ☒		TAR – §6.0
9. Other Discharges	Required ☒		TAR – §7.0
9.1. Effluent	Required ☒	“Effluent” includes both process effluent and collected precipitation (runoff) from areas that might be contaminated by the operations. Briefly describe all effluents that will be generated at the facility and how each will be managed. If no effluent will be generated, make a statement to that effect.	TAR – §7.1
9.2. Refuse (Non-hazardous)	Required ☐		TAR – §7.2
9.3. Hazardous Waste Management	Required ☒	If Hazardous wastes are generated at the facility, they will be management and disposed of following the requirements of the BC Hazardous Waste Regulation (HWR).	TAR – §7.3
10. Environmental Management System	Required ☒		TAR – §8.0
10.1. Corporate environmental policy.	Required ☒		TAR – §8.1
10.2. Statutory requirements.	Required ☒	Describe applicable local, provincial and federal environmental standards and guidelines including permit requirements, regulations, including those under development when the application is submitted	TAR – §8.2
10.3. Industry sector-specific standards, guidelines and codes of practice.	Required ☒		TAR – §8.3; 3.6
10.4. List of existing plans developed by the applicant.	Required ☒	List of existing plans relating to air emissions management developed by the applicant or required by other regulatory agencies, and a brief summary of the objectives of these plans.	TAR – §8.4
10.5. Proposed emission reduction and management plans.	Required ☐		TAR – §8.5
10.6. Operation plans and procedures.	Required ☒	Applicable to managing air emissions	TAR – §8.6
11. Monitoring Programs and Reporting	Required ☒	An air quality monitoring and management plan will be developed that summarizes proposed operational phase monitoring, KPIs and trigger action response plan based adaptive management approach	TAR – §9.0 (9.1–9.2)
12. Changes to Permit Clauses (use the latest version of the <i>Clause Amendment Form EPD-EMA-07</i>)	Required ☐	Not applicable	-
B. AIR QUALITY ASSESSMENT REPORT (AQAR)			
1. A detailed emission inventory.	Required ☒	Provided in the Dispersion Modelling Plan	TAR – §3.1

Information Requirements Table for Air Emissions - Oil&Gas Sector

Application Tracking Number: 455458

Authorization Number: 113083

[Woodfibre LNG General Partner Inc / Woodfibre Liquefied Natural Gas Export Facility]

Information	Requirements	Comments	Location in Final Application
			TAR Appendix A TDR – §4.0, Tables 4.1–4.6 Dispersion Modelling Plan (TDR App. A)
2. Dispersion Modelling Plan(DMP).	Required ☒	A Dispersion Modelling Plan will be developed and provided to BCER for review.	Dispersion Modelling Plan (TDR App. A)
3. Air Quality Assessment Report.	Required ☒	Dispersion modelling results will be discussed in a Technical Data Report	TAR – §5.1 TAR Appendix A TDR – §2 – 7; Appendices B – D
C. PHOTO INVENTORY (FOR AMENDMENT APPLICATIONS)	Required ☐		
D. SECTOR SPECIFIC INFORMATION AND EMISSION LIMIT GUIDANCE			
1. Sulphur Recovery Criteria for Natural Gas Processing Plants	Required ☐	http://a100.gov.bc.ca/pub/eirs/finishDownloadDocument.do?subdocumentId=2037	-
2. Nitrogen Oxide Emission Standards (Oil and Gas Waste Regulation-Schedule 1)	Required ☐	http://www.bclaws.ca/civix/document/id/loo84/loo84/32_254_2005	-
3. Multi-Sector Air Pollutants Regulations	Required ☒	https://laws-lois.justice.gc.ca/eng/regulations/SOR-2016-151/	TAR – §3.6.1; 8.2
4. Canadian Ambient Air Quality Standards for NO ₂	Required ☒	https://www.ccme.ca/en/current_priorities/air/caaqs.html	TAR – §5.1 TAR Appendix A TDR – §2.3, Table 2.2
5. New National Air Quality Standards for SO ₂	Required ☒	https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/fs_so2_caaqs.pdf	TAR – §5.1 TAR Appendix A TDR – §2.3
6. BC Air Quality Dispersion Modelling Guideline	Required ☒	https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/bc-dispersion-modelling-guideline-2015.pdf	TAR – §5.1 TAR Appendix A TDR – §§1.3, 2, 5; Appendix A (Dispersion Modelling Plan)

FORMS AND MAPS

- **Final Application Form**
- **Location Map**
- **Site Map**
- **Discharge Factors Form**
- **Qualified Professional Forms**

FINAL Application Form for a NEW Authorization

for authorization to discharge waste under the *Environmental Management Act*

New Permit, Approval, or Operational Certificate

FORM REFERENCE CODE: EPD-EMA-02.2

INSTRUCTIONS:

The application process is comprised of multiple steps that require the submission of a preliminary application and fee, followed by meetings with Ministry staff, and submission of a final application. **This form may be used for submission of a Final Application for a new Permit, Approval or Operational Certificate.**

Before completing this application form, please review the following:

- Waste Discharge Regulation under the *Environmental Management Act* at www.bclaws.ca; and,
- Ministry information and guidance documents that will assist in understanding the registration process and any other documents that may be required at <http://www2.gov.bc.ca/gov/content?id=0876E90DA4744A449423D35EB4E09785>.

It is preferred that this form is completed using a computer or typewriter. If completing this form by hand, please PRINT clearly.

Mandatory fields are marked with an asterisk (*). Please ensure all required fields are completed or the application form may not be accepted.

Once the Final Application has been submitted, the application will be screened for completeness before proceeding through the Screening Phase.

A Pre-Authorization Number and Tracking Number has been assigned to this request. Both numbers should be referenced on all documents submitted to support the new application request.

Under *Environmental Management Act*, a person is prohibited from introducing waste into the environment without authorization. Submitting an application to discharge is NOT an authorization to discharge.

This application can be submitted to the Ministry by email (preferred), mail or by courier.

Mail or Email	Courier
Environmental Protection Division Business Services PO Box 9377 Stn Prov Govt Victoria, BC V8W 9M6 Email: PermitAdministration.VictoriaEPD@gov.bc.ca	Ministry of Environment & Climate Change Strategy Environmental Protection Division Business Services 3rd Floor, 525 Superior Victoria, BC V8V 0C5

Section 1: Application Information

*Tracking Number	455458	1
*Pre-Authorization Number	PA 113083	2
*Applicant Name	Woodfibre LNG General Partner Inc., as General Partner on behalf of the Woodfibre L	3
*Facility Name	Woodfibre LNG Export Facility	4
*Name of person completing this application	Janine Forrest	5
*The person submitting this application is	☒ The Applicant as named on the Preliminary Application Form, Section 2 ☐ The Agent, as named on the Preliminary Application Form, Section 4	6

The Application Package must include the following components or the application may be returned. Please refer to the guidance documents or contact the Ministry for further information on these requirements.

	Included	Not required / applicable	Submitted with Preliminary Application
Application Instruction Document (AID)	☐	☒	
Information Requirements Table (IRT)	☒	☐	☒
Technical Assessment Report	☒	☐	☐
Consultation Report	☒	☐	☐
Discharge Factors Application Form (Form EPD-EMA-03)	☒	☐	☒
Site Plan Form (Form EPD-EMA-09)	☒	☐	☐
Location Map Form (Form EPD-EMA-08)	☒	☐	☒

Section 2: Declaration and Signature

Please carefully read the following before placing your signature.

By completing this Application for an authorization, the Applicant understands and agrees with the following terms and conditions:

1. In this section:

“Applicant” means the applicant as identified in section 2 of this application form;

“Authorization” means the permit, approval, operational certificate, or amended permit, approval, operational certificate, sought pursuant to this application;

“Director” means any statutory decision maker under EMA;

“EMA” means the *Environmental Management Act*, S.B.C. 2003, c. 53, as amended or replaced from time to time;

“FOIPPA” means the Freedom of Information and Protection of Privacy Act, R.S.B.C. 1996, c. 165, as amended or replaced from time to time;

“Province” means Her Majesty the Queen in Right of British Columbia;

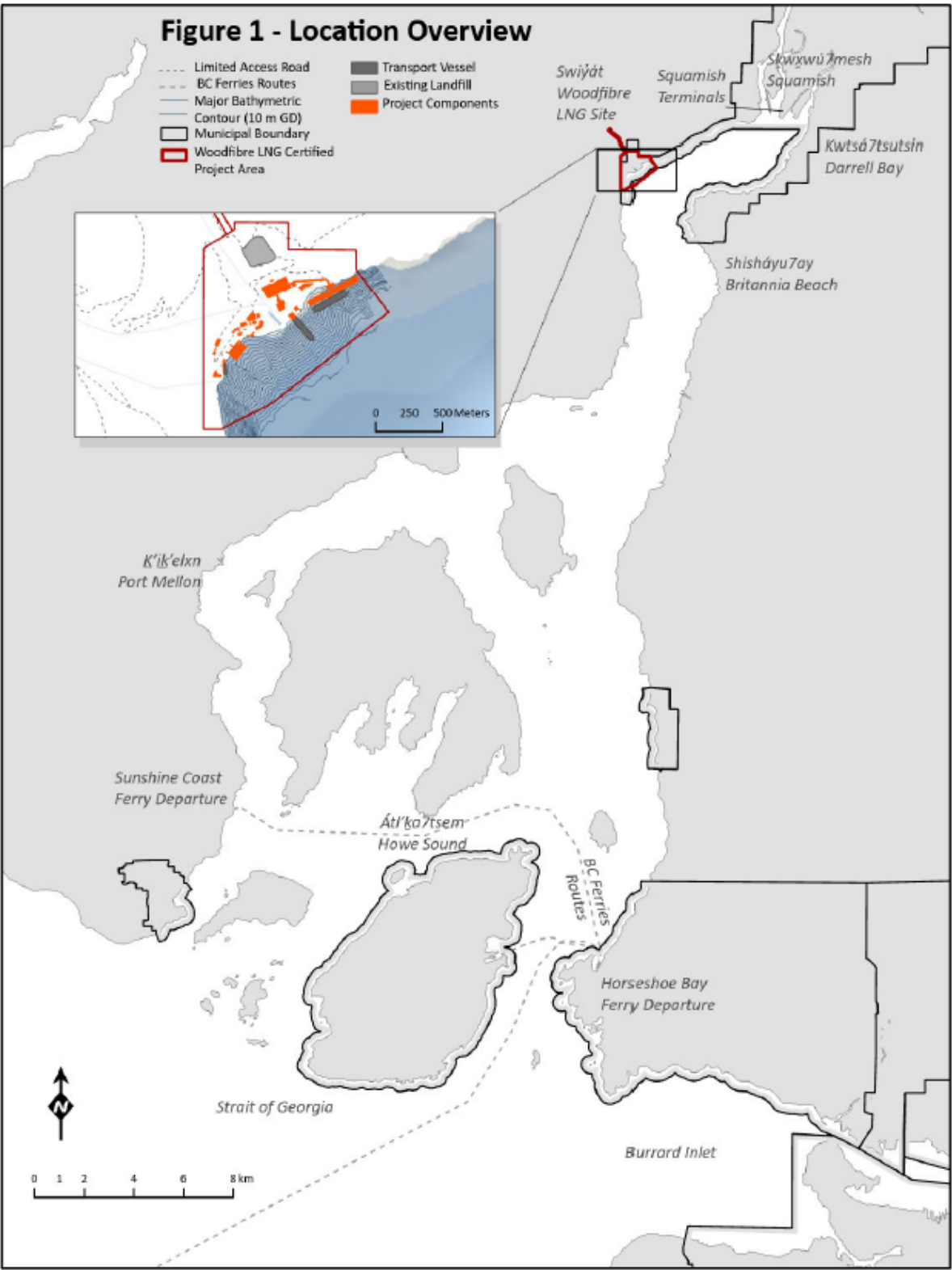
“Regulatory Document” means:

- a) this application form,
- b) any document that the Applicant submits or causes to be provided submitted to the Province or the Director in support of this application, and
- c) any document that the Applicant submitted or causes to be submitted to the Director or the Province pursuant to
 - i. the Authorization;
 - ii. any regulation made under EMA that regulates the facility described above or the discharge of waste from that facility; or
 - iii. any order issued under EMA directed against the Applicant that is related to the facility described above or the discharge of waste from that facility.

2. In consideration of the Province receiving this application, subject to paragraph 3, the Applicant hereby irrevocably authorizes the Province to publish on the B.C government website the entirety of any Regulatory Document.
3. Despite paragraph 2, if the Applicant clearly identifies on the face of a Regulatory Document that the Regulatory Document, or clearly identified portions of it, are confidential and provides in writing with the document a rationale for why the document or portion thereof could not be disclosed under FOIPPA, the Applicant does not consent to the Province publishing the document or any portion of it if, in the opinion of the Director, the document or portion could not be disclosed under FOIPPA, if it were subject to a request under section 5 of FOIPPA.
4. In consideration of the Province receiving this application, the Applicant agrees that it will indemnify and save harmless the Province and the Province’s employees and agents from any claim for infringement of copyright or other intellectual property rights that the Province or any of the Province’s employees or agents may sustain, incur, suffer or be put to at any time that arise from the publication of a Regulatory Document.
5. The Applicant certifies that the information provided in this registration form is true, complete and accurate, and acknowledges that the submission of insufficient information may result in this registration being returned causing delays in the registration review process.

*Name of Applicant or Agent (print)	*Signature of Applicant or Agent	*Date
Marnie Yohemas	<i>Marnie Yohemas</i>	October 23, 2026

Location Map



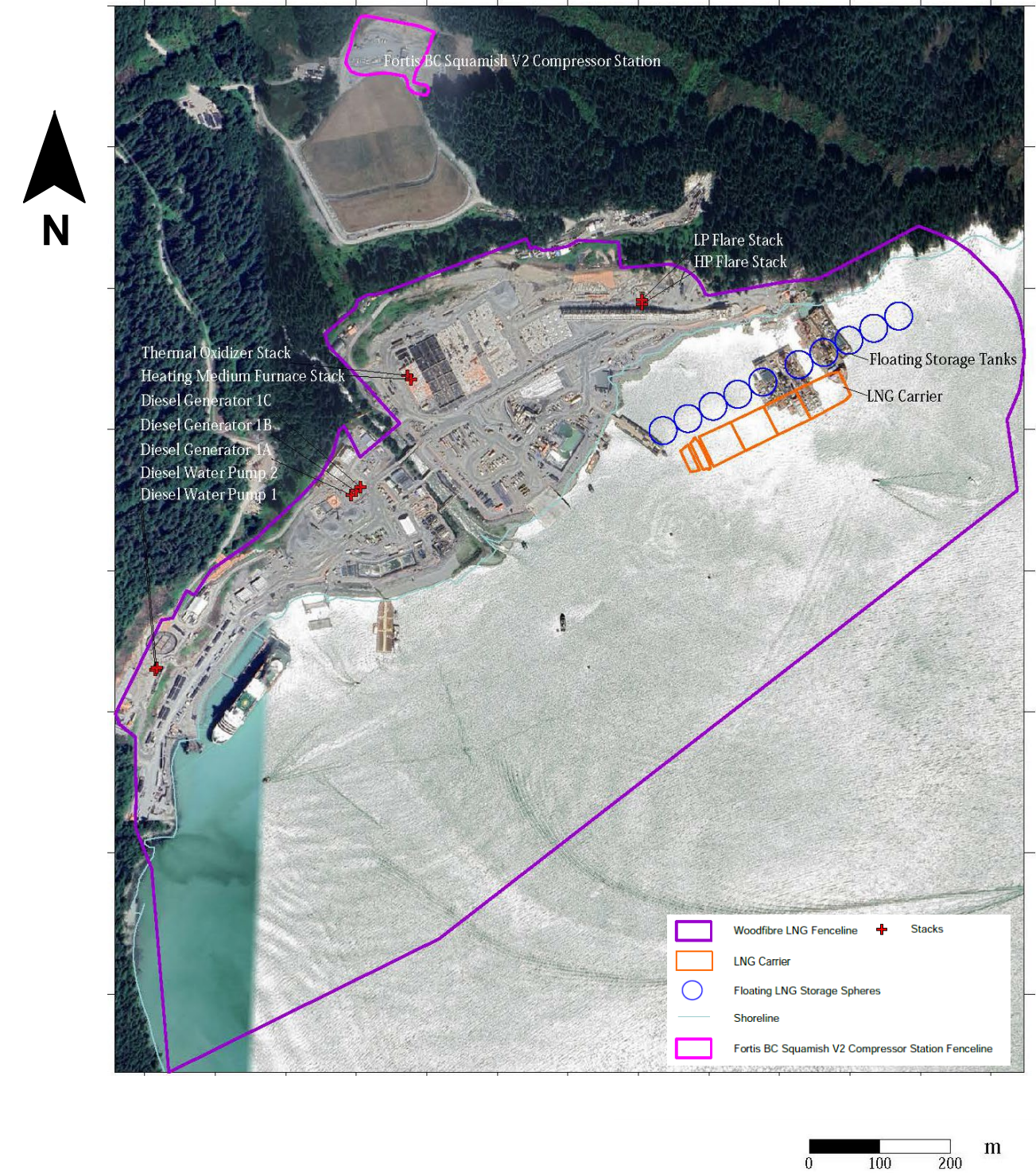
AUTHORIZATION:
Date:

(Office Use Only)

for Director, *Environmental Management Act*

(Office Use Only)

Site Plan



AUTHORIZATION:
Date:

(Office Use Only)

for Director, *Environmental Management Act*

(Office Use Only)

DISCHARGE SOURCE # 1 – HEAT MEDIUM FURNACE**1. SOURCE OF WASTE:**

- Type: Heater
- Quantity: 1
- Make: Vertical Cylindrical - Natural Draft
- Duty: 32.4 MW
- Power Fuel: Natural Gas – Facility fuel gas

2. PROPOSED TREATMENT OF WASTE:

- Combustion

3. QUANTITY OF WASTE DISCHARGED:

- Routine rate of waste discharge: 8.7402 sm³/s (@1 atm, 20 °C, dry)

4. OPERATING PERIOD:

- Continuous

5. DISCHARGE WORKS:

- Type: Point
- Elevation at base (ASL): 8.5 m asl
- Stack Height: 49.335 m
- Stack Inside Diameter: 1.90 m
- Stack Gas Exit Velocity: 5.91 m/s
- Stack Gas Discharge Temp: 188 °C

6. CHARACTERISTICS OF WASTE:

Pollutant	Routine Discharge Rate: Stabilizing and Steady State Operations	
	g/s	Tonnes/day
SO ₂	0.010	0.001
NO _x ^a	0.611	0.053
CO ^b	1.55	0.134
PM _{2.5} ^c	0.021	0.002
VOC ^d	0.075	0.006

Notes:

- Calculated based on exhausted gas NO_x content 30 ppmv.
- Calculated based on exhaust gas CO content 125 ppmv.
- Calculated based on Canadian Energy Partnership for Environmental Innovation (CEPEI) emission factor from CEPEI Methodologies Manual for the Calculator for Airborne Contaminant Emissions from Natural Gas Combustion - 2024 Inventory Year (Reporting in 2025). Retrieved from ORTECH, Report No. 92922-1.
- Estimated based on U.S.EPA AP 42 emission factors from U.S. EPA. 1998. AP42, Fifth Edition, Volume I, Chapter 1.4: Natural Gas Combustion, Table 1.4-2. Available at: https://www.epa.gov/sites/default/files/2020-09/documents/1.4_natural_gas_combustion.pdf

DISCHARGE SOURCE # 2 – THERMAL OXIDIZER**1. SOURCE OF WASTE:**

- Type: Incinerator
- Quantity: 1
- Make: -
- Duty: 11.6 MW
- Power Fuel: Boil-off Gas + Acid Gas + Flash Gas + Storage Gas
(storage gas is from the vapor from the Condensate Storage Tank that is returned to the Thermal Oxidizer)

2. PROPOSED TREATMENT OF WASTE:

- Incineration

3. QUANTITY OF WASTE DISCHARGED:

- Maximum rate of waste discharge: 5.5405 sm³/s (@1 atm, 20 °C, dry)

4. OPERATING PERIOD:

- Continuous

5. DISCHARGE WORKS:

- Type: Point
- Elevation at base (ASL): 8.5 m asl
- Stack Height: 49.335 m
- Stack Inside Diameter: 1.38 m
- Stack Gas Exit Velocity: 18.7 m/s
- Stack Gas Discharge Temp: 982 °C

6. CHARACTERISTICS OF WASTE:

Pollutant	Routine Discharge Rate: Stabilizing and Steady State Operations	
	g/s	Tonnes/day
SO ₂ routine ^a	3.114	0.269
SO ₂ maximum ^b	8.522	0.736
NO _x ^c	0.302	0.026
CO ^d	0.296	0.026
PM _{2.5} ^e	0.007	0.001
VOC ^f	0.027	0.002

Notes:

- Normal inlet feed gas with a total sulphur content of 24 ppmv
- Non-routine (maximum) inlet feed gas with a total sulphur content of 45 ppmv due to the increase in mercaptans
- Calculated based on NO_x emission factor 26 g/GJ (HHV).
- Calculated based on exhausted gas CO content 47 ppmv (dry and 3% oxygen)
- Calculated based on Canadian Energy Partnership for Environmental Innovation (CEPEI) emission factor from CEPEI Methodologies Manual for the Calculator for Airborne Contaminant Emissions from Natural Gas Combustion - 2024 Inventory Year (Reporting in 2025). Retrieved from ORTECH, Report No. 92922-1.
- Estimated based on U.S.EPA AP 42 emission factors from U.S. EPA. 1998. AP42, Fifth Edition, Volume I, Chapter 1.4: Natural Gas Combustion, Table 1.4-2. Available at: https://www.epa.gov/sites/default/files/2020-09/documents/1.4_natural_gas_combustion.pdf

DISCHARGE SOURCE # 3 – HIGH PRESSURE FLARE**1. SOURCE OF WASTE:**

- Type: Flare
- Quantity: 1
- Make: N/A
- Duty: N/A
- Power Fuel: Natural Gas – Facility fuel gas

2. PROPOSED TREATMENT OF WASTE:

- Combustion

3. QUANTITY OF WASTE DISCHARGED:

- Routine (Flaring) rate of waste discharge – Stabilizing Operations: 3,887 sm³/h (@1 atm, 20 °C)
- Routine (Flaring) rate of waste discharge – Steady State Operations: 1,204 sm³/h (@1 atm, 20 °C)
- Non-Routine (Flaring – Process Upset Scenario) rate of waste discharge: 257,504 sm³/h (@1 atm, 20 °C)
- Non-Routine (Venting – Thermal Oxidizer Trip Scenario) rate of waste discharge: 8,845 sm³/h (@1 atm, 20 °C)

4. OPERATING PERIOD:

- Continuous

5. DISCHARGE WORKS:

- Type: Point
- Elevation at base (ASL): 8.5 m asl
- Stack Height: 134.0 m
- Stack Inside Diameter: 1.20 m
- Stack Gas (Pseudo) Exit Velocity: 20.0 m/s
- Stack Gas (Pseudo) Discharge Temp: 1,000 °C
- Non-routine Trip venting scenario gas exit velocity: 2.40 m/s
- Non-routine Trip venting scenario discharge temperature: 45 °C

6. CHARACTERISTICS OF WASTE:

Pollutant	Routine Discharge Rate: Stabilizing Operations		Routine Discharge Rate: Steady State Operations		Non-Routine Discharge Rate: Process Upset (Start Up)	
	g/s	Tonnes/day	g/s	Tonnes/day	g/s	Tonnes/day
SO ₂	0.054	0.005	0.006	0.0005	8.69	0.750
NO _x ^a	1.26	0.109	0.342	0.03	87.7	7.58
CO ^a	5.17	0.447	1.40	0.121	361	31.2
PM _{2.5} ^b	0.054	0.005	0.017	0.0014	7.24	0.625
VOC ^a	11.0	0.951	2.99	0.258	769	66.5

Notes:

- ^a. Estimated based on U.S.EPA AP 42 emission factors from U.S. EPA. 2018. AP42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources. Section 13.5 Industrial Flares. Available at: https://www.epa.gov/sites/default/files/2020-10/documents/13.5_industrial_flares.pdf.
- ^b. Calculated based on the method presented by McEwen J.D.N and Johnson M.R in Black Carbon Particulate Matter Emission Factors for Buoyancy-driven Associated Gas Flares. Journal of the Air & Waste Management Association. 62 (3): 307-321 (DOI: 10.1080/10473289.2011.650040).

Pollutant	Non-Routine Discharge Rate: Thermal Oxidizer Trip	
	g/s	Tonnes/day
TRS ^a	1.66	0.143
H ₂ S ^b	0.948	0.082
VOC	11.75	1.0152

Notes:

- ^a. TRS emission based on total sulphur content of 541 ppmv in venting gases (acid gas + flash gas + storage gas) and total sulphur content of 6.1 ppmv in routine operation HP gases.
- ^b. H₂S emission based on H₂S content of 311 ppmv in venting gases (acid gas + flash gas + storage gas) and H₂S content of 0.64 ppmv in normal operation HP gases.

DISCHARGE SOURCE # 4 – LOW PRESSURE FLARE**1. SOURCE OF WASTE:**

- Type: Flare
- Quantity: 1
- Make: -
- Duty: N/A
- Power Fuel: Fuel Gas

2. PROPOSED TREATMENT OF WASTE:

- Combustion

3. QUANTITY OF WASTE DISCHARGED:

- Routine (Flaring) rate of waste discharge – Stabilizing Operations: 1,565 sm³/h (@1 atm, 20 °C)
- Routine (Flaring) rate of waste discharge – Steady State: 557 sm³/h (@1 atm, 20 °C)
- Non-routine (Flaring) rate of waste discharge: 21,776 sm³/h (@1 atm, 20 °C)

4. OPERATING PERIOD:

- Continuous

5. DISCHARGE WORKS:

- Type: Point
- Elevation at base (ASL): 8.5 m asl
- Stack Height: 134.0 m
- Stack Inside Diameter: 0.76 m
- Stack Gas (Pseudo) Exit Velocity: 20.0 m/s
- Stack Gas (Pseudo) Discharge Temp: 1,000 °C

6. CHARACTERISTICS OF WASTE:

Pollutant	Routine Discharge Rate: Stabilizing Operations		Routine Discharge Rate: Steady State Operations		Non-Routine Discharge Rate: Process Upset (Start Up)	
	g/s	Tonnes/day	g/s	Tonnes/day	g/s	Tonnes/day
SO ₂	0.0025	0.0002	0.002	0.0001	0.002	0.0001
NO _x ^a	0.417	0.036	0.154	0.0133	5.86	0.506
CO ^a	1.71	0.148	0.633	0.055	24.0	2.08
PM _{2.5} ^b	0.0217	0.0019	0.008	0.0007	0.302	0.026
VOC ^a	3.64	0.315	1.35	0.117	51.2	4.42

Notes:

- ^a. Estimated based on U.S.EPA AP 42 emission factors from U.S. EPA. 2018. AP42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources. Section 13.5 Industrial Flares. Available at: https://www.epa.gov/sites/default/files/2020-10/documents/13.5_industrial_flares.pdf.
- ^b. Calculated based on the method presented by McEwen J.D.N and Johnson M.R in Black Carbon Particulate Matter Emission Factors for Buoyancy-driven Associated Gas Flares. Journal of the Air & Waste Management Association. 62 (3): 307-321 (DOI: 10.1080/10473289.2011.650040).

DISCHARGE SOURCE # 5 – ESSENTIAL DIESEL GENERATORS**1. SOURCE OF WASTE:**

- Type: Generator
- Quantity: 3
- Make: CAT (C175-16), Tier 4
- Duty: 2.5 MW, 60 Hz
- Power Fuel: Diesel

2. PROPOSED TREATMENT OF WASTE:

- Combustion, Tier 4 compliant diesel engines.

3. QUANTITY OF WASTE DISCHARGED:

- Non-Routine rate of waste discharge (Exhaust Flow per Engine): 3.57448 sm³/s (@1 atm, 20 °C, dry)

4. OPERATING PERIOD:

- Intermittent; as required for emergencies and maintenance/testing purposes. Typically for testing purposes, the generators will run from 15 to 30 minutes per week.

5. DISCHARGE WORKS:

- Type: Point
- Elevation at base (ASL): 8.5 m asl
- Stack Height: 6.5 m
- Stack Inside Diameter: 0.508 m
- Exit Velocity: 46.9 m/s
- Discharge Temp: 453 °C

6. CHARACTERISTICS OF WASTE:

Pollutant	Non-Routine Discharge Rate (per engine) ^a
	g/s
SO ₂ ^b	0.005
NO _x	0.755
CO	0.119
PM _{2.5}	0.031
VOC	0.051

Note:

^a Discharge rates calculated using information from the manufacturer's datasheet for NO_x, CO, PM, HC

^b SO₂ emission rates are based on an assumed sulphur content of 15 mg/kg (15 ppm by mass) in ultra-low-sulphur diesel fuel

DISCHARGE SOURCE # 6 – DIESEL FIREWATER PUMPS**1. SOURCE OF WASTE:**

- Type: Pumps
- Quantity: 2
- Make: Clarke / Caterpillar (C18H0-UFAC28), TIER 2
- Duty: 597 kW
- Power Fuel: Diesel

2. PROPOSED TREATMENT OF WASTE:

- Combustion

3. QUANTITY OF WASTE DISCHARGED:

- Non-Routine rate of waste discharge (Exhaust Flow per Pump): 0.6380 sm³/s (@1 atm, 20 °C, dry)

4. OPERATING PERIOD:

- Intermittent; as required for emergencies and maintenance/testing purposes. Typically for testing purposes, the pumps will run from 15 to 30 minutes per week.

5. DISCHARGE WORKS:

- Type: Point
- Elevation at base (ASL): 8.5 m
- Stack Height: 4 m
- Stack Diameter: 0.2032 m
- Stack Gas Exit Velocity: 62.2 m/s
- Stack Gas Discharge Temp: 560 °C

6. CHARACTERISTICS OF WASTE:

Pollutant	Non-Routine Discharge Rate (per engine) ^a
	g/s
SO ₂ ^b	0.001
NO _x	0.831
CO	0.109
PM _{2.5}	0.014
VOC	0.010

^a Discharge rates calculated using information from the manufacturer's datasheet for NO_x, CO, PM, HC

^b SO₂ emission rates are based on an assumed sulphur content of 15 mg/kg (15 ppm by mass) in ultra-low-sulphur diesel fuel

DISCHARGE SOURCE # 7 – VARIOUS LNG FACILITY VENTS

1. SOURCE OF WASTE:

- Type: Vents
- Quantity: various
- Make: N/A
- Duty: N/A
- Power Fuel: N/A

2. PROPOSED TREATMENT OF WASTE:

- Compressor lube-oil tank vapors are cleaned through oil mist separators before venting.

3. QUANTITY OF WASTE DISCHARGED:

- Maximum rate of waste discharge: Discharge rates vary by vent source. Source-specific discharge rates and operating frequencies are provided in Section 3.1.5 and Appendix B (Vent Source List) of the Technical Assessment Report.

4. OPERATING PERIOD:

- Continuous and intermittent

5. DISCHARGE WORKS:

- Type: Point
- Elevation at base (ASL): 8.5 m
- Stack Height: various
- Stack Diameter: various
- Stack Gas Exit Velocity: various
- Stack Gas Discharge Temp: various

6. CHARACTERISTICS OF WASTE:

The characteristics of waste are hydrocarbon, air, and nitrogen.

Refer to Appendix B of the Technical Assessment Report (TAR) that contains the list of venting sources associated with hydrocarbons and corresponding frequency and rates. These sources are vented due to the gas heating value, volume, flow rate being insufficient to support stable combustion or is critical for the integrity of equipment.

Conflict of Interest Disclosure Statement

A qualified professional ¹ providing services to either the Ministry of Environment and Climate Change Strategy ("ministry"), or to a regulated person for the purpose of obtaining an authorization from the ministry, or pursuant to a requirement imposed under the *Environmental Management Act*, the *Integrated Pest Management Act* or the *Park Act* has a real or perceived conflict of interest when the qualified professional, or their relatives, close associates or personal friends have a financial or other interest in the outcome of the work being performed.

A real or perceived conflict of interest occurs when a qualified professional has

- a) an ownership interest in the regulated person's business;
- b) an opportunity to influence a decision that leads to financial benefits from the regulated person or their business other than a standard fee for service (e.g. bonuses, stock options, other profit sharing arrangements);
- c) a personal or professional interest in a specific outcome;
- d) the promise of a long term or ongoing business relationship with the regulated person, that is contingent upon a specific outcome of work;
- e) a spouse or other family member who will benefit from a specific outcome; or
- f) any other interest that could be perceived as a threat to the independence or objectivity of the qualified professional in performing a duty or function.

Qualified professionals who work under ministry legislation must take care in the conduct of their work that potential conflicts of interest within their control are avoided or mitigated. Precise rules in conflict of interest are not possible and professionals must rely on guidance of their professional associations, their common sense, conscience and sense of personal integrity.

Declaration

I, Ramin Dastanpour, as a member of Engineers and Geoscientists BC
declare

Select one of the following:

- ☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this Woodfibre LNG Project WDA Application for Air Emissions (PA-113083).

I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to Kristofer Siriunas, BC Energy Regulator, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

In addition, I will take the following steps to mitigate the real or perceived conflict(s) I have disclosed, to ensure the public interest remains paramount:

Further, I acknowledge that this disclosure may be interpreted as a threat to my independence and will be considered by the statutory decision maker accordingly.

This conflict of interest disclosure statement is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Signature: **Ramin**
x **Dastanpour**

Digitally signed by
Ramin Dastanpour
Date: 2026.10.23
10:15:49 -07'00'

Print name: Ramin Dastanpour

Date: October 23, 2026

Witnessed by: **Adriana**
x **MacLeod**

Digitally signed by
Adriana MacLeod
Date: 2026.10.23
10:56:17 -07'00'

Print name: Adriana MacLeod

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- a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

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Declaration

I, Reid Person First and Last Name, as a member of Engineers and Geoscientists BC
declare

Select one of the following:

☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this Woodfibre LNG Project WDA Application for Air Emissions (PA-113083).
I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to
Kristofer Siriunas, BC Energy Regulator, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

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Signature:

x

Reid Allan Person
-- P.Eng. - EGBC

Digitally signed by Reid Allan
Person -- P.Eng. - EGBC
Date: 2026.10.23 10:44:36
-06'00'

Print name: Reid Person

Date: October 23, 2026

Witnessed by:

x

Adriana
MacLeod

Digitally signed by
Adriana MacLeod
Date: 2026.10.23
10:53:25 -07'00'

Print name: Adriana MacLeod

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- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Declaration of Competency

The Ministry of Environment and Climate Change Strategy relies on the work, advice, recommendations and in some cases decision making of qualified professionals¹, under government's professional reliance regime. With this comes an assumption that professionals who undertake work in relation to ministry legislation, regulations and codes of practice have the knowledge, experience and objectivity necessary to fulfill this role.

1. Name of Qualified Professional Ramin Dastanpour, PhD, P.Eng., PMP
Title Senior Atmospheric Engineer
2. Are you a registered member of a professional association in B.C.? ☒ Yes ☐ No
Name of Association: Engineers and Geoscientists BC Registration # 65760
3. Brief description of professional services:
Air quality dispersion modeling, Emission source quantification, emission measurements,
Emission control, Emission monitoring, management and mitigation review

This declaration of competency is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature: **Ramin Dastanpour**
x Digitally signed by Ramin Dastanpour
Date: 2026.10.23 10:10:16 -07'00'
Print Name: Ramin Dastanpour

Witnessed by: **Adriana MacLeod**
x Digitally signed by Adriana MacLeod
Date: 2026.10.23 11:06:10 -07'00'
Print Name: Adriana MacLeod

Date signed: October 23, 2026

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1. Name of Qualified Professional Reid Person, P.Eng.
Title Senior Principal, Air Quality Engineer

2. Are you a registered member of a professional association in B.C.? ☒ Yes ☐ No

Name of Association: Engineers and Geoscientists BC Registration # 56558

3. Brief description of professional services:

Emission source characterization, emission quantification, emission control review, evaluation
of monitoring and management plans, air quality dispersion modelling.

This declaration of competency is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature:

x Reid Allan Person
-- P.Eng. - EGBC
Digitally signed by Reid Allan Person -- P.Eng. - EGBC
Date: 2026.10.23 10:50:29 -06'00'

Print Name: Reid Person

Witnessed by:

x Adriana MacLeod
Digitally signed by Adriana MacLeod
Date: 2026.10.23 11:01:29 -07'00'

Print Name: Adriana MacLeod

Date signed: October 23, 2026

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- b) *through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.*

**TECHNICAL ASSESSMENT REPORT which
contains the**

- Technical Data Report**
- Dispersion Modelling Plan**

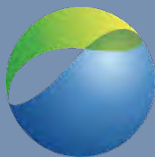
Technical Assessment Report for the Woodfibre LNG Project Waste Discharge Authorization Application to the British Columbia Energy Regulator

October 16, 2026

Prepared for:
Woodfibre LNG General Partner Inc.

123222939EN

WLNG-W0001-RE-RP-00286_RevA



**Woodfibre
LNG**

PREAMBLE

The Woodfibre Liquefied Natural Gas Project (the Project) is a liquefied natural gas export facility being constructed on the former Woodfibre Pulp and Paper Mill site (the Project) in Átl'ka7tsem (Howe Sound), approximately seven kilometres south of Skwxwú7mesh (Squamish). The Project is on the historical location of a Skwxwú7mesh Úxwumixw (Squamish Nation) village known as Swiyát. Swiyát and Átl'ka7tsem (Howe Sound) are tied to the cultural well-being of Skwxwú7mesh Úxwumixw (Squamish Nation) members, their ancestors, and their descendants, and to other Indigenous groups as defined in the Project's Environmental Assessment Certificates. Woodfibre LNG General Partner Inc. recognizes the importance of these areas to the Skwxwú7mesh stélmexw (Squamish People), and other Indigenous groups. Woodfibre LNG General Partner Inc. seeks to construct and operate the Project in a manner that is respectful of Indigenous values. This Technical Assessment Report is primarily written in English with important place names, species, phrases, and passages provided in the Skwxwú7mesh Sníchim (Squamish language).

Temíxwiýikw chet wa naantem chet ti temíxw Swiyát
Chet wa smén'hemswit kwis ns7éyxnitas chet ti temíxw
We7ú chet kwis t'íchimwit iy íwas chet ek' l tti.

Our ancient ancestors named this place Swiyát
We, as their descendants safeguard these lands
We will continue to swim and fish in these clear waters.

EXECUTIVE SUMMARY

Woodfibre LNG General Partner Inc. (Woodfibre LNG), as General Partner on behalf of the Woodfibre LNG Limited Partnership will operate the Woodfibre Liquefied Natural Gas Project (the Project), which is located on the former Woodfibre Pulp Mill site approximately 7 kilometres (km) southwest of Sk̓wx̓wú7mesh (Squamish), British Columbia (BC).

Woodfibre LNG is applying for a Waste Discharge Authorization under the Environmental Management Act for air emissions associated with commissioning and operation of the Woodfibre LNG Project. The Project is being constructed on the former Woodfibre Pulp Mill site in Átl'ka7tsem (Howe Sound), approximately 7 km southwest of Sk̓wx̓wú7mesh (Squamish), British Columbia, and will have the capacity to produce up to 2.1 million tonnes of LNG per year. Pipeline-quality natural gas supplied through the FortisBC Eagle Mountain Pipeline will be measured at the custody transfer station and treated to remove mercury, carbon dioxide (CO₂), hydrogen sulphide (H₂S) and other sulphur compounds, water, heavy hydrocarbons and other impurities before being cooled to approximately -160 degrees Celsius (°C) in a liquefaction train. Heavier hydrocarbons will be stabilized and stored as condensate for export. LNG will be transferred to a floating storage and offloading unit consisting of two converted LNG carriers with a combined storage capacity of up to 250,000 m³ and subsequently loaded onto LNG carriers for export. Supporting systems include electric refrigerant-compressor drives, boil-off gas recovery and recompression, a heat medium furnace, thermal oxidizer, high- and low-pressure flare systems, utilities, control and safety systems, and LNG loading and vapour-return infrastructure.

Air emissions will primarily arise from the natural-gas-fired heat medium furnace, the thermal oxidizer, and the continuously piloted high- and low-pressure flare systems. These sources will emit products of combustion, including nitrogen oxides (NO_x), sulphur dioxide (SO₂), fine particulate matter (PM_{2.5}), carbon monoxide (CO), volatile organic compounds (VOC) and, in smaller quantities, polycyclic aromatic hydrocarbons (PAH).

The heat medium furnace will use eight ultra-low-NO_x burners, a burner management system and oxygen monitoring to maintain efficient combustion and meet the applicable federal NO_x emission-intensity requirement. The thermal oxidizer will operate at approximately 982°C to oxidize sulphur compounds and destroy hydrocarbon contaminants, including BTEX, and will be equipped with low-NO_x burners, combustion controls and continuous monitoring of NO_x, SO₂, CO, oxygen and total hydrocarbons. The flare systems include continuously monitored pilots, automatic ignition, fuel-gas purging with nitrogen backup, flashback seals, dedicated collection headers, knockout drums and flow measurement.

Additional intermittent emissions may result from emergency diesel generators and firewater pumps, equipment and storage tank vents, fugitive leaks, commissioning and process-upset flaring. There is one type of continuous venting of hydrocarbons planned; in the Compressor Lube Oil tanks, the vapor is cleaned in an oil mist separator before being vented. Fugitive emissions will be addressed through scheduled maintenance, routine inspections, operating procedures and the Fugitive Emissions Management Plan.

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LNG carriers and harbour tugboats are outside the jurisdiction of the *Environmental Management Act* but have been included in the cumulative dispersion assessment.

Dispersion modelling assessment was completed to evaluate potential impacts on air quality associated with the Project's emissions. The assessment indicates that Project air emissions can be effectively managed through the proposed facility design, operating controls, monitoring systems and management plans. Predicted concentrations of SO₂, PM_{2.5} and CO remain below the applicable BC Air Quality Objectives for all scenarios. Maximum predicted one-hour and annual NO₂ concentrations remain below the objectives for the Project-Only Normal Operations, Commissioning and Early-operations cases. The maximum one-hour NO₂ concentrations are predicted to exceed the BC AQO within the vicinity of the Project for the Application and Cumulative Cases; however, they are primarily associated with marine vessel emissions and the addition of baseline concentrations, are confined to the areas along and near the facility boundary, and decrease rapidly with distance. Maximum concentrations at sensitive receptors and Skwxwú7mesh town receptors remain below the applicable objectives for all pollutants and cases. Similarly, predicted effects during process-upset conditions are localized near the facility boundary.

The updated air quality modelling results were reviewed from a human health perspective and compared with applicable World Health Organization air quality guidelines at community receptors, including Skwxwú7mesh (Squamish), Sta'7mes Village, Browning Lake Cultural Site, Britannia Beach residences, Foulgers Creek, and Camp Potlatch. For the Normal Operations, Stabilizing Operations, and Cumulative cases, predicted concentrations of NO₂, SO₂, and PM_{2.5} remained below applicable short-term and long-term WHO guidelines, indicating a negligible health risk. Conservative short-term Process Upset and High Inlet Sulphur cases similarly predicted limited changes in air quality at community receptors, with peak concentrations remaining well below the WHO air quality guidelines, indicative of negligible short-term health risks. Overall, the updated modelling supports the conclusions of the Environmental Assessment that Project-related air emissions would result in negligible to low human health risk and would be not significant. For pollutants such as NO₂ that are considered to have a non-threshold concentration-response relationship (i.e., there is always some risk associated with any exposure, including background exposures), low represents the lowest applicable risk classification based on the toxicological characteristics of the substance rather than the magnitude of the Project contribution.

A surface water acidification and eutrophication assessment was completed at four stream sites in proximity to the Project to predict whether deposition of sulphur (S) and nitrogen (N) compounds have the potential to generate changes in water quality (chemistry) and ultimately cause adverse effects on freshwater systems through shifts in pH (acidification) or the nutrient regime (eutrophication).

Results from water chemistry and the predicted deposition rates from the air dispersion modelling scenarios for the Baseline Value, Project-Alone Case, Application Case, and Cumulative Case showed that there were no predicted critical load of acidity (CL_(A)) exceedances for the stream sites except at SW-01 in 2025 with CL_(A) exceedances for Application Case and Cumulative Case. As such, SW-01 in 2025 was classified as having a "low biological concern" while other stream sites and the rest of the sampling periods were classified as having "no biological concern" to acidification.

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Results from baseline estimated and calculated total N and predicted N deposition rates for Baseline Value, Project-Alone Case, Application Case, and Cumulative Case modelling scenarios showed that the four stream sites were classified as oligotrophic (i.e., nutrient poor) at baseline and under the four modelling scenarios, with no predicted change to their trophic state.

A terrestrial acidification and eutrophication assessment of terrestrial ecosystems was completed to predict effects of sulphur and nitrogen deposition on soils and vegetation. The assessment followed the BC Ministry of Environment Critical Load Screening Guidance for Acidification and Eutrophication of Terrestrial Ecosystems (BC MOE 2014). A screening assessment and subsequent desktop-based Level 0 assessment were completed. Air dispersion modelling results for the Project-Alone, Application, and Cumulative Cases were compared with screening thresholds and selected critical loads. Existing soils, terrain, bedrock geology, ecosystem mapping, Vegetation Resources Inventory, and biogeoclimatic ecosystem classification data were used to characterize ecosystems and species sensitive to acid and/or nitrogen deposition and to quantify areas where modelled acid or nitrogen deposition exceeded applicable critical loads. Key results include the following:

- The Cumulative Case acid deposition screening isopleth defined as a 3,534.3 ha local study area (LSA). Soils within the LSA were primarily rated as moderately sensitive to acid deposition, with smaller areas of low or high sensitivity.
- No critical loads for acidification or eutrophication were exceeded at baseline or in the Project-Alone Case.
- Acidification critical loads were exceeded in the Application and Cumulative Cases in relatively small areas, primarily low-elevation coniferous forest near the Project and along the Skwxwú7mesh (Squamish) River valley. Exceedance areas were 120.1 ha (3.4% of the LSA) and 128.2 ha (3.6% of the LSA), respectively.
- For eutrophication, the 4 kg/ha/yr critical load for forested upland and wetland ecosystems was exceeded in small areas near the Project in the Application and Cumulative Cases. Exceedance areas were 22.6 ha (0.6% of the LSA) and 25.4 ha (0.7% of the LSA), respectively.
- A separate 11,314.2 ha Lichen and Alpine LSA (LALSA) was defined for more sensitive alpine, subalpine, and lichen receptors. The 2 kg/ha/yr critical load was exceeded in the Application and Cumulative Cases, including 86.4 ha of alpine and parkland in the Application Case (<0.1% of the LALSA). Sensitive lichens may experience a 12–30% decline in abundance and richness based on Geiser et al. (2019).

Though modelled acidic deposition does exceed Level 0 critical loads in the Application Case, it does so only in small areas (120.1 ha, approximately 3% of the LSA), and the air dispersion modelling is conservative in its predictions. Based on these factors, Level 0 may be considered an appropriate level of assessment. Predicted exceedances are limited in spatial extent and are not predicted in the Project-Alone Case; therefore, the assessment indicates a low potential for widespread terrestrial acidification or eutrophication effects to forested ecosystems within the study areas due to the Project. There are predicted effects to the most sensitive functional groups of lichens throughout the LALSA due to the Project.

LIMITATIONS

This document entitled Technical Assessment Report for Woodfibre LNG Project was prepared by Stantec Consulting Ltd. (“Stantec”) for the account of Woodfibre LNG Limited Partnership (the “Client”) to support the regulatory review process for its Waste Discharge Authorization (the “Application”) for the Woodfibre LNG (the “Project”). In connection therewith, this document may be reviewed and used by the BC Energy Regulator (BCER) participating in the review process in the normal course of its duties. Except as set forth in the previous sentence, any reliance on this document by any other party or use of it for any other purpose is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document. The information and conclusions in the document are based on the conditions existing at the time the document was published and does not take into account any subsequent changes. Stantec has assumed all information received from the Client and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein. Any use which another party makes of this document is the responsibility and risk of such party. Such party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other party as a result of decisions made or actions taken based on this document.

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REVIEW AND SIGN-OFF

This document entitled Technical Assessment Report for the Woodfibre LNG Project was prepared by Stantec Consulting Ltd. ("Stantec") for the account of Woodfibre LNG Limited Partnership (the "Client") to support the application to the British Columbia (BC) Energy Regulator (BCER) for a Waste Discharge Authorization (WDA) (the "Application") for air emissions from the Woodfibre LNG Project (the "Project").

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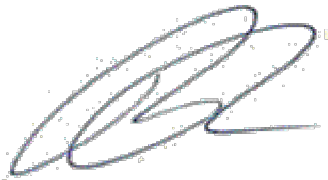
Prepared by: _____

April Hauk, B.Sc.,
EP Associate, Air Quality





Ramin Dastanpour, Ph.D., P.Eng., PMP
Senior Atmospheric Engineer



Reviewed by: _____

Reid Person, M.Eng., P.Eng.
Principal, Technical Discipline Leader,
Air Quality



Approved by: _____

Adriana MacLeod, B.Sc.
Project Manager

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SQUAMISH-ENGLISH TRANSLATION

Squamish	English
Ínexwantas	Monitoring
Skwxwú7mesh	Squamish
Skwxwú7mesh Sníchim	Squamish language
Skwxwú7mesh Úxwumixw	Squamish Nation
Skwxwú7mesh stélmexw	Squamish people
Stakw	Water, river
Temíxw	Land, earth, dirt
Nexwnéwu7ts Átlk'a7tsem	Howe Sound

ABBREVIATIONS

AGRU	Acid Gas Removal Unit
asl	above sea level
AQMS	Air Quality Monitoring Station
BAT	Best Achievable Technology
BC	British Columbia
BC AQO	British Columbia Air Quality Objective
BCER	BC Energy Regulator
BMS	burner management system
BOG	boil off gas
BTEX	benzene, toluene, ethylbenzene and xylenes
CEMS	continuous emissions monitoring system
CL _(A)	critical load of acidity
CO	carbon monoxide
EAC	Environmental Assessment Certificate
EAO	Environmental Assessment Office
ENVP	BC Ministry of Environment and Parks
ERAA	<i>Energy Resource Activities Act</i>
eq/ha/y	equivalents per hectare per year
FDS	Federal Decision Statement
Fortis BC	FortisBC Energy Inc.
FST	floating storage tank
GJ/hr	gigajoules per hour
H ₂ S	hydrogen sulphide
ha	hectare
HP	high pressure
hPa	hectopascal
kg/ha/y	kilograms per hectare per year
km	kilometre

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KO	Knock Out
LALSA	Lichen and Alpine LSA
LDAR	Leak Detection and Repair
LNG	liquefied natural gas
LP	low pressure
LSA	local study area
m	metre
m ³	cubic metre
m ³ /h	cubic metres per hour
MCHE	Main Cryogenic Heat Exchanger
mm	millimetre
MR	mixed refrigerant
m/s	metres per second
MW	megawatts
N	nitrogen
NO ₂	nitrogen dioxide
NO _x	oxides of nitrogen
O ₂	oxygen
OGAA	<i>Oil and Gas Activities Act</i>
PAH	polycyclic aromatic hydrocarbon
PM _{2.5}	fine particulate matter
ppmv	parts per million by volume
PCV	pressure control valve
the Project	Woodfibre Liquefied Natural Gas Project
PRV	pressure relief valve
PSV	pressure safety valve
PVRV	pressure vacuum relief valve
S	sulphur
SO ₂	sulphur dioxide
TAR	Technical Assessment Report

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TDR	Technical Data Report
TRS	total reduced sulphur
VOC	Volatile Organic Compound
WDA	Waste Discharge Authorization
Woodfibre LNG	Woodfibre LNG General Partner Inc., as General Partner on behalf of the Woodfibre LNG Limited Partnership

1.0 WOODFIBRE LNG PROJECT INTRODUCTION

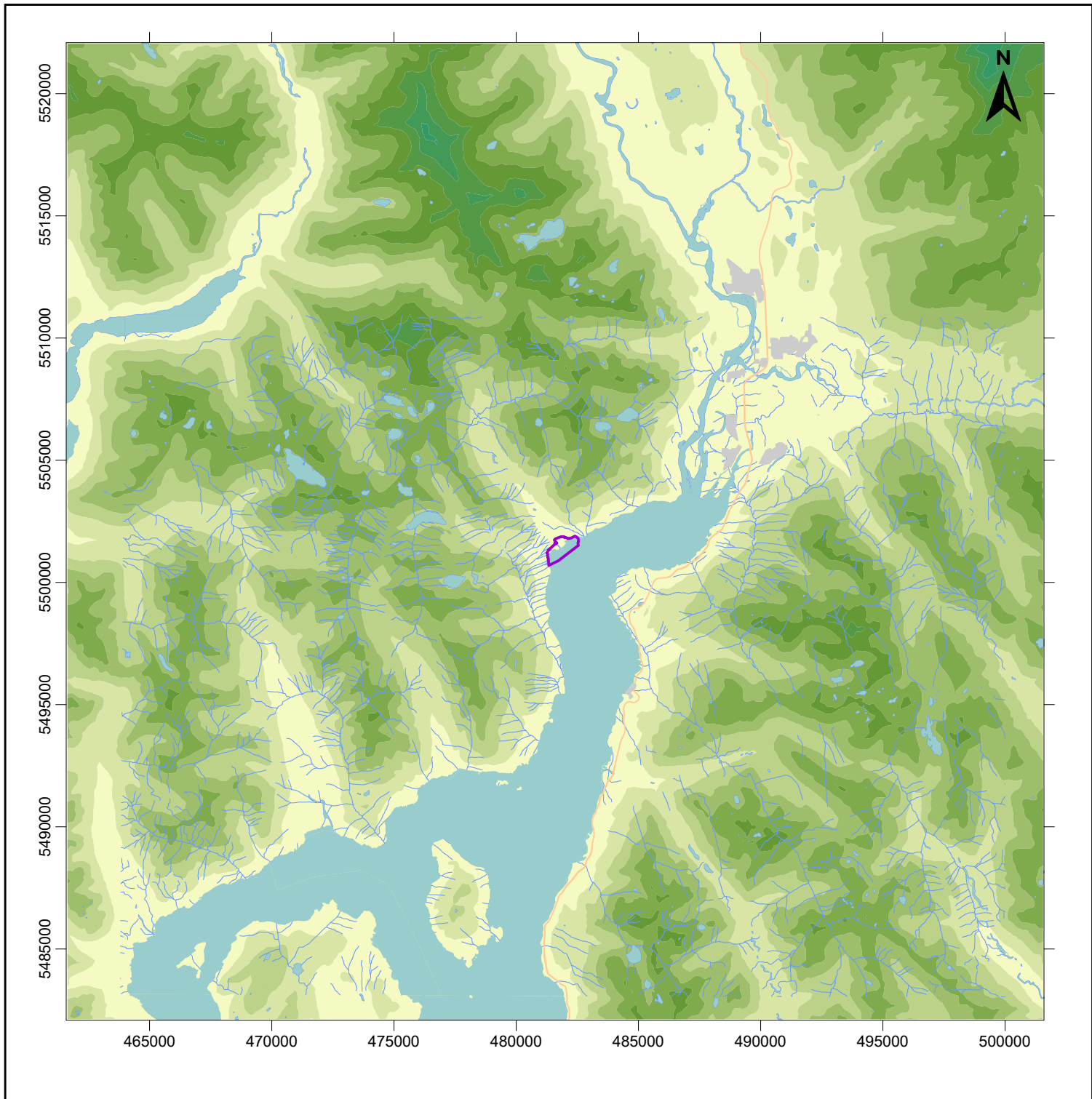
Woodfibre LNG General Partner Inc. (Woodfibre LNG), as General Partner on behalf of the Woodfibre LNG Limited Partnership will operate the Woodfibre Liquefied Natural Gas Project (the Project), which is located on the former Woodfibre Pulp Mill site approximately 7 kilometres (km) southwest of Sk̓w̓x̓w̓ú7mesh (Squamish), British Columbia (BC) (Figure 1.1).

The Project includes land-based natural gas processing and liquefaction facilities with a capacity to liquefy up to 2.1 million tonnes per year of liquefied natural gas (LNG). A floating storage and offloading unit includes two floating storage tanks (FST) that have a combined storage capacity of 250,000 cubic metres (m³) and LNG loading facilities that transfer LNG to LNG carriers for export. The estimated LNG carrier frequency is approximately 40 carriers annually, or three to four monthly. The supporting infrastructure includes buildings (e.g., administration building, control and operation building, maintenance building), utility systems, flare system, and boil off gas (BOG) vapour return lines.

The Project will be powered by electricity provided by BC Hydro, which includes the electric motors that drive the refrigerant compressors that liquefy the natural gas. The use of these e-drives is a key component to Woodfibre LNG's net zero roadmap, by setting a new global standard to be the world's first net zero LNG facility. Natural gas will be supplied to the facility by FortisBC Energy Inc. (Fortis BC) from western Canadian markets.

Woodfibre LNG is submitting this application for a Waste Discharge Authorization (WDA) for air emissions for the Project under the *Environmental Management Act* administered by the BC Energy Regulator (BCER). The WDA includes emissions from commissioning and operations of the Project.

The WDA application components include this Technical Assessment Report (TAR), the Dispersion Modelling Plan (Attachment 1, Appendix A), and the Technical Data Report (TDR) (Appendix A).



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

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Client/Project/Report

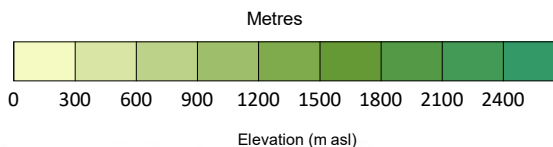
Woodfibre LNG General Partners Inc.
 Woodfibre LNG Facility
 Technical Assessment Report

Figure No

1.1

Title

Location Map



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1.1 REGULATORY CONTEXT

The provincial, Skwxwú7mesh Úxwumixw (Squamish Nation), and federal environmental assessment processes each yielded conditions of approval that Woodfibre LNG must address prior to and during construction and operations of the Project. Collectively, these approvals include the Environmental Assessment Certificate (EAC) #E15-02, environmental assessment approval from Skwxwú7mesh Úxwumixw (Squamish Nation), and the Federal Decision Statement (FDS).

Since the EAC was issued, four EAC amendments have been issued for the Project to date:

- EAC Amendment (#1) — issued by the Environmental Assessment Office (EAO) on July 12, 2017, for changes to the Project, including changes to the process cooling technology from seawater cooling to air cooling, use of the existing Mill Creek staḵw (water) intake, and withdrawal of staḵw (water) from Woodfibre Creek for short-term needs during construction.
- EAC Amendment (#2) — issued by the EAO on July 19, 2019, to clarify the definition of construction in Schedule B (Table of Conditions).
- EAC Amendment (#3) — issued by the EAO on November 1, 2023, to allow for a temporary floating worker accommodation, or “Floatel #1”, as well as its associated mooring, access infrastructure, and onshore drinking- staḵw (water) treatment facility.
- EAC Amendment (#4) – issued by the EAO on November 4, 2025, to allow for a second temporary floating worker accommodation, or “Floatel #2”.
- EAC Amendment (#5) – issued by the EAO on March 31, 2026, to increase the condensate storage container volume from 300 to 1,500 m³.

The Skwxwú7mesh Úxwumixw (Squamish Nation) environmental assessment process for the Project was designed to parallel the federal and provincial environmental assessment processes, whereby Project effects on the Skwxwú7mesh stélmexw (Squamish people's) rights and title interests are identified, understood, and properly avoided or mitigated. The process for the Project ultimately resulted in Skwxwú7mesh Úxwumixw (Squamish Nation) issuing an environmental assessment certificate (#2015-001), which includes conditions described in the SNEAA that was issued on October 14, 2015; and subsequently amended in 2023 and 2025.

1.2 PROJECT DESCRIPTION

The Certified Project Description under the EAC is outlined herein.

The components related to LNG processing are:

- Control systems
- Natural gas inlet facility and piping
- Natural gas pre-treatment facilities
- Up to two natural gas liquefaction trains (also called processing units) (*note, there is only one LNG train*)
- A condensate storage container

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- Flare system with a maximum flare stack height of 140 metres (m)
- Fire control and safety infrastructure

The Project uses electrical power sourced from BC Hydro. Feed gas will be supplied to the Project via the FortisBC Eagle Mountain Pipeline. Feed gas is of marketable natural gas quality with few impurities. However, the trace impurities (i.e., carbon dioxide [CO₂], sulphur compounds, mercury, heavy hydrocarbons, benzene, toluene, ethylbenzene, and xylenes (BTEX)) are removed prior to liquefying.

The components related to the LNG loading system are:

- Supporting utility lines
- LNG loading lines
- Boil off gas (BOG) vapour return lines

The components related to the marine terminal are:

- One LNG carrier berth, able to accommodate one LNG carrier
- The floating storage and offloading unit consisting of two converted LNG carriers with a total capacity of no greater than 250,000 m³

Supporting permanent infrastructure includes:

- Infrastructure to bring electrical power to Certified LNG Facility Area
- Fresh sta_kw (water) supply infrastructure, including intake, piping and storage tank
- Main administration building containing First aid, Security and Safety, control room(s), maintenance building(s), dry storage and chemical building(s), Vehicle shelter building, and guardhouse
- Facilities to provide site access, including floats, docks, barge ramp, passenger ferry terminal, and helipad
- Marine offloading facility
- Shoreline protection berm
- Site security infrastructure
- Sta_kw (water) and wastewater treatment and discharge facilities
- Storm sta_kw (water) management, treatment and discharge facilities
- Roads and bridges

2.0 OPERATIONAL SYSTEM DESCRIPTION

This section contains detailed process description, a system and block flow diagram, a list of relevant process flow diagrams provided to the BCER, and a site plan.

2.1 DETAILED PROCESS, OPERATIONAL AND RELEVANT CONTROL SYSTEMS

Natural gas will be supplied to the LNG facility by FortisBC from western Canadian market hubs. Scheduled grab samples of the inlet gas will be taken manually and analyzed for hydrogen sulphide (H_2S) and total sulphur content in the laboratory.

In the LNG facility, the impurities and other components of the incoming pipeline quality gas mainly CO_2 , trace sulfur, sta_{kw} (water) and mercury that would not meet the LNG specification are removed. The natural gas is then cooled (liquefied) to -160 degrees Celsius ($^{\circ}C$) in a two stage process to produce LNG which is subsequently stored in FSTs then loaded into an LNG carrier for export to market. Figure 2.1 contains a schematic overview of the process.

The main sources of emissions are the Thermal Oxidizer, Heat Medium Furnace, and flare system.

The incoming feed gas is directed through the inlet facility to adjust the feed gas temperature and pressure. The feed gas is then routed to the mercury removal unit to remove mercury using adsorbent beds. The feed gas is then directed to the Acid Gas Removal Unit (AGRU) to remove the CO_2 and low levels of H_2S using an amine solvent in the Acid Gas Absorber. The AGRU is required to remove CO_2 from the feed gas to avoid freezing and plugging in the downstream cryogenic equipment and H_2S to meet the LNG specification. The separated CO_2 rich (and low levels of H_2S) amine solvent stream from the Acid Gas Absorber is then directed to the high pressure (HP) Flash Drum then the Solvent Regenerator to separate the solvent for reuse in the Acid Gas Absorber. The resulting separated CO_2 and H_2S stream ("acid gas") is then directed to the Thermal Oxidizer where the acid gas is thermally incinerated. The hydrocarbon vapours from the HP Flash Drum and Condensate Storage Tank are also sent to the Thermal Oxidizer. The acid gas stream also contains volatile organic compounds (VOCs) including BTEX, and other sulphur containing compounds (e.g. mercaptans) present in the feed gas with the CO_2 and H_2S . The Thermal Oxidizer is supplied with supplemental fuel gas to maintain the combustion temperature for adequate destruction and removal of BTEX and H_2S .

The sweet wet gas from the Acid Gas Absorber is cooled then sent to the Dehydration unit where molecular sieve gas dryers adsorb the sta_{kw} (water). The resulting dry treated gas is pre-cooled in propane heat exchangers then fractionated in a Scrub Column, the scrub column is designed to meet the LNG specification and avoid freezing in the Main Cryogenic Heat Exchanger (MCHE) by removal of heavy hydrocarbons and BTEX.

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- Heavier components leave the bottom of the Scrub Column as a high pressure liquid. This stream is routed to the Condensate Stabilization Column where the lighter hydrocarbons are removed (and reused within the LNG process) to stabilize the liquid for storage at atmospheric pressure. The stabilized condensate is then air cooled before being routed to the Stabilized Condensate Storage Drum then Stabilized Condensate Storage Tank for export. As noted above, the hydrocarbon condensate vapours from Stabilized Condensate Storage Drum and Stabilized Condensate Storage Tank vent are sent to the Thermal Oxidizer for combustion.
- Treated gas from the top of the Scrub Column is routed to the Liquefaction Unit. The gas is cooled (liquefied) to -160°C in the MCHE using a refrigerant system consisting of methane, ethane, propane, and nitrogen ("Mixed Refrigerant") and the resulting LNG is routed to the FSTs. The refrigerant compressors are driven by electric motors powered by renewable hydroelectricity, rather than natural gas turbines, which is the foundation of Woodfibre LNG's approach to achieving Net Zero (refer to Section 8.1 for further information).

The FSTs are two retrofitted LNG vessels (FST-1 and FST-2) that are permanently moored at the marine terminal, with each vessel containing five LNG Storage Tanks. The LNG carrier, with the assistance of up to three tugs, moors parallel to the FSTs; LNG is then loaded onto the LNG carrier for export.

Process heat is used in several systems, including heat exchangers and gas heaters. Process heat is supplied by a gas-fired heat medium furnace to a closed loop of heating medium fluid. The gas is sourced from the internal fuel gas system. Fuel gas is also supplied to other equipment, including the Thermal Oxidizer and the flare system. Fuel gas is primarily BOG and the hydrocarbon vapours from the Condensate Stabilization Column. BOG is the vapour that is generated off the LNG when it is subject to warmer temperatures. The BOG recovered from the FSTs and LNG loading system is recompressed in BOG compressors and routed to the fuel gas system; any excess BOG is mixed with the dry treated gas downstream of the Dehydration unit (prior to being pre-cooled in the propane heat exchangers) and reliquefied. During plant start-up or upset conditions, alternative sources of fuel gas are the incoming feed gas and the dry gas downstream of the Dehydration unit.

The LNG facility utilizes two flares: the HP flare and the low pressure (LP) flare. Routine flaring will be undertaken which is the controlled flaring necessary to maintain flare system pressure and prevent the ingress of oxygen (typically achieved through purging the flare headers with fuel gas) and safely combust minor sources of hydrocarbons, for example, leakage from compressor seals. Non-routine flaring events may occur where there are process upsets (deviations that require an LNG facility operator to take measures that prevent safety or production loss and pre-empt activation of safety systems), maintenance, in emergency situations, and during planned facility shutdowns (typically occur every five years).

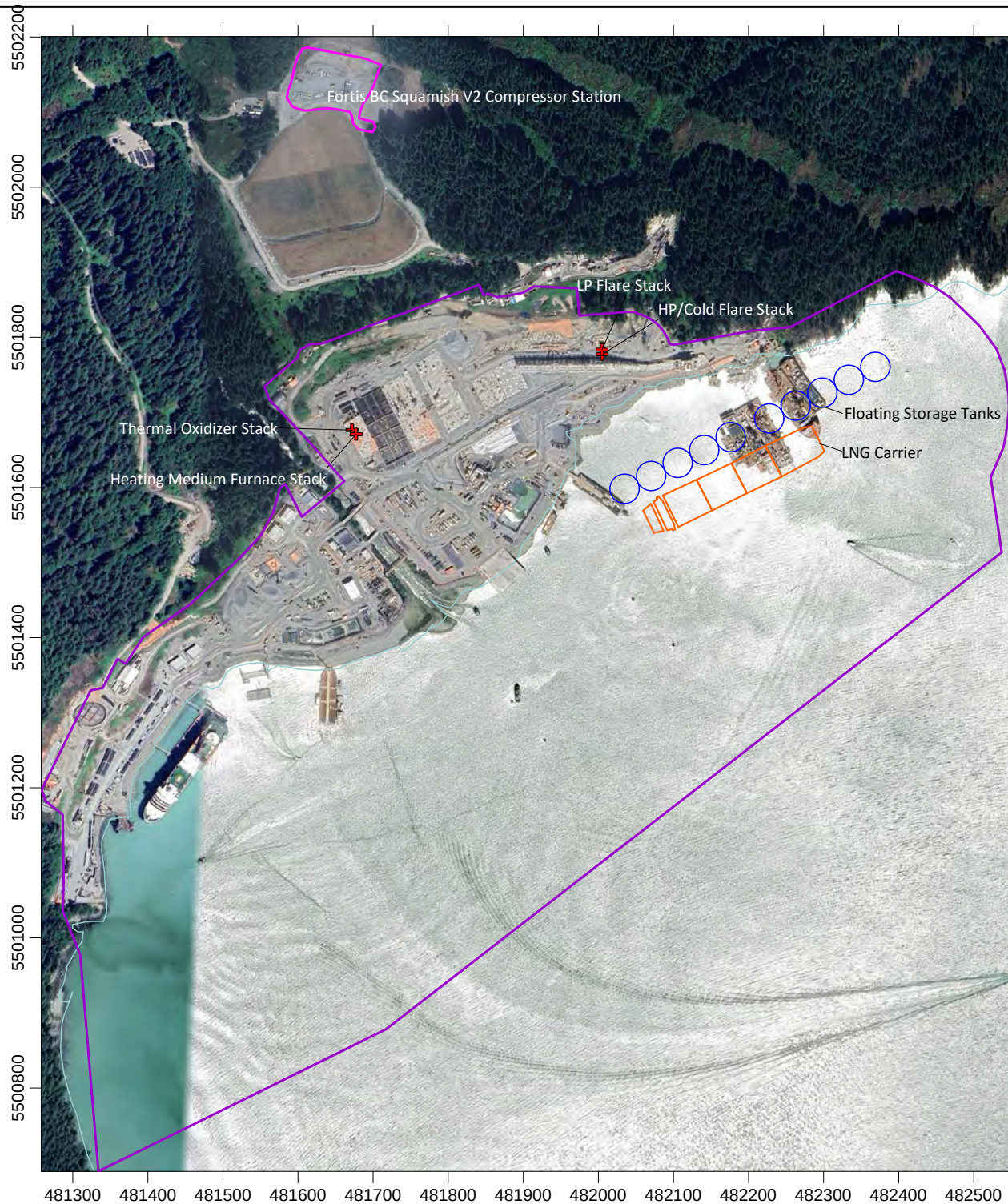
2.2 SYSTEM AND BLOCK FLOW DIAGRAMS

Figure 2.1 provides a system and block flow diagram for the LNG facility.

The diagram illustrates the process flow for the waste-to-energy plant. It begins with Pipeline Feed Gas entering the Inlet Facilities. The gas then passes through a Mercury Removal Unit and an Acid Gas Removal Unit. The resulting Acid Gas is sent to a Thermal Oxidizer, which also receives Flue Gas from the Fuel Gas System. The Thermal Oxidizer's output goes to a Dehydration Unit, which then feeds into Propane Heat Exchangers. The Propane Heat Exchangers output to a Scrub Column, which then feeds into a Liquefaction Unit. The Liquefaction Unit outputs to Floating Storage Tanks, which then feed into LNG Export. The Liquefaction Unit also outputs Boil Off Gas to a Refrigerant System. The Refrigerant System outputs to the Propane Heat Exchangers. The Propane Heat Exchangers also output to a Condensate Stabilization & Storage Tank, which then feeds into Condensate Export. The Condensate Stabilization & Storage Tank also outputs to the Floating Storage Tanks. The Floating Storage Tanks also output to LNG Export. The Condensate Export and LNG Export are the final products of the process.

Note, the intent of this illustration is to highlight the key processes that inform the waste discharge authorisation for air emissions. It does not show every process flow stream and supporting utilities, including all the connections to the flare system.

15-Dec-2025



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Woodfibre LNG Fenceline
- LNG Carrier
- Floating LNG Storage Spheres
- Shoreline
- Fortis BC Squamish V2 Compressor Station Fenceline
- + Stacks

0 100 200 m



Project Location
Swiyat

Client/Project/Report

Woodfibre LNG General Partners Inc.
Woodfibre LNG Facility
Technical Assessment Report

Figure No.
2.2

Title
Detailed Site Plan

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3.0 AIR DISCHARGE AND TREATMENT

Project emissions are described by type including point sources, non-routine sources, and fugitive emissions.

3.1 POINT SOURCE EMISSION INVENTORY

As described in Section 2.1, there are four continuous combustion emission sources associated with the Project including one heat medium furnace, one thermal oxidizer, high-pressure (HP) flare, and low-pressure (LP) flare. This equipment operates using fuel gas, which is primarily BOG resulting in products of natural gas combustion including oxides of nitrogen (NO_x), sulphur dioxide (SO₂), fine particulate matter (PM_{2.5}), carbon monoxide (CO), volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs).

In the event BOG is not available for fuel gas, feed gas may be used for fuel in the point emission sources. The change in fuel gas may result in negligible to small increase in SO₂ emissions from the Thermal Oxidizer due to the sulphur content of the feed gas. Emission rates for NO_x, PM_{2.5}, CO, and VOCs are unchanged for the thermal oxidizer. Emission rates are unchanged for the heat medium furnace and flare pilot and purge while using feed gas for fuel.

There is emergency equipment that will operate occasionally to test operability and conduct maintenance, and during emergency conditions, these include three backup essential diesel generators and three firewater pumps (two diesel, one electric). This equipment that operates using diesel results in the release of the byproducts of diesel combustion including NO_x, SO₂, PM_{2.5}, CO, VOCs, and PAHs.

There are several pieces of equipment that will vent to atmosphere. Venting will occur based on operational activities (e.g., from pressure safety valves (PSVs), pressure relief valves (PRVs)), to support maintenance activities, and where the flow rate is small and/or composition is insufficient to support stable combustion.

The equipment specifications and emissions details for each point source are provided in the following sections.

3.1.1 Heat Medium Furnace

The Heat Medium Furnace has a design duty of approximately 26 megawatts (MW) with a rated capacity of 94.5 gigajoules per hour (GJ/hr) and is used to supply high temperature (approximately 300°C) and low temperature (180°C) heating medium to the heaters and reboilers in the LNG process. Detailed source characteristics, operating parameters, and emission rates are provided in Table 3.1.

The discharge temperature is controlled by adjusting the fuel gas supply to the Heat Medium Furnace. The Heat Medium Furnace is equipped with eight Ultra Low NO_x burners to achieve a NO_x emissions intensity of less than 16 g/GJ (corrected to 3% oxygen (O₂) dry basis) to meet the requirements of the Multi-Sector Air Pollutants Regulation established under the Canadian Environmental Protection Act.

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The Heat Medium Furnace also has a burner management system (BMS) to monitor the operating parameters, including an oxygen analyzer to ensure adequate excess oxygen levels are maintained. There are three 4-inch stack sampling connections; two are near the top of the flue stack (approximately 38 meters above ground level) and one is near the top of the heater (approximately 18.5 meters above ground level).

As noted in Section 2.1, the fuel source of the heating medium furnace is fuel gas, which is primarily boil off gas (BOG) from the BOG compressors and overhead non-condensable vapors from the Condensate Stabilization Column Reflux Drum. Fuel gas is internally generated and consumed during normal operations. Any excess BOG is recycled into the feed gas for re-liquefaction. If BOG or the overhead vapors from the Condensate Stabilization Column Reflux Drum are not available, the secondary source for fuel gas is the dry, treated feed gas from the Dehydration unit. During plant start up or under upset conditions, a tertiary source of fuel gas is the feed gas from the inlet facility (pipeline feed gas is routed via the start-up heater). When the facility uses feed gas as a substitute for fuel gas, no material change in emissions from the Heat Medium Furnace is expected, as the alternative fuel sources are primarily natural gas.

Table 3.1: Heat Medium Furnace Equipment Details

Source Identification		Heat Medium Furnace
Number of Units		1
Temporal Variation		Continuous
Fuel Type		Natural Gas – Facility Fuel Gas
Heat Input (based on HHV)	MW	32.4
Stack Location (UTM Zone 10, NAD 83)		
UTM Easting	m E	481,677
UTM Northing	m N	5,501,671
Elevation	m	8.5
Stack Parameters		
Stack Height	m	49.34
Stack Inside Tip Diameter	m	1.90
Exhaust Discharge Rate (at 101.325 kPa, 20°C, dry)	s m ³ /s	8.7402
Maximum Exit Velocity	m/s	5.91
Exit Temperature	°C	188
	K	461
Maximum Emission Rates		
SO ₂	g/s	0.010
NO _x	g/s	0.611
PM _{2.5}	g/s	0.021
CO	g/s	1.55
VOC	g/s	0.075

3.1.2 Thermal Oxidizer

As outlined in Section 2.1, the purpose of the Thermal Oxidizer is to thermally incinerate the following streams from the LNG facility:

- Acid Gas: From the AGRU where an amine solvent is used in the Acid Gas Absorber to remove CO₂ from the feed gas to avoid freezing and plugging in the downstream cryogenic equipment along with other impurities such as VOCs (including BTEX), H₂S and other sulphur containing compounds (e.g. mercaptans). The solvent is separated from this acid gas stream for reuse, then the acid gas is directed to the Thermal Oxidizer.
- Flash Gas: Hydrocarbon vapors from the HP Flash Drum (also part of the AGRU).
- Storage Gas: Hydrocarbon condensate vapor from the Condensate Storage Tank, Stabilized Condensate Drum and displaced vapor return during condensate loading activities.

These streams are injected around the burner management system via inlet nozzles and are subsequently incinerated. The Thermal Oxidizer has an operational temperature of 982°C that is managed by a BMS, a control system to ensure the system is operated safely. The firing rate of the system is controlled by maintaining a specific operating temperature inside the Thermal Oxidizer while acid gas/ flash gas/ storage gas stream volumes may fluctuate. There are various controls within the BMS that manage the flow of fuel gas and air into the burner to obtain the required combustion conditions to achieve oxidation of the sulphur compounds (converted to SO₂) and conversion of the hydrocarbon compounds into steam (water) and CO₂. The Thermal Oxidizer source parameters and maximum emission rates used for permitting and dispersion modelling are summarized in Table 3.2.

The Thermal Oxidizer is equipped with Low NO_x Burners to achieve a NO_x emissions intensity of less than 26 g/GJ (corrected to 3% O₂ dry basis) from the fuel gas combustion.

Similar to the heating medium furnace, the primary fuel source for the Thermal Oxidizer is BOG. In the non-routine event that BOG is not available, the change in emission rates from the Thermal Oxidizer when using pipeline feed gas as the primary fuel gas source is negligible. The fuel gas requirement will vary depending on acid gas flow and concentrations (which is mainly CO₂); the dispersion modelling is based on the maximum sulfur in acid gas stream (based on maximum sulfur in the feed gas); therefore, a lower acid gas concentration (CO₂ or sulphur), will result in slight reduction in fuel gas consumption.

There is a continuous emissions monitoring system (CEMS) for the Thermal Oxidizer. The ABB Advance Optima A02000 series CEMS will be used to measure the parameters outlined in Table 3.3. An EMRC Gas Flow Monitoring System will be used to measure the dynamic pressure of gas flow and stack temperature. The CEMS will operate in accordance with the federal "Protocols and performance specifications for continuous monitoring of gaseous emissions from thermal power generation and other sources" (formerly PG/7).

There are 4-inch instrumentation connections on the Thermal Oxidizer stack at approximately 30 meters above ground level, which includes four sample port connections, O₂ analyzer, the CEMS connection and flow monitor connection; with the analyzers housed in an analyzer cabinet.

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In the low likelihood event of temporary unavailability of the Thermal Oxidizer, the acid gas and HP flash gas from the AGRU will be routed to the flare for venting. The overhead vapors from the Condensate Storage Tank will be vented via local PCV vent at the top of the tank¹. The unavailability of the Thermal Oxidizer could be due to a problem with the Thermal Oxidizer BMS or the combustion air blowers.

- As the design case is based on 2% CO₂ case (rare event), there are many spare burners for normal operating case. In addition, fuel gas is sourced downstream of the dehydration unit, where the gas quality is expected to be clean and suitable for burner service.
- The combustion air blowers are the only rotating equipment in the system therefore there are two blowers which can be operated anywhere from 2 × 50% to 2 × 100% duty, providing flexibility and allowing for a robust maintenance strategy without impacting availability.

Acid gas diversion to the flare system is a common design feature in many major LNG facilities, as it provides a temporary operating window during thermal oxidizer upsets, allowing Operations time to troubleshoot and restore the Thermal Oxidizer without immediately shutting down the facility, while the acid gas is released at higher elevation to improve dispersion. This approach helps avoid a full plant shutdown, which can result in significantly higher emissions associated with depressurization, flaring, and subsequent facility restart.

If troubleshooting determines that the Thermal Oxidizer cannot be restored, the facility would then proceed with an orderly shutdown. As such, the intent is not to use the flare as a long-term disposal solution, but rather as a temporary contingency measure to improve facility reliability and minimize overall emissions associated with unnecessary shutdowns.

The acid gas stream equates to over 90% of the flow rate routed to the flare for venting. The acid gas has a very low calorific value as it averages over 92 mol% CO₂ and 6 mol% water. The Thermal Oxidizer is specifically designed to incinerate this stream. However, the HP flare is intended primarily for general gas combustion and not for specialized acid gas destruction, therefore there will not be effective destruction of the acid gas in the flare. While the pilot and purge system will be operating on the HP flare during a thermal oxidizer upset, in practice, the gas would be discharged unburned (vented) from the flare. There is no “make up” gas to the HP flare to increase the destruction efficiency (for the HP flare) under the potential Thermal Oxidizer trip scenario as flare tips are not designed to handle these low-flow, and low-calorific-value gases. To increase the flare tip flow rate and heating value within the allowable operating envelope, a significant quantity of supplemental fuel gas would be required. This would result in a substantial increase in fuel gas consumption and associated emissions, making the approach environmentally and operationally unfavorable.

The dispersion modelling is based on the total sulphur (H₂S and other sulphur containing compounds) in the incoming feed gas being discharged as total reduced sulphur (TRS) compounds (vented) rather than converted to SO₂ (combusted) (Appendix A (Technical Data Report)).

¹ For the dispersion modelling, this stream has been included in what is vented via the flare stack.

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Table 3.2: Thermal Oxidizer Equipment Details

Source Identification		Thermal Oxidizer
Number of Units		1
Temporal Variation		Continuous
Fuel Type		BOG + Acid Gas + Flash Gas + Storage Gas
Heat Input (based on HHV)	MW	11.6 ^a
Stack Location (UTM Zone 10, NAD 83)		
UTM Easting	m E	481,672
UTM Northing	m N	5,501,676
Elevation	m asl	8.5
Stack Parameters		
Stack Height	m	49.34
Stack Inside Tip Diameter	m	1.38
Exhaust Discharge Rate (at 101.325 kPa, 20°C, dry)	s m ³ /s	5.5405
Maximum Exit Velocity	m/s	18.7
Exit Temperature	C	982
	K	1255
Maximum Emission Rates		
SO ₂ ^b	g/s	3.11
NO _x	g/s	0.302
PM _{2.5}	g/s	0.007
CO	g/s	0.296
VOC	g/s	0.027

Note:

^a The heat input includes BOG used as fuel gas to maintain the required Thermal Oxidizer operating temperature.

^b Thermal Oxidizer SO₂ emissions based on BOG fuel gas. The emission rate using feed gas as fuel gas is 3.13 g/s.

Table 3.3: Continuous Emissions Monitoring System Overview

Parameter	A02000 Analyzer Module Type	A02000 Analyzer Module Model	Measured Range
CO	Infrared photometer analyzer	URAS 26	0 to 1,000 ppm
SO ₂	Infrared photometer analyzer	URAS 26	0 to 100 ppm
O ₂	Oxygen analyzer	MAGNOS 28	0 to 25%
NO _x	Process photometer analyzer	LIMAS 21	0 to 100 ppm
THC	Flame ionizer detector (FID) analyzer	FIDAS 24	0 to 100 ppm

Note:

THC is total hydrocarbon

3.1.3 High- and Low-Pressure Flare Systems

The HP and LP flares are located side by side in a guy-wire-stabilized space frame, with the guy wire anchored at three locations. Detailed flare characteristics, operating assumptions, and emission estimates are provided in Table 3.4.

Flares are fitted with pilot burners that maintain continuous flame presence at the flare tip, and an automatic pilot ignition system ensuring combustion under all wind conditions and during precipitation events should material be released to the flares. Thermocouples are provided at each flare pilot to continuously monitor the presence of the pilot flame at each flare tip and alert a Facility operator in the unlikely event that a flare pilot is extinguished.

There are networks of flare headers that collect gases that are continuously purged with fuel gas to prevent the ingress of oxygen, with nitrogen as a backup purge gas. There is a velocity gas seal in both the HP and LP flare systems that reduces the amount of purge gas required to maintain the flare collection systems in the required condition.

The HP warm flare header collects wet releases from the Facility which are routed to the Warm Flare Knock Out (KO) Drum. The HP cold header collects the cold, cryogenic streams which are routed to the Cold Flare KO Drum. The vapors from the Warm KO Drum are transferred to the Cold KO Drum then sent to the HP Flare for combustion. Defrost gas (heated feed gas downstream of the dehydration unit) is utilized in the Cold Flare KO Drum to heat and vaporize any liquids that may have accumulated in the drum. Liquids that cannot be vaporized are returned to the Warm Flare KO Drum via the Cold Flare Blow Case. The high boiling liquid remnants in the Warm KO Drum that cannot be vaporized are transferred into temporary containers and sent offsite to an approved facility.

The LP flare system is used for low pressure sources, including FSTs (e.g., BOG), vapors from LNG carrier loading, analyzers, compressors, and pump vents. Since the discharged streams are exclusively vapor, a KO drum is not required for the LP flare system.

All PRVs are routed to the flare system except for the low-pressure LNG tanks in emergency scenarios (refer to Section 3.1.5).

The flare systems have flow meters to provide reliable and accurate measurements over the expected range of flow conditions and gas compositions. The BC Measurement Guideline (BCER, 2023) defines the measurement accuracy requirements which will be applied to the flare system.

As noted in Section 2.1, routine flaring is the controlled flaring necessary to maintain flare system pressure and prevent the ingress of oxygen (typically achieved through purging the flare headers with fuel gas) and safely combust minor sources of hydrocarbons, for example, leakage from compressor seals. Further information on the non-routine flaring is provided in Section 3.2.

During Stabilizing Operations, routine flare rates may be temporarily higher due to gas passing valves. Stabilizing Operations are assessed as a separate operating scenario, with the associated flare flow and emission rates presented in Table 3.4 and further described in Section 3.2.3 and Appendix A.

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Table 3.4: High- and Low-Pressure Flare Systems Details

Source Identification		High Pressure (HP) Flare	Low Pressure (LP) Flare
Number of Units		One	One
Temporal Variation		Continuous	Continuous
Fuel Type		Fuel Gas	Fuel Gas
Heat Input (based on HHV)	MW	6.1	4.1
Stack Location (UTM Zone 10, NAD 83)			
UTM Easting	m E	482,005	482,005
UTM Northing	m N	5,501,777	5,501,784
Elevation	M asl	8.5	8.5
Stack Parameters			
Physical Stack Height	m	134.0	134.0
Stack Inside Tip Diameter	m	1.20	0.76
Maximum Gas Flow Rate (at 101.325 kPa, 20°C, dry)	s m ³ /h	1204	557
Pseudo Exit Velocity	m/s	20.0	20.0
Pseudo Exit Temperature	C	1,000	1,000
	K	1,273	1,273
Emission Rates - Normal Operations			
SO ₂	g/s	0.006	0.002
NO _x	g/s	0.342	0.154
PM _{2.5}	g/s	0.017	0.008
CO	g/s	1.40	0.633
VOC	g/s	2.99	1.35
Emission Rates - Stabilizing Operations (Temporary Elevated Routine Flaring Due to Passing Valves)			
SO ₂	g/s	0.054	0.002
NO _x	g/s	1.26	0.417
PM _{2.5}	g/s	0.054	0.022
CO	g/s	5.17	1.71
a) Routine flaring is controlled flaring undertaken to maintain flare system pressure and prevent the ingress of oxygen (typically achieved through purging the flare headers with fuel gas) and safely combust minor sources of hydrocarbons, for example, leakage from compressor seals.			

3.1.4 Essential Diesel Equipment

Essential diesel equipment at the LNG facility provides backup power generation and fire protection in the event of power loss or fire. Emission characteristics and source parameters for essential diesel equipment are summarized in Table 3.5.

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There are three essential diesel generators, 3 x 50%. The generators are connected to the essential switchgear, which in turn distributes power to various substations and normal LNG facility power supply including the uninterruptible power supply (UPS) batteries. Essential loads/services are defined as all safety related systems requiring electrical power, including electrical control systems, communication systems, emergency lighting systems, firefighting systems, one of the instrument air compressors and also loads/services for which failure in operation or failure upon demand can cause an unsafe condition of the process and/or electrical installation, jeopardize personnel, or cause major damage to the LNG Facility.

In the event of a loss of normal LNG facility power supply, the generators are initiated to provide the essential loads; two would be operated at one time, with one in standby (N+1 sparing philosophy). The essential diesel generators are also operated occasionally (i.e. weekly) to test operability for maintenance, for the duration of 15 to 30 minutes. The diesel day tank capacity allows the generators to operate for up to 24 hrs.

There are three fire pump skids (3 x 50%); one electric motor pump and two diesel engine driven pumps. The fire water pumps will start automatically when the two jockey pumps (electric motors) are unable to maintain the required pressure in the fire water distribution header. The fire water pumps are configured as 3 x 50%. The fire water distribution network extends through the whole site. For testing purposes, the run hours will be 15 to 30 minutes per week per engine. The diesel day tank capacity allows the engines to operate for up to 24 hrs.

Table 3.5: Essential Diesel Equipment Details

Source Identification		Essential Generators	Firewater Pumps
Number of Units		Three	Two
Temporal Variation		Emergency	Emergency
Fuel Type		Diesel	Diesel
Power Rating	kW	2500	597
Stack Location (UTM Zone 10, NAD 83)			
UTM Easting	m E	481593; 481599; 481606	481315; 481317
UTM Northing	m N	5501507; 5501513; 5501519	5501259; 5501262
Elevation	m asl	8.5	8.5
Stack Parameters			
Physical Stack Height	m	6.5	4.0
Stack Inside Tip Diameter	m	0.508	0.203
Exhaust Discharge Rate (at 101.325 kPa, 20°C, dry)	sm ³ /s	3.57448	0.638
Maximum Exit Velocity	m/s	46.9	62.2
Exit Temperature	C	453	560
	K	726	833

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Source Identification		Essential Generators	Firewater Pumps
Maximum Emission Rates for each generator or pump			
SO ₂	g/s	0.005	0.001
NO _x	g/s	0.755	0.831
PM _{2.5}	g/s	0.031	0.014
CO	g/s	0.119	0.109
VOC	g/s	0.051	0.010

3.1.5 Vent Sources

A list of vent sources for the LNG facility is provided in Appendix B. There is one source of continuous venting; in the Compressor Lube Oil tanks, the vapor is cleaned in an oil mist separator before being vented. This includes Air Compressor Package Lube Oil Tanks, BOG Gas Compressor Lube Oil Tanks, Regenerator Gas Compressor Lube Oil Tank, LP Mixed Refrigerant (MR) Compressor Lube Oil Tanks, and HP MR Compressor Lube Oil Tank.

There are several pieces of equipment that will vent locally to atmosphere intermittently or under emergency scenarios at a safe location (elevated heights).

Intermittent venting of hydrocarbons may occur from the following sources for operational and maintenance activities:

- Diesel Storage Tank, Fire Water Diesel Pump Day Tank, and the Essential Diesel Generator Day Tanks will vent during filling, as diesel air saturated vapors will be released while displacing air during filling.
- Heat Medium Furnace fuel gas skid and burner/pilot gas manifold. The start up sequence will vent a small amount of fuel gas until the combustion composition is achieved.
- Thermal Oxidizer fuel gas skid (main fuel gas, pilot fuel gas and flash gas piping). The start up sequence will vent a small amount of fuel gas until the combustion composition is achieved.

Emergency venting of hydrocarbons may occur from the following sources:

- FSTs:
 - Each FST has two pressure vacuum relief valves (PVRVs) that will discharge (vent) to atmosphere. PVRVs protect the low-pressure storage tanks from rupturing (overpressure) or imploding (under-vacuum) during normal operations like overfilling or emptying. The probability of lifting a PVRV is minimal given the ten LNG storage tanks within the two FST vessels are interconnected, providing a large volume to manage the overall pressure in the FSTs. The PVRV set pressures are also staggered so that they do not all lift at the same time, with the lowest pressure set for Tank 1 and 10 to provide maximum separation.
- Condensate Storage Tank:
 - There are two PVRVs that protect against vacuum and overpressure scenarios.
 - There is one vent that will be used if the vapor from the tanks cannot be routed to the Thermal Oxidizer or LP flare header (normal operations).

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In addition, in the low likelihood event of temporary unavailability of the Thermal Oxidizer, the acid gas and HP flash gas from the acid gas removal unit and the overhead vapor from the Condensate Storage tank will be routed to the flare system to vent at the higher elevation (refer to Section 3.1.2).

Venting non-hydrocarbons for operational and maintenance activities will also occur from equipment. Examples include (but are not limited to):

- Nitrogen:
 - Secondary seals on the compressors (continuous) (primary seals are connected to the flare) and seals on the LNG Loading Arms and Jumper Arms (continuous; note these are on the intermittent list in the event these fail).
 - Nitrogen Receiver pressure relief valves (PRVs) (emergency), Nitrogen Package local vent (continuous) and PRVs (emergency), and Nitrogen Storage Vessel (intermittent; to maintain pressure in the vessel).
 - Demineralized Water Tank pressure control valves (PCVs) (intermittent).
- Air:
 - Oily Water Storage Tank and oily water sumps (intermittent), Sanitary Wastewater Treatment System and lift stations (intermittent), and Raw Water / Fire Water Storage Tank (intermittent).
 - Air Compressor Package during compressor blow off (intermittent), Wet Air Receiver PRVs (emergency), Instrument Air Dryer PRVs (emergency), Instrument Air Receiver PCV (intermittent), and Instrument Air Dryer Analyzer Exhaust (continuous).
 - FST tank void space continuous purging with instrument air (for leak detection).

There are many other PRVs associated with tanks/vessels that will vent non-hydrocarbons in an emergency event that are not listed herein.

3.1.6 Marine Vessels

LNG carriers will visit the LNG facility approximately 40 times per year to deliver LNG to markets. Three harbour tugboats will assist the LNG carriers to maneuver into and out of the loading berth. The LNG carrier and tugboats will be onsite for approximately 30 hours for the LNG loading activities. While LNG carriers and tugboats are not under the jurisdiction of the *Environmental Management Act*, these vessels can be substantial emission sources and should be considered cumulatively with routine operations of the Project.

The dispersion modelling assessment considers one LNG carrier and three tugboats in the Application Case (Appendix A). The emissions considered include LNG carrier and tugboat movements, and auxiliary sources while at berth. LNG carriers and assist tugs will use low-sulphur fuel.

3.2 EMISSION SCENARIOS

The emission scenarios included an assessment of the longer term normal operations emissions plus other emission profiles that may occur during commissioning and other non-routine events. The scenarios are outlined herein, with further details contained in the Dispersion Modeling Plan (Appendix A).

3.2.1 Normal Operations

“Operations” commences at the export of the first LNG cargo from the LNG facility. The “normal operations” emissions profile is based on when the LNG facility is operating at a steady state, which is anticipated to occur from approximately year three onwards and hence is the longest timeframe for all emission scenarios.

The Project emission sources for normal operations are based on the conservative approach that the heat medium furnace, and thermal oxidizer are operating continuously and simultaneously at 100% of the time; the marine vessels are present, and the flares have a continuous pilot operating and fuel gas purge.

3.2.2 Commissioning

Prior to the commencement of “Operations”, commissioning activities are undertaken where equipment is tested and started up after they are mechanically complete. This includes the refractory dry out procedure of the heating medium furnace and thermal oxidizer where heat is applied under controlled conditions using high velocity gas fire burners.

Flaring is required to manage the hydrocarbons within the affected section of the LNG process and the subsequent re-start process to achieve the necessary LNG specification. This case reflects a period within the commissioning and start up period where higher rates of flaring are anticipated.

The “commissioning” scenario includes emissions from flaring associated with commissioning activities, and conservatively assumes the thermal oxidizer, and the heat medium furnace operate at 100% load, with no marine emission sources considered however, during commissioning it is expected that the thermal oxidizer and heat medium furnace will operate at lower rates in the range of 30-50%; and there will be no acid gas produced until the AGRU is operational. As there will be no prolonged or stable production of LNG during commissioning, it is assumed there are no marine vessels present.

3.2.3 Stabilizing Operations

During the first two years of operations, routine flaring rates may be higher than normal steady state operations due to higher rates of gas passing valves as the facility is stabilizing. Therefore this scenario has the same emissions as normal operations (refer to Section 3.2.1) with a higher rate of flaring.

Woodfibre LNG recognizes the importance of minimizing routine flaring and will implement a program to reduce passing valves.

3.2.4 Non-Routine Operations

Non-routine operations are events that are not within the expected steady state operations in Normal Operations or Stabilizing Operations. These events could be a result of a process upset, equipment trip, or a short-term abnormal operating condition that result in elevated emissions from the flare stack and/or thermal oxidizer. The non-routine operation events include the following:

- **Process Upset Case:** During operations, there will be Facility trips that are typically caused by the action of a control or safety system. These are intermittent process upset events that can be due to various causes, from overall power failure to a specific equipment issue. Flaring is required during the trip to manage the hydrocarbons within the affected section of the LNG process and during the re-start process to achieve the necessary LNG specification. The frequency of trips is anticipated to decrease over time, with up to 10 trips expected during the first year of operations, and for short periods of time (i.e., hours). This scenario will have elevated nitrogen dioxide (NO₂) and PM_{2.5} emissions compared to routine flaring operations (i.e., pilot and purge gas) due to the additional hydrocarbons being combusted. Woodfibre LNG recognizes the importance of minimizing the frequency and duration of these trips and flaring events and is dedicated to implementing proactive measures to reduce these occurrences, ensuring the Facility operates efficiently while reducing its environmental footprint. This assessment is conservative as all the facility equipment will not be at 100% normal operations when a process trip is occurring (e.g., heat medium furnace and thermal oxidizer may only be running at 30-50% of their design capacities).
- **Thermal Oxidizer High Inlet Sulphur Case:** Typical average inlet total sulphur is expected to be less than 24 ppmv; however, on rare occasions inlet total sulphur could increase to 45 ppmv (due to the addition of mercaptans into the feed gas) in turn increasing the concentration of total sulphur in the acid gas stream discharged to the thermal oxidizer. This scenario will have elevated short-term (i.e., 1-hour) SO₂ emissions from the thermal oxidizer on the conservative assumption that the increase in sulphur is all directed to the thermal oxidizer rather than remaining in the feed gas (remain in the LNG and condensate). This case is considered cumulatively with normal operations, marine vessels, and baseline concentrations.
- **Thermal Oxidizer Trip:** In the low likelihood event of temporary unavailability of the thermal oxidizer the acid gas stream from the AGRU would be routed to the HP flare and vented, along with the HP flash gas and condensate storage gas that is usually routed to the thermal oxidizer (refer to Section 3.1.2 for further information). This scenario is based on the design sulphur concentration in acid gas stream and evaluates ambient concentrations of TRS and H₂S compared to odour thresholds. This case is considered in isolation as there are no other substantial sources of TRS or H₂S nearby.

3.3 FUGITIVE EMISSION SOURCES AND MANAGEMENT

Fugitive emissions are defined as unintentional leakage of gas or vapours from pressurized equipment such as flanges, valves, or other equipment. To reduce or prevent fugitive emissions, operations and maintenance practices will include regularly scheduled maintenance programs, routine inspections, and standard operating procedures. A fugitive emissions management plan has been developed in accordance with the *LNG Facility Regulation* (BCER, 2014) to detect, manage, and report fugitive emissions.

3.4 POLLUTION CONTROL WORKS AND TREATMENT EFFICIENCIES

The following sections provide descriptions of the emission control works for heat medium furnace, thermal oxidizer, and HP and LP flare systems.

3.4.1 Heat Medium Furnace

Emissions from the heat medium furnace are controlled through the use of efficient combustion design and a low-NO_x burner. The burner configuration is intended to reduce NO_x formation by controlling flame temperature and oxygen availability during fuel gas combustion. The furnace operates under stable, continuous conditions, which further supports consistent combustion performance and minimized emission variability.

As noted in Section 3.1.1, the Heat Medium Furnace is equipped with eight Ultra Low NO_x burners to achieve a NO_x emissions intensity of less than 16 g/GJ (corrected to 3% oxygen (O₂) dry basis) to meet the requirements of the Multi-Sector Air Pollutants Regulation established under the *Canadian Environmental Protection Act*.

3.4.2 Thermal Oxidizer

The thermal oxidizer is designed to treat an acid gas waste stream containing sulphur-bearing compounds, carbon dioxide, and VOCs removed from the feed gas prior to liquefaction. Emission control is achieved by maintaining elevated combustion temperatures and sufficient residence time to allow for effective oxidation of contaminants without the need for supplemental feed gas.

The system is designed to achieve a destruction and removal efficiency (DRE) of 99.9% for H₂S and BTEX. As noted in Section 3.1.2, the Thermal Oxidizer is equipped with Low NO_x Burners to achieve a NO_x emissions intensity of less than 26 g/GJ (corrected to 3% O₂ dry basis) from the fuel gas combustion.

3.4.3 High-Pressure and Low-Pressure Flare Systems

To control emissions effectively, the flare systems include the following key design, operational, and measurement features:

- **Flare Tip Design and Pilot Flames:** Optimized flare tips with continuous pilot burners and automatic ignition systems ensure complete combustion of flared gases under all wind, weather, and operational conditions.
- **Continuous Header Purging:** Flare headers are continuously purged with fuel gas (backed by nitrogen) to prevent air ingress and maintain combustion efficiency.
- **Velocity Gas Seals:** Reduce purge gas rates and routine emissions during normal operations.
- **Dedicated Collection Headers:** Separate wet and cold streams to prevent hydrate formation, freezing, or condensation that could compromise combustion.
- **KO Drums and Defrost Gas (HP Flare):** KO drums capture liquids from wet streams, with defrost gas used to vapourize accumulated liquids, ensuring safe routing to the flare or return to the warm flare KO drum.
- **Material Recycling and Recovery:** Off-spec hydrocarbons, condensates, and certain gas streams can be recycled, re-liquefied, or routed to alternative systems to minimize flaring. While this is not part of the flare system, it can minimize flaring.
- **Flow Measurement and Totalizing:** Flow meters for HP and LP flares track flared volumes for regulatory reporting and ensure that flaring is minimized and accurately quantified.
- **Fuel Gas Measurement:** Inexwantas (monitoring) of fuel gas used for purge and pilot burners ensures sufficient heating value for complete combustion while optimizing fuel usage.
- **Thermocouples at Pilots:** Continuous Inexwantas (monitoring) of pilot flame presence allows operators to respond immediately if a flame is extinguished, maintaining safe and efficient operation.
- **Sequenced Start-Up and Commissioning Controls:** Use of turndown capacity, LNG cooldown, and staged system commissioning reduces unnecessary flaring during start-up.
- **Pressure Control and Equipment Redundancy:** System design pressures, spare equipment, and recycle loops minimize process upset flaring by avoiding unnecessary depressurization.
- **Environmental Inexwantas (Monitoring):** Record keeping, and visible emissions program.

These integrated design, operational, and measurement features ensure that the HP and LP flare systems maintain efficient combustion, minimize unnecessary flaring, and reduce overall emissions while preserving safety and process integrity.

3.5 DISCHARGE EVALUATION

The comparison of dispersion modelling results for the LNG facility emission to the BC Air Quality Objectives (BC AQOs) (ENVP, 2025a) provides a discharge evaluation. This comparison is provided in the Technical Data Report (Appendix A).

3.6 COMPARISON OF DISCHARGE QUALITY TO KNOWN DISCHARGE CRITERIA, GUIDELINES OR INDUSTRY PRACTICES

3.6.1 Multi-Sector Air Pollutant Regulation

The federal Multi-Sector Air Pollutant Regulation, under the *Canadian Environmental Protection Act, 1999* sets NO_x emission limits for boilers and reciprocating engines in the oil and gas industry.

As noted in Section 3.1.1 and 3.4.1, the Heat Medium Furnace has a design duty of approximately 26 MW and is equipped with eight Ultra Low NO_x burners to achieve a NO_x emissions intensity of less than 16 g/GJ (corrected to 3% O₂ dry basis) to meet the requirements of the Multi-Sector Air Pollutants Regulation.

3.6.2 Energy Resources Activities Act, Liquefied Natural Gas Facility Regulation

In BC, LNG facilities are regulated by the LNG Facility Regulation (BC Reg 146/2014, BCER, 2014), under the *Energy Resource Activities Act (ERAA)*. Section 17 to 19 in the LNG Facility Regulation provide requirements regarding flaring and venting (provided below for information). As noted herein, the Project has been designed to minimize venting and flaring.

Section 17: Venting

(1) An LNG facility permit holder must not vent gas from an LNG facility unless the gas heating value, volume, or flow rate is insufficient to support stable combustion and all of the following apply:

- a) the venting is conducted in a manner that does not constitute a safety hazard
- b) the venting does not cause off-site odours
- c) the quantity of vented gas is minimized
- d) the duration of venting is minimized

(2) An LNG facility permit holder may use gas containing hydrogen sulphide for pneumatic instrumentation or to provide motive force to pumps only if the gas contains no more than 20 parts per million of hydrogen sulphide.

Section 18: Flaring

(1) Subject to subsection (2), an LNG facility permit holder must not flare gas from the LNG facility unless flaring is required for emergency purposes.

(2) An LNG facility permit holder may flare gas from the LNG facility if

- a) flaring is required for maintenance purposes, or
- b) permission to flare is included in the LNG facility permit.

(3) An LNG facility permit holder must ensure that the duration of flaring and the quantity of gas that is flared from an LNG facility is minimized.

Section 19: Flaring Notification and Reporting

- (1) An LNG facility permit holder must notify the commission at least 24 hours before a planned flaring event from the LNG facility if the quantity of gas to be flared exceeds 10 000 m³.
- (2) If an unplanned flaring event occurs at the LNG facility and the quantity of flared gas exceeds 10 000 m³, the LNG facility permit holder must notify the commission within 24 hours after the flaring event begins.
- (3) An LNG facility permit holder must maintain a log of all flaring that occurs at the LNG facility and submit flaring information to the commission on its request.

3.6.3 BC Flaring and Venting Reduction Guideline

The BCER (2025) Flaring and Venting Reduction Guideline (BCER, 2025) provides regulatory requirements and guidance for flaring, incinerating, and venting in BC, as well as procedural information for flare approval requests, dispersion modelling, and the measurement and reporting of flared, incinerated, and vented gas for facilities regulated under the ERAA. The Flaring and Venting Reduction Guideline includes performance requirements for flares and incinerators for all upstream industry oil and gas systems; however, these are not all applicable to an LNG Facility.

As noted in Sections 3.1.3, 3.1.5, 3.4.3, and 3.7 the Project has been designed to minimize venting and flaring where practicable.

3.7 BEST ACHIEVABLE TECHNOLOGY SUMMARY

The BC Ministry of Environment and Parks (ENVP) define Best Achievable Technology (BAT) as technology that meets waste discharge standards for the protection of the environment and human health while considering feasibility, reliability, control effectiveness, and cost-effectiveness (BC ENVP, 2021).

The use of BC Hydroelectricity instead of on-site natural gas-fired power significantly reduces combustion-related emissions (NO_x, SO₂, PM_{2.5} and CO), supporting the Project's commitment to achieving net zero greenhouse gas emissions. This assessment incorporates information from the WLNG Roadmap to Net Zero (WLNG, 2023) and equipment performance datasheets, reflecting the strategy to minimize stationary combustion emissions and achieve a very low carbon intensity of 0.04 tonnes of carbon dioxide equivalent (tCO₂e) per tonne of LNG produced. The key greenhouse gas reduction measures identified in the WLNG Roadmap to Net Zero are summarized below:

- E-Drive System
- BOG Re-Liquefaction
- Compressor Dry Gas Seals
- Recycle Lines for Off-Spec Gas
- Increased Leak Detection and Repair (LDAR) Frequency
- On-Site Nitrogen Production
- Alignment with Canada's Methane Strategy

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As noted in Section 3.4.1, the heat medium furnace has been designed to control continuous air emissions and minimize greenhouse gas releases while providing stable and efficient operation. The furnace incorporates a low-NO_x burner and optimized combustion design, controlling flame temperature and oxygen availability to reduce NO_x formation during fuel gas combustion. Operating under continuous, stable conditions provides consistent performance and minimal emission variability.

As noted in Section 3.4.2, the thermal oxidizer achieves a destruction and removal efficiency exceeding 99.9% for H₂S and BTEX, and NO_x emissions intensity of less than 26 g/GJ (corrected to 3% O₂ dry basis) from the fuel gas combustion. The thermal oxidizer provides effective treatment of residual contaminants, demonstrating reliable performance and high emission control effectiveness, consistent with proven technologies used in similar facilities.

The HP and LP flare systems manage process gases during routine operations, start-up, shutdown, and upset conditions. Optimized flare tip design, continuous pilot flames, header purging, and knockout drums ensure complete combustion of hydrocarbons, minimizing unnecessary flaring and venting. Operational sequencing, flow measurement, and fuel gas Inexwantas (monitoring) further enhance emission efficiency.

The effectiveness of these emission control technologies is supported by the Project air quality assessment completed in accordance with the BC Air Quality Dispersion Modelling Guideline (ENVP, 2022a), the Guidance on NO₂ Dispersion Modelling in BC (ENVP, 2022b), and the Dispersion Modelling Plan. The assessment indicates that the Project results in only small changes to regional air quality and demonstrates that the proposed emission control technologies effectively minimize emissions and support compliance with the applicable BC AQOs (ENVP, 2025a). Where elevated concentrations are predicted, they are localized near the Facility boundary under conservative modelling assumptions and do not alter the overall conclusion regarding the effectiveness of the selected technologies.

This review evaluates the power supply, heat medium furnace, thermal oxidizer, and flare systems against ENVP BAT principles (ENVP, 2021), including proven performance, operational reliability, emission reduction effectiveness, demonstrated air quality performance, and alignment with the Project's Net Zero plan. Based on technology selection, dispersion modelling results, feasibility, reliability, and environmental effectiveness, these systems represent BAT and support the WDA application.

4.0 RECEIVING ENVIRONMENT

The following receiving environment setting sections provide information regarding existing environmental conditions prior to the proposed air emissions discharge and include the following sub-sections: geophysical information, ecosystems, climate, meteorology, and airshed.

4.1 GEOPHYSICAL INFORMATION

The Woodfibre LNG Project is situated on the west side of Átl'ka7tsem (Howe Sound) in the District of Squamish, approximately seven km southwest of Sk̓wx̓wú7mesh (Squamish), BC, which had a population of 23,819 in 2021. Project elevations range from sea level up to 50 m above sea level (asl), with higher terrain located to the north, northwest, east, and northeast of the model domain. The lowest elevations occur near sea level to the south and east, primarily across the central portion of the model domain along Átl'ka7tsem (Howe Sound). The surrounding terrain is complex, varying from sea level to over 2,500 m asl. Evergreen forest is the dominant temíxw (land) cover in the region. The nearest settlement is the community of Sk̓wx̓wú7mesh (Squamish), located approximately seven km northeast of the Project. A location map is provided in Figure 1.1.

4.2 ECOSYSTEMS

The Project is located in an area zoned for industrial temíxw (land) use, with no permanent residents living within five km of the facility. Sensitive receptors within approximately 20 km include the community of Sk̓wx̓wú7mesh (Squamish), located about eight km from the Project, and areas within Sk̓wx̓wú7mesh (Squamish) Nation territory. Ecological receptors in the vicinity include forested areas with cedar and birch trees, as well as nearby freshwater features and Alice Lake, which lies approximately 16 km from the Project. Other notable recreational and natural areas include Murrin Park, located about four km from the Project, and Sk̓wx̓wú7mesh (Squamish) General Hospital, approximately nine km away.

4.3 METEOROLOGY

Air temperature, relative humidity, barometric pressure, precipitation, and wind data were collected at the onsite Woodfibre LNG meteorological station for two 18-month Ínexwantas (monitoring) periods and are documented in the Woodfibre LNG Export Facility Meteorology Technical Data Reports (April 28, 2022 – September 25, 2023, and September 25, 2023 – March 31, 2025) (Stantec, 2023) (Stantec, 2025).

Since the period of record is 18 months, the annual (12-month) average was obtained by two steps. First, for months that appear in both years (e.g., September in both 2023 and 2024, or March in both 2024 and 2025), the values were averaged. Then, a 12-month average was taken from these values to obtain the annual average. Similarly, the annual (12-month) total was obtained by first averaging the months that occur in both years and then taking the total for 12 months.

Data from the onsite station were compared with measurements from the Sk̓wx̓wú7mesh (Squamish) Airport station and long-term climate normals (1991–2020) to provide context for regional conditions. A summary of the Inexwantas (monitoring) results is provided below.

4.3.1 Air Temperature

Monthly mean air temperatures at the onsite station were generally consistent with those measured at the Sk̓wx̓wú7mesh (Squamish) Airport station, with the largest differences occurring during winter months (up to approximately 1.7 °C warmer at Woodfibre LNG). Monthly mean air temperatures are summarized as follows:

- **2022–2023:** Monthly mean air temperatures ranged from -0.4°C in December to +18.7 °C in August, and the annual average air temperature was 9.5°C.
- **2023–2025:** Monthly mean air temperatures ranged from 2.4°C in January to 19.3°C in July, and the annual average air temperature was 10.2°C.

These annual averages are comparable to the Sk̓wx̓wú7mesh (Squamish) Airport 1991–2020 climate normal of 9.8°C. Long-term climate normals report an annual average maximum air temperature of 14.3°C and an annual average minimum air temperature of 5.1°C.

4.3.2 Relative Humidity

Monthly average relative humidity at the onsite station was consistently higher than at the Sk̓wx̓wú7mesh (Squamish) Airport station, due to the proximity of the onsite station to the shores of Átl'ka7tsem (Howe Sound), with the largest monthly differences ranging from approximately 9.8% to 15.3%, typically occurring in summer.

- **2022–2023:** Average monthly relative humidity values ranged from 78.5% in July to 93.0% in January, and the annual average was 82.6%.
- **2023–2025:** Average monthly relative humidity values ranged from 81.3% in April to 99.0% in December, and the annual average was 90.0%.

These values compare with Sk̓wx̓wú7mesh (Squamish) Airport annual averages of 77.8% (2022–2023) and 81.9% (2023–2024). Long-term climate normals for Sk̓wx̓wú7mesh (Squamish) Airport report an average relative humidity of 79.0%, based on morning and afternoon observations.

4.3.3 Barometric Pressure

Monthly average barometric pressure at the onsite station was consistently higher than at the Sk̓wx̓wú7mesh (Squamish) Airport station, with monthly differences of approximately 5.8–7.1 hectopascal (hPa), primarily due to the elevation difference between the two locations.

- **2022–2023:** Average monthly barometric pressure values ranged from 1,013 hPa in March to 1,020 hPa in November, with an annual average of 1,016 hPa.
- **2023–2025:** Average monthly barometric pressure values ranged from 1,013 hPa in March to 1,021 hPa in January, with an annual average of 1,016 hPa.

The annual averages at the onsite station are higher than the Sk̓wx̓wú7mesh (Squamish) Airport annual average of 1,010 hPa. Long-term climate normals for Sk̓wx̓wú7mesh (Squamish) Airport also report an annual average of 1,010 hPa, aligning with the airport measurements but lower than the onsite values.

4.3.4 Rainfall

Annual rainfall totals measured onsite for the two 18-month periods were 1,846 millimetres (mm) (2022–2023) and 2,516 mm (2023–2025). Monthly cumulative rainfall generally aligned with total precipitation measured at the Sk̓wx̓wú7mesh (Squamish) Airport station, with the largest monthly differences occurring in December, when the onsite station recorded 43–73 mm less precipitation than the airport. Annual totals at Sk̓wx̓wú7mesh (Squamish) Airport were lower for both periods (1,683 mm and 2,203 mm), reflecting that the Squamish Airport records total precipitation (rainfall plus snow-water-equivalent) but still measured less than the onsite rainfall totals. Long-term climate normals (1991–2020) indicate an annual total precipitation of 2,344 mm, higher than the 2022–2023 Squamish Airport data and lower than the 2023–2025 onsite rainfall total.

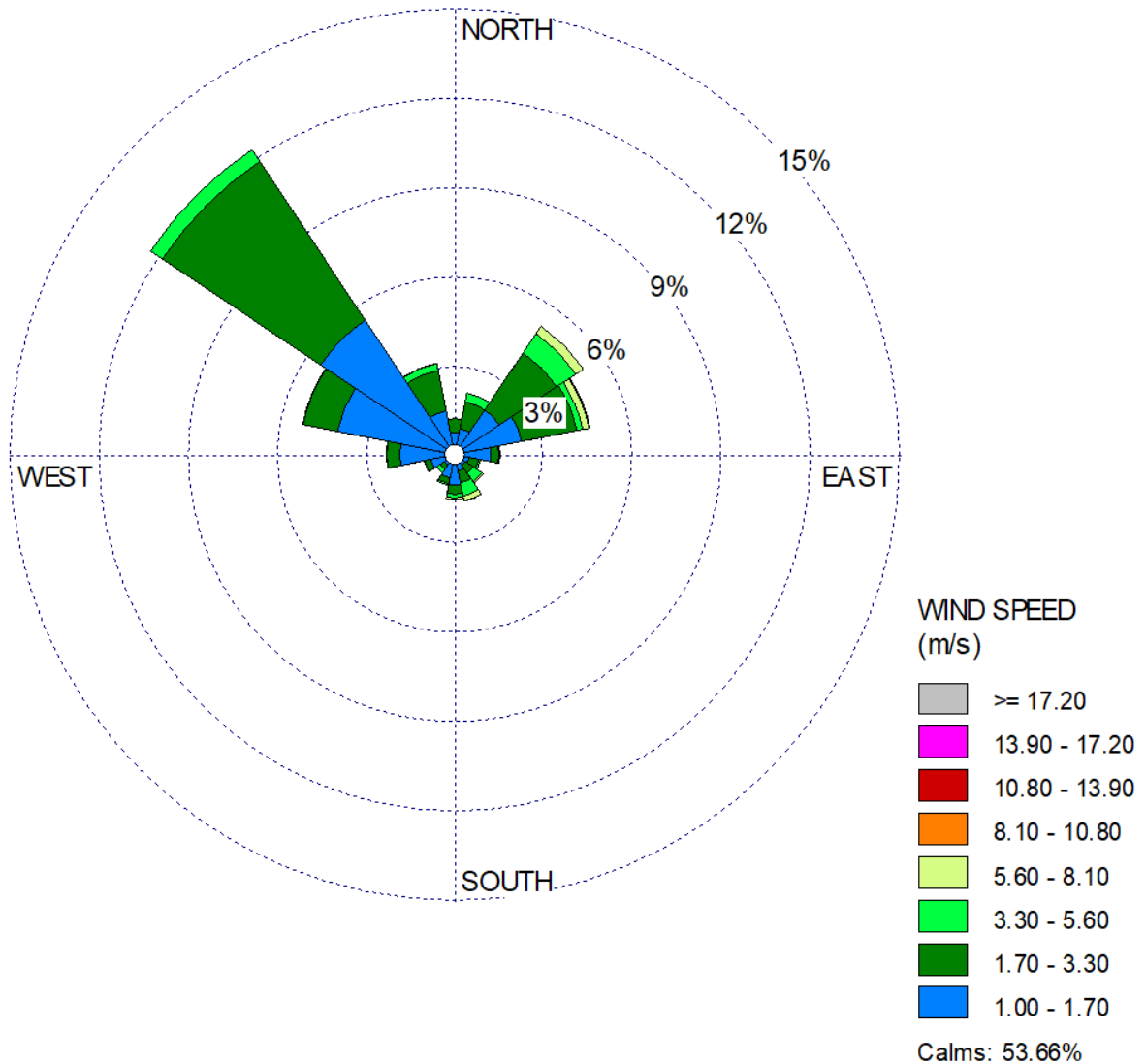
4.3.5 Wind Speed and Wind Direction

Annual wind roses for each period (Figure 4.1 and Figure 4.2) show that winds were predominantly from the northwest, with secondary flow from the west-northwest, consistent with regional coastal wind patterns. Calm winds (<1.0 metres per second [m/s]) were the most frequent, occurring 49–54% of the time annually, followed by winds in the 1.0–3.3 m/s range. Stronger winds (>3.3 m/s) were relatively rare, accounting for 1–7% of the hourly observations. Comparisons with the 1991–2020 Sk̓wx̓wú7mesh (Squamish) Airport climate normals indicate that the predominant wind direction is also northwest, with an average wind speed of approximately 2–3 m/s. The higher occurrence of calm conditions at the onsite station reflects local coastal and terrain influences, while the general wind direction and moderate wind speeds are consistent with long-term regional patterns.

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Figure 4.1: Woodfibre LNG Station Wind Speed and Wind Direction Summary from April 28, 2022, to September 25, 2023



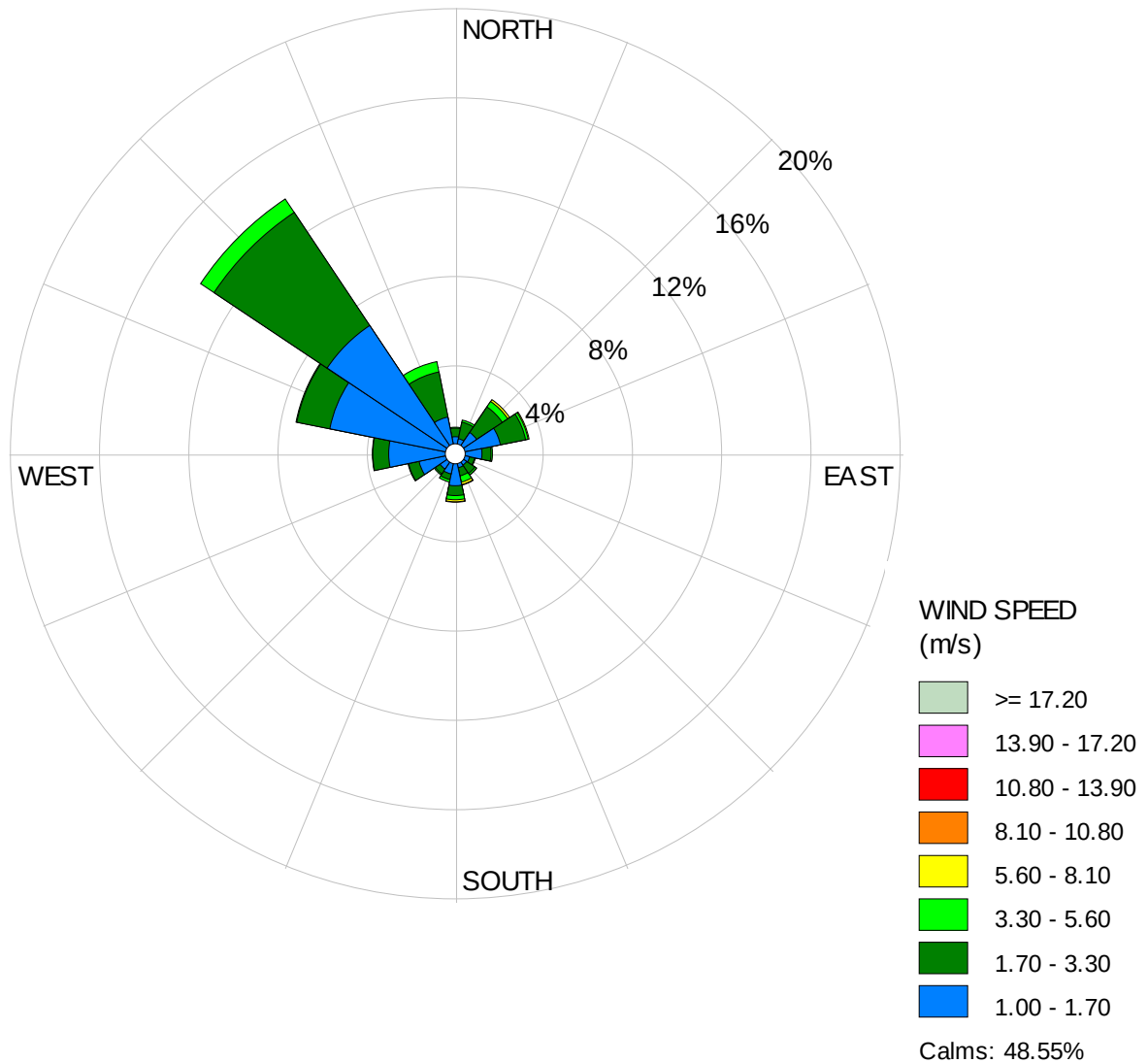
Notes:

The Woodfibre LNG Station Wind Speed and Wind Direction Summary is based on 99.9% data availability.
m/s = metres per second; % = percent; > = greater than; calms are < 1 m/s.

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Figure 4.2: Woodfibre LNG Station Wind Speed and Wind Direction Summary from September 25, 2023, to March 31, 2025



Notes:

The Woodfibre LNG Station Wind Speed and Wind Direction Summary is based on 99.2% data availability.

m/s = metres per second; % = percent; > = greater than; calms are < 1 m/s.

4.4 AIRSHED

Sk̓wx̓wú7mesh (Squamish) has been home to a range of residential, commercial, and light industrial activities, all of which contribute to local air quality. To characterize existing conditions, long-term Ínexwantas (monitoring) data from stations representative of the area were analyzed. The Sk̓wx̓wú7mesh (Squamish) Elementary Ínexwantas (monitoring) station, located approximately nine km east-northeast of the Project, was used to establish baseline concentrations for NO₂, SO₂, and PM_{2.5}. The Horseshoe Bay Ínexwantas (monitoring) station, located 33 km south-southwest of the Project, was used to establish baseline concentrations for CO. Continuous Ínexwantas (monitoring) data are derived from the most recent and representative years of ambient air quality data in ENVP's online data archive (ENVP, 2025b). Data from Ínexwantas (monitoring stations) is used in the baseline determination if the quarterly data validity meets or is greater than the minimum 75% threshold.

A summary of existing air quality in Sk̓wx̓wú7mesh (Squamish) is presented in Table 4.1. These values represent the greatest effects of local industrial sources, natural background concentrations (globally and regionally), plus minor sources (local home heating, vehicle emissions, food preparation, and road dust). For reference, the applicable BC AQOs are also presented.

Data from the representative Ínexwantas (monitoring) stations indicates that measured concentrations are below the BC AQO for NO₂, SO₂, PM_{2.5} and CO. Due to the lack of anthropogenic sources, it was assumed that the background concentration of H₂S was zero.

The onsite Air Quality Monitoring Station (AQMS) commenced operating in September 2024 for verification purposes during construction; air quality monitoring conditions were stipulated by the EAO under EAC Amendment #3. The onsite meteorological station is co-located with the AQMS and was installed in March 2022. Ambient concentrations measured at the AQMS are representative of the construction period, therefore, are not used in the assessment for baseline or to describe existing conditions.

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Table 4.1: Summary of Sk̓wx̓wú7mesh (Squamish) Air Quality Based on Measurements at the Closest, Most Representative Stations

Substance	Averaging Period	Baseline Concentration (µg/m³) ^a	BC AQO (µg/m³)
NO ₂ ^b	1-hour ^c	41.6	113
	Annual ^d	9.4	32
SO ₂ ^e	1-hour ^f	11.1	170
	Annual ^g	0.7	13
PM _{2.5} ^h	24-hour ⁱ	17.7	25
	Annual ^j	5.2	8
CO ^k	1-hour ^l	389.3	14,300
	8-hour ^l	338.4	5,500

Notes:

- a. Baseline air quality data was developed by RWDI for the FortisBC Energy Inc. (FortisBC), Eagle Mountain – Woodfibre Gas Pipeline Project, Squamish V2 Compressor Station from BC Air Data Archive Website (ENVP, 2025b). Conversions from ppb or ppm to µg/m³ assume standard conditions of 25°C and 101.325 kPa.
- b. **NO₂**: The data for NO₂ observations used for baseline at Sk̓wx̓wú7mesh (Squamish) Elementary are for 2021 to 2023.
- c. **NO₂**: The 1-hour baseline NO₂ concentration was determined based on the 98th percentile of the daily 1-hour maximum concentrations averaged over 2021 to 2023 (ENVP, 2025b).
- d. **NO₂**: The annual NO₂ baseline concentration was determined based on the average of 1-hour values for 2021 to 2023.
- e. **SO₂**: The observations used for SO₂ baseline are from Sk̓wx̓wú7mesh (Squamish) Elementary are for 2021 to 2023.
- f. **SO₂**: The 1-hour baseline SO₂ concentration was determined based on the daily 1-hour maximum concentrations, followed by the calculation of the 99th percentile for each year, then averaged over the 3-year period.
- g. **SO₂**: The annual SO₂ baseline concentration was determined based on the average of annual mean values for the 3-year period.
- h. **PM_{2.5}**: Observations at Sk̓wx̓wú7mesh (Squamish) Elementary are for 2021 to 2023. Days excluded with recorded wildfire activity. Days excluded: Jul 30 - Aug 3, 2021, Aug 12-15, 2021, Sep 10-15, 2022, Oct 4-7, 2022, Oct 13-21, 2022, Jun 7-8, 2023, Jul 6-7, 2023, Aug 19-22, 2023, Aug 25-29, 2023. List of air quality advisories referenced from Metro Vancouver: <https://metrovancover.org/media-room/media-releases>.
- i. **PM_{2.5}**: The 24-hour PM_{2.5} baseline concentration was determined based on average of the 98th percentile values for the 24-hour averaging interval over the 3-year period.
- j. **PM_{2.5}**: The annual PM_{2.5} baseline concentration was determined based on the average of the annual mean values over the 3-year period.
- k. **CO**: CO observations at Horseshoe Bay is for 2017 to 2019, which are the most recent valid years.
- l. **CO**: The 1-hour and 8-hour baseline CO concentrations were determined based on the 98th percentile of 1-hour CO concentrations for 2017 to 2019.

5.0 AIR QUALITY ASSESSMENT

5.1 IMPACT ASSESSMENT

The Technical Data Report (TDR) is used to describe the air quality assessment methodology, dispersion modelling results, and conclusions on changes to air quality (refer to Appendix A). The TDR includes the following (but not limited to):

- The air quality assessment focuses on effects of NO₂, SO₂, PM_{2.5}, and CO on air quality beyond the facility boundary where the air quality regulatory criteria apply. These pollutants are considered the indicators for potential environmental and health risks and are regulated and monitored by governments. For the non-routine Thermal Oxidizer Trip Case, the model predicted concentrations of H₂S and TRS were also compared to applicable guidelines.
- The air quality assessment evaluates potential air quality effects from Commissioning, Stabilizing Operations, Routine (Normal) Operations, and Non-routine Operating conditions.
- A “baseline” is included to account for the contribution from existing sources, which is a key to understanding what the potential incremental air quality contribution is from the project sources. Baseline data was obtained from the long-term Inexwantas (monitoring) stations including Skw̓w̓7mesh (Squamish) Elementary Inexwantas (monitoring) station and Horseshoe Bay Inexwantas (monitoring) station (refer to Section 4.4).
- For the purposes of the modelling, these scenarios were modelled as follows to allow for an evaluation of the relative contributions:
 - **Normal Operations:**
 - o **Project Normal Operations Case:** Emissions from the facility only including the heat medium furnace, thermal oxidizer, and routine flaring (i.e., pilot and purge)
 - o **Application Case – Normal Operations:** Includes the sources from the Project Normal Operations Case, plus associated marine vessels, and the addition of baseline concentrations.
 - o **Cumulative Case:** Includes the Application Case – Normal Operations, plus the FortisBC Squamish V2 Compressor Station, and the addition of baseline concentrations.
 - **Stabilizing Operations:**
 - o **Project Stabilizing Operations Case:** Emissions from the facility only include the heat medium furnace, thermal oxidizer, and routine flaring (i.e., pilot and purge, and passing valves). During this period, routine flaring rates may be temporarily increased due to passing valves.
 - o **Application Case – Stabilizing Operations:** Includes the sources from the Project Stabilizing Operations Case, plus associated marine vessels, and the addition of baseline concentrations. During this period, routine flaring rates may be temporarily increased due to passing valves.

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- **Commissioning:**
 - o **Commissioning Case:** Includes the flaring rates expected during the commissioning period plus the heat medium furnace, thermal oxidizer and the additional of baseline concentrations.
- **Non Routine Operations:**
 - o **Process Upset Case:** Includes the flaring rates for a worst-case flaring event associated with an equipment upset or trip during operations. This is assessed independently, and with marine sources and baseline.
 - o **High Inlet Sulphur Case:** Includes a high inlet sulphur content event in the feed gas, resulting in increased SO₂ emissions from the Thermal Oxidizer. This scenario includes SO₂ emissions from the Project Normal Operations sources, marine vessel sources, and baseline concentrations (i.e., the Application Case).
 - o **Thermal Oxidizer Trip Case:** Includes the acid gas, flash gas and storage gas venting scenario to the HP Flare. This is assessed independently, with normal operations, baseline, and cumulatively.
- Non-indicator pollutants such as VOCs and PAHs were reviewed for the Project emission sources. The nature of (quantity and composition) VOCs and PAHs emitted by the Project have not materially changed from the assumptions used in the EA; therefore, VOCs and PAHs were not carried forward in the assessment.

5.1.1 Routine Scenarios

The dispersion modelling predicted that concentrations of SO₂, PM_{2.5}, and CO are less than the applicable BC AQOs for all routine scenarios evaluated, including Commissioning, Stabilizing Operations, and Normal Operations.

The model predicted one-hour and annual average NO₂ concentrations are also less than the applicable BC AQOs for the Project-Alone Normal and Stabilizing Operations and Commissioning.

The model predicted one-hour NO₂ concentrations greater than the BC AQO for the Application Case – Normal Operations, Application Case – Stabilizing Operations, and Cumulative Case. The maximum predicted one-hour NO₂ concentration was approximately 126 µg/m³, compared with the BC AQO of 113 µg/m³. These localized exceedances are primarily attributable to marine vessel emissions and the inclusion of baseline concentrations and are confined to areas on or immediately adjacent to the Facility boundary. Predicted concentrations decrease rapidly with distance from the emission sources, and concentrations at sensitive receptors and the Skwxwú7mesh (Squamish) town receptors remain less than the applicable BC AQO.

5.1.2 Non-Routine Scenarios

The dispersion modelling predicted that concentrations of SO₂, PM_{2.5}, and CO are less than the applicable BC AQOs for all non-routine scenarios evaluated.

For the Process Upset Case, the maximum predicted one-hour NO₂ concentration from the upset case alone is 77.4 µg/m³, which is less than the BC AQO of 113 µg/m³. With the addition of marine vessels and baseline concentrations, the maximum predicted concentration increases to 126.5 µg/m³, consistent with the Application Case – Normal Operations. The maximum occurs at the northern Facility fenceline, with concentrations greater than the BC AQO extending approximately 500 m to the northeast and southwest. These are primarily due to conservative modelling assumptions and the close proximity of the emission sources. Predicted concentrations at sensitive receptors and the Skwxwú7mesh (Squamish) town boundary remain less than the applicable BC AQO.

For the High Inlet Sulphur Case, the maximum predicted one-hour SO₂ concentration is 139.1 µg/m³ for the Project-alone case and 151.1 µg/m³ with marine vessels and baseline concentrations included, compared with the BC AQO of 170 µg/m³. The Cumulative Case result is also 151.1 µg/m³. Predicted concentrations at sensitive receptors and the Skwxwú7mesh (Squamish) town boundary remain less than the BC AQO.

For the Thermal Oxidizer Trip Case, conservative modelling used to characterize the potential maximum under adverse meteorological conditions predicts maximum one-hour TRS and H₂S concentrations of 278 µg/m³ and 160 µg/m³, respectively, compared with the applicable odour-based criteria of 7 µg/m³ for TRS and 14 µg/m³ for H₂S. The joint-probability assessment, which accounts for the infrequent occurrence of a Thermal Oxidizer trip, indicates that concentrations greater than the odour-based criteria are limited to areas along and adjacent to the Project boundary. The greatest potential occurs along the northern Project boundary for approximately 1 to 1.5 hours per year during adverse meteorological conditions.

5.1.3 Human Health

The air quality modelling results for the various modelled cases were reviewed from a health perspective and compared with applicable World Health Organization (WHO) air quality guidelines (AQG).

The WHO AQG is described as the lowest exposure level of an air pollutant above which the WHO guideline development group is confident that there is an increase in adverse health effects. At concentrations below the WHO AQG, long-term health effects are minimal or do not occur. The review focused on community receptors, including Skwxwú7mesh (Squamish), Sta'7mes Village, Browning Lake Cultural Site, Britannia Beach residences, Foulgers Creek, and Camp Potlatch.

Potential health risks associated with Project air emissions were previously assessed as part of the Environmental Assessment. This health assessment concluded that Project air emissions would likely have a negligible to low effect to human health risk, where the effect would not be significant. For some air pollutants, including NO₂, Health Canada considers the concentration-response relationship to be non-threshold, meaning that a theoretical non-zero risk may remain at very low exposure concentrations.

Accordingly, low represents the lowest applicable risk classification for these substances based on their toxicological characteristics, rather than the magnitude of the Project-related contribution.

For Normal, Stabilizing Operations, and Cumulative cases, the predicted concentrations of NO₂, SO₂, and PM_{2.5} at the assessed community receptors remained below the applicable short-term (1-hour and 24-hour) and long-term (annual average) WHO AQG. Foulgers Creek, the nearest community receptor located approximately 2.5 km south of the Project, had a predicted 1-hour NO₂ concentration of 41.6 µg/m³ under baseline conditions, increasing to a peak of 57.0 µg/m³ under the Cumulative Case, compared with the WHO AQG of 200 µg/m³. For the remaining community receptors located approximately 4 to 11 km from the Project, predicted Project-related increases in air pollutant concentrations were negligible, as emissions were substantially dispersed before reaching Squamish and other residential areas in the region.

The Process Upset Case provides a conservative assessment of short-term emissions associated with intermittent process upsets or equipment trips. At Skwxwú7mesh (Squamish), the baseline 1-hour NO₂ concentration is 41.6 µg/m³, and increases to a peak 1-hour concentration of 56.5 µg/m³ over the multi-year modelling period, remaining below the WHO AQG of 200 µg/m³. Predicted 1-hour NO₂ concentrations are lower during the remainder of the modelled period, and Project-related changes are smaller at more distant community receptors such as Camp Potlatch. For SO₂ and PM_{2.5}, emissions during the Process Upset Case are negligible, as emissions were substantially dispersed before reaching Squamish and other residential areas in the region.

The High Inlet Sulphur Case provides a conservative assessment of short-term SO₂ emissions. At Skwxwú7mesh (Squamish), the baseline 1-hour SO₂ concentration is 11.1 µg/m³ increases to 17.0 µg/m³. The World Health Organization does not establish a 1-hour SO₂ guideline for comparison. Instead, it provides a 10-minute SO₂ AQG of 500 µg/m³ and a 24-hour SO₂ AQG of 40 µg/m³. For context, if the 10-minute concentration reached the WHO AQG of 500 µg/m³, that 10-minute period alone would contribute to at least 83.3 µg/m³ to the corresponding 1-hour average, even if the concentrations during the remaining 50 minutes of the hour were assumed to be zero. The predicted peak 1-hour SO₂ concentration of 17.0 µg/m³ indicates a negligible potential for short-term SO₂ health risk at Squamish and the other community receptors.

Overall, the model results indicate that Project emissions under Normal Operations, Stabilizing Operations, Cumulative, Process Upset and High Inlet Sulphur cases would have a limited influence on air quality and associated inhalation exposure in Squamish, Britannia Beach, and other populated areas in the region.

5.1.4 Acidification and Eutrophication Assessment

5.1.4.1 Aquatic

The Project will generate air emissions that have the potential to cause acidification and eutrophication in waterbodies surrounding the Project. The effect pathway of Project air emissions on the aquatic receiving environment is the deposition of sulphur (S) and nitrogen (N) compounds with potential to generate

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changes in water quality (chemistry) and ultimately cause adverse effects on freshwater systems through shifts in pH (acidification) or the nutrient regime (eutrophication).

Four stream sites (two in Woodfibre Creek [SW-01 and SW-08] and two in Mill Creek [SW-02 and SW-07]) with existing baseline water quality data were selected within the 40 km by 40 km air quality deposition model domain centered over the Project for the acidification and eutrophication assessments under four air quality monitoring scenarios (Baseline Value, Project-Alone Case, Application Case (Normal Operations), and Cumulative Case). The study area boundaries and the number of stream sites were defined by the 2015 Guidance for the Assessment of Acidification and Eutrophication of Aquatic Ecosystems (BC MOE, 2015). The boundary for the acidification assessment was defined by the 100 equivalents per hectare per year (eq/ha/y) S+N isopleth while the boundary for eutrophication assessment was defined by the 3 kilograms per hectare per year (kg/ha/y) N isopleth for the Cumulative Case.

Results from water chemistry and the predicted deposition rates from the air dispersion modelling scenarios for the Baseline Value, Project-Alone Case, Application Case, and Cumulative Case showed that there were no predicted critical load of acidity ($CL_{(A)}$) exceedances for the stream sites except at SW-01 in 2025 with $CL_{(A)}$ exceedances for Application Case and Cumulative Case. Further investigation revealed the predicted $CL_{(A)}$ exceedance may be related to a sea spray event on January 24, 2025, that affected ionic composition, thereby reducing $CL_{(A)}$ and organic acid adjusted acid neutralizing capacity but had no influence on pH. As such, SW-01 in 2025 was classified as having a “low biological concern” while other stream sites and the rest of the sampling periods were classified as having “no biological concern” to acidification. However, without the sea spray event on January 24, 2025, SW-01 in 2025 would be classified as having “no biological concern” to acidification.

Results from baseline estimated and calculated total N and predicted N deposition rates for Baseline Value, Project-Alone Case, Application Case, and Cumulative Case showed that the four stream sites were classified as oligotrophic (i.e., nutrient poor) at baseline and under the four modelling scenarios, with no predicted change to their trophic state.

The aquatic acidification and eutrophication assessment is presented in Appendix C.

5.1.4.2 Terrestrial

A terrestrial acidification and eutrophication assessment of terrestrial ecosystems was completed to predict effects of S and N deposition on soils and vegetation. The assessment followed the BC Ministry of Environment Critical Load Screening Guidance for Acidification and Eutrophication of Terrestrial Ecosystems (BC MOE 2014). A screening assessment and subsequent desktop-based Level 0 assessment was completed. Air dispersion modelling results for the Project-Alone, Application, and Cumulative Cases were compared with screening thresholds and selected critical loads. Existing soils, terrain, bedrock geology, ecosystem mapping, Vegetation Resources Inventory, and biogeoclimatic ecosystem classification data were used to characterize ecosystems and species sensitive to acid and/or nitrogen deposition and to quantify areas where modelled acid or nitrogen deposition exceeded applicable critical loads. For the acidification assessment, soil map units were rated in terms of their relative sensitivity to acid deposition and an adjusted critical load was assigned using the information from

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Tables 3 and 4 in the Critical Load Screening Guidance (BC MOE 2014). For the eutrophication assessment, critical loads were determined from a review of the recent literature.

Key results include the following:

- The Cumulative Case acid deposition screening isopleth encompassed 3,534.3 hectares (ha) of terrestrial area, which defines the local study area (LSA). Within the LSA, soils exposed to acid deposition were primarily rated as moderately sensitive to acid deposition, with smaller areas rated as low or high sensitivity.
- No critical loads for acidification or eutrophication were exceeded at baseline or in the Project-alone Case.
- Acidification critical loads for exposed soils were exceeded in the Application Case and Cumulative Case. Acidification exceedance was predicted in small areas that were primarily associated with low elevation coniferous forest near the Project and northward along the Skwxwú7mesh (Squamish) River valley. Exceedance areas totalled 120.1 ha in the Application Case (3.4% of LSA area) and 128.2 ha in the Cumulative Case (3.6% of LSA area).
- For eutrophication, the 4 kg/ha/yr empirical critical load for forested upland and wetland ecosystems was exceeded in the Application Case and Cumulative Case in small areas immediately adjacent to the Project. Exceedance areas totalled 22.6 ha in the Application Case (0.6% of LSA area) and 25.4 ha in the Cumulative Case (0.7% of LSA area).
- A separate Lichen and Alpine LSA (LALSA) applicable to the eutrophication assessment was defined as the 2 kg/ha/yr isopleth for nitrogen deposition, because these sensitive species and ecosystems are affected at a lower threshold than forested ecosystems, and the LSA defined for other receptors was not large enough to capture the potential effects on them. The LALSA totals 11,314.2 ha of terrestrial area and extends from the Project site to the top of the air dispersion modelling domain along the Squamish River Valley. The 2 kg/ha/yr empirical critical load for alpine and subalpine ecosystems and lichens was exceeded in the Application Case and Cumulative Case in the LALSA. This includes 86.4 ha alpine and parkland areas exceeded in the Application case (<0.1% of the LALSA). Lichens within the entire LALSA, particularly cyanolichens and forage lichens, may experience a decline in abundance and richness of 12-30% based on Geiser et al. (2019).

Though modelled acidic deposition does exceed Level 0 critical loads in the Application Case, it does so only in small areas (120.1 ha, approximately 3% of the LSA), and the air dispersion modelling is conservative in its predictions. Based on these factors, Level 0 may be considered an appropriate level of assessment. Predicted exceedances are limited in spatial extent and are not predicted in the Project-Alone Case; therefore, the assessment indicates a low potential for widespread terrestrial acidification or eutrophication effects to forested ecosystems within the study areas due to the Project.

There are predicted effects to the most sensitive functional groups of lichens throughout the LALSA due to the Project.

The terrestrial acidification and eutrophication assessment is presented in Appendix D.

5.2 ASSESSMENT LIMITATIONS

The air quality assessment is a predictive assessment based on the Project design, emission characteristics, operating information, meteorological data, and receiving-environment information available for the WDA application. As the assessment is being completed prior to operation of the facility, source characteristics and emissions are represented using detailed design information, vendor data, engineering calculations, and applicable emission factors. Where appropriate, conservative assumptions and maximum or design emission rates have been used to provide a protective basis for the assessment.

The dispersion modelling evaluates a defined set of operating scenarios selected to represent Normal Operations, Commissioning, Stabilizing Operations, and relevant Non-routine conditions. These scenarios are intended to characterize the conditions with the greatest potential to influence ambient air quality rather than reproduce every possible combination of facility operating conditions. In several cases, the assessment conservatively assumes simultaneous operation of sources at maximum or elevated operating conditions that would not necessarily occur together in practice. The Dispersion Modelling Plan similarly recognizes dispersion modelling as a best-estimate approach that is intended to provide reasonably conservative predictions for air quality management purposes.

Commissioning and non-routine events are temporary and may vary in duration and operating configuration. The modelled commissioning and process-upset cases therefore represent conservative assessment conditions intended to bound the potential short-term air quality effects associated with these activities. This work, for example, assumes the heat medium furnace and thermal oxidizer operate at 100% load during commissioning even though operation at lower loads is expected during much of this period.

The aquatic acidification and eutrophication assessment is based on available water chemistry information from four stream sites in proximity to the Project. The terrestrial acidification and eutrophication assessment is a screening-level, desktop-based Level 0 assessment using available soils, ecosystem, terrain, vegetation, and other spatial information. These approaches are appropriate to the purpose and scale of the assessments and are interpreted in conjunction with conservative air dispersion and deposition predictions. The Project-Alone Case does not predict exceedances of the applicable terrestrial critical loads, while predicted exceedances in the Application and Cumulative Cases are limited in spatial extent.

These limitations are typical of prospective air quality assessments and have been addressed by using approved modelling methods, conservative assumptions, and multiple operating scenarios. They are not considered to materially affect the conclusions of the assessment. As described in Section 6.0, the available receiving environment information is considered adequate for the WDA application.

6.0 RECEIVING ENVIRONMENT INFORMATION GAPS

There are no substantial gaps in meteorological and air quality information that are relevant to the assessment of this application. The ambient air quality and meteorology Inexwantas (monitoring) locations near the Project location are adequate for the scope of this WDA application. Both the quality and quantity of data (spatially and temporally) are adequate to characterize the receiving environment. These data are discussed in the TDR (Appendix A).

7.0 OTHER DISCHARGE

This section provides a summary of other discharges at LNG Facility, including effluent (liquid), refuse, and hazardous waste.

7.1 EFFLUENT

Effluent discharges from the site are addressed in three separate WDAs:

- **Sewage:** Discharge of effluent from sewage sources on site has been authorized since 1975 under ENV Permit #2334. An amendment to this permit was issued to Woodfibre LNG Limited in 2015, then the permit was transferred to Woodfibre LNG General Partner Inc, effective December 2022 (issued in 2023).
- **Leachate:** Discharge of effluent from the former pulp mill refuse site located on site has been authorized since 1975 under ENV Permit #1239. An amendment to this permit was issued to Woodfibre LNG Limited in 2015, and 2019, then the permit was transferred to Woodfibre LNG General Partner Inc in 2023.
- **Stormwater and Drainage:** A permit to authorize the discharge of stormwater drainage from the site into Átl'ka7tsem (Howe Sound) and Mill Creek is currently being sought from the BCER. This will include the operation of an Oily Water Treatment System to remove free and dispersed oil and settleable and suspended solids, mainly from the contaminated contact staḵw (water) system (which is staḵw (water) sourced from operational process areas where there is equipment that contains hydrocarbons and other potential sources of contaminants that will interface with surface staḵw (water) runoff.

7.2 REFUSE

There is no refuse discharge proposed for the Project or from the existing site.

7.3 HAZARDOUS WASTE MANAGEMENT

Hazardous waste will be handled, stored, and disposed of according to the BC Hazardous Waste Regulation.

8.0 ENVIRONMENTAL MANAGEMENT SYSTEM

Below is a summary of WLNG's Corporate Environment Policy, statutory requirements, industry specific standards, guidelines and codes of practice, list of emissions-specific management plans, emissions reduction and management plan, and operational plans and procedures.

8.1 CORPORATE ENVIRONMENT POLICY

Woodfibre LNG's approach is guided by a commitment to build and operate one of the lowest-emission LNG facilities globally, with sustainability and reconciliation at the core of its development. Woodfibre LNG has a five pillar sustainability framework of which emissions management is one of the pillars. Emissions management includes the net zero roadmap that contains the following aspects:

- Lower Emissions Design: The facility is powered by hydroelectricity, avoiding the need for gas-fired turbines and associated emissions.
- Targeted Carbon Offsets: The remaining hard-to-abate emissions are offset through the purchase of local offsets.
- Increased LDAR: During operations, LDAR surveys are planned to be conducted monthly, exceeding regulated quarterly programs required under the LNG Facilities Regulation (BCER, 2014). This tighter cadence enables faster leak detection and repair, reducing cumulative fugitive emissions.

Further information on Woodfibre LNG's net zero commitment and plan is available at the following website: <https://woodfibrelng.ca/sustainability/net-zero/>

8.2 STATUTORY REQUIREMENTS

The applicable local, provincial and federal environmental standards and guidelines to protect the receiving environment are outlined in Section 1.1 and Section 3.6.

8.3 INDUSTRY SECTOR-SPECIFIC STANDARDS, GUIDELINES AND CODES OF PRACTICE

Applicable industry sector-specific standards, guidelines, and codes of practice to protect the receiving environment are outlined in Section 1.1 and Section 3.6.

8.4 LIST OF EXISTING MANAGEMENT PLANS

There are no existing management plans related to the operation of the LNG facility. The plans currently under development that are required under other BC regulations are:

- **EAC Condition 4 – Air Quality Mitigation and Inexwantas (Monitoring) Plan (AQMMP):**
The AQMMP will include the measures to monitor liquefaction facility air emissions and contaminants of concern for sources modelled in the EAC Application; approach for reporting air emissions data to government agencies, Indigenous groups and the public; and adaptive management plan to address the effects of the Project related to air quality from liquefaction facility emissions in the event those effects are either not mitigated to the extent identified in the EAC Application or were not predicted in the EAC Application. The AQMMP is to be developed by a qualified professional (QP) in consultation with BC ENVP, BC Ministry of Health, BCER, Vancouver Coastal Health, Skwxwú7mesh Úxwumixw (Squamish Nation) and Tsleil-Waututh Nation; and submitted to the EAO at least 30 days prior to the planned date to commence commissioning. The AQMMP will be informed by this WDA given the Inexwantas (monitoring) and reporting program will be defined by the BCER in the WDA permit under the *Environmental Management Act*.
- **LNG Facility Regulation – Fugitive Emissions Management Plan (FEMP):** The FEMP forms part of the Safety and Loss Management Program that must be prepared to the satisfaction of the BCER and in compliance with CSA Z276 LNG – Production, storage and handling. Fugitive emission sources and management are discussed in Section 3.3.
- **LNG Facility Regulation – Facility Permit – Condition 21 to 23 - Flaring Management Report (FMR):** The FMR documents the measures to design, construct and operate the LNG facility to minimize flaring of gas, including but not limited to, flaring during LNG carrier loading; and associated emissions including, but not limited to, black smoke during commissioning. The FMR requires approval from the BCER.
- **LNG Facility Regulation – Facility Permit – Condition 17 to 18 - Flaring Notification Plan (FNP):** The FNP defines the notification processes during commissioning and operations for notifications to the public, District of Skwxwú7mesh (Squamish), Skwxwú7mesh Úxwumixw (Squamish Nation), Musqueam Indian Band, and Tsleil-Waututh Nation regarding flaring events. The FNP requires approval from the BCER.

Woodfibre LNG is currently implementing a Floatel Air Quality Inexwantas (Monitoring) and Mitigation Plan that contains the mitigations, Inexwantas monitoring and reporting program associated with the construction workforce accommodation on site (two floatels) as required under EAC Condition 35.

8.5 EMISSION REDUCTION AND MANAGEMENT PLAN

An emission reduction and management plan is not considered necessary for this application. Predicted concentrations from Project sources alone are less than the applicable BC AQOs. Localized exceedances of the one-hour NO₂ BC AQO are predicted for the Application and Cumulative Cases; however, these are primarily associated with marine vessel emissions and the addition of baseline concentrations, are confined to areas near the Facility boundary, and predicted concentrations at sensitive and community receptors remain less than the applicable BC AQO.

8.6 OPERATION PLANS AND PROCEDURES

Woodfibre LNG will implement many operating plans and procedures related to the equipment included within this WDA application. These can be discussed with the BCER as required.

9.0 ÍNEXWANTAS (MONITORING) PROGRAMS AND REPORTING

9.1 POINT SOURCE MONITORING

As noted in Section 3.1.2, the thermal oxidizer will have a CEMS, which will monitor the parameters contained in Table 3.3.

The operators are also able to pro-actively monitor the heating medium furnace and flare through the range of meters and gas composition analyzers in the facility. This data will be used to calculate the emissions from these point sources, with the use of published emission factors and engineering calculations. There are different types of metering systems for the streams noted, as follows, and the data will be used to support regulatory reporting where required:

- HP and LP Flare: GE Panametric XGF series ultrasonic flow meters are installed with both pressure and temperature compensation, ensuring measurement accuracy within $\pm 1.5\%$ of reading across the specified flow range. Continuous flow totalizing is performed at the Distributed Control System (DCS), with historical data archived for monitoring and analysis. Both the LP and HP flare headers have online gas chromatographs that measure full gas composition and lower heating value (LHV) before the gas goes up the flare stack for combustion.
- Thermal Oxidizer metering: Differential pressure (DP) flow measurement and process analyzers are used to provide accurate, reliable metering within the thermal oxidizer package.
- Fuel Gas: A GE Panametric XGM series ultrasonic flow meter is utilized, equipped with pressure and temperature compensation to achieve $\pm 1\%$ accuracy over the designated flow range. Flow is totalized continuously in the DCS, with historization for operational review and audit purposes. As the primary source for fuel gas is the BOG from the FSTs, the BOG composition is measured on an online gas chromatograph on the outlet of the BOG compressor.
- Feed Gas metering: Inlet gas flow is metered via the adjacent plant's Custody Transfer Station, which incorporates custody-grade ultrasonic flowmeters, gas chromatographs, and flow computers to ensure precise measurement. A dedicated communication link is established between the CTS and the WLNG plant DCS to facilitate seamless and reliable data integration.

As noted in Section 2.1, samples will be taken manually of the inlet gas for H_2S and total sulphur for analysis in a laboratory. An online gas chromatograph is installed downstream of the Acid Gas Absorber to continuously monitor and confirm that H_2S and CO_2 concentrations in the treated gas meet the specified limits required by downstream process units.

9.2 RECEIVING ENVIRONMENT MONITORING PROGRAM

The receiving environment monitoring program is being developed based on outcomes of the dispersion modelling and effects assessment so that it is commensurate to the nature and magnitude of the Project discharges. As outlined in Section 5.1, the dispersion model predicted concentrations at sensitive receptors and the Skwxwú7mesh (Squamish) town receptors remain less than the applicable BC AQOs.

The ENVP operates an air quality monitoring station in Squamish, that measures NO₂, SO₂, and PM_{2.5} along with ozone (O₃), temperature, humidity, wind speed and direction. This information is publicly available and can be used to inform the air quality in the local community.

Note, the monitoring program defined under WDA PE-113083 will also be replicated in the AQMMP being developed in accordance with the EAC (refer to Section 8.4).

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APPENDIX A AIR QUALITY TECHNICAL DATA REPORT

Technical Data Report for the Woodfibre LNG Project

Waste Discharge Authorization: Permit Application for Air Emissions (PA-113083)

October 16, 2026

Prepared by:
Stantec Consulting Ltd.
#500 - 4515 Central Blvd
Burnaby, BC, V5H 0C6

Prepared for:
Woodfibre LNG General Partner Inc.
#900 - 1185 W Georgia Street
Vancouver, BC, V6E 4E6

WLNG-W0001-RE-RP-00285



Preamble

The Woodfibre Liquefied Natural Gas Project (the Project) is a liquefied natural gas export facility being constructed on the former Woodfibre Pulp and Paper Mill site (the Project) in Átl'ka7tsem (Howe Sound), approximately seven kilometres south of Skwxwú7mesh (Squamish). The Project is on the historical location of a Skwxwú7mesh Úxwumixw (Squamish Nation) village known as Swiyát. Swiyát and Átl'ka7tsem (Howe Sound) are tied to the cultural well-being of Skwxwú7mesh Úxwumixw (Squamish Nation) members, their ancestors, and their descendants, and to other Indigenous groups as defined in the Project's Environmental Assessment Certificates. Woodfibre LNG General Partner Inc. recognizes the importance of these areas to the Skwxwú7mesh stélmexw (Squamish People), and other Indigenous groups. Woodfibre LNG General Partner Inc. seeks to construct and operate the Project in a manner that is respectful of Indigenous values. This Technical Data Report is primarily written in English with important place names, species, phrases, and passages provided in the Skwxwú7mesh Sníchim (Squamish language).

Temíxwiýikw chet wa naantem chet ti temíxw Swiyát
Chet wa sménhemswit kwis ns7éyxnitas chet ti temíxw
We7ú chet kwis t'íchimwit iy íwas chet ek' I tti.

Our ancient ancestors named this place Swiyát
We, as their descendants safeguard these lands
We will continue to swim and fish in these clear waters.

Executive Summary

Stantec Consulting Ltd. (Stantec) was contracted by Woodfibre LNG General Partners Inc. (Woodfibre LNG) to conduct an air quality assessment in support of the Waste Discharge Authorization (WDA) application for the Woodfibre LNG Project (the Project or Facility). The dispersion modelling was performed in accordance with the British Columbia (BC) Air Quality Dispersion Modelling Guideline (BC Ministry of Environment and Parks (ENVP, 2022a)), Guidance on NO₂ Dispersion Modelling in BC (ENVP, 2022b), and the Dispersion Modelling Plan in Appendix A.

Emission Sources

The Facility emission sources included in the WDA Application are one thermal oxidizer, one heat medium furnace, one high pressure (HP) flare, and one low pressure (LP) flare. While marine vessels are exempt from the Environmental Management Act, they are an important source of emissions and are considered in the assessment along with the Project sources.

Air Quality Assessment

The air quality assessment evaluates potential air quality effects from commissioning, stabilizing operations, routine (normal) operations, and non-routine operating conditions. Project emissions are also considered cumulatively with emissions from the nearby FortisBC Energy Inc. (FortisBC) Squamish V2 Compressor Station and with the addition of baseline to consider sources not modelled. Predicted concentrations of nitrogen dioxide (NO₂), sulphur dioxide (SO₂), fine particulate matter (PM_{2.5}), and carbon monoxide (CO) were compared to applicable BC Air Quality Objectives (AQOs). For the non-routine Thermal Oxidizer Trip Case, predicted concentrations of total reduced sulphur (TRS) were compared to applicable BC AQOs, while predicted concentrations of hydrogen sulphide (H₂S) were compared to the applicable Alberta Ambient Air Quality Objectives (AAQOs).

Modelling Approach

The dispersion modelling assessment was developed using conservative assumptions to evaluate potential air quality effects. The emission inventory is considered conservative based on the use of maximum emission data from equipment vendors, the assumption of continuous operation of equipment at maximum design capacities, and the use of conservative estimates of normal flare volumes. As a result, the predicted concentrations provide a conservative estimate of potential air quality effects and are higher than concentrations expected during normal Facility operations. The predicted concentrations presented throughout this assessment represent the maximum concentrations predicted across the modelling domain for each scenario and averaging period. These maximum values are compared with applicable BC AQOs; however, they do not represent concentrations across the entire airshed.

Commissioning

The Commissioning Case considers the period during the testing and startup of the Facility. This case includes emissions from extended flaring events at the HP flare, the thermal oxidizer, the heat medium furnace, plus baseline. As this phase is not operations and LNG is not being produced, it is assumed there are no marine vessels at the Facility. Predicted concentrations of NO₂, SO₂, PM_{2.5}, and CO for the Commissioning Case are less than the applicable BC AQOs, including at nearby sensitive receptors.

Stabilizing Operations and Normal Operations

Project Stabilizing Operations Case evaluates the Project emission sources (i.e., thermal oxidizer, heat medium furnace, routine flaring (pilot/purge)) and elevated routine flaring rates during early operations due to passing valves. Once the passing valves have been corrected, early operations stabilize into Normal Operations (i.e., without the additional routine flaring). Maximum predicted concentrations of NO₂, SO₂, PM_{2.5}, and CO for both the Project Stabilizing Operations and Normal Operations scenarios are less than the applicable BC AQOs. Maximum predicted concentrations at nearby sensitive receptors are much less than BC AQOs.

Application Case

The Application Case – Project Stabilizing Operations and the Application Case – Normal Operations considers the cases described above with the addition of marine vessels plus baseline. Predicted concentrations of SO₂, PM_{2.5}, and CO remain less than the applicable BC AQOs. Predicted annual average NO₂ concentrations are less than the BC AQO; however, the maximum predicted one-hour NO₂ concentration is greater than the BC AQO for both Stabilizing Operations and Normal Operations. The elevated concentrations are associated with marine vessel emissions (LNG carrier auxiliary engines which power vessel systems including cargo pumps and compressors) and baseline concentrations. The maximum one-hour NO₂ concentration occurs at the northern Facility fenceline for both Stabilizing Operations and Normal Operations. Concentrations greater than the BC AQO occur along the eastern fenceline and extend approximately 500 m to the northeast. Predicted one-hour NO₂ concentrations at the closest sensitive receptor (Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and the Skwxwú7mesh (Squamish) Town boundary receptor remain less than the BC AQO.

Based on the results of the Application Case - Stabilizing Operations Case (compared to the Application Case - Normal Operations), changes to air quality due to increased flaring during this period are predicted to be negligible. As such, only the Normal Operations case was carried forward to the Cumulative Case assessment.

Cumulative Case

The Cumulative Case considers the Application Case – Normal Operations plus the FortisBC Squamish V2 Compressor Station. For the assessment, the Squamish V2 Compressor Station includes two natural gas fired turbine compressor units, one boiler, and one backup generator. Maximum predicted concentrations for the Cumulative Case are generally unchanged, with negligible to small increases, compared to the Application Case - Normal Operations.

Process Upset Case

The Process Upset Case evaluates a flaring event where the Facility is shut down and restarted due to an equipment trip or process upset. This case includes flaring from the HP and LP flares, as well as the emissions from thermal oxidizer and heat medium furnace. For the purposes of the dispersion modelling, it is assumed that the thermal oxidizer and heat medium furnace are operating at 100% load, where in actual likelihood during this type of event these units would be operating at 30 to 50% load; therefore, this assessment is conservative. Predicted concentrations of SO₂, PM_{2.5}, and CO remain less than the applicable BC AQOs; however, the one-hour NO₂ concentration is greater than the BC AQO with the inclusion of the marine vessels and baseline. The maximum one-hour NO₂ concentration occurs at the northern Facility fenceline and extends approximately 500 m to the northeast and 500 m to the southwest of the Facility.

High Inlet Sulphur Case

The High Inlet Sulphur Case evaluates the unlikely event that feed gas sulphur content increases from 24 ppmv to 45 ppmv due to an increase in mercaptan content. The scenario assumes the Facility is in Normal Operations and only emissions of SO₂ from the thermal oxidizer are affected. Predicted SO₂ concentrations for the High Inlet Sulphur Alone, Application, and Cumulative Cases remain less than the applicable 1-hour BC AQO.

Thermal Oxidizer Trip Case

The Thermal Oxidizer Trip Case considers the unlikely event where the thermal oxidizer is offline, and the acid gas and flash gas from the acid gas removal unit, and condensate storage tank vapour (storage gas) are routed to the HP flare and vented (not combusted due to the composition of the gas). The pollutants of interest in this scenario are total reduced sulphur (TRS) and hydrogen sulphide (H₂S). Maximum TRS and H₂S concentrations are predicted to be greater than the BC AQO and Alberta AAQOs (AEPA, 2024) during this non-routine scenario. However, the joint probability of a Thermal Oxidizer Trip occurring and concentrations exceeding the BC AQO for TRS or the Alberta AAQOs for more than one hour in ten years is limited to areas along and adjacent to the Project boundary. The maximum potential for concentrations greater than the BC AQO or Alberta AAQOs occurs along the northern Project boundary in the range of 1 to 1.5 hours per year. As the BC AQO and Alberta AAQOs for TRS and H₂S were developed to manage potential for odour, the model predictions show that during a Thermal Oxidizer Trip Scenario, there may be potential for occurrence of odour near the Project during adverse meteorological conditions, but it is predicted to occur very infrequently.

Conclusions

The results of this air quality assessment indicate that the predicted changes to air quality during commissioning, stabilizing operations, and normal operations are small. Where elevated concentrations are predicted, they are localized near the Facility, occur under conservative modelling assumptions, and are primarily due to marine vessel emissions and baseline concentrations, rather than the Facility.

Limitations

This document entitled Technical Assessment Report for Woodfibre LNG Project was prepared by Stantec Consulting Ltd. (“Stantec”) for the account of Woodfibre LNG Limited Partnership (the “Client”) to support the regulatory review process for its Waste Discharge Authorization (the “Application”) for the Woodfibre LNG (the “Project”). In connection therewith, this document may be reviewed and used by the BC Energy Regulator (BCER) participating in the review process in the normal course of its duties. Except as set forth in the previous sentence, any reliance on this document by any other party or use of it for any other purpose is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document. The information and conclusions in the document are based on the conditions existing at the time the document was published and does not take into account any subsequent changes. Stantec has assumed all information received from the Client and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein. Any use which another party makes of this document is the responsibility and risk of such party. Such party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other party as a result of decisions made or actions taken based on this document.

October 16, 2026

Review and Sign-Off

This document entitled Technical Data Report for the Woodfibre LNG Project was prepared by Stantec Consulting Ltd. ("Stantec") for the account of Woodfibre LNG Limited Partnership (the "Client") to support the application to the British Columbia (BC) Energy Regulator (BCER) for a Waste Discharge Authorization (WDA) (the "Application") for air emissions from the Woodfibre LNG Project (the "Project").

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Date:
2026.10.22
09:54:24
-07'00'

Prepared by: _____

April Hauk, B.Sc.,
EP Associate, Air Quality

Re De



Ramin Dastanpour, Ph.D., P.Eng.,
PMP
Senior Atmospheric Engineer

Reviewed by: _____

Reid Person, M.Eng., P.Eng.
Principal, Technical Discipline Leader,
Air Quality

Adriana MacLeod
Digitally signed
by Adriana MacLeod
Date:
2026.10.22
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Approved by: _____

Adriana MacLeod, B.Sc.
Project Manager

October 16, 2026

Document Revision History

Version	Revision Date	Pages Revised	Revision Description
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Squamish-English Translation

Squamish	English
Ínexwantas	Monitoring
Skwxwú7mesh	Squamish
Skwxwú7mesh Sníchim	Squamish language
Skwxwú7mesh Úxwumixw	Squamish Nation
Skwxwú7mesh stélmexw	Squamish people
Staḵw	Water, river
Temíxw	Land, earth, dirt
Nexwnéwu7ts Átlk'a7tsem	Howe Sound

Abbreviations

the Application	The application to the British Columbia (BC) Energy Regulator (BCER) for a Waste Discharge Authorization (WDA) to authorize the discharge of air emissions to the environment under the <i>Environmental Management Act</i>
ARM 2	Ambient Ratio Method 2
AQO	Air Quality Objective
BC	British Columbia
BCER	British Columbia Energy Regulator
BOG	Boil-off gas
°C	degrees Celsius
CAAQS	Canadian Ambient Air Quality Standards
CCME	Canadian Council of Ministers of the Environment
CEPA	<i>Canadian Environmental Protection Act</i>
the Client	Woodfibre LNG General Partner Inc.
CO	Carbon monoxide
EA	Environmental Assessment
ECCC	Environment and Climate Change Canada
ENVP	British Columbia Ministry of Environment and Parks
FortisBC	FortisBC Energy Inc.
FST	Floating storage tanks
GCU	Gas combustion unit
HHRA	Human Health Risk Assessment
HP	High pressure
km	kilometre
LNG	Liquified natural gas
LP	Low pressure
m	metres
mm	millimetres

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m asl	metres above sea level
m ³	cubic metres
MARPOL	International Convention for the Prevention of Pollution from Ships
MDO	Marine diesel oil
NA-ECA	North American Emissions Control Area
NO	Nitrogen oxide
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen
NO _x as NO ₂	NO _x = NO + NO ₂ , and not NO ₂ alone
PM _{2.5}	fine particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometres
ppmv	Parts per million by volume
the Project	the Woodfibre LNG Project
SO ₂	Sulphur dioxide
SO _x	Oxides of sulphur
Stantec	Stantec Consulting Ltd.
TAR	Technical Assessment Report
TDR	Technical Data Report
TRS	Total Reduced Sulphur
µg/m ³	microgram per cubic metre
US EPA	United States Environmental Protection Agency
VOCs	Volatile organic compounds
WDA	Waste Discharge Authorization
Woodfibre LNG	Woodfibre LNG General Partner Inc.
WRF	Weather Research and Forecast model

1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

Woodfibre LNG General Partner Inc. (Woodfibre LNG), as General Partner on behalf of the Woodfibre LNG Limited Partnership will operate the Woodfibre Liquefied Natural Gas (LNG) Project (the Project or Facility), which is located on the former Woodfibre Pulp Mill site approximately 7 kilometres (km) southwest of Sk̓wx̓wú7mesh (Squamish), British Columbia (BC) (Figure 1.1).

The Project includes land-based natural gas processing and liquefaction facilities with a capacity to liquefy up to 2.1 million tonnes per year of LNG. A floating storage and offloading unit includes two floating storage tanks (FST) that have a combined storage capacity of 250,000 cubic metres (m³) and LNG loading facilities that transfer LNG to LNG carriers for export. The estimated LNG carrier frequency is approximately 40 carriers annually, or three to four per month. The supporting infrastructure includes buildings (e.g., administration building, control and operation building, maintenance building), utility systems, flare system, and boil off gas (BOG) vapour return lines.

The Project will be powered by electricity provided by BC Hydro, which includes the electric motors that drive the refrigerant compressors that liquefy the natural gas. The use of these e-drives is a key component to Woodfibre LNG's net zero roadmap, by setting a new global standard to be the world's first net zero LNG Facility. Natural gas will be supplied to the Facility by FortisBC Energy Inc. (Fortis BC) from western Canadian markets.

1.2 PURPOSE

The purpose of this Technical Data Report (TDR) is to document air quality assessment methodology, dispersion modelling results, and conclusions on changes to air quality in support of the Project's WDA application to the BC Energy Regulator (BCER).

1.3 AIR QUALITY ASSESSMENT APPROACH

Stantec's team of air quality scientists, meteorologists, and engineers carried out the air quality dispersion modelling and assessment for the Project. The Stantec team has training and experience specific to the selected dispersion model, are familiar with the user manuals written by the model developers, are aware of modelling best practices, use professional judgement, and have experience modelling LNG facilities in a similar setting. Stantec follows guidance for dispersion modelling and air quality assessments issued by the BC Ministry of Environment and Parks (ENVP), the United States Environmental Protection Agency (US EPA), and other jurisdictions (i.e., Alberta, Ontario). Additional guidance is also available in the scientific literature, and previous works in BC, Canada, and other jurisdictions.

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Dispersion modelling for the Project was performed in accordance with the BC Air Quality Dispersion Modelling Guideline (BC Ministry of Environment and Parks (ENVP, 2022a), Guidance on NO₂ Dispersion Modelling in BC (ENVP, 2022b), and the Dispersion Modelling Plan in Appendix A. The Dispersion Modelling Plan was reviewed by the BCER; their comments (including assessment scope, methodology, and result presentation) were incorporated into the final Dispersion Modelling Plan (Appendix A). The air quality assessment follows the same methodology employed by FortisBC for the Eagle Mountain – Woodfibre Gas Pipeline Project, Squamish V2 Compressor Station WDA application to BCER. The intention is to achieve consistency in model predictions for the adjacent projects (as they are the basis for the cumulative case). However, the modelling methodology described in this TDR is specific to the Woodfibre LNG Project

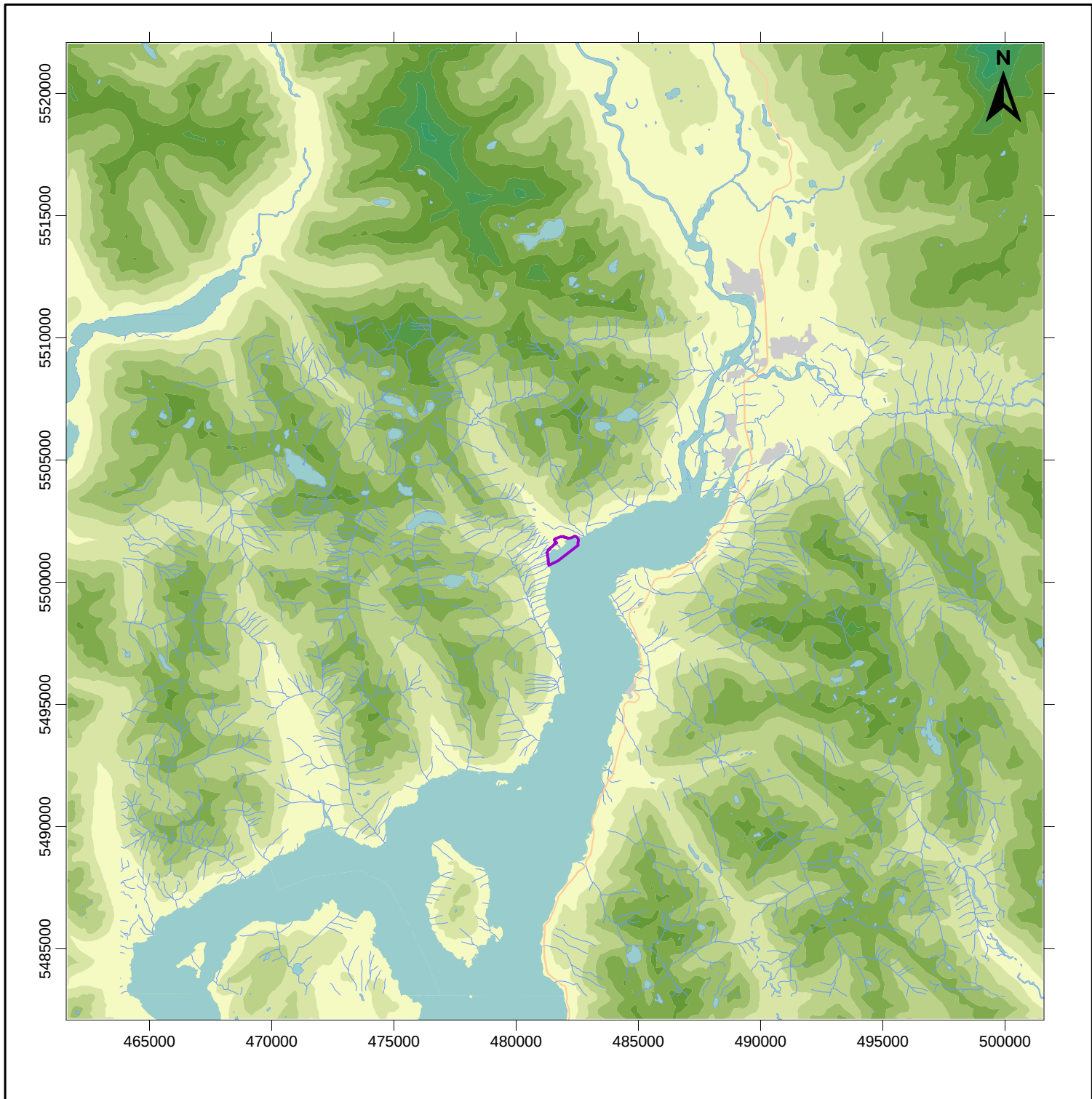
The air quality assessment focuses on effects of nitrogen dioxide (NO₂), sulphur dioxide (SO₂), fine particulate matter (PM_{2.5}), and carbon monoxide (CO) on air quality beyond the Facility boundary where the air quality regulatory criteria apply. These pollutants are considered the indicators for potential environmental and health risks and are regulated and monitored by governments.

Non-indicator pollutants such as volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs) were reviewed for the Project emission sources. Non-indicator species are pollutants with less prevalent environmental, or health risks and regulatory monitoring and management is on a case-by-case basis.

VOC emissions were assessed through air quality modelling and human health risk assessments as part of the Environmental Assessment (EA) for the Project (WLNG, 2015) (Appendix A). That assessment concluded that VOC emissions would result in a negligible effect on air quality, with maximum predicted concentrations much less than regulatory criteria (WLNG, 2015). Updated estimates for VOCs and PAHs from the Project were evaluated and determined to be similar to or less than concentrations predicted in the EA for the Project. As the nature (quantity and composition) of VOCs and PAHs emitted by the Project have not materially changed from the assumptions used in the EA, VOCs and PAHs are not included in this assessment.

A Human Health Risk Assessment (HHRA) is not included in the WDA application as the effects of the Project emissions on human health were assessed as part of the EA and found to have negligible effects on human health (WLNG, 2025). While an updated HHRA is not provided as part of the WDA Application, a summary of findings regarding effects on air quality and human health from the EA is included in the Technical Assessment Report (TAR).

Deposition rates of nitrogen and sulphur are predicted using dispersion modelling. Modelling results are provided to the Stantec vegetation, soils, and aquatic teams for input into the acidification and eutrophication assessment. Results and conclusions for this deposition assessment are provided in the TAR for the WDA application.



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

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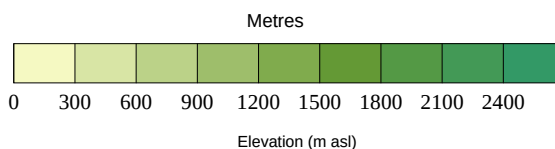
Client/Project/Report

Woodfibre LNG General Partners Inc.
 Woodfibre LNG Facility
 Technical Data Report

Figure No.

1.1

Title
 Location Map and Dispersion Modelling Domain



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2.0 METHODS

This air quality assessment uses the CALPUFF/CALMET dispersion modelling system. Dispersion modelling methods for this assessment followed the Guideline (ENVP, 2022a) and are summarized in the following sections. Further detail on dispersion methodology is provided in the Dispersion Modelling Plan in Appendix A.

2.1 DISPERSION MODELLING DOMAIN

The dispersion modelling domain for the air quality assessment is defined as a 40 km by 40 km domain (Appendix A). The modelling domain is sized to capture the possible effects of the Project.

Terrain in the modelling domain is complex ranging from approximately sea level to over 2,500 metres above sea level (m asl). Higher elevations are located in the north, northwest, east, and northeast sections of the modelling domain. The lowest elevations (sea level) are in the southern and center sections of the model domain. The Project is situated close to sea level with the LNG Facility modules located approximately 8.5 metres (m) above sea level (asl). Appendix B includes further information on local terrain.

The dominant temíxw (land) cover in this region is evergreen forest. The community of Skwxwú7mesh (Squamish) is located 7 kilometers (km) to the northeast of the Project. Britannia Beach is located 5.2 km southeast of the Project. Figure 1.1 illustrates the modelling domain and local terrain.

Across the 40 km by 40 km modelling domain, a total of 30,942 receptors were included in the model setup (Section 5.2). Concentrations are predicted at each of these receptors for each hour in the meteorological data set (i.e., 8760 hours per year over the five-year period (2011-2015)), for a total of 43,824 hours at 30,942 receptors. The maximum concentrations from these results are presented in tabular and graphical (isopleth) form in Section 6.0.

2.2 LEVEL OF ASSESSMENT

The Guideline (ENVP, 2022a) defines three levels of air quality assessment that vary in the degree of detail and scope. Section 2.2.2 of the Guideline (ENVP, 2022a) indicates that a Level 3 modelling assessment using the CALPUFF modelling system is appropriate for modelling air emissions associated with the Project due to the complex topography and wind flows in the region and the multiple emission sources.

2.3 APPLICABLE AIR QUALITY OBJECTIVES

Effects on air quality are determined, in part, by comparing predicted ground-level concentrations of the substances to the applicable Air Quality Objectives (AQO). The AQOs are used to gauge current and historical air quality and guide decisions on environmental impact assessments and authorizations.

In BC, ENVP have stated that the BC AQOs are applicable beyond the facility fence line ((ENVP, 2016), (ENVP, 2020)). Where exceedances of the AQO are predicted through dispersion modelling, the ENVP considers the context of magnitude, frequency, timing, and proximity to sensitive receptors. Should there be exceedances of the AQO, ENVP would manage these in accordance with the federal Air Zone Management Framework ((Canadian Council of Ministers of Environment (CCME, 2019)) for improvements in air quality across the affected area and would include all important sources (ENVP, 2020).

The BC AQOs for NO₂ are based on the Canadian Ambient Air Quality Standards (CAAQS), announced by the Government of Canada in 2017 ((Canadian Environmental Protection Act (CEPA, 2017)) for the year 2020. The CCME have stated that achievement of the CAAQS is determined on an airshed and air zone basis, which covers broad geographical areas (CCME, 2025). They are regional ambient standards and not intended to be applied to individual projects and facilities as regulatory standards (CCME, 2025). Rather, they are used by provinces and territories to guide air zone management actions intended to reduce ambient concentrations below the CAAQS and prevent CAAQS exceedances (CCME, 2025). The ENVP have not adopted the 2025 CAAQS for NO₂ as the BC AQO to date.

The ENVP has recently adopted the 2025 CAAQS for SO₂ as the BC AQO (ENVP, 2025b).

The BC AQOs for NO₂, SO₂, PM_{2.5}, CO and total reduced sulphur (TRS) applicable to this assessment are shown in Table 2.1 (ENVP, 2025b).

Table 2.1 British Columbia Air Quality Objectives

Substance	Averaging Interval	British Columbia Air Quality Objective (µg/m ³)
NO ₂	1-hour	113 ^a
	Annual	32 ^b
SO ₂	1-hour	170 ^c
	Annual	10.5 ^d
PM _{2.5}	24-hour	25 ^e
	Annual	8 ^f
CO	1-hour	14,300
	8-hour	5,500

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Substance	Averaging Interval	British Columbia Air Quality Objective ($\mu\text{g}/\text{m}^3$)
TRS	1-hour	7 ^g
	24-hour	3 ^g

Notes:

- a. Achievement for 1-hour NO_2 is based on 3-year average of the annual 98th percentile of daily 1-hour maximum. This requires the extraction of the highest predicted 1-hour value at each location for each day, followed by the calculation of the 98th percentile (the eighth highest) of those 365 values for each year, then average the three annual values.
- b. Achievement for annual NO_2 is based on the average of all 1-hour average concentrations over a single calendar year
- c. Achievement for 1-hour SO_2 is based on 3-year average of the annual 99th percentile of daily 1-hour maximum. This requires the extraction of the highest predicted 1-hour value at each location for each day, followed by the calculation of the 99th percentile (the fourth highest) of those 365 values for each year, then average the three annual values.
- d. Achievement for SO_2 is based on the average of 1-hour concentrations averaged over one year
- e. Achievement for $\text{PM}_{2.5}$ is based on annual 98th percentile of daily average, averaged over one year
- f. Achievement for $\text{PM}_{2.5}$ is based on annual average, averaged over one year
- g. Pollution Control Objectives were developed by the B.C. Ministry of Environment and the B.C. Department of Lands, Forest and Water Resources in the 1970s for five source sectors. These criteria, which referred to all discharges to the environment, were rescinded in 2006, but the ambient air quality objectives continue to be used for reference purposes.

2.4 OTHER AIR QUALITY OBJECTIVES

As noted above, the 2025 NO_2 CAAQS has not been adopted by the ENVP to date. As such, the applicable AQO for NO_2 remains the 2020 NO_2 CAAQS. However, during the review of the Dispersion Modelling Plan (Appendix A), BCER requested that NO_2 dispersion modelling results be compared to the 2025 NO_2 CAAQS. These standards are provided in Table 2.2.

Table 2.2 NO_2 CAAQS

Substance	Averaging Interval	2025 NO_2 CAAQS ($\mu\text{g}/\text{m}^3$)
NO_2	1-hour	79 ^a
	Annual	23 ^b

Notes:

- a. Achievement for 1-hour NO_2 is based on 3-year average of the annual 98th percentile of daily 1-hour maximum. This requires the extraction of the highest predicted 1-hour value at each location for each day, followed by the calculation of the 98th percentile (the eighth highest) of those 365 values for each year, then average the three annual values.
- b. Achievement for annual NO_2 is based on the average of all 1-hour average concentrations over a single calendar year

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For the assessment of H₂S, predicted concentrations are compared to the Alberta Ambient Air Quality Objectives (AAQOs). These standards are set to manage offensive odour and protect human health. Table 2.3 provides the Alberta AAQOs for H₂S.

Table 2.3 Alberta Ambient Air Quality Objectives for H₂S

Substance	Averaging Interval	Alberta Ambient Air Quality Objectives (µg/m ³)
H ₂ S	1-hour	14

Notes:

^a. Achievement for 1-hour H₂S is based on maximum (100th percentile) concentration

Source (AEPA, 2024)

3.0 REGIONAL ATMOSPHERIC CONDITIONS

This section describes the existing regional conditions in the study area, including the background climate, meteorology, and air quality. Understanding both the existing climate and air quality, and its relationship with the landscape, helps establish the link between cause (emissions) and effect (resultant changes in air quality) and supports the Project air quality assessment.

3.1 CLIMATE AND METEOROLOGY

Climate is defined as the weather conditions prevailing in an area over a long-time interval (several decades). The climate of the site was characterized using the 30-year Environment and Climate Change Canada (ECCC) Canadian Climate Normals (1991 to 2020) for the Skwxwú7mesh (Squamish) Airport station (ECCC, 2025).

3.1.1 Air Temperature

The average daily temperature in Skwxwú7mesh (Squamish) is 9.8 degrees Celsius (°C). January is the coldest month, and July is the warmest (1.8°C and 18.5°C daily average temperature). Extreme temperatures vary from -13.8°C (January 6, 1993 and December 25, 1964) to 38.2°C (September 4, 2017).

3.1.2 Rainfall

The average annual total precipitation in Skwxwú7mesh (Squamish) is 2,344 millimetres (mm). November is the wettest month (383.0 mm average), and July is the driest (47.5 mm average). The extreme daily precipitation was 164.4 mm (November 10, 1990).

3.1.3 Meteorology

Meteorology is the study of the changes in wind speed and direction, temperature, air pressure, humidity, and other parameters in the atmosphere. Local meteorological conditions influence the transport and dispersion of air emissions. Wind speed, wind direction, and atmospheric turbulence are major meteorological elements that influence the transport and dispersion of particulate and gaseous emissions.

The Guideline (ENVP, 2022a) requires the application of at least three years of meteorological data as input for dispersion modelling and recommends use of an ENVP-supplied Weather Research and Forecasting (WRF) meteorological dataset. The WRF model allows for the dynamic spatial and temporal downscaling of reanalysis datasets to predict site-specific meteorological conditions more accurately. These meteorological data were used in dispersion modelling and are discussed in Section 5.1 and presented in detail in Appendix B.

3.2 BASELINE AIR QUALITY

It is useful in this type of study to know the predicted incremental air quality contribution of the source or sources being modelled. It is also important to know about the cumulative effects on air quality. This is especially important when comparing model predictions to ambient objectives. The cumulative air quality is calculated by accounting for the contribution from all sources except the source or sources being modelled and adding that to the predicted increment from the Project. The term “baseline” is being used to describe existing air quality conditions and the contribution from existing sources. Further information on baseline development is provided in Appendix A.

For the Project, baseline was determined using long-term Inexwantas (monitoring) data from representative Inexwantas (monitoring) stations including Skw̓wú7mesh (Squamish) Elementary Inexwantas (monitoring) station and Horseshoe Bay Inexwantas (monitoring) station.

Section 8.1.4 of the Guideline (ENVP, 2022a) recommends developing baseline values using high percentile values which characterize baseline as a large increment of measured values (i.e., the 98th percentile for other substances hourly and daily averages, and the mean values for annual averages). These values represent the greatest effects of all local industrial sources, natural background concentrations (globally and regionally), plus minor sources (local home heating, vehicle emissions, food preparation, and road dust).

For this assessment and for consistency with the FortisBC Squamish V2 Compressor Station cumulative assessment, a single high percentile value is used. Baseline concentrations for the Project air quality assessment are provided in Table 3.1. These baseline values assume concentrations are high all the time and are applied across all receptors in the modelling domain (40 km by 40 km). This is a conservative approach as baseline concentrations will fluctuate based on contributing emission sources and meteorological conditions.

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Table 3.1 Summary of Baseline CAC Concentrations ^a

Substance	Averaging Period	Baseline Concentration (µg/m ³)
NO ₂ ^b	1-hour ^c	41.6
	Annual ^d	9.4
SO ₂ ^e	1-hour ^f	11.1
	Annual ^g	0.7
PM _{2.5} ^h	24-hour ⁱ	17.7
	Annual ^j	5.2
CO ^k	1-hour ^l	389.3
	8-hour ^l	338.4

Notes:

- ^a. Baseline air quality data was developed from BC Air Data Archive Website (ENVP, 2025a) and the methodology is consistent with that described in the Dispersion Modelling Plan for FortisBC Skwxwú7mesh (Squamish) V2 Compressor Station (RWDI, 2025). Conversions from ppb or ppm to µg/m³ assume standard conditions of 25°C and 101.325 kPa.
- ^b. **NO₂**: Data sourced from Skwxwú7mesh (Squamish) Elementary Ínexwantas (monitoring) station for 2021 to 2023.
- ^c. **NO₂**: The 1-hour baseline NO₂ concentration was determined based on the 98th percentile of the daily 1-hour maximum concentrations averaged over 2021 to 2023.
- ^d. **NO₂**: The annual NO₂ baseline concentration was determined based on the average of 1-hour values for 2021 to 2023.
- ^e. **SO₂**: Data sourced from Skwxwú7mesh (Squamish) Elementary Ínexwantas (monitoring) station for 2021 to 2023.
- ^f. **SO₂**: The 1-hour baseline SO₂ concentration was determined based on the daily 1-hour maximum concentrations, followed by the calculation of the 99th percentile for each year, then averaged over the 3-year period.
- ^g. **SO₂**: The annual SO₂ baseline concentration was determined based on the average of annual mean values for the 3-year period.
- ^h. **PM_{2.5}**: Data sourced from Skwxwú7mesh (Squamish) Elementary Ínexwantas (monitoring) station for 2021 to 2023. Days excluded with recorded wildfire activity. Days excluded: Jul 30 - Aug 3 2021, Aug 12-15 2021, Sep 10-15 2022, Oct 4-7 2022, Oct 13-21 2022, Jun 7-8 2023, Jul 6-7 2023, Aug 19-22 2023, Aug 25-29 2023. List of air quality advisories referenced from Metro Vancouver: <https://metrovancover.org/media-room/media-releases>.
- ⁱ. **PM_{2.5}**: The 24-hour PM_{2.5} baseline concentration was determined based on average of the 98th percentile values for the 24-hour averaging interval over the 3-year period.
- ^j. **PM_{2.5}**: The annual PM_{2.5} baseline concentration was determined based on the average of the annual mean values over the 3-year period.
- ^k. **CO**: Data sourced from Horseshoe Bay Ínexwantas (monitoring) station for 2017 to 2019, which are the most recent valid years.
- ^l. **CO**: The 1-hour and 8-hour baseline CO concentrations were determined based on the 98th percentile of 1-hour CO concentrations for 2017 to 2019.

4.0 EMISSION AND MODEL SCENARIOS

4.1 PROJECT EMISSIONS

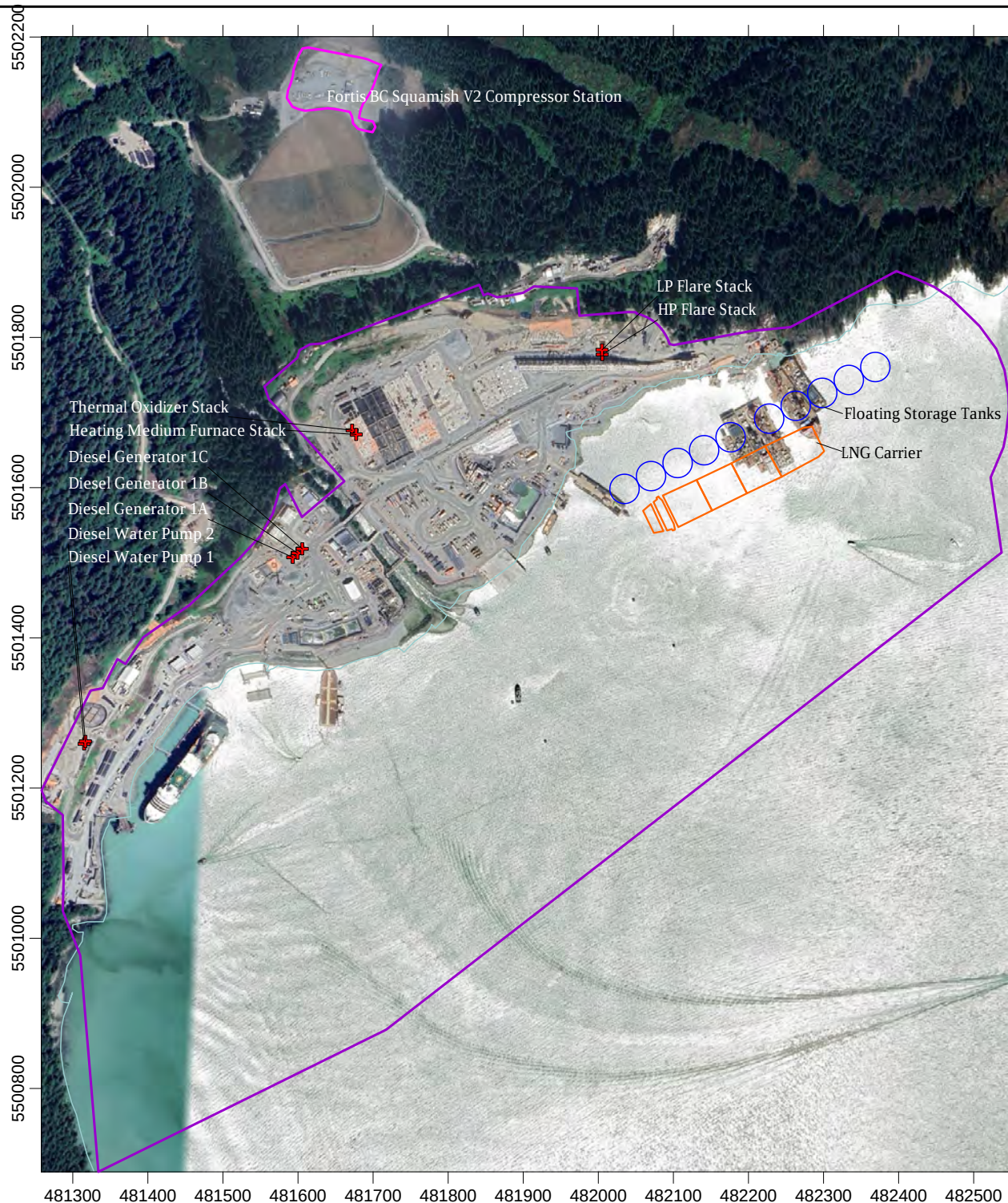
4.1.1 Normal Operation

The Project emission sources for normal operation are outlined in Table 4.1. The Facility layout is illustrated in Figure 4.1. Detailed emission source information is provided in Appendix A and the TAR.

For modelling, a conservative approach assume the heat medium furnace and thermal oxidizer operating continuously and simultaneously 100% of the time; and the flares operate with continuous pilot and purge.

Table 4.1 Facility Emission Sources

Equipment Name	Quantity	Primary Purpose
Heat Medium Furnace	1	To provide process heat via a closed loop heating medium fluid.
Thermal Oxidizer	1	To combust the acid gas and flash gas from the Acid Gas Removal Unit, and Storage Gas (vapor from the Condensate Storage Tank).
High-pressure Flare	1	Flares are fitted with pilot burners that maintain a continuous flame presence at the flare tip, ensuring combustion under all wind conditions and during precipitation events should material be released to the flares.
Low-pressure Flare	1	Routine flaring is the controlled flaring necessary to maintain flare system pressure and prevent the ingress of oxygen, with minor sources of hydrocarbons for combustion. Non-routine flaring is when flaring is undertaken as a safety measure to protect the Facility and its personnel (e.g., during process upsets, emergency situations and Facility shutdowns/startups). See Section 4.1.5.
Emergency Diesel Generators	3	The emergency diesel equipment is operated occasionally to test operability for maintenance, and during emergency conditions (two would be operated at one time, with one in standby). The three diesel generators are typically tested monthly for maintenance purposes. As this equipment is operated infrequently and for a short duration, the three generators are depicted in the model as not operating.
Emergency Diesel Firewater pumps	2	The emergency diesel equipment is operated occasionally for operability testing and maintenance, and during emergency conditions. The two diesel firewater pumps will typically operate on a weekly basis for approximately 15 to 30 minutes. As this equipment is operated infrequently and for a short duration, the two diesel firewater pumps are depicted in the model as not operating.
Vents	various	Venting will occur based on operational activities (e.g., emergency scenarios, from pressure safety valves), to support maintenance activities, and where the flow rate is small and/or composition is insufficient to support stable combustion.



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Woodfibre LNG Fenceline
- LNG Carrier
- Floating LNG Storage Spheres
- Shoreline
- Fortis BC Squamish V2 Compressor Station Fenceline
- + Stacks

0 100 200 m



Project Location
Swlyat

Client/Project/Report

Woodfibre LNG General Partners Inc.
Woodfibre LNG Facility
Dispersion Modelling Plan

Figure No.

4.1

Title

Project Site Plan

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

4.1.2 Commissioning

During commissioning, equipment is tested and started up. Flaring is required to manage the hydrocarbons within the affected section of the LNG process and the subsequent re-start process to achieve the necessary LNG specification. This case reflects a period within the commissioning and start up period where higher rates of flaring are anticipated. The scenario includes emissions from commissioning flaring, the thermal oxidizer, and the heat medium furnace, with no marine emission sources considered. Predicted concentrations are evaluated including baseline concentrations. This assessment is conservative as the Facility will not be at 100% normal operations during commissioning (e.g., heat medium furnace and thermal oxidizer may be running at 30-50% of their design capacities; and there will be no acid gas produced until the acid gas removal unit is operational).

4.1.3 Stabilizing Operations

Stabilizing operations will begin after commissioning is complete and export of the first LNG cargo has occurred and will continue through the first two years of operation (i.e., Years 1–2). During this period of stabilizing operations, routine flaring rates may be temporarily higher than normal operations due to higher rates of gas passing valves.

4.1.4 Marine Vessels

Marine vessels associated with the Project are exempt from the inclusion in the WDA permit because their emissions are governed under the International Convention for the Prevention of Pollution from Ships (MARPOL). North American Emissions Control Area (NA-ECA), adopted under MARPOL Annex VI, came into effect in August 2012 and includes limits on oxides of sulphur (SO_x) and oxides of nitrogen (NO_x) from ship exhausts. However, these vessels are sources of emissions and are included in the assessment to understand the cumulative effects with the Project emission sources.

For the assessment emissions from the LNG carrier and harbour tugboats are included for the following activities: loading the LNG from the FSTs (30 hours) with support from one harbour tugboat.

For short-term modelling, the 30-hour LNG loading period includes one harbour tugboat. Annual marine emissions additionally include 3-hour maneuvering-in and 3-hour maneuvering-out periods, each supported by three harbour tugboats. Further information on the associated emissions is provided in Appendix A.

Table 4.2 Marine Vessel Emission Sources

Vessel	Quantity	Combustion Sources	Operating Scenarios
LNG Carrier	1	Four auxiliary engines, two boilers, and one gas combustion unit (GCU)	During the LNG loading, three auxiliary engines, two boilers, and the GCU will operate. It is assumed the main engines will not operate while LNG is loading.
Tug Boat	1	One main engine	Marine diesel oil (MDO), renewable R100, or similar

4.1.5 Non-Routine Operation

Non-routine operations are events that are not within the normal expected steady state operation. These events could be a result of a process upset, equipment trip, or a short-term abnormal operating condition that result in elevated emissions from the flare stack and/or thermal oxidizer. Flaring during commissioning is also assessed as non-routine. Emission source information for these events is provided in Appendix A.

The non-routine operation events include the following:

- **Process Upset Case:** During normal operations, there will be Facility trips that are typically caused by the action of a control or safety system. These are intermittent process upset events that can be due to various causes, from overall power failure to a specific equipment issue. Flaring is required during the trip to manage the hydrocarbons within the affected section of the LNG process and during the re-start process to achieve the necessary LNG specification. The frequency of trips is anticipated to decrease over time, with up to 10 trips expected during the first year of operations, and for short periods of time (i.e., hours). This scenario will have elevated NO₂ and PM_{2.5} emissions compared to routine flaring operations (i.e., pilot and purge gas) due to the additional hydrocarbons being combusted. This assessment is conservative as all the Facility equipment will not be at 100% normal operations when a process trip is occurring (e.g., heat medium furnace and thermal oxidizer may only be running at 30-50% of their design capacities).
- **Thermal Oxidizer High Inlet Sulphur Case:** Typical average inlet total sulphur is expected to be less than 24 parts per million by volume (ppmv); however, on rare occasions, inlet total sulphur could increase to 45 ppmv (due to the addition of mercaptans into the feed gas) in turn increasing the concentration of total sulphur in the acid gas stream discharged to the thermal oxidizer. This scenario will have elevated short-term (i.e., 1-hour) SO₂ emissions from the thermal oxidizer on the conservative assumption that the increase in sulphur is all directed to the thermal oxidizer rather than remaining in the feed gas (remain in the LNG and condensate). This case is considered cumulatively with normal operations, marine vessels, and baseline concentrations.
- **Thermal Oxidizer Trip:** In the low-likelihood event of temporary unavailability of the thermal oxidizer, the acid gas stream from the acid gas removal unit would be routed to the high-pressure flare and vented, along with the HP flash gas and condensate storage gas that is usually routed to the thermal oxidizer and based on average sulphur concentration in acid gas stream and will evaluate ambient concentrations of total reduced sulphur (TRS) and hydrogen sulphide (H₂S). This case is considered in isolation as there are no other substantial sources of TRS or H₂S nearby.

4.2 FORTISBC SQUAMISH V2 COMPRESSOR STATION EMISSIONS

The FortisBC Squamish V2 Compressor Station is located on the Project's northeast plant boundary (Figure 4.1). Emission sources include two natural gas-fired turbine compressors, two boilers (one is backup), and one emergency generator. The following scenarios are considered for the Cumulative Case.

- For short-term averaging periods (1-hour, 24-hour): FortisBC Squamish V2 Compressor Station peak operations include two turbines and one boiler operating at 100% rated capacity all of the time.
- For annual averaging periods: FortisBC Squamish V2 Compressor Station, annual operations include one turbine operating at 100% rated capacity all of the time, the second turbine operating at 100% rated capacity for 20% of the time, one boiler operating at 75% load, and one emergency generator operating at 100% load for 10% of the time.

4.3 MODEL SCENARIOS

To understand the effects of the emission sources described in Section 4.1 and 4.2, nine model scenarios (or "cases") are considered. As there are no existing facilities near the Project, a Base Case is not required. A representative baseline concentration will be added to predicted concentrations to account for existing sources that are not modelled (i.e., traffic, other marine traffic, residential heating, small industrial and commercial sources) (refer to Section 3.2). Further information on six of the cases is provided below; with the three non-routine cases outlined further in this section:

- **Project Normal Operations Case:** Emissions from the Facility only including the heat medium furnace, thermal oxidizer, and routine flaring (i.e., pilot and purge) (refer to Table 6.1 in Appendix A).
- **Project Stabilizing Operations Case:** Emissions from the Facility only include the heat medium furnace, thermal oxidizer, and routine flaring (i.e., pilot and purge, and passing valves) (refer to Table 6.1 in Appendix A). During this period, routine flaring rates may be temporarily increased due to passing valves.
- **Commissioning Case:** Includes the flaring rates expected during the commissioning period plus the heat medium furnace, thermal oxidizer and the addition of baseline concentrations.
- **Application Case – Normal Operations:** Includes the sources from the Project Normal Operations Case, plus associated marine vessels (refer to Table 6.1 and Table 6.4 in Appendix A), and the addition of baseline concentrations (Table 3.1).
- **Application Case – Stabilizing Operations:** Includes the sources from the Project Stabilizing Operations Case, plus associated marine vessels (refer to Table 6.1 and Table 6.4 in Appendix A), and the addition of baseline concentrations (Table 3.1). During this period, routine flaring rates may be temporarily increased due to passing valves.
- **Cumulative Case:** Includes the Application Case – Normal Operations, plus the FortisBC Squamish V2 Compressor Station (i.e., two turbines, one boiler) (refer to Section 4.2), and the addition of baseline concentrations (Table 3.1).

The emission sources included in each modelling scenario are summarized in Table 4.3. The summary of emissions for the Project Normal Operations Case, Project Stabilizing Operations Case, Commissioning Case, Application Case, and Cumulative Case is presented in Table 4.4.

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Table 4.3 Summary of Emission Sources for each Modelling Scenario at the Project

Equipment	Commissioning Case	Project Normal Operations Case	Project Stabilizing Operation Case	Application Case – Normal Operations	Application Case – Stabilizing Operations	Cumulative Case – Normal Operations
Project Equipment						
Heat Medium Furnace	x ^c	x	x	x	x	x
Thermal Oxidizer	x ^c	x	x	x	x	x
High Pressure (HP) Flare	x ^d	x ^a	x ^b	x ^a	x ^b	x ^a
Low Pressure Flare	x ^d	x ^a	x ^b	x ^a	x ^b	x ^a
LNG Carrier	N/A	N/A	N/A	x	x	x
Harbour Assist Tugboats	N/A	N/A	N/A	x	x	x
Emergency Generators	N/A	N/A	N/A	N/A	N/A	N/A
Firewater Pumps	N/A	N/A	N/A	N/A	N/A	N/A
Baseline	x	N/A	N/A	x	x	x
FortisBC Squamish V2 Compressor Station^e						
Turbine 1	N/A	N/A	N/A	N/A	N/A	x ^f
Turbine 2	N/A	N/A	N/A	N/A	N/A	x ^g
Boiler 1	N/A	N/A	N/A	N/A	N/A	x ^h

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Equipment	Commissioning Case	Project Normal Operations Case	Project Stabilizing Operation Case	Application Case – Normal Operations	Application Case – Stabilizing Operations	Cumulative Case – Normal Operations
Boiler 2 (backup)	N/A	N/A	N/A	N/A	N/A	N/A
Backup Generator	N/A	N/A	N/A	N/A	N/A	x ⁱ

Notes:

'x' means operational in the associated scenario

'N/A' means not operational in the associated scenario

a. Includes normal operation of the flare (i.e., pilot, purge)

b. Includes stabilizing operations flaring rates (i.e., passing valves)

c. Assumes thermal oxidizer and heat medium furnace are operating at 100% load; however likely these will be operating at 30-50% load during the commissioning period. Also there is no acid gas being produced until the acid gas removal unit is operating

d. Includes commissioning flaring rates (i.e., testing, start up, shut down)

e. Provided by FortisBC

f. 100% load and operating time for short-term averages and annual averages

g. 100% load for short-term averages, 100% load for 20% operating time for annual averages

h. Not operating for short-term average, 75% load for 20% operating time for annual averages.

i. Not operating for short-term average, 100% load for 10% operating time for annual averages.

Table 4.4 Emissions Summary for Project Commissioning, Stabilizing Operations, and Normal Operations Modelling Scenarios

Modelling Scenario	Emissions (tonnes/year)			
	NOx	SO ₂	PM _{2.5}	CO
Commissioning ^a	108	15.4	4.5	440
Project Stabilizing Operations Case, Total	79.1	97.3	3.2	267
Project Normal Operations Case, Total	43.1	95.8	1.6	119
Application Case – Normal Operations, Total	73.4	96.8	2.2	137
Application Case – Stabilizing Operations, Total	109	98.3	3.8	285
Cumulative Case – Normal Operations, Total	88.2	97.2	5.0	152

Note:

^a Commissioning Case includes heat medium furnace, thermal oxidizer, flare pilot/purge, and flaring during commissioning, up to 38 days within commissioning timeline.

• **Non-Routine Emission Cases:**

- **Process Upset Case:** Includes the flaring rates for a worst-case flaring event associated with an equipment upset or trip during operations. This is assessed independently, and with marine sources and baseline.
- **High Inlet Sulphur Case:** Includes a high inlet sulphur content event in the feed gas, resulting in increased SO₂ emissions from the Thermal Oxidizer. This scenario includes SO₂ emissions from the Project Normal Operations sources, marine vessel sources, and baseline concentrations (i.e., the Application Case).
- **Thermal Oxidizer Trip Case:** Includes the acid gas, flash gas and storage gas venting scenario to the HP Flare. This is assessed in isolation, with normal operations, baseline, and cumulatively.

Table 4.5 Summary of Emission Sources for each Non-Routine Operations Scenario

Equipment	Process Upset Case	High Inlet Sulphur Case			Thermal Oxidizer Trip Case
		Alone	Application	Cumulative	
Project Equipment					
Heat Medium Furnace	x	x	x	x	N/A
Thermal Oxidizer	x	x ^c	x ^c	x ^c	N/A
High Pressure (HP) Flare	x ^{a, b}	x ^a	x ^a	x ^a	x ^d
Low Pressure (LP) Flare	x ^{a, b}	x ^a	x ^a	x ^a	N/A
LNG Carrier	x	N/A	x	x	N/A
Harbour Assist Tugboats	x	N/A	x	x	N/A
Emergency Generators	N/A	N/A	N/A	N/A	N/A
Firewater Pumps	N/A	N/A	N/A	N/A	N/A
Baseline	x	N/A	x	x	N/A

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Equipment	Process Upset Case	High Inlet Sulphur Case			Thermal Oxidizer Trip Case
		Alone	Application	Cumulative	
FortisBC Squamish Compressor Station ^e					
Turbine 1 ^f	N/A	N/A	N/A	x	N/A
Turbine 2 ^g	N/A	N/A	N/A	x	N/A
Boiler 1 ^h	N/A	N/A	N/A	x	N/A
Boiler 2 (backup)	N/A	N/A	N/A	N/A	N/A
Backup Generator ⁱ	N/A	N/A	N/A	x	N/A

Notes:

'x' means operational in the associated scenario

'N/A' means not operational in the associated scenario

^a Includes normal operation of the flare (i.e., pilot, purge)

^b Includes non-routine flaring emissions for Process Upset (Section 4.1.5)

^c High inlet sulphur emissions for the Thermal Oxidizer (Section 4.1.5)

^d Includes vented gas streams to HP Flare as a result of Thermal Oxidizer trip (Section 4.1.5)

^e Provided by FortisBC

^f 100% load and operating time for short-term averages and annual average

^g 100% load for short-term averages, 100% load for 20% operating time for annual averages

^h Not operating for short-term average, 75% load for 20% operating time for annual averages

ⁱ Not operating for short-term average, 100% load for 10% operating time for annual averages

Table 4.6 Emissions Summary for each Non-Routine Operations Modelling Scenarios

Modelling Scenario	Emissions (tonnes/event)					
	NOx	SO ₂	PM _{2.5}	CO	TRS	H ₂ S
Process Upset Case ^a	8.2	1.0	0.66	33.5	N/A	N/A
High Inlet Sulphur Case ^b	0.41	1.48	0.012	0.77	N/A	N/A
Thermal Oxidizer Trip Case ^c	N/A	N/A	N/A	N/A	0.28	0.16

Notes:

^a Process Upset Case includes HP pilot/purge, flare volume due to process trip/upset, LP pilot/purge and BOG from floating storage tanks (FSTs) while BOG compressor is offline for a 24 hour period. As a conservative approach, this case assumes thermal oxidizer and heat medium furnace operate at full load.

^b Thermal oxidizer with high inlet sulphur considers the unlikely event that the Facility receives feed gas with high sulphur content for a 48 hour period. Heat medium furnace and flares are operating the same as in normal operations scenario. This scenario is considered alone, with marine vessels (Application Case), and cumulatively with the Fortis BC Compressor Station

^c Thermal oxidizer trip case considers the re-routing of acid gases, flash gas and storage gas to the flare stack which are then vented (uncombusted) for a 48 hour period. This scenario/emission point is considered on its own as there are no other substantial sources of TRS and H₂S at the Facility.

5.0 DISPERSION MODELLING

Effects of the Project emissions on ambient air quality were assessed using dispersion modelling. Dispersion models provide a scientific link between the emission sources and downwind concentration profiles associated with the sources. Dispersion models incorporate meteorological conditions to account for the transport and dilution of the plume in the atmosphere and incorporate terrain influences. The dispersion modelling was conducted in accordance with the Guideline (ENVP, 2022a) and the Dispersion Modelling Plan for the Project (Appendix A).

5.1 METEOROLOGY

Details regarding CALMET, including modelling domain, topography, temíxw (land) use, meteorological data inputs, CALMET model options and an evaluation of the CALMET predictions are included in Appendix B.

This assessment uses the 2011-2015 4 km grid WRF output data, which is the latest available data (ENVP, 2021). Using a five-year data set provides an adequate range to account for year-to-year variation in meteorological conditions. This variation is also expected to be representative of a more recent five-year period (i.e., 2021-2025). This meteorological forecast output is produced by four-dimensional data assimilation within the Advanced Research WRF core model at a 4 km grid resolution.

5.2 MODELLING DOMAIN, RECEPTORS, TEMÍXW (LAND) USE, AND TERRAIN

The modelling domain boundaries are established to focus the scope of the assessment and to enable a meaningful analysis of potential effects on air quality arising from the Project. The CALPUFF and CALMET modelling domains are presented in Appendix A.

The proposed receptor grid spacing for CALPUFF domains follows recommendations in Section 7.2 in the Guideline (ENVP, 2022a) with increased density near the Project and through Skwxwú7mesh (Squamish). The receptor grid is consistent with the dispersion modelling for the FortisBC Squamish V2 Compressor Station (RWDI, 2025). This extent of the receptor grid is sufficient to indicate the magnitude and spatial variation of the predicted concentrations resulting from the Project emissions.

The term "sensitive receptor" used in this assessment follows the terminology and receptor selection approach described in the Guideline (ENVP, 2022a) and is used for the purposes of the air quality modelling assessment. There are no permanent residents within 5 km of the Project. Sensitive receptors included in the assessment follow those identified for the FortisBC Squamish V2 Compressor Station (RWDI, 2025). A list of sensitive receptors is provided in Appendix A.

5.3 OXIDES OF NITROGEN-TO-NITROGEN DIOXIDE CONVERSION

NO_x are primarily comprised of nitrogen oxide (NO) and NO₂. Only NO₂ concentrations have applicable AQOs. For this assessment, the Ambient Ratio Method 2 (ARM 2) approach using the coastal curve is used to convert predicted NO_x to NO₂.

5.4 CHEMICAL TRANSFORMATION

The required and recommended switch settings outlined in Section 7.8 of the Guideline (ENVP, 2022a) are used. See further discussion in Appendix A.

The updated Regional Impact in Visibility and Acid Deposition Model scheme with inorganic aerosol thermodynamic equilibrium model (Chemical mechanism flag = 6) is used per Section 7.8 of the Guideline (ENVP, 2022a).

The CALPUFF deposition options are enabled to predict deposition of nitrates and sulfates to be used to evaluate acidification and eutrophication. Modelling results are provided to the Stantec vegetation, soils, and aquatic teams for input into the acidification and eutrophication assessment. Results and conclusions for this deposition assessment are provided in the TAR for the WDA application

5.5 SECONDARY PARTICULATE FORMATION

The CALPUFF model is used to predict secondary inorganic PM_{2.5} formation attributable to precursor SO₂ and NO_x emissions as the sum of primary PM_{2.5} and ammonium nitrate and ammonium sulphate concentrations.

5.6 STAGNATION

This assessment employs the CALPUFF dispersion modelling system, which as a non-steady-state puff model, can treat zero wind speeds, trapping effects during inversions, and causality explicitly.

This assessment uses numerical weather prediction model output (from WRF) to provide near-zero wind speeds for periods where measurements indicate a calm (i.e., less than anemometer threshold speeds).

5.7 BUILDING PLUME DOWNWASH EFFECTS

There is potential for building downwash from Project buildings and structures. Therefore, these are included in Building Profile Input Program and Plume Rise Model Enhancements. Structure dimensions and a simplified plot plan are provided in Appendix A.

Building downwash is modelled consistent with Section 7.6 in the Guideline (ENVP, 2022a). For sloped or peaked roofs, the building height is equivalent to halfway between the trough and the peak, consistent with ENVP direction.

6.0 RESULTS

The results presented in this section are based on conservative emission and modelling assumptions and represent the maximum predicted concentrations for each modelling scenario and averaging period. These maximum predicted concentrations are compared to the applicable BC AQOs. The corresponding concentration isopleths illustrate the spatial distribution of predicted concentrations within the airshed and should be considered together with the tabulated results when interpreting the modelling results.

6.1 PROJECT NORMAL OPERATIONS CASE

Predicted concentrations for the Project Normal Operations Case are shown in Table 6.1. Project Normal Operations Case includes emission sources operating at normal operating rates, after commissioning and stabilizing operations.

Table 6.1 Project-Normal Operations Modelling Results

Substance	Averaging Period	Maximum Predicted Concentrations ($\mu\text{g}/\text{m}^3$)	BC AQO ($\mu\text{g}/\text{m}^3$)	Percentage of BC AQO (%)
NO ₂	1-hour	18.1	113	16
	Annual	1.6	32	5
SO ₂	1-hour	53.3	170	31
	Annual	4.4	10.5	42
PM _{2.5}	24-hour	2.0	25	8
	Annual	0.2	8	2
CO	1-hour	140	14,300	1
	8-hour	36	5,500	1

Notes:

Achievement for each parameter and time averaging interval is as described in the notes section of Table 2.1

NO to NO₂ conversion is using ARM 2 Coastal Sites.

For NO₂, the Project Normal Operations Case maximum 98th percentile of the predicted daily one-hour maximum ground-level NO₂ concentration is 18.1 $\mu\text{g}/\text{m}^3$, which is less than the BC AQO and the 2025 CAAQS (refer to Table 2.2). Figure D.1 shows that this maximum concentration occurs at the northern Facility fenceline.

The maximum predicted annual average ground-level NO₂ concentration is 1.6 $\mu\text{g}/\text{m}^3$, which is less than the BC AQO and 2025 CAAQS. Figure D.2 shows that this maximum concentration occurs 170 m south of the southwest Facility fenceline.

For SO₂, the Project Normal Operations Case maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 53.3 $\mu\text{g}/\text{m}^3$, which is less than the BC AQO. Figure D.3 shows that this maximum concentration occurs at the northern Facility fenceline.

The maximum predicted annual average ground-level SO₂ concentration is 4.4 µg/m³, which is less than the BC AQO. Figure D.4 shows that this maximum concentration occurs 250 m south of the southwest Facility fenceline.

For PM_{2.5}, the Project Normal Operations Case maximum 98th percentile of the predicted daily maximum ground-level PM_{2.5} concentration is 2.0 µg/m³, which is less than the BC AQO. Figure D.5 shows that this maximum concentration occurs 1 km northeast of the northeast Facility fenceline.

The maximum predicted annual average ground-level PM_{2.5} concentration is 0.2 µg/m³, which is less than the BC AQO. Figure D.6 shows that this maximum concentration occurs 1 km northeast of the northeast Facility fenceline.

For CO, the Project Normal Operations Case maximum predicted daily one-hour maximum ground-level CO concentration is 140 µg/m³, which is less than the BC AQO. The maximum predicted 8-hour average ground-level CO concentration is 36 µg/m³, which is less than the BC AQO. Isopleths are not provided for CO given the predicted concentrations are less than 1% of the BC AQO.

6.2 COMMISSIONING CASE

Predicted concentrations for the Commissioning Case are shown in Table 6.2. This scenario considers flaring during commissioning, prior to the commencement of early and normal operations.

The assessment also includes emissions from the thermal oxidizer and heat medium furnace, with no marine emission sources considered. Predicted concentrations were evaluated including baseline conditions.

Table 6.2 Commissioning Case Modelling Results

Substance	Averaging Period	Maximum Predicted Concentration Including Baseline (µg/m ³)	BC AQO (µg/m ³)	Percentage of BC AQO from Maximum Predicted Concentration Including Baseline (%)
NO ₂	1-hour	59.8	113	53
	Annual	11.1	32	35
SO ₂	1-hour	64.4	170	38
	Annual	5.1	10.5	49
PM _{2.5}	24-hour	19.8	25	79
	Annual	5.4	8	67
CO	1-hour	665	14,300	5
	8-hour	387	5,500	7

Notes:

Achievement for each parameter and time averaging interval is as described in the notes section of Table 2.1

NO to NO₂ conversion is using ARM 2 Coastal Sites.

For NO₂, the Commissioning Case maximum 98th percentile of the predicted daily one-hour maximum ground-level NO₂ concentration is 59.8 µg/m³, which is less than the BC AQO and 2025 CAAQS. A single baseline NO₂ value was applied (Table 3.1). Figure D.7 shows that the maximum concentration occurs at the northern Facility fenceline.

The maximum predicted annual average ground-level NO₂ concentration is 11.1 µg/m³, which is less than the BC AQO. Figure D.8 shows that this maximum concentration occurs 170 m south of the southwest Facility fenceline.

For SO₂, the Commissioning Case maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 64.4 µg/m³, which is less than the BC AQO. Figure D.9 shows that this maximum concentration occurs at the northern Facility fenceline.

The maximum predicted annual average ground-level SO₂ concentration is 5.1 µg/m³, which is less than the BC AQO. Figure D.10 shows that this maximum concentration occurs 250 m south of the southwest Facility fenceline.

For PM_{2.5}, the Commissioning Case maximum 98th percentile of the predicted daily maximum ground-level PM_{2.5} concentration is 19.8 µg/m³, which is less than the BC AQO. Figure D.11 shows that this maximum concentration occurs 1 km northeast of the northeast Facility fenceline.

The maximum predicted annual average ground-level PM_{2.5} concentration is 5.4 µg/m³, which is less than the BC AQO. Figure D.12 shows that this maximum concentration occurs 1 km northeast of the northeast Facility fenceline.

For CO, the Commissioning Case maximum predicted daily one-hour maximum ground-level CO concentration is 665 µg/m³, which is less than the BC AQO. The maximum predicted 8-hour average ground-level CO concentration is 387 µg/m³, which is less than the BC AQO. Isopleths are not provided for CO given the predicted concentrations are 5 to 7% of the BC AQO.

6.3 PROJECT STABILIZING OPERATIONS CASE

Predicted concentrations for the Project Stabilizing Operations Case are shown in Table 6.3. Project Stabilizing Operations Case includes emissions operating at early operating rates after commissioning and before normal operations.

Table 6.3 Project-Stabilizing Operations Modelling Results

Substance	Averaging Period	Maximum Predicted Concentrations ($\mu\text{g}/\text{m}^3$)	BC AQO ($\mu\text{g}/\text{m}^3$)	Percent Difference to Project Normal Operations (%)	Percentage of BC AQO (%)
NO ₂	1-hour	18.0	113	-0.6	16
	Annual	1.7	32	6.2	5
SO ₂	1-hour	53.3	170	0	31
	Annual	4.4	10.5	0	42
PM _{2.5}	24-hour	2.1	25	5	8
	Annual	0.2	8	0	2
CO	1-hour	194	14,300	39	1
	8-hour	36.7	5,500	1.9	1

Notes:

Achievement for each parameter and time averaging interval is as described in the notes section of Table 2.1

NO to NO₂ conversion is using ARM 2 Coastal Sites.

For NO₂, the Project-Stabilizing Operations Case maximum 98th percentile of the predicted daily one-hour maximum ground-level NO₂ concentration is 18.0 $\mu\text{g}/\text{m}^3$, which is less than the BC AQO and the 2025 CAAQS (refer to Table 2.2). This is 0.6% less than the Project Normal Operations. Figure D.13 shows that this maximum concentration occurs at the northern Facility fenceline.

The maximum predicted annual average ground-level NO₂ concentration is 1.7 $\mu\text{g}/\text{m}^3$, which is less than the BC AQO and 2025 CAAQS. This is 6.2% greater than the Project Normal Operations. Figure D.14 shows that this maximum concentration occurs 170 m south of the southwest Facility fenceline.

For SO₂, the Project-Stabilizing Operations Case maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 53.3 $\mu\text{g}/\text{m}^3$, which is less than the BC AQO. This is the same as the Project Normal Operations. Figure D.15 shows that this maximum concentration occurs at the northern Facility fenceline.

The maximum predicted annual average ground-level SO₂ concentration is 4.4 $\mu\text{g}/\text{m}^3$, which is less than the BC AQO. This is the same as the Project Normal Operations. Figure D.16 shows that this maximum concentration occurs 250 m south of the southwest Facility fenceline.

For PM_{2.5}, the Project-Stabilizing Operations Case maximum 98th percentile of the predicted daily maximum ground-level PM_{2.5} concentration is 2.1 $\mu\text{g}/\text{m}^3$, which is less than the BC AQO. This is 5% greater than the Project Normal Operations. Figure D.17 shows that this maximum concentration occurs 1 km northeast of the northeast Facility fenceline.

The maximum predicted annual average ground-level PM_{2.5} concentration is 0.2 $\mu\text{g}/\text{m}^3$, which is less than the BC AQO. This is from the same as the Project Normal Operations. Figure D.18 shows that this maximum concentration occurs 1 km northeast of the northeast Facility fenceline.

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For CO, the Project-Stabilizing Operations Case maximum predicted daily one-hour maximum ground-level CO concentration is $194 \mu\text{g}/\text{m}^3$, which is less than the BC AQO. This is 39% greater than the Project Normal Operations. The maximum predicted 8-hour average ground-level CO concentration is $36.7 \mu\text{g}/\text{m}^3$, which is less than the BC AQO. This is 2% greater than the Project Normal Operations. Isopleths are not provided for CO given the predicted concentrations are less than 2% of the BC AQO.

The maximum predicted concentrations for Project Stabilizing Operations Case are less than the BC AQO (and the 2025 CAAQS for NO_2). The results indicate that the increased flaring associated with passing valves during stabilizing operations has a negligible to small effect on air quality.

6.4 APPLICATION CASE – NORMAL OPERATIONS

Predicted concentrations for the Application Case – Normal Operations are shown in Table 6.4.

Table 6.4 Application Case – Normal Operations Modelling Results

Substance	Averaging Period	Maximum Predicted Concentrations (µg/m³)	Baseline (µg/m³)	Maximum Predicted Concentration Including Baseline (µg/m³)	Maximum Predicted Concentration at Closest Sensitive Receptor ^a Including Baseline (µg/m³)	Maximum Predicted Concentration in Skwxwú7mesh (Squamish) Town Boundary Receptor ^b Including Baseline (µg/m³)	BC AQO (µg/m³)	Percentage of AQO with Baseline (%)
NO ₂	1-hour	84.9	41.6	126.5	44.1	47.7	113	112
	Annual	4.6	9.4	14.0	9.4	9.5	32	44
SO ₂	1-hour	53.3	11.1	64.4	12.5	15.2	170	38
	Annual	4.4	0.7	5.1	0.7	0.8	10.5	49
PM _{2.5}	24-hour	2.5	17.7	20.2	17.8	18.5	25	81
	Annual	0.2	5.2	5.4	5.2	5.3	8	67
CO	1-hour	1,340	389	1,729	405	420	14,300	12
	8-hour	442	338	781	344	350	5,500	14

Notes:

Achievement for each parameter and time averaging interval is as described in the notes section of Table 2.1

Bolded black values are greater than the BC AQO.

NO to NO₂ conversion is using ARM 2 Coastal Sites.

^a The closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project.

^b The closest Skwxwú7mesh (Squamish) Town Boundary Receptor is located approximately 7 km northeast of the Project.

For NO₂, the Application Case – Normal Operations maximum 98th percentile of the predicted daily one-hour maximum ground-level NO₂ concentration is 126.5 µg/m³, which is greater than the BC AQO and the 2025 CAAQS. This represents a 599% increase relative to the Project Normal Operations Case maximum concentration of 18.1 µg/m³, indicating that the increase in the predicted maximum is largely driven by marine vessel emissions and baseline concentrations. A single urban baseline NO₂ value was applied to the entire modelling domain. Figure D.19 shows that the maximum concentration occurs at the northern Facility fenceline. Concentrations greater than the BC AQO occur along the eastern fenceline and extend approximately 500 m to the northeast. Predicted one-hour NO₂ concentrations at the closest sensitive receptor (Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and the Skwxwú7mesh (Squamish) Town boundary receptor (located approximately 7 km northeast of the Project) are 44.1 µg/m³ and 47.7 µg/m³, respectively, which are less than the BC AQO and 2025 CAAQS and a small increase from the baseline value applied (41.6 µg/m³; Table 3.1).

The maximum predicted annual average ground-level NO₂ concentration is 14.0 µg/m³, which is less than the BC AQO and 2025 CAAQS. Figure D.20 shows that this maximum concentration occurs at the northern Facility fenceline. Predicted annual NO₂ concentrations at closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO and 2025 CAAQS.

For SO₂, the Application Case – Normal Operations maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 64.4 µg/m³, which is less than the BC AQO. Figure D.21 shows that this maximum concentration occurs at the northern Facility fenceline. Predicted one-hour SO₂ concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

The maximum predicted annual average ground-level SO₂ concentration is 5.1 µg/m³, which is less than the BC AQO. Figure D.22 shows that this maximum concentration occurs 250 m south of the southwest Facility fenceline. Predicted annual SO₂ concentrations at closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the applicable air quality objectives.

For PM_{2.5}, the Application Case – Normal Operations maximum 98th percentile of the predicted daily maximum ground-level PM_{2.5} concentration is 20.2 µg/m³, which is less than the BC AQO. Figure D.23 shows that this maximum concentration occurs 130 m east of the northern Facility fenceline. Predicted daily PM_{2.5} concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

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The maximum predicted annual average ground-level PM_{2.5} concentration is 5.4 µg/m³, which is less than the BC AQO. Figure D.24 shows that this maximum concentration occurs 1 km northeast of the northeast Facility fenceline. Predicted annual PM_{2.5} concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

For CO, the Application Case – Normal Operations maximum predicted daily one-hour maximum ground-level CO concentration is 1,729 µg/m³, which is less than the BC AQO. The maximum predicted 8-hour average ground-level CO concentration is 781 µg/m³, which is less than the BC AQO. Isopleths are not provided for CO given the predicted concentrations are 12 to 14% of the BC AQO. Predicted CO concentrations at closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

6.5 APPLICATION CASE - STABILIZING OPERATIONS

Predicted concentrations for the Application Case – Stabilizing Operations are shown in Table 6.5. Application Case – Stabilizing Operations includes emissions operating at early operating rates after commissioning and before normal operations.

Table 6.5 Application Case – Stabilizing Operations Modelling Results

Substance	Averaging Period	Maximum Predicted Concentrations (µg/m³)	Baseline (µg/m³)	Maximum Predicted Concentration Including Baseline (µg/m³)	Maximum Predicted Concentration at Closest Sensitive Receptor ^a Including Baseline (µg/m³)	Maximum Predicted Concentration in Skwxwú7mesh (Squamish) Town Boundary Receptor ^b Including Baseline (µg/m³)	BC AQO (µg/m³)	Percentage of AQO with Baseline (%)
NO ₂	1-hour	84.9	41.6	126.5	44.2	47.6	113	112
	Annual	4.7	9.4	14.1	9.4	9.5	32	44
SO ₂	1-hour	53.3	11.1	64.4	12.5	15.1	170	38
	Annual	4.4	0.7	5.1	0.7	0.8	10.5	49
PM _{2.5}	24-hour	2.5	17.7	20.2	17.8	18.4	25	81
	Annual	0.2	5.2	5.4	5.2	5.3	8	67
CO	1-hour	1,340	389	1729	405	420	14,300	12
	8-hour	442	338	781	344	348	5,500	14

Notes:

Achievement for each parameter and time averaging interval is as described in the notes section of Table 2.1

Bolded black values are greater than the BC AQO.

NO to NO₂ conversion is using ARM 2 Coastal Sites.

^a The closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project.

^b The closes Skwxwú7mesh (Squamish) Town Boundary Receptor is located approximately 7 km northeast of the Project

For NO₂, the Application Case – Stabilizing Operations maximum 98th percentile of the predicted daily one-hour maximum ground-level NO₂ concentration is 126.5 µg/m³, which is greater than the BC AQO and the 2025 CAAQS. This represents a 602% increase relative to the Project Stabilizing Operations Case maximum concentration indicating that the increase is largely driven by marine vessel emissions and baseline concentrations. A single baseline NO₂ value was applied. Figure D.25 shows that the maximum concentration occurs at the northern Facility fenceline. Concentrations greater than the BC AQO occur along the eastern fenceline and extend approximately 500 m to the northeast. Predicted one-hour NO₂ concentrations at the closest sensitive receptor (Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and the Skwxwú7mesh (Squamish) Town boundary receptor (located approximately 7 km to the northeast of the Project) are 44.2 µg/m³ and 47.6 µg/m³, respectively, which are less than the BC AQO and 2025 CAAQS and a small increase from the baseline value applied (41.6 µg/m³; Table 3.1).

The maximum predicted annual average ground-level NO₂ concentration is 14.1 µg/m³, which is less than the BC AQO and 2025 CAAQS. Figure D.26 shows that this maximum concentration occurs at the northern Facility fenceline. Predicted annual NO₂ concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO and 2025 CAAQS.

For SO₂, the Application Case – Stabilizing Operations maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 64.4 µg/m³, which is less than the BC AQO. Figure D.27 shows that this maximum concentration occurs at the northern Facility fenceline. Predicted one-hour SO₂ concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

The maximum predicted annual average ground-level SO₂ concentration is 5.1 µg/m³, which is less than the BC AQO. Figure D.28 shows that this maximum concentration occurs 250 m south of the southwest Facility fenceline. Predicted annual SO₂ concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

For PM_{2.5}, the Application Case – Stabilizing Operations maximum 98th percentile of the predicted daily (24-hour) maximum ground-level PM_{2.5} concentration is 20.2 µg/m³, which is less than the BC AQO. Figure D.29 shows that this maximum concentration occurs 130 m east of the northern Facility fenceline. Predicted daily (24-hour) PM_{2.5} concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

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The maximum predicted annual average ground-level PM_{2.5} concentration is 5.4 µg/m³, which is less than the BC AQO. Figure D.30 shows that this maximum concentration occurs 1 km northeast of the northeast Facility fenceline. Predicted annual PM_{2.5} concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

For CO, the Application Case – Stabilizing Operations maximum predicted daily one-hour maximum ground-level CO concentration is 1,729 µg/m³, which is less than the BC AQO. The maximum predicted 8-hour average ground-level CO concentration is 781 µg/m³, which is less than the BC AQO. Isopleths are not provided for CO given the predicted concentrations are 12 to 14% of the BC AQO. Predicted CO concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

6.6 CUMULATIVE CASE – NORMAL OPERATIONS

Predicted concentrations for the Cumulative Case – Normal Operations are shown in Table 6.6. The Cumulative Case includes the Project Normal Operations Case plus the FortisBC Squamish V2 Compressor Station. Based on the results of the Application Case - Stabilizing Operations Case, the increase in flaring during this period is not predicted to result in a substantial change to air quality. As such, the contribution from stabilizing operations is not expected to materially influence the Cumulative Case air quality assessment. Therefore, the Cumulative Case assessment focuses on the Normal Operations of the Facility.

Table 6.6 Cumulative Case – Normal Operations Modelling Results

Substance	Averaging Period	Maximum Predicted Concentrations (µg/m³)	Baseline (µg/m³)	Maximum Predicted Concentration Including Baseline (µg/m³)	Maximum Predicted Concentration at Closest Sensitive ^a Receptor Including Baseline (µg/m³)	Maximum Predicted Concentration in Skwxwú7mesh (Squamish) Town Boundary Receptor ^b Including Baseline (µg/m³)	BC AQO (µg/m³)	Percentage of BC AQO with Baseline (%)	Percent Change from Application Case - Normal Operations (%)
NO ₂	1-hour	84.9	41.6	126.5	44.3	48.1	113	112	0
	Annual	4.7	9.4	14.1	9.4	9.5	32	44	0.7
SO ₂	1-hour	53.3	11.1	64.4	12.5	15.3	170	38	0
	Annual	4.4	0.7	5.1	0.7	0.8	10.5	49	0
PM _{2.5}	24-hour	2.6	17.7	20.3	17.8	18.5	25	81	0.5
	Annual	0.4	5.2	5.6	5.2	5.3	8	69	3.7
CO	1-hour	1340	389	1,729	405.4	423.4	14,300	12	0
	8-hour	442	338	781	343.8	350.4	5,500	14	0

Notes:

Achievement for each parameter and time averaging interval is as described in the notes section of Table 2.1

Bolded black values are greater than the BC AQO.

NO to NO₂ conversion is using ARM 2 Coastal Sites.

^a The closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project.

^b The closes Skwxwú7mesh (Squamish) Town Boundary Receptor is located approximately 7 km northeast of the Project

The Cumulative Case – Normal Operations includes the Application Case – Normal Operations in addition to the proposed FortisBC Squamish V2 Compressor Station. Predicted concentrations of NO₂, SO₂, PM_{2.5}, and CO result in a negligible to small change relative to the Application Case – Normal Operations.

For NO₂, the Cumulative Case – Normal Operations maximum 98th percentile of the predicted daily one-hour maximum ground-level NO₂ concentration is 126.5 µg/m³ (consistent with the Application Case – Normal Operations), which is greater than the BC AQO and the 2025 CAAQS. A single urban baseline NO₂ value was applied to the entire modelling domain. Figure D.31 shows that the maximum concentration occurs at the northern Facility fenceline and extends approximately 500 m to the northeast. Predicted one-hour NO₂ concentrations at the closest sensitive receptor (Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and the Skwxwú7mesh (Squamish) Town boundary receptor (located approximately 7 km northeast of the Project) are 44.3 µg/m³ and 48.1 µg/m³, respectively, and are less than the BC AQO and the 2025 CAAQS and a minor increase from the baseline value applied (41.6 µg/m³; Table 3.1).

The maximum predicted annual average ground-level NO₂ concentration is 14.1 µg/m³, which is less than the BC AQO and represents a 0.7% increase from the Application Case – Normal Operations. Figure D.32 shows that the maximum concentration occurs at the northern Facility fenceline. Predicted annual NO₂ concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO and the 2025 CAAQS.

For SO₂, the Cumulative Case– Normal Operations maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 64.4 µg/m³ (consistent with the Application Case – Normal Operations), which is less than the BC AQO. Figure D.33 shows that this maximum concentration occurs at the northern Facility fenceline. Predicted one-hour SO₂ concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

The maximum predicted annual average ground-level SO₂ concentration is 5.1 µg/m³ (consistent with the Application Case – Normal Operations), which is less than the BC AQO. Figure D.34 shows that this maximum concentration occurs 250 m south of the southwest Facility fenceline. Predicted annual SO₂ concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

For PM_{2.5}, the Cumulative Case – Normal Operations maximum 98th percentile of the predicted daily maximum ground-level PM_{2.5} concentration is 20.3 µg/m³, which is less than the BC AQO and a 0.5% increase from the Application Case – Normal Operations. Figure D.35 shows that this maximum concentration occurs 130 m east of the northern Facility fenceline. Predicted daily PM_{2.5} concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

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The maximum predicted annual average ground-level PM_{2.5} concentration is 5.6 µg/m³ which is less than the BC AQO and a 3.7% increase from the Application Case – Normal Operations. Figure D.36 shows that this maximum concentration occurs 370 m north of the northern Facility fenceline. Predicted annual PM_{2.5} concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

For CO, the Cumulative Case – Normal Operations maximum predicted daily one-hour maximum ground-level CO concentration is 1729 µg/m³ (consistent with the Application Case – Normal Operations), which is less than the BC AQO. The maximum predicted 8-hour average ground-level CO concentration is 781 µg/m³ (consistent with the Application Case – Normal Operations), which is less than the BC AQO. Isopleths are not provided for CO given the predicted concentrations are a small percentage of the BC AQO. Predicted CO concentrations at the closest sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

6.7 NON-ROUTINE EMISSION CASES

6.7.1 Process Upset Case

Predicted concentrations for the Process Upset Case are shown in Table 6.7. This scenario considers flaring due to equipment upset or trip. This scenario assumes the thermal oxidizer and heat medium furnace operate at full load and that the marine vessels (i.e., LNG carrier, tugboats) are present, and with the addition of baseline. Annual average concentrations are not presented because process upset events are short-term in nature and are not representative of annual operating conditions. The Process Upset Case assumes up to 10 process upset events in each of Years 1 and 2 and up to five events per year in Year 3 and thereafter, with each event lasting up to 24 hours. Therefore, short-term averaging periods provide the most appropriate representation of the potential air quality effects associated with these events.

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Table 6.7 Process Upset Case (Equipment Upset or Trip) Modelling Results

Substance	Averaging Period	Maximum Predicted Concentration (Flaring Alone) ($\mu\text{g}/\text{m}^3$)	Maximum Predicted Concentration Including Baseline and Marine Vessels ($\mu\text{g}/\text{m}^3$)	Maximum Predicted Concentration at Closest Sensitive Receptor ^a Including Baseline and Marine Vessels ($\mu\text{g}/\text{m}^3$)	Maximum Predicted Concentration in Skwxwú7mesh (Squamish) Town Boundary Receptor ^b Including Baseline and Marine Vessels ($\mu\text{g}/\text{m}^3$)	BC AQO ($\mu\text{g}/\text{m}^3$)	Percentage of BC AQO with baseline (%)
NO ₂	1-hour	77.4	126.5	50.7	54.9	113	112
SO ₂	1-hour	12.3	36.3	12.5	15.2	170	21
PM _{2.5}	24-hour	1.5	19.2	17.8	17.9	25	77
CO	1-hour	1,004	1,729	522	798	14,300	12
	8-hour	412	779	375	523	5,500	14

Notes:

Achievement for each parameter and time averaging interval is as described in the notes section of Table 2.1

NO to NO₂ conversion is using ARM 2 Coastal Sites.

^a The closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project.

^b The closest Skwxwú7mesh (Squamish) Town Boundary receptor is located approximately 7 km northeast

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For NO₂, the Process Upset Case-alone maximum 98th percentile of the predicted daily one-hour maximum ground-level NO₂ concentration is 77.4 µg/m³ which is less than the BC AQO and the 2025 CAAQS. With the addition of marine vessels and baseline this increases to 126.5 µg/m³ (consistent with the Application Case – Normal Operations), which is greater than the BC AQO and the 2025 CAAQS. A single urban baseline NO₂ value was applied to the entire modelling domain. Figure D.37 shows that the maximum concentration (with the addition of marine vessels and baseline) occurs at the northern Facility fenceline and extends approximately 500 m to the northeast and 500 m to the southwest of the Facility. Predicted NO₂ concentrations at the sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO and 2025 CAAQS.

For SO₂, the Process Upset Case-alone maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 12.3 µg/m³ which is less than the BC AQO. With the addition of marine vessels and baseline this increases to 36.3 µg/m³ (consistent with the Application Case – Normal Operations), which is less than the BC AQO. Figure D.38 shows that the maximum concentration occurs at the northern Facility fenceline. Predicted SO₂ concentrations at the sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

For PM_{2.5}, the Process Upset Case-alone maximum 98th percentile of the predicted daily maximum ground-level PM_{2.5} concentration is 1.5 µg/m³ which is less than the BC AQO. With the addition of marine vessels and baseline this increases to 19.2 µg/m³ (consistent with the Application Case – Normal Operations), which is less than the BC AQO. Figure D.39 shows that this maximum concentration occurs 150 m northeast of the northeast Facility fenceline. Predicted PM_{2.5} concentrations at the sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

For CO, the Process Upset Case-alone maximum predicted daily one-hour maximum ground-level CO concentration is 1,004 µg/m³ and with marine vessels and baseline added this increases to 1,729 µg/m³ (consistent with the Application Case – Normal Operations), which is less than the BC AQO. The maximum predicted 8-hour average ground-level CO concentration is 412 µg/m³ and with marine vessels and baseline added this increases to 778 µg/m³, which is less than the BC AQO. Predicted CO concentrations at the sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

The Process Upset Case results with marine vessels and baseline are generally similar to the Application Case – Normal Operations, indicating that the incremental effect of upset flaring on the reported maximum concentrations is small.

6.7.2 High Inlet Sulphur Case

Predicted concentrations for the Thermal Oxidizer High Inlet Sulphur Case are shown in Table 6.8. This scenario considers the event in which high inlet sulphur content occurs in the feed gas and results in higher SO₂ emissions from the thermal oxidizer. This scenario includes the other Project Normal Operations sources, marine sources, plus baseline (i.e., the Application Case – Normal Operations). This scenario is also considered cumulatively with the FortisBC Squamish V2 Compressor Station.

Table 6.8 Thermal Oxidizer High Inlet Sulphur Case Modelling Results

Substance	Averaging Period	High Inlet Sulphur Case Alone Maximum Predicted Concentration (µg/m ³) excluding baseline	High Inlet Sulphur Application Case Maximum Predicted Concentration (µg/m ³) including baseline	High Inlet Sulphur Cumulative Case Maximum Predicted Concentration (µg/m ³) including baseline	BC AQO (µg/m ³)
SO ₂	1-hour	139.1	151.1	151.1	170
Percentage of AQO (%)		82	89	89	-

Notes:

Achievement for each parameter and time averaging interval is as described in the notes section of Table 2.1

For SO₂, the High Inlet Sulphur Case Alone maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 139.1 µg/m³, with no baseline added and is less than the BC AQO. Figure D.40 shows that this maximum concentration occurs at the northern Facility fenceline. Predicted concentrations at the closest sensitive receptors (Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

The High Inlet Sulphur Application Case maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 151.1 µg/m³, with baseline added and is less than the BC AQO. Figure D.41 shows that this maximum concentration occurs at the northern Facility fenceline. Predicted concentrations at the closest sensitive receptors (Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

The High Inlet Sulphur Cumulative Case maximum 99th percentile of the predicted daily one-hour maximum ground-level SO₂ concentration is 151.1 µg/m³, which is less than the BC AQO. Figure D.42 shows that this maximum concentration occurs at the northern Facility fenceline. Predicted concentrations at the closest sensitive receptors (Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast) are less than the BC AQO.

These results for the High Inlet Sulphur Case indicate that the increase in sulphur inlet results in increased SO₂ emissions; however, this has a negligible change to air quality near the Facility and at sensitive receptors (closest sensitive receptor is Murrin Provincial Park, located approximately 2.5 km southeast of the Project) and closest Skwxwú7mesh (Squamish) Town Boundary receptor (located approximately 7 km northeast).

6.7.3 Thermal Oxidizer Trip Case

Predicted concentrations for the Thermal Oxidizer Trip Case are shown in Table 6.9. This scenario considers the event where the thermal oxidizer is offline, and acid gases, HP flash gas and the condensate storage gas are routed to the flare and vented. This scenario assesses TRS and H₂S concentrations in isolation as there are no other substantial sources of these compounds.

During normal operations of the Project, it is expected that this scenario is likely to occur infrequently and for only a limited duration. For this air quality assessment, conservative estimates of frequency and duration have been assumed: two events could occur per year and the duration of the event is up to 96 hours (i.e., 4 days in total in a year).

The assessment aims to understand and assess the potential maximum TRS and H₂S concentrations that could occur during this event (Table 6.9) when a thermal oxidizer trip occurs concurrently during adverse meteorological conditions. To predict maximum TRS and H₂S concentrations under adverse meteorology, the model is run assuming that the venting occurs continuously throughout the 5-year modelling period (i.e., 43,824 hours). Given the infrequent occurrence of this scenario, it is highly unlikely that a venting event would occur at the same time as adverse meteorological conditions. Maximum predicted concentrations are likely overstated compared to expected concentrations during actual thermal oxidizer trip events.

To more realistically estimate how often a thermal oxidizer trip scenario and adverse meteorological conditions could occur at the same time, the probability of occurrence or likelihood is presented in Table 6.9. This was calculated based upon the joint frequency of predicted exceedances from the dispersion model and expected frequency of occurrence of the event (i.e., 96 hours or 4 days per year).

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Table 6.9 Thermal Oxidizer Trip Case Modelling Results

Substance	Averaging Period	Maximum Predicted Concentrations (µg/m ³)	BC AQO / Alberta AAQOs (µg/m ³)	Percentage of AQO (%)	Likelihood of Occurrence in a Year (hours or days in a year)
TRS	1-hour (1st highest)	278	7 ^c	3,967	0.01 ^a
	1-hour (9th highest)	120	7 ^c	1,714	0.1 ^a
	1-hour 99th percentile (88th highest)	38.8	7 ^c	555	1 ^a
	1-hour 95th percentile (439th highest)	12.2	7 ^c	174	5 ^a
	1-hour 90th percentile (877th highest)	8.0	7 ^c	114	10 ^a
	24hr (1st highest)	21.1	3 ^c	702	0.01 ^b
	24hr 99th percentile (4th highest)	10.2	3 ^c	341	0.04 ^b
	24hr 95th percentile (19th highest)	7.2	3 ^c	241	0.20 ^b
	24hr 90th percentile (37th highest)	5.5	3 ^c	183	0.40 ^b
H ₂ S	1-hour (1st highest)	160	14 ^c	1140	0.01 ^a
	1-hour (9th highest)	68.9	14 ^c	492	0.1 ^a
	1-hour 99th percentile (88th highest)	22.3	14 ^c	159	1 ^a
	1-hour 95th percentile (439th highest)	7.0	14 ^c	50	5 ^a
	1-hour 90th percentile (877th highest)	4.6	14 ^c	33	10 ^a

Notes:

Achievement for TRS and H₂S and time averaging interval is as described in the notes section of Table 2.1 and Table 2.3

^a Likelihood of occurrence is based upon number of hours in a year where concentrations are equal to or greater than the indicated value based upon the joint frequency of predicted exceedances from the dispersion model and expected frequency of occurrence of the event (i.e., 96 hours per year).

^b Likelihood of occurrence is based upon number of days in a year where concentrations are equal to or greater than the indicated value based upon the joint frequency of predicted exceedances from the dispersion model and expected frequency of occurrence of the event (i.e., 4 days per year).

^c TRS concentrations are compared to the BC AQOs, while H₂S concentrations are compared to the Alberta AAQOs.

Bolded black values are greater than the BC AQO / Alberta AAQOs.

Table 6.9 shows the predicted maximum (100th), 99th, and 95th percentile 1-hour and 24-hour TRS and H₂S concentrations for the Thermal Oxidizer Trip Scenario for the 5-year modelling timeframe (i.e., 43,824 hours or 1,826 days). The results reflect a skewed distribution where elevated concentrations are predicted to occur infrequently. For example, the maximum predicted (100th percentile) H₂S concentration is 160 µg/m³ which occurs 1 hour in 5 years whereas predicted H₂S concentrations are less than the Alberta AAQOs of 14 µg/m³ for approximately 95% of hours in the 5 years that are modelled. Predicted concentrations decline substantially by the 99th percentile. This is further seen in Figure D.43 where the spatial extent for the 99th and 95th percentile predicted concentration contours are much less than the 100th percentile contours.

Table 6.9 shows the joint probability of both the Thermal Oxidizer Trip Scenario occurring (i.e., ~ 96 hours per year) and meteorological conditions that result in maximum H₂S concentrations greater than the Alberta AAQOs (model predictions). This indicates that the of maximum (100th percentile) and the 9th highest concentration values actually occurring are approximately 1 hour in 100 years (0.01 hours per year) and 1 hour in 10 years (0.1 hours per year), respectively. The 99th percentile predicted concentration is estimated to occur 1 hour per year. Figure D.44 shows this predicted probability of exceeding the Alberta AAQOs for H₂S in hours per year. The figure shows that the area with a predicted likelihood exceeding the Alberta AAQOs greater than one hour in ten years (i.e., 0.1 hour per year) is limited to areas along and adjacent to the Project boundary. The maximum potential for exceedance of the Alberta AAQOs occurs along the northern Project boundary in the range of 1 to 1.5 hours per year. As the Alberta AAQOs for H₂S were developed to manage potential for odour, the model predictions show that, during a Thermal Oxidizer Trip Scenario, there may be potential for occurrence of odour near the Project during adverse meteorological conditions but it is predicted to occur infrequently and for a limited duration during a non-routine scenario (i.e., 1 to 1.5 hours in 8,760 hours/year).

7.0 CONCLUSION

The assessment predicts that concentrations of SO₂, PM_{2.5}, and CO are less than the applicable BC AQOs for the normal operation and non-routine cases evaluated. Predicted one-hour average NO₂ concentrations are less than the BC AQO and 2025 CAAQS for the Project Normal Operation, the Commissioning Case, and Project Stabilizing Operations Case. Predicted annual average NO₂ concentrations are less than the applicable BC AQO and 2025 CAAQS for normal operation and non-routine cases evaluated.

Maximum predicted concentrations greater than the one-hour NO₂ BC AQO and 2025 CAAQS occur for the Application Case – Normal Operations, Application Case – Stabilizing Operations, Cumulative Case, and Process Upset Case. The elevated predicted concentrations are primarily attributable to marine vessel emissions and the inclusion of baseline concentrations. These elevated concentrations are localized to areas on or immediately adjacent to the Facility boundary and concentrations decrease rapidly with distance from the emission sources. Predicted concentrations are less than the BC AQOs and near baseline levels at the sensitive receptors or the Skwxwú7mesh (Squamish) town receptors.

Maximum TRS and H₂S concentrations are predicted to exceed the BC AQO and Alberta AAQOs during a Thermal Oxidizer Trip Case with maximum concentrations occurring along the Facility boundary. The joint probability of a Thermal Oxidizer Trip occurring and concentrations exceeding the BC AQO or Alberta AAQOs for TRS and H₂S greater than one hour in ten years is limited to areas along and adjacent to the Project boundary. The maximum potential for exceedance of the BC AQO and Alberta AAQOs occurs along the northern Project boundary in the range of 1 to 1.5 hours per year.

As the BC AQO for TRS and Alberta AAQOs for H₂S were developed to manage potential for odour, the model predictions show that, during a Thermal Oxidizer Trip Scenario, there may be potential for occurrence of odour near the Project during adverse meteorological conditions, but it is predicted to occur very infrequently and be localized to the Facility.

The results of this air quality assessment indicate that the predicted changes to air quality during commissioning, stabilizing operations, and normal operations are small. Where elevated concentrations are predicted, they are localized near the Facility, occur under conservative modelling assumptions, and are primarily attributable to marine vessel emissions and baseline concentrations.

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APPENDIX A

Dispersion Modelling Plan



Dispersion Modelling Plan

Dispersion Modelling Plan for Woodfibre LNG Project

Rev E: Issued for Review

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Prepared for:
Woodfibre LNG General Partner Inc.
900 – 1185 West Georgia
Vancouver, BC V6E 4E6

Prepared by:
Stantec Consulting Ltd.

October 16, 2026

Project/File:
123222939

Preamble

The Woodfibre Liquefied Natural Gas Project (the Project) is a liquefied natural gas export facility being constructed on the former Woodfibre Pulp and Paper Mill site in Nexwnéwu7ts Átlk'a7tsem (Howe Sound), approximately seven kilometres south of Skwxwú7mesh (Squamish). The Project is on the historical location of a Skwxwú7mesh Úxwumixw (Squamish Nation) village known as Swiyát. Swiyát and Nexwnéwu7ts Átlk'a7tsem (Howe Sound) are tied to the cultural well-being of Skwxwú7mesh Úxwumixw (Squamish Nation) members, their ancestors, and their descendants, and to other Indigenous Groups as defined in the Project's Environmental Assessment Certificates. Woodfibre LNG Limited Partnership recognizes the importance of these areas to the Skwxwú7mesh stélmexw (Squamish People), and other Indigenous Groups. Woodfibre LNG Limited Partnership seeks to construct and operate the Project in a manner that is respectful of Indigenous values. This Dispersion Modelling Plan is primarily written in English with important place names, species, phrases, and passages provided in the Skwxwú7mesh Sníchim (Squamish language).

Temíxwiýikw chet wa naantem chet ti temíxw Swiyát

Chet wa sménhemswit kwis ns7éyxnitás chet ti temíxw

We7ú chet kwis t'íchimwit iy íwas chet ek' l tti.

Our ancient ancestors named this place Swiyát

We, as their descendants safeguard these lands

We will continue to swim and fish in these clear waters.



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Squamish-English Translation

Squamish	English
Ínexwantas	Monitoring
Skw̓xwú7mesh	Squamish
Skw̓xwú7mesh Sníchim	Squamish language
Skw̓xwú7mesh Úxwumixw	Squamish Nation
Skw̓xwú7mesh stélmexw	Squamish people
Staḵw	Water, river
Temíxw	Land, earth, dirt
Nexwnéwu7ts Átlk'a7tsem	Howe Sound



Acronyms / Abbreviations

the Application	The application to the British Columbia (BC) Energy Regulator (BCER) for a Waste Discharge Authorization (WDA) to authorize the discharge of air emissions to the environment under the <i>Environmental Management Act</i>
AAQC	Ambient Air Quality Criteria
AAQO	Ambient Air Quality Objective
AEPA	Alberta Ministry of Environment and Protected Areas
ARM 2	Ambient Ratio Method 2
AQO	Air Quality Objective
BC	British Columbia
BCER	British Columbia Energy Regulator
BOG	Boil-off gas
BPIP-PRIME	Building Profile Input Program with Plume Rise Model Enhancements
BTEX	Benzene, toluene, ethylbenzene, xylene
°C	degrees Celsius
CAAQS	Canadian Ambient Air Quality Standards
CCME	Canadian Council of Ministers of the Environment
CDEM	Canadian Digital Elevation Model
CEC	Commission for Environmental Cooperation
CEPA	<i>Canadian Environment Protection Act</i>
CEPEI	Canadian Energy Partnership for Environmental Innovation
CO	Carbon monoxide
ENVP	British Columbia Ministry of Environment and Parks
FortisBC	FortisBC Energy Inc.
FST	Floating storage tanks
g/s	grams per second
GCU	Gas combustion unit
HHV	Higher heating value
H ₂ S	Hydrogen sulphide
K	Kelvin



km	kilometre
kW	kilowatt
LNG	Liquified natural gas
m	metre
m/s	metres per second
m ³ /h	cubic metres per hour
m asl	metres above sea level
m E	Easting (metres)
m N	Northing (metres)
MARPOL	International Convention for the Prevention of Pollution from Ships
MDO	Marine diesel oil
MECP	Ministry of Environment, Conservation, and Parks (Ontario)
MGO	Marine gas oil
MJ/m ³	Megajoules per cubic metre
MW	Megawatts
NA-ECA	North American Emissions Control Area
NAD83	North American Datum of 1983
NAPS	National Air Pollutant Surveillance
NO	Nitrogen oxide
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen
NO _x as NO ₂	NO _x = NO + NO ₂ , and not NO ₂ alone
NRCAN	Natural Resources Canada
PM _{2.5}	fine particulate matter with an aerodynamic diameter less than equal to 2.5 micrometres
ppm _v	Parts per million by volume
the Project	the Woodfibre LNG Project
SO ₂	Sulphur dioxide
Stantec	Stantec Consulting Ltd.
t/d	tonnes per day
TAR	Technical Assessment Report
TDR	Technical Data Report



TRS	Total Reduced Sulphur
$\mu\text{g}/\text{m}^3$	microgram per cubic metre
UTM	Universal Transverse Mercator
US EPA	United States Environmental Protection Agency
VOCs	Volatile organic compounds
WDA	Waste Discharge Authorization
Woodfibre LNG	Woodfibre LNG General Partner Inc.
WRF	Weather Research and Forecast model



1 Introduction

Woodfibre LNG General Partner Inc. (Woodfibre LNG) will operate the Woodfibre Liquefied Natural Gas (LNG) Project (the Project), which is located on the former Woodfibre Pulp Mill site approximately seven kilometres (km) southwest of Skwxwú7mesh (Squamish), BC.

1.1 Purpose

The purpose of this plan is to document the methodology that will be used to model the dispersion of emissions from the Project to support the application for a Waste Discharge Authorization (WDA) permit (the Application).

1.2 Regulatory Framework

Woodfibre LNG is seeking a WDA permit from the BC Energy Regulator (BCER) to authorize the discharge of air emissions from the Project to the environment under the *Environmental Management Act*.

Air quality dispersion modelling was previously undertaken in 2014 to support the issuance of the Environmental Assessment Certificate (E15-02). The methodology presented herein has been updated since 2014 to reflect the latest approach recommended in the BC Air Quality Dispersion Modelling Guideline (Guideline) (ENVP, 2022a), with an updated emission inventory based on detailed design and emission factors.

1.3 Use of Dispersion Models

Air quality dispersion models are computer programs that are used to link changes in air quality and deposition to existing and proposed emission sources. When correctly applied, they represent a best estimate approach, with a tendency to over-predict effects on air quality (conservatism). The goal is to develop suitably comprehensive representations of potential future effects (i.e., spatial distributions of concentrations; location, time, and frequency of exceedances of ambient air quality objectives [AQO]) that are reasonably conservative in magnitude. At the same time, these predictions should not be overly conservative. To do so renders them impractical for their intended use: to reliably inform air quality management decisions.

The ability of a model to predict concentrations and rates of deposition depend on the accuracy of the source and emission inventory, the meteorology, and the assumptions used to represent the atmospheric physics and chemistry processes. The United States Environmental Protection Agency (US EPA) (2005) states:

“Models are reasonably reliable in estimating the magnitude of highest concentrations occurring sometime, somewhere within an area. For example, errors in highest estimated concentrations of ± 10 to $\pm 40\%$ are found to be typical, i.e., certainly well within the often quoted “factor-of-two” accuracy that has long been recognized for these models.”



A credible and defensible dispersion modelling methodology is one in which the model is appropriately, correctly, and consistently applied. To accomplish this, Stantec Consulting Ltd. (Stantec) relies on the professional judgement and expert opinion of a team of engineers and scientists with the requisite knowledge, skills, and experience. These subject matter experts are supported by training specific to the selected dispersion model, user manuals written by the model developers, industry best practices, and considerable experience modelling LNG facilities in a similar setting. They rely mainly on guidance issued by the US EPA, and the Province of British Columbia Ministry of Environment and Parks (ENVP) (ENVP, 2022a, 2022b, 2022c). Additional guidance is also available in the scientific literature, and previous works in B.C., Canada, and elsewhere.

1.4 Plan Layout

The format of this dispersion modelling plan follows the template provided by the ENVP (ENVP, 2022b). Text in *italics* is provided as part of the ENVP template and details the required information for each section of the dispersion modelling plan. This assessment will use the CALPUFF modelling system therefore any requirements in the ENVP template related to other dispersion modelling systems (i.e., AERMOD) have been removed.



2 General

Facility Name: Woodfibre LNG Project / Woodfibre LNG Facility

Company: Woodfibre LNG General Partner Inc

Company Contact: Ashleigh Crompton

Location:

Latitude: 49.6673°N Northing: 5,501,671 m N UTM Zone 10

Longitude: -123.2539°E Easting: 481,677 m E UTM Zone 10

Air Quality Consultant and Contact Name:

Stantec Consulting Ltd.

April Hauk

250-852-5921

April.Hauk@stantec.com

Ramin Dastanpour

604-202-4536

Ramin.Dastanpour@stantec.com

Reid Person

403-781-4159

Reid.Person@stantec.com

BCER Contact Name(s):

Kristofer Siriunas

250-419-4457

Kristofer.Siriunas@bc-er.ca

Rachel Butler

250-794-5220

Rachel.Butler@bc-er.ca



Dispersion Modelling Plan

Section 2: General

October 16, 2026

Level of Assessment (1, 2 or 3) and provide rational for the proposed level of assessment:

A Level 3 Assessment will be conducted to support the assessment of air emissions from the Project. This is consistent with the recommendations in the Guideline (ENVP, 2022a) where Level 3 comprehensive assessments should be undertaken for large industrial developments where there is complex topography and wind flows in the region and multiple emission sources. The air quality assessment will be conducted using the CALPUFF modeling system.

Does this plan follow a modelling approach that is similar to the approach taken in a previous air quality assessment already reviewed and accepted by the Ministry? If so, provide the project name and Ministry contact:

This plan follows a similar air dispersion modelling approach to that used for the FortisBC Energy Inc. (FortisBC), Eagle Mountain – Woodfibre Gas Pipeline Project, Squamish V2 Compressor Station based upon the intention to achieve consistency in model predictions for the adjacent projects (as they are the basis for the cumulative case), but the modelling methodology described here is specific to the Woodfibre LNG Project. BCER has approved the Dispersion Modelling Plan for the FortisBC Squamish V2 Compressor Station (RWDI, 2025).



3 Project Description and Geographic Setting

Provide an overview of the project, including process description and the purpose of the dispersion modelling study:

The Project is comprised of the following key components:

- **Land-based natural gas processing and liquefaction facilities:** The Project has the capacity to produce 2.1 million tonnes of LNG per year.
- **A floating storage and offloading unit:** There are two floating storage tanks (FSTs) that have a total storage capacity of 250,000 cubic metres and LNG loading facilities that transfer LNG from the FSTs to LNG carriers for export.
- **Supporting infrastructure:** Includes buildings (e.g., administration building, control and operation building, warehouse and maintenance building), utility systems, flare system and the boil off gas (BOG) vapor return lines.

Natural gas will be supplied to the facility by FortisBC from western Canadian market hubs. In the LNG facility, the impurities and other components of the incoming pipeline quality gas (mainly carbon dioxide, trace sulfur, and water) that would not meet the LNG specification are removed; then the natural gas is cooled (liquefied) to produce LNG. The estimated LNG carrier frequency is approximately 40 carriers annually, or three to four monthly. Woodfibre LNG has authorization from the Canadian Energy Regulator to export LNG for a period of 40 years (License GL-340).

The Project will be powered by electricity provided by BC Hydro, which includes the electric motors that drive the refrigerant compressors that liquefy the natural gas. The use of these e-drives is a key component to Woodfibre LNG's net zero roadmap, by setting a new global standard to be the world's first net zero LNG facility.

There are several sources of emissions associated with the Project that are subject to a WDA permit under the *Environmental Management Act*. The sources are outlined in Section 6.

Provide a description of the following:

- *Terrain characteristics within domain: flat terrain or complex terrain (i.e., will complex flow need to be considered?)*
- *Dominant land cover: urban, rural, industrial, agricultural, forested, rock, water, grassland*

Most of the Project site is on fee simple, industrially zoned, brownfield temíxw (lands) with more than 100 years of industrial use. The site previously operated as a pulp mill facility from 1912 until 2006.

The Project area is mostly at sea level (with the LNG facility modules located at approximately 8.5 metres (m) above sea level (asl)); and surrounded by steep, mountainous terrain. There is no temíxw (land) or road access to the site; all personnel, equipment, and supplies for the Project are brought in by marine vessel via Nexwnéwu7ts Átl'ka7tsem (Howe Sound).



Dispersion Modelling Plan

Section 3: Project Description and Geographic Setting
October 16, 2026

Higher elevations are located at north, northwest, east, and northeast part of model domain and the lowest elevations (sea level) are south and east of the Project and mainly across the middle of the model domain through Nexwnéwu7ts Átlk'a7tsem (Howe Sound). Terrain in the region is complex ranging from approximately sea level to over 2,500 m asl.

The dominant temíxw (land) cover in this region is evergreen forest. The community of Skwxwú7mesh (Squamish), located 7 kilometres (km) to the northeast. Britannia Beach is located 5.2 km southeast of the Project.



4 Dispersion Model

4.1 Selected Dispersion Model

List model(s) and version to be used:

The following models will be used for the Level 3 Assessment with no modifications to the original computer code. They have been optimized to run in a LINUX computing environment.

- CALMET v6.5.0
- CALPUFF v7.2.1

CALMET is a diagnostic 3-dimensional meteorological model. It creates spatially and temporally varying wind, temperature, and other atmospheric parameters required by the CALPUFF dispersion model to simulate how pollutants transport and dispersion in the atmosphere.

CALPUFF is a multi-layer, multi-species, non-steady-state puff dispersion model, which can simulate the effects of time- and space-varying meteorological conditions on pollutant transport, transformation, and deposition. CALPUFF contains algorithms for near-source effects such as building downwash, transitional plume rise, partial plume penetration, as well as longer-range effects such as chemical transformation, and pollutant removal (wet scavenging and dry deposition).

Stantec developed post-processing tools that provide predicted concentrations at modelled receptors for applicable regulatory averaging intervals.

To achieve a consistent modelling methodology, through collaboration with FortisBC, Woodfibre LNG obtained CALMET input files used for the Squamish V2 Compressor Station air quality assessment. CALMET setup is described in the BCER approved Dispersion Modelling Plan for the FortisBC Squamish V2 Compressor Station (RWDI, 2025) and summarized in the sections below.

Specify any non-guideline models or versions (i.e., beta-test versions) planned for use. Provide rationale:

No non-guideline models or versions are planned for this assessment.

If modifications to any of the models are planned, provide a description and the rationale:

No modifications to the models are planned.



4.2 Default Switch Settings

For CALMET/CALPUFF identify any key switch settings in CALMET and CALPUFF that will be different from the “black (do not touch)” defaults as per Tables 6.2 and 7.1 (ENVP, 2022a). Provide rationale.

- The key switch settings in CALPUFF will be the “black (do not touch)” defaults as per Table 6.2 and Table 7.1 in the Guideline (ENVP, 2022a). There are no proposed deviations from the default settings.
- The CALMET switch settings are provided in Appendix A (Table A.1).

For the CALMET model provide:

A CALMET domain map that also shows the locations of surface meteorological stations and upper air stations:

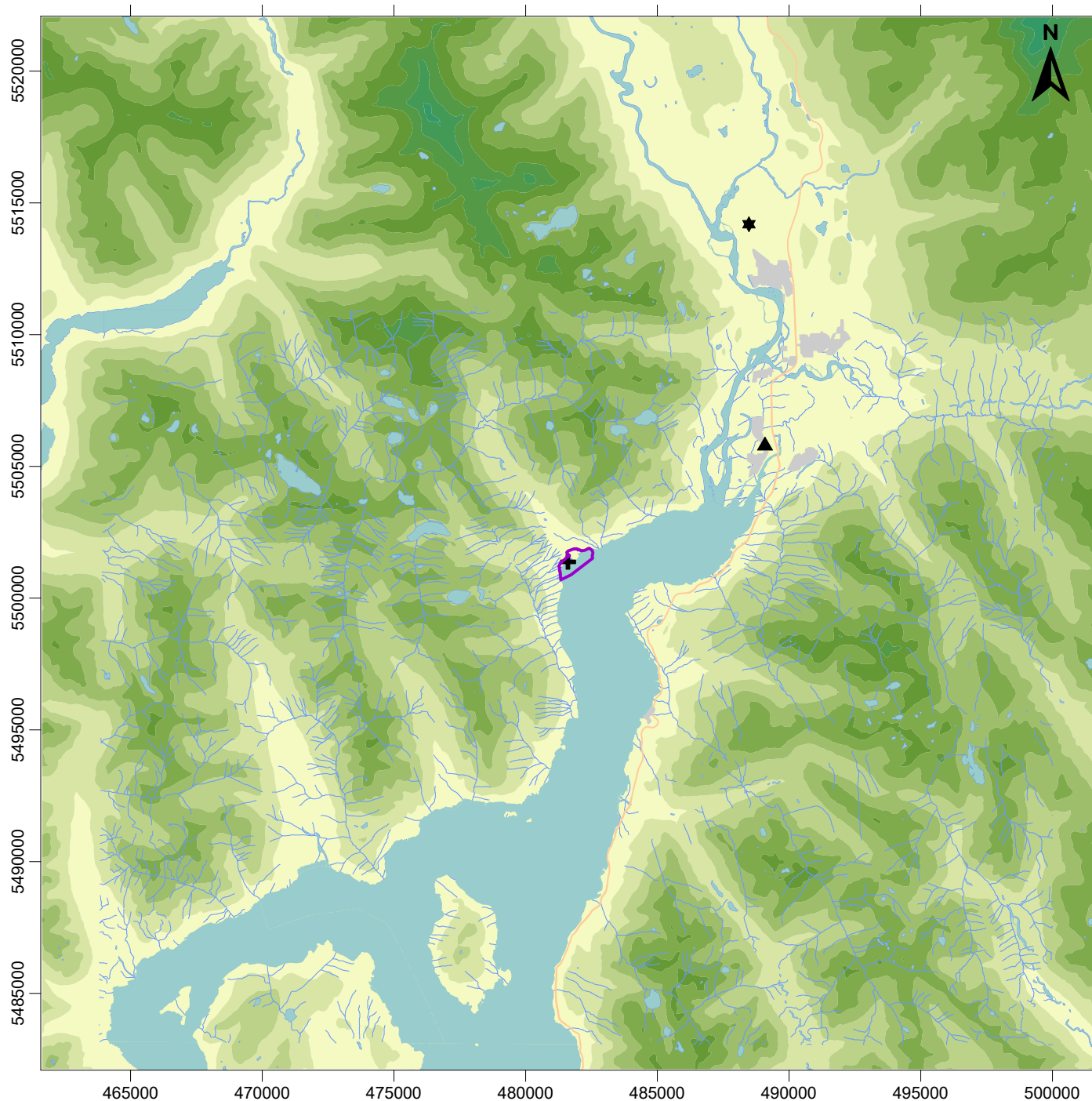
CALMET domain map for the Project is provided in Figure 4.1 and consists of the following:

- CALMET domain 40 km x 40 km with 100 m grid resolution centered at the 481,593 m Universal Transverse Mercator (UTM) Easting and 5,502,083 m UTM Northing.
- *Number of grids in X and Y direction:* NX = 400, NY = 400
- *Vertical levels (m):* 0., 20., 40., 80., 160., 300., 600., 1000., 1500., 2200., 3000

There are three surface meteorological stations, the Sḵw̱wú7mesh (Squamish) Elementary School Ínexwantas (monitoring) station, the Sḵw̱wú7mesh (Squamish Airport), and the Woodfibre LNG onsite Ínexwantas (monitoring) station in the CALMET domain (Figure 4.1).

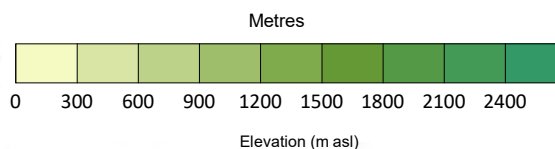
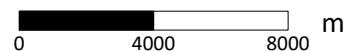
There are no upper air stations within or nearby the CALMET domain. See Section 10 for more information on CALMET setup.





Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body
- Skwxwú7mesh (Squamish) Elementary School Inexwantas (monitoring) station
- Woodfibre LNG onsite Inexwantas (monitoring) station
- Skwxwú7mesh (Squamish) Airport



Client/Project/Report

Woodfibre LNG General Partners Inc.
 Woodfibre LNG Facility
 Dispersion Modelling Plan

Figure No

4.1

Title

CALMET Model Domain and Terrain
 (40km x 40km)

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4.3 CALPUFF Receptors

4.3.1 Gridded Receptors

For the CALPUFF model

Proposed receptor grid spacing for the Project assessment (see Section 7.2 in the Guideline (ENVP, 2022a)) will follow the same setup as for the FortisBC Squamish V2 Compressor Station Project as described in the approved Dispersion Modelling Plan (RWDI, 2025). Receptor spacing is referenced based on distances from the Project and FortisBC V2 Squamish Compressor Station facility boundaries (the two facility boundaries):

- 10 m receptor spacing along the two facility boundaries
- 20 m receptor spacing within 500 m of the two facility boundaries
- 50 m receptor spacing within 2 km of the two facility boundaries
- 250 m receptor spacing within 5 km of the two facility boundaries
- 500 m receptor spacing beyond 5 km to 40 km of the two facility boundaries (remainder of the modelling domain)
- Additional 50 m receptor spacing within the management boundary of the District of Squamish

The grid described comprises 30,926 receptor locations. This extent of the receptor grid is considered sufficient to indicate the magnitude and spatial variation of the predicted concentrations resulting from the Project emissions.

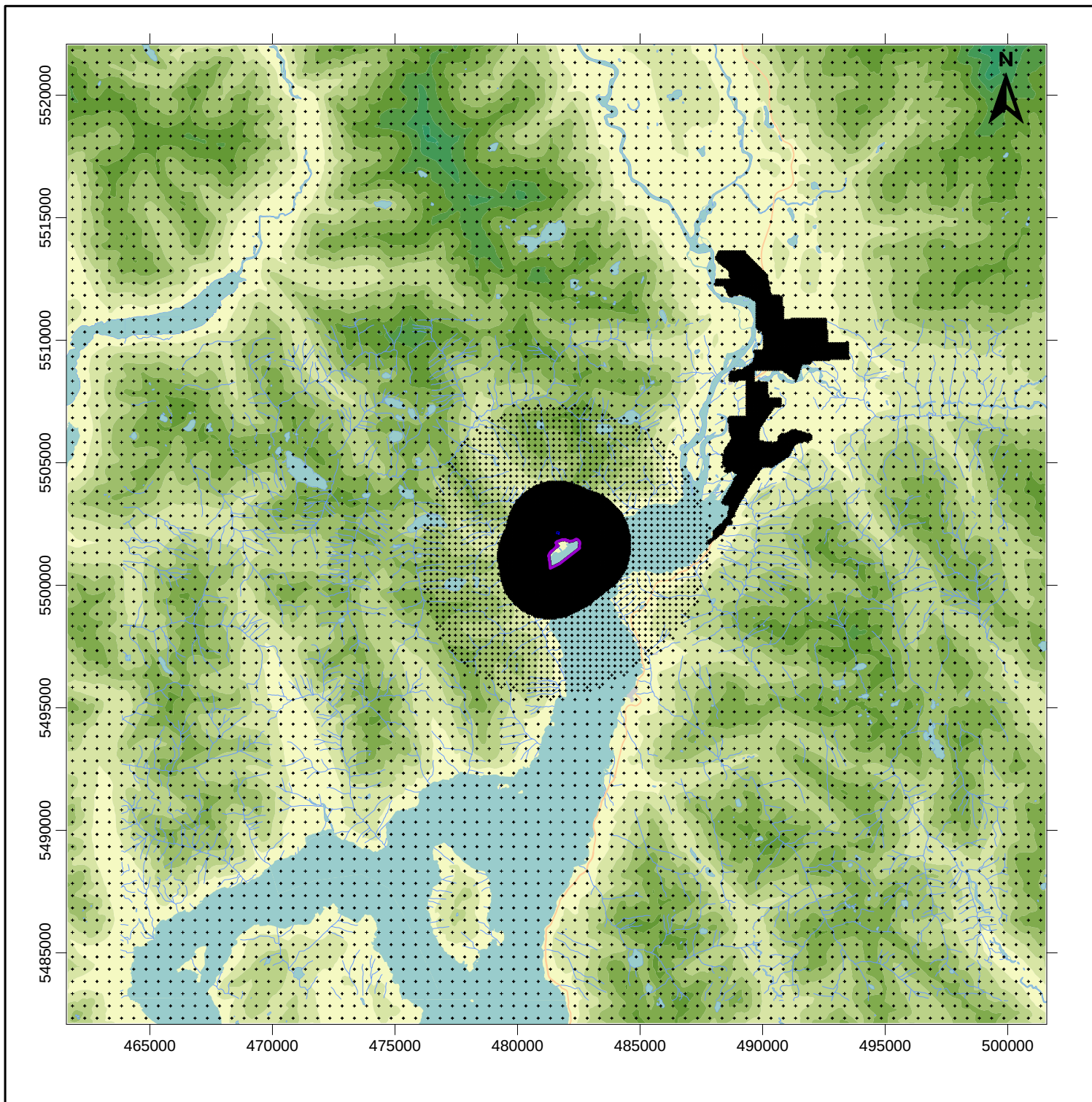
A map of the CALPUFF domain and receptor grid.

A map of the CALPUFF domain and gridded receptors for the Project assessment is shown in Figure 4.2.

Receptor (flagpole) height (m) (see Section 7.5 (ENVP, 2022a)).

Flagpole receptors will be included in the dispersion modelling. The height of the flagpole receptor is 1.5 m from ground level. A 1.5 m flagpole height for predicted concentrations was used to align with the FortisBC Energy Squamish V2 Compressor Station assessment. The flagpole receptors are used for concentration prediction only. Flagpole receptors are not used for deposition predictions as CALPUFF requires ground-level receptors to predict wet and dry deposition rates.





Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fence Line
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fence Line
- Squamish Community
- Water Body

0 4000 8000 m



Client/Project/Report

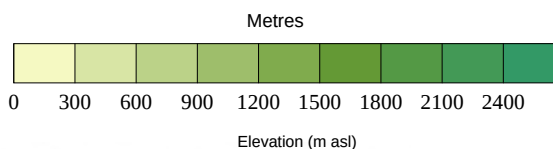
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 Dispersion Modelling Plan

Figure No.

4.2

Title

**CALPUFF Receptor Grid
 (40km x 40km)**



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4.3.2 Sensitive Receptors

For the CALPUFF model the proposed sensitive receptors (see Section 7.4 in the Guideline (ENVP, 2022a)):

There are no permanent residents within 5 km of the Project. Sensitive receptors included in the assessment follow those identified for the FortisBC Squamish V2 Compressor Station (RWDI, 2025). A list of sensitive receptors is shown in Table 4.1 and Figure 4.3.

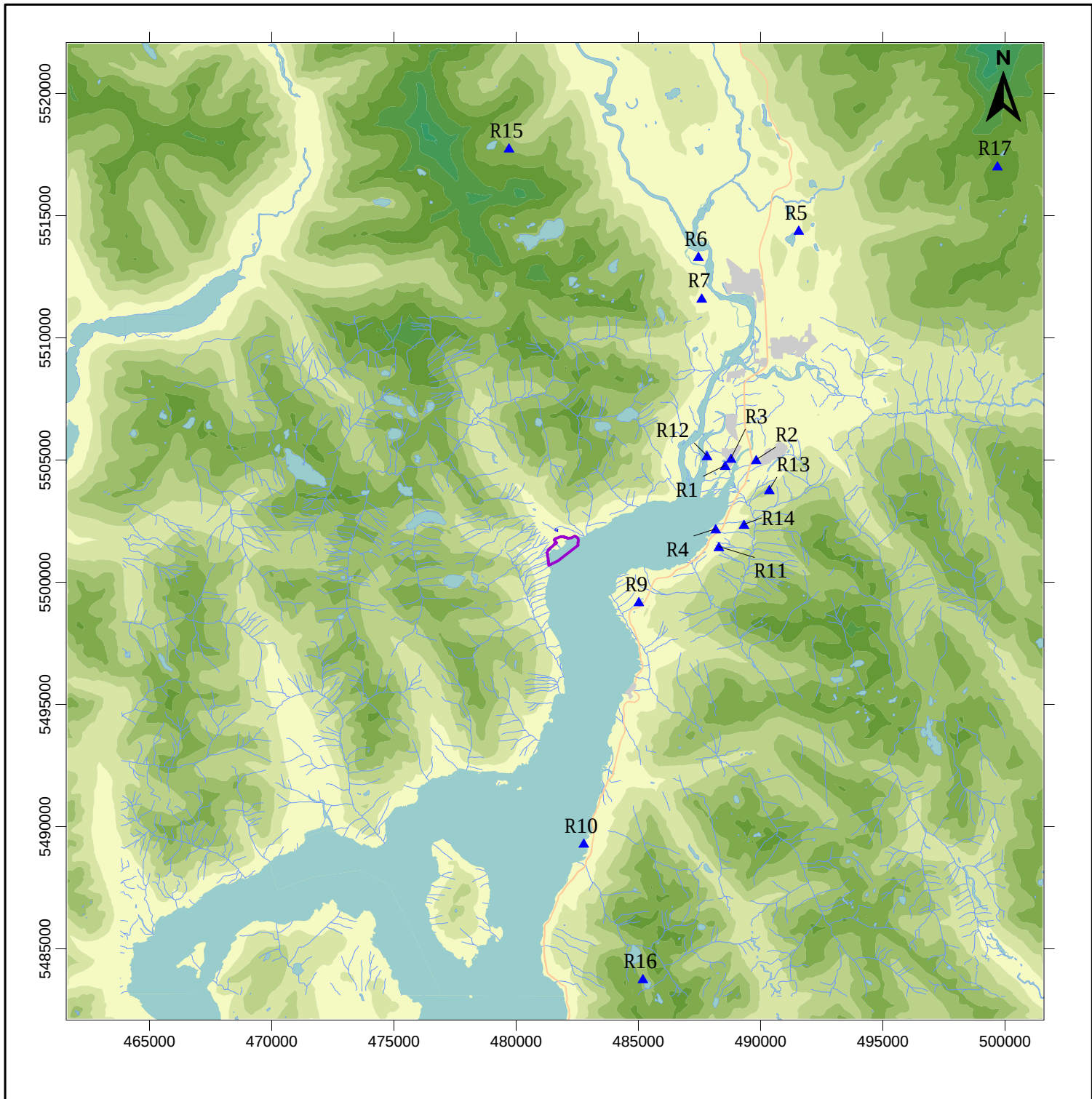
Table 4.1 Sensitive Receptors ^a

Receptor ID	UTM Zone 10		Description
	m E	m N	
R1	488549.1	5504781.4	Residential
R2	489821.1	5505016.4	Sḵw̱wú7mesh (Squamish) General Hospital
R3	488791.1	5505073.4	Balsam Montessori Academy
R4	488161.1	5502184.4	Klahanie Campground
R5	491559.4	5514405.8	Alice Lake Park
R6	487457.2	5513332.3	Baynes Island Ecological Reserve
R7	487591.5	5511627.6	Brackendale Eagles Park
R9	485019.7	5499205.8	Murrin Park
R10	482767.4	5489326.6	Porteau Cover Park
R11	488294.3	5501459.8	Shannon Falls Park
R12	487806.3	5505180.8	Skwelwil'em Squamish Estuary WMA
R13	490357.2	5503788.7	Stawamus Chief Park
R14	489321.0	5502369.3	Stawamus Chief Protected Area Park
R15	479707.1	5517772.6	Tantalus Park
R16	485184.5	5483777.9	Cypress Park
R17	499689.8	5517035.9	Garibaldi Park

Note:

^a. From RWDI (2025). R8 is missing from RWDI (2025).





Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fence Line
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fence Line
- Sensitive Receptor
- Squamish Community
- Water Body

0 4000 8000 m



Client/Project/Report

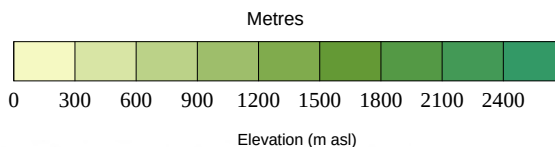
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 Dispersion Modelling Plan

Figure No.

4.3

Title

**CALPUFF Sensitive Receptors
 (40km x 40km)**



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5 Planned Model Output: Air Quality Assessment Needs

What model output is required for decision makers and stakeholders? (i.e., what is the purpose of the assessment?). Circle as appropriate. Air Quality: concentrations, depositions, visibility, fogging, icing, other (specify)

The model output will be documented in a Technical Data Report (TDR) and inform the Technical Assessment Report (TAR); both reports will form part of the WDA permit application.

Model output for the Project will include predicted ground-level concentrations for nitrogen dioxide (NO₂), sulphur dioxide (SO₂), particulate matter with aerodynamic diameter less than 2.5 microns (PM_{2.5}), carbon monoxide (CO), and total reduced sulphur (TRS)¹ compounds (Thermal Oxidizer Trip non-routine scenario). The 1-hour, 8-hour, 24-hour, and annual averages will be presented following the statistical form of the applicable regulatory criteria used for comparison (refer to Section 7).

Tables and Figures for Level 2 and 3 Assessments (see detailed list in Section 8.3.2 (ENVP, 2022a):

Spatial distribution maps of air quality parameters (maximums, exceedance frequencies, annual averages)

Figures will include spatial distribution maps of maximum predicted concentrations for the Cases modelled (refer to Section 6.3). Both hourly (i.e., 1-hour, 24-hour) and annual averages will be presented. Averages will be presented as the appropriate statistical form for comparison to the AQO (i.e., maximum predicted 3-year average of the 98th percentile of the daily 1-hour maximum NO₂ concentration).

If exceedances of the applicable regulatory criteria are predicted for the Application Case or Cumulative Case, the list (in Excel format) of receptors, showing the receptor location (UTM coordinates) and frequency of exceedance will be provided.

Tables of maximum short and long term average air quality parameters (locations and associated meteorological conditions).

Tables of maximum predicted concentrations for NO₂, SO₂, PM_{2.5}, CO, and TRS (where applicable) equivalent to the statistical form of the applicable AQO (i.e., maximum predicted 3-year average of the 98th percentile of the daily 1-hour maximum NO₂ concentration) will be provided for each Case modelled; with and without the inclusion of baseline (refer to Section 8).

¹ Total Reduced Sulphur (TRS) compounds are a mixture of odorous gases, primarily hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.



Dispersion Modelling Plan

Section 5: Planned Model Output: Air Quality Assessment Needs
October 16, 2026

Tables of air quality parameters at select receptors of interest (maximums, frequency distributions)

Tables of air quality parameters will be provided for sensitive receptors including, maximum predicted concentrations for NO₂, SO₂, PM_{2.5}, CO, and TRS (where applicable) equivalent to the statistical form of the applicable AQO (i.e., maximum predicted 3-year average of the 98th percentile of the daily 1-hour maximum NO₂ concentration) will be provided for each Case modelled; with and without the inclusion of baseline (refer to Section 8).

Tables of air quality parameters under abnormal emission situations (upsets, start-up)

Abnormal emission situations (or non-routine scenarios) may occur during equipment trip, facility start-up after a facility trip, maintenance, high inlet sulphur conditions, or emergency conditions (see section 6.2.4). Once the Project has reached steady state operations, these events are typically short-term and infrequent. Short-term averages (i.e., 1-hour, 8-hour, 24-hour) will be presented in tabular format. Flaring during commissioning and the early stages of operations may occur for longer duration (days versus hours) and more frequent (weekly versus monthly); however, the important effects are assessed in the short-term averages (i.e., 1-hour, 8-hour, 24-hour). These will be presented in tabular format.

Output spatial scale: near-field (<10 km), local (<50 km), regional (>50 km)

Figures will be provided for CALPUFF domain (40 km by 40 km). If complex spatial distribution of concentrations is predicted in the vicinity of the Project, additional figures for the near-field will be investigated.

Special output required for vegetation, health risk or visibility assessments

For vegetation, model output will include predicted concentrations of oxides of nitrogen (NO_x) (as NO₂) and SO₂ and compared to the critical levels (see Section 7.2). Deposition rates will be presented for nitrogen, sulphur and nitrogen plus sulphur.

For health risk, predicted concentrations will be compared to the applicable regulatory criteria (see Section 7).

Visibility is not assessed for the Project. The Project's emission sources combust natural gas and have low potential for impacts to visibility.

Other (specify)

There are no other tables or figures proposed at this time.



6 Emission Sources and Characteristics

6.1 Contaminants Emitted for Each Emission Scenario

Provide the following details of the sources to be modelled, type, contaminants, basis of emissions.

Characteristics of emissions from the Project operation sources consist of those from the combustion of natural gas and associated marine vessel emission sources. The Project's emissions include NO_x, SO₂, PM_{2.5}, and CO. Emissions of TRS including H₂S are not emitted during normal operation but can occur during non-routine scenarios. These substances will be carried forward in each model scenario discussed below.

Updated estimates of VOC and PAH emissions from the Project have been reviewed. VOCs and PAHs were previously assessed as part of the Environmental Assessment (EA), which included air quality modelling and a human health risk assessment. The EA concluded that VOC emissions would result in a small to negligible effect on air quality and that VOC and PAH concentrations would represent negligible health risks (WLNG, 2015). Updated estimates based on the final facility design indicate that predicted VOC and PAH concentrations remain below applicable screening criteria and are generally similar to or lower than those predicted in the EA. VOCs and PAHs are therefore not carried forward in this dispersion modelling assessment. A summary of the assessment is provided in Appendix B.

For each model scenario and for the substances modelled, the source type is Point.

Fugitive and venting emission sources are not included in the modelling. Fugitive emissions (i.e., methane) are expected to be small, benign, and managed through requirements in the *LNG Facility Regulation* for a leak detection and repair program for the Project. Venting sources are also expected to be intermittent, short-term, small, and benign (i.e., hydrocarbons, nitrogen, air). Venting may occur for operational activities, maintenance activities, and where the flow rate is small and/or cannot support stable combustion. Further information regarding venting will be provided in the WDA permit application.

6.2 Emission Inventory

The assessment considers emissions from the Project under four operating scenarios: normal operations, commissioning, stabilizing operations, and non-routine events. Marine vessels will not be part of the WDA permit; however, they are a source of emissions and are included in the assessment. Maximum emission rates are applied in the CALPUFF modelling. Emission rates for NO_x, PM_{2.5}, CO, TRS, and H₂S are provided by Woodfibre LNG based on engineering and vendor data (maximum performance guarantees or maximum estimated emission rates). Where vendor or engineering data is not available, emission rates are based on published emission factors. The emission inventory for the Project is considered conservative based the use of maximum emission data from equipment vendors, assuming continuous operation of equipment at maximum design capacities, and use of conservative estimates of



normal flare volumes. Design information including building dimensions, stack heights and diameters is provided by Woodfibre LNG. Detailed calculations for emission parameters are provided in Appendix C.

6.2.1 Normal Operations Emission Sources

The Project emission sources for Normal operations are outlined in Table 6.1. The facility layout is illustrated in Figure 6.1. Further information on the building dimensions included in the modelling is provided in Section 9.

The associated emissions, stack parameters, and flare stack pseudo parameters during normal operations are provided in Table 6.2. The calculation methodology for stack pseudo parameters is provided in Appendix C. For modelling, a conservative approach is taken to assume the heat medium furnace, and thermal oxidizer are operating continuously and simultaneously 100% of the time; and the flares have a continuous pilot operating and fuel gas purge. For the heat medium furnace and thermal oxidizer, emission calculations are based on operating case of “high CO₂”, in which the facility receives feed gas with high (2 mol%) CO₂ concentration. Although this operating case is expected to occur only very infrequently, it has been adopted as the basis for the modelling because it results in higher emissions than the “average CO₂” operating case, in which the facility receives feed gas containing the average CO₂ concentration (see Appendix D for the emission comparison).



Dispersion Modelling Plan

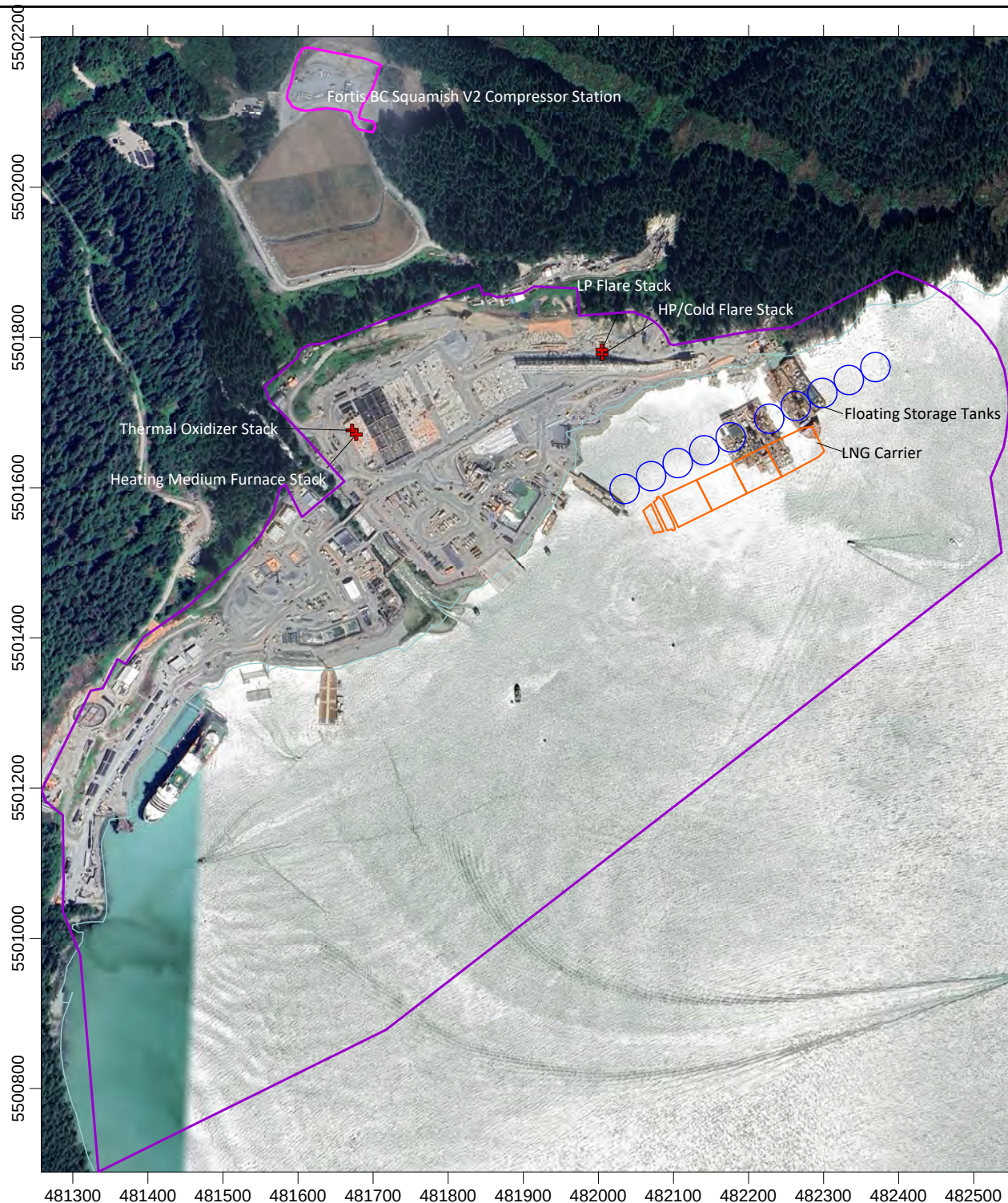
Section 6: Emission Sources and Characteristics

October 16, 2026

Table 6.1 Facility Emission Sources

Equipment Name	Quantity	Primary Purpose
Heat Medium Furnace	1	To provide process heat via a closed loop heating medium fluid.
Thermal Oxidizer	1	To combust the acid gas and flash gas from the Acid Gas Removal Unit, and the hydrocarbon condensate vapor from the Condensate Storage Tank ("storage gas").
High-pressure (HP) Flare	1	Flares are fitted with pilot burners that maintain a continuous flame presence at the flare tip, ensuring combustion under all wind conditions and during precipitation events should material be released to the flares. Routine flaring is the controlled flaring necessary to maintain flare system pressure and prevent the ingress of oxygen, with minor sources of hydrocarbons for combustion. Non-routine flaring is when flaring is undertaken as a safety measure to protect the facility and its personnel (e.g., during process upset, emergency situations and facility shutdowns/startups).
Low-pressure (LP) Flare	1	
Emergency Diesel Generators	3	The emergency diesel equipment is operated occasionally to test operability for maintenance, and during emergency conditions (two would be operated at one time, with one in standby). The three diesel generators are typically tested monthly for maintenance purposes, as this equipment is operated infrequently and for a short duration, the three generators are depicted in the model as not operating.
Emergency Diesel Firewater pumps	2	The emergency diesel equipment is operated occasionally to test operability for maintenance, and during emergency conditions. and the two diesel firewater pumps will typically operate on a weekly basis for approximately 15 to 30 minutes. As this equipment is operated infrequently and for a short duration, the two diesel firewater pumps are depicted in the model as not operating.
Vents	various	Venting will occur based on operational activities (e.g., emergency scenarios, from pressure safety valves), to support maintenance activities, and where the flow rate is small and/or composition is insufficient to support stable combustion. These venting sources will be addressed in the permit application but not included in the dispersion modelling.





Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Woodfibre LNG Fenceline
- LNG Carrier
- Floating LNG Storage Spheres
- Shoreline
- Fortis BC Squamish V2 Compressor Station Fenceline
- + Stacks

0 100 200 m



Project Location
Swiyat

Client/Project/Report

Woodfibre LNG General Partners Inc.
Woodfibre LNG Facility
Dispersion Modelling Plan

Figure No.

6.1

Title

Project Site Plan

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

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Table 6.2 Stack Parameters and Emission Rates for the Proposed Emission Sources (Normal Operations)

Source Identification		Heat Medium Furnace	Thermal Oxidizer	High Pressure (HP) Flare	Low Pressure (LP) Flare
Unit Description		Design Case ^a	Design Case ^a	Purges + Design Leaks + Pilots	Purges + Design Leaks + Pilots + Compressor Seals
Temporal Variation		Continuous	Continuous	Continuous	Continuous
Operational Data ^b					
Input Gas Type		Fuel Gas ^c	BOG + Acid Gas + Flash Gas + Storage Gas ^d	Fuel Gas (purges and pilots) ^c + Feed Gas with 24 ppmv sulphur (design leaks)	Fuel Gas (purges and pilots) ^c + BOG (design leaks) + Feed Gas with 24 ppmv sulphur (compressor seals)
Input Gas Higher Heating Value (HHV)	MJ/sm ³	34.1	4.94	35.0	34.1
Heat Input (based on HHV)	MW	32.4	11.6	11.7	5.28
Sulphur Content	ppmv	4.0 (see Appendix D)	488 ^e	6.1 ^e	4.1 ^e
Input Gas Flow Rate ^b					
Total Input Flow Rate	s m ³ /h	3,418	8,470	1,204	557
Fuel Gas Flow Rate	s m ³ /h	3,418 (4.0 ppmv S, see Appendix D)	-	1,076 (4.0 ppmv S, see Appendix D) ^f	540 (4.0 ppmv S, see Appendix D) ^f
BOG Gas Flow Rate	s m ³ /h	-	828 (1.0 ppmv S, see Appendix D)	-	13.3 (1.0 ppmv S, see Appendix D)
Acid Gas Flow Rate	s m ³ /h	-	7,264 (562 ppmv S)	-	-
Flash Gas Flow Rate	s m ³ /h	-	358 (58.0 ppmv S)	-	-
Storage Gas (Condensate Vapours) ^d Flow Rate	s m ³ /h	-	19.2 (1,723 ppmv S)	-	-
Feed Gas Flow Rate	s m ³ /h	-	-	128 (24 ppmv S, see Appendix D)	3.55 (24 ppmv S, see Appendix D)



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Source Identification		Heat Medium Furnace	Thermal Oxidizer	High Pressure (HP) Flare	Low Pressure (LP) Flare
Stack Location (UTM Zone 10, NAD 83) ^g					
UTM Easting	m E	481,677	481,672	482,005	482,005
UTM Northing	m N	5,501,671	5,501,676	5,501,777	5,501,784
Grade Elevation ^h	m asl	8.5	8.5	8.5	8.5
Stack Parameters ^b					
Rain Cap	Yes/No	No	No	No	No
Release Direction		Vertical	Vertical	Vertical	Vertical
Physical Stack Height	m	49.335	49.335	134.0	134.0
Pseudo Stack Height ⁱ	m	-	-	139.2	137.6
Stack Inside Tip Diameter	m	1.90	1.38	1.20	0.76
Pseudo Stack Diameter ⁱ	m	-	-	1.06	0.710
Maximum Exit Velocity ^j	m/s	5.91	18.7	-	-
Pseudo Exit Velocity ⁱ	m/s	-	-	20.0	20.0
Exit Temperature	°C	188	982	-	-
	K	461	1255	-	-
Pseudo Exit Temperature ⁱ	°C	-	-	1,000	1,000
	K	-	-	1,273	1,273



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Source Identification		Heat Medium Furnace	Thermal Oxidizer	High Pressure (HP) Flare	Low Pressure (LP) Flare
Maximum Emission Rates					
SO ₂ ^k	t/d	0.001	0.269	0.0005	0.0001
NO _x	t/d	0.053 ^l	0.026 ^m	0.030 ⁿ	0.013 ⁿ
PM _{2.5}	t/d	0.002 ^o	0.001 ^o	0.001 ^p	0.001 ^p
CO	t/d	0.134 ^q	0.026 ^r	0.121 ⁿ	0.055 ⁿ
SO ₂ ^k	g/s	0.010	3.11	0.006	0.002
NO _x	g/s	0.611 ^l	0.302 ^m	0.342 ⁿ	0.154 ⁿ
PM _{2.5}	g/s	0.021 ^o	0.007 ^o	0.017 ^p	0.008 ^p
CO	g/s	1.55 ^q	0.296 ^r	1.40 ⁿ	0.633 ⁿ

Notes:

- Based on the operating scenario of “high carbon dioxide”; where the facility received feed gas with high (2 mol%) carbon dioxide concentration. While this scenario is expected to occur very infrequently, it is the basis for the modelling as it will result in higher emissions compared to the average carbon dioxide concentration in the feed gas (adopting conservative approach).
- Provided by Woodfibre LNG.
- Gas compositions are provided by Woodfibre LNG and are shown in Appendix D. Fuel gas is internally generated and consists of BOG and overhead vapours from the condensate stabilization column.
- Storage gas is from the vapor from the Condensate Storage Tank that is returned to the Thermal Oxidizer.
- Sulphur content 488 ppmv for thermal oxidizer was calculated based on sumproduct of sulphur content and gas flow rate for each input stream, including BOG, acid gas, flash gas, and storage gas (condensate vapours). The sulphur content is 1.0, 562, 58.0, and 1723 ppmv for BOG gas, acid gas, flash gas, and storage gas, respectively, and gas flow rate is 828, 7264, 358, and 19.2 sm³/hr for fuel gas, acid gas, flash gas, and storage gas, respectively. See Appendix C for the detailed calculation.
Sulphur content 6.1 ppmv for HP flare was calculated based on sumproduct of sulphur content and gas flow rate for each input stream, including purge fuel gas, design leak feed gas, and pilot fuel gas. The sulphur content is 4 ppmv for fuel gas and 24 ppmv for feed gas. The total fuel gas flow rate (purge + pilot) is 1,076 sm³/h and feed gas flow rate is 128 sm³/h. See Appendix C for the detailed calculation.
Sulphur content 4.1 ppmv for LP flare was calculated based on sumproduct of sulphur content and gas flow rate for each input stream, including purge fuel gas, design leak BOG gas, pilot fuel gas, and compressor seals feed gas. The sulphur content is 4 ppmv for fuel gas, 1 ppmv for BOG gas, and 24 ppmv for feed gas. The total fuel gas flow rate (purge + pilot) is 540 sm³/h, BOG gas is 13.3 sm³/h, and feed gas flow rate is 3.55 sm³/h. See Appendix C for the detailed calculation.



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Source Identification	Heat Medium Furnace	Thermal Oxidizer	High Pressure (HP) Flare	Low Pressure (LP) Flare
<p>^{f.} Fuel gas consumption for the routine flare flow rates are based on peak design purge rates (adopting conservative approach); the average flow rate is expected to be less than 50% of the peak design rate.</p> <p>^{g.} Based on the most recent plot plan which was provided by Woodfibre LNG.</p> <p>^{h.} Based on the grade elevations presented on the plot plan drawings, which were provided by Woodfibre LNG.</p> <p>^{i.} Pseudo stack parameters calculated following the methods in Section 10.1.1 of the Guideline (ENVP 2022a). While the CALPUFF model has a flare source type included, the Guideline (ENV 2022b) recommends modelling flares as a point source using pseudo stack parameters to represent an equivalent stack that will result in the same plume rise as a flare. Combustion occurs at the tip of the flare stack and consideration of combustion air is difficult to define. To account for appropriate plume rise in the dispersion model, the pseudo parameters are derived to assume 55% of the heat emitted is radiation loss and 45% is the sensible heat released. Pseudo stack calculation methodology is provided in Appendix C.</p> <p>^{j.} Stantec calculated using exhaust gas flow rate.</p> <p>^{k.} Calculated based on input gas sulphur content. Sulphur content of 488 ppmv for the thermal oxidizer (from BOG gas, acid gas, flash gas, and storage (condensate) gas) and sulphur content of 4 ppmv for fuel gas for the heat medium furnace, HP and LP flare pilot and purge. Refer to Appendix C for more details.</p> <p>^{l.} Calculated based on exhausted gas NO_x content 30 ppmv, which was provided by Woodfibre LNG.</p> <p>^{m.} Calculated based on NO_x emission factor 26 g/GJ (HHV), which was provided by Woodfibre LNG.</p> <p>^{n.} Estimated based on U.S.EPA AP 42 emission factors (U.S. EPA 2018).</p> <p>^{o.} Calculated based on Canadian Energy Partnership for Environmental Innovation (CEPEI) emission factor (CEPEI 2025).</p> <p>^{p.} Calculated based on the method presented by McEwen J.D.N and Johnson M.R (2012).</p> <p>^{q.} Calculated based on exhausted gas CO content 125 ppmv, which was provided by Woodfibre LNG.</p> <p>^{r.} Calculated based on exhausted gas CO content 47 ppmv (dry and 3% oxygen), which was provided by Woodfibre LNG.</p>				



6.2.2 Commissioning Emission Sources

During commissioning, equipment is tested and started up. Flaring is required to manage the hydrocarbons within affected sections of the LNG process and the subsequent re-start process to achieve the necessary LNG specification. The associated emissions, stack parameters, and flare stack pseudo parameters for flaring during commissioning are provided in Table 6.3.

For this assessment, it is conservatively assumed the thermal oxidizer and heat medium furnace operate at 100% load; however, during commissioning it is expected that the thermal oxidizer and heat medium furnace will operate at lower rates in the range of 30-50%. Stack parameters and emission rates for these are assumed the same as those in Normal Operations (Table 6.2). As there will be no prolonged or stable production of LNG during commissioning, it is assumed there are no marine vessels present.

Table 6.3 Stack Parameters and Emission Rates for Flaring during Commissioning

Source Identification		High Pressure (HP) Flare
Scenario Description ^a		Commissioning - (Liquefaction start up and stable operation)
Frequency		One event (a peak flaring event during commission)
Duration		Up to 38 days (within overall commissioning timeline)
Input Gas Properties ^a		
Input Gas Type ^b		Feed gas with 24 ppmv sulphur + BOG + Pilot and purge fuel gas
Input Gas HHV	MJ/m ³	40.9
Sulphur Content (derived from input gas flow rates below)	ppmv	21.5 ^c
Input Gas Flow Rate ^a		
Total Input Flow Rate	s m ³ /h	96,067
Feed Gas	s m ³ /h	85,500 (24 ppmv S, see Appendix D)
BOG Gas	s m ³ /h	9,500 (1.0 ppmv S, see Appendix D)
Pilot and Purge Fuel Gas	s m ³ /h	1,067 (4.0 ppmv, see Appendix D)
Stack Location (UTM Zone 10, NAD 83) ^d		
UTM Easting	m E	482,005
UTM Northing	m N	5,501,777
Grade Elevation ^e	m asl	8.5
Stack Physical Parameters ^a		
Stack Height	m	134.0
Stack Diameter	m	1.20



Source Identification		High Pressure (HP) Flare
Scenario Description ^a		Commissioning - (Liquefaction start up and stable operation)
Stack Pseudo Parameters ^f		
Effective Stack Height	m	180
Effective Stack Diameter	m	10.2
Effective Exit Velocity	m/s	20.0
Effective Exit Temperature	°C	1000
	K	1273
Emission Rates		
SO ₂ ^g	t/d	0.134
NO _x ^h	t/d	2.76
PM _{2.5} ⁱ	t/d	0.115
CO ^h	t/d	11.4
SO ₂ ^g	g/s	1.55
NO _x ^h	g/s	31.9
PM _{2.5} ⁱ	g/s	1.33
CO ^h	g/s	131

Notes:

- a. Provided by Woodfibre LNG. Based on the operating scenario of "High carbon dioxide"; where the facility received feed gas with high (2 mol%) carbon dioxide concentration. While this scenario is expected to occur very infrequently, it is the basis for the modelling as it will result in higher emissions compared to the average carbon dioxide concentration in the feed gas (adopting conservative approach).
- b. Gas compositions are provided in Appendix D.
- c. Sulphur content 21.5 ppmv was calculated based on sumproduct of sulphur content and gas flow rate for each input stream, including feed gas, BOG gas, and pilot and purge fuel gas. The sulphur content is 24, 1.0, and 4.0 ppmv for feed gas, BOG gas, and fuel gas, respectively. The fuel gas flow rate is 85,500, 9,500, and 1,067 sm³/h for feed gas, BOG gas, and fuel gas, respectively. Sulphur contents calculations are shown in Appendix C.
- d. Based on the most recent plot plan which was provided by Woodfibre LNG.
- e. Based on the grade elevations presented on the plot plan drawings, which were provided by Woodfibre LNG.
- f. Pseudo stack parameters calculated following the methods in Section 10.1.1 (Flare Source Parameters) of the Guideline (ENVP 2022a). While the CALPUFF model has a flare source type included, the Guideline (ENV 2022b) recommends modelling flares as a point source using pseudo stack parameters to represent an equivalent stack that will result in the same plume rise as a flare. Combustion occurs at the tip of the flare stack and consideration of combustion air is difficult to define. To account for appropriate plume rise in the dispersion model, the pseudo parameters are derived to assume 55% of the heat emitted is radiation loss and 45% is the sensible heat released.
- g. SO₂ estimated based on sulphur content in total input gas flow (21.5 ppmv) and total input gas flow rate (96,057 sm³/h). The combustion efficiency of 100% is applied for sulphur to SO₂ conversion.
- h. NO_x and CO estimated based on U.S.EPA AP 42 emission factors (U.S. EPA 2018).
- i. PM_{2.5} estimated based on the method presented by McEwen J.D.N and Johnson M.R (2012).



6.2.3 Stabilizing Operations Emission Sources

The stabilizing operations case reflects a period within the start-up period where a higher routine flare rate is possible to account for higher rates of gas passing valves. The additional flare flow rate during stabilizing operations will be modelled using the flow rates and emission rates shown in Table 6.4. It is assumed the Normal Operation emission sources will also be operating during this period. Stack parameters and emission rates for these sources are provided in Table 6.2. In stabilizing operations LNG will be produced and shipped from the Facility; therefore, marine vessels are present during this time. Stack parameters and emission rates for marine vessels are provided in Table 6.6.

Table 6.4 Stack Parameters and Emission Rates for Stabilizing Operations

Source Identification		High Pressure (HP) Flare	Low Pressure (LP) Flare
Scenario Description a		Stabilizing Operation	
Frequency and Duration		From First Cargo and Lasting for Years 1-2	
Input Gas Properties ^a			
Input Gas Type ^{a, b}		Passing Valves Feed Gas with 24 ppmv sulphur + Normal Operation HP Flare Gases (Purges + Design Leaks + Pilots)	Passing Valves, BOG + Normal Operation LP Flare Gases (Purges + Design Leaks + Pilots + Compressor Seals)
Input Gas HHV	MJ/m ³	39.8	32.8
Sulphur Content (derived from input gas flow rates below) ^c	ppmv	18.5	2.09
Input Gas Flow Rate ^a			
Total Input Flow Rate	s m ³ /h	3,887	1,565
Passing Valves Feed Gas with 24 ppmv sulphur	s m ³ /h	2,683 (24 ppmv S)	-
Passing Valves BOG	s m ³ /h	-	1,009 (1.0 ppmv S, see Appendix D)
Normal Operation HP Flare Gases	s m ³ /h	1,204 (6.1 ppmv S, see Table 6.2)	-
Normal Operation LP Flare Gases	s m ³ /h	-	557 (4.1 ppmv S, see Table 6.2)
Stack Location (UTM Zone 10, NAD 83) ^d			
UTM Easting	m E	482,005	482,005
UTM Northing	m N	5,501,777	5,501,784
Grade Elevation ^e	m asl	8.5	8.5



Source Identification		High Pressure (HP) Flare	Low Pressure (LP) Flare
Scenario Description a		Stabilizing Operation	
Stack Physical Parameters ^a			
Stack Height	m	134.0	134.0
Stack Diameter	m	1.20	0.76
Stack Pseudo Parameters ^f			
Effective Stack Height	m	143.8	139.8
Effective Stack Diameter	m	2.03	1.17
Effective Exit Velocity	m/s	20.0	20.0
Effective Exit Temperature	°C	1000	1000
	K	1273	1273
Emission Rates			
SO ₂ ^g	t/d	0.005	0.0002
NO _x ^h	t/d	0.109	0.036
PM _{2.5} ⁱ	t/d	0.005	0.002
CO ^h	t/d	0.447	0.148
SO ₂ ^g	g/s	0.054	0.002
NO _x ^h	g/s	1.26	0.417
PM _{2.5} ⁱ	g/s	0.054	0.022
CO ^h	g/s	5.17	1.71

Notes:

- a. Provided by Woodfibre LNG.
- b. Gas compositions are provided in Appendix D.
- c. Sulphur content calculated based on sumproduct of sulphur content and gas flow rate for each input stream.
For the HP, sulphur content is 24 ppmv for passing valves feed gas and 6.1 ppmv for normal operation HP flare gases (see Table 6.2). Flow rate is 2,683 sm³/h for passing valves feed gas and 1,204 sm³/h for normal operation HP flare gases.
For the LP, sulphur content is 1.0 ppmv for passing valves BOG and 4.0 ppmv for normal operation LP flare gases (see Table 6.2). Flow rate is 1,009 sm³/h for passing valves BOG and 557 sm³/h for normal operation LP flare gases.
- d. Based on the most recent plot plan which was provided by Woodfibre LNG.
- e. Based on the grade elevations presented on the plot plan drawings, which were provided by Woodfibre LNG.



Source Identification	High Pressure (HP) Flare	Low Pressure (LP) Flare
Scenario Description a	Stabilizing Operation	
<p>^{f.} Pseudo stack parameters calculated following the methods in Section 10.1.1 (Flare Source Parameters) of the Guideline (ENVP 2022a). While the CALPUFF model has a flare source type included, the Guideline (ENV 2022b) recommends modelling flares as a point source using pseudo stack parameters to represent an equivalent stack that will result in the same plume rise as a flare. Combustion occurs at the tip of the flare stack and consideration of combustion air is difficult to define. To account for appropriate plume rise in the dispersion model, the pseudo parameters are derived to assume 55% of the heat emitted is radiation loss and 45% is the sensible heat released</p> <p>^{g.} For the HP flare, SO₂ estimated based on sulphur content in total input gas flow (18.5 ppmv) and total input gas flow rate (3,887 sm³/h). For the LP flare, SO₂ estimated based on sulphur content in total input gas flow (2.09 ppmv) and total input gas flow rate (1,565 sm³/h). The combustion efficiency of 100% is applied for sulphur to SO₂ conversion.</p> <p>^{h.} NO_x and CO estimated based on U.S.EPA AP 42 emission factors (U.S. EPA 2018).</p> <p>^{i.} PM_{2.5} estimated based on the method presented by McEwen J.D.N and Johnson M.R (2012).</p>		

6.2.4 Non-Routine Scenarios

Table 6.5 contains emission details, stack parameters, and pseudo stack parameters associated with non-routine emission scenarios; three scenarios have been identified which represent where there will be elevated emissions from the flare stack or thermal oxidizer. This includes the following:

- **Process Upset Case:** During normal operations, there will be Facility trips that are typically caused by the action of a control of safety system. These are intermittent process upset events that can be due to various causes, from overall power failure to specific equipment issues. Flaring is required during the trip to manage the hydrocarbons within the affected section of the LNG process and during the re-start process to achieve the necessary LNG specification. The frequency of trips is anticipated to decrease over time, with up to 10 trips expected during the first year of operations, and for short periods of time (i.e., hours). This scenario will have elevated emissions compared to routine flaring operations (i.e., pilot and purge gas) due to the additional hydrocarbons being combusted. This assessment is conservative as all the facility equipment will not be at 100% normal operations when a process trip is occurring (e.g., heater medium furnace and thermal oxidizer may only be running at 30-50% of their design capacities).
- **Thermal Oxidizer High Inlet Sulphur Case:** Typical average inlet total sulphur is expected to be less than 24 ppmv; however, on rare occasions inlet total sulphur could increase to 45 ppmv (due to the addition of mercaptans into the feed gas) in turn increasing the concentration of total sulphur in the acid gas stream directed to the thermal oxidizer. This scenario will have elevated SO₂ emissions from the Thermal Oxidizer. This scenario will have elevated short-term (i.e., 1-hour) SO₂ emissions from the Thermal Oxidizer on the conservative assumption that the increase in inlet sulphur (mercaptans) is all directed to the Thermal Oxidizer rather than result in increase sulphur in LNG and condensate. This case is considered cumulatively with normal operations, marine vessels, the FortisBC Squamish V2 Compressor Station, and baseline concentrations.



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- **Thermal Oxidizer Trip:** In the low likelihood event of temporary unavailability of the thermal oxidizer the acid gas stream from the acid gas removal unit would be routed to the high-pressure flare and vented, along with the HP flash gas and storage gas that is usually routed to the Thermal Oxidizer. This scenario will be based on design sulphur concentration in acid gas stream and will evaluate ambient concentrations of TRS and H₂S. If predicted exceedances of odour based objectives are predicted, various percentiles will be presented to describe probability of odour occurrence concurrent with a Thermal Oxidizer Trip Scenario. The AQOs for TRS and H₂S are based upon odour detection rather than a toxicological reference value endpoint. A high inlet sulphur Thermal Oxidizer trip case is not proposed due to the improbability of this scenario occurring. It is considered highly improbable that the thermal oxidizer will trip simultaneously while the facility is receiving high inlet sulphur, and even more improbable that these two non-routine events would then overlap with worst-case meteorology. On this basis, this scenario is not modelled.

Each of the non-routine scenarios mentioned above will be modelled using the flow rates and emission rates shown in Table 6.5. The five-year meteorological data will be used for the modelling. Other non-routine scenarios that were considered but will not be included in the modelling as potential emissions are less than those described above and therefore effects to air quality will be less include:

- **Emergency depressurization:** The modules can be depressurized via the use of blowdown valves to reduce the volume of trapped hydrocarbons in equipment during an emergency. The blowdown valves significantly reduce the system pressure within 15 minutes to reduce the consequence from vessel leak or failure, and/or stress on the vessel (pending the emergency scenario). This emergency flaring event with a short duration will result in less emissions than a process upset case that results in a 24-hour flaring event, therefore the latter was selected for modelling.
- **Planned facility shutdown:** which will be scheduled every five years to allow for equipment maintenance and inspection. Emissions associated with the Process Upset Case described above and in Table 6.5 are higher than those associated with a planned facility shutdown.
- **Use of pipeline feed gas as fuel gas during periods when BOG is not available.** During normal operation, if the BOG compressor is offline and BOG-derived fuel gas is not available, the facility will use pipeline feed gas from the inlet as fuel gas. This also represents the BOG compressor failure scenario during ship loading, where gas flow rates and emissions would be lower than those assessed for the Process Upset Case. NO_x, PM_{2.5}, and CO emissions from the Heat Medium Furnace, Thermal Oxidizer, HP Flare, and LP Flare are unchanged when using pipeline feed gas as fuel gas. SO₂ emissions from the Heat Medium Furnace, HP Flare, and LP Flare are also unchanged, and the change in SO₂ emissions from the Thermal Oxidizer is negligible. Therefore, because the resulting changes in emissions are not substantial and the ship-loading BOG compressor failure case is bounded by the Process Upset Case, this scenario was not modelled.



Table 6.5 Stack Parameters and Emission Rates for Non-Routine Scenarios

Source Identification		Process Upset		Thermal Oxidizer	High Pressure (HP) Flare (Venting)
Scenario Description a		High Pressure (HP) Flare	Low Pressure (LP) Flare	High Inlet Sulphur	Thermal oxidizer Trip Scenario (Acid gas routed to HP Flare – Venting) (High CO2 Case)
Frequency		Ten events for each of year 1 and year 2, and five events for year 3 and after		Unlikely	Two events per year
Duration		Up to 24 hours		Up to 48 hours	Up to 48 hours
Input Gas Properties a					
Input Gas Type b		Feed gas with 45 ppmv sulphur + Normal Operation HP Flare Gases (Purges + Leaks + Pilots)	BOG from FST + Normal Operation LP Flare Gases (Purges + Leaks + Pilots + Compressor Seals) c	Same as thermal oxidizer normal operation, but with inlet gas sulphur content 45 ppmv	Vent gas (acid gas + flash gas + storage gas) + Normal Operation HP Flare Gases (Purges + Leaks + Pilots)
Input Gas HHV	MJ/m³	41.9	33.1	4.94	-
Sulphur Content (derived from input gas flow rates below)	ppmv	44.8 d	0.1 d	1,337 d	541 ppmv for vent gas d 6.1 ppmv for Normal operation HP flare gases (see Table 6.2)
Input Gas Flow Rate a					
Total Gas Flow Rate	s m³/h	257,504	21,776		8,845
Feed Gas (with High Inlet Sulphur)	s m³/h	256,300 d (45 ppmv S, see Appendix D)	-	-	-
BOG Gas from FST	s m³/h	-	21,219 (0 ppmv S, see Appendix D)	-	-
Normal Operation HP Flare Gases	s m³/h	1,204 (6.1 ppmv S, see Table 6-2)	-	-	1,204 (6.1 ppmv S, see Table 6.2; 0.64 ppmv H₂S)
Normal Operation LP Flare Gases	s m³/h	-	557 (4.1 ppmv S, see Table 6.2)	-	-
Thermal Oxidizer Gas Flow Rate (same as Normal Operation)	s m³/h		-	8,470 (1,337 ppmv S)	-
Vent Gas Flow Rate (same as Thermal Oxidizer Normal Operation, but excluding BOG gas)	s m³/h		-	-	7,641 (541 ppmv S, see Table 6.2; 311 ppmv H₂S)
Stack Location (UTM Zone 10, NAD 83) e					
UTM Easting	m E	482,005	482,005	481,672	482,005
UTM Northing	m N	5,501,777	5,501,784	5,501,676	5,501,777
Grade Elevation f	m asl	8.5	8.5	8.5	8.5
Stack Physical Parameters a					
Stack Height	m	134.0	134.0	49.335	134.0
Stack Diameter	m	1.20	0.76	1.38	1.20
Stack Pseudo Parameters g					
Effective Stack Height	m	208.3	154.3	-	-
Effective Stack Diameter	m	17.0	4.37	-	-
Effective Exit Velocity	m/s	20.0	20.0	18.7	2.40 (venting velocity) h



Source Identification		Process Upset		Thermal Oxidizer	High Pressure (HP) Flare (Venting)
Scenario Description a		High Pressure (HP) Flare	Low Pressure (LP) Flare	High Inlet Sulphur	Thermal oxidizer Trip Scenario (Acid gas routed to HP Flare – Venting) (High CO2 Case)
Effective Exit Temperature	°C	1000	1000	982	45 (venting temperature) ⁱ
	K	1273	1273	1255	318 (venting temperature) ⁱ
Emission Rates					
SO ₂ ^j	t/d	0.750	0.0001	0.736	-
NO _x ^k	t/d	7.58	0.506	0.026	-
PM _{2.5} ^l	t/d	0.625	0.026	0.001	-
CO ^k	t/d	31.2	2.08	0.026	-
TRS	t/d	-	-	-	0.143 ^m
H ₂ S	t/d	-	-	-	0.082 ⁿ
SO ₂ ^j	g/s	8.69	0.002	8.52	-
NO _x ^k	g/s	87.7	5.86	0.302	-
PM _{2.5} ^l	g/s	7.24	0.302	0.007	-
CO ^k	g/s	361	24.0	0.296	-
TRS	g/s		-	-	1.66 ^m
H ₂ S	g/s		-	-	0.948 ⁿ

Notes:

a. Provided by Woodfibre LNG. Based on the operating scenario of “High carbon dioxide”; where the facility received feed gas with high (2 mol%) carbon dioxide concentration. While this scenario is expected to occur very infrequently, it is the basis for the modelling as it will result in higher emissions compared to the average carbon dioxide concentration in the feed gas (adopting conservative approach).

b. Gas compositions are provided in Appendix D.

c. Based on flaring time required to safety shut facility after the upset and restart of the facility after troubleshooting including flaring of the BOG generated by FSTs when the LNG facility is not running.

d. Sulphur contents calculations are shown in Appendix C.

e. Based on the most recent plot plan which was provided by Woodfibre LNG.

f. Based on the grade elevations presented on the plot plan drawings, which were provided by Woodfibre LNG.

g. Pseudo stack parameters calculated following the methods in Section 10.1.1 (Flare Source Parameters) of the Guideline (ENVP 2022a). While the CALPUFF model has a flare source type included, the Guideline (ENV 2022b) recommends modelling flares as a point source using pseudo stack parameters to represent an equivalent stack that will result in the same plume rise as a flare. Combustion occurs at the tip of the flare stack and consideration of combustion air is difficult to define. To account for appropriate plume rise in the dispersion model, the pseudo parameters are derived to assume 55% of the heat emitted is radiation loss and 45% is the sensible heat released.

h. Stantec calculated based on gas flow rate combined all gas streams.

i. Provided by Woodfibre LNG.

j. SO₂ estimated based on sulphur content in total input gas flow and total input gas flow rate The combustion efficiency of 100% is applied for sulphur to SO₂ conversion.

k. NO_x and CO estimated based on U.S.EPA AP 42 emission factors (U.S. EPA 2018).

l. PM_{2.5} estimated based on the method presented by McEwen J.D.N and Johnson M.R (2012)

^m TRS emission based on total sulphur content of 541 ppmv in venting gases (acid gas + flash gas + storage gas) and total sulphur content of 6.1 ppmv in routine operation HP gases.

ⁿ. H₂S emission based on H₂S content of 311 ppmv in venting gases (acid gas + flash gas + storage gas) and H₂S content of 0.64 ppmv in normal operation HP gases. See Appendix D for the H₂S content.



6.2.5 Marine Vessels

Marine vessels associated with the Project are exempt from the inclusion in the WDA permit given their emissions are governed under the International Convention for the Prevention of Pollution from Ships (MARPOL). North American Emissions Control Area (NA-ECA), adopted under MARPOL Annex VI, came into effect in August 2012, that includes limits on SO_x and NO_x from ship exhausts.

However, these vessels are sources of emissions and are included in the assessment to understand the cumulative effects with the Project emission sources. The basis for the assessment herein is based on the emissions from the LNG carrier and harbour tug boats (refer to Table 6.6) during the following activities: the LNG carrier being maneuvered into the berth position (3 hours) at the marine terminal with support by three harbour tug boats, loading the LNG from the FSTs (30 hours), then maneuvered away from the berth with support from three harbour tug boats (3 hours). Further information on the associated emissions is provided in Table 6.6, Table 6.7, and Table 6.8.

Table 6.6 Marine Vessel Emission Sources

Vessel	Quantity	Combustion Sources	Operating Scenarios
LNG Carrier	1	Two main engines, four auxiliary engines, two boilers, and one gas combustion unit (GCU)	<p>While the LNG carrier maneuvers into the berth, two main engines, two auxiliary engines, and the GCU will operate.</p> <p>During the LNG loading, three auxiliary engines, two boilers, and the GCU will operate. It is assumed the main engines will not operate while LNG is loading.</p> <p>While the LNG carrier maneuvers out of the berth, two main engines and two auxiliary engines will operate.</p> <p>During maneuvering the main engines will use marine gas oil (MGO) for fuel. The auxiliary engines and GCU will use LNG boil-off gas for fuel. The two boilers will use MGO.</p>
Tug Boat	1	One main engine	Marine diesel oil (MDO), renewable R100, or similar



Table 6.7 LNG Carrier Specification and Emission Summary (annual average)

Source Identification		Main Engine_1	Main Engine_2	Auxiliary Engine_1	Auxiliary Engine_2	Auxiliary Engine_3	Auxiliary Engine_4	Boiler_1	Boiler_2	Gas Combustion Unit (GCU)
Equipment Make and Model ^a		Doosan Man 5G70ME-C.5-GI	Doosan Man5G70ME-C.5-GI	Wartsila W9L34DF	Wartsila W9L34DF	Wartsila W6L34DF	Wartsila W6L34DF	Allaborg Missoin OS-Tci, Evap rate 7,500kg.hr	Allaborg Missoin OS-Tci, Evap rate 7,500kg.hr	Wartsila - Moss Inert Gas System combined IGG/GCU
Operational Data ^a										
Engine Power	kW	13,470	13,470	4,320	4,320	2,880	2,880			
Fuel Type ^b		MGO	MGO	LNG (i.e., BOG)	LNG (i.e., BOG)	LNG (i.e., BOG)	LNG (i.e., BOG)	MGO	MGO	LNG (i.e., BOG)
Sulphur Content	%	0.1	0.1	1 ppmv	1 ppmv	1 ppmv	1 ppmv	0.1	0.1	1 ppmv
Engine NO _x Emission Standard		Tier II	Tier II	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Activity - Maneuvering In ^a										
Working or not		Yes	Yes	Yes	Yes	No	No	No	No	Yes
Load Factor		0.15	0.15	0.75	0.75	-	-	-	-	0.50
Duration	hour	3	3	3	3	-	-	-	-	3
Activity - Port Loading ^a										
Working or not		No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Load Factor				0.6	-	0.6	0.6	-	-	0.5
Duration	hour			30	-	30	30	30	30	4
Activity Maneuvering Out ^a										
Working or not		Yes	Yes	Yes	Yes	No	No	No	No	No
Load Factor		0.15	0.15	0.75	0.75	-	-	-	-	-
Duration	hour	3	3	3	3	-	-	-	-	-
Stack Location (UTM Zone 10, NAD 83) ^c										
UTM Easting	m E	482,078	482,076	482,077	482,076	482,075	482,073	482,072	482,072	482,071
UTM Northing	m N	5,501,557	5,501,562	5,501,554	5,501,556	5,501,559	5,501,562	5,501,555	5,501,558	5,501,559
Base Elevation ^d	m asl	0	0	0	0	0	0	0	0	0
Stack Dimensions ^a										
Stack Height	m	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2
Stack Diameter	m	1.1	1.1	0.7	0.7	0.6	0.6	0.6	0.6	0.45
Exhaust Parameters										
Exit Velocity ^e	m/s	5.98	5.98	30.2	35.5	27.4	27.4	18.1	18.1	48.3 for hourly/daily prediction; 24.2 for annual prediction
Exit Temperature ^a	°C	230	230	413	413	416	416	384	384	40.0 ^f
	K	503	503	686	686	689	689	657	657	313 ^f



Source Identification		Main Engine_1		Main Engine_2		Auxiliary Engine_1		Auxiliary Engine_2		Auxiliary Engine_3		Auxiliary Engine_4		Boiler_1		Boiler_2		Gas Combustion Unit (GCU)	
Emission Rates (Hourly/Daily) (Include emissions from Port Loading activity at the terminal)																			
SO ₂ ^h	kg/h	-	-	0.002	-	0.001	0.001	0.198	0.198	0.006									
NO _x	kg/h	-	-	3.37	-	2.25	2.25	0.279	0.279	3.13									
PM _{2.5}	kg/h	-	-	0.078	-	0.052	0.052	0.026	0.026	0.047									
CO	kg/h	-	-	3.37	-	2.25	2.25	0.070	0.070	2.63									
SO ₂ ^h	g/s	-	-	0.0004	-	0.0003	0.0003	0.055	0.055	0.002									
NO _x	g/s	-	-	0.936	-	0.624	0.624	0.077	0.077	0.870									
PM _{2.5}	g/s	-	-	0.022	-	0.014	0.014	0.007	0.007	0.013									
CO	g/s	-	-	0.936	-	0.624	0.624	0.019	0.019	0.731									
Emission Rates (Annual) (Include emissions from Maneuvering In, Port Loading, and Maneuvering Out activities at the terminal) ⁱ																			
SO ₂ ^h	kg/h	0.026	0.026	0.0003	0.0001	0.0001	0.0001	0.027	0.027	0.0002									
NO _x	kg/h	0.845	0.845	0.577	0.115	0.308	0.308	0.038	0.038	0.090									
PM _{2.5}	kg/h	0.010	0.010	0.013	0.003	0.007	0.007	0.004	0.004	0.001									
CO	kg/h	0.102	0.102	0.577	0.115	0.308	0.308	0.010	0.010	0.076									
SO ₂ ^h	g/s	0.007	0.007	0.0001	0.00001	0.00004	0.00004	0.008	0.008	0.0001									
NO _x	g/s	0.235	0.235	0.160	0.032	0.085	0.085	0.011	0.011	0.025									
PM _{2.5}	g/s	0.003	0.003	0.004	0.001	0.002	0.002	0.001	0.001	0.0004									
CO	g/s	0.028	0.028	0.160	0.032	0.085	0.085	0.003	0.003	0.021									

Notes:

a. Provided by Woodfibre LNG.

b. BOG gas compositions provided in Appendix D.

c. Based on the most recent plot plan which was provided by Woodfibre LNG.

d. Extracted based on the Canadian Digital Elevation Model (CDEM) database (NRCan, 2016).

e. Stantec calculated using exhausted gas flow rate. For the GCU, exist velocities are 24.2 and 48.2 m/s for “Maneuvering In” activity and “Port Loading” activity, respectively. The minimum value of 24.2 is selected for the annual average predictions. The 48.2 m/s from “Port Loading” activity is used for the hourly/daily average predictions.

f. Assumed by Stantec based on GCU flue gas system with seawater-cooled scrubber installed.

g. For main engines and auxiliary engines, emission calculations based on emission factors from “Ports Emissions Inventory Guidance: Methodologies for Estimating Port-Related and Goods Movement Mobile Source Emissions” (U.S.EPA 2022). As main engine (with MGO) load factors are less than 20%, low load adjustment factors of 1.32, 1.06, 1.11, 1.32 from U.S. EPA (2022) were applied for LNG Carrier main engine emission estimations for SO₂, NO_x, PM_{2.5}, and CO respectively.

For GCU, NO_x, and CO emission estimations were based on U.S. EPA AP42 emission factors (U.S. EPA 1998) and PM_{2.5} emission estimations based on CEPEI emission factor (CEPEI 2025).

h. Estimated based on sulphur content.

i. For boilers with MGO fuel, emission estimations were based on U.S. EPA AP 42 emission factors (U.S.EPA 2010).



Table 6.8 Tugboat Specification and Emission Summary

Source Identification		Tugboat West	Tugboat Center	Tugboat East
Engine Make and Model ^a		2x MAN 16V175D	2x MAN 16V175D	2x MAN 16V175D
Operational Data ^a				
Engine Power	kW	5,440	5,440	5,440
Fuel Type		MDO (Renewable R100 or similar)		
Sulphur Content	%	0.01		
Engine NO _x Emission Standard		Tier III		
Load Factor		0.5	0.5	0.5
Duration for LNG Carrier Maneuvering In	hour	3	3	3
Duration for LNG Carrier Maneuvering Out	hour	3	3	3
Stack Location (UTM Zone 10, NAD 83)				
UTM Easting	m E	482,125	482,207	482,289
UTM Northing	m N	5,501,552	5,501,591	5,501,631
Elevation	m asl	0	0	0
Stack Dimensions ^a				
Stack Height	m	11.7	11.7	11.7
Stack Diameter	m	0.6	0.6	0.6
Exhaust Parameters				
Exit Velocity ^b	m/s	14.6	14.6	14.6
Exit Temperature ^c	°C	487	487	487
	K	760	760	760
Emission Rates (Hourly/Daily) ^d (assumed one tugboat associated with Port Loading activity)				
SO ₂ ^e	kg/h	-	-	0.113
NO _x	kg/h	-	-	3.54
PM _{2.5}	kg/h	-	-	0.089
CO	kg/h	-	-	5.44
SO ₂ ^e	g/s	-	-	0.031
NO _x	g/s	-	-	0.982
PM _{2.5}	g/s	-	-	0.025
CO	g/s	-	-	1.51



Source Identification		Tugboat West	Tugboat Center	Tugboat East
Engine Make and Model ^a		2x MAN 16V175D	2x MAN 16V175D	2x MAN 16V175D
Emission Rates (Annual Average) ^{d, f}				
SO ₂ ^e	kg/h	0.003	0.003	0.003
NO _x	kg/h	0.097	0.097	0.097
PM _{2.5}	kg/h	0.002	0.002	0.002
CO	kg/h	0.149	0.149	0.149
SO ₂ ^e	g/s	0.0009	0.0009	0.0009
NO _x	g/s	0.027	0.027	0.027
PM _{2.5}	g/s	0.0007	0.0007	0.0007
CO	g/s	0.041	0.041	0.041

Notes:

- a. Provided by Woodfibre LNG.
- b. Calculated using exhausted gas flow rate.
- c. Manufacturer information.
- d. Calculated based on U.S.EPA emission factors (U.S.EPA 2022).
- e. Estimated based on sulphur content.
- f. Calculated based on 40 LNG Carriers per year.

6.3 Model Emission Scenarios

If applicable, describe the different model emission scenarios required for the assessment if multiple options are under consideration. For example, different source characteristics (stack dimensions, emission rates) or source arrangements (locations, types, buildings) may need separate modelling runs to examine the air quality implications of different scenarios.

Nine scenarios (or “cases”) will be modelled. This includes three cases representing normal operations, two cases representing stabilizing operations, one commissioning case, and three non-routine cases. As there are no existing facilities near the Project, a Base Case is not required. A representative baseline concentration will be added to predicted concentrations to account for existing sources that are not modelled (i.e., traffic, other marine traffic, residential heating, small industrial and commercial sources) (refer to Section 0). Further information on each case is provided in the following sections.



6.3.1 Normal Operations Scenarios

Further information on each of the three normal operations cases is provided below:

- **Project-Alone Case:** Emissions from the facility only including the heat medium furnace, thermal oxidizer, and routine flaring (i.e., pilot and purge) (refer to Table 6.1).
- **Application Case:** Includes the sources from the Project-Alone Case, plus associated marine vessels (refer to Table 6.1 and Table 6.6), and the addition of baseline concentrations (Table 8.2).
- **Cumulative Case:** Includes the Application Case plus the FortisBC Squamish V2 Compressor Station (i.e., two turbines, one boiler), and the addition of baseline concentrations. The following operations are considered for the Cumulative Case.
 - For short-term averaging periods (1-hour, 24-hour): FortisBC Squamish V2 Compressor Station peak operations include two turbines and one boiler operating at 100% rate capacity all of the time.
 - For annual averaging periods: FortisBC Squamish V2 Compressor Station, annual operations include one turbine operating at 100% rated capacity all of the time, the second turbine operating at 100% rated capacity for 20% of the time, one boiler operating at 75% load, and one emergency generator operating at 100% load for 10% of the time.

The normal modelling scenarios are summarized in Table 6.9 and the summary of scenario emissions is presented in Table 6.10.

Table 6.9 Summary of Emission Sources for each Normal Operations Scenarios

Equipment	Project-Alone Case	Application Case	Cumulative Case
Project Equipment			
Heat Medium Furnace	x	x	x
Thermal Oxidizer	x	x	x
High Pressure (HP) Flare	x ^a	x ^a	x ^a
Low Pressure (LP) Flare	x ^b	x ^b	x ^b
LNG Carrier	N/A	x	x
Harbour Assist Tugboats	N/A	x	x
Emergency Generators	N/A	N/A	N/A
Firewater Pumps	N/A	N/A	N/A
Baseline	N/A	x	x



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Equipment	Project-Alone Case	Application Case	Cumulative Case
FortisBC Squamish Compressor Station ^c			
Turbine 1	N/A	N/A	x
Turbine 2	N/A	N/A	x
Boiler 1	N/A	N/A	x
Boiler 2 (backup)	N/A	N/A	N/A
Generator	N/A	N/A	x

Notes:

'x' means operational in the associated scenario

'N/A' means not operational in the associated scenario

a. Includes normal operation of the HP flare (i.e., purge and pilot fuel gas and leak feed gas).

b. Includes normal operation of the HP flare (i.e., purge and pilot fuel gas, leak BOG gas, and compressor seal feed gas).

c. Provided by FortisBC.

Table 6.10 Emissions Summary for Normal Operations Scenario

Modelling Scenario	Emissions (tonnes/year)			
	SO ₂	NO _x	PM _{2.5}	CO
Project-Alone Case, Total ^a	95.8	43.1	1.61	119
Application Case, Total ^b	96.8	73.4	2.19	137
Cumulative Case, Total ^c	97.2	88.2	4.95	152

Notes:

a. Project-Alone Case, Total includes one heat medium furnace, one thermal oxidizer, one normal operation HP flare (i.e., purge and pilot fuel gas and leak feed gas), and one normal operation LP flare (i.e., purge and pilot fuel gas, leak BOG gas, and compressor seal feed gas). Plant availability factor 97% is applied for these sources. The 97% availability factor is for the overall facility, based on the Reliability, Availability, and Maintainability (RAM) study that assesses production availability and production reliability (including potential facility downtime due to maintenance or emergencies). This is applied to the annual average emission rates.

b. The Application Case, Total emissions represent the emissions resulting from the Project-Alone Case and associated marine vessels plus baseline concentrations. Note that the marine vessel emissions are based on the annual average values.

c. The Cumulative Case, Total emissions include the Application Case with baseline added and the FortisBC Squamish V2 Compressor Station annual emissions (i.e., one turbine operates 100% of time, the other turbine operates 20% of time, one boiler with 75% load operates 100% of time, and one generator operates 10% of time during one year).



6.3.2 Commissioning Scenario

The commissioning scenario evaluates higher rates of flaring that occur throughout commissioning. The following operations are considered for this scenario:

- Emissions from the facility including the heat medium furnace, thermal oxidizer, commissioning flaring, plus baseline.

The commissioning operating scenarios are summarized in Table 6.11 and the summary of scenario emissions is presented in Table 6.12.

Table 6.11 Summary of Emission Sources for Commissioning Scenario

Equipment	Commissioning Case
Project Equipment	
Heat Medium Furnace	x
Thermal Oxidizer	x
High Pressure (HP) Flare	x ^a
Low Pressure (LP) Flare	x ^b
LNG Carrier	N/A
Harbour Assist Tugboats	N/A
Emergency Generators	N/A
Firewater Pumps	x
Baseline	N/A
FortisBC Squamish Compressor Station^a	
Turbine 1	N/A
Turbine 2	N/A
Boiler 1	N/A
Boiler 2 (backup)	N/A
Generator	N/A

Notes:

'x' means operational in the associated scenario

'N/A' means not operational in the associated scenario

^a. Includes commissioning operation of the HP flare (i.e., feed gas, BOG gas, and purge and pilot fuel gas).

^b. Includes commissioning operation of the LP flare (i.e., purge and pilot fuel gas)

^c. Provided by FortisBC



Table 6.12 *Emissions Summary for Commissioning Scenario*

Modelling Scenario	Emissions (tonnes/year)			
	SO ₂	NO _x	PM _{2.5}	CO
Commissioning Case, Total ^a	15.4	108	4.50	440

Notes:

- ^a. Total includes one heat medium furnace, one thermal oxidizer, one commissioning HP flare (feed gas, BOG gas, and purge and pilot fuel gas), and one commissioning LP flare (i.e., purge and pilot fuel gas). The total emissions are estimated based on one event per year and one event lasting for 38 days.

6.3.3 **Stabilizing Operations Scenarios**

Stabilizing operations scenarios are similar to normal operations but include higher rates of flaring that might occur throughout the first two years of operations as a result of passing valves. The following cases are considered:

- **Project Stabilizing Operations Case:** Emissions from the facility including the heat medium furnace, thermal oxidizer, stabilizing operations flaring.
- **Application Case – Stabilizing Operations:** Stabilizing Operations Project Case plus associated marine vessels and baseline.

The stabilizing operations scenarios are summarized in Table 6.13 and the summary of scenario emissions is presented in Table 6.14.

Table 6.13 *Summary of Emission Sources for Stabilizing Operations Scenario*

Equipment	Project Stabilizing Operations Case	Application Case – Stabilizing Operations
Project Equipment		
Heat Medium Furnace	x	x
Thermal Oxidizer	x	x
High Pressure (HP) Flare	x ^a	x ^a
Low Pressure (LP) Flare	x ^b	x ^b
LNG Carrier	N/A	x
Harbour Assist Tugboats	N/A	x
Emergency Generators	N/A	N/A
Firewater Pumps	N/A	N/A
Baseline	N/A	x



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Equipment	Project Stabilizing Operations Case	Application Case – Stabilizing Operations
FortisBC Squamish Compressor Station		
Turbine 1	N/A	N/A
Turbine 2	N/A	N/A
Boiler 1	N/A	N/A
Boiler 2 (backup)	N/A	N/A
Generator	N/A	N/A

Notes:

'x' means operational in the associated scenario

'N/A' means not operational in the associated scenario

a. Includes stabilizing operation of the HP flare (i.e., passing valves feed gas, together with normal operation HP flare gases).

b. Includes stabilizing operation of the LP flare (i.e., BOG gas, together with normal operation LP flare gases).

Table 6.14 Emissions Summary for Stabilizing Operations Scenario

Modelling Scenario	Emissions (tonnes/year)			
	SO ₂	NO _x	PM _{2.5}	CO
Project Stabilizing Operations Case, Total ^a	97.3	79.1	3.17	267
Application Case – Stabilizing Operations, Total ^b	98.3	109	3.76	285

Notes:

a. Project Stabilizing Operations Case, Total includes one heat medium furnace, one thermal oxidizer, stabilizing operation HP flare (i.e., passing valve feed gas and normal operation HP flare gases), and stabilizing operation LP flare (i.e., passing valve BOG gas and normal operation LP flare gases). Plant availability factor 97% is applied for these sources. The 97% availability factor is for the overall facility, based on the Reliability, Availability, and Maintainability (RAM) study that assesses production availability and production reliability (including potential facility downtime due to maintenance or emergencies). This is applied to the annual average emission rates.

b. The Application Case – Stabilizing Operations, Total emissions represent the emissions resulting from the Project-Alone Case and associated marine vessels plus baseline concentrations. Note that the marine vessel emissions are based on the annual average values.



6.3.4 Non-Routine Operations Scenarios

Three non-routine emission scenarios are assessed (described in Section 6.2.4) including in combination with other emissions that may be operating at the time of each non-routine event.

- Process Upset Case (includes flaring at HP Flare and of BOG to the LP Flaring, thermal oxidizer, heat medium furnace, and marine vessels). Results are also presented for emissions from the flare by itself.
- Thermal Oxidizer High Inlet Sulphur Case (normal operations with thermal oxidizer emitting higher than typical SO₂ emission rates associated with high inlet sulphur and added baseline).
- Thermal Oxidizer Trip to Flare (Venting) Case – Assessed in isolation as emissions of TRS and H₂S from other sources are negligible.

The Non-Routine modelling scenarios are summarized in Table 6.15. Summary of scenario emissions are presented in Table 6.16, Table 6.17 and Table 6.18.

Process Upset Case

Table 6.15 Summary of Emission Sources for Process Upset Scenario

Equipment	Project-Alone Case
Project Equipment	
Heat Medium Furnace	x
Thermal Oxidizer	x
High Pressure (HP) Flare	x ^a
Low Pressure (LP) Flare	x ^b
LNG Carrier	x
Harbour Assist Tugboats	x
Emergency Generators	N/A
Firewater Pumps	N/A
Baseline	x
FortisBC Squamish Compressor Station^a	
Turbine 1	N/A
Turbine 2	N/A
Boiler 1	N/A



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Equipment	Project-Alone Case
Boiler 2 (backup)	N/A
Generator	N/A

Notes:

'x' means operational in the associated scenario

'N/A' means not operational in the associated scenario

- a. Includes process upset operation of the HP flare (i.e., feed gas resulted from this operation, together with normal operation HP flare gases).
- b. Includes process upset operation of the LP flare (i.e., BOG gas resulted from this operation, together with normal operation LP flare gases).

Table 6.16 Emissions Summary for x Process Upset Scenario

Modelling Scenario	Emissions (tonnes/event)			
	SO ₂	NO _x	PM _{2.5}	CO
Process Upset, Total ^a	1.0	8.2	0.66	33.5

Notes:

- a. Process Upset, Total includes one heat medium furnace, one thermal oxidizer, one HP flare associated with the process upset operation (i.e., feed gas resulted from this operation, together with normal operation HP flare gases), and one LP flare associated with the process upset operation (i.e., BOG gas resulted from this operation, together with normal operation LP flare gases). and associated marine vessels plus baseline concentrations.

Thermal Oxidizer with High Inlet Sulphur Operation

Table 6.17 Summary of Emission Sources for Scenario Associated with Thermal Oxidizer with High Inlet Sulphur Operation

Equipment	Project-Alone Case	Application Case	Cumulative Case
Project Equipment			
Heat Medium Furnace	x	x	x
Thermal Oxidizer	x	x	x
High Pressure (HP) Flare	x ^a	x ^a	x ^a
Low Pressure (LP) Flare	x ^b	x ^b	x ^b
LNG Carrier	N/A	x	x
Harbour Assist Tugboats	N/A	x	x



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Equipment	Project-Alone Case	Application Case	Cumulative Case
Emergency Generators	N/A	N/A	N/A
Firewater Pumps	N/A	N/A	N/A
Baseline	N/A	x	x
FortisBC Squamish Compressor Station ^c			
Turbine 1	N/A	N/A	x
Turbine 2	N/A	N/A	x
Boiler 1	N/A	N/A	x
Boiler 2 (backup)	N/A	N/A	N/A
Generator	N/A	N/A	x

Notes:

'x' means operational in the associated scenario

'N/A' means not operational in the associated scenario

a. Includes normal operation of the HP flare (i.e., purge and pilot fuel gas and leak feed gas).

b. Includes normal operation of the LP flare (i.e., purge and pilot fuel gas, leak BOG gas, and compressor seals feed gas).

c. Provided by FortisBC.

Table 6.18 Emissions Summary for Scenario Associated with Thermal Oxidizer with High Inlet Sulphur Operation

Modelling Scenario	Emissions (tonnes/event)			
	SO ₂	NO _x	PM _{2.5}	CO
Project-Alone Case, Total ^a	1.48	0.243	0.009	0.671
Application Case, Total ^b	1.48	0.409	0.012	0.770
Cumulative Case, Total ^c	1.48	0.490	0.027	0.852

Notes:

a. Project-Alone Case, Total includes one heat medium furnace, one thermal oxidizer with high inlet sulphur, one normal operation HP flare (i.e., purge and pilot fuel gas and leak feed gas), and one normal operation LP flare (i.e., purge and pilot fuel gas, leak BOG gas, and compressor seal feed gas).

b. The Application Case, Total emissions represent the emissions resulting from the Project-Alone Case and associated marine vessels plus baseline concentrations. Note that the marine vessel emissions are based on the annual average values.

c. The Cumulative Case, Total emissions include the Application Case with baseline added and the FortisBC Squamish V2 Compressor Station annual emissions. Note that the emissions from the FortisBC Squamish V2 Compressor Station are based on the annual emissions (i.e., one turbine operates 100% of time, the other turbine operates 20% of time, one boiler with 75% load operates 100% of time, and one generator operates 10% of time during one year).



Thermal Oxidizer Trip Case

Thermal oxidizer trip case was assessed in isolation as emissions of TRS and H₂S from other sources are negligible. The TRS and H₂S emission rates associated with the thermal oxidizer trip operation (i.e., from the HP flare venting source) are 0.143 and 0.082 t/d (Table 6.5), respectively.

6.4 Source Emission Rate Variability

Do emissions have sub-hourly variation (e.g., blow-down flares with high emission peaks during the hour)? If so, describe the approach to assess air quality implications of those sub-hourly high emission peaks.

Normal operations emission sources are depicted as continuous at maximum estimated emission rates (see Section 6.2.1).

Non-routine emission scenarios related to process Trips are expected to last 12 to 24 hours while the plant recovers.

Describe the approach to assess air quality implications under the 25, 50, 75% emission scenario. See Section 3.4.2 (ENVP, 2022a).

Reduced capacity emission scenarios are not applicable for normal operations. Equipment is assessed as operating at 100% capacity continuously.

If there are batch processes, provide a temporal emission profile (emission rate vs time) for each batch process.

There are no batch processes associated with the Project.

Describe anticipated abnormal emission scenarios (e.g., start-up, shut-down, maintenance of control works) and their anticipated frequency of occurrence. See Section 3.4.3. (ENVP, 2022a).

See Section 6.3.4 for a description of the non-routine flaring scenario.



7 Applicable Air Quality Objectives

7.1 British Columbia Air Quality Objectives

Effects on air quality are determined, in part, by comparing predicted ground-level concentrations of the substances to the applicable AQO. The AQOs are used to gauge current and historical air quality and guide decisions on environmental impact assessments and authorizations.

In BC, ENVP have stated that the BC AQOs are applicable beyond the facility fence line ([ENVP, 2016], [ENVP, 2020]). Where exceedances of the AQO are predicted through dispersion modelling, the ENVP considers the context of magnitude, frequency, timing, and proximity to sensitive receptors. Should there be exceedances of the AQO, ENVP would manage these in accordance with the federal Air Zone Management Framework (Canadian Council of Ministers of Environment [CCME] [CCME, 2019]) for improvements in air quality across the affected area and would include all important sources (ENVP, 2020).

The BC AQOs for NO₂ are based on the Canadian Ambient Air Quality Standards (CAAQS), announced by the Government of Canada in 2017 (CEPA, 2017) for the year 2020. The CCME have stated that achievement of the CAAQS is determined on an airshed and air zone basis, which covers broad geographical areas (CCME, 2019). They are regional ambient standards and not intended to be applied to individual projects and facilities as regulatory standards (CCME, 2019). Rather, they are used by provinces and territories to guide air zone management actions intended to reduce ambient concentrations below the CAAQS and prevent CAAQS exceedances. The ENVP has recently adopted the 2025 CAAQS for SO₂ as the BC AQO (ENVP, 2025). The ENVP have not stated that the 2025 CAAQS for NO₂ will be adopted as the BC AQO.

The BC AQOs for NO₂, SO₂, PM_{2.5}, and CO applicable to this assessment are shown in Table 7.1 (ENVP, 2025).



Table 7.1 British Columbia Air Quality Objectives

Substance	Averaging Interval	British Columbia Air Quality Objective (µg/m ³)
NO ₂	1-hour	113 ^a
	Annual	32 ^b
SO ₂	1-hour	170 ^c
	Annual	10.5 ^d
PM _{2.5}	24-hour	25 ^e
	Annual	8 ^f
PM ₁₀	24-hour	50
CO	1-hour	14,300
	8-hour	5,500

Notes:

- ^a. Achievement for 1-hour NO₂ is based on 3-year average of the annual 98th percentile of daily 1-hour maximum. This requires the extraction of the highest predicted 1-hour value at each location for each day, followed by the calculation of the 98th percentile (the eighth highest) of those 365 values for each year, then average the three annual values.
- ^b. Achievement for annual NO₂ is based on the average of all 1-hour average concentrations over a single calendar year.
- ^c. Achievement for 1-hour SO₂ is based on 3-year average of the annual 99th percentile of daily 1-hour maximum. This requires the extraction of the highest predicted 1-hour value at each location for each day, followed by the calculation of the 99th percentile (the fourth highest) of those 365 values for each year, then average the three annual values.
- ^d. Achievement for SO₂ is based on the average of 1-hour concentrations averaged over one year.
- ^e. Achievement for PM_{2.5} is based on annual 98th percentile of daily average, averaged over one year.
- ^f. Achievement for PM_{2.5} is based on annual average, averaged over one year.

7.2 Other Regulatory Criteria

Other important criteria for the assessment of potential air quality effects include the critical levels, screening thresholds, and empirical critical loads listed in the World Health Organization (2000) and Air Pollution Information System (2016) to assess potential effects of nitrogen and sulphur deposition on vegetation. The criteria employed in this assessment are presented in Table 7.2.



Table 7.2 Criteria for Critical Levels, Screening Threshold, and Empirical Critical Load

Substance	Averaging Interval	Pathway	Criteria	Reference
Terrestrial Ecosystem				
NO _x as NO ₂ ^a	Annual	Atmospheric Concentration Critical Level	30 µg/m ³	World Health Organization 2000, Air Pollution Information System 2016
SO ₂	Annual		10 µg/m ³	
Nitrogen Deposition	Annual	Deposition Screening Threshold	5 kg/ha/yr	ENVP 2014
Sulphur Deposition	Annual		7.5 kg/ha/yr	
Acid Deposition (Nitrogen + Sulphur) -	Annual		150 eq/ha/yr	
Aquatic Ecosystem				
Nitrogen and/or Sulphur Deposition	Annual	Assessment Area	100 eq/ha/yr S+N or 3 kg/ha/yr N whichever is greater	ENVP 2015
Nitrogen Deposition	Annual	Eutrophication Empirical Critical Load	1 to 10 kg/ha/yr N (1 to 4 kg/ha/yr used for this assessment based on ecosystem type)	CLRTAR 2024

Note:

NO_x parameter is "NO_x as NO₂" (NO_x = NO + NO₂), and not NO₂ alone.



8 Baseline Concentration

Indicate method used to determine baseline concentrations for each pollutant (Section 8.1):

- ☒ monitoring data (Section 8.1.1 and 8.1.2)
☐ establish monitoring program (Section 8.1.3)
☐ modelled sources (Section 8.1.5)
☐ other method (describe)

The term “baseline” is used to describe the existing air quality conditions prior to the commencement of the Project.

The Guideline (Section 8.1 (ENVP, 2022a)) states that baseline may be determined from air quality Inexwantas (monitoring) data or may be estimated from modelling other contributing sources or a combination of both. Choosing the appropriate baseline concentration can be critical in assessing overall air quality. In order of priority, the information sources used to establish the baseline concentration level are:

- A network of long-term ambient Inexwantas (monitoring) stations near the source under study
- Long-term ambient Inexwantas (monitoring) at a different location that is adequately representative; and
- Modelled baseline

For the Project, baseline will be determined using long-term Inexwantas (monitoring) data from representative Inexwantas (monitoring) stations at different locations. The development of the baseline concentrations is consistent with the FortisBC Squamish V2 Compressor Station Assessment (RWDI, 2025) and described below.

If existing monitoring data to be used, complete the following table: Representative Air Quality Measurements, including station name, location, period of record, contaminants measured.

The Inexwantas (monitoring) stations reviewed included Skwxwú7mesh (Squamish) Elementary and Horseshoe Bay.

The Skwxwú7mesh (Squamish) Elementary Inexwantas (monitoring) station is located 9 km east-northeast of the Project and is used as baseline concentrations for NO₂, SO₂ and PM_{2.5}.

The Horseshoe Bay Inexwantas (monitoring) station is located 33 km south-southwest of the Project and is used as baseline concentrations for CO.

Continuous monitoring data was obtained for the most recent and representative years of ambient air quality data in ENVP's online data archive (ENVP, 2025). Data from Inexwantas (monitoring) stations is used in the baseline determination if the quarterly data validity meets or is greater than the minimum 75% threshold. A summary of Inexwantas (monitoring) station locations and substances reviewed are provided in Table 8.1.



Table 8.1 *Summary of Ínexwantas (Monitoring) Stations Locations and Substances Monitored*

Ínexwantas (Monitoring) Station	Elevation (m asl)	Location (UTM NAD83)			Data Period	Substances Monitored			
		m E	m N	Zone		NO ₂	SO ₂	PM _{2.5}	CO
Skwxwú7mesh (Squamish) Elementary	6	489,087	5,505,861	10U	2021 to 2023	x	x	x	-
Horseshoe Bay	54	479,918	5,468,474	10U	2017 to 2019	-	-	-	x

Section 8.1.4 of the Guideline (ENVP, 2022a) recommends developing baseline values using high percentile values which characterize baseline as a large increment of measured values (i.e., the 98th percentile for other substances hourly and daily averages, and the mean values for annual averages). These values represent the greatest effects of all local industrial sources, natural background concentrations (globally and regionally), plus minor sources (local home heating, vehicle emissions, food preparation, and road dust). The Guidance on NO₂ Dispersion Modelling in BC (NO₂ Guidance) (ENVP, 2022c) provides three options to add baseline NO₂ to dispersion modelling predictions. For this assessment and for consistency with the FortisBC Squamish V2 Compressor Station cumulative assessment, a single high percentile value is used. Baseline concentrations for the Project air quality assessment are provided in Table 8.2. The baseline values assumes that baseline concentrations are high all the time and is applied across all receptors in the modelling domain (40 km by 40 km). This is a conservative approach as baseline concentrations will fluctuate based on contributing emission sources and meteorological conditions. The monitoring data used is representative of the urban area of Skwxwú7mesh (Squamish) and Horseshoe Bay; concentrations are likely less in rural and remote areas of the modelling domain.

Table 8.2 *Summary of Baseline CAC Concentrations ^a*

Substance	Averaging Period	Baseline Concentration (µg/m ³)
NO ₂ ^b	1-hour ^c	41.6
	Annual ^d	9.4
SO ₂ ^e	1-hour ^f	11.1
	Annual ^g	0.7
PM _{2.5} ^h	24-hour ⁱ	17.7
	Annual ^j	5.2
CO ^k	1-hour ^l	389.3
	8-hour ^l	338.4



Substance	Averaging Period	Baseline Concentration (µg/m³)
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Notes:

- a. Baseline air quality data was developed from BC Air Data Archive Website (ENVP, 2025) and the methodology is consistent with that described in the Dispersion Modelling Plan for FortisBC, Squamish V2 Compressor Station (RWDI, 2025). Conversions from ppb or ppm to µg/m³ assume standard conditions of 25°C and 101.325 kPa.
- b. **NO₂**: Data sourced from Sk̓wx̓wú7mesh (Squamish) Elementary Ínexwantas (monitoring) station for 2021 to 2023.
- c. **NO₂**: The 1-hour baseline NO₂ concentration was determined based on the 98th percentile of the daily 1-hour maximum concentrations averaged over 2021 to 2023.
- d. **NO₂**: The annual NO₂ baseline concentration was determined based on the average of 1-hour values for 2021 to 2023.
- e. **SO₂**: Data sourced from Sk̓wx̓wú7mesh (Squamish) Elementary Ínexwantas (monitoring) station for 2021 to 2023.^f **SO₂**: The 1-hour baseline SO₂ concentration was determined based on the daily 1-hour maximum concentrations, followed by the calculation of the 99th percentile for each year, then averaged over the 3-year period.
- g. **SO₂**: The annual SO₂ baseline concentration was determined based on the average of annual mean values for the 3-year period.
- h. **PM_{2.5}**: Data sourced from Sk̓wx̓wú7mesh (Squamish) Elementary Ínexwantas (monitoring) station for 2021 to 2023. Days excluded with recorded wildfire activity. Days excluded: Jul 30 - Aug 3 2021, Aug 12-15 2021, Sep 10-15 2022, Oct 4-7 2022, Oct 13-21 2022, Jun 7-8 2023, Jul 6-7 2023, Aug 19-22 2023, Aug 25-29 2023. List of air quality advisories referenced from Metro Vancouver: <https://metrovancover.org/media-room/media-releases>.
- i. **PM_{2.5}**: The 24-hour PM_{2.5} baseline concentration was determined based on average of the 98th percentile values for the 24-hour averaging interval over the 3-year period.
- j. **PM_{2.5}**: The annual PM_{2.5} baseline concentration was determined based on the average of the annual mean values over the 3-year period.
- k. **CO**: Data sourced from Horseshoe Bay Ínexwantas (monitoring) station for 2017 to 2019, which are the most recent valid years.
- l. **CO**: The 1-hour and 8-hour baseline CO concentrations were determined based on the 98th percentile of 1-hour CO concentrations for 2017 to 2019.

If baseline concentrations are anticipated to change in the future due to planned significant reductions or increases in emissions, provide a description of how these will be accounted for (e.g., construction of a nearby new facility or the planned decommissioning of a currently operating facility) and the uncertainties involved in estimating future emissions.

The Project and FortisBC Squamish V2 Compressor Station will commence operations on a similar timeline; there are no other reasonably foreseeable projects identified in the modelling domain that substantially influence air quality.

For NO₂ models, provide a description of how NO₂ chemistry, location and proximity of urban regions relative to the modelled source, and proximity of nearby large industrial or transportation sources of NO_x are considered when selecting the baseline dataset (Section 3.3.2 in the Guidance (ENVP, 2022a)).

Baseline concentrations were obtained from nearby Ínexwantas (monitoring) stations (i.e., Sk̓wx̓wú7mesh (Squamish) Elementary School, Horseshoe Bay) that are representative of sources not modelled, including traffic, other marine vessels, residential heating, and other small industrial and commercial emission sources.



9 Building Downwash

Potential for building downwash. Please provide rationale if building downwash is not modelled.

If building downwash included, provide a site map to indicate buildings to be processed by BPIP-PRIME, and complete the Table.

Building Profile Input Program (BPIP) can be used to prepare downwash related input for the Plume Rise Model Enhancements (PRIME) building downwash algorithm (BPIP PRIME). BPIP-PRIME can determine whether a stack is subjected to wake effects from a structure(s) and calculate building heights and projected building widths for cases when the plume is affected by building wakes.

In multiple building situations, BPIP-PRIME determines building separation distances and will fill in the gap between the buildings under specific circumstances if they are “sufficiently close”. With the addition of more buildings and stacks, a maze of influence zones results, and BPIP-PRIME automates these calculations for these complicated situations.

There is potential for building downwash from Project buildings and structures. Therefore, these have been included in BPIP. Structure dimensions are provided in Table 9.1 and Table 9.2 and locations are shown on Figure 9.1.

Building downwash will be modelled consistent with Section 7.6 in the Guideline (ENVP, 2022a). For sloped or peaked roofs, the building height is equivalent to halfway between the trough and the peak, consistent with ENVP direction. Building or module structure package dimensions are provided in Table 9.1 and Table 9.2 and building locations are shown on Figure 9.1. The FortisBC Squamish V2 Compressor Station building dimensions are provided in Table 9.3.

Table 9.1 *Building or Module Structure Package Dimensions*

Building ID	Description ^{a, b}	Length (m) ^b	Width (m) ^b	Height (m) ^{c, d}
1	Control & Operations Building	63.2	22.7	5.7 ^c
2	Warehouse & Maintenance Building	58.0	23.4	7.9 ^c
3	Administration Building	41.1	22.1	4.8 ^c
4	Instrument Air Compressor Building	27.0	25.3	12.2 ^c
5	Chemical Storage Building	20.2	7.0	14.4 ^c
6	Guard House # 1	3.0	2.4	2.0 ^c
7	Vehicle Shelter Building	13.1	7.2	12.5 ^c
8	Power Dist. Center - FST1	12.5	10.7	32.5
9	Power Dist. Center - FST2	12.9	10.4	32.5
10	M11	32.2	21.4	29.1



Building ID	Description ^{a, b}	Length (m) ^b	Width (m) ^b	Height (m) ^{c, d}
11	High-Voltage Switchyard Equipment Building	17.7	15.8	7.7
12	M10	33.5	23.3	13.5
13	Substation 03 Powerhouse - FST & Jetty	13.8	8.8	7.1
14	M09_1	18.9	16.5	17.2
15	M09_2	18.2	9.1	22.9
16	M09_3	8.9	8.8	23.6
17	M09_4	5.0	4.3	9.8
18	M01_1	38.5	13.0	9.0
19	M01_2	38.9	6.5	19.4
20	M01_3	37.2	16.0	16.9
21	M01_4	37.4	18.4	16.9
22	M01_5	37.3	17.4	37.2
23	M01_6	37.3	9.4	11.3
24	M02_1	39.8	12.5	9.0
25	M02_2	38.4	6.4	19.4
26	M02_3	38.0	16.3	16.9
27	M02_4	39.0	18.1	16.9
28	M02_5	41.9	20.5	37.2
29	M02_6	41.4	11.6	12.8
30	M13	36.5	27.0	10.5
31	M04_1	29.3	24.6	16.9
32	M04_2	13.7	10.8	24.2
33	LNG Carrier Working Block_1	32.9	13.0	37.1
34	LNG Carrier Working Block_2	42.0	6.0	35.2
35	LNG Carrier Tank Area 1	50.1	46.9	21.1
36	LNG Carrier Tank Area 2	51.7	45.7	21.1



Building ID	Description ^{a, b}	Length (m) ^b	Width (m) ^b	Height (m) ^{c, d}
37	LNG Carrier Tank Area 3	51.4	45.0	21.1
38	LNG Carrier Tank Area 4	78.0	55.7	21.1

Notes:

M stands for process module.

- a. Several modules have been broken into several parts to reduce unnecessary conservatism in the BPIP model.
- b. Based on the most recent Woodfibre LNG project plot plan layout (version 7).
- c. The height of buildings or module structures is the average of peak and eave height which is above grade level for those located on temíxw (land) or is above sea level for those located on FST and LNG carrier and based on site data provided by Woodfibre LNG or assumptions.
- d. The height of buildings located in the industrial area has been corrected to the grade level.

Table 9.2 *Tank Structure Dimensions*

Tank ID	Description	Diameter (m) ^a	Height (m) ^b
1	00-T-7101 - LNG Tank 1 FST1 - Storage Sphere	39.1	32.5 ^c
2	00-T-7102 - LNG Tank 2 FST1 - Storage Sphere	39.1	32.5 ^c
3	00-T-7103 - LNG Tank 3 FST1 - Storage Sphere	39.1	32.5 ^c
4	00-T-7104 - LNG Tank 4 FST1 - Storage Sphere	39.1	32.5 ^c
5	00-T-7105 - LNG Tank 5 FST1 - Storage Sphere	39.1	32.5 ^c
6	00-T-7106 - LNG Tank 6 FST2 - Storage Sphere	39.1	32.5 ^c
7	00-T-7107 - LNG Tank 7 FST2 - Storage Sphere	39.1	32.5 ^c
8	00-T-7108 - LNG Tank 8 FST2 - Storage Sphere	39.1	32.5 ^c
9	00-T-7109 - LNG Tank 9 FST2 - Storage Sphere	39.1	32.5 ^c
10	00-T-7110 - LNG Tank 10 FST2 - Storage Sphere	39.1	32.5 ^c
11	01-T-6001 - Raw Water/FW Storage Tank	28.0	26.0 ^d
12	01-T-7509 - Stabilized Condensate Storage Tank	11.0	14.1 ^d
13	01-T-6469 - Oily Water Storage Tank	7.5	11.9 ^d
14	01-T-6603 - Diesel Fuel Tank	1.8	8.8 ^d

Notes:

FST - floating storage tanks.

- a. Based on the most recent Woodfibre LNG project plot plan layout (version 7) or directly provided by Woodfibre LNG.
- b. The height of tanks is above grade level for those located on temíxw (land) or is above sea level for those located on FST which is based on site data provided by Woodfibre LNG or assumptions.
- c. Since it is a sphere, half its height is used in the BPIP.
- d. The height of tanks located in the industrial area has been corrected to the grade level.



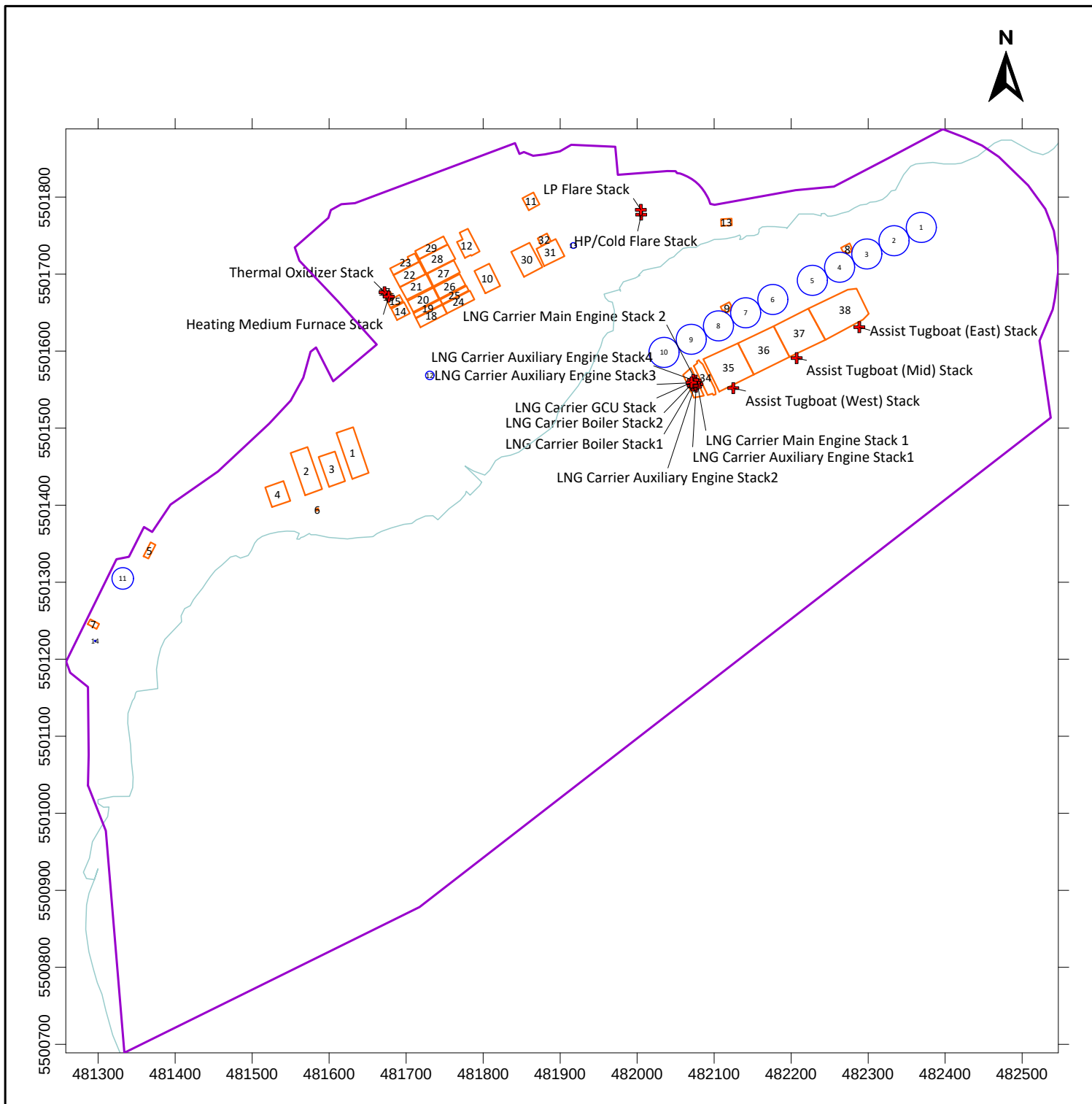
Table 9.3 FortisBC Squamish V2 Compressor Station Building Dimensions

Building ID	Description	Length (m)^a	Width (m)^a	Height (m)^a
3	Building 3	38.7	9.5	4.5
9	Building 9	20.1	18.1	12.3

Note:

^{a.} Provided by FortisBC Energy Inc. (RWDI, 2025)





Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Buildings or Process Module Structures
- Tanks or LNG Storage Spheres
- Shoreline
- + Stacks

See Table 9.1 on the Model Plan for descriptions of buildings, process module structures, tanks, or LNG storage spheres.



Stantec

Project Location
Swiyat

Client/Project/Report

Woodfibre LNG General Partners Inc.
Woodfibre LNG Facility
Dispersion Modelling Plan

Figure No.

9.1

Title

Simplified Plot Plan for Dispersion Modelling

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10 Geophysical Data Input

10.1 Topography and Temíxw (Land) Use Data

Terrain and temíxw (land) use data for the Project uses the same datasets described for the FortisBC Squamish V2 Compressor Station assessment (RWDI, 2025). Terrain and temíxw (land) use data will be input to the CALPUFF assessment using the FortisBC Squamish V2 Compressor Station assessment GEO.dat file.

- Terrain data (specify source of data) and an elevation map for the model domain:
 - The source of elevation data is the Canadian Digital Elevation Map, available here: <https://open.canada.ca/data/en/dataset/7f245e4d-76c2-4caa-951a-45d1d2051333>
 - Elevation data within facility boundary was adjusted based on the Elevation Drawing (350106-1100-00-PI-DWG-P0A-0014) provided by Woodfibre LNG
- Land use data (specify source of data) and a land use map for the Project CALMET model domain:
 - The source of temíxw (land) use data is the Commission for Environmental Cooperation (CEC). North American Land Change Monitoring System (NALCMS) North American Land Cover at 30 m, available here: <http://www.cec.org/north-american-environmental-atlas/land-cover-30m-2015-landsat-and-rapideye/>
- See Figure 10.1 for temíxw (land) use data within the modelling domain.

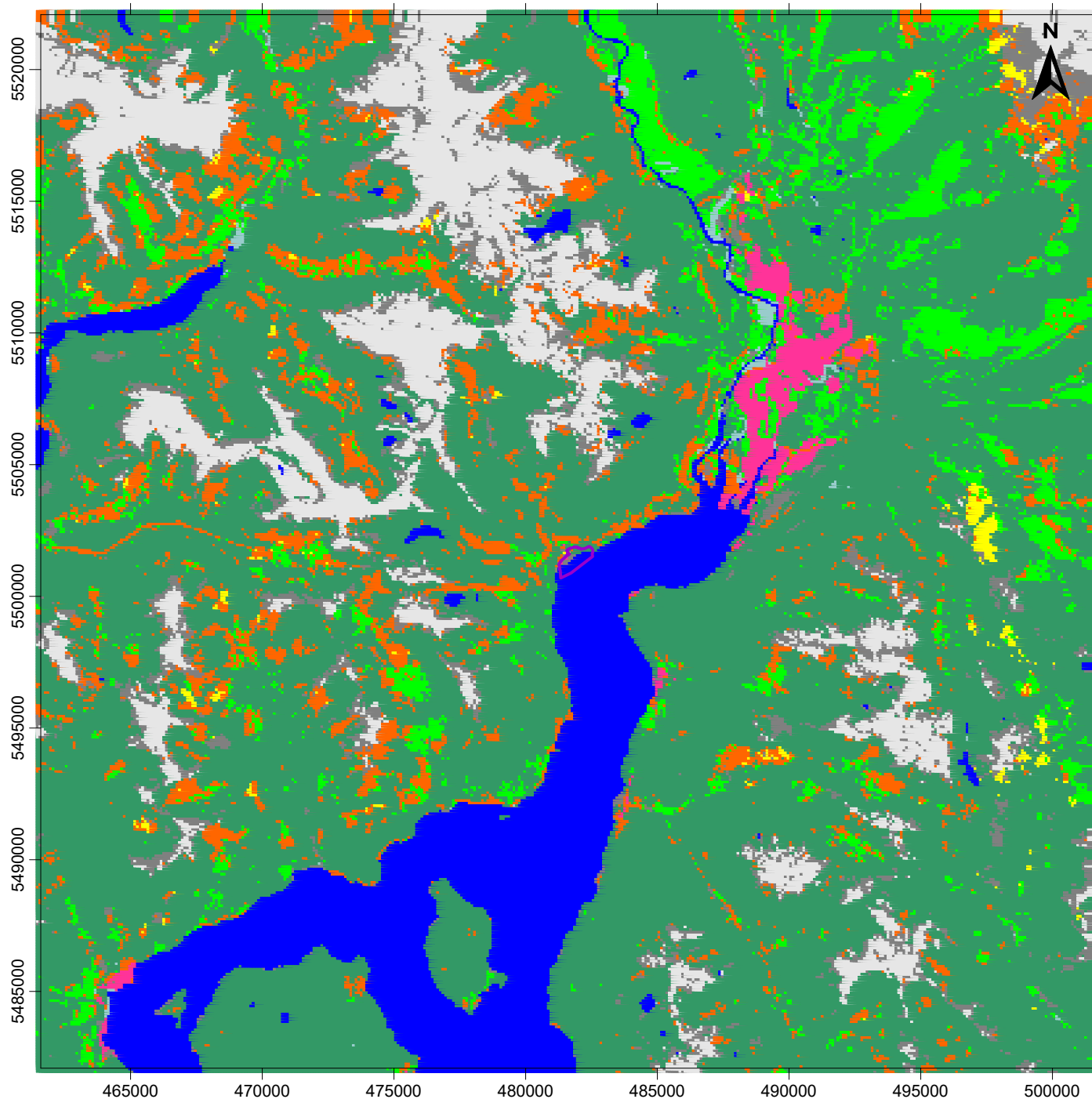
10.1.1 Surface Characteristics

For this Level 3 Assessment the five recommended seasonally varied surface characteristics (surface roughness length, albedo, Bowen ratio, soil heat flux, vegetation leaf area index, and anthropogenic heat flux) are used for the dispersion modelling study consistent with Section 4.4 in the Guideline (ENVP, 2022a).

The 30 m resolution CEC Temíxw (land) cover data (CEC, 2020) is employed by CALMET to develop a 100 m resolution temíxw (land) use file. Figure 10.1 illustrates the temíxw (land)-use classes in the CALMET model domain for the Project. Based on the 100 m CALMET grid resolution data, the domain is comprised of 61.0% evergreen forest, 9.5% water, 9.0% perennial snow or ice, 7.1% shrub rangeland, 6.3% deciduous forest, 5.4% barren temíxw (land), 0.5% rangeland, and 0.3% wetland.

Translation table of 30 m resolution CEC Temíxw (Land) Cover Categories to CALMET Categories and seasonal CALMET temíxw (land)-use characterization parameters tables are included in Appendix A.





Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

 Facility Fenceline

-  Urban Land
-  Rangeland
-  Shrub Rangeland
-  Deciduous Forest
-  Evergreen Forest
-  Water
-  Wetland
-  Barren Land
-  Snow or Ice



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Figure No

10.1

Title

CALMET Land Use Classification in Model Domain

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10.2 Meteorological Data Input (For Level 2 and 3 Assessments Only)

Meteorological input data for the CALPUFF assessment will align with the FortisBC Squamish V2 Compressor Station assessment (RWDI, 2025). For this assessment, CALMET output files will be obtained from FortisBC.

10.2.1 Surface Meteorological Data

As described in the FortisBC Squamish V2 Compressor Station Dispersion Modelling Plan (RWDI, 2025), surface observations from the Sk̓w̓x̓w̓7mesh (Squamish) airport will not be used due to the complex terrain in the modelling domain and distance from the Squamish V2 Compressor Station and Woodfibre LNG emission sources.

The Sk̓w̓x̓w̓7mesh (Squamish) Elementary School Ínexwantas (monitoring) station and the Woodfibre LNG on-site Ínexwantas (monitoring) station were also considered for this assessment, however, as these Ínexwantas (monitoring) stations were established in 2015 and 2024, respectively, they do not align with the Weather Research Forecast (WRF) data (i.e., 2011-2015) used for CALMET input (see Section 10.3); therefore, these surface Ínexwantas (monitoring) data are not used. CALMET will rely on WRF data for surface meteorological parameters (see Section 10.3).

The onsite Air Quality Monitoring Station (AQMS) commenced operating in September 2024 for verification purposes during construction; air quality monitoring conditions were stipulated by the Environmental Assessment Office (EAO) under Amendment #3 of the Environmental Assessment Certificate (EAC), which authorized the use of a temporary floating worker accommodation (floatel) to house the workforce. The onsite meteorological station is co-located with the AQMS and was installed in March 2022. The selection of sampling locations for the AQMS followed the siting criteria outlined in the British Columbia Field Sampling Manual (BCFSM) (BC ENV 2020). The AQMS was located next to the existing meteorological station (with the passive samplers installed on the roof), and adjacent to the floatel, given the purpose is to measure ambient air quality to verify mitigation measures to protect the health of off-duty workers residing in the floatels where required during the Project's construction phase. The station is powered by the site electrical system.

The AQMS has continuous monitoring for total suspended particulates (TSP), particulate matter 0-10 micron (μm) in diameter (PM_{10}), and particulate matter 0-2.5 μm in diameter ($\text{PM}_{2.5}$), and nitrogen dioxide (NO_2); and passive sampling for SO_2 and VOCs.

As this station was established in 2022, it does not align with the time period of the Weather Research Forecast (WRF) data (i.e., 2011-2015) used in the assessment. As a quality review step, the wind rose for the on-site meteorological station was reviewed and compared to the WRF data. Despite different time periods, there is general agreement of the prevailing wind directions and speed. Ambient concentrations measured at the AQMS are representative of the construction period, therefore, are not used in the assessment for baseline or to describe existing conditions.



10.2.2 Upper-Air Meteorological Data

There are no upper air meteorological stations within the CALMET domain, therefore upper air data will not be used in this assessment. CALMET will derive upper air information from the WRF numerical weather model data (see Section 10.3).

10.3 Numerical Weather Prediction Model Output

The proposed numerical weather prediction model output use is as follows:

This assessment will use the 2011-2015 4 km grid WRF output data available from ENVP. This meteorological forecast output is produced by four dimensional data assimilation within the Advanced Research WRF core model at a 4 km grid resolution. WRF data output is available on an hourly interval for 2011, 2012, 2013, 2014, and 2015 for all of BC and most of Alberta.

The use of the 2011 to 2015 numerical weather predictions (WRF) rather than a more recent timeframe is an accepted practice for dispersion modelling in BC. The WRF data was produced by a consultant (Exponent) under contract to ENVP and provides a quality controlled, consistent source of numerical weather prediction model output in CALMET-ready format (3D.DAT) that can be extracted for project specific domains. The use of multiple years of WRF data input allows the capture of year-to-year variation in meteorological conditions (i.e., some year may be drier than others, some years may be cooler than others) that may influence emissions differently. It is expected that the variation in the 2011-2015 WRF data parameter would be similar to that seen in a more recent five year data set.

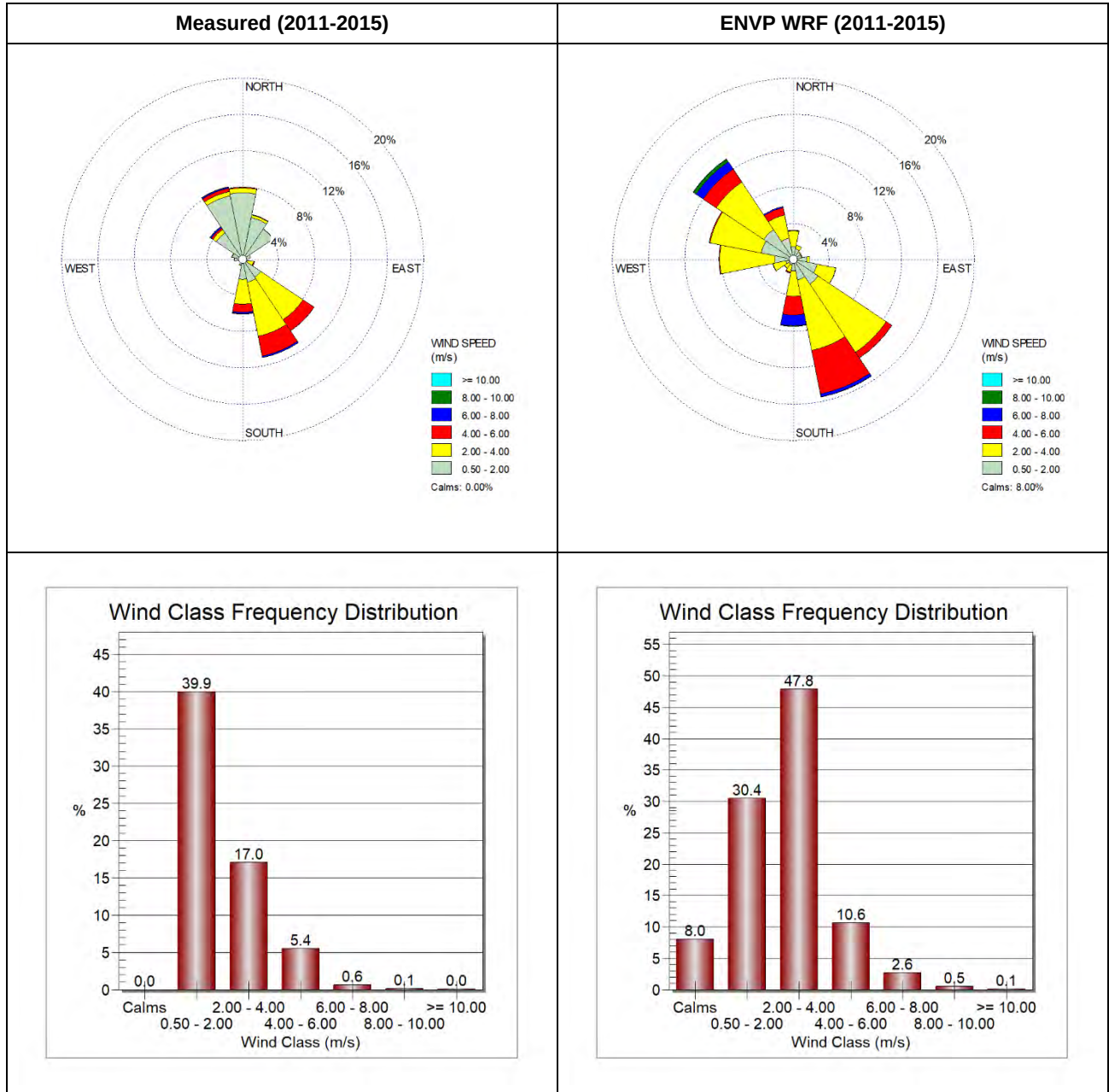
As described in Section 10.2.1 surface meteorological measurements will not be included in CALMET and there are no upper station data are not available (see Section 10.2.2). Modelling will proceed in WRF-only mode (i.e., NOOBS mode).

Figure 10.2 compares the wind roses generated for the ECCC Skwxwú7mesh (Squamish) Airport weather station from the WRF model predictions with the wind rose for the same location based on measurements for the five-year period from 2011 to 2015. The measured winds indicated a higher frequency of northerly wind compared to the WRF data. The WRF data indicates slightly higher wind speeds at this location compared to measured. Both measured and predicted wind roses show good agreement with the most frequent winds are from southeast and northwest.

Since the WRF model predictions and measurements are reasonably similar for Skwxwú7mesh (Squamish) Airport weather station that are located approximately 14 km north northeast of to the Project site, the WRF model predictions are expected to be representative of meteorological conditions in the model domain. CALMET makes further fine scale adjustments to the wind field to account for terrain and temíxw (land) cover influence.



Figure 10.2 Comparison of Measured and Predicted Surface Winds at ECCC Skwxwú7mesh (Squamish) Airport Weather Station (2011–2015)



11 Treatments

11.1 NO to NO₂ Conversion

Identify the method to be used. Please note that the results of total conversion must be presented as part of all model reports, regardless of the conversion method selected for the project (Section 3.2 (ENVP, 2022c)). Specify the considerations given to ambient concentrations, characteristics of modelled sources, and availability of relevant monitoring data when selecting the NO₂ modelling method indicated above.

Emission of NO_x are produced by the Project emission sources through combustion processes. Emissions of NO_x predominantly consist of NO and NO₂. Emissions of NO are rapidly converted into NO₂ through a limiting reaction with ozone. This degree to which the available NO is converted to NO₂ can be limited by both availability of ozone and meteorology. CALPUFF predicts concentrations of NO_x. The Guideline (ENVP, 2022a) provides several options to calculate the atmospheric conversion of NO to NO₂. For this assessment this conversion will be carried out using the ambient ratio method 2 (ARM 2) following the coastal curve. The ARM 2 method applies a ratio of NO₂ to total NO_x in the atmosphere to determine the concentration of NO₂ based on the predicted concentration of NO_x. The ratio of NO₂ to total NO_x are described in the NO₂ Guidance (ENVP, 2022c) by concentration curves for different locations (i.e., coastal, industrial, rural, urban) within BC. This treatment is consistent with the BCER approved FortisBC Squamish V2 Compressor Station Dispersion Modelling Plan (RWDI, 2025), Section 3.2.1.2 of the Guideline (ENVP, 2022a), and Appendix A of the NO₂ Guidance; (ENVP, 2022c).

11.2 Chemical Transformation

Specify transformation method and provide details on inputs if secondary PM_{2.5}, acid deposition or visibility effects are to be estimated. Depending on the transformation method, this could include ammonia, ozone, hydrogen peroxide concentrations, nighttime loss and formation rates for nitrates and sulphates.

The required and recommended switch settings outlined in Section 7.8 of the Guideline (ENVP, 2022a) will be used. The updated RIVAD scheme with ISOROPPIA equilibrium (MCHEM = 6) will be used per Section 7.8 of the Guideline (ENVP, 2022a).

11.2.1 Secondary Particulate Formation

CALPUFF model will be used to predict secondary PM_{2.5} formation attributable to precursor SO₂ and NO_x emissions.



11.3 Particle Deposition

If non-recommended particle size distributions (see Section 3.6) are used, provide Table of particle emission (including heavy metals if modelled) size/density distribution and indicate the basis for the Table.

As coarse particulate emissions are expected to be small to negligible, deposition and plume depletion are not modelled.

11.4 Stagnation

Provide an estimate of the frequency of stagnation based on local meteorological data if available.

CALPUFF is a non-steady-state puff model which simulates dispersion under near-calm and calm conditions (i.e., can treat zero wind speeds). The assessment will summarize the frequency of calm conditions.

11.5 Plume Condensation (Fogging) and Icing

Indicate if this will be included (Section 10.6).

Plume condensation and freezing (Fogging and Icing) is not selected as an option because the combustion source plumes have substantial buoyancy and momentum, and they are not particularly moisture laden. Condensing or freezing plumes near ground level are not expected.



12 Quality Management Program

Note: Model input and output files will be submitted to the BCER upon request.

12.1 Model Input Data

Indicate the tests that will be undertaken to assure the quality of the inputs, for geophysical data, meteorological data, NWP data.

The model inputs for this assessment include emission sources (locations and elevation) and emission characteristics. Woodfire LNG supplied the detailed design data that was subject to a rigorous review given the intent to minimize emissions from the facility to achieve the net zero goal. Under Stantec's quality management system, the model inputs are also subject to scrutiny by a qualified Quality Reviewer and Independent Reviewer. Quality assurance related materials will be presented in dedicated Appendices to the TDR (CALMET and CALPUFF).

Geographic, temíxw (land) use data, and meteorological data will be obtained from FortisBC Squamish V2 Compressor Station assessment for consistency in modelling methodology. Stantec will conduct a reasonable level of quality assurance of this data; however, relies on this input data for this assessment.

The CALMET Appendix for the TDR will include plots and graphs depicting:

- Contour plots of topography and temíxw (land) use for the entire CALMET model domain.
- WRF raw data quality assurance and quality control checks (annual wind rose, monthly temperature comparison with the Skwxwú7mesh (Squamish) Airport weather station).
- Wind field maps (surface and different elevations) for select periods where topographic influences (channeling, thermally driven flows) would be evident.
- Frequency distributions of various meteorological parameters (annual, seasonal) such as PG-stability class, mixing heights.
- Plots of hourly average parameters such as temperature, mixing height, precipitation at key locations (seasonal and annual).
- Selected wind fields as vector plots.



12.2 Model Output Data

For CALMET/CALPUFF applications, provide a list of the tests conducted to confirm the quality of the model output (intermediate pre-processing files and concentration/deposition predictions).

With respect to the pre-processed files that are prepared for CALPUFF input, there are several tests listed in Section 9.1.1 and 9.1.2 to check the output from the pre-processing utility programs to confirm that they have been properly processed. The quality of the meteorological outputs will be tested to ensure that specific data treatments have been applied properly. For CALMET output there are several tests listed in Section 9.1 in the Guideline (ENVP, 2022a) to test the quality of the generated meteorological fields.

The quality of the meteorological outputs will be tested to check that specific data treatments have been applied properly. The CALMET Appendix for the TDR will include plots and graphs as listed in Section 12.1.

There are no ambient air quality measurements available from a nearby Inexwantas (monitoring) station that are paired in time with the modelling timeframe (i.e., 2011-2015), therefore, a predicted versus measured comparison cannot be completed. Predicted concentrations will be reviewed for reasonability based on professional judgment and experience from similar projects in similar settings.



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Appendices



Appendix A

CALMET Model Options and Temíxw (Land) Use Characterization Parameters



Dispersion Modelling Plan

Appendix A: CALMET Model Options and Temíxw (Land) Use Characterization Parameters
October 16, 2026

Table A.1 Woodfibre LNG Project Specific CALMET Model Options

Parameter	Default	Project	Comment
Wind Field Model Options:			
IEXTRP	-4	1	No extrapolation is done for no-obs mode model run
ICALM	0 or 1	0	Extrapolate surface winds even if calm
BIAS	0	12*0	Layer-dependent biases modifying the weights of surface and upper air stations
IPROG	2,4 or 14	14	Use gridded prognostic wind field model output fields as input to the diagnostic wind field model (from WRF 3D.DAT)
Other Wind Field Input Parameters:			
TERRAD	-	5	Radius of influence of terrain features (km)
Relative Humidity Parameters:			
IRHPROG	0	1	Use RH from WRF/3D file
Temperature Parameters:			
ITPROG	0	2	Use WRF/3D for surface and upper air temperature data



Dispersion Modelling Plan

Appendix A: CALMET Model Options and Temíxw (Land) Use Characterization Parameters
October 16, 2026

Table A.2 Translation Table of 30 m resolution CEC Temíxw (Land) Cover Categories to CALMET Categories

30 m Resolution CEC Temíxw (Land) Cover Code	30 m Resolution CEC Temíxw (Land) Cover Type	CALMET Code	CALMET Temíxw (Land) Use Category
1	Temperate or sub-polar needleleaf forest	42	Evergreen Forest temíxw (Land)
2	Sub-polar taiga needleleaf forest	42	
3	Tropical or sub-tropical broadleaf evergreen forest	42	
4	Tropical or sub-tropical broadleaf deciduous forest	41	Deciduous Forest temíxw (Land)
5	Temperate or sub-polar broadleaf deciduous forest	41	
6	Mixed forest	43	Mixed Forest temíxw (Land)
7	Tropical or sub-tropical shrubland	32	Shrub Rangeland
8	Temperate or sub-polar shrubland	32	
9	Tropical or sub-tropical grassland	30	Rangeland
10	Temperate or sub-polar grassland	30	Rangeland
11	Sub-polar or polar shrubland-lichen-moss	32	Shrub Rangeland
12	Sub-polar or polar grassland-lichen-moss	30	Rangeland
13	Sub-polar or polar barren-lichen-moss	32	Shrub Rangeland
14	Wetland	60	Wet Land
15	Cropland	20	Agricultural temíxw (Land)
16	Barren lands	70	Barren temíxw (Land)
17	Urban	10	Urban or Build-up temíxw (Land)
18	Water Body	51	Staḵw (Water)
19	Snow and Ice	90	Perennial Snow or Ice



Table A.3 CALMET Temíxw (Land)-use Characterization and Associated Geophysical Parameters for the Season 1 (Mid-Summer)

30 m Resolution CEC Temíxw (Land) Cover Code	Surface Roughness (m)	Albedo	Bowen Ratio	Soil Heat Flux (fraction)	Anthropogenic Heat Flux (W/m ²)	Leaf Area Index	CALMET Code	CALMET Temíxw (Land) Cover Type
1	1.300	0.120	0.300	0.150	0.000	5.000	42	Evergreen Forest
2	1.300	0.120	0.300	0.150	0.000	5.000	42	
3	1.300	0.120	0.300	0.150	0.000	5.000	42	
4	1.300	0.160	0.300	0.150	0.000	3.400	41	Deciduous Forest
5	1.300	0.160	0.300	0.150	0.000	3.400	41	
6	1.300	0.140	0.300	0.150	0.000	4.500	43	Mixed Forest
7	0.300	0.180	1.000	0.150	0.000	4.500	32	Shrub Rangeland
8	0.300	0.180	1.000	0.150	0.000	4.500	32	
9	0.150	0.200	0.500	0.150	0.000	1.000	30	Rangeland
10	0.150	0.200	0.500	0.150	0.000	1.000	30	
11	0.300	0.180	1.000	0.150	0.000	4.500	32	Shrub Rangeland
12	0.150	0.200	0.500	0.150	0.000	1.000	30	Rangeland
13	0.300	0.180	1.000	0.150	0.000	4.500	32	Shrub Rangeland
14	0.200	0.140	0.100	0.300	0.000	0.200	60	Wet Land
15	0.200	0.200	0.500	0.150	0.000	2.000	20	Agricultural Temíxw (Land)
16	0.050	0.200	1.500	0.150	0.000	0.000	70	Barren Temíxw (Land)
17	0.540	0.160	0.800	0.250	8.000	0.300	10	Urban or Build-up Temíxw (Land)
18	0.001	0.100	0.100	1.000	0.000	0.000	51	Stákw (Water)
19	0.200	0.700	0.500	0.150	0.000	0.000	90	Snow and Ice

Note:
For latitude 55° to 60° N, Season 1 (Mid-Summer) = July; W/m² = watts per square metre



Table A.4 CALMET Temíxw (Land)-use Characterization and Associated Geophysical Parameters for Season 2 (Autumn)

30 m Resolution CEC Temíxw (Land) Cover Code	Surface Roughness (m)	Albedo	Bowen Ratio	Soil Heat Flux (fraction)	Anthropogenic Heat Flux (W/m ²)	Leaf Area Index	CALMET Code	CALMET Temíxw (Land) Cover Type
1	1.300	0.120	0.800	0.150	0.000	5.000	42	Evergreen Forest
2	1.300	0.120	0.800	0.150	0.000	5.000	42	
3	1.300	0.120	0.800	0.150	0.000	5.000	42	
4	1.300	0.160	1.000	0.150	0.000	1.900	41	Deciduous Forest
5	1.300	0.160	1.000	0.150	0.000	1.900	41	
6	1.300	0.140	0.900	0.150	0.000	3.500	43	Mixed Forest
7	0.300	0.180	1.500	0.150	0.000	3.500	32	Shrub Rangeland
8	0.300	0.180	1.500	0.150	0.000	3.500	32	
9	0.150	0.200	0.700	0.150	0.000	1.000	30	Rangeland
10	0.150	0.200	0.700	0.150	0.000	1.000	30	
11	0.300	0.180	1.500	0.150	0.000	3.500	32	Shrub Rangeland
12	0.150	0.200	0.700	0.150	0.000	1.000	30	Rangeland
13	0.300	0.180	1.500	0.150	0.000	3.500	32	Shrub Rangeland
14	0.200	0.140	0.100	0.300	0.000	0.200	60	Wet Land
15	0.200	0.200	0.700	0.150	0.000	1.500	20	Agricultural Temíxw (Land)
16	0.050	0.200	1.500	0.150	0.000	0.000	70	Barren Temíxw (Land)
17	0.540	0.160	1.000	0.250	12.000	0.200	10	Urban or Build-up Temíxw (Land)
18	0.001	0.100	0.100	1.000	0.000	0.000	51	Stakw (Water)
19	0.200	0.700	0.500	0.150	0.000	0.000	90	Snow and Ice

Note:
For latitude 55° to 60° N, Season 2 (Autumn) = August and September; W/m² = watts per square metre



Table A.5 CALMET Temíxw (Land)-use Characterization and Associated Geophysical Parameters for Season 3 (Winter 1)

30 m Resolution CEC Temíxw (Land) Cover Code	Surface Roughness (m)	Albedo	Bowen Ratio	Soil Heat Flux (fraction)	Anthropogenic Heat Flux (W/m²)	Leaf Area Index	CALMET Code	CALMET Temíxw (Land) Cover Type
1	1.300	0.120	0.800	0.150	0.000	5.000	42	Evergreen Forest
2	1.300	0.120	0.800	0.150	0.000	5.000	42	
3	1.300	0.120	0.800	0.150	0.000	5.000	42	
4	0.600	0.170	1.000	0.150	0.000	0.100	41	Deciduous Forest
5	0.600	0.170	1.000	0.150	0.000	0.100	41	
6	0.950	0.140	0.900	0.150	0.000	2.300	43	Mixed Forest
7	0.300	0.180	1.500	0.150	0.000	2.300	32	Shrub Rangeland
8	0.300	0.180	1.500	0.150	0.000	2.300	32	
9	0.020	0.180	0.700	0.150	0.000	1.000	30	Rangeland
10	0.020	0.180	0.700	0.150	0.000	1.000	30	
11	0.300	0.180	1.500	0.150	0.000	2.300	32	Shrub Rangeland
12	0.020	0.180	0.700	0.150	0.000	1.000	30	Rangeland
13	0.300	0.180	1.500	0.150	0.000	2.300	32	Shrub Rangeland
14	0.200	0.140	0.100	0.300	0.000	0.100	60	Wet Land
15	0.020	0.180	0.700	0.150	0.000	1.000	20	Agricultural Temíxw (Land)
16	0.050	0.200	1.500	0.150	0.000	0.050	70	Barren Temíxw (Land)
17	0.500	0.180	1.000	0.250	21.000	0.100	10	Urban or Build-up Land (Temíxw)
18	0.001	0.100	0.100	1.000	0.000	0.000	51	Stakw (Water)
19	0.200	0.700	0.500	0.150	0.000	0.000	90	Snow and Ice

Note:
For latitude 55° to 60° N, Season 3 (Winter 1) = October; W/m² = tts per square metre



Table A.6 CALMET Temíxw (Land)-use Characterization and Associated Geophysical Parameters for Season 5 (Transitional Spring)

30 m Resolution CEC Temíxw (Land) Cover Code	Surface Roughness (m)	Albedo	Bowen Ratio	Soil Heat Flux (fraction)	Anthropogenic Heat Flux (W/m²)	Leaf Area Index	CALMET Code	CALMET Temíxw (Land) Cover Type
1	1.300	0.120	0.700	0.150	0.000	5.000	42	Evergreen Forest
2	1.300	0.120	0.700	0.150	0.000	5.000	42	
3	1.300	0.120	0.700	0.150	0.000	5.000	42	
4	1.000	0.160	0.700	0.150	0.000	0.800	41	Deciduous Forest
5	1.000	0.160	0.700	0.150	0.000	0.800	41	
6	1.150	0.140	0.700	0.150	0.000	3.300	43	Mixed Forest
7	0.300	0.180	1.000	0.150	0.000	3.300	32	Shrub Rangeland
8	0.300	0.180	1.000	0.150	0.000	3.300	32	
9	0.030	0.140	0.300	0.150	0.000	1.000	30	Rangeland
10	0.030	0.140	0.300	0.150	0.000	1.000	30	
11	0.300	0.180	1.000	0.150	0.000	3.300	32	Shrub Rangeland
12	0.030	0.140	0.300	0.150	0.000	1.000	30	Rangeland
13	0.300	0.180	1.000	0.150	0.000	3.300	32	Shrub Rangeland
14	0.200	0.140	0.100	0.300	0.000	0.100	60	Wet Land
15	0.030	0.140	0.300	0.150	0.000	1.000	20	Agricultural Temíxw (Land)
16	0.050	0.200	1.500	0.150	0.000	0.000	70	Barren Temíxw (Land)
17	0.520	0.160	0.800	0.250	15.000	0.200	10	Urban or Build-up Temíxw (Land)
18	0.001	0.100	0.100	1.000	0.000	0.000	51	Stakw (Water)
19	0.200	0.700	0.500	0.150	0.000	0.000	90	Snow and Ice

Note:
For latitude 55° to 60° N, Season 5 (Transitional Spring) =May and June; W/m² = watts per square metre



Appendix B

VOC and PAH Assessment from Woodfibre LNG Environmental Assessment



B.1 Summary of EA VOC Assessment

As part of the Environmental Assessment, VOCs were included in the air quality assessment as non-indicator compounds to support related assessment disciplines, including human health. The EA quantified VOC emissions from Project sources, including landfill emissions, process combustion, the amine incinerator, fugitive emissions from the LNG facility, marine vessel exhaust, emergency generators, and flaring. The EA emission estimates included conservative assumptions, such as maximum operating capacity and a 20% contingency factor for engineering-based emission estimates.

The EA assessed selected VOC concentrations using CALPUFF dispersion modelling. Because federal and British Columbia ambient air quality criteria were not available for individual VOCs, the predicted concentrations were compared against Alberta Ambient Air Quality Objectives (AAQOs), where available. The EA evaluated fifteen VOC substances with available AAQOs, and found that the maximum predicted concentrations, including background where available, were below the applicable objectives for the fifteen VOCs assessed. Based on the EA results, VOCs were not identified as a key air quality driver for the Project.

For the current assessment, potential impacts on air quality associated with VOC and PAH emissions were evaluated to confirm whether the EA conclusions remain applicable to the final facility design. This screening comparison considered the same compounds assessed in the EA, where applicable, and compared the predicted concentrations for the final facility design against the applicable Alberta AAQOs. As summarized in Table B.1 and Table B.2, the screening results for both the normal operations and stabilizing operations cases were well below the applicable AAQOs, both excluding and including EA background concentrations where available. The predicted VOC and PAH concentrations associated with the final design were also generally lower than the concentrations predicted in the EA. Compounds assessed in the EA but not retained in the current screening comparison were associated with negligible final design emissions. Based on this screening review, VOC and PAH concentrations are expected to remain well below applicable AAQOs and are not expected to be a key air quality driver for the Project. Therefore, VOCs and PAHs are not carried forward for further assessment in the current WDA application.



Table B.1 Comparison of Maximum Predicted Concentrations of VOCs and PAHs for the EA Assumptions with the Final Facility Design (excluding baseline)

Compound	Averaging period	Predicted Maximum Concentrations			Alberta AAQO (µg/m³)	EA Normal Operations (% of Alberta AAQO)	Final Design Normal Operations Model Result (% of Alberta AAQO)	Final Design Stabilizing Operations Model Result (% of Alberta AAQO)
		EA Normal Operations (µg/m³)	Final Design Normal Operations Model Result (µg/m³)	Final Design Stabilizing Operations Model Result (µg/m³)				
Acetaldehyde	1-hour	4.26E+00	1.70E-02	1.74E-02	90	4.73	0.02	0.02
Acetone	1-hour	2.24E+00	- ^a	-	5,900	0.04	-	-
Acrolein	1-hour	3.50E-01	6.00E-03	6.02E-03	4.5	7.78	0.13	0.13
	24-hour	1.00E-01	7.40E-04	7.99E-04	0.4	25.0	0.19	0.20
Acrylonitrile	1-hour	2.30E-01	-	-	43	0.53	-	-
	Annual	1.00E-02	-	-	2	0.50	-	-
Benzene	1-hour	6.60E-01	1.40E-02	4.07E-02	30	2.2	0.05	0.14
	Annual	6.00E-02	3.90E-04	6.92E-04	3	2.0	0.01	0.02
Benzo[a]pyrene	Annual	2.00E-05	5.12E-07	1.08E-06	3.00E-04	6.67	0.17	0.36
Cumene	1-hour	4.00E-02	-	-	500	0.01	-	-
Ethylbenzene	1-hour	3.40E-01	2.80E-03	2.80E-03	2,000	0.02	0.0001	0.0001
Formaldehyde	1-hour	2.27E+00	2.70E-01	2.76E-01	65	3.49	0.42	0.42
n-hexane	1-hour	6.00E-02	2.20E+00	2.24E+00	21,000	0.0003	0.01	0.01
	24-hour	2.00E-02	-	-	7,000	0.0003	-	-
Isopropanol	1-hour	2.08E+00	-	-	7,850	0.03	-	-
Styrene	1-hour	0.00E+00	-	-	215	0.00	-	-
Toluene	1-hour	1.09E+01	3.60E-02	3.65E-02	1,880	0.58	0.002	0.002
	24-hour	2.60E+00	-	-	400	0.65	-	-
Vinyl Chloride	1-hour	3.20E-01	-	-	130	0.25	-	-
Xylenes	1-hour	1.12E+01	1.80E-02	1.78E-02	2,300	0.49	0.001	0.001
	24-hour	2.73E+00	-	-	700	0.39	-	-

^a Emissions for these blank compounds in the final design are negligible therefore not included in this screening exercise.



Table B.2 Comparison of Maximum Predicted Concentrations of VOCs and PAHs for the EA Assumptions with the Final Facility Design (including baseline)

Compound	Averaging period	EA Background Concentration (µg/m3)	Predicted Maximum Concentrations			Alberta AAQO (µg/m³)	EA Normal Operations + EA Background (% of Alberta AAQO)	Final Design Normal Operations Model Result + EA Background (% of Alberta AAQO)	Final Design Stabilizing Operations Model Result + EA Background (% of Alberta AAQO)
			EA Normal Operations (µg/m³)	Final Design Normal Operations Model Result (µg/m³)	Final Design Stabilizing Operations Model Result (µg/m³)				
Acetaldehyde	1-hour	0.00	4.26	0.02	0.02	90	4.73	0.02	0.02
Acetone	1-hour	0.00	2.24	- ^a	-	5,900	0.04	-	-
Acrolein	1-hour	0.00	0.35	0.006	0.006	4.5	7.78	0.13	0.13
	24-hour	0.00	0.10	0.0007	0.0008	0.4	25.0	0.18	0.20
Acrylonitrile	1-hour	0.00	0.23	-	-	43	0.53	-	-
	Annual	0.00	0.01	-	-	2	0.50	-	-
Benzene	1-hour	2.52	3.18	2.53	2.56	30	10.60	8.43	8.53
	Annual	0.20	0.26	0.20	0.20	3	8.67	6.67	6.67
Benzo[a]pyrene	Annual	0.00	2.00E-05	5.12E-07	1.08E-06	3.00E-04	6.67	0.17	0.36
Cumene	1-hour	0.27	0.31	-	-	500	0.06	-	-
Ethylbenzene	1-hour	1.62	1.96	1.62	1.62	2,000	0.10	0.08	0.08
Formaldehyde	1-hour	0.00	2.27	0.27	0.28	65	3.49	0.42	0.43
Isopropanol	1-hour	0.00	2.08	-	-	7,850	0.03	-	-
Styrene	1-hour	0.49	0.49	-	-	215	0.23	-	-
Toluene	1-hour	19.03	29.88	19.07	19.07	1,880	1.59	1.01	1.01
	24-hour	7.81	10.42	-	-	400	2.61	-	-
Vinyl Chloride	1-hour	0.00	0.32	-	-	130	0.25	-	-
Xylenes	1-hour	7.43	18.66	7.45	7.45	2,300	0.81	0.32	0.32
	24-hour	3.05	5.79	-	-	700	0.83	-	-

^a Emissions for these blank compounds in the final design are negligible therefore not included in this screening exercise.





Appendix C

Emissions Methodology



Flare Stack Pseudo Parameters

Flare stack pseudo parameters are presented in Table 6.2. The effective flare stack exit velocity (20 m/s) and exit temperature (1273 K) are assumed values specified in the Guideline (BC ENVP, 2022a) Section 10.1.1. The effective flare stack height and stack diameter are calculated using equations in Section 10.1.1 in the Guideline (BC ENVP, 2022a). The effective stack height is the sum of the physical stack height and the vertical component of the flame length. The pseudo stack height is calculated as:

$$H_e = H_s + (4.56 * 10^{-3}) * Q^{0.478}$$

Where,

H_e is effective stack height (m)

H_s is physical stack height (m)

Q is total heat release (calories/second)

An effective (or pseudo) diameter is calculated to approximate the flame effective width and achieve an equivalent plume rise. Plume rise is a function of total heat release from the flare source. The effective stack diameter is calculated based on total heat release from combustion of flared gas, an assumed radiative heat loss fraction of 55%, an effective stack exit velocity (20 m/s), and an effective stack exit temperature (1273 K). An ambient temperature of 293 K is assumed in the default calculation method. The following conservative assumption is applied: net total heat release value is applied for the calculation of effective stack height and stack diameter. The pseudo stack diameter is calculated as:

$$D_e = 0.0122 \sqrt{\frac{T_s * Q * (1 - F)}{g * (T_s - T_a) * V_s}}$$

Where,

D_s is effective stack diameter (m)

T_s is effective stack exit temperature (1273 K)

Q is total heat release (calories/second)

F is radiative heat loss fraction (55%)

g is acceleration due to gravity (9.81 m/s²)

T_a is ambient temperature (293 K)

V_s is effective exit velocity (20 m/s)



Normal Operations Emission Calculations

Detailed SO₂, NO_x, PM_{2.5}, and CO emission calculations associated with the project sources including heat medium furnace, thermal oxidizer, and normal operation flares (HP flare and LP flare) are described below.

Calculation inputs and emission factors used for the source emission estimations are provided in Section 6 of the Dispersion Modelling Plan.

Heat Medium Furnace

The SO₂ emission rate is calculated using the following equation:

$$\begin{aligned}
 &SO_2 \text{ emission rate (t/d)} \\
 &= \text{Fuel consumption} \left(3,418 \frac{\text{sm}^3}{\text{h}} \right) * \frac{\text{sulphur content (4.0 ppmv)}}{10^6} \\
 &\div \text{Molar volume conversion factor at standard condition} \left(\frac{23.6449 \text{ m}^3}{\text{kmol}} \right) \\
 &* SO_2 \text{ MW} \left(\frac{64.066 \text{ kg}}{\text{kmol}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ tonne}}{10^3 \text{ kg}} \right) = 0.001 \text{ t/d}
 \end{aligned}$$

Where fuel consumption of 3418 sm³/h is from Table 6-2 and sulphur content of 4.0 ppmv is from Appendix D (fuel gas).

Emission calculations for NO_x, PM_{2.5}, and CO are as follows:

$$\begin{aligned}
 &NO_x \text{ emission rate (t/d)} \\
 &= \left(\frac{\text{Exhaust gas flow rate} \left(\frac{\text{kg}}{\text{h}} \right)}{\text{Exhaust gas MW} \left(\frac{\text{kg}}{\text{kmol}} \right)} \right) * \frac{\text{Exhaust gas NO}_x \text{ content (ppmv)}}{10^6} \\
 &* NO_x \text{ MW} \left(\frac{\text{kg}}{\text{kmol}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ tonne}}{10^3 \text{ kg}} \right)
 \end{aligned}$$

$$\begin{aligned}
 &PM_{2.5} \text{ emission rate (t/d)} \\
 &= PM_{2.5} \text{ emission factor} \left(\frac{\text{g}}{\text{GJ}} \right) * \text{Heat input (HHV)} \left(\frac{\text{GJ}}{\text{h}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) \\
 &* \text{Unit conversion} \left(\frac{1 \text{ tonne}}{10^6 \text{ g}} \right)
 \end{aligned}$$

$$\begin{aligned}
 &CO \text{ emission rate (t/d)} \\
 &= \left(\frac{\text{Exhaust gas flow rate} \left(\frac{\text{kg}}{\text{h}} \right)}{\text{Exhaust gas MW} \left(\frac{\text{kg}}{\text{kmol}} \right)} \right) * \frac{\text{Exhaust gas CO content (ppmv)}}{10^6} * CO \text{ MW} \left(\frac{\text{kg}}{\text{kmol}} \right) \\
 &* \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ tonne}}{10^3 \text{ kg}} \right)
 \end{aligned}$$



Thermal Oxidizer

Higher Heating Value (MJ/sm³), sulphur content (ppmv), and SO₂ emission rate for the normal operations case are calculated as follows:

High heating value (MJ/sm³)

$$\begin{aligned}
&= \left\{ \text{BOG gas higher heating value} \left(32.0 \frac{\text{MJ}}{\text{sm}^3} \right) * \text{BOG gas flow rate} \left(828 \frac{\text{sm}^3}{\text{hr}} \right) \right. \\
&+ \text{acid gas higher heating value} \left(0.125 \frac{\text{MJ}}{\text{sm}^3} \right) * \text{acid gas flow rate} \left(7,264 \frac{\text{sm}^3}{\text{hr}} \right) \\
&+ \text{flash gas higher heating value} \left(38.1 \frac{\text{MJ}}{\text{sm}^3} \right) * \text{flash gas flow rate} \left(358 \frac{\text{sm}^3}{\text{hr}} \right) \\
&+ \text{storage gas higher heating value} \left(38.3 \frac{\text{MJ}}{\text{sm}^3} \right) \\
&\left. * \text{storage gas gas flow rate} \left(19.2 \frac{\text{sm}^3}{\text{hr}} \right) \right\} \div \text{total gas flow rate} \left(8,470 \frac{\text{sm}^3}{\text{hr}} \right) \\
&= 4.94 \text{ MJ/sm}^3
\end{aligned}$$

Sulphur content (ppmv)

$$\begin{aligned}
&= \left\{ \text{BOG gas sulphur content} (1.0 \text{ ppmv}) * \text{BOG gas flow rate} \left(828 \frac{\text{sm}^3}{\text{hr}} \right) \right. \\
&+ \text{acid gas sulphur content} (562 \text{ ppmv}) * \text{acid gas flow rate} \left(7,264 \frac{\text{sm}^3}{\text{hr}} \right) \\
&+ \text{flash gas sulphur content} (58.0 \text{ ppmv}) * \text{flash gas flow rate} \left(358 \frac{\text{sm}^3}{\text{hr}} \right) \\
&+ \text{storage gas sulphur content} (1723 \text{ ppmv}) * \text{storage gas flow rate} \left(19.2 \frac{\text{sm}^3}{\text{hr}} \right) \left. \right\} \\
&\div \text{total gas flow rate} \left(8,470 \frac{\text{sm}^3}{\text{hr}} \right) = 488 \text{ ppmv}
\end{aligned}$$

SO₂ emission rate (t/d)

$$\begin{aligned}
&= \text{Fuel consumption} \left(8,470 \frac{\text{sm}^3}{\text{h}} \right) * \frac{\text{sulphur content} (488 \text{ ppmv})}{10^6} \\
&\div \text{Molar volume conversion factor at standard condition} \left(\frac{23.6449 \text{ m}^3}{\text{kmol}} \right) \\
&* \text{SO}_2 \text{ MW} \left(\frac{64.066 \text{ kg}}{\text{kmol}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ tonne}}{10^3 \text{ kg}} \right) = 0.269 \text{ t/d}
\end{aligned}$$

Where fuel consumption of 8,470 sm³/h is from Table 6-2 and sulphur content of 488 ppmv is from the calculation above.

Emission calculations for NO_x, PM_{2.5}, and CO are as follows:

NO_x emission rate (t/d)

$$\begin{aligned}
&= \text{NO}_x \text{ emission factor} \left(\frac{\text{g}}{\text{GJ}} \right) * \text{Heat input (HHV)} \left(\frac{\text{GJ}}{\text{h}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) \\
&* \text{Unit conversion} \left(\frac{1 \text{ tonne}}{10^6 \text{ g}} \right)
\end{aligned}$$



PM_{2.5} emission rate (t/d)

$$= PM_{2.5} \text{ emission factor } \left(\frac{g}{GJ} \right) * \text{Heat input (HHV)} \left(\frac{GJ}{h} \right) * \text{Unit conversion } \left(\frac{24 h}{1 d} \right) \\ * \text{Unit conversion } \left(\frac{1 \text{ tonne}}{10^6 g} \right)$$

CO emission rate (t/d)

$$= \left(\frac{\text{Exhaust gas flow rate } \left(\frac{kg}{h} \right)}{\text{Exhaust gas MW } \left(\frac{kg}{kmol} \right)} \right) * \frac{(100 - \text{water content } (\%))}{100} \\ * \left(\frac{(20.9 - 3)}{(20.9 - \text{dry } O_2 \text{ content } (\%))} \right) * \frac{\text{CO emission factor (ppmvd@3\% } O_2)}{10^6} \\ * \text{CO MW } \left(\frac{kg}{kmol} \right) * \text{Unit conversion } \left(\frac{24 h}{1 d} \right) * \text{Unit conversion } \left(\frac{1 \text{ tonne}}{10^3 kg} \right)$$

Flares

The sulphur contents (ppmv) and SO₂ emission rates for the normal operations HP and LP flares are calculated as follows:

HP flare sulphur content (ppmv)

$$= \left\{ \text{Fuel gas sulphur content (4.0 ppmv)} * \text{fuel gas flow rate } \left(1076 \frac{sm^3}{hr} \right) \right. \\ \left. + \text{feed gas sulphur content (24 ppmv)} * \text{feed gas flow rate } \left(128 \frac{sm^3}{hr} \right) \right\} \\ \div \text{total gas flow rate } \left(1,204 \frac{sm^3}{hr} \right) = 6.1 \text{ ppmv}$$

LP flare sulphur content (ppmv)

$$= \left\{ \text{fuel gas sulphur content (4.0 ppmv)} * \text{fuel gas flow rate } \left(540 \frac{sm^3}{hr} \right) \right. \\ \left. + \text{BOG gas sulphur content (1.0 ppmv)} * \text{BOG gas flow rate } \left(13.3 \frac{sm^3}{hr} \right) \right. \\ \left. + \text{feed gas sulphur content (24.0 ppmv)} * \text{feed gas flow rate } \left(3.55 \frac{sm^3}{hr} \right) \right\} \\ \div \text{total gas flow rate } \left(557 \frac{sm^3}{hr} \right) = 4.1 \text{ ppmv}$$

The sulphur contents for each stream mentioned above are provided in Appendix D.



HP flare SO₂ emission rate (t/d)

$$\begin{aligned}
&= \text{Fuel consumption} \left(1,204 \frac{\text{sm}^3}{\text{h}} \right) * \frac{\text{sulphur content (6.1 ppmv)}}{10^6} \\
&\div \text{Molar volume conversion factor at standard condition} \left(\frac{23.6449 \text{ m}^3}{\text{kmol}} \right) \\
&* \text{SO}_2 \text{ MW} \left(\frac{64.066 \text{ kg}}{\text{kmol}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ tonne}}{10^3 \text{ kg}} \right) \\
&= 0.0005 \text{ t/d}
\end{aligned}$$

Where fuel consumption of 1,204 sm³/h is from Table 6-2 and sulphur content of 6.1 ppmv is from the calculation above.

LP flare SO₂ emission rate (t/d)

$$\begin{aligned}
&= \text{Fuel consumption} \left(557 \frac{\text{sm}^3}{\text{h}} \right) * \frac{\text{sulphur content (4.1 ppmv)}}{10^6} \\
&\div \text{Molar volume conversion factor at standard condition} \left(\frac{23.6449 \text{ m}^3}{\text{kmol}} \right) \\
&* \text{SO}_2 \text{ MW} \left(\frac{64.066 \text{ kg}}{\text{kmol}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ tonne}}{10^3 \text{ kg}} \right) \\
&= 0.0001 \text{ t/d}
\end{aligned}$$

Where fuel consumption of 557 sm³/h is from Table 6-2 and sulphur content of 4.1 ppmv is from the calculation above.

NO_x, PM_{2.5}, and CO are calculated using the following equations.

NO_x emission rate (t/d)

$$\begin{aligned}
&= \text{NO}_x \text{ emission factor} \left(\frac{\text{lb}}{\text{MMBtu}} \right) * \text{Heat input (HHV)} \left(\frac{\text{MMBtu}}{\text{h}} \right) \\
&* \text{Unit conversion} \left(\frac{\text{kg}}{2.205 \text{ lb}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ tonne}}{1000 \text{ kg}} \right)
\end{aligned}$$

PM_{2.5} emission rate (t/d)

$$\begin{aligned}
&= \text{PM}_{2.5} \text{ emission factor} \left(\frac{\text{g}}{\text{GJ}} \right) * \text{Heat input (LHV)} \left(\frac{\text{GJ}}{\text{h}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) \\
&* \text{Unit conversion} \left(\frac{1 \text{ tonne}}{10^6 \text{ g}} \right)
\end{aligned}$$

CO emission rate (t/d)

$$\begin{aligned}
&= \text{CO emission factor} \left(\frac{\text{lb}}{\text{MMBtu}} \right) * \text{Heat input (LHV)} \left(\frac{\text{MMBtu}}{\text{h}} \right) \\
&* \text{Unit conversion} \left(\frac{\text{kg}}{2.205 \text{ lb}} \right) * \text{Unit conversion} \left(\frac{24 \text{ h}}{1 \text{ d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ tonne}}{1000 \text{ kg}} \right)
\end{aligned}$$



Sulphur Contents for Commissioning Case

High Pressure Flare

$$\begin{aligned}
 & \text{Sulphur content (ppmv)} \\
 &= \left\{ \text{feed gas sulphur content (24.0 ppmv)} * \text{feed gas flow rate} \left(85,500 \frac{\text{sm}^3}{\text{hr}} \right) \right. \\
 &+ \text{BOG gas sulphur content (1.0 ppmv)} * \text{BOG gas flow rate} \left(9,500 \frac{\text{sm}^3}{\text{hr}} \right) \\
 &+ \text{pilot and purge gas sulphur content (4.0 ppmv)} \\
 &\left. * \text{pilot and purge gas flow rate} \left(1,067 \frac{\text{sm}^3}{\text{hr}} \right) \right\} \div \text{total gas flow rate} \left(96,067 \frac{\text{sm}^3}{\text{hr}} \right) \\
 &= 21.5 \text{ ppmv}
 \end{aligned}$$

Sulphur Contents for Stabilizing Operations Case

High Pressure Flare

$$\begin{aligned}
 & \text{HP flare sulphur content (ppmv)} \\
 &= \left\{ \text{feed gas sulphur content (24.0 ppmv)} * \text{feed gas flow rate} \left(2,683 \frac{\text{sm}^3}{\text{hr}} \right) \right. \\
 &+ \text{routine operation gas sulphur content (6.1 ppmv)} \\
 &\left. * \text{routine operation gas flow rate} \left(1,204 \frac{\text{sm}^3}{\text{hr}} \right) \right\} \div \text{total gas flow rate} \left(3,887 \frac{\text{sm}^3}{\text{hr}} \right) \\
 &= 18.5 \text{ ppmv}
 \end{aligned}$$

Note that the HP flare normal operation gas sulphur content of 6.1 ppmv is from the Normal Operations Emission Calculations for HP flare (see calculation above)

Low Pressure Flare

$$\begin{aligned}
 & \text{LP flare sulphur content (ppmv)} \\
 &= \left\{ \text{BOG gas sulphur content (1.0 ppmv)} * \text{BOG gas flow rate} \left(1,009 \frac{\text{sm}^3}{\text{hr}} \right) \right. \\
 &+ \text{routine operation gas sulphur content (4.1 ppmv)} \\
 &\left. * \text{routine operation gas flow rate} \left(557 \frac{\text{sm}^3}{\text{hr}} \right) \right\} \div \text{total gas flow rate} \left(1,565 \frac{\text{sm}^3}{\text{hr}} \right) \\
 &= 2.09 \text{ ppmv}
 \end{aligned}$$

Note that the LP flare normal operation gas sulphur content of 4.1 ppmv is from the Normal Operations Emission Calculations for LP flare (see calculation above)



Sulphur Contents for Non-Routine Scenarios

HP Flare –Process Upset

$$\begin{aligned}
 & \text{HP flare sulphur content (ppmv)} \\
 &= \left\{ \text{feed gas sulphur content (45.0 ppmv, with high inlet sulphur)} \right. \\
 & \quad * \text{feed gas flow rate } \left(256,300 \frac{\text{sm}^3}{\text{hr}} \right) \\
 & \quad + \text{routine operation gas sulphur content (6.1 ppmv)} \\
 & \quad \left. * \text{routine operation gas flow rate } \left(1,204 \frac{\text{sm}^3}{\text{hr}} \right) \right\} \\
 & \div \text{total gas flow rate } \left(257,504 \frac{\text{sm}^3}{\text{hr}} \right) = 44.8 \text{ ppmv}
 \end{aligned}$$

LP Flare –Process Upset

$$\begin{aligned}
 & \text{LP flare sulphur content (ppmv)} \\
 &= \left\{ \text{BOG gas (from FTS) sulphur content (0 ppmv)} * \text{BOG gas flow rate } \left(21,219 \frac{\text{sm}^3}{\text{hr}} \right) \right. \\
 & \quad + \text{routine operation gas sulphur content (4.1 ppmv)} \\
 & \quad \left. * \text{routine operation gas flow rate } \left(557 \frac{\text{sm}^3}{\text{hr}} \right) \right\} \div \text{total gas flow rate } \left(21,776 \frac{\text{sm}^3}{\text{hr}} \right) \\
 &= 0.1 \text{ ppmv}
 \end{aligned}$$

The sulphur contents of feed gas (with high inlet sulphur) and BOG gas (from FST) are provided in Appendix D.

Thermal Oxidizer – High Inlet Sulphur

The following steps are used to obtain sulphur content (ppmv) in the input gas for this source.

First, calculate additional SO₂ emission rates due to additional sulphur content (i.e., an additional 21 ppmv) in inlet gas for the high inlet sulphur scenario. The high inlet gas sulphur content is 45 ppmv, while normal inlet gas sulphur content is 24 ppmv. Woodfibre LNG confirmed that the additional 21 ppmv sulphur will be removed in the acid gas removal unit and will not go to condensate product and LNG product. Therefore, the additional 21 ppmv sulphur will be combusted through the thermal oxidizer. The additional emission of SO₂ is calculated as follows:



$$\begin{aligned}
& SO_2 \text{ emission rate associated with the additional 21 ppmv sulphur in the inlet gas (kg/hr)} \\
&= \text{Inlet gas flow rate} \left(290 * 10^6 \frac{\text{scf}}{\text{d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ d}}{24 \text{ h}} \right) * \left(\frac{\text{sm}^3}{35.315 \text{ scf}} \right) \\
&\quad * \frac{\text{sulphur content (45 - 24)(ppmv)}}{10^6} \\
&\quad \div \text{Molar volume conversion factor at standard condition} \left(\frac{23.6449 \text{ m}^3}{\text{kmol}} \right) \\
&\quad * SO_2 \text{ MW} \left(\frac{64.066 \text{ kg}}{\text{kmol}} \right) = 19.5 \text{ kg/hr}
\end{aligned}$$

Second, calculate the total SO₂ emission rate as follows:

$$\begin{aligned}
& \text{Total } SO_2 \text{ emission rate (kg/hr)} \\
&= SO_2 \text{ emission rate associated with normal operation (i.e., inlet gas sulphur content 24 ppmv)} \\
&+ SO_2 \text{ emission rate associated with additional 21 ppmv sulphur in the inlet gas} \\
&= 0.269 \left(\frac{\text{t}}{\text{d}} \right) * \text{Unit conversion} \left(\frac{1 \text{ d}}{24 \text{ h}} \right) * \text{Unit conversion} \left(\frac{1000 \text{ kg}}{1 \text{ t}} \right) + 19.5 \frac{\text{kg}}{\text{hr}} = 30.7 \text{ kg/hr}
\end{aligned}$$

Finally, calculate the sulphur content (ppmv) for the high inlet sulphur scenario using total SO₂ emission rate as follows:

$$\begin{aligned}
& \text{Sulphur content (ppmv)} \\
&= SO_2 \text{ emission rate} \left(30.7 \frac{\text{kg}}{\text{hr}} \right) \div SO_2 \text{ MW} \left(64.066 \frac{\text{kg}}{\text{kmol}} \right) \\
&\quad * \text{Molar volume conversion factor at standard condition} \left(\frac{23.6449 \text{ m}^3}{\text{kmol}} \right) \\
&\quad \div \text{total gas flow rate} \left(8,470 \frac{\text{sm}^3}{\text{hr}} \right) * \text{Unit conversion} (10^6 \text{ ppmv}) = 1,337 \text{ ppmv}
\end{aligned}$$

HP Flare (Venting)

$$\begin{aligned}
& \text{Sulphur content (ppmv) in vent gas (acid gas + flash gas + storage gas)} \\
&= \left\{ \text{acid gas sulphur content (562 ppmv)} * \text{acid gas flow rate} \left(7,264 \frac{\text{sm}^3}{\text{hr}} \right) \right. \\
&\quad + \text{flash gas sulphur content (58.0 ppmv)} * \text{flash gas flow rate} \left(358 \frac{\text{sm}^3}{\text{hr}} \right) \\
&\quad \left. + \text{storage gas sulphur content (1723 ppmv)} * \text{storage gas flow rate} \left(19.2 \frac{\text{sm}^3}{\text{hr}} \right) \right\} \\
&\quad \div \text{total gas flow rate} \left(7,641 \frac{\text{sm}^3}{\text{hr}} \right) = 541 \text{ ppmv}
\end{aligned}$$



The H₂S contents (ppmv) in vent gas and in normal HP flare gas are calculated as follows:

$$\begin{aligned}
 &H_2S \text{ content (ppmv) in vent gas (acid gas + flash gas + storage gas)} \\
 &= \left\{ \text{acid gas } H_2S \text{ content (326 ppmv)} * \text{acid gas flow rate} \left(7,264 \frac{sm^3}{hr} \right) \right. \\
 &\quad + \text{flash gas } H_2S \text{ content (15.0 ppmv)} * \text{flash gas flow rate} \left(358 \frac{sm^3}{hr} \right) \\
 &\quad \left. + \text{storage gas } H_2S \text{ content (0 ppmv)} * \text{storage gas flow rate} \left(19.2 \frac{sm^3}{hr} \right) \right\} \\
 &\quad \div \text{total gas flow rate} \left(7,641 \frac{sm^3}{hr} \right) = 311 \text{ ppmv} \\
 &H_2S \text{ content in routine HP flare (ppmv)} \\
 &= \left\{ \text{Fuel gas } H_2S \text{ content (0 ppmv)} * \text{fuel gas flow rate} \left(1076 \frac{sm^3}{hr} \right) \right. \\
 &\quad \left. + \text{feed gas } H_2S \text{ content (6.0 ppmv)} * \text{feed gas flow rate} \left(128 \frac{sm^3}{hr} \right) \right\} \\
 &\quad \div \text{total gas flow rate} \left(1,204 \frac{sm^3}{hr} \right) = 0.64 \text{ ppmv}
 \end{aligned}$$

The H₂S content in each stream mentioned above are provided in Appendix D.



Appendix D

Gas Compositions and Emission Comparison between High CO₂ and Average CO₂ Operating Cases



Dispersion Modelling Plan

Appendix D: Gas Compositions and Emission Comparison between High CO₂ and Average CO₂ Operating Cases
October 16, 2026

Table D.1 shows gas compositions for all gas streams used by the facility equipment, including the heat medium furnace, thermal oxidizer, and HP and LP flares, for all operation scenarios.

Table D.2 shows comparison of high CO₂ and average CO₂ operating cases for the heat medium furnace and thermal oxidizer. The emissions of SO₂, NO_x, PM_{2.5}, and CO from the high CO₂ case are higher than those from the average CO₂ case for both the heat medium furnace and thermal oxidizer. Although the high CO₂ case, in which the facility receives feed gas containing a high CO₂ concentration (2 mol%), is expected to occur only very infrequently, it has been adopted as the basis for the modelling because it represents a conservative operating condition with higher emission rates.



Table D.1 Gas Compositions (mole fraction) ^a

Compound	Fuel Gas	BOG	BOG from FST (Process Upset Operation)	Feed Gas (normal operation)	Feed Gas (high inlet sulphur)	High CO ₂ Case (Design Case)			Average CO ₂ Case (Normal Case)		
						Acid Gas	*Flash Gas	Storage Gas (Condensate)	Acid Gas	Flash Gas	Storage Gas (Condensate)
Methane	0.86964	0.84974	0.87783	0.88004	0.88002	0.00253	0.93139	0	0.00723	0.94703	0
Ethane	0.01275	0.00005	0.00005	0.08185	0.08185	0.00016	0.03189	0	0.00045	0.03340	0
Propane	0.00332	0	0	0.02206	0.02206	0.00002	0.00536	0	0.00007	0.00571	0
i-Butane	0.00059	0	0	0.00366	0.00366	0.00001	0.00109	0.00053	0.00002	0.00105	0.00053
n-Butane	0.00056	0	0	0.00419	0.00419	0.000005	0.00089	0.00779	0.00001	0.00096	0.00779
i-Pentane	0.00017	0	0	0.00082	0.00082	0.000003	0.00062	0.13707	0.00001	0.00058	0.13707
n-Pentane	0.00001	0	0	0.00057	0.00057	0	0	0.08632	0	0	0.08632
Hexane	0	0	0	0.00021	0.00021	0	0.00004	0.01247	0.000001	0.00005	0.01247
Methylcyclohexane	0	0	0	0.00007	0.00007	0	0	0.00156	0	0	0.00156
Heptane	0	0	0	0.00018	0.00018	0	0.00002	0.00354	0	0.00002	0.00354
Octane	0	0	0	0.00016	0.00016	0	0.00002	0.00107	0.000001	0.00002	0.00107
Nonane	0	0	0	0.00008	0.00008	0	0.00001	0.00019	0	0.00001	0.00019
Nitrogen	0.11287	0.15014	0.12207	0.00292	0.00292	0.000004	0.00287	0.74594	0.00001	0.00287	0.74594
Carbon Dioxide	0.00002	0.00001	0.000001	0.00303	0.00303	0.93186	0.01747	0	0.92395	0.00161	0
Water	0	0	0	0.00008	0.00008	0.06482	0.00821	0	0.06479	0.00655	0
Benzene	0	0	0	0.00003	0.00003	0.00002	0.000031	0.00155	0.00007	0.00003	0.00155
Toluene	0	0	0	0.00001	0.00001	0.00001	0.000016	0.00024	0.00005	0.00002	0.00024
Xylene	0	0	0	0.000002	0.000002	0.000002	0.000002	0.00001	0.00001	0.000003	0.00001
Hydrogen Sulfide	0	1.0E-06	0	0.00001	0.00001	0.00033	0.000015	0	0.00196	0.00001	0
COS	0	0	0	0.000004	0.000004	0.00022	0.000001	0	0.00132	0	0
Other Sulfur Compounds	0.000004	0	0	0.00001	0.00003	0.00002	0.00004	0.00172	0.00005	0.00005	0.00172
O ₂	0.000054	0.00006	0.00005	0.00001	0.00001	0	0.00001	0	0	0.00001	0
Active solvent components	0	0	0	0	0	0	0	0	0	0.000001	0
Sum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total Sulphur (mole fraction)	0.000004	1.0E-06	0	0.000024	0.000045	0.000562	0.000058	0.001723	0.003330	0.000061	0.001723
Total Sulphur (ppmv)	4.0	1.0	0.0	24.0	45.0	562	58.0	1,723	3,330	61.0	1,723
LHV (MJ/m ³)	30.7	28.9	29.8	37.0	37.9	0.113	34.3	35.4	0.354	35.0	35.4
HHV (MJ/m ³)	34.1	32.0	33.1	42.0	42.0	0.125	38.1	38.3	0.390	38.8	38.3

Note:
^a Provided by Woodfibre LNG.



Table D. 2 Comparison of High CO₂ and Average CO₂ Operating Cases for the Heat Medium Furnace and Thermal Oxidizer

Source Identification		Heat Medium Furnace		Thermal Oxidizer	
Unit Description		High CO ₂ Case (Design Case) ^a	Average CO ₂ Case (Normal Case) ^b	High CO ₂ Case (Design Case) ^a	Average CO ₂ Case (Normal Case) ^b
Temporal Variation		Continuous	Continuous	Continuous	Continuous
Operational Data					
Input Gas Type		Fuel Gas	Fuel Gas	BOG + Acid Gas + Flash Gas + Storage Gas	BOG + Acid Gas + Flash Gas + Storage Gas
Input Gas Higher Heating Value (HHV)	MJ/sm ³	34.1	34.1	4.94	8.07
Heat Input (based on HHV)	MW	32.4	22.6	11.6	3.37
Sulphur Content	ppmv	4	4	488	2,638
Fuel Gas Consumption Rate	s m3/h	3,418	2,386	-	-
BOG Gas Flow Rate	s m3/h	-	-	828 (sulphur content 1.0 ppmv)	140 (sulphur content 1.0 ppmv) ^c
Acid Gas Flow Rate	s m3/h	-	-	7,264 (sulphur content 562 ppmv)	1,179 (sulphur content 3,330 ppmv) ^c
Flash Gas Flow Rate	s m3/h	-	-	358 (sulphur content 58.0 ppmv)	167 (sulphur content 61.0 ppmv) ^c
Storage Gas Flow Rate	s m3/h	-	-	19.2 (sulphur content 1,723 ppmv)	19.2 (sulphur content 1,723 ppmv) ^c
Total Gas Flow Rate to Thermal Oxidizer	s m3/h	-	-	8,470 (488 ppmv)	1,505 (2,638 ppmv)
Stack Parameters					
Maximum Exit Velocity	m/s	5.91	3.90	18.7	5.01
Exit Temperature	°C	188	163	982	982
	K	461	436	1,255	1,255
Maximum Emission Rates					
SO ₂	t/d	0.001	0.001	0.269	0.258
NO _X	t/d	0.053	0.037	0.026	0.008
PM _{2.5}	t/d	0.002	0.001	0.001	0.0002
CO	t/d	0.134	0.093	0.026	0.008
SO ₂	g/s	0.010	0.007	3.11	2.99
NO _X	g/s	0.611	0.426	0.302	0.088
PM _{2.5}	g/s	0.021	0.014	0.007	0.002
CO	g/s	1.55	1.08	0.296	0.094

Notes:

^a For high CO₂ case, all information for both heater medium heater and thermal oxidizer are from Table 6-2.

^b For average CO₂ case, calculation approaches for input heating value and sulphur content in total gas flow rate for the thermal oxidizer, and calculation approaches for emission estimations for both heater medium heater and thermal oxidizer are the same as the high CO₂ case.

^c Gas flow rate and sulphur content for each stream are provided by Woodfibre LNG. The sulphur contents are also shown in Table D.1



October 16, 2026

APPENDIX B

CALMET



Technical Data Report— for the Woodfibre LNG Project Waste Discharge Authorization Application

CALMET Appendix



Prepared for:
Woodfibre LNG General Partner Inc.

September 9, 2026

Prepared by:
Stantec Consulting Ltd.

Project/File:
123222939

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B.1 Introduction

This appendix provides technical details and assumptions regarding the application of the CALMET model to determine the meteorology for dispersion modelling of air quality assessment in support of the Woodfibre Liquefied Natural Gas Project Waste Discharge Authorization Application (the Project). The CALMET modelling was completed following the BC Ministry of Environment and Parks (ENVP) Air Quality Dispersion Modelling Guideline (the Guideline) (ENVP, 2022). The appendix focuses on model input data preparation and an overview of main CALMET predicted parameters.

For the air quality assessment completed for the Project, the CALMET meteorological model (Scire et al., 2000) was run for a five-year period, January 1, 2011 to December 31, 2015. The selection of a five-year period is consistent with the Guideline (ENVP, 2022). CALMET was run in no-obs mode (ENVP, 2022) using Weather Research and Forecasting (WRF) model 4 km gridded data provided by ENVP (ENVP, 2021).

B.2 CALMET Application

The CALMET model is available from the model developer's (i.e., Exponent, Inc.) web site (<http://www.src.com/calpuff/calpuff1.htm>). The current United States Environmental Protection Agency (US EPA) version of CALMET is Version 5.8.4, level 130731. For this assessment, a more recent version, Version 6.50 - Level 150223 was adopted.

A 40 km by 40 km CALMET model domain at 100 m grid resolution was selected for the assessment (see Section B.3). With this high-resolution grid spacing, it was possible to maximize run time and file size efficiencies while still capturing large-scale terrain feature influences on wind flow patterns.

To simulate transport and dispersion processes, it is also important to simulate representative vertical profiles of wind direction, wind speed, temperature, and turbulence intensity within the atmospheric boundary layer (i.e., the layer within about 2,000 m of the Earth's surface). To capture this vertical structure, twelve vertical layers were selected. CALMET defines a vertical layer as the midpoint between two faces (i.e., thirteen faces correspond to twelve layers, with the lowest layer always being ground level or 10 m). The vertical faces used in this study are 0 m, 20 m, 40 m, 80 m, 160 m, 300 m, 600 m, 1,000 m, 1,500 m, 2,200 m and 3,000 m.

The ENVP WRF 4 km dataset for the years 2011–2015 (ENVP, 2021) was used as an initial guess field. The CALMET model was then used to adjust this initial guess field for the kinematic effects of terrain, slope flows, and terrain blocking effects using the finer scale terrain data to produce a modified wind field.



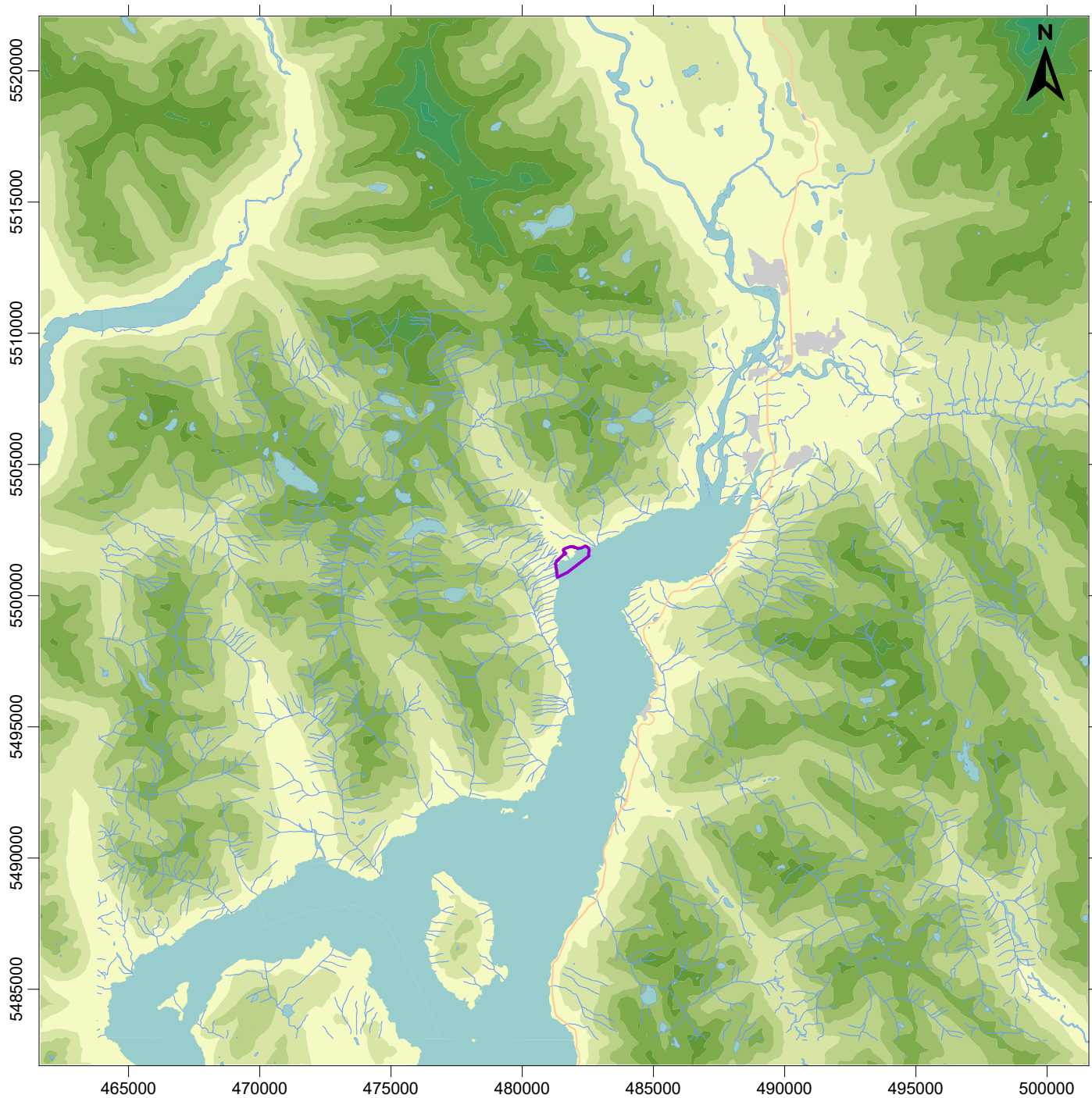
B.3 Model Domain

The CALMET domain adopted for the Project extends from approximately north of 49.4902 degrees latitude to 49.8512 degrees latitude, and from west of 123.5303 degrees longitude to 122.9778 degrees longitude as shown in Figure B.1. The CALMET Domain covers a 40 km by 40 km (1,600 km²) area. The extents (described above in decimal degrees) are provided in Table B.1 as UTM coordinates

Table B.1 Coordinates of the 40 km x 40 km CALMET Domain (100 m grid resolution)

Domain Corner	Location (UTM NAD 83, Zone 10)	
	East (m)	North (m)
Northwest	461593	5522083
Southwest	461593	5482083
Southeast	501593	5482083
Northeast	501593	5522083

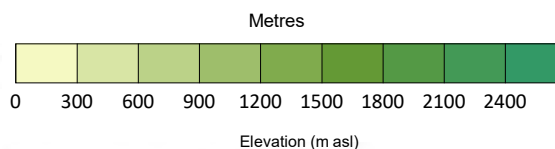




Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fence Line
- Water Course
- Major Road
- Squamish Community
- Water Body

0 4000 8000 m



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Figure No

B.1

Title
 CALMET Model Domain and Terrain
 (40km x 40km)

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B.4 Topography and Land Cover

B.4.1 Topography

Valleys and elevated terrain features influence surface wind flow patterns. Terrain data that are used to define these features were obtained from Canadian Digital Elevation Model (CDEM) (Natural Resources Canada, 2017). A CDEM mosaic can be obtained for a pre-defined or user-defined extent. The coverage and resolution of a mosaic vary according to latitude and to the extent of the requested area.

Derived products such as slope, shaded relief and colour shaded relief maps can also be generated on demand. The pre-packaged GeoTif datasets are based on the National Topographic System of Canada (NTS) at the 1:250 000 scale. These data have a horizontal resolution of ~30 m, which is more than sufficient for air quality assessment purposes.

A general overview of the terrain within the CALMET domain is presented in Figure B.1. Terrain in the region is very complex with elevations ranging from 0 to 2,637 meters above sea level (m asl). The base elevation at the Project site is approximately 8.5 m asl.

B.4.2 Land-Cover Data

In addition to terrain elevation data, the CALMET model uses surface parameters such as surface roughness length, albedo, Bowen ratio, leaf area index, soil heat flux, and anthropogenic heat flux to provide input to calculate surface heat flux and mechanical turbulence.

For this assessment, the North American Land Cover data (CEC, 2020) set was used to determine land use categories for the CALMET model. The 2015 North American Land Cover data set was produced as part of the North American Land Change Monitoring System (NALCMS); a trilateral effort between the Canada Centre for Remote Sensing, the United States Geological Survey, and three Mexican organizations including the National Institute of Statistics and Geography, National Commission for the Knowledge and Use of the Biodiversity and the National Forestry Commission of Mexico. The resulting 2015 Land Cover of North America data are at a resolution of 30 m.

This land cover information was then converted into the fractional land-use data file by the CALMET CTGPROC program (described in Table B.2). Considering that Howe Sound does not freeze in winter and snow accumulation is intermittent (mostly rains); therefore, Winter1 characteristics will be used throughout the winter season (no winter 2). Four seasons (shown in Table B.3) were determined based on Table 4.5 of the Guidelines (ENVP, 2022). Table B.4 to Table B.7 provide seasonal values for surface roughness (z_0), albedo, Bowen ratio, soil heat flux, anthropogenic heat flux and leaf area index (LAI). The selected values are consistent with Section 4.4 of the Guideline (ENVP, 2022). Using the fractional land use data from CTGPROC, CALMET MAKEGEO pre-processor calculates the dominant land use for each cell and computes weighted surface parameters based on seasonal values provided in Table B.4 to Table B.7.



The 30 m resolution CEC Temíxw (land) cover data (CEC, 2020) is employed by CALMET to develop a 100 m resolution temíxw (land) use file. Figure B.2 illustrates the temíxw (land)-use classes in the CALMET model domain for the Project. Based on the 100 m CALMET grid resolution data, the domain is comprised of 61.0% evergreen forest, 9.5% water, 9.0% perennial snow or ice, 7.1% shrub rangeland, 6.3% deciduous forest, 5.4% barren temíxw (land), 0.5% rangeland, and 0.3% wetland.

Table B.2 Translation Table of 30 m resolution CEC Land Cover Categories to CALMET Categories

30 m Resolution CEC Land Cover Code	30 m Resolution CEC Land Cover Type	CALMET Code	CALMET Land Use Category
1	Temperate or sub-polar needleleaf forest	42	Evergreen Forest Land
2	Sub-polar taiga needleleaf forest	42	
3	Tropical or sub-tropical broadleaf evergreen forest	42	
4	Tropical or sub-tropical broadleaf deciduous forest	41	Deciduous Forest Land
5	Temperate or sub-polar broadleaf deciduous forest	41	
6	Mixed forest	43	Mixed Forest Land
7	Tropical or sub-tropical shrubland	32	Shrub Rangeland
8	Temperate or sub-polar shrubland	32	
9	Tropical or sub-tropical grassland	30	Rangeland
10	Temperate or sub-polar grassland	30	Rangeland
11	Sub-polar or polar shrubland-lichen-moss	32	Shrub Rangeland
12	Sub-polar or polar grassland-lichen-moss	30	Rangeland
13	Sub-polar or polar barren-lichen-moss	32	Shrub Rangeland
14	Wetland	60	Wet Land
15	Cropland	20	Agricultural Land
16	Barren lands	70	Barren Land
17	Urban	10	Urban or Build-up Land
18	Small Water Body	51	Small Water Body
19	Snow and Ice	90	Snow and Ice
20	Large water body	55	Large water body



Table B.3 Four Seasons Applied in CALMET Modeling for the Latitude of 45° to 50° N

Season	ENVP 2022 guideline definitions	Months
1	Midsummer with lush vegetation	June and July
2	Autumn with cropland that has not been harvested	August and September
3	Winter season (Winter 1 and Winter 2 together)	October, November, December, January, February, March and April
4	Transitional spring with partially green short annuals	May



Table B.4 CALMET Land-use Characterization and Associated Geophysical Parameters for the Season 1 (Summer)

NALCMS Code	Surface Roughness (m)	Albedo	Bowen Ratio	Soil Heat Flux (fraction)	Anthropogenic Heat Flux (W/m ²)	Leaf Area Index	CALMET Code	CALMET Land Cover Type
1	1.300	0.120	0.300	0.150	0.000	5.000	42	Evergreen Forest
2	1.300	0.120	0.300	0.150	0.000	5.000	42	
3	1.300	0.120	0.300	0.150	0.000	5.000	42	
4	1.300	0.160	0.300	0.150	0.000	3.400	41	Deciduous Forest
5	1.300	0.160	0.300	0.150	0.000	3.400	41	
6	1.300	0.140	0.300	0.150	0.000	4.500	43	Mixed Forest
7	0.300	0.180	1.000	0.150	0.000	4.500	32	Shrub Rangeland
8	0.300	0.180	1.000	0.150	0.000	4.500	32	
9	0.150	0.200	0.500	0.150	0.000	1.000	30	Rangeland
10	0.150	0.200	0.500	0.150	0.000	1.000	30	
11	0.300	0.180	1.000	0.150	0.000	4.500	32	Shrub Rangeland
12	0.150	0.200	0.500	0.150	0.000	1.000	30	Rangeland
13	0.300	0.180	1.000	0.150	0.000	4.500	32	Shrub Rangeland
14	0.200	0.140	0.100	0.300	0.000	0.200	60	Wet Land
15	0.200	0.200	0.500	0.150	0.000	2.000	20	Agricultural Land
16	0.050	0.200	1.500	0.150	0.000	0.000	70	Barren Land
17	0.540	0.160	0.800	0.250	8.000	0.300	10	Urban or Build-up
18	0.001	0.100	0.100	1.000	0.000	0.000	51	Small Water Body
19	0.200	0.700	0.500	0.150	0.000	0.000	90	Snow or Ice
20	0.001	0.100	0.100	1.000	0.000	0.000	55	Large Water Body

Notes:

For latitude 45° to 50° N, Season 1 (Summer) = June and July ; W/m² = watts per square metre



Table B. 5 CALMET Land-use Characterization and Associated Geophysical Parameters for Season 2 (Autumn)

NALCMS Code	Surface Roughness (m)	Albedo	Bowen Ratio	Soil Heat Flux (fraction)	Anthropogenic Heat Flux (W/m ²)	Leaf Area Index	CALMET Code	CALMET Land Cover Type
1	1.300	0.120	0.800	0.150	0.000	5.000	42	Evergreen Forest
2	1.300	0.120	0.800	0.150	0.000	5.000	42	
3	1.300	0.120	0.800	0.150	0.000	5.000	42	
4	1.300	0.160	1.000	0.150	0.000	1.900	41	Deciduous Forest
5	1.300	0.160	1.000	0.150	0.000	1.900	41	
6	1.300	0.140	0.900	0.150	0.000	3.500	43	Mixed Forest
7	0.300	0.180	1.500	0.150	0.000	3.500	32	Shrub Rangeland
8	0.300	0.180	1.500	0.150	0.000	3.500	32	
9	0.150	0.200	0.700	0.150	0.000	1.000	30	Rangeland
10	0.150	0.200	0.700	0.150	0.000	1.000	30	
11	0.300	0.180	1.500	0.150	0.000	3.500	32	Shrub Rangeland
12	0.150	0.200	0.700	0.150	0.000	1.000	30	Rangeland
13	0.300	0.180	1.500	0.150	0.000	3.500	32	Shrub Rangeland
14	0.200	0.140	0.100	0.300	0.000	0.200	60	Wet Land
15	0.200	0.200	0.700	0.150	0.000	1.500	20	Agricultural Land
16	0.050	0.200	1.500	0.150	0.000	0.000	70	Barren Land
17	0.540	0.160	1.000	0.250	12.000	0.200	10	Urban or Build-up
18	0.001	0.100	0.100	1.000	0.000	0.000	51	Small Water Body
19	0.200	0.700	0.500	0.150	0.000	0.000	90	Snow or Ice
20	0.001	0.100	0.100	1.000	0.000	0.000	55	Large Water Body

Notes:

For latitude 45° to 50° N, Season 2 (Autumn) = August and September; W/m² = watts per square metre



Table B.6 CALMET Land-use Characterization and Associated Geophysical Parameters for Season 3 (Winter)

NALCMS Code	Surface Roughness (m)	Albedo	Bowen Ratio	Soil Heat Flux (fraction)	Anthropogenic Heat Flux (W/m ²)	Leaf Area Index	CALMET Code	CALMET Land Cover Type
1	1.300	0.120	0.800	0.150	0.000	5.000	42	Evergreen Forest
2	1.300	0.120	0.800	0.150	0.000	5.000	42	
3	1.300	0.120	0.800	0.150	0.000	5.000	42	
4	0.600	0.170	1.000	0.150	0.000	0.100	41	Deciduous Forest
5	0.600	0.170	1.000	0.150	0.000	0.100	41	
6	0.950	0.140	0.900	0.150	0.000	2.300	43	Mixed Forest
7	0.300	0.180	1.500	0.150	0.000	2.300	32	Shrub Rangeland
8	0.300	0.180	1.500	0.150	0.000	2.300	32	
9	0.020	0.180	0.700	0.150	0.000	1.000	30	Rangeland
10	0.020	0.180	0.700	0.150	0.000	1.000	30	
11	0.300	0.180	1.500	0.150	0.000	2.300	32	Shrub Rangeland
12	0.020	0.180	0.700	0.150	0.000	1.000	30	Rangeland
13	0.300	0.180	1.500	0.150	0.000	2.300	32	Shrub Rangeland
14	0.200	0.140	0.100	0.300	0.000	0.100	60	Wet Land
15	0.020	0.180	0.700	0.150	0.000	1.000	20	Agricultural Land
16	0.050	0.200	1.500	0.150	0.000	0.050	70	Barren Land
17	0.500	0.180	1.000	0.250	21.000	0.100	10	Urban or Build-up
18	0.001	0.100	0.100	1.000	0.000	0.000	51	Small Water Body
19	0.200	0.700	0.500	0.150	0.000	0.000	90	Snow or Ice
20	0.001	0.100	0.100	1.000	0.000	0.000	55	Large Water Body

Notes:

For latitude 45° to 50° N, Season 3 (Winter) = October, November, December, January, February, March and April, W/m² = watts per square metre



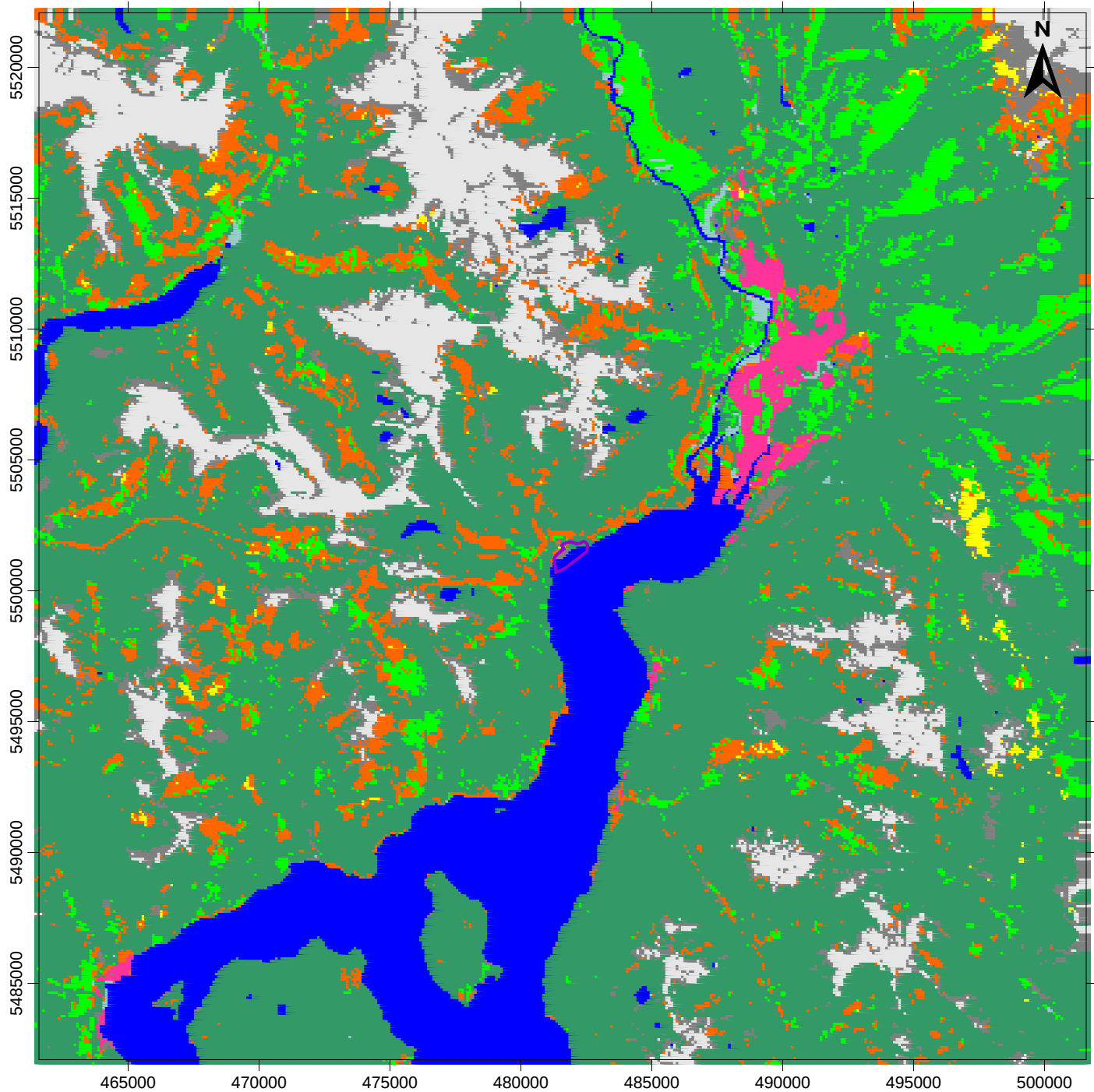
Table B.7 CALMET Land-use Characterization and Associated Geophysical Parameters for Season 4 (Transitional Spring)

NALCMS Code	Surface Roughness (m)	Albedo	Bowen Ratio	Soil Heat Flux (fraction)	Anthropogenic Heat Flux (W/m ²)	Leaf Area Index	CALMET Code	CALMET Land Cover Type
1	1.300	0.120	0.700	0.150	0.000	5.000	42	Evergreen Forest
2	1.300	0.120	0.700	0.150	0.000	5.000	42	
3	1.300	0.120	0.700	0.150	0.000	5.000	42	
4	1.000	0.160	0.700	0.150	0.000	0.800	41	Deciduous Forest
5	1.000	0.160	0.700	0.150	0.000	0.800	41	
6	1.150	0.140	0.700	0.150	0.000	3.300	43	Mixed Forest
7	0.300	0.180	1.000	0.150	0.000	3.300	32	Shrub Rangeland
8	0.300	0.180	1.000	0.150	0.000	3.300	32	
9	0.030	0.140	0.300	0.150	0.000	1.000	30	Rangeland
10	0.030	0.140	0.300	0.150	0.000	1.000	30	
11	0.300	0.180	1.000	0.150	0.000	3.300	32	Shrub Rangeland
12	0.030	0.140	0.300	0.150	0.000	1.000	30	Rangeland
13	0.300	0.180	1.000	0.150	0.000	3.300	32	Shrub Rangeland
14	0.200	0.140	0.100	0.300	0.000	0.100	60	Wet Land
15	0.030	0.140	0.300	0.150	0.000	1.000	20	Agricultural Land
16	0.050	0.200	1.500	0.150	0.000	0.000	70	Barren Land
17	0.520	0.160	0.800	0.250	15.000	0.200	10	Urban or Build-up
18	0.001	0.100	0.100	1.000	0.000	0.000	51	Small Water Body
19	0.200	0.700	0.500	0.150	0.000	0.000	90	Snow or Ice
20	0.001	0.100	0.100	1.000	0.000	0.000	55	Large Water Body

Notes:

For latitude 45° to 50° N, Season 5 (Spring) = May; W/m² = watts per square metre





Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Facility Fenceline

- Urban Land
- Rangeland
- Shrub Rangeland
- Deciduous Forest
- Evergreen Forest
- Water
- Wetland
- Barren Land
- Snow or Ice



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Figure No.

B.2

Title
 CALMET Land Use Classification in Model Domain

B.5 Meteorological Inputs

The CALMET model requires the input of surface and upper air meteorological fields. For this application, CALMET model was run in no-obs mode (ENVP, 2022) by using WRF (ENVP, 2021) model output for the period of January 1, 2011, to December 31, 2015. There are no valid hourly surface and upper air data stations within the 40 km by 40 km CALMET model domain.



B.6 ENVP 2011–2015 WRF 4 km Data

The CALMET model requires the input of surface and upper air meteorological fields. For this application, CALMET model was run in no-obs mode (ENVP, 2022) by using WRF (ENVP, 2021) model output for the period of January 1, 2011, to December 31, 2015. There are no valid hourly surface and upper air data stations within the 40 km by 40 km CALMET model domain.

While WRF model predictions have been compared to observations at surface and upper air stations to provide assurance that the outputs can be used for dispersion modelling purposes (ENVP, 2022), the outputs are predictions that may not necessarily be representative for the study area. For this reason, ENVP recommends that WRF data users assess the representativeness of the WRF output at their location (ENVP, 2022).

Figure B.3 shows the ENVP WRF grid point locations based on 4 km grid resolution within the 40 km by 40 km CALMET model domain.

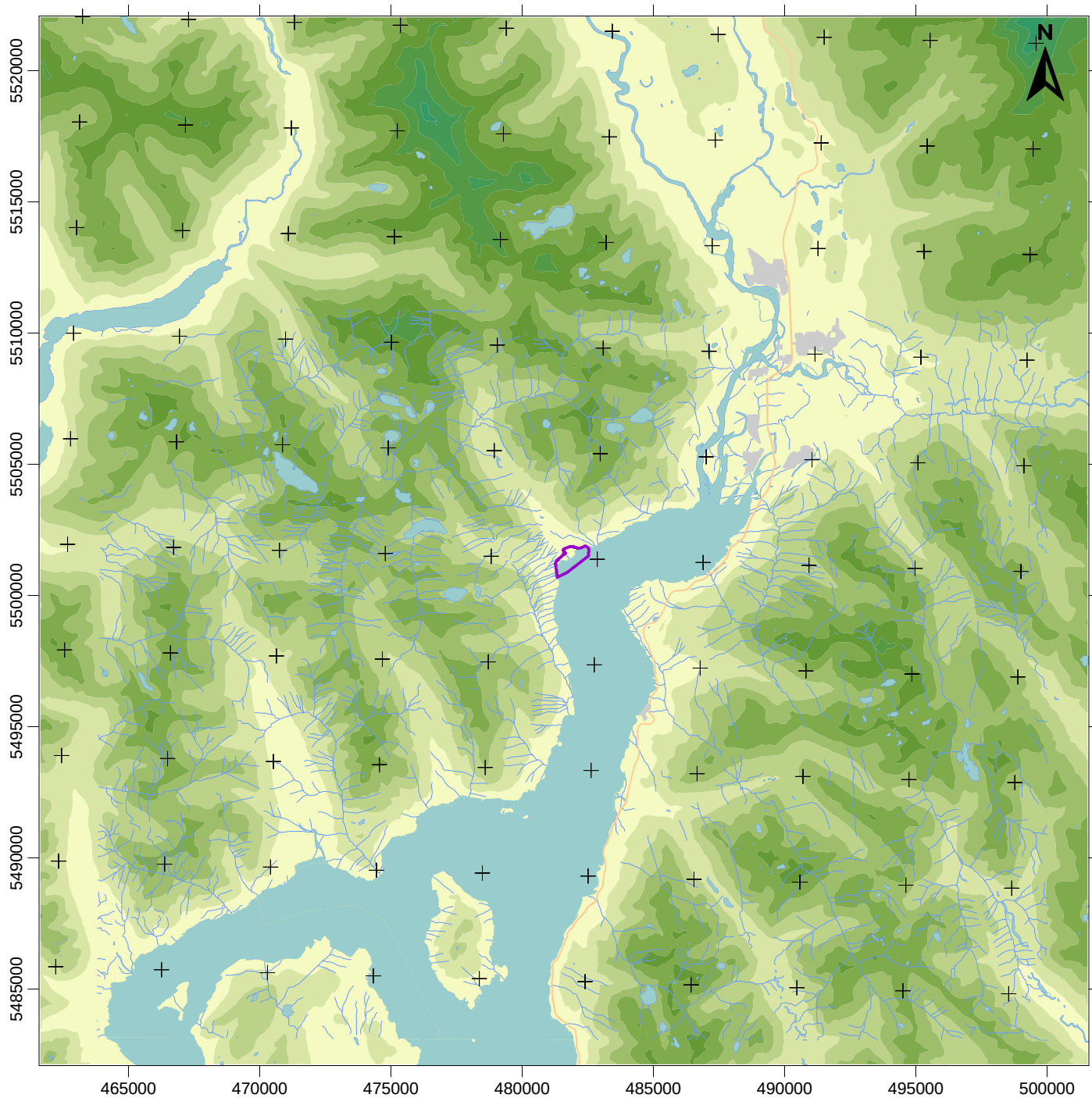
The Environment and Climate Change Canada (ECCC) Squamish Airport weather station was used to determine the representativeness of the WRF data. This station is located approximately nine km to the northeast of the Project site. Wind speed, wind direction and temperature data at the lowest model level were extracted from WRF data and compared to the measurements for the five-year period from 2011 to 2015.

Figure B.4 compares the wind roses generated for the Squamish Airport weather station from the WRF model predictions with the wind rose for the same location based on measurements. Both measured and predicted wind roses show good agreement with the most frequent winds are from southeast and north.

Figure B.5 compares the monthly average surface temperatures from the WRF model predictions with measurements at the Squamish Airport Weather Station. The WRF model predictions show slightly cold bias but relatively reasonable agreement with observations throughout the five-year period.

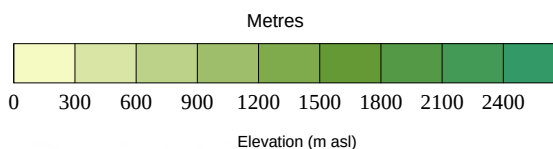
As the WRF model predictions and measurements are similar at the Squamish Airport Weather Station that is located close to the Project site, the WRF model predictions should also be representative of meteorological conditions in the model domain.





Notes
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body
- ENVP WRF 4km grid



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B.3

Title
 WRF 4km Grids in CALMET Model Domain

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Figure B.4 Comparison of Measured and Predicted Surface Winds at ECCC Squamish Airport Weather Station (2011–2015)

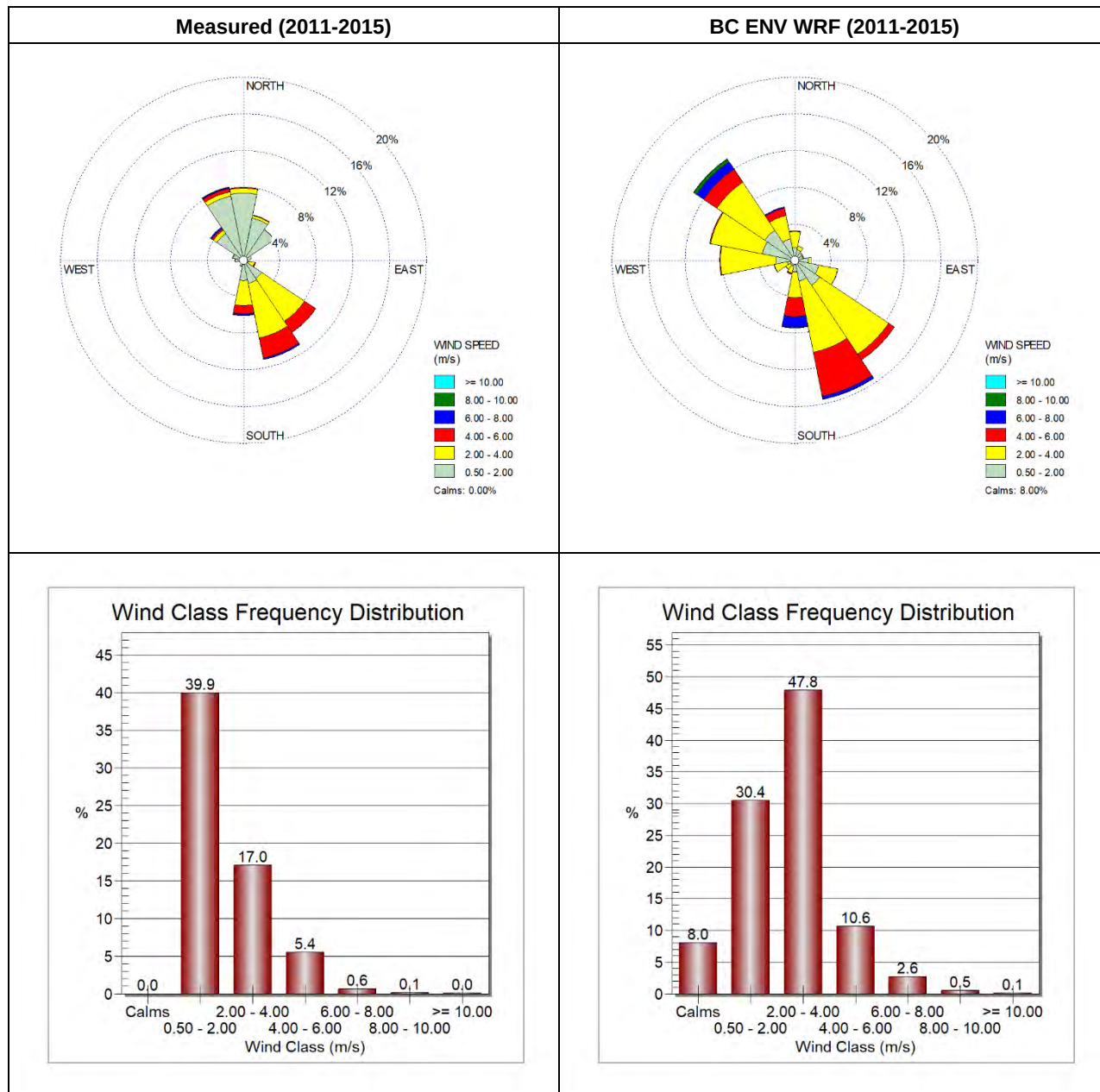
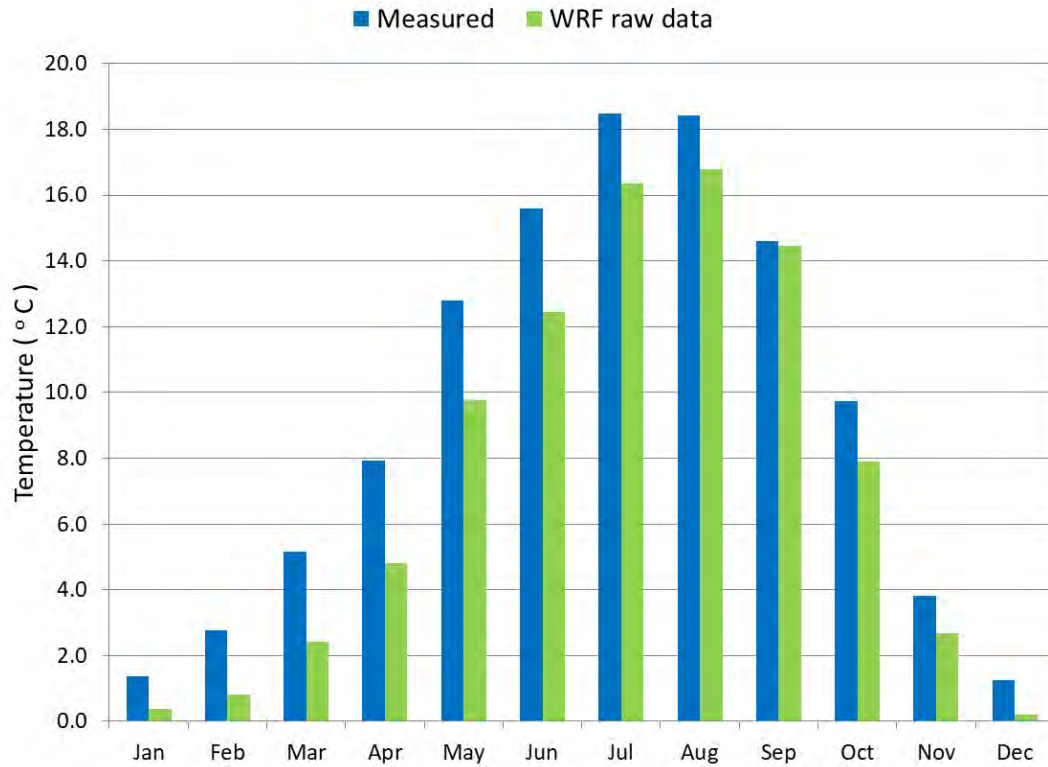


Figure B.5 Comparison of Measured and Predicted Monthly Average Temperature at Squamish Airport Weather Station (2011–2015)



B.7 CALMET Predictions

To assess the value of the WRF-CALMET model approach for this assessment, CALMET output parameters including surface and elevated winds, surface temperature, mixing height and PG stability class data were extracted at the Project Site for analysis. These are the main parameters that influence transport and dispersion of emissions (Scire et al., 2000).

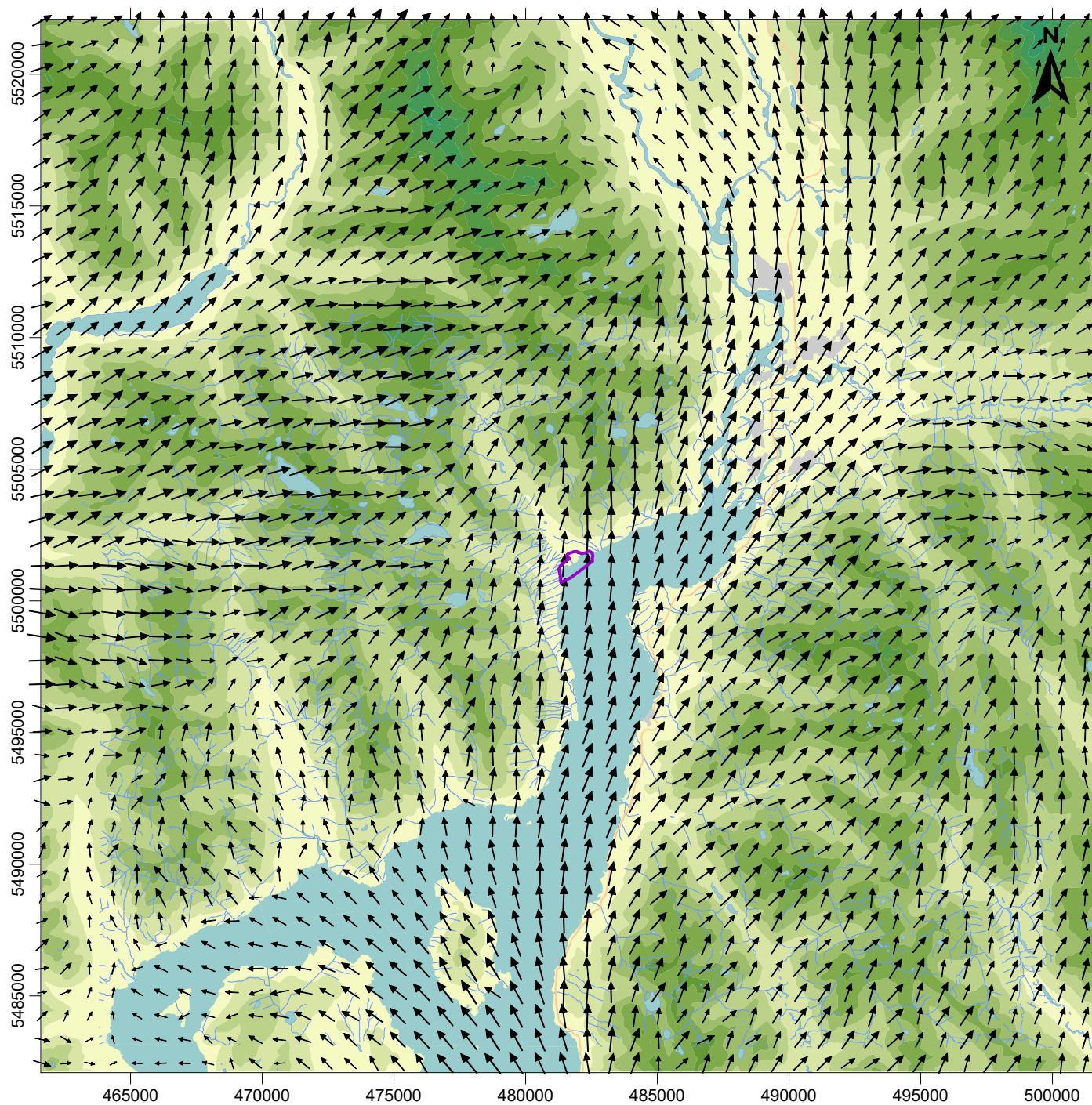
B.7.1 Predicted Surface Winds Field

The CALMET model can provide surface wind vector plots for all the grid points across a model domain. Three plots were generated to represent unstable, stable, and neutral conditions for the near-field model domain. The three sample wind vector plots are described below:

- Figure B.6 shows the wind field as a vector plot at 1200 LST on July 18, 2015, for convective (i.e., unstable) conditions (PG class B). Winds in the south and middle portion of the domain tend to be from the south, whereas those in the rest part of the domain tend to be less organized. The predicted winds at the Project site are mainly from the southwest.
- Figure B.7 shows the wind field as a vector plot at 1800 LST on January 10, 2015, for stable conditions (PG class F). The winds in the water parts of the domain tend to be from north, whereas those in the other part of the domain tend to be less organized. The predicted winds at the Project site are mainly from the northwest.
- Figure B.8 shows the wind field as a vector plot at 1500 LST on November 24, 2015, for high wind speed (i.e., neutral) conditions. Under these conditions, winds are from the north and northwest across most of the domain. The predicted winds at the Project site are mainly from the north with a wind speed of 15.0 m/s.

The vector plots were not selected to represent a specific meteorological condition; they are provided to show the variability of the airflow that can occur over the 40 km x 40 km area during any given hour. Departures of the predicted vector plots from the actual wind field for a given hour are to be expected given the nature of modelling and the relatively low density of actual observations across the region. The predicted values, however, are preferable to assuming a homogeneous wind field across the domain for each hour, based on the local terrain influences that are reflected in the measured data.





Notes
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 2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

0 4000 8000 m



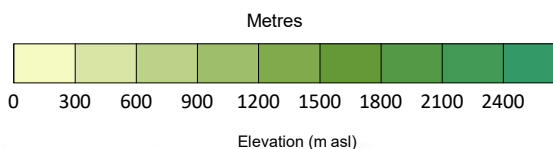
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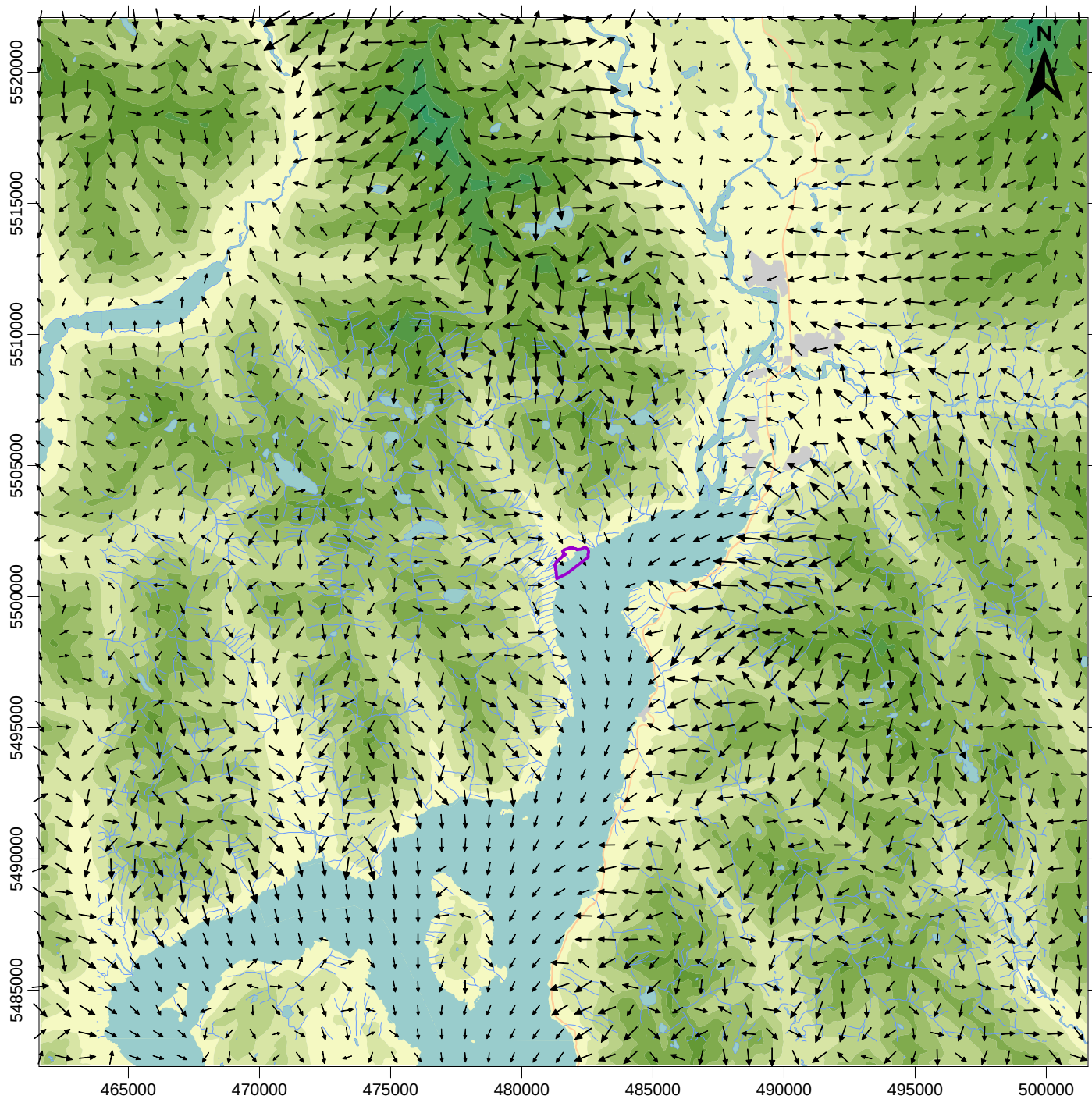
Figure No

B.6

Title
 Predicted Surface Wind Field for Unstable Conditions
 (1200 LST July 18, 2015)



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- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

0 4000 8000 m



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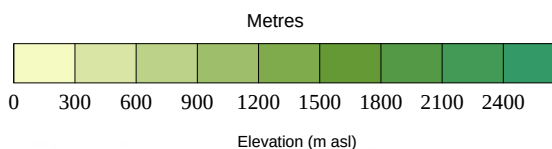
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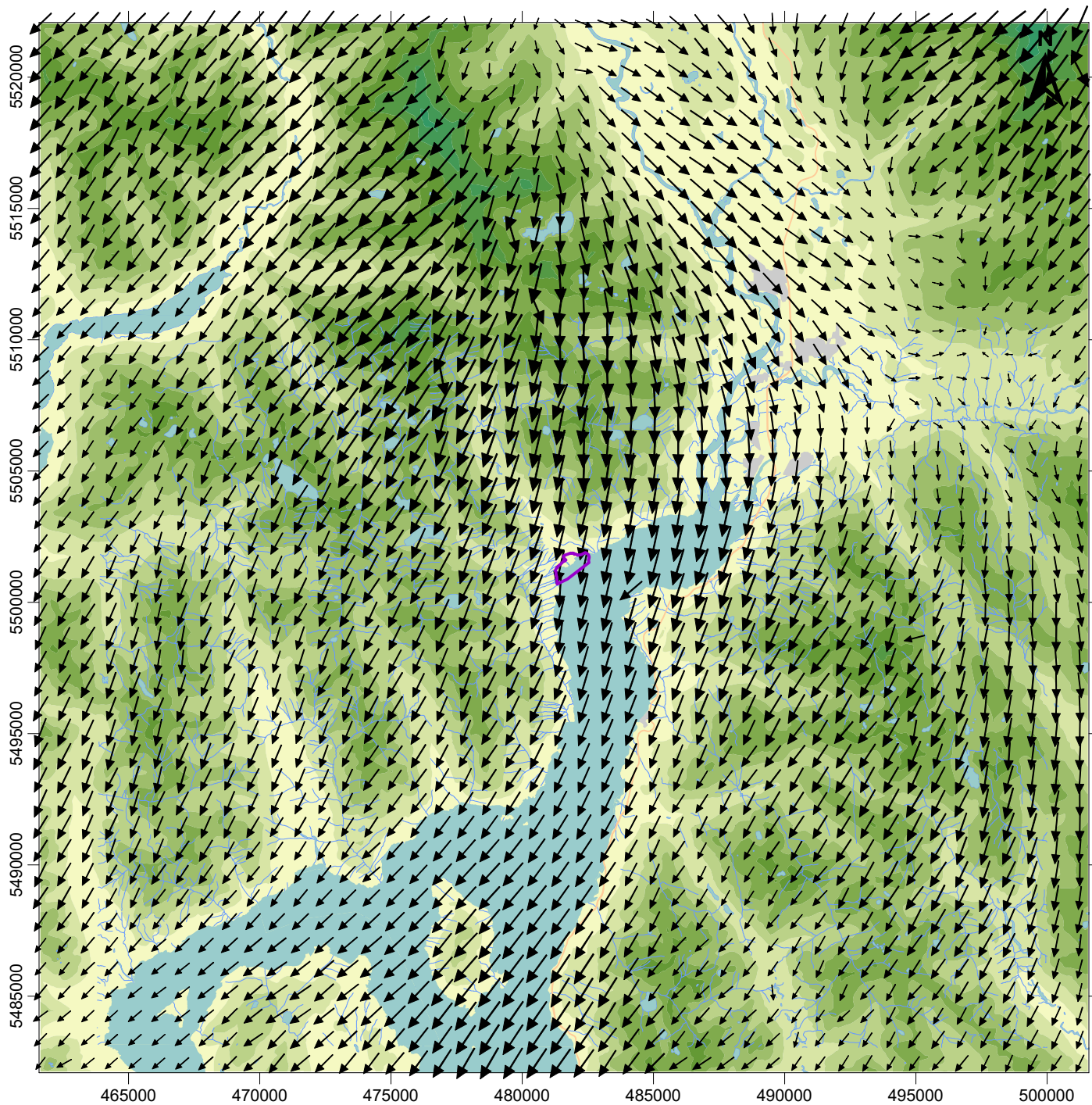
B.7

Title

Predicted Surface Wind Field for Stable Conditions
 (1800 LST January 10, 2015)



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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

0 4000 8000 m



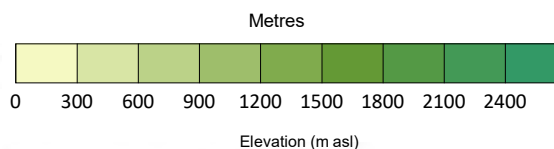
Client/Project/Report

Woodfibre LNG General Partners Inc.
 Woodfibre LNG Facility
 Technical Data Report

Figure No

B.8

Title
 Predicted Surface Wind Field for High Winds Conditions
 (1500 LST November 24, 2015)



Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

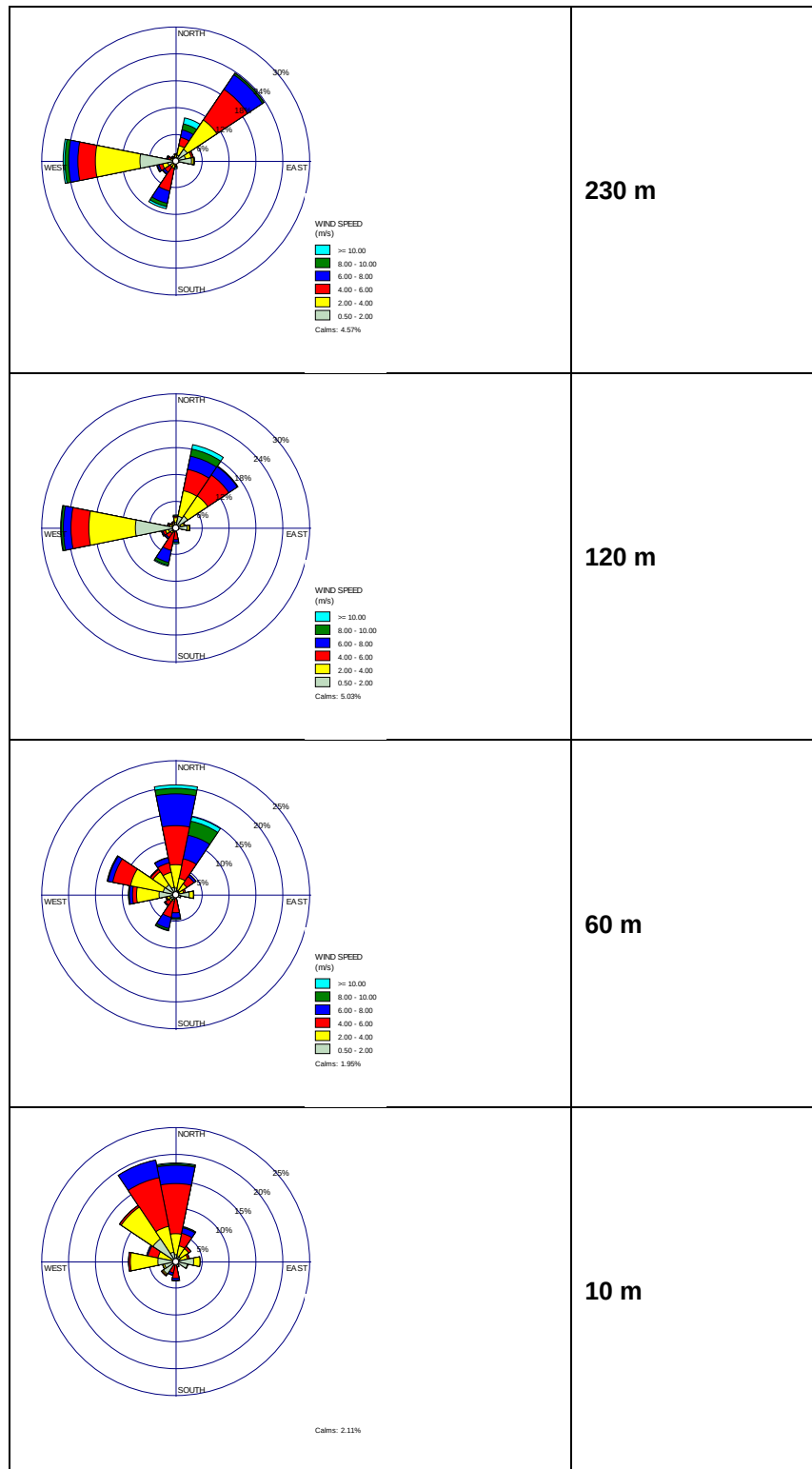
B.7.2 Predicted Winds at Project Site

Figure B.9 shows the wind roses predicted by CALMET for the Project site at various elevations above ground (10 m, 60 m, 120 m and 230 m). The results indicate:

- At 10 m and 60 m levels, winds are mainly from north. Higher winds are also mainly from the south. This is likely due to local topography surrounding the Project Site.
- At 120 m and 230 m levels, winds are mainly from northeast and west. Higher winds are also mainly from the northeast. This is likely due to local topography surrounding the Project Site
- Wind speed increases with increasing height above the ground.



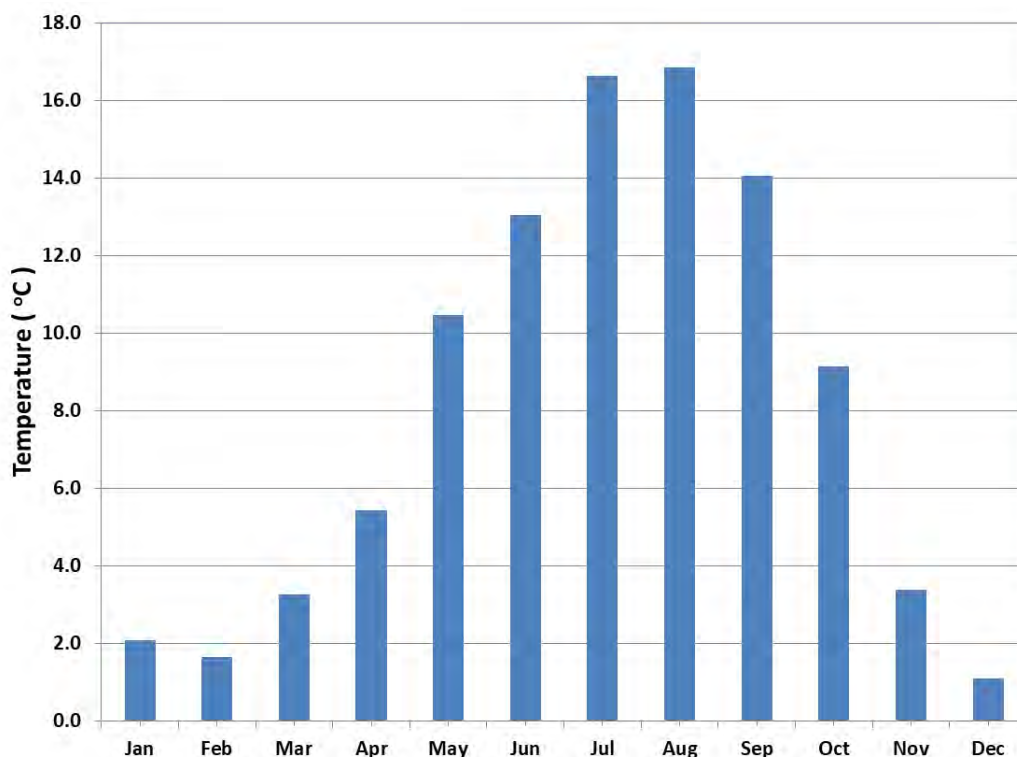
Figure B.9 CALMET Predicted Wind Roses at 4 Levels at the Project Site (2011–2015)



B.7.3 Predicted Surface Temperatures at Project Site

Figure B.10 shows the monthly average surface temperatures predicted by CALMET for the Project site for 2011–2015. The predicted monthly temperatures indicate similar and reasonable seasonal surface temperature variations.

Figure B.10 CALMET Predicted Monthly Average Surface Temperature at the Project site (2011–2015)



B.7.4 Predicted Mixing Heights

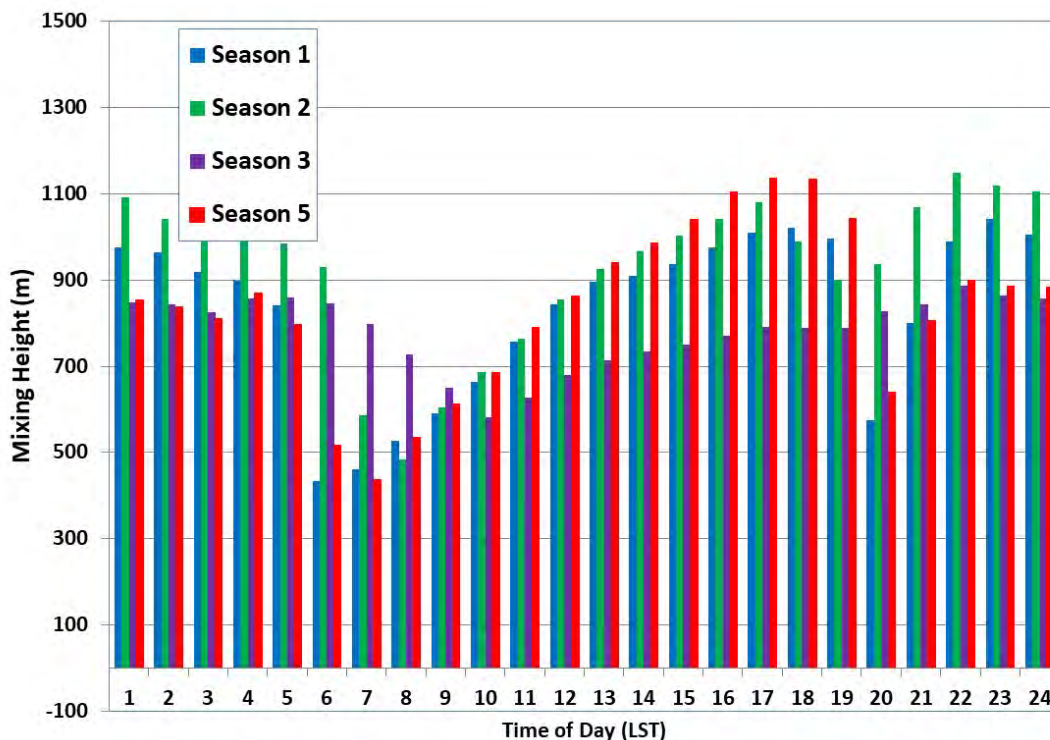
CALMET predicted seasonal mean diurnal mixing heights extracted at the Project Site for 2011–2015 are provided in Figure B.11 (definitions of five seasons refer to Table B.2). Extractions are as per the CALMET user guide (Scire, J.S., F.R. Robe, M.E. Ferneau, and R.J. Yamartino, 2000). The results show:

- Season 1 (mid-summer): The mean maximum values are about 1,042 m.
- Season 2 (autumn): The mean maximum afternoon values are about 1,150 m.
- Season 3 (winter): The mean maximum afternoon values are about 886 m.
- Season 5 (transitional spring): The mean maximum afternoon values are about 1,137 m.



The convective mixing process dominates during the day, leading to maximum mixed layer depths during the afternoon. The minimum values for each season are predicted to occur during the night.

Figure B.11 CALMET Predicted Mean Diurnal Mixing Heights at the Project site (2011–2015)



B.7.5 Predicted Atmospheric Stability Class

Table B.8 provides the stability class frequency distributions based on the CALMET model predictions for the Project site. Figure B.12 shows the frequency distributions of predicted seasonal PG stability classes at the Project site on a diurnal basis.

- The neutral condition (Stability Class D) Neutral conditions are most frequent during the fall (season 3) and winter (season 4), during both day and night. This is due to the combination of high winds and persistent cloud cover, which are present in the area during the fall and winter storm season.
- Unstable conditions (Stability Classes A, B and C) are more frequent during the summer and spring seasons (seasons 1, 2 and 5), and are associated with daytime periods, clear skies and low wind speeds.
- Stable conditions (Stability Classes E and F) are more frequent during nighttime periods.



Table B.8 Predicted Stability Class Frequency Distributions (%) at the Project site (2011–2015)

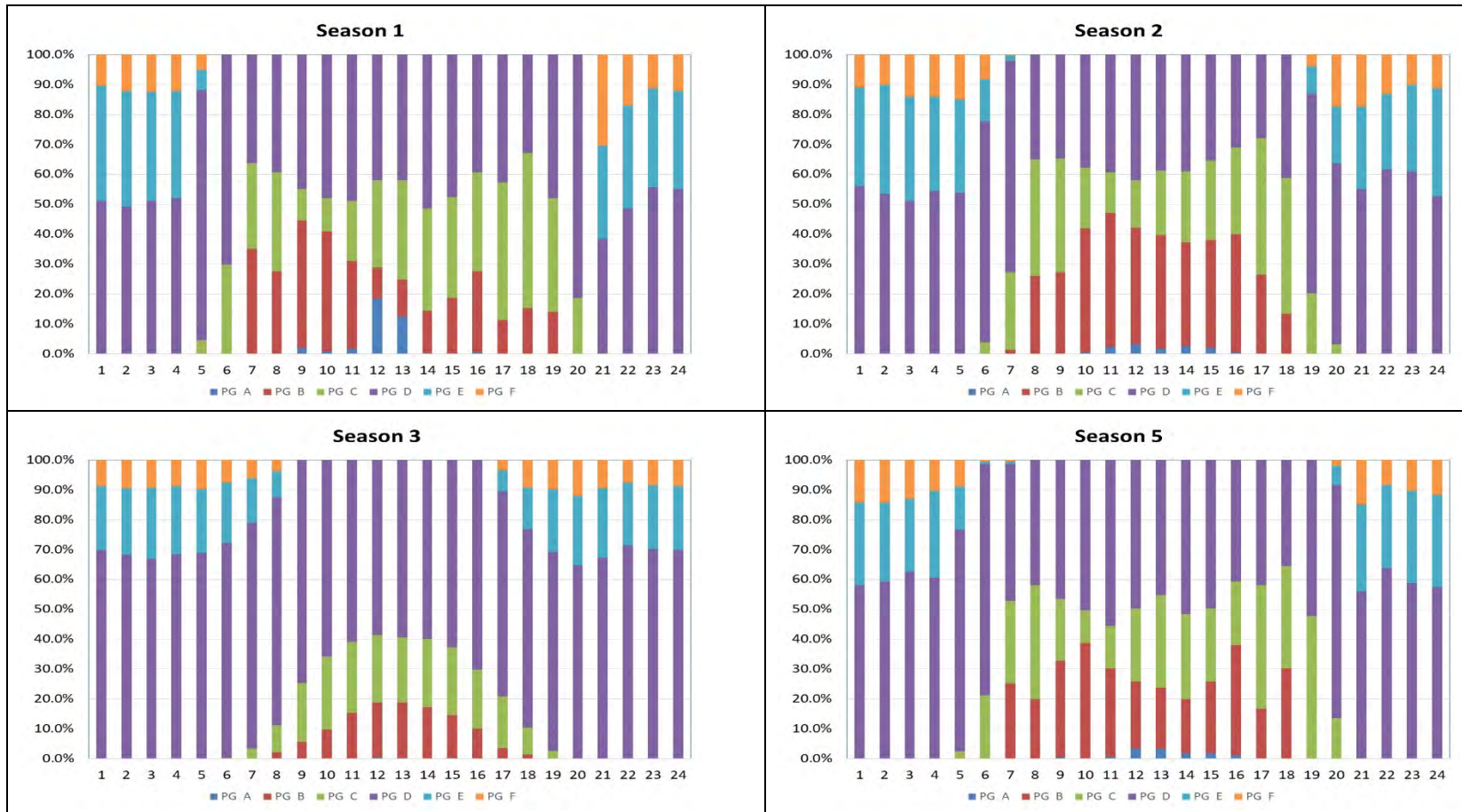
	Number of Hours	A	B	C	D	E	F
Season 1	7320	1.5	12.4	19.0	50.0	12.0	5.1
Season 2	7320	0.5	15.3	15.5	48.9	13.7	6.1
Season 3	25464	0.1	4.9	9.1	67.6	12.8	5.5
Season 5	3720	0.5	13.1	16.7	54.7	10.3	4.5
2011–2015	43824	0.4	8.6	12.5	60.5	12.6	5.5

Note:

Definitions of five seasons refer to Table B.4.



Figure B.12 Frequency of Predicted Seasonal PG Stability Class at the Project Site (2011 to 2015)



Note:

Definitions of four seasons refer to Table B.3



B.8 CALMET Model Options

The model developer provided the CALMET user with numerous options to address a range of user needs. The parameters for the CALMET control file used in this assessment are provided in Table B.9 to Table B.14.

The default values recommended by the US EPA (US EPA, 1998) are presented for comparative purposes. In most cases, these default values are used. The Guidelines (ENVP, 2022) Section 9.4 also indicates some specific values in CALMET Input Group 5 that are to be used instead of the default values. Some of the recommendations are mandatory (indicated by green shading in Table B.13 and others are left to professional judgment (indicated by blue shading in Table B.13).

Table B.9 CALMET Model Options Groups 0 and 1

Parameter	Default	Project	Comment
Input Group 0: Input and Output File Names			
NUSTA	-	0	Number of upper air stations
NOWSTA	-	2	Number of over waters met stations
MM3D	-	60	Number of CALWRF 3D.DAT files (one for each month)
NIGF	-	0	Number of IGF-CALMET.DAT files
Input Group 1: General run control parameters			
IBYR	-	2011	Starting year
IBMO	-	1	Starting month
IBDY	-	1	Starting day
IBHR	-	0	Starting hour
IBSEC	-	0	Starting second
IEYR	-	2016	Ending year
IEMO	-	1	Ending month
IEDY	-	1	Ending day
IEHR	-	0	Ending hour
IESEC	-	0	Ending second
ABTZ	-	UTC-0800	UTC time zone
NSECDT	3,600	3600	Length of modeling time-step (seconds)
IRTYPE	1	1	Run type
LCALGRD	T	T	Special data fields
ITEST	2	2	Flag to stop run after SETUP phase



Table B.10 CALMET Model Options Group 2: Grid Control Parameters

Parameter	Default	Project	Comment
PMAP	UTM	UTM	Map projection
IUTMZN	-	10	UTM Zone
UTMHEM	N	N	Hemisphere for UTM projection
DATUM	-	NAR-C	Datum-region for output coordinate
NX	-	400	No. X grid cells
NY	-	400	No. Y grid cells
DGRIDKM	-	0.1	Grid spacing (km)
XORIGKM	-	461.593	Reference coordinate of SW corner of grid cell (1,1) -X coordinate (km)
YORIGKM	-	5522.083	Reference coordinate of SW corner of grid cell (1,1) -Y coordinate (km)
NZ	-	12	Vertical grid definition: Number of vertical layers
ZFACE	-	0, 20, 40, 80, 120, 280, 520, 880, 1320, 1820, 2380, 3000 and 4000	Vertical grid definition: Cell face heights in arbitrary vertical grid (m)

Table B.11 CALMET Model Options Group 3: Output Options

Parameter	Default	Project	Comment
Disk Output:			
LSAVE	T	T	Save met. fields in the unformatted output files
IFORMO	1	1	Type of unformatted output file
Line Printer Output:			
LPRINT	F	F	Print meteorological fields
IPRINF	1	1	Print intervals (hrs)
IUVOUT (NZ)	0	12*0	Specify which layers of U,V wind component to print
IWOUT (NZ)	0	12*0	Specify which level of the w wind component to print
ITOUT (NZ)	0	12*0	Specify which levels of the 3-D temperature field to print

Parameter	Default	Project	Comment
Meteorological fields to print:			
Variable		Print? 0 = no print 1 = print	Comment
STABILITY		1	PGT stability
USTAR		0	Friction velocity
MONIN		0	Monin-Obukhov length
MIXHT		1	Mixing height
WSTAR		0	Convective velocity scale
PRECIP		1	Precipitation rate
SENSHEAT		0	Sensible heat flux
CONVZI		0	Convective mixing height
Testing and debug print options for micrometeorological module:			
LDB	F	F	Print input meteorological data and internal variables
NN1	1	1	First time step for which debug data are printed
NN2	1	1	Last time step for which debug data are printed
LDBCST	F	F	Print distance to land internal variables
Testing and debug print options for wind field module:			
IOUTD	0	0	Control variable for writing the test/debug wind fields to disk files
NZPRN2	1	1	Number of levels, starting at surface, to print
IPR0	0	0	Print the interpolated wind components
IPR1	0	0	Print the terrain adjusted surface wind components
IPR2	0	0	Print the smoothed wind components and the initial divergence fields
IPR3	0	0	Print the final wind speed and direction
IPR4	0	0	Print the final divergence fields
IPR5	0	0	Print the winds after kinematic effects are added
IPR6	0	0	Print the winds after the Froude number adjustment is made
IPR7	0	0	Print the winds after slope flows are added
IPR8	0	0	Print the final wind field components



Table B.12 CALMET Model Options Group 4: Meteorological Data Options

Parameter	Default	Project	Comment
NOOBS	0	2	Use WRF/3D for surface, overwater, and upper air data
Number of Surface & Precipitation Meteorological Stations:			
NSSTA	-	Not applicable	Number of surface stations
NPSTA	-	Not applicable	Number of precipitation stations
Cloud Data Options:			
MCLOUD	0	4	Gridded cloud cover from prognostic relative humidity at all levels
File Formats:			
IFORMS	2	Not applicable	Surface meteorological data file format
IFORMP	2	Not applicable	Precipitation data file format
IFORMC	2	Not applicable	Cloud data file format

Table B.13 CALMET Model Option Group 5: Wind Field Options and Parameters

Parameter	Default	Project	Comment
Wind Field Model Options:			
IWFCOD	1	1	Model selection variables
IFRADJ	1	1	Compute Froude number adjustment
IKINE	0	0	Compute kinematic effects
IOBR	0	0	Use O'Brien procedure for adjustment of the vertical velocity
ISLOPE	1	1	Compute slope flow effects
IEXTRP	-4	1	no extrapolation is done
ICALM	0 or 1	0	Extrapolate surface winds even if calm
BIAS	0	12*0	Layer-dependent biases modifying the weights of surface and upper air stations
RMIN2	4	Not applicable	Minimum distance from nearest upper air station to surface station for which extrapolation of surface winds at surface station will be allowed
IPROG	2,4 or 14	14	Use gridded prognostic wind field model output fields as input to the diagnostic wind field model (from WRF 3D.DAT)
ISTEPPGS	3600	3600	Time step (seconds) of the prognostic model input data
IGFMET	0	0	Use coarse CALMET fields as initial guess fields

Parameter	Default	Project	Comment
Radius of Influence Parameters:			
LVARY	F	F	Use varying radius of influence
RMAX1	-	Not applicable	Maximum radius of influence over land in the surface layer (km)
RMAX2	-	Not applicable	Maximum radius of influence over land aloft (km)
RMAX3	-	Not applicable	Maximum radius of influence over water
Other Wind Field Input Parameters:			
RMIN	0.1	0.1	Minimum radius of influence used in the wind field interpolation (km)
TERRAD	-	5	Radius of influence of terrain features (km)
R1	-	Not applicable	Relative weighting of the first guess field and observations in the surface layer (km)
R2	-	Not applicable	Relative weighting of the first guess field and observations in the layers aloft (km)
RPROG	-	0	Relative weighting parameter of the prognostic wind field data (km)
DIVLIM	5.0E-6	5.0E-6	Maximum acceptable divergence in the divergence minimization procedure
NITER	50	50	Maximum number of iterations in the divergence minimization procedure
NSMTH (NZ)	2,(mxnz-1)*4	2,11*4	Number of passes in the smoothing procedure
NINTR2	99	12*99	Maximum number of stations used in each layer for the interpolation of data to a grid point
CRITFN	1.0	1.0	Critical Froude number
ALPHA	0.1	0.1	Empirical factor controlling the influence of kinematic effects
FEXTR2(NZ)	0.0	12*0	Multiplicative scaling factor for extrapolation of surface observations to upper layers
Barrier Information:			
NBAR	0	0	Number of barriers to interpolation of the wind fields
KBAR	NZ	12	Level (1 to NZ) up to which barriers apply
XBBAR	-	0	X coordinate of beginning of each barrier
YBBAR	-	0	Y coordinate of beginning of each barrier
XEBAR	-	0	X coordinate of ending of each barrier
YEBAR	-	0	Y coordinate of ending of each barrier



Technical Data Report— for the Woodfibre LNG Project Waste Discharge Authorization Application

Section B.8: CALMET Model Options

September 9, 2026

Parameter	Default	Project	Comment
Diagnostic Module Data Input Options:			
IDIOPT1	0	0	Surface temperature (0 = compute internally from hourly surface observation)
ISURFT	-	-1	use 2-D spatially varying surface temperatures
IDIOPT2	0	0	Domain-averaged temperature lapse (0 = compute internally from hourly surface observation)
IUPT	-	Not applicable	Upper air station to use for the domain-scale lapse rate
ZUPT	200	Not applicable	Depth through which the domain-scale lapse rate is computed (m)
IDIOPT3	0	0	Domain-averaged wind components
IUPWND	-1	-1	Upper air station to use for the domain-scale winds (-1 indicating 3-D initial guess fields)
ZUPWND	1., 1000	1., 1000	Bottom and top of layer through which domain-scale winds are computed (m)
IDIOPT4	0	0	Observed surface wind components for wind field module
IDIOPT5	0	0	Observed upper air wind components for wind field module
Lake Breeze Information:			
LLBREZE	F	F	Use lake breeze module
NBOX	-	Not applicable	Number of lake breeze regions
XG1	-	Not applicable	X Grid line 1 defining the region of interest
XG2	-	Not applicable	X Grid line 2 defining the region of interest
YG1	-	Not applicable	Y Grid line 1 defining the region of interest
YG2	-	Not applicable	Y Grid line 2 defining the region of interest
XBCST	-	Not applicable	X Point defining the coastline in kilometres (Straight line)
YBCST	-	Not applicable	Y Point defining the coastline in kilometres (Straight line)
XECST	-	Not applicable	X Point defining the coastline in kilometres (Straight line)
YECST	-	Not applicable	Y Point defining the coastline in kilometres (Straight line)
NLB	-	Not applicable	Number of stations in the region
METBXID	-	Not applicable	Station ID's in the region

Notes:

Green shading = mandatory recommendations

Blue shading = left up to professional judgment



Table B.14 CALMET Model Option Group 6: Mixing Height, Temperature and Precipitation Parameters

Parameter	Default	Project	Comment
Empirical Mixing Height Constants:			
CONSTB	1.41	1.41	Neutral, mechanical equation
CONSTE	0.15	0.15	Convective mixing height equation
CONSTN	2400	2400	Stable mixing height equation
CONSTW	0.16	0.16	Over water mixing height equation
FCORIO	1.0E-4	1.0E-04	Absolute value of Coriolis (l/s)
Spatial Averaging of Mixing Heights:			
IAVEZI	1	1	Conduct spatial averaging
MNMDAV	1	1	Maximum search radius in averaging (grid cells)
HAFANG	30	30	Half-angle of upwind looking cone for averaging
ILEVZI	1	1	Layer of winds used in upwind averaging
Convective Mixing Heights Options:			
IMIXH	1	1	Method to compute the convective mixing height (Maul-Carson)
THRESHL	0.05	0.05	Threshold buoyancy flux required to sustain convective mixing height growth overland (W/m^3)
THRESHW	0.05	0.05	Threshold buoyancy flux required to sustain convective mixing height growth overwater (W/m^3)
IZICRLX	1	1	Use convective mixing height relaxation to equilibrium value
TZICRLX	800	800	Relaxation time (seconds) of convective mixing height to equilibrium value
ITWPROG	0	0	Option for overwater lapse rates used in convective mixing height growth (1=use prognostic lapse rates)
ILUOC3D	16	16	Land use category ocean in 3D.DAT datasets
Other Mixing Height Variables:			
DPTMIN	0.001	0.001	Minimum potential temperature lapse rate in the stable layer above the current convective mixing height (K/m)
DZZI	200	200	Depth of layer above current convective mixing height through which lapse rate is computed (m)
ZIMIN	50	50	Minimum overland mixing height (m)
ZIMAX	3000	3000	Maximum overland mixing height (m)
ZIMINW	50	50	Minimum overwater mixing height (m)
ZIMAXW	3000	3000	Maximum overwater mixing height (m)

Parameter	Default	Project	Comment
Overwater Surface Fluxes Method and Parameters:			
ICOARE	10	10	COARE with no wave parameterization
DSHELF	0	0	Coastal/Shallow water length scale (km)
IWARM	0	0	COARE warm layer computation
ICOOL	0	0	COARE cool skin layer computation
Relative Humidity Parameters:			
IRHPROG	0	1	3D relative humidity from WRF data
Temperature Parameters:			
ITPROG	-	1	Use WRF/3D for temperature data
IRAD	1	1	Interpolation type
TRADKM	500	500	Radius of influence for temperature interpolation (km)
NUMTS	-	Not applicable	Maximum number of stations to include in temperature interpolation
IAVET	1	1	Conduct spatial averaging of temperatures (1 = yes)
TGDEFB	-0.0098	-0.0098	Default temperature gradient below the mixing height over water (K/m)
TGDEFA	-0.0045	-0.0045	Default temperature gradient above the mixing height over water (K/m)
JWAT1	-	999	Beginning land use categories for temperature interpolation over water
JWAT2	-	999	Ending land use categories for temperature interpolation over water



B.9 References

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October 16, 2026

APPENDIX C

CALPUFF



Technical Data Report— Air Quality

Woodfibre LNG Project



Prepared for:
Woodfibre LNG General Partner Inc.

September 9, 2026

Prepared by:
Stantec Consulting Ltd.

Project/File:
123222939

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Appendix C CALPUFF

C.1 Introduction

This section discusses the application of the primary dispersion model that was used for the air quality assessment for the Woodfibre LNG Project (the Project). The dispersion modelling was conducted in accordance with the British Columbia Ministry of Environment and Parks (ENVP)'s 2022 British Columbia Air Quality Dispersion Modelling Guideline (the Guideline) (ENVP, 2022a).

C.2 CALPUFF Model

C.2.1 Model Description

The CALPUFF model (Scire et al., 2000) is a multi-layer, multi-species, non-steady state puff dispersion model that can simulate the effects of time and space-varying meteorological conditions on substance transport, transformation, and removal. CALPUFF contains algorithms for near-source effects such as building downwash, transitional plume rise, partial plume penetration, as well as longer-range effects such as chemical transformation, and pollutant removal (wet scavenging and dry deposition). It can accommodate arbitrarily varying point source and area source emissions. Most of the algorithms contain options to treat physical processes at differing levels of detail depending on the requirements for the particular model application:

- **Atmospheric Dispersion:** Several options are provided in CALPUFF for the computation of dispersion coefficients:
 - similarity theory to estimate sigma v (or σ_v) and sigma w (or σ_w) from surface heat and momentum fluxes provided by CALMET
 - Pasquill-Gifford (PG) or McElroy-Pooler (MP) dispersion coefficients
 - dispersion equations based on the Complex Terrain Dispersion Model (CTDM)
 - hourly values of direct turbulence measurements (σ_v and σ_w)
- **Chemical Transformation:** CALPUFF includes options to parameterize chemical transformation effects using the five species scheme (SO_2 , SO_4^{2-} , NO_x , nitric acid [HNO_3], and NO_3^-) used in the MESOPUFF II model; a modified six-species scheme (SO_2 , SO_4^{2-} , nitric oxide [NO], NO_2 , HNO_3 , and NO_3^-) adapted from the RIVAD/ARM3 (Regional Impact in Visibility and Acid Deposition/Acid Rain Mountain Mesoscale Model) method; updated RIVAD with ISORROPPIA inorganic aerosol thermodynamic equilibrium model; or a set of user specified, diurnally-varying transformation rates.



- **Dry Deposition:** A full resistance model is provided to calculate dry deposition rates of gases and particulate matter as a function of geophysical parameters, meteorological conditions and substance properties. Options are provided to allow user-specified, diurnally varying deposition velocities to be used for one or more pollutants instead of the resistance model (e.g., for sensitivity testing) or to bypass the dry deposition model completely.
- **Wet Deposition:** An empirical scavenging coefficient approach is used in CALPUFF to compute the depletion and wet deposition fluxes due to precipitation scavenging. The scavenging coefficients are specified as a function of the pollutant and precipitation type (i.e., frozen versus liquid precipitation).

The following section describes the application of the CALPUFF model specific to the Project assessment. The most recently available version of the CALPUFF model was selected (i.e., Version 7.2.1 [Level 150618]).

C.2.2 Model Application

C.2.2.1 CALPUFF Modeling Domain

The CALPUFF model requires the user to define a domain where the emissions sources are identified, the meteorological conditions are characterized, and the locations where the air quality changes are to be predicted. A CALPUFF modelling domain is comprised of 40 km (north-south) by 40 km (east-west) area within the same CALMET model domain. Table C.1 provides the corners of the CALPUFF modelling domain. The CALPUFF modeling domain is sized to capture the values of interest for the Project sources (i.e., predicted concentrations greater than 10% of the applicable ambient air quality objective) as per the Guideline (ENVP, 2022a).

Table C.1 Coordinates of the CALPUFF Modeling Domain (40 km x 40 km)

Domain Corner	Location (UTM NAD 83, Zone 10)	
	East (m)	North (m)
Northwest	461593	5522083
Southwest	461593	5482083
Southeast	501593	5482083
Northeast	501593	5522083



C.2.2.2 Meteorological Data

For the air quality assessment completed for the Project, the CALMET meteorological model (Scire et al., 2000) was run for a five-year period, January 1, 2011 to December 31, 2015. The selection of a five-year period is consistent with the Guideline (ENVP, 2022a). There are no valid hourly surface and upper air data stations within the 40km by 40km CALMET model domain. CALMET was run in no-obs mode

using the Weather Research and Forecasting (WRF) model 100 m gridded data (see Appendix B).

C.2.2.3 Emissions and Source Characteristics

CALPUFF was used to simulate the transport and dispersion of emissions from the Woodfibre LNG Project and other regional sources. Appendix A of the Technical Data Report provides emission source characteristics and emission rates for the Project sources and the other regional sources used for this assessment.

C.2.2.4 Receptor Locations

Two types of receptors within the model domain are defined: nested gridded receptors and discrete (sensitive) receptors.

Gridded Receptors

Proposed receptor grid spacing for the Project assessment (see Section 7.2 in the Guideline (ENVP, 2022a)) will follow the same setup as for the FortisBC Squamish V2 Compressor Station Project as described in the approved Dispersion Modelling Plan (RWDI, 2025). Receptor spacing is referenced based on distances from the Project and FortisBC V2 Squamish Compressor Station facility boundaries (the two facility boundaries):

- 10 m receptor spacing along the two facility boundaries
- 20 m receptor spacing within 500 m of the two facility boundaries
- 50 m receptor spacing within 2 km of the two facility boundaries
- 250 m receptor spacing within 5 km of the two facility boundaries
- 500 m receptor spacing beyond 5 km to 40 km of the two facility boundaries (remainder of the modelling domain)
- Additional 50 m receptor spacing within the management boundary of the District of Squamish

The grid described comprises 30,942 receptor locations. This extent of the receptor grid is considered sufficient to indicate the magnitude and spatial variation of the predicted concentrations resulting from the Project emissions. Appendix A Figure 4.2 shows the receptor grid used within the CALPUFF modelling domain.



Sensitive Receptors

There are no permanent residents within 5 km of the Project. Sensitive receptors included in the assessment follow those identified for the FortisBC Squamish V2 Compressor Station (RWDI, 2025). A list of 16 sensitive receptors is shown in Appendix A. Appendix A Figure 4.3 shows the locations of the sensitive receptors.

Both grid and sensitive receptors are applied for the CALPUFF modelling. Note that the flagpole height (i.e., receptor height) of 1.5 m is applied for the concentration predictions. No flagpole height is applied for the deposition predictions.

C.2.2.5 Building Downwash

Buildings or other solid structures may affect the flow of air near a source and cause building downwash effects (e.g., eddies on the downwind side), which have potential to reduce plume rise and affect dispersion. For dispersion modelling purposes, building downwash effects were considered for the Project sources with the Plume Rise Model Enhancement (PRIME) downwash routine (MBDW=2) suggested in the Guideline (ENVP, 2022a). For the building and structure dimensions considered in dispersion modelling, see Appendix A.

C.2.2.6 Terrain Effects

The CALPUFF model was used to estimate concentrations, for each species considered, at each receptor location. Since some of these receptors were located in terrain at elevations greater than puff release points, terrain effects were considered. To account for the possible distortion of the plume trajectory over elevated terrain, the Partial Plume Path Adjustment Method was used to modify the height of the plume.

The Partial Plume Path Adjustment Method employs a plume path coefficient (PPC) to adjust the height of the plume above the ground. PPC default values of 0.50, 0.50, 0.50, 0.50, 0.35 and 0.35 for PG stability classes A, B, C, D, E, and F, respectively, were used.



C.2.2.7 Dispersion Coefficients

Fundamental parameters controlling plume dispersion in a Gaussian model such as CALPUFF are the dispersion coefficients. These values, which must be specified for both the horizontal and the vertical directions, can be estimated in CALPUFF using several different methods. For this application, dispersion coefficients were internally computed from turbulence estimates based on micrometeorological data from CALMET (MDISP = 2). This selected method is based on ENVP recommendations (i.e., Table 7.1 in the Guideline (ENVP, 2022a)).

C.2.2.8 Chemical Transformation

The updated RIVAD scheme with ISOROPPIA equilibrium (MCHEM = 6) is used per Section 7.8 of the Guideline (ENVP, 2022a). Aqueous phase chemistry flag (MAQCHEM) and Liquid Water Content flag (MLWC) are turned on following Section 7.8 of the Guideline (ENVP, 2022a). The 288 array ozone values derived from the 2011-2015 hourly ozone data monitored at the Squamish Elementary station following the NO₂ Dispersion Modelling in British Columbia (NO₂ Guidance) (ENVP, 2022b) is applied for the hourly ozone file (OZONE.DAT).

The CALPUFF deposition options are turned on to enable the prediction of depositions of NO₂, SO₂, nitrates, and sulfates, which are used in the acid deposition analysis.

C.2.2.9 NO_x to NO₂ Chemistry

The Guideline (ENVP, 2022a) identifies several NO_x to NO₂ conversion approaches: the total conversion method (TCM) that assumes all NO_x is converted to NO₂; the ambient ratio method (ARM); the ozone limiting method (OLM) using representative ozone measurements; and the CALPUFF predictions based on the RIVAD/ISORROPIA approach.

For this assessment, NO to NO₂ conversion is carried out using the ambient ratio method 2 (ARM2) consistent with Section 3.2.1.2 and Appendix A of the NO₂ Guidance (ENVP, 2022b). The Coastal Sites ARM2 curve was used to convert NO to NO₂, as provided in the NO₂ Guidance (ENVP, 2022b).

C.2.2.10 NH₃ Concentrations

The Interagency Workshop of Air Quality Modeling Phase 2 report (U.S.EPA,1998) recommends background ammonia (NH₃) concentration of 10 ppb for grassland and 0.5 ppb for forest land. Considering the majority of the area surrounding the Project is forest land, a constant value of 0.5 ppb was selected as monthly background NH₃ for this assessment.

C.2.2.11 Secondary Particular Formation

The CALPUFF model was used to predict secondary PM_{2.5} formation due to precursor SO₂ and NO_x emissions. The model predicts particulate nitrate NO₃⁻, which can exist as an aerosol (i.e., dissolved in a water droplet) or as a particle (e.g., NH₄NO₃). Similarly, sulphate SO₄²⁻ can also exist as an aerosol



(i.e., dissolved in a water droplet) or as a particle (e.g., ammonium sulphate $[(\text{NH}_4)_2\text{SO}_4]$. NO_3^- and SO_4^{2-} are assumed to react with ambient NH_3 to produce NH_4NO_3 and $(\text{NH}_4)_2\text{SO}_4$, respectively; the predicted sulphate and nitrate are multiplied by the factors indicated in Table C.2.

Table C.2 $\text{PM}_{2.5}$ Multipliers for SO_4^{2-} and NO_3^-

Predicted Parameter	SO_4^{2-}	NO_3^-
Molecular mass	96	62
End product	$(\text{NH}_4)_2\text{SO}_4$	NH_4NO_3
Molecular mass	132	80
Multiplier	1.375	1.290

Note:

Multiplier = (Molecular Mass of End Product)/(Molecular Mass of Predicted Parameter)

The $\text{PM}_{2.5}$ predictions derived from the CALPUFF model include the primary $\text{PM}_{2.5}$ contribution plus the secondary sulphate contribution and the secondary nitrate contribution.

C.2.2.12 Deposition Calculation Approach

Deposition Parameters

Deposition is comprised of dry and wet removal mechanisms. The dry and wet deposition rates depend on the phase of the compound being deposited (e.g., vapour or particle), and other physical and chemical properties of the compound. For this assessment, deposition of nitrogen and sulphur compounds is required to predict as these compounds can have potential acidification or eutrophication effects on terrestrial and aquatic systems.

For dry deposition, the compound groups are discussed in terms of the deposition options that are available in the CALPUFF model:

- For SO_2 , NO , NO_2 , HNO_3 , CO , and NO_x , dry deposition is calculated using the CALPUFF internal vapour-phase resistance sub-model.
- For SO_4^{2-} and NO_3^- , dry deposition is calculated using the CALPUFF internal particle-phase resistance sub-model. The default geometric mass mean diameters and standard deviations of $0.48 \mu\text{m}$ and $2 \mu\text{m}$ (respectively) based on the CALPUFF manual (Scire et al., 2000) were adopted.

The calculation of wet deposition requires wet scavenging coefficients that vary with phase and form of the precipitation (i.e., liquid (rain) or solid (snow)). The CALPUFF model assumes the scavenging coefficient approach for both gases and particles. For the nitrogen and sulphur compounds, the default wet scavenging coefficients are based on the CALPUFF manual (Scire et al., 2000) and CALPUFF GUI species library.



Sulphur and Nitrogen Compound Depositions

The Project will be a source of acid forming emissions (SO_2 and NO_x contributions). The CALPUFF model predicts SO_2 , SO_4^{2-} , NO , NO_2 , HNO_3 and NO_3^- deposition as annual averages attributable to emission sources located in the model domain.

Sulphur Deposition

The total sulphur deposition (S) was calculated as follows:

$$S = \frac{96}{64} [\text{SO}_2] + [\text{SO}_4^{2-}]$$

where S is expressed in kg SO_4^{2-} /ha/a and the values in the square brackets represent the sum of the predicted wet and dry deposition values in kg SO_4^{2-} /ha/a. The multiplication coefficients account for molecular mass differences for the individual species.

Nitrogen Deposition

The total nitrogen deposition (N) was calculated as follows:

$$N = \frac{14}{30} [\text{NO}] + \frac{14}{46} [\text{NO}_2] + \frac{14}{63} [\text{HNO}_3] + \frac{14}{62} [\text{NO}_3^-]$$

where the N is expressed in kg N/ha/a and the values in the square brackets represent the sum of the predicted wet and dry deposition values in kg/ha/a. The multiplication coefficients account for molecular mass differences for the individual species.

Sulphur and Nitrogen Depositions

The total sulphur and nitrogen depositions (S + N) was calculated as follows:

$$S + N = \left(\frac{2}{64} [\text{SO}_2] + \frac{2}{96} [\text{SO}_4^{2-}] + \frac{1}{30} [\text{NO}] + \frac{1}{46} [\text{NO}_2] + \frac{1}{63} [\text{HNO}_3] + \frac{1}{62} [\text{NO}_3^-] \right) * 1000$$

where the (S + N) is expressed in eq/ha/a and the values in the square brackets represent the sum of the predicted wet and dry deposition values in kg/ha/a. The multiplication coefficients account for valance and molecular mass differences for the individual species.

C.2.3 Model Options

The input parameters for the CALPUFF control file used in the modelling assessment are provided in Table C.3 to Table C.16. The input groups that are applicable to this assessment are indicated in Table C.3. Section 7.8 and Section 10.7 of the Guideline indicate the key CALPUFF model options. Although not specified in the Guideline, it is assumed that the default values are those defined in the CALPUFF user manual (Scire et al., 2000). In most cases, these default values are used. Table 7.1 of the Guideline (ENVP, 2022a) also indicates specific values to be used instead of the default values.



Table C.3 *Input Groups in the CALPUFF Control*

Input Group	Description	Applicable to Project?
0	Input and output file names	Yes
1	General run control parameters	Yes
2	Technical options	Yes
3	Species list	Yes
4	Grid control parameters	Yes
5	Output options	Yes
6	Sub grid scale complex terrain inputs	No
7	Dry deposition parameters for gases	Yes
8	Dry deposition parameters for particles	Yes
9	Miscellaneous dry deposition for parameters	No
10	Wet deposition parameters	Yes
11	Chemistry parameters	Yes
12	Diffusion and computational parameters	Yes
13	Point source parameters	Yes
14	Area source parameters	No
15	Line source parameters	Yes
16	Volume source parameters	No
17	FLARE source control parameters	No
18	Road Emissions parameters	No
19	Emission rate scale-factor tables	No
20	Non-gridded (discrete) receptor information	Yes

Table C.4 *Input Group 0: Input and Output File Names*

Parameter	Default	Project	Comments
NMETDOM	-	1	One CALMET.DAT Domains used
NMETDAT	-	12	Number of CALMET.DAT files (Total for ALL Domains) per year



Table C.5 Input Group 1: General Run Control Parameters

Parameter	Default	Project	Comments
METRUN	0	0	All model periods in met file(s) will be run
IBYR	-	2011	Starting year
IBMO	-	1	Starting month
IBDY	-	1	Starting day
IBHR	-	0	Starting hour
IEYR	-	2016	Ending year
IEMO	-	1	Ending month
IEDY	-	1	Ending day
IEHR	-	0	Ending hour
ABTZ		UTC-0800	Base time zone
NSPEC	-	11	Number of chemical species
NSE	-	8	Number of chemical species to be emitted
ITEST	2	2	Program is executed after SETUP phase
MRESTART	0	0	Do not read or write a restart file during run
NRESPD	0	0	File updated every 24 periods
METFM	1	1	CALMET binary file (CALMET.MET)
AVET	60	60	Averaging time in minutes
PGTIME	60	60	PG Averaging time in minutes
IOUTU	1	1	Output units for binary concentration and flux files written in Dataset v2.2 or later formats. 1 = mass - g/m ³ (conc) or g/m ² /s (dep)

Table C.6 Input Group 2: Technical Options

Parameter	Default	Project	Comments
MGAUSS	1	1	Gaussian distribution used in near field
MCTADJ	3	3	Partial plume path terrain adjustment
MCTSG	0	0	Scale-scale complex terrain not modelled
MSLUG	0	0	Near-field puffs not modelled as elongated
MTRANS	1	1	Transitional plume rise modelled
MTIP	1	1	Stack tip downwash used
MRISE	1	1	Method used to compute plume rise for point sources not subject to building downwash. 1 = Briggs plume rise



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Parameter	Default	Project	Comments
MBDW	1 or 2	2	PRIME Method is used to simulate building downwash
MSHEAR	0	0	Vertical wind shear is not modelled
MSPLIT	0	0	Puff splitting not used
MCHEM	1	6	Transformation rates computed internally (Updated RIVAD scheme with ISORROPIA equilibrium)
MAQCHEM	1	1	Transformation rates and wet scavenging coefficients adjusted for in-cloud aqueous phase reactions
MLWC	1	1	Gridded cloud water data read from CALMET water content output files
MWET	1	1	Wet removal modelled
MDRY	1	1	Dry deposition modelled
MTILT	0	0	Gravitational settling (plume tilt) is not modelled
MDISP	2 or 3	2	Dispersion coefficients from internally calculated sigma v, sigma w using micrometeorological variables (u^* , w^* , L , etc.) per ENVP Guideline
MTURBVW	3	Not applicable	Used only if MDISP = 1 or 5.
MDISP2	3	Not applicable	Used only if MDISP = 1 or 5.
MTAULY	0	0	Draxler default 617.284 (s)
MTAUADV	0	0	No turbulence advection
MCTURB	1	1	Standard CALPUFF subroutines
MROUGH	0	0	PG σ_y and σ_z is not adjusted for roughness
MPARTL	1	1	Partial plume penetration of elevated inversion
MPARTLBA	1	1	Partial plume penetration of elevated inversion modelled for the buoyant area sources
MTINV	0	0	Strength of temperature inversion computed from default gradients
MPDF	0 or 1	1	Yes if MDISP = 2 (turbulence based dispersion coefficients).
MSGTIBL	0	0	Sub-grid TIBL module not used for shoreline
MBCON	0	0	Boundary concentration conditions not modelled
MSOURCE	0	0	Individual source contributions not saved
MFOG	0	0	Do not configure for FOG model output
MREG	1	0	Do not test options specified to see if they conform to regulatory values

Notes:

Mandatory or recommendations by the Guideline Section 7.8.

Professional judgement required per the Guideline Section 7.8.



Table C.7 Input Group 3: Species List

CSPEC	Modelled ¹	Emitted ²	Dry Deposition ³	Output Group Number
SO ₂	1	1	1	0
SO ₄	1	0	2	0
NO	1	1	1	0
NO ₂	1	1	1	0
HNO ₃	1	0	1	0
NO ₃	1	0	2	0
PM _{2.5}	1	1	2	0
CO	1	1	1	0
NO _x	1	1	1	0
H ₂ S	1	1	0	0
VOC	1	1	0	0

Notes:

¹ 0 = no, 1 = yes

² 0 = no, 1 = yes

³ 0 = none, 1 = computed-gas, 2 = computed particle, 3 = user-specified

Table C.8 Input Group 4: Map Projection and Grid Control Parameters

Parameter	Default	Project	Comments
PMAP	UTM	UTM	Universal Transverse Mercator
FEAST	0	0	False Easting (km) at the projection origin
FNORTH	0	0	False Northing (km) at the projection origin
IUTMZN	-	10	UTM zone
UTMHEM	N	N	Northern Hemisphere for UTM projection
DATUM	WGS-84	NAR-C	NAR-C is applicable for this assessment. WGS-84 is just the datum for TRC demo case along with the CALPUFF release.
NX	-	40	Number of X grid cells in meteorological grid
NY		40	Number of Y grid cells in meteorological grid
NZ	-	10	Vertical grid definition: Number of vertical layers
DGRIDKM	-	0.1	Grid spacing (km) to match CALMET
ZFACE	-	0, 20, 40, 80, 160, 300, 600, 1000, 1500, 2200, 3000	Vertical grid definition: Cell face heights (m). Selected to match CALMET



Parameter	Default	Project	Comments
XORIGKM	-	461.593	Reference X coordinate for SW corner of grid cell (1,1) of meteorological grid (km)
YORIGKM	-	5482.083	Reference Y coordinate for SW corner of grid cell (1,1) of meteorological grid (km)
IBCOMP	-	1	X index of lower left corner of the computational grid
JBCOMP	-	1	Y index of lower left corner of the computational grids
IECOMP	-	40	X index of the upper right corner of the computational grid
JECOMP	-	40	Y index of the upper right corner of the computational grid
LSAMP	T	F	Sampling grid is not used
IBSAMP	-	Not applicable	X index of lower left corner of the sampling grid
JBSAMP	-	Not applicable	Y index of lower left corner of the sampling grid
IESAMP	-	Not applicable	X index of upper right corner of the sampling grid
JESAMP	-	Not applicable	Y index of upper right corner of the sampling grid
MESHDN	1	1	Nesting factor of the sampling grid

Table C.9 Input Group 5: Output Options

Parameter	Default	Project	Comments
ICON	1	1	Output file CONC.DAT containing concentrations is created
IDRY	1	1	Output file DFLX.DAT containing dry fluxes is created
IWET	1	1	Output file WFLX.DAT containing wet fluxes is created
IT2D	0	0	2D Temperature
IRHO	0	0	Density
IVIS	1	0	Output file containing relative humidity data is not created
LCOMPRS	T	T	Perform data compression in output file
IQAPLOT	1	1	Create a standard series of output files (e.g., locations of sources, receptors, grids ...) suitable for plotting
IMFLX	0	0	Do not calculate mass fluxes across specific boundaries
INRISE	0	0	Do not create a file with plume properties for each rise increment, for each model timestep
IMBAL	0	0	Mass balances for each species are not reported hourly
ICPRT	0	1	Print concentration fields to the output list file
IDPRT	0	0	Do not print dry flux fields to the output list file



Parameter	Default	Project	Comments					
IWPRT	0	0	Do not print wet flux fields to the output list file					
ICFRQ	1	1	Concentration fields are printed to output list file every 24-hour					
IDFRQ	1	1	Dry flux fields are printed to output list file every 24-hour					
IWFRQ	1	1	Wet flux fields are printed to output list file every 24-hour					
IPRTU	1	3	Units for line printer output are in $\mu\text{g}/\text{m}^3$ for concentration and $\mu\text{g}/\text{m}^2/\text{s}$ for deposition					
IMESG	2	2	Messages tracking the progress of run are written on screen					
LDEBUG	F	F	Logical value for debug output					
IPFDEB	1	1	First puff to track					
NPFDEB	1	1	Number of puffs to track					
NN1	1	1	Meteorological period to start output					
NN2	10	10	Meteorological period to end output					
Species	Concentrations Printed (0 = no, 1 = yes)		Dry Fluxes Printed (0 = no, 1 = yes)		Wet Fluxes Printed (0 = no, 1 = yes)		Mass Flux	
	Printed	Saved to Disk	Printed	Saved to Disk	Printed	Saved to Disk	Printed	Saved to Disk
SO ₂	0	1	0	1	0	1	0	0
SO ₄	0	1	0	1	0	1	0	0
NO	0	1	0	1	0	1	0	0
NO ₂	0	1	0	1	0	1	0	0
HNO ₃	0	1	0	1	0	1	0	0
NO ₃	0	1	0	1	0	1	0	0
PM _{2.5}	0	1	0	1	0	1	0	0
CO	0	1	0	1	0	1	0	0
NO _x	0	1	0	1	0	1	0	0
H ₂ S	0	1	0	1	0	1	0	0
VOC	0	1	0	1	0	1	0	0



Table C.10 Input Group 6: Sub-Grid Scale Complex Terrain Inputs

Parameter	Default	Project	Comments
NHILL	0	0	Number of terrain features (not applicable)
NCTREC	0	not applicable	Number of special complex terrain receptors
MHILL	-	not applicable	Hill data created by OPTHILL & input below in Subgroup (6b); Receptor data in Subgroup (6c)
XHILL2M	1	not applicable	Conversion factor for changing horizontal dimensions to metres
ZHILL2M	1	not applicable	Conversion factor for changing vertical dimensions to metres
XCTDMKM	-	not applicable	X origin of CTDM system relative to CALPUFF coordinate system (km)
YCTDMKM	-	not applicable	Y origin of CTDM system relative to CALPUFF coordinate system (km)

Table C.11 Input Group 7: Dry Deposition Parameters for Gases

Parameter	Default	Project	Comments
SO ₂	0.1509	0.1509	Diffusivity
	1000	1000	Alpha star
	8.0	8.0	Reactivity
	0.0	0.0	Mesophyll resistance
	0.04	0.04	Henry's Law coefficient
NO	0.1345	0.1345	Diffusivity
	1.0	1.0	Alpha star
	2.0	2.0	Reactivity
	25	25	Mesophyll resistance
	18	18	Henry's Law coefficient
NO ₂	0.1656	0.1656	Diffusivity
	1.0	1.0	Alpha star
	8.0	8.0	Reactivity
	5.0	5.0	Mesophyll resistance
	3.5	3.5	Henry's Law coefficient



Parameter	Default	Project	Comments
HNO ₃	0.1628	0.1628	Diffusivity
	1.0	1.0	Alpha star
	18.0	18.0	Reactivity
	0.0	0.0	Mesophyll resistance
	0.00000008	0.00000008	Henry's Law coefficient
NO _x	0.1656	0.1656	Diffusivity
	1.0	1.0	Alpha star
	8.0	8.0	Reactivity
	5.0	5.0	Mesophyll resistance
	3.5	3.5	Henry's Law coefficient
CO	0.186	0.186	Diffusivity
	1.0	1.0	Alpha star
	2.0	2.0	Reactivity
	61.0	61.0	Mesophyll resistance
	44.0	44.0	Henry's Law coefficient

Table C.12 CALPUFF Model Option Groups 8, 9 and 10

Species	Default	Project	Comments
Input Group 8: Dry Deposition Parameters for Particles			
SO ₄ ²⁻	0.48	0.48	Geometric mass mean diameter of SO ₄ ²⁻ [μm]
SO ₄ ²⁻	2.0	2.0	Geometric standard deviation of SO ₄ ²⁻ [μm]
NO ₃ ⁻	0.48	0.48	Geometric mass mean diameter of NO ₃ ⁻ [μm]
NO ₃ ⁻	2.0	2.0	Geometric standard deviation of NO ₃ ⁻ [μm]
PM _{2.5}	0.48	0.48	Geometric mass mean diameter of PM [μm]
PM _{2.5}	1.5	1.5	Geometric standard deviation of PM [μm]
Input Group 9: Miscellaneous Dry Deposition Parameters			
RCUTR	30	30	Reference cuticle resistance (s/cm)
RGR	10	10	Reference ground resistance (s/cm)
REACTR	8	8	Reference pollutant reactivity
NINT	9	9	Number of particle size intervals for effective particle deposition velocity
IVEG	1	1	Vegetation in non-irrigated areas is active and unstressed



Species	Default	Project	Comments
Input Group 10: Wet Deposition Parameters			
SO ₂	3.0E-05	3.0E-05	Scavenging coefficient for liquid precipitation [s ⁻¹]
	0.0	0.0	Scavenging coefficient for frozen precipitation [s ⁻¹]
SO ₄ ²⁻	1.0E-04	1.0E-04	Scavenging coefficient for liquid precipitation [s ⁻¹]
	3.0E-05	3.0E-05	Scavenging coefficient for frozen precipitation [s ⁻¹]
NO	2.9E-05	2.9E-05	Scavenging coefficient for liquid precipitation [s ⁻¹]
	0.0	0.0	Scavenging coefficient for frozen precipitation [s ⁻¹]
NO ₂	5.1E-05	5.1E-05	Scavenging coefficient for liquid precipitation [s ⁻¹]
	0.0	0.0	Scavenging coefficient for frozen precipitation [s ⁻¹]
HNO ₃	6.0E-05	6.0E-05	Scavenging coefficient for liquid precipitation [s ⁻¹]
	0.0	0.0	Scavenging coefficient for frozen precipitation [s ⁻¹]
NO ₃ ⁻	1.0E-04	1.0E-04	Scavenging coefficient for liquid precipitation [s ⁻¹]
	3.0E-05	3.0E-05	Scavenging coefficient for frozen precipitation [s ⁻¹]
PM _{2.5}	1.0E-04	1.0E-04	Scavenging coefficient for liquid precipitation [s ⁻¹]
	3.0E-05	3.0E-05	Scavenging coefficient for frozen precipitation [s ⁻¹]

Table C.13 Input Group 11: Chemistry Parameters

Parameters	Default	Project	Comments
MOZ	1	1	Read hourly ozone concentrations from OZONE.DAT data file (2011-2015 hourly file generated by Squamish Elementary monitoring station 288 array ozone values)
BCKO3	12*80	Not used	Background ozone concentration (ppb)
MNH3	0	0	Used only if MCHEM =6 or 7. MNH3 =0, means using monthly background ammonia values (BCKNH3) - no vertical variation
MAVGNH3	1	Not used	Ammonia vertical averaging option. Used only if MCHEM = 6 or 7, and MNH3 = 1
BCKNH3	12*10	12*0.5	Constant background concentration in ppb
RNITE1	0.2	0.2	Night-time NO ₂ loss rate in percent/hour
RNITE2	2	2	Night-time NO _x loss rate in percent/hour
RNITE3	2	2	Night-time HNO ₃ loss rate in percent/hour
MH2O2	1	0	Use a monthly background H ₂ O ₂ value
BCKH2O2	12*1	12*1	Monthly background H ₂ O ₂ concentrations (used for aqueous phase transformations)



Parameters	Default	Project	Comments
RH_ISRP	50	50	Used only if MCHEM=6 or 7. Minimum relative humidity used in ISORROPIA computations
SO ₄ _ISRP	0.4	0.4	Used only if MCHEM=6 or 7. Minimum SO ₄ used in ISORROPIA computations
BCKPMF	-	Not used	Fine particulate concentration for secondary organic aerosol option, used only for MESOPUFF II scheme for OH (MCHEM =4) and Updated RIVAD scheme with ISORROPIA equilibrium and CalTech SOA (MCHEM =7)
OFRAC	-	Not used	Organic fraction of fine particulate for secondary organic aerosol option, used only for MESOPUFF II scheme for OH (MCHEM =4) and Updated RIVAD scheme with ISORROPIA equilibrium and CalTech SOA (MCHEM =7)
VCNX	-	Not used	VOC/NO _x ratio for secondary organic aerosol option, used only for MESOPUFF II scheme for OH

Notes:

“-“ means not available.

Mandatory or recommendations by the Guideline Section 7.8.

Professional judgement required per the Guideline Section 7.8.

User specified per the Guideline Section 10.7.

Table C.14 Input Group 12: Misc. Dispersion and Computational Parameters

Parameters	Default	Project	Comments
SYTDEP	550	550	Horizontal size of a puff in metres beyond which the time dependant dispersion equation of Heffter (1965) is used
MHFTSZ	0	0	Do not use Heffter formulas for σ_z
JSUP	5	5	Stability class used to calc dispersion rates for puffs above boundary layer
CONK1	0.01	0.01	Vertical dispersion constant for stable conditions
CONK2	0.1	0.1	Vertical dispersion constant for neutral or stable conditions
TBD	0.5	0.5	Use ISC transition point for determining the transition point between the Schulman-Scire (Schulman et al. 2000) to Huber-Snyder Building Downwash scheme
IURB1	10	10	Lower range of land use categories for which urban dispersion is assumed
IURB2	19	19	Upper range of land use categories for which urban dispersion is assumed
ILANDUIN	20	20	Land use category for the modelling domain



Parameters	Default	Project	Comments	
ZOIN	0.25	0.25	Roughness length in meters for domain	
XLAIIN	3	3	Leaf area index for domain	
ELEVIN	0	0	Elevation above sea level in meters	
XLATIN	-999	-999	Latitude of met location in degrees	
XLONIN	-999	-999	Longitude of met location in degrees	
ANEMHT	10	10	Anemometer height in meters	
ISIGMAV	1	1	Sigma-v is read for lateral turbulence data	
IMIXCTDM	0	0	Predicted mixing heights are used	
XMULEN	1	1	Maximum length of emitted slug in meteorological grid units	
XSAMLEN	1	1	Maximum travel distance of slug or puff in meteorological grid units during one sampling unit	
MXNEW	99	99	Max number of puffs released from one source during one time step	
MXSAM	99	99	Maximum number of sampling steps during one time step for a puff or slug	
NCOUNT	2	2	Number of iterations used when computing the transport wind for a sampling step that includes transitional plume rise	
SYMIN	1	1	Minimum sigma y in metres for a new puff or slug	
SZMIN	1	1	Minimum sigma z in metres for a new puff or slug	
SZCAP_M	5.0E06	5.0E06	Maximum sigma z in metres to avoid numerical problem in calculating time or distance	
Stability Class	Parameter			
	SVMIN (Project)		SWMIN (Project)	
	Minimum turbulence (σ_v) (m/s)		Minimum turbulence (σ_w) (m/s)	
	Land	Water	Land	Water
A	0.2	0.2	0.2	0.2
B	0.2	0.2	0.12	0.12
C	0.2	0.2	0.08	0.08
D	0.2	0.2	0.06	0.06
E	0.2	0.2	0.03	0.03
F	0.2	0.2	0.016	0.016
CDIV	0.0, 0.0	0.0, 0.0	Divergence criteria for dw/dz in met cells	



Parameters	Default	Project	Comments
NLUTBIL	4	4	Search radius for nearest land and water cells used in the subgrid TIBL module
WSCALM	0.5	0.5	Minimum wind speed allowed for non-calm conditions (m/s)
XMAXZI	3000	3000	Maximum mixing height in metres
XMINZI	50	50	Minimum mixing height in metres
WSCAT	1.54	1.54	wind speed category 1 [m/s]
	3.09	3.09	wind speed category 2 [m/s]
	5.14	5.14	wind speed category 3 [m/s]
	8.23	8.23	wind speed category 4 [m/s]
	10.80	10.80	wind speed category 5 [m/s]
PLX0	0.07	0.07	Wind Speed Power Law Exponent (Stability class A)
	0.07	0.07	Wind Speed Power Law Exponent (Stability class B)
	0.10	0.10	Wind Speed Power Law Exponent (Stability class C)
	0.15	0.15	Wind Speed Power Law Exponent (Stability class D)
	0.35	0.35	Wind Speed Power Law Exponent (Stability class E)
	0.55	0.55	Wind Speed Power Law Exponent (Stability class F)
PTG0	0.020	0.020	Potential temperature gradient for Stability Class E stability (degK/m)
	0.035	0.035	Potential temperature gradient for Stability Class F (degK/m)
PPC	0.50	0.50	Plume Path Coefficient (Stability class A)
	0.50	0.50	Plume Path Coefficient (Stability class B)
	0.50	0.50	Plume Path Coefficient (Stability class C)
	0.50	0.50	Plume Path Coefficient (Stability class D)
	0.35	0.35	Plume Path Coefficient (Stability class E)
	0.35	0.35	Plume Path Coefficient (Stability class 5)
SL2PF	10	10	Slug-to-puff transition criterion factor equal to sigma y/length of slug
NSPLIT	3	3	Number of puffs that result every time a puff is split
IRESPLIT	0,0,0,0,0,0,0,0,0,0, 0, 0, 0, 0,0 0, 0, 1, 0, 0, 0, 0, 0, 0	0,0,0,0,0,0,0,0,0,0, 0, 0, 0, 0,0 0, 0, 1, 0, 0, 0, 0, 0, 0	Time(s) of day when split puffs are eligible to be split once again
ZISPLIT	100	100	Minimum allowable last hour's mixing height for puff splitting



Parameters	Default	Project	Comments
ROLDMAX	0.25	0.25	Maximum allowable ratio of last hour's mixing height and maximum mixing height experienced by the puff for puff splitting
NSPLITH	5	5	Number of puffs that result every time a puff is horizontally split
SYSPLITH	1	1	Minimum sigma-y of puff before it may be horizontally split
SHSPLITH	2	2	Minimum puff elongation rate due to wind shear before it may be horizontally split
CNSPLITH	1.0E-7	1.0E-7	Minimum concentration of each species in puff before it may be horizontally split
EPSSLUG	1.00E-04	1.00E-04	Fractional convergence criterion for numerical SLUG sampling iteration
EPSAREA	1.00E-06	1.00E-06	Fractional convergence criterion for numerical AREA sampling iteration
DRISE	1.0	1.0	Trajectory step length for numerical rise
HTMINBC	500	500	Minimum height (m) to which BC puffs are mixed as they are emitted (MBCON=2 ONLY)
RSAMPBC	10	10	Search radius (km) about a receptor for sampling nearest BC puff.
MDEPBC	1	1	Concentration is adjusted for depletion

Note:

Mandatory or recommendations by the Guideline Section 7.8.

Table C.15 CALPUFF Model Option Groups 13

Parameters	Default	Project	Comments
Input Group 13: Point Source Parameters			
NPT1	-	Varies by scenario	Number of point sources with constant stack parameters
IPTU	1	1	Units for point source emission rates are g/s
NSPT1	0	0	Number of source-species combinations with variable emissions scaling factors
NPT2	-	0	Number of point sources with variable emission parameters provided in external file

Note:

Point source (i.e., stacks) parameters are given in Appendix A.

“-“ means not applicable.



Table C.16 CALPUFF Model Option Groups 15

Parameters	Default	Project	Comments
Input Group 15: Line Source Parameters			
NLN2	-	0	Number of buoyant line sources with variable location and emission parameters
NLINES	-	0	Number of buoyant line sources
ILNU	1	1	Units for line source emission rates is g s-1
NSLN1	0	0	Number of source-species combinations with variable emission scaling factors
MXNSEG	7	7	Maximum number of segments used to model each line
NLRISE	6	6	Number of distances at which transitional rise computed

Notes:

Line source parameters are given in Appendix A.

“-” means not applicable.

Table C.17 CALPUFF Model Option Groups 20

Parameters	Default	Project	Comments
Input Group 20: Non-gridded Receptor Information			
NREC	-	30,942	Number of receptors

Notes:

Two set of modeled receptors are shown in Appendix A Figures 4.2 and 4.3.

“-” means not applicable.



C.3 References

- ENVP. 2022a. British Columbia Air Quality Dispersion Modelling Guideline. British Columbia Ministry of Environment, August 2022.
- ENVP. 2022b. Guidance for NO₂ Dispersion Modelling in British Columbia. August 2022.
- RWDI. 2025. Dispersion Modelling Plan for FortisBC Energy Inc. Squamish V2 Compressor Station. September 8. 2025.
- Scire, J.S., D.G. Strimaitis, and R.J. Yamartino. 2000. A User's Guide for the CALPUFF Dispersion Model (Version 5). Earth Tech, Inc., Concord, MA.
- Schulman, L.L., D.G. Strimaitis and J.S. Scire. 2000. Development and Evaluation of the PRIME Plume Rise and Building Downwash Model. Journal of the Air & Waste Management Association. 50(3):378-90.
- U.S. EPA. 1998. United States Environmental Protection Agency. Interagency Workgroup on Air Quality Modelling (IWAQM) Phase 1 Summary Report and Recommendations for Modelling Long Range Transport Impacts. EPA-454/R-98-019.

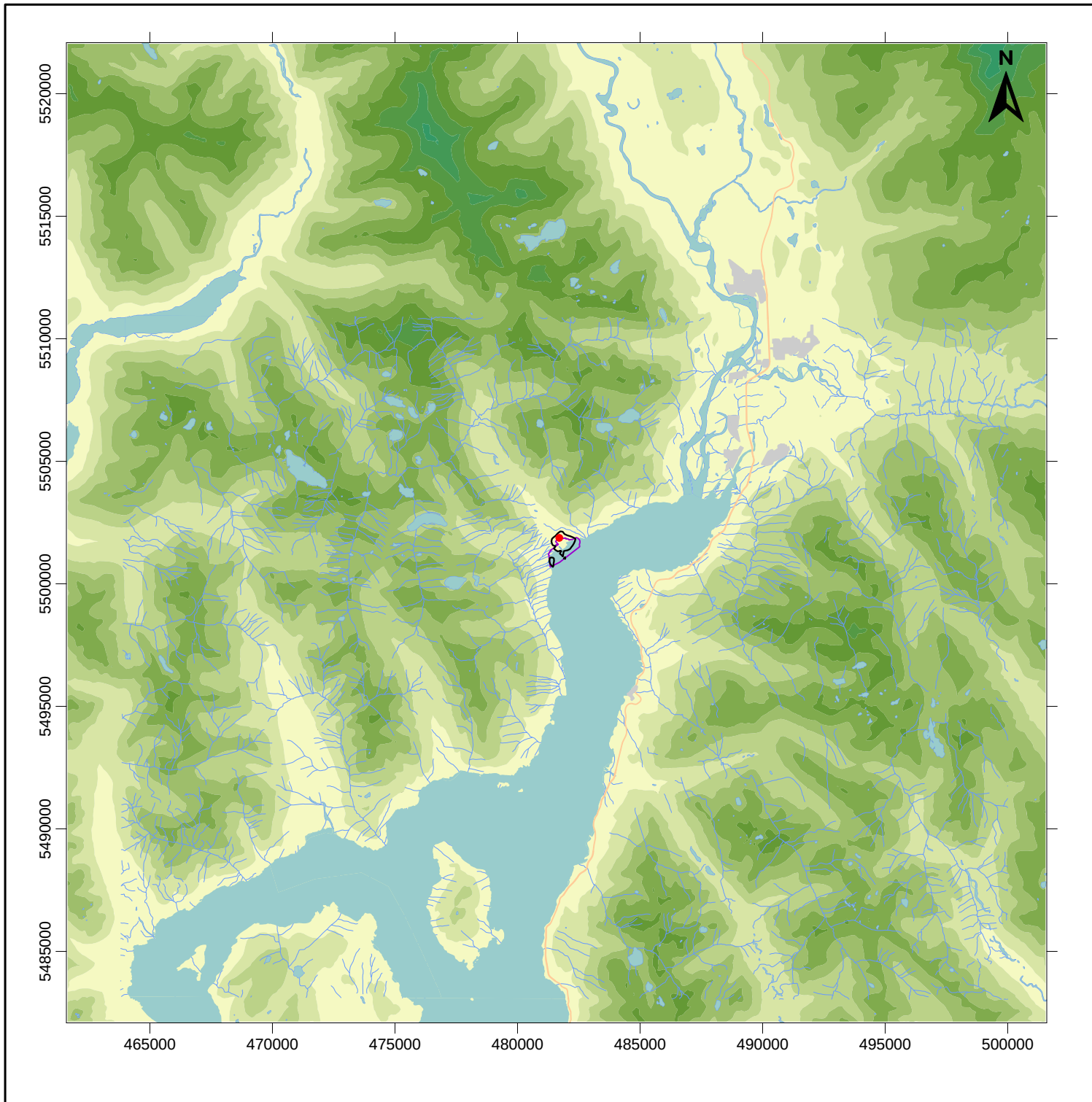


October 16, 2026

APPENDIX D

Isopleth Maps



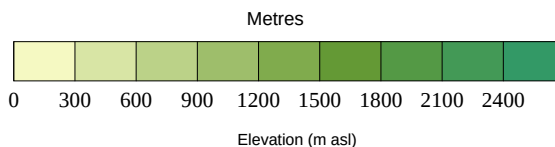


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

Maximum 1-hour Average 98th Daily Maximum NO₂ Concentration: 18.1 µg/m³
 1-hour NO₂ BC AQO: 113 µg/m³

Contour Levels: 11.3 µg/m³
 Baseline: not added



0 4000 8000 m



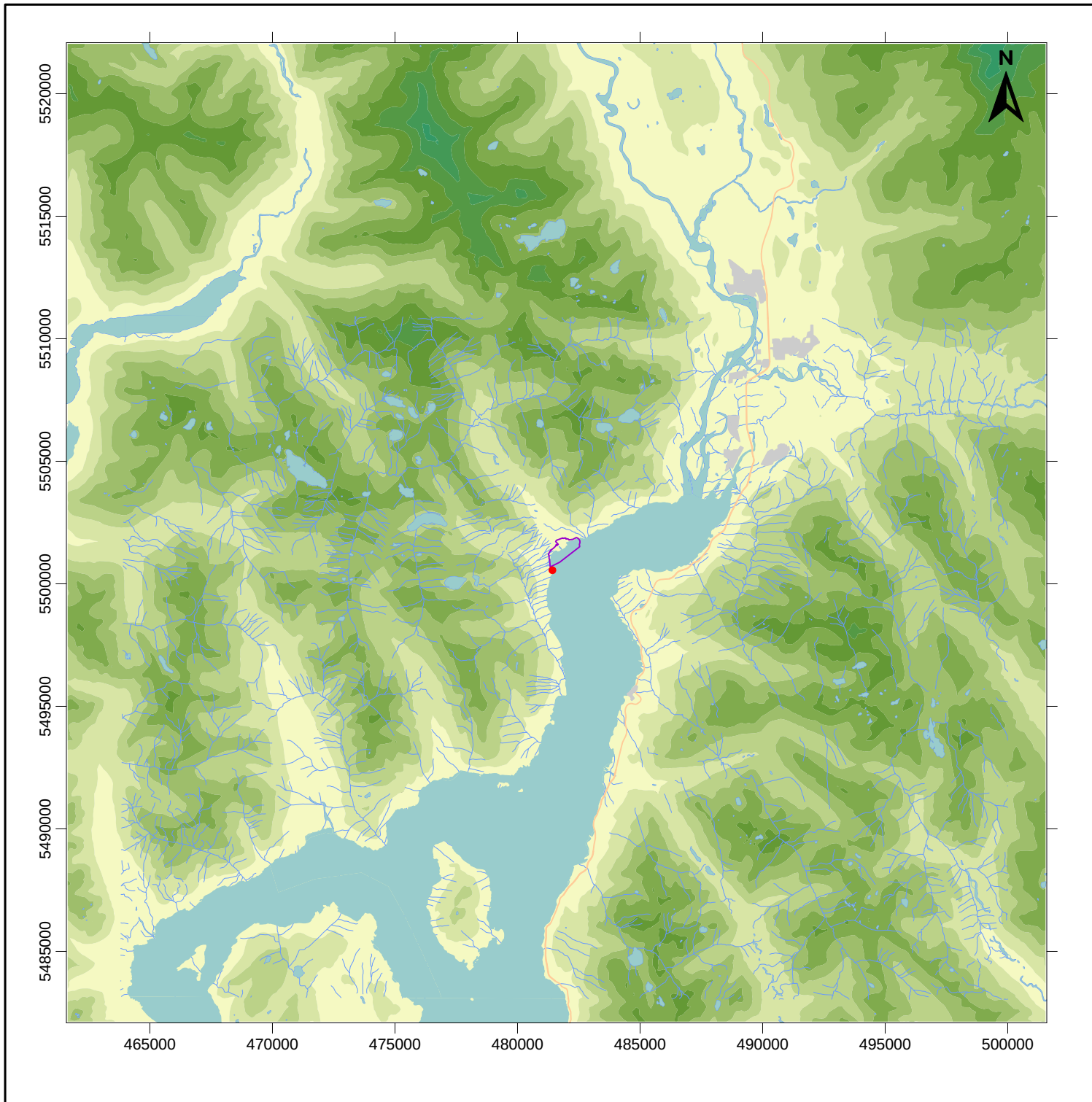
Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.1

Title
 Project Alone Case - Normal Operations Predicted Ground-Level
 98th Percentile of 1-hour Daily Maximum
 NO₂ Concentrations (µg/m³)

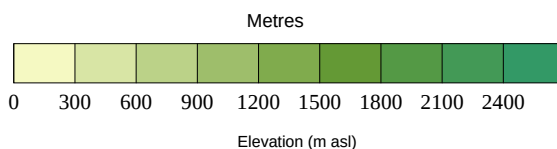


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average NO₂ Concentration: 1.6 µg/m³
- Annual NO₂ BC AQO: 32 µg/m³

Contour Levels: 3.2 µg/m³
 Baseline: not added



Client/Project/Report

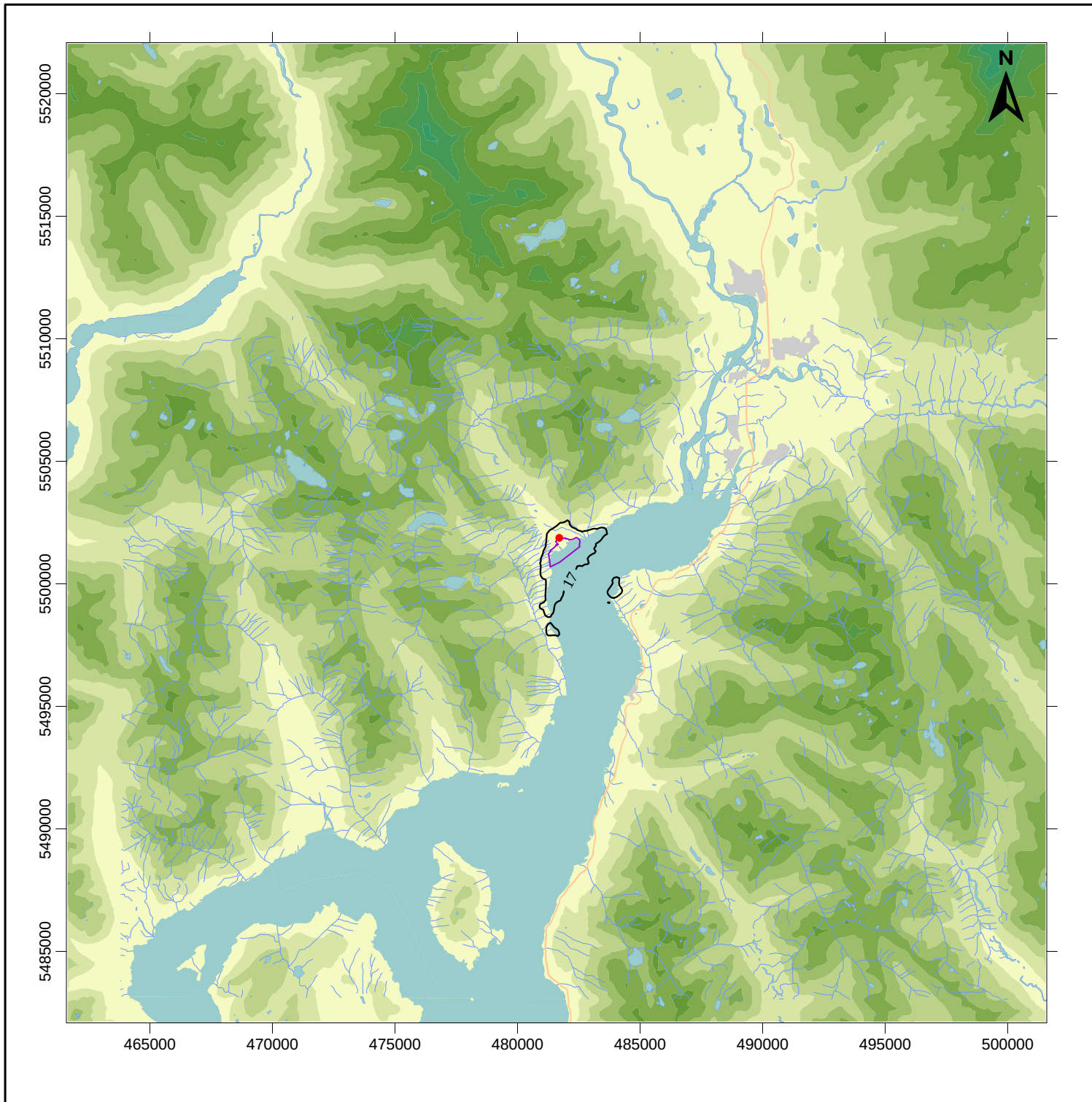
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.2

Title
Project Alone Case - Normal Operations Predicted Ground-Level
Annual Average NO₂ Concentrations (µg/m³)

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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

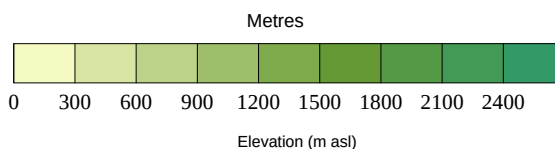
- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration: 53.3 µg/m³

1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17, 42.5 µg/m³

Baseline: not added



0 4000 8000 m



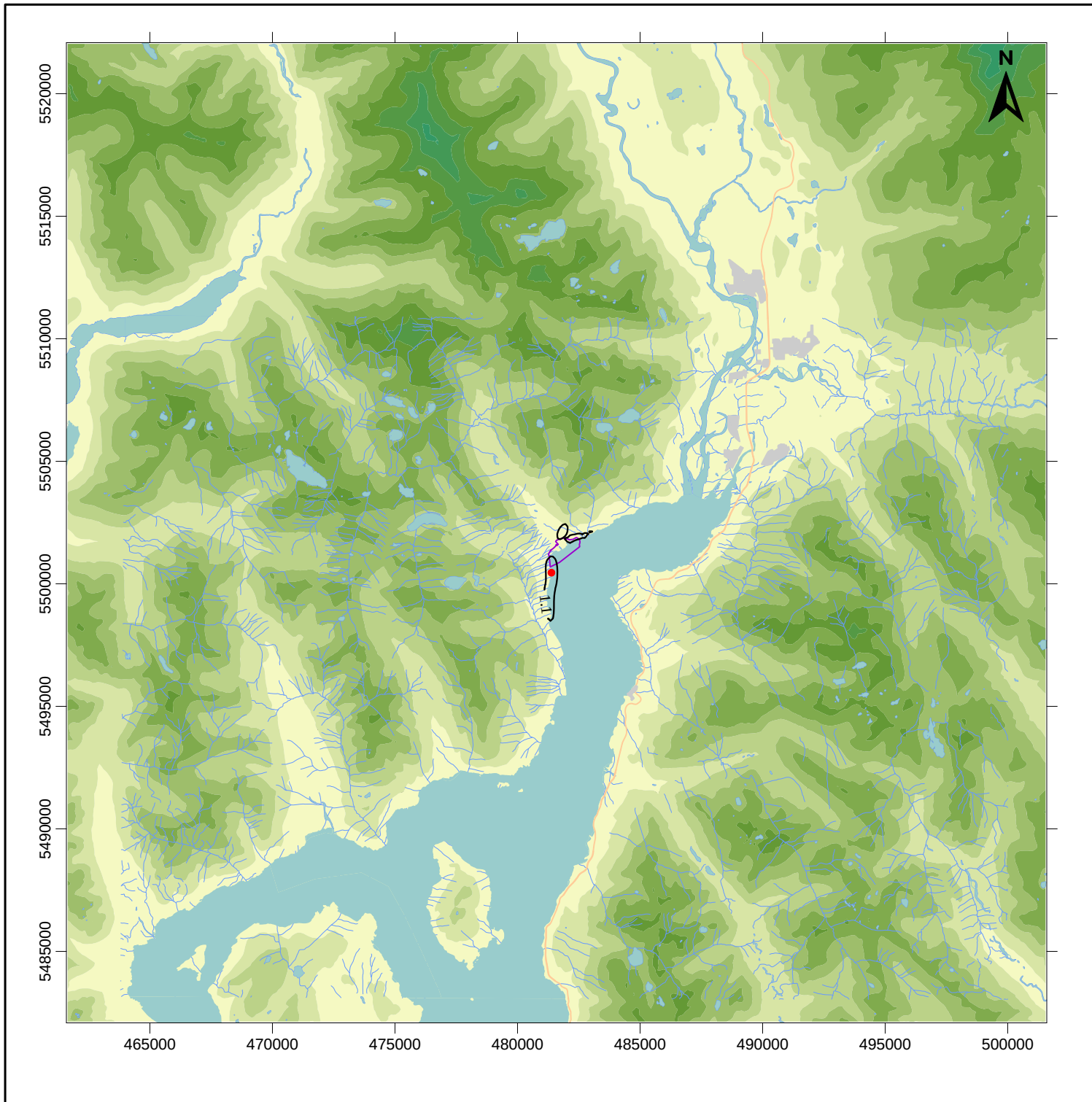
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Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.3

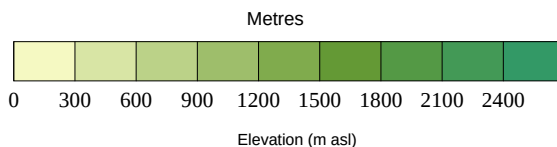
Title
 Project Alone Case - Normal Operations Predicted Ground-Level
 99th Percentile of 1-hour Daily Maximum
 SO₂ Concentrations (µg/m³)



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average SO₂ Concentration: 4.4 µg/m³
Annual SO₂ BC AQO: 10.5 µg/m³
- Contour Levels: 1.1 µg/m³
- Baseline: not added



0 4000 8000 m



Client/Project/Report

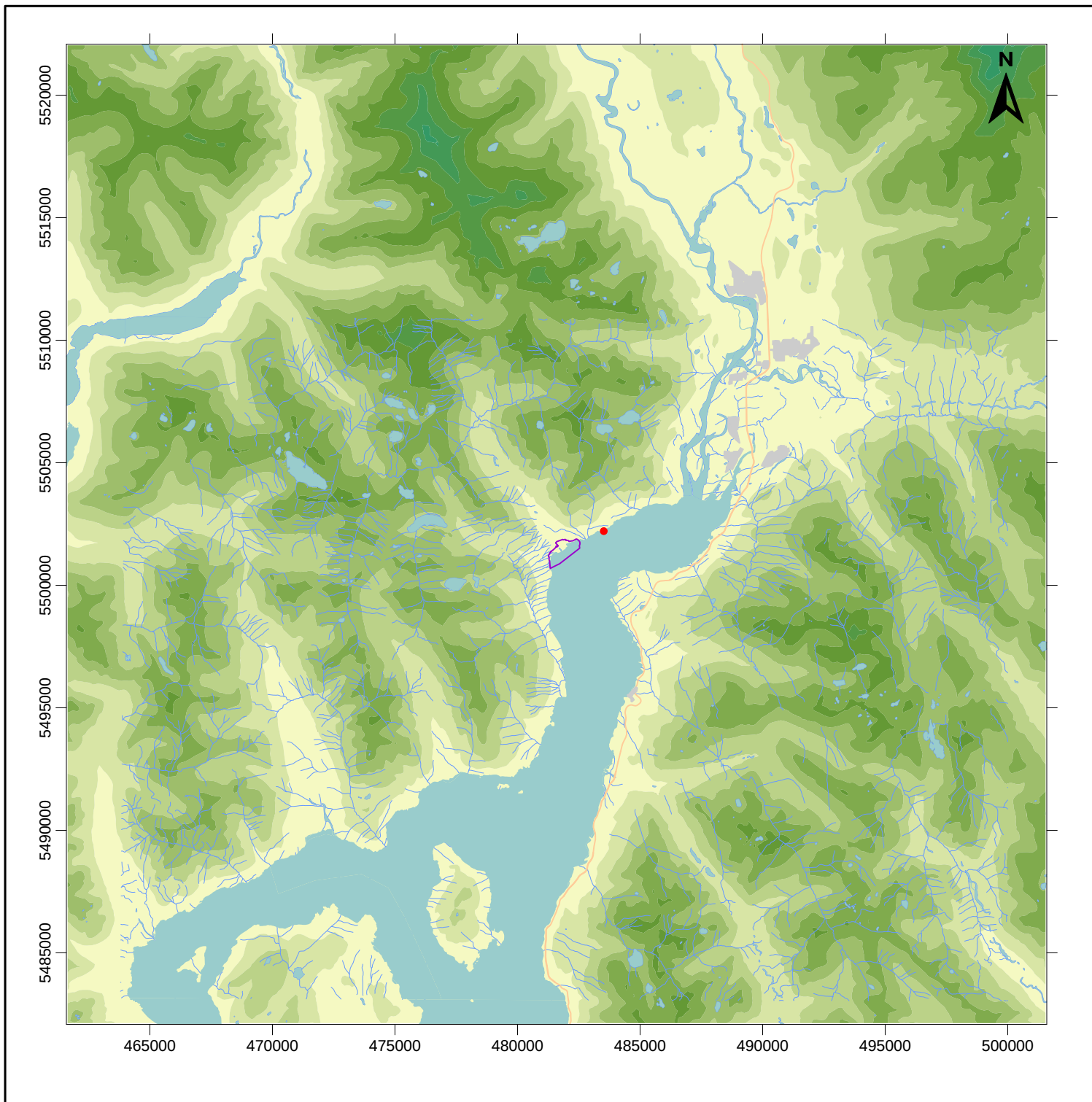
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.4

Title
Project Alone Case - Normal Operations Predicted Ground-Level
Annual Average SO₂ Concentrations (µg/m³)

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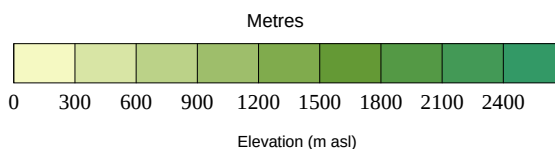
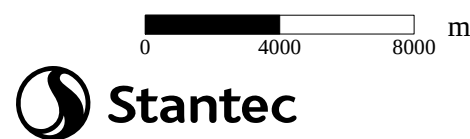


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fence Line
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 24-Hour Average $PM_{2.5}$ Concentration: $2.0 \mu g/m^3$
- 24-Hour $PM_{2.5}$ BC AQO: $25 \mu g/m^3$

Contour Levels: $2.5 \mu g/m^3$
 Baseline: not added



Client/Project/Report

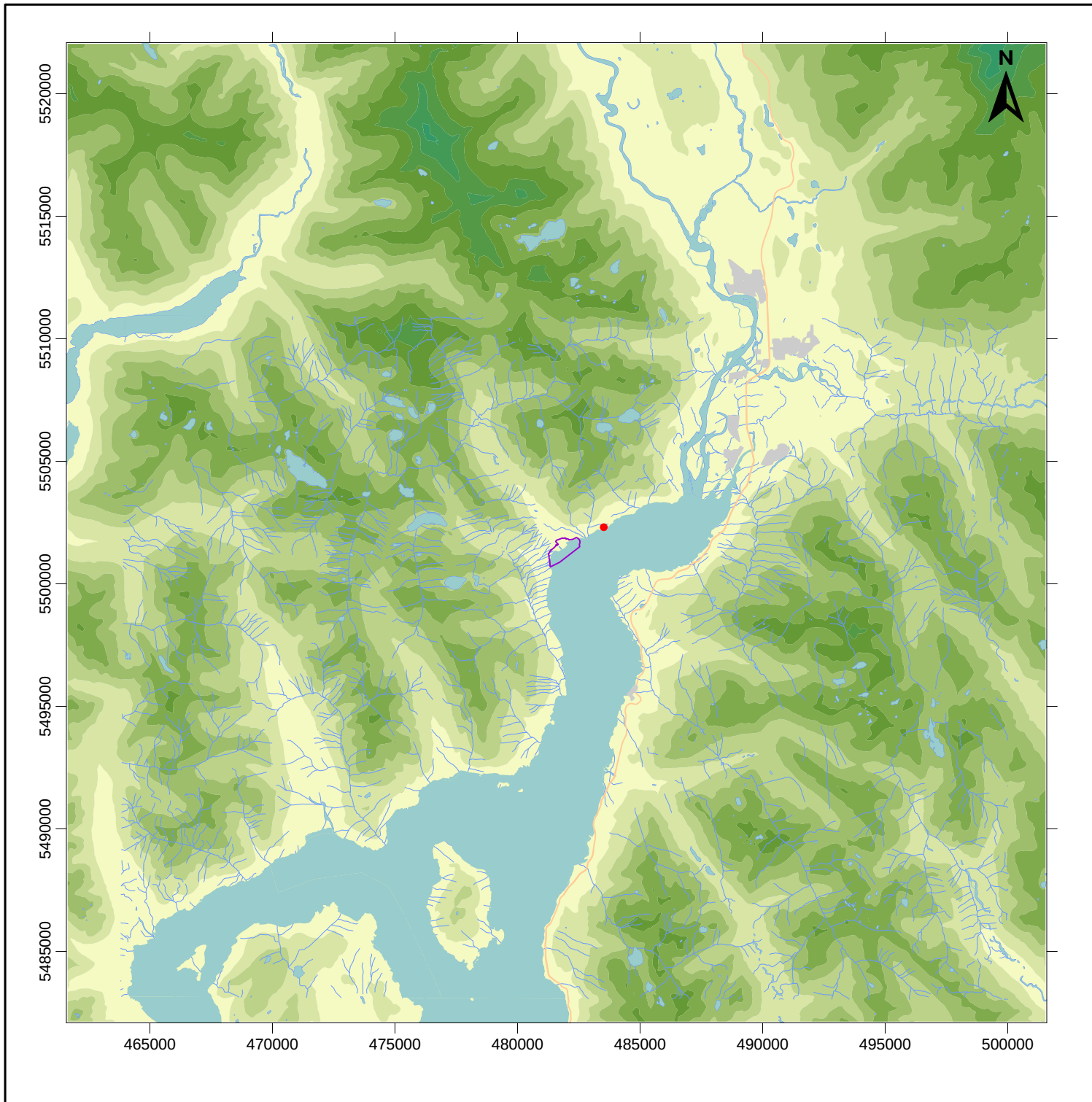
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.5

Title
Project Alone Case - Normal Operations Predicted Ground-Level
98th Percentile 24-Hour Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)

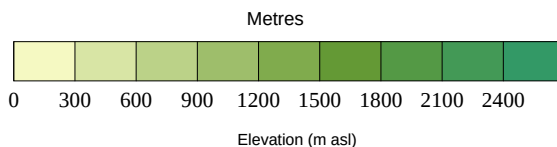
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average $PM_{2.5}$ Concentration: $0.2 \mu g/m^3$
 Annual $PM_{2.5}$ BC AQO: $8 \mu g/m^3$
 Contour Levels: $0.8 \mu g/m^3$
 Baseline: not added



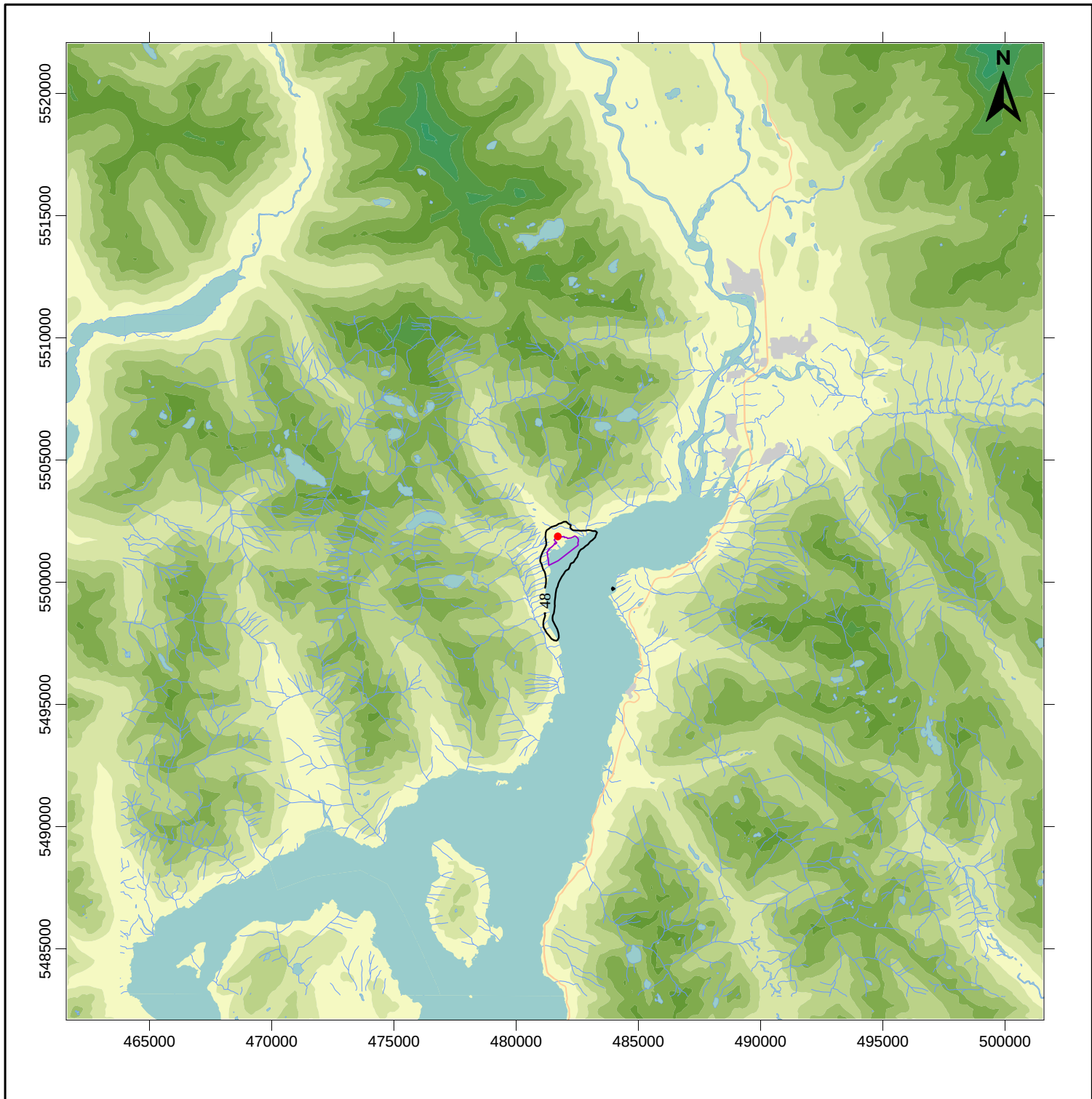
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Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.6

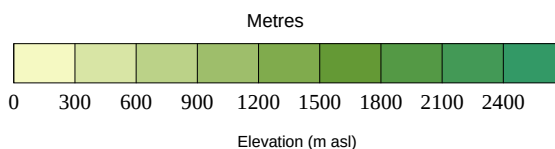
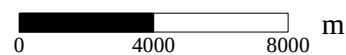
Title
 Project Alone Case - Normal Operations Predicted Ground-Level
 Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 1-hour Average 98th Daily Maximum NO₂ Concentration: 59.6 µg/m³
 1-hour NO₂ BC AQO: 113 µg/m³
- Contour Levels: 48, 56.5 µg/m³
 Baseline: 41.6 µg/m³



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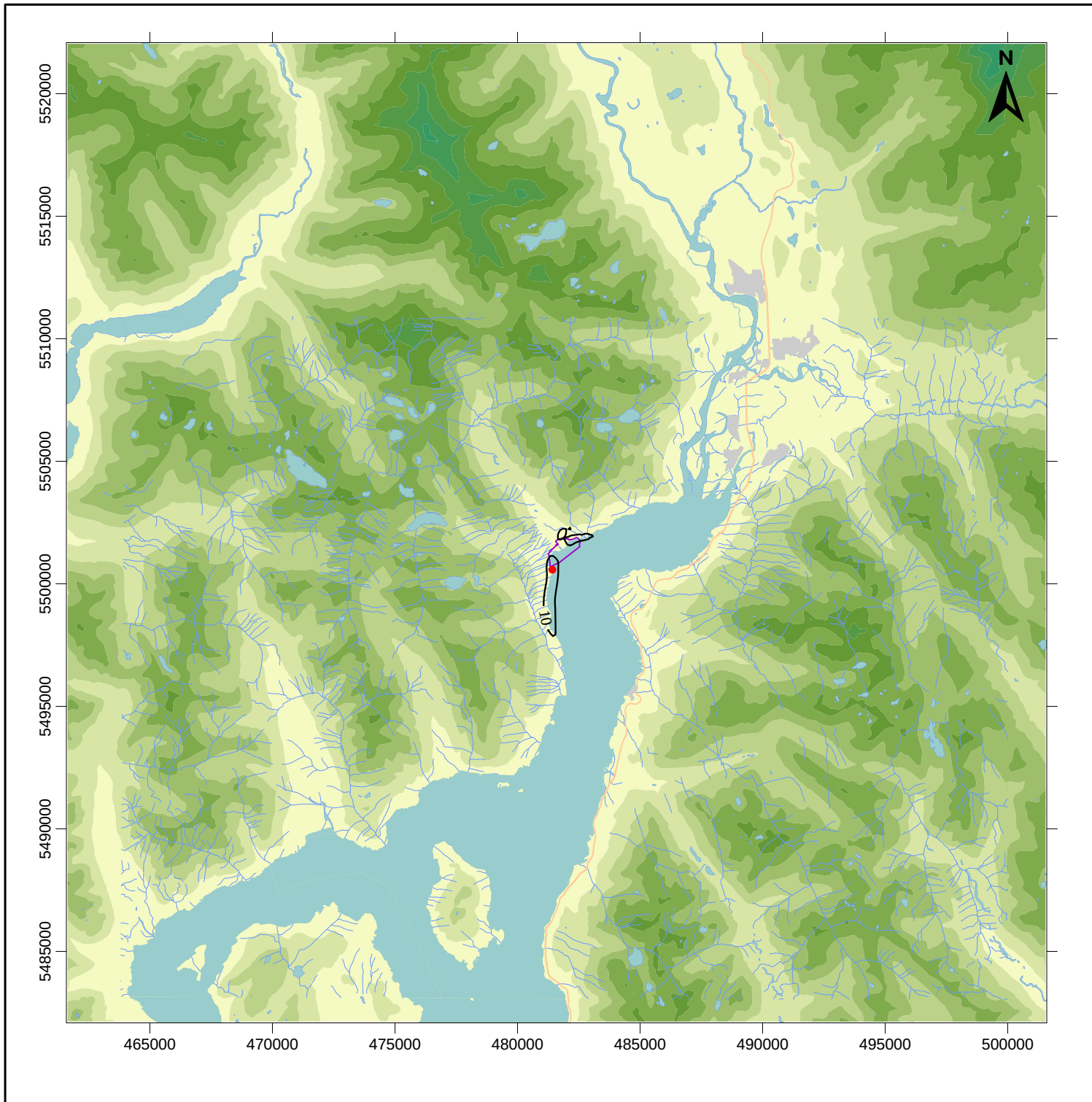
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.7

Title
 Commissioning Case Predicted Ground-Level
 98th Percentile of 1-hour Daily Maximum
 NO₂ Concentrations (µg/m³)

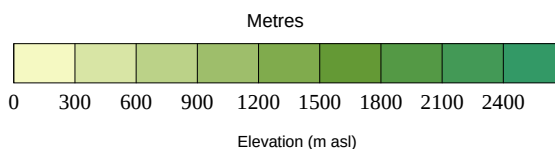
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average NO₂ Concentration: 11.1 µg/m³
 Annual NO₂ BC AQO: 32 µg/m³
- Contour Levels: 10 µg/m³
 Baseline: 9.4 µg/m³



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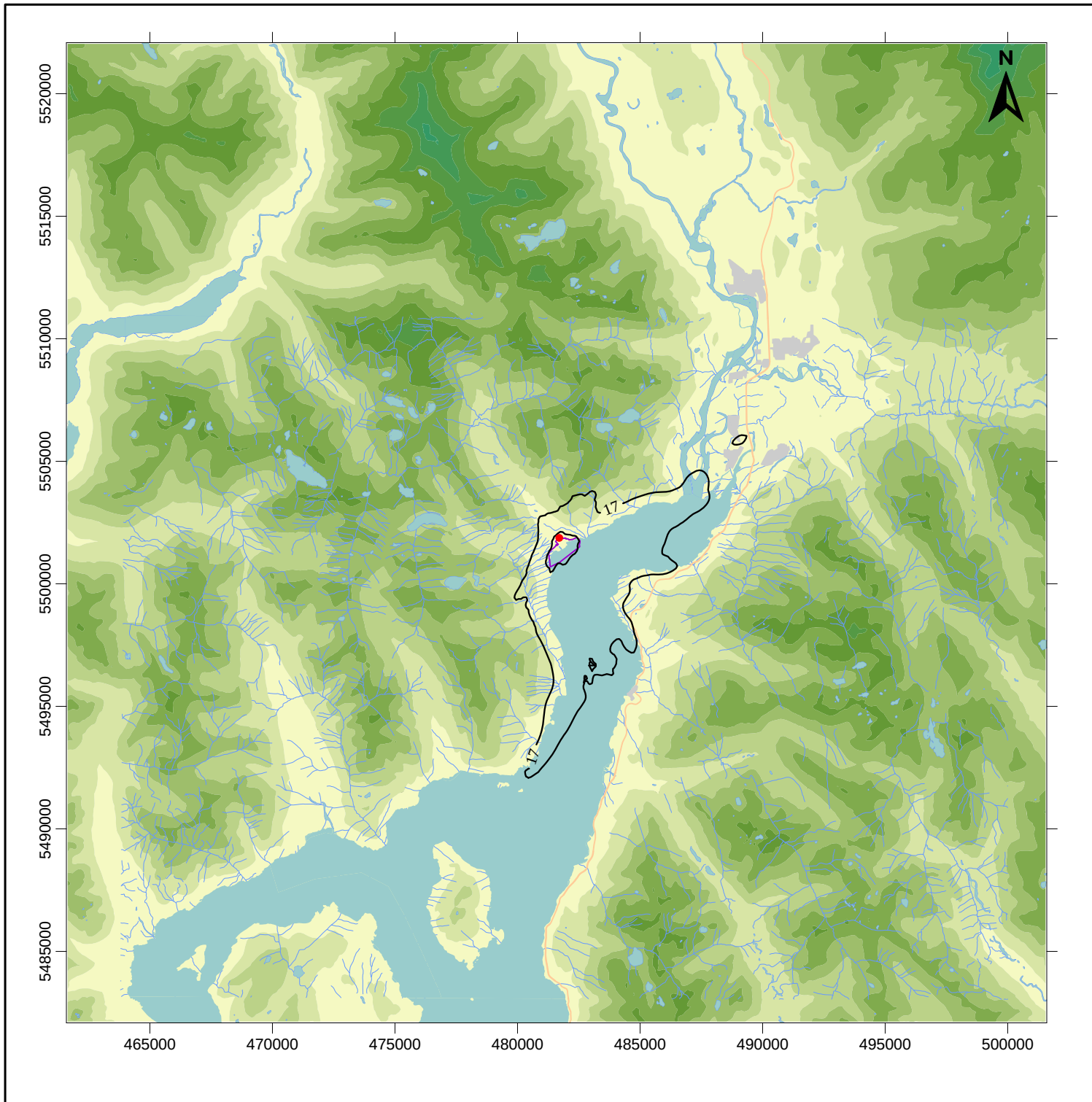
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.8

Title
Commissioning Case Predicted Ground-Level
Annual Average NO₂ Concentrations (µg/m³)

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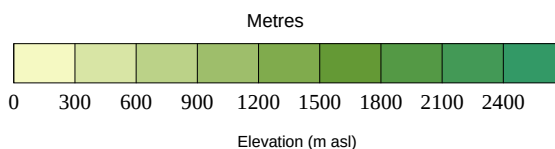


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration: 64.4 µg/m³
 1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17, 42.5 µg/m³
 Baseline: 11.1 µg/m³



0 4000 8000 m



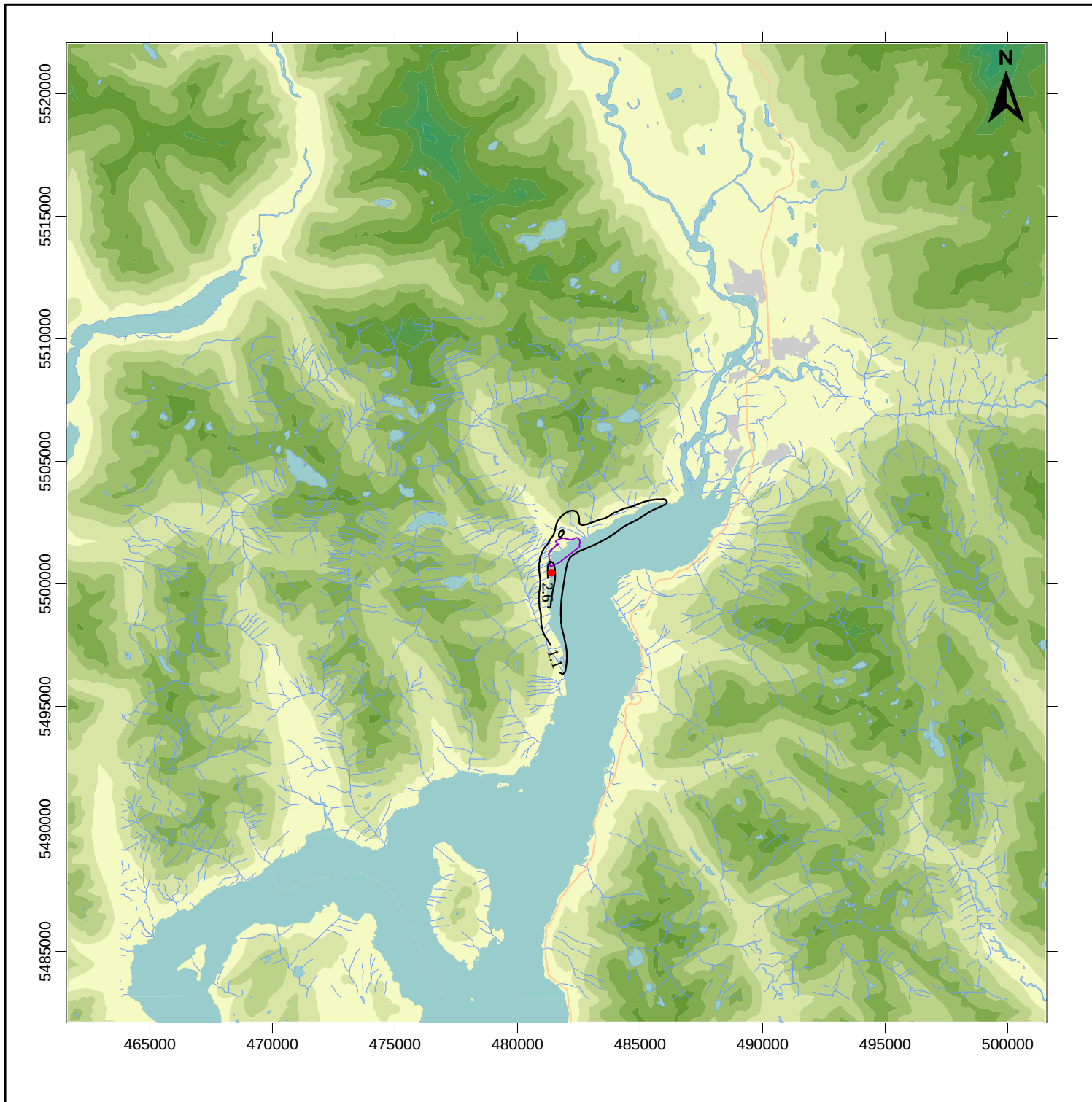
Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.9

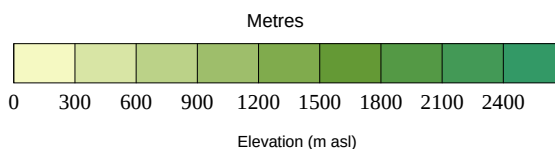
Title
Commissioning Case Predicted Ground-Level
99th Percentile of 1-hour Daily Maximum
SO₂ Concentrations (µg/m³)



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average SO₂ Concentration: 5.1 µg/m³
- Annual SO₂ BC AQO: 10.5 µg/m³
- Contour Levels: 1.1, 2.6 µg/m³
- Baseline: 0.7 µg/m³



0 4000 8000 m



Client/Project/Report

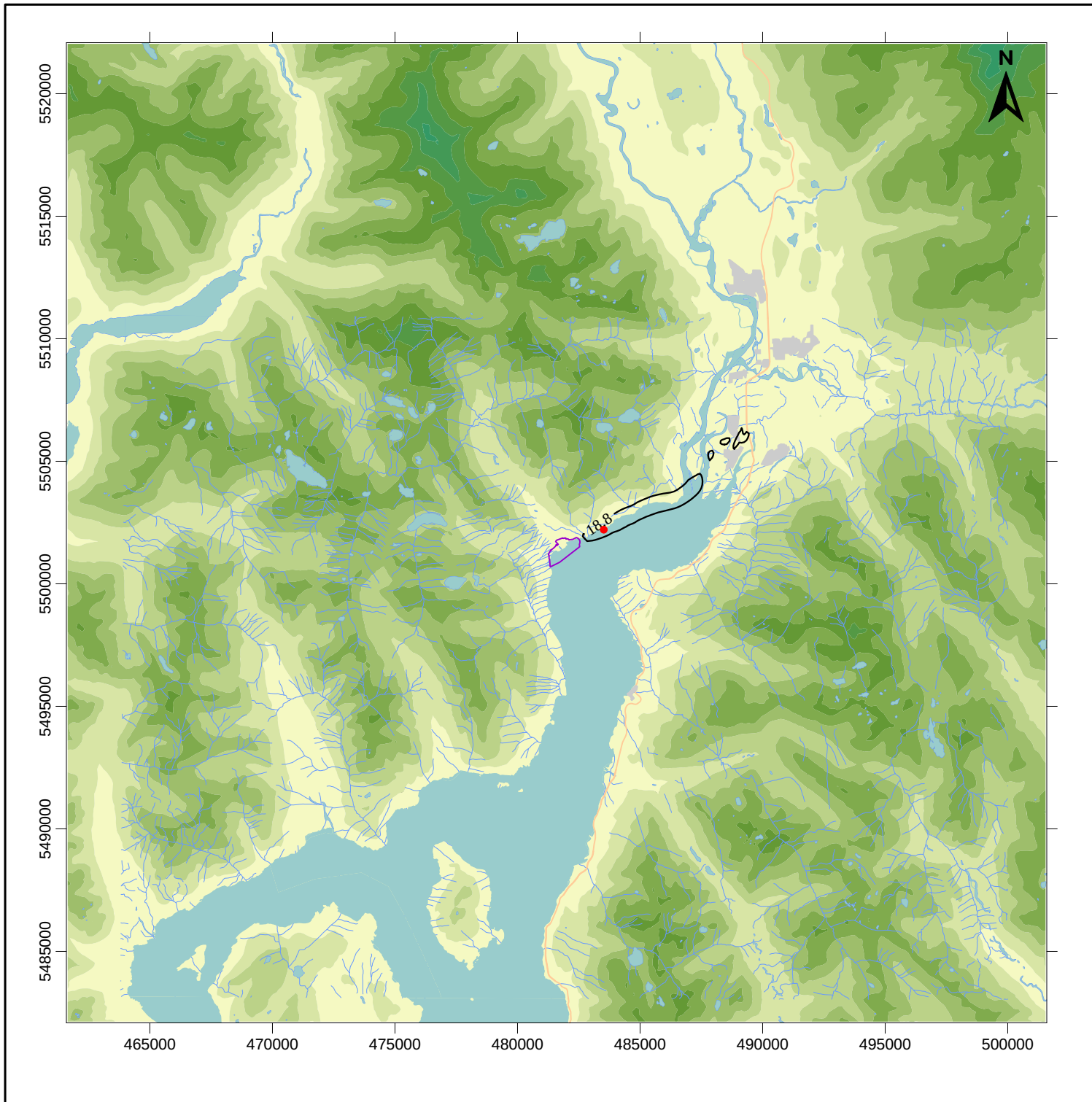
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.10

Title
Commissioning Case Predicted Ground-Level
Annual Average SO₂ Concentrations (µg/m³)

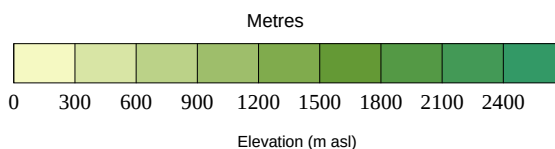
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fence Line
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 24-Hour Average PM_{2.5} Concentration: 19.8 µg/m³
- 24-Hour PM_{2.5} BC AQO: 25 µg/m³
- Contour Levels: 18.8 µg/m³
- Baseline: 17.7 µg/m³



Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

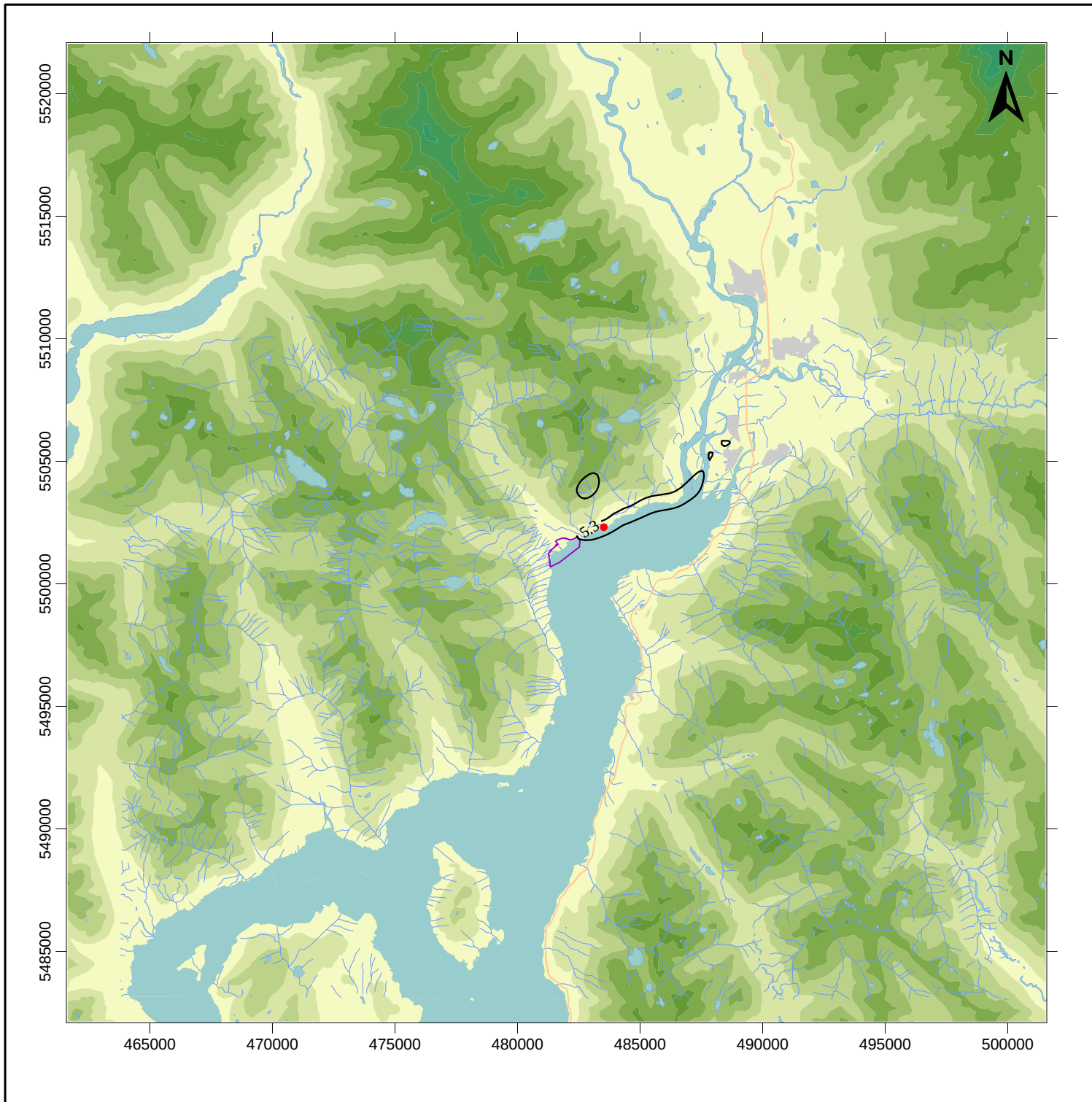
Figure No.

D.11

Title

Commissioning Case Predicted Ground-Level
98th Percentile 24-Hour Average PM_{2.5} Concentrations (µg/m³)

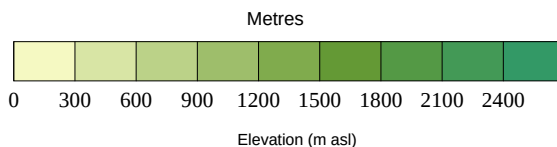
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average $PM_{2.5}$ Concentration: $5.4 \mu g/m^3$
 Annual $PM_{2.5}$ BC AQO: $8 \mu g/m^3$
- Contour Levels: $5.3 \mu g/m^3$
 Baseline: $5.2 \mu g/m^3$



0 4000 8000 m



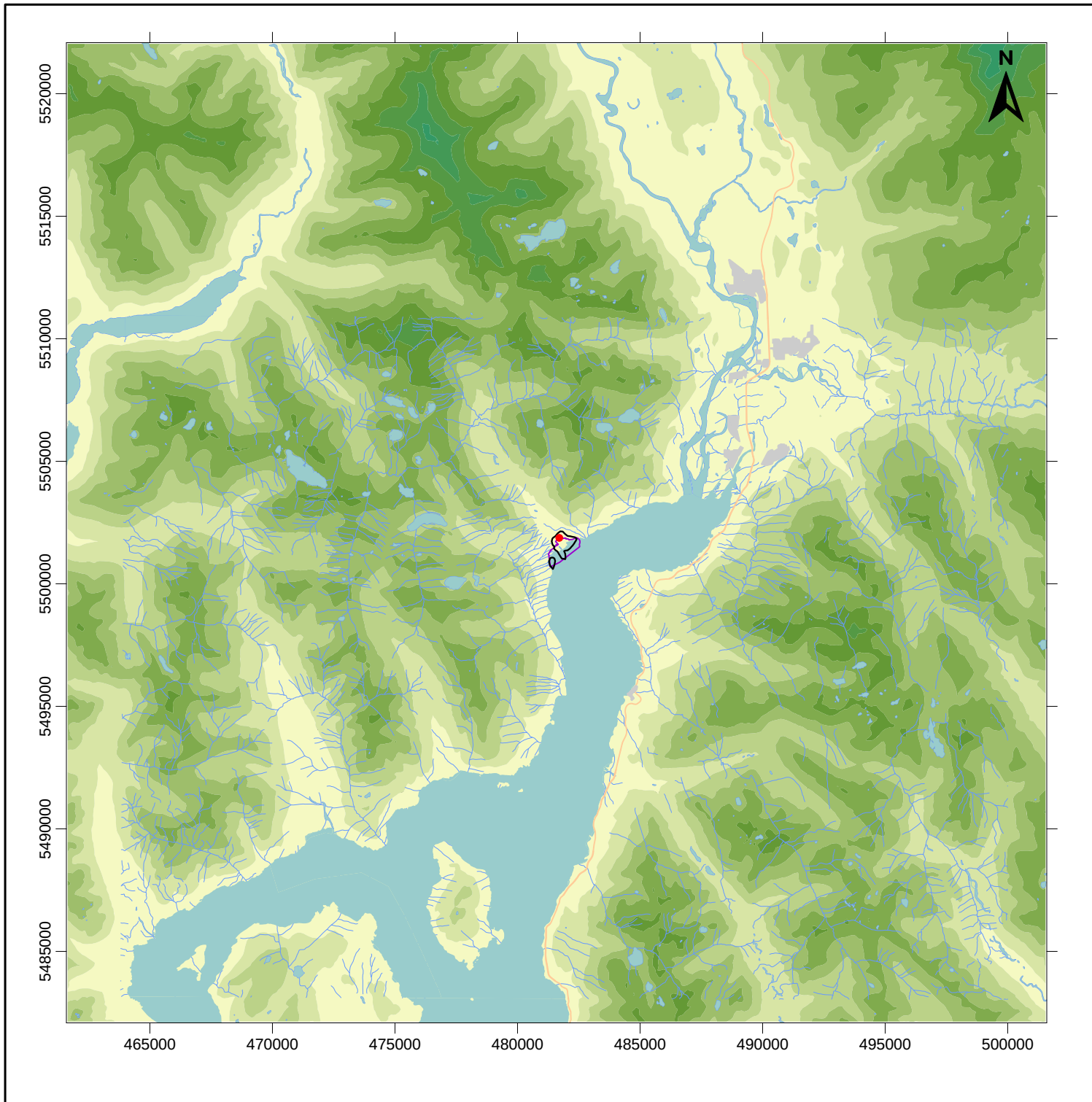
Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.12

Title
Commissioning Case Predicted Ground-Level
Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)

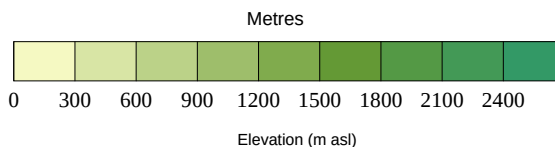


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

Maximum 1-hour Average 98th Daily Maximum NO₂ Concentration: 18.0 µg/m³
 1-hour NO₂ BC AQO: 113 µg/m³

Contour Levels: 11.3 µg/m³
 Baseline: not added



0 4000 8000 m



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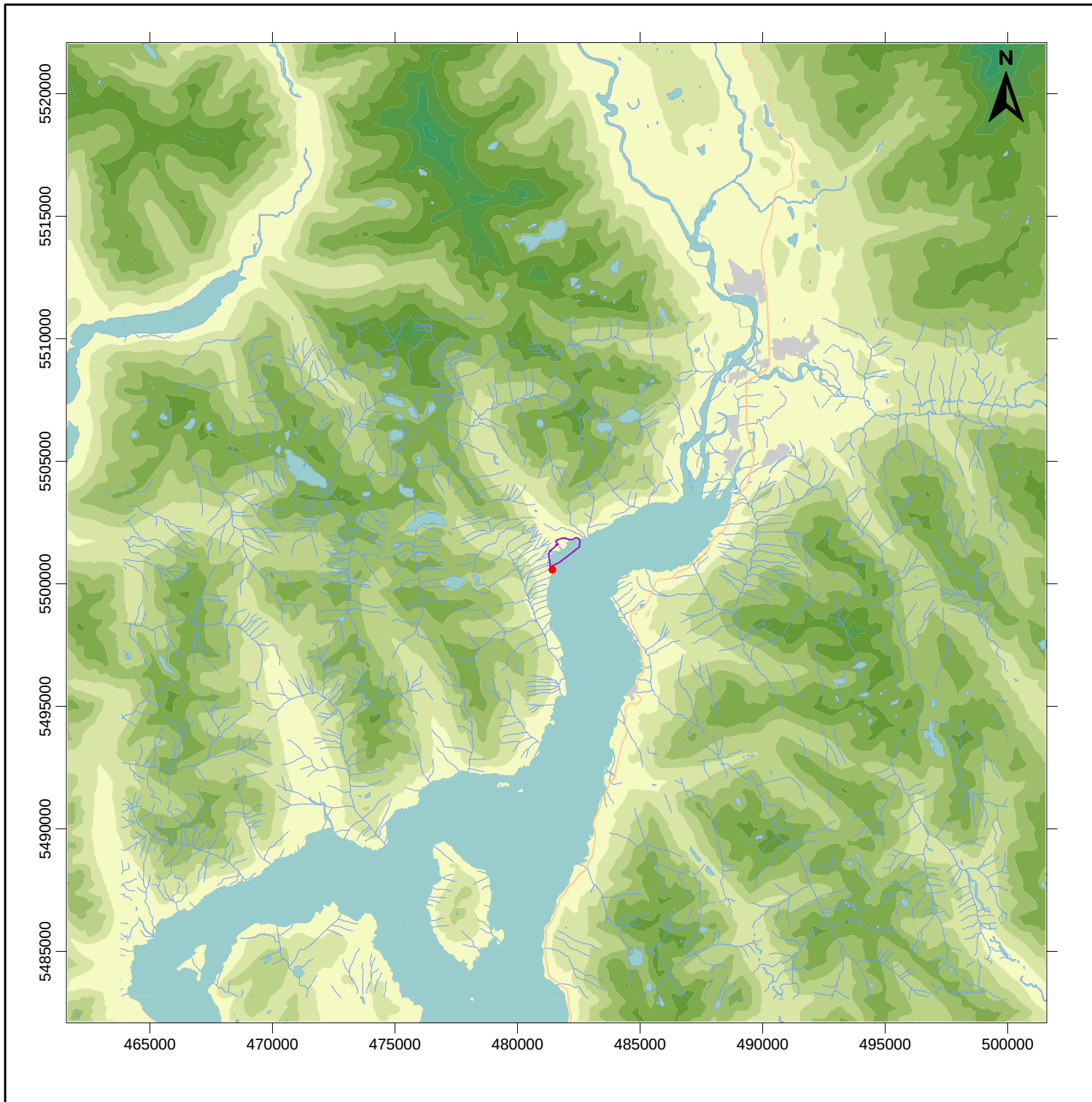
Figure No.

D.13

Title

Project Alone Case - Stabilizing Operations Predicted Ground-Level
98th Percentile of 1-hour Daily Maximum
NO₂ Concentrations (µg/m³)

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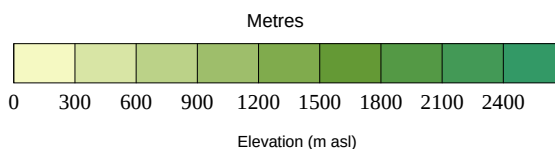


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

Maximum Annual Average NO₂ Concentration:
 1.7 µg/m³
 Annual NO₂ BC AQO: 32 µg/m³

Contour Levels: 3.2 µg/m³
 Baseline: not added



0 4000 8000 m



Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

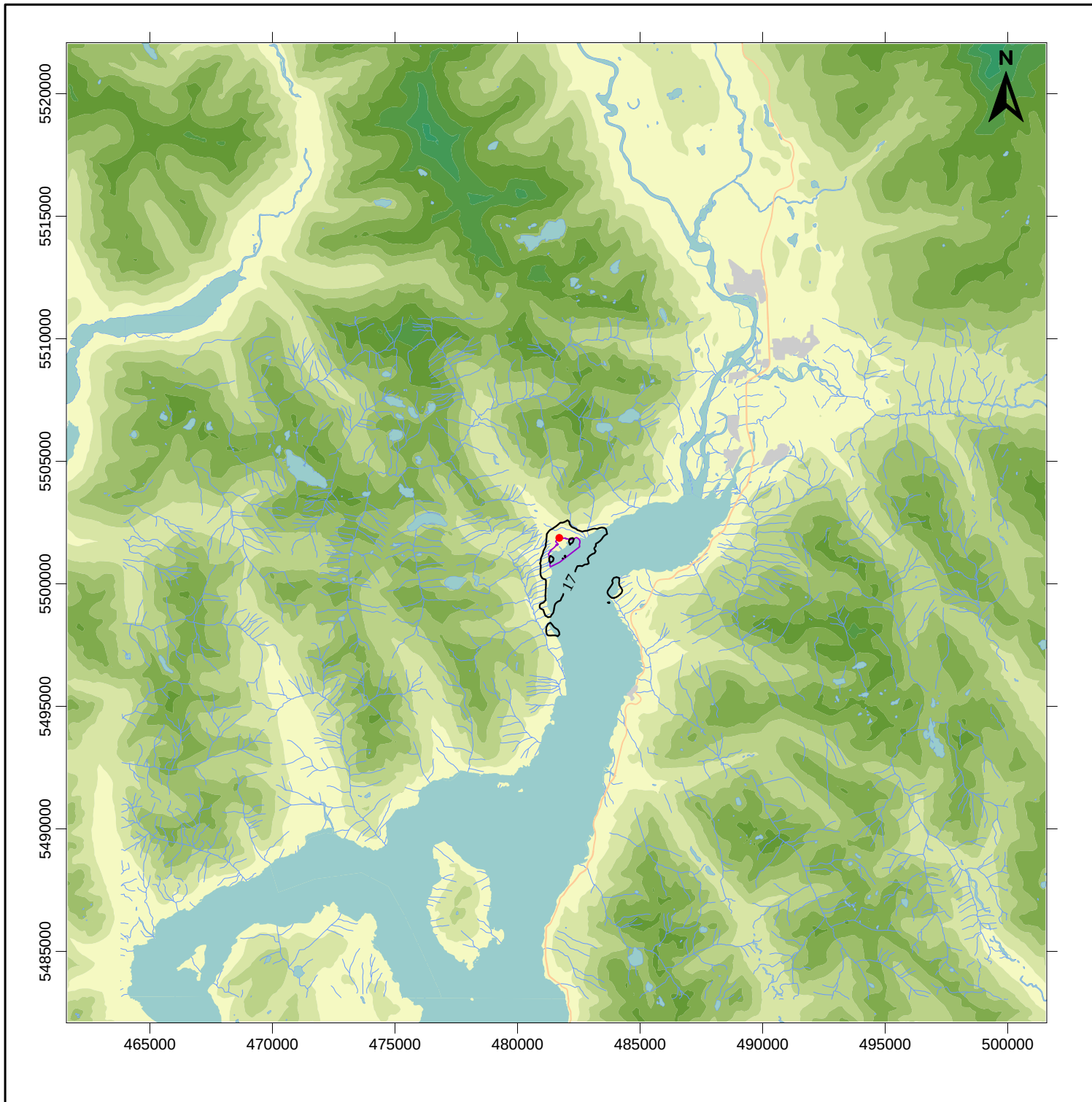
Figure No.

D.14

Title

Project Alone Case - Stabilizing Operations Predicted Ground-Level
Annual Average NO₂ Concentrations (µg/m³)

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

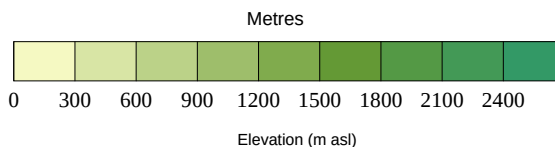


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration: 53.3 µg/m³
- 1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17, 42.5 µg/m³
 Baseline: not added



Client/Project/Report

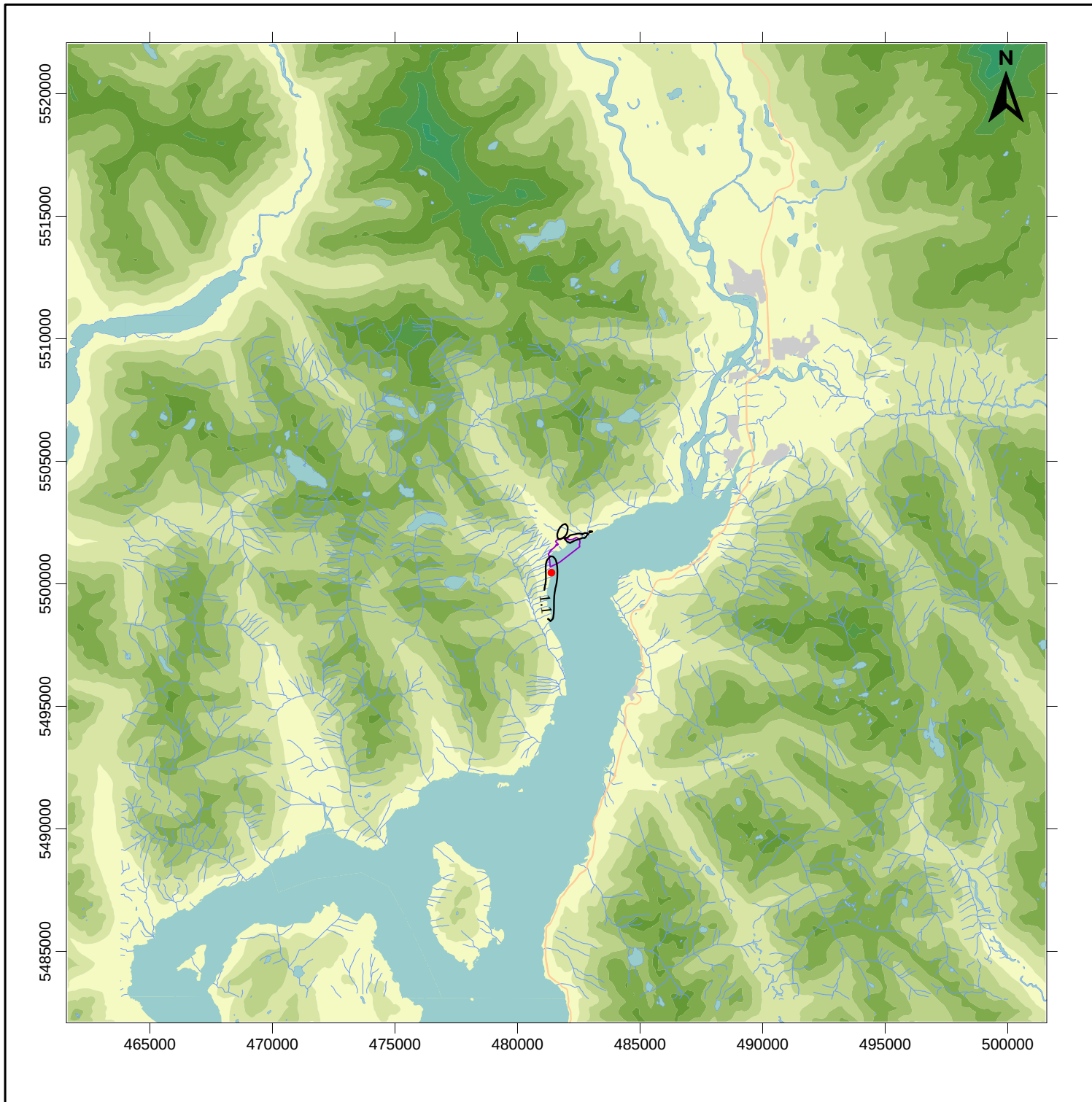
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.15

Title

Project Alone Case - Stabilizing Operations Predicted Ground-Level
99th Percentile of 1-hour Daily Maximum
SO₂ Concentrations (µg/m³)

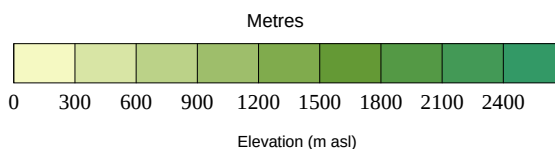


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average SO₂ Concentration: 4.4 µg/m³
Annual SO₂ BC AQO: 10.5 µg/m³

Contour Levels: 1.1 µg/m³
 Baseline: not added



0 4000 8000 m



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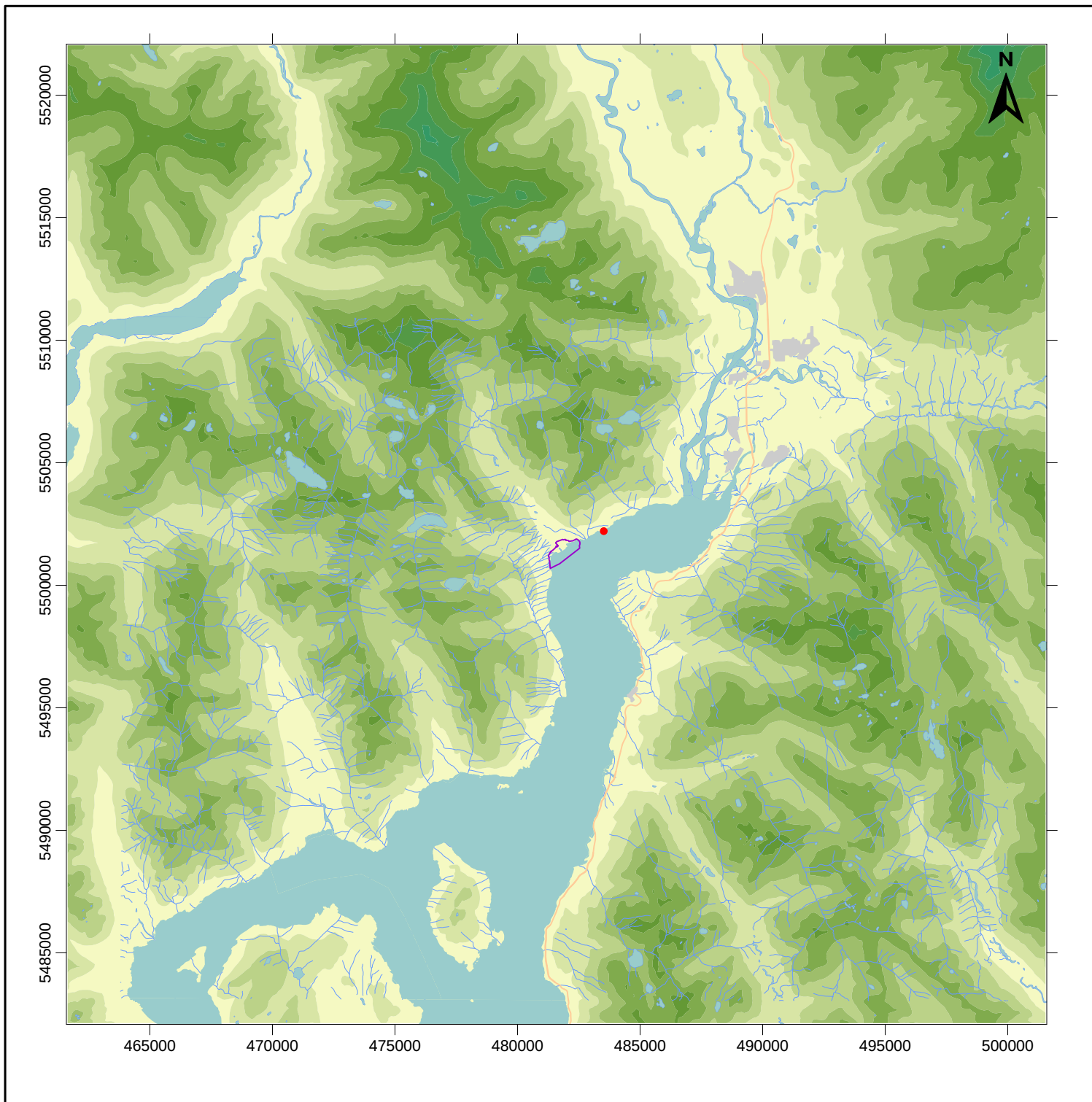
Figure No.

D.16

Title

Project Alone Case - Stabilizing Operations Predicted Ground-Level Annual Average SO₂ Concentrations (µg/m³)

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

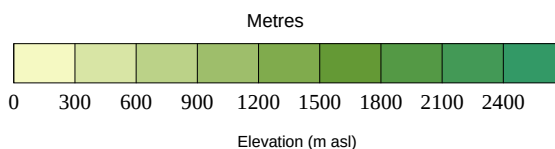


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 24-Hour Average PM_{2.5} Concentration: 2.1 µg/m³
 24-Hour PM_{2.5} BC AQO: 25 µg/m³

Contour Levels: 2.5 µg/m³
 Baseline: not added



0 4000 8000 m



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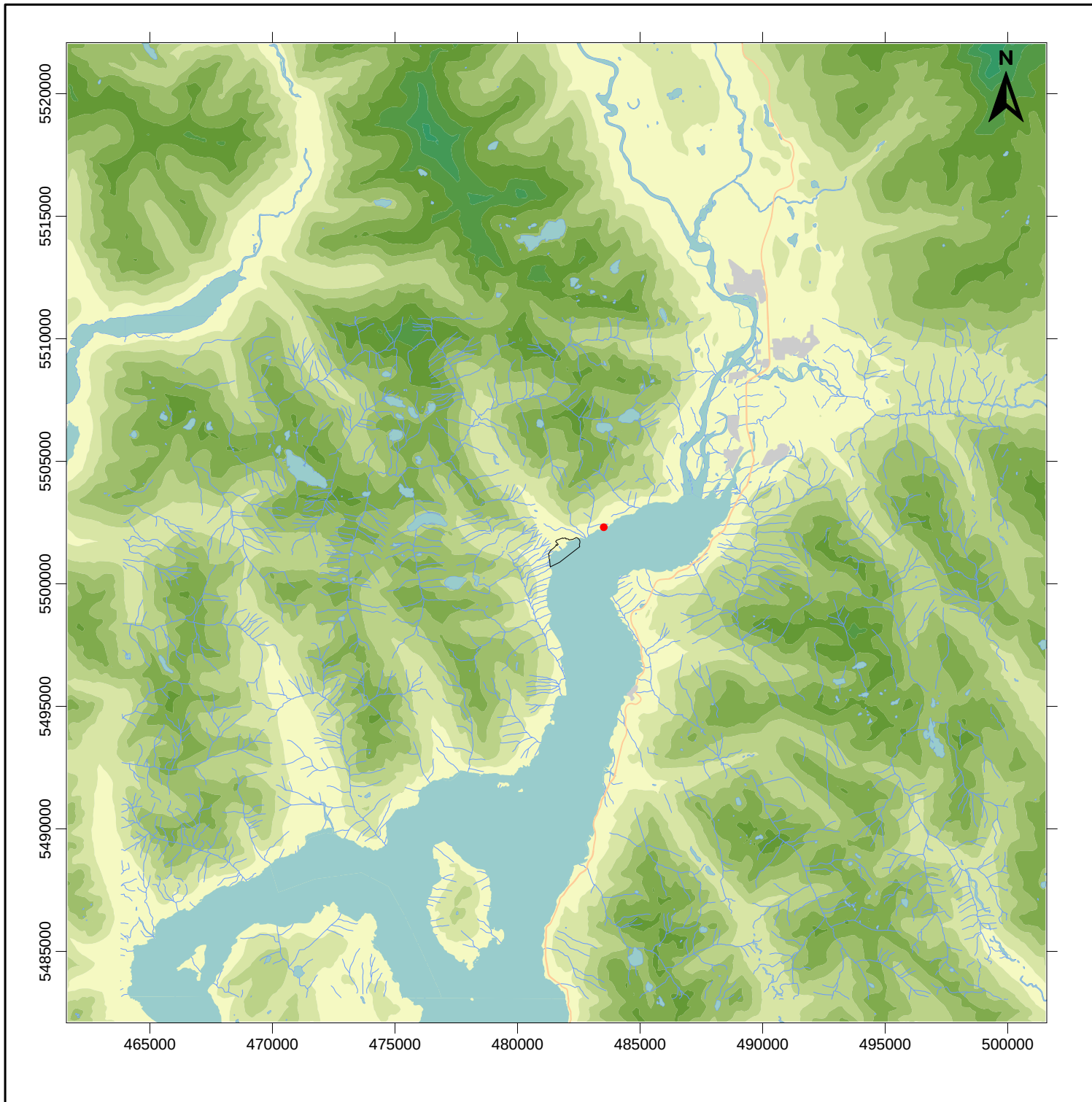
Figure No.

D.17

Title

Project Alone Case - Stabilizing Operations Predicted Ground-Level
98th Percentile 24-Hour Average PM_{2.5} Concentrations (µg/m³)

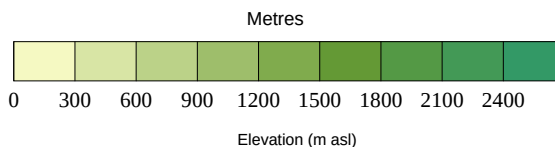
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average $PM_{2.5}$ Concentration: $0.2 \mu g/m^3$
 Annual $PM_{2.5}$ BC AQO: $8 \mu g/m^3$
 Contour Levels: $0.8 \mu g/m^3$
 Baseline: not added



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Woodfibre LNG Limited Operations Air Quality Assessment

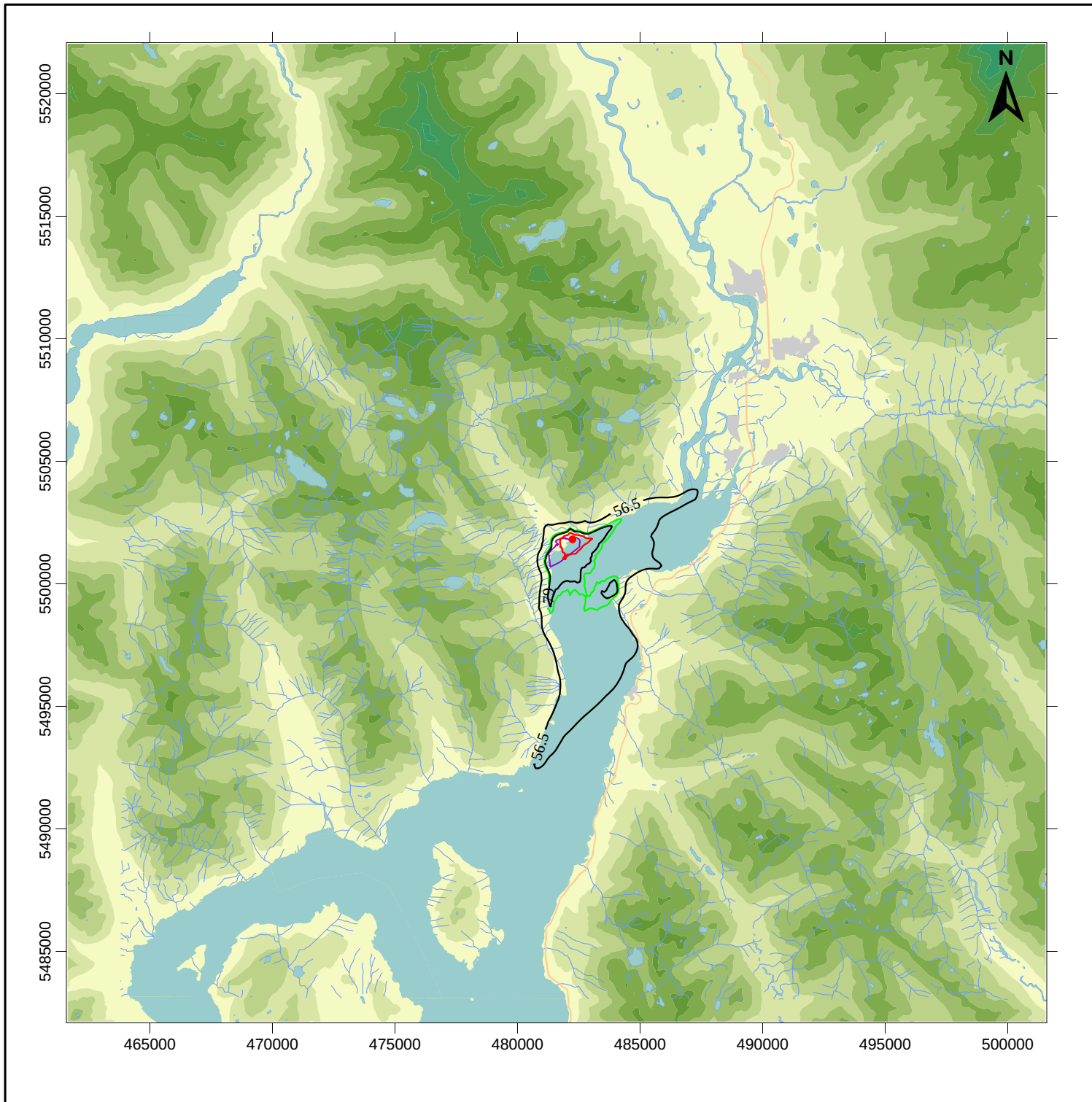
Figure No.

D.18

Title

Project Alone Case - Stabilizing Operations Predicted Ground-Level
Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)

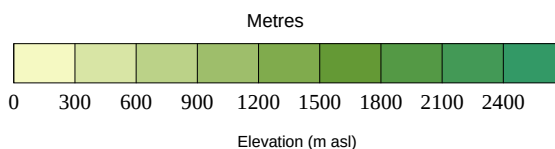
Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 1-hour Average 98th Daily Maximum NO₂ Concentration: 126.5 µg/m³
- 1-hour NO₂ BC AQO: 113 µg/m³ —
- 1-hour NO₂ 2025 CAAQS: 79 µg/m³ —
- Contour Levels: 56.5, 79, 84.8, 113 µg/m³
- Baseline: 41.6 µg/m³



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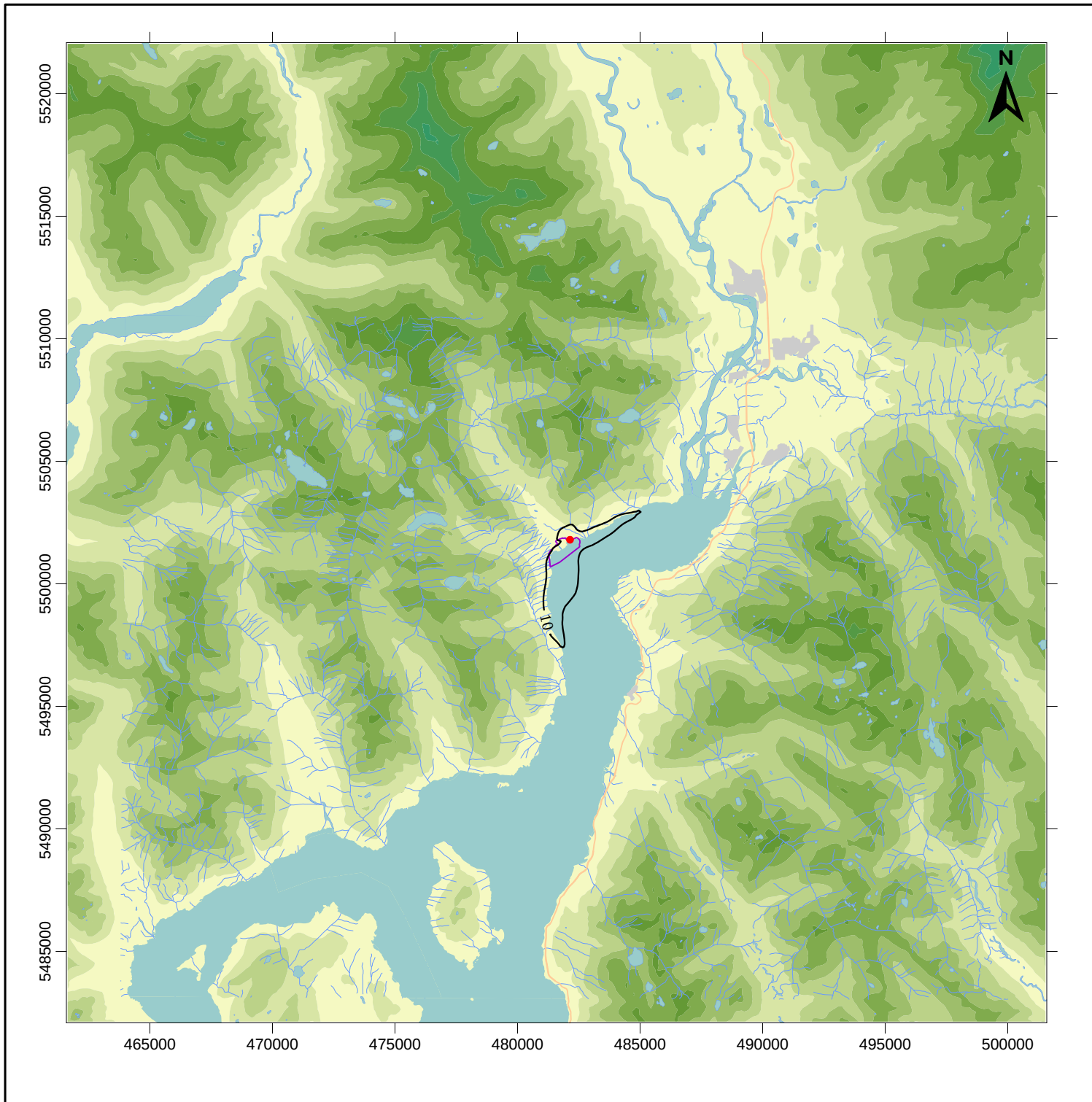
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.19

Title

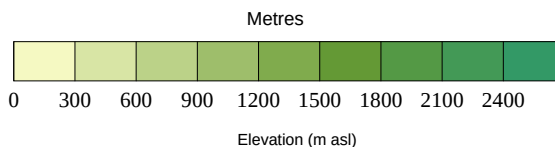
Application Case - Normal Operations Predicted Ground-Level
98th Percentile of 1-hour Daily Maximum
NO₂ Concentrations (µg/m³)



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average NO₂ Concentration: 14.0 µg/m³
Annual NO₂ BC AQO: 32 µg/m³
- Contour Levels: 10 µg/m³
Baseline: 9.4 µg/m³



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Woodfibre LNG Limited Operations Air Quality Assessment

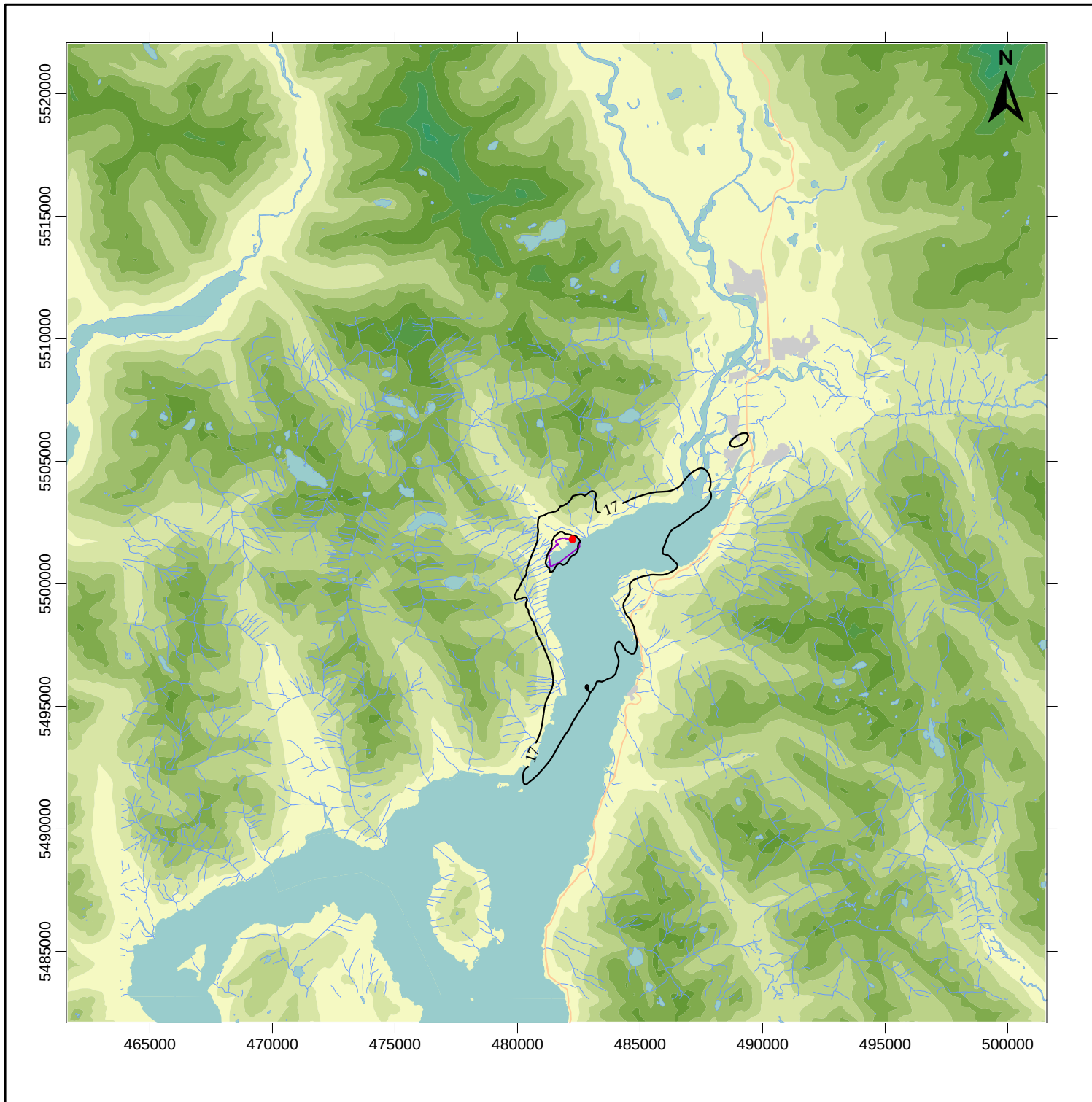
Figure No.

D.20

Title

Application Case - Normal Operations Predicted Ground-Level
Annual Average NO₂ Concentrations (µg/m³)

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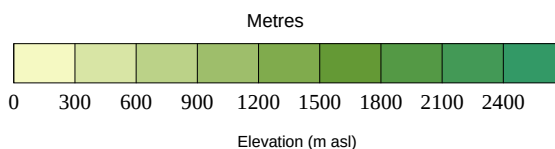


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration:
 64.4 µg/m³
 1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17, 42.5 µg/m³
 Baseline: 11.1 µg/m³



0 4000 8000 m



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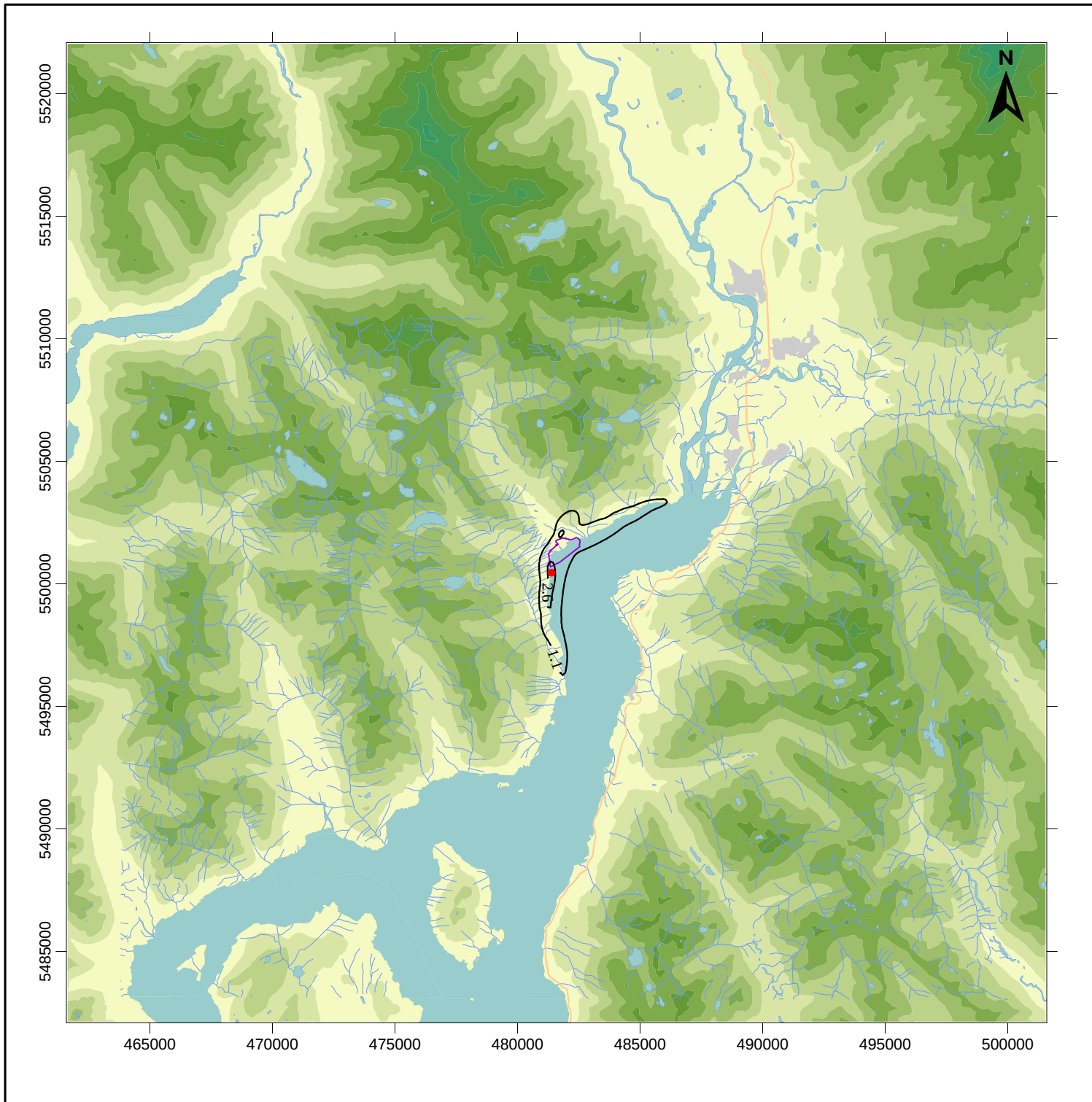
Figure No.

D.21

Title

Application Case - Normal Operations Predicted Ground-Level
99th Percentile of 1-hour Daily Maximum
SO₂ Concentrations (µg/m³)

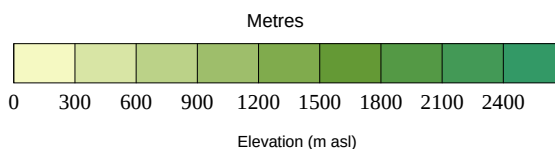
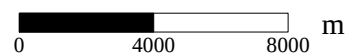
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average SO₂ Concentration: 5.1 µg/m³
- Annual SO₂ BC AQO: 10.5 µg/m³
- Contour Levels: 1.1, 2.6 µg/m³
- Baseline: 0.7 µg/m³



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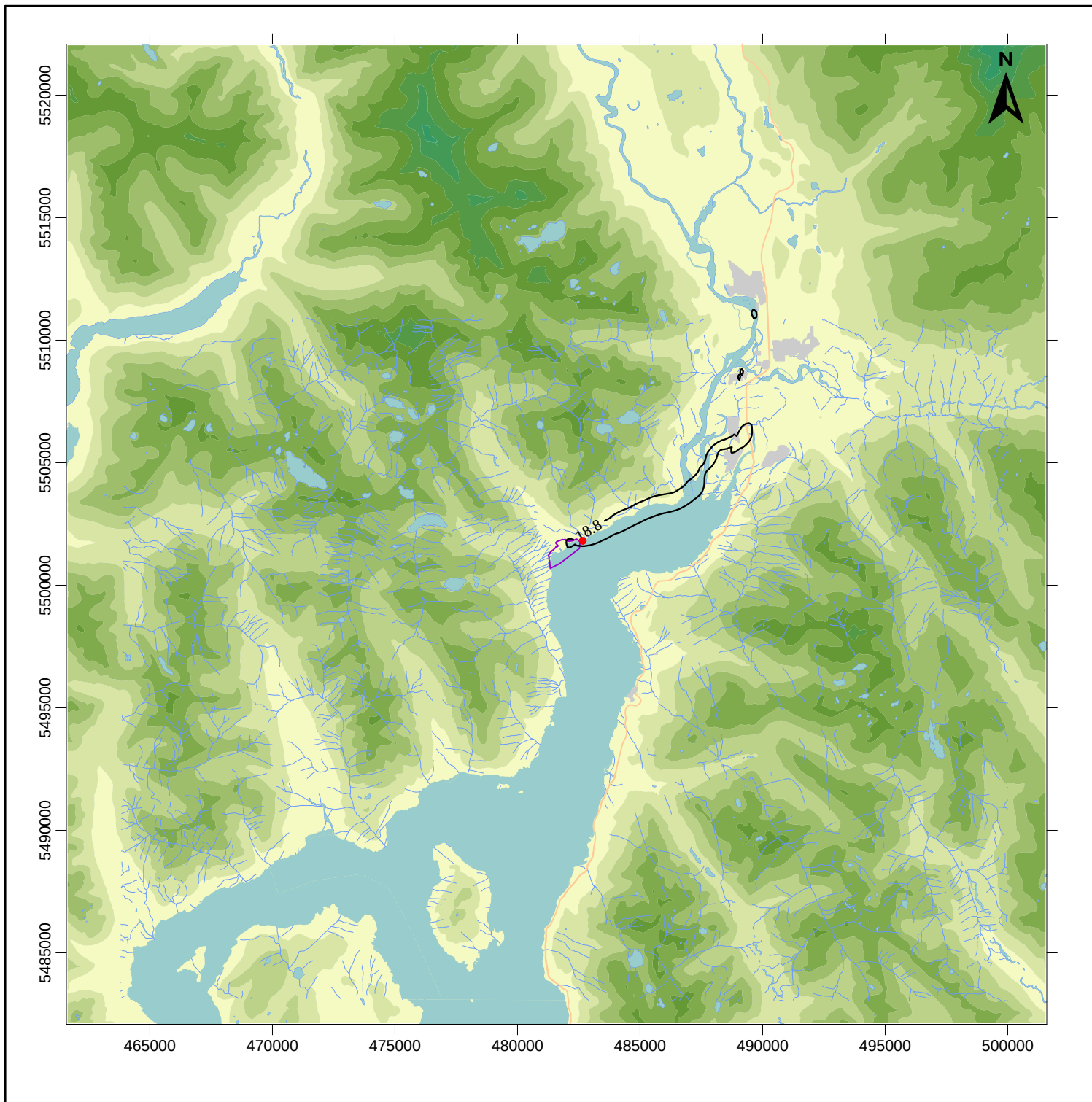
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.22

Title
Application Case - Normal Operations Predicted Ground-Level
Annual Average SO₂ Concentrations (µg/m³)

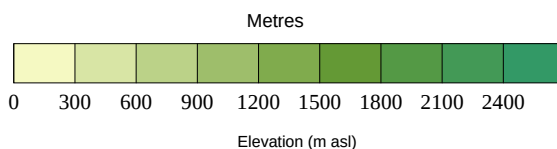
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 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 24-Hour Average PM_{2.5} Concentration: 20.2 µg/m³
- 24-Hour PM_{2.5} BC AQO: 25 µg/m³
- Contour Levels: 18.8 µg/m³
- Baseline: 17.7 µg/m³



0 4000 8000 m



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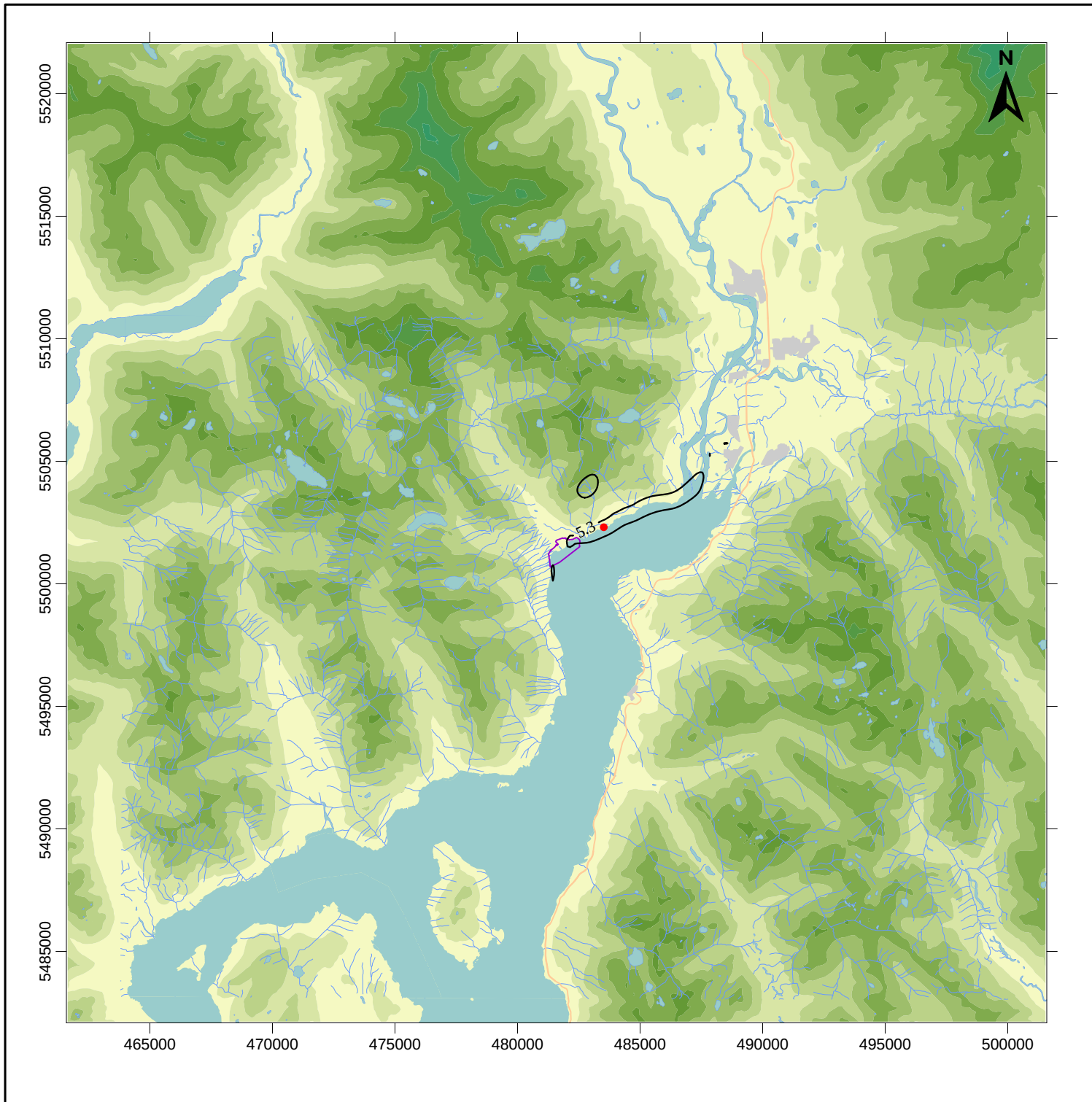
Figure No.

D.23

Title

Application Case - Normal Operations Predicted Ground-Level
98th Percentile 24-Hour Average PM_{2.5} Concentrations (µg/m³)

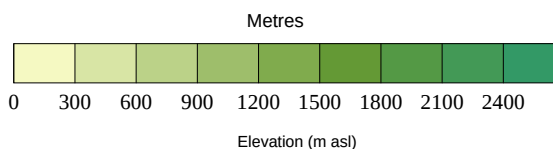
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average PM_{2.5} Concentration: 5.4 µg/m³
- Annual PM_{2.5} BC AQO: 8 µg/m³
- Contour Levels: 5.3 µg/m³
- Baseline: 5.2 µg/m³



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Woodfibre LNG Limited Operations Air Quality Assessment

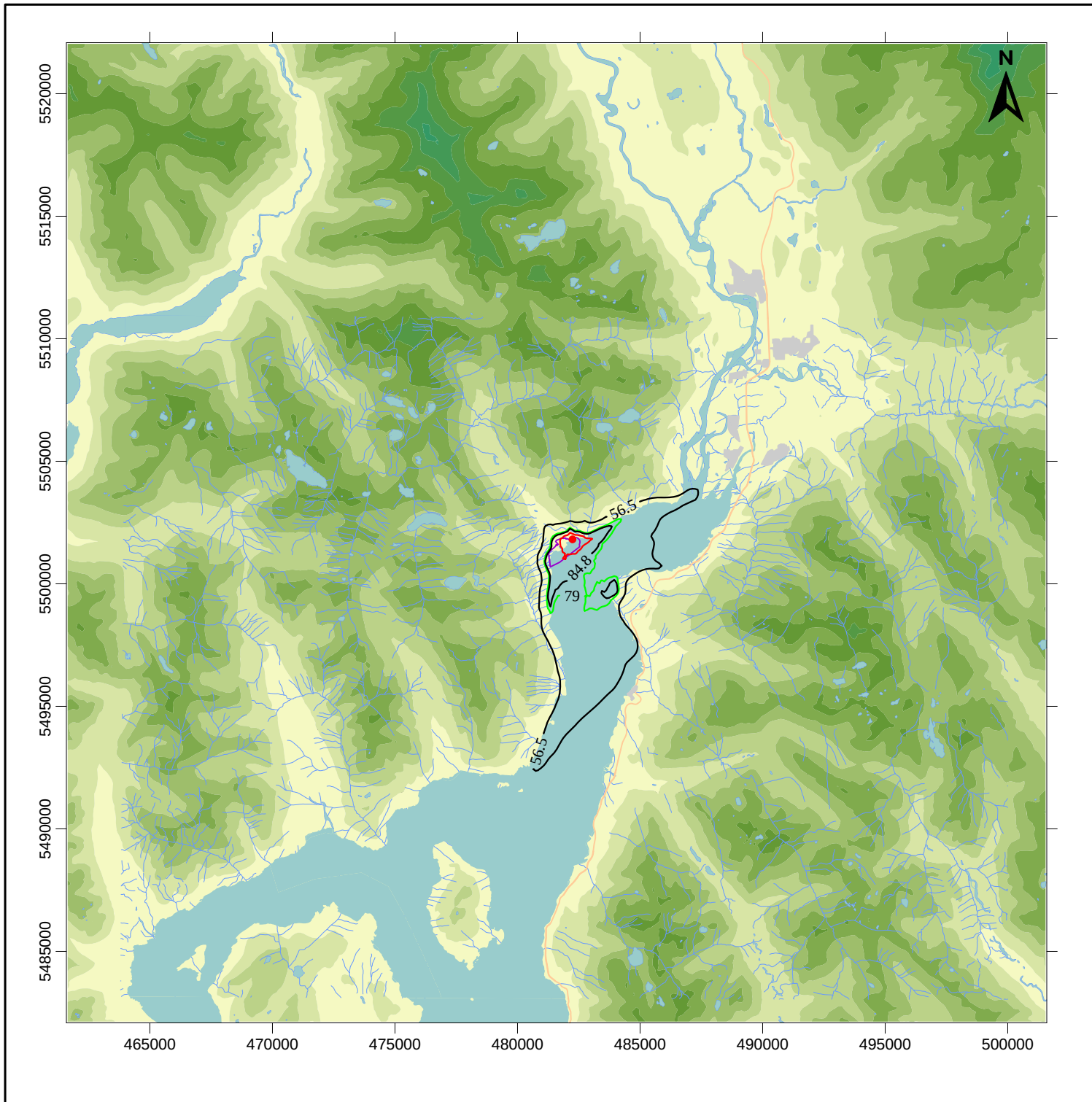
Figure No.

D.24

Title

Application Case - Normal Operations Predicted Ground-Level
Annual Average PM_{2.5} Concentrations (µg/m³)

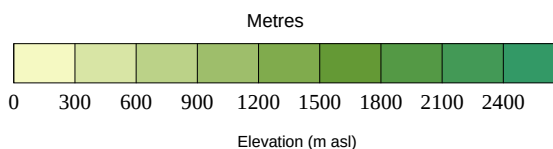
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 1-hour Average 98th Daily Maximum NO₂ Concentration: 126.5 µg/m³
- 1-hour NO₂ BC AQO: 113 µg/m³ —
- 1-hour NO₂ 2025 CAAQS: 79 µg/m³ —
- Contour Levels: 56.5, 79, 84.8, 113 µg/m³
- Baseline: 41.6 µg/m³



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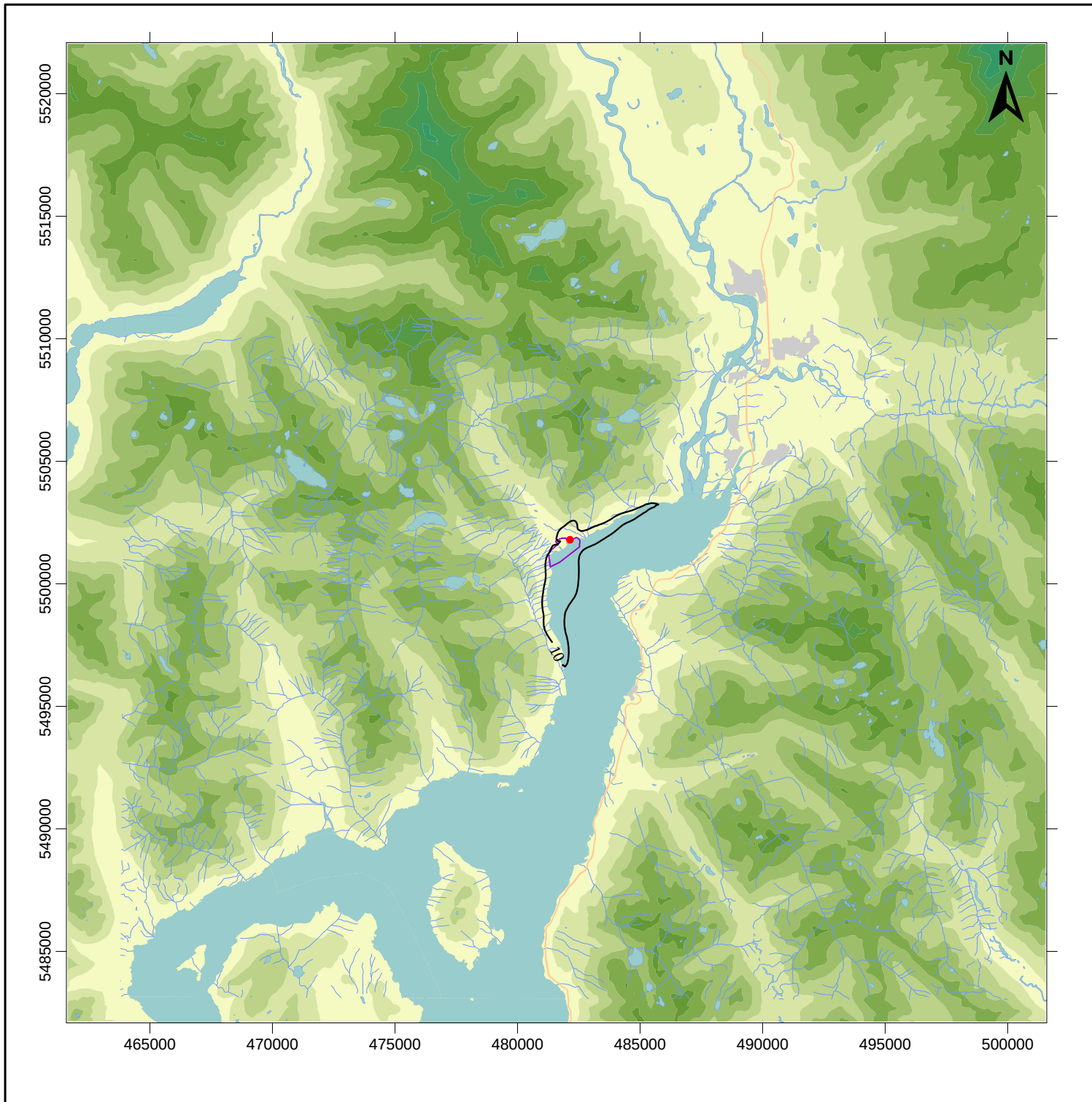
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.25

Title

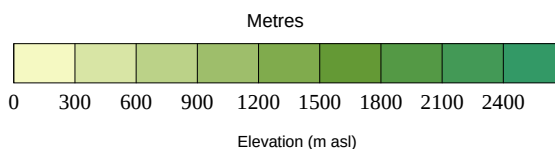
Application Case - Stabilizing Operations Predicted Ground-Level
98th Percentile of 1-hour Daily Maximum
NO₂ Concentrations (µg/m³)



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average NO₂ Concentration: 14.1 µg/m³
Annual NO₂ BC AQO: 32 µg/m³
- Contour Levels: 10 µg/m³
Baseline: 9.4 µg/m³



0 4000 8000 m



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Woodfibre LNG Limited Operations Air Quality Assessment

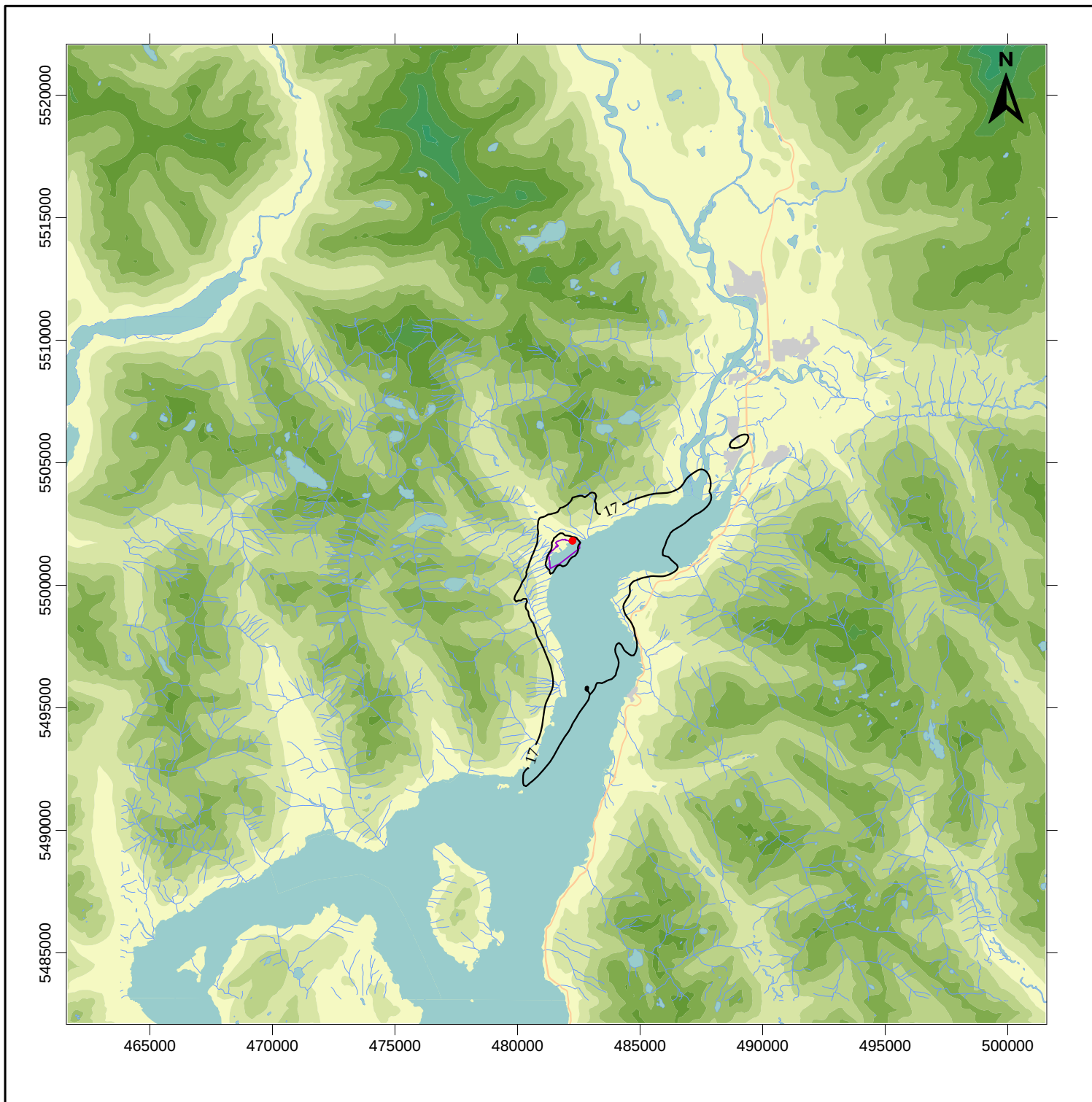
Figure No.

D.26

Title

Application Case - Stabilizing Operations Predicted Ground-Level
Annual Average NO₂ Concentrations (µg/m³)

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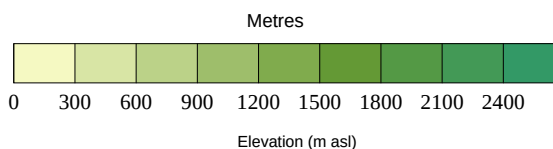


Notes
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 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

● Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration:
 64.4 µg/m³
 1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17, 42.5 µg/m³
 Baseline: 11.1 µg/m³



0 4000 8000 m



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Woodfibre LNG Limited Operations Air Quality Assessment

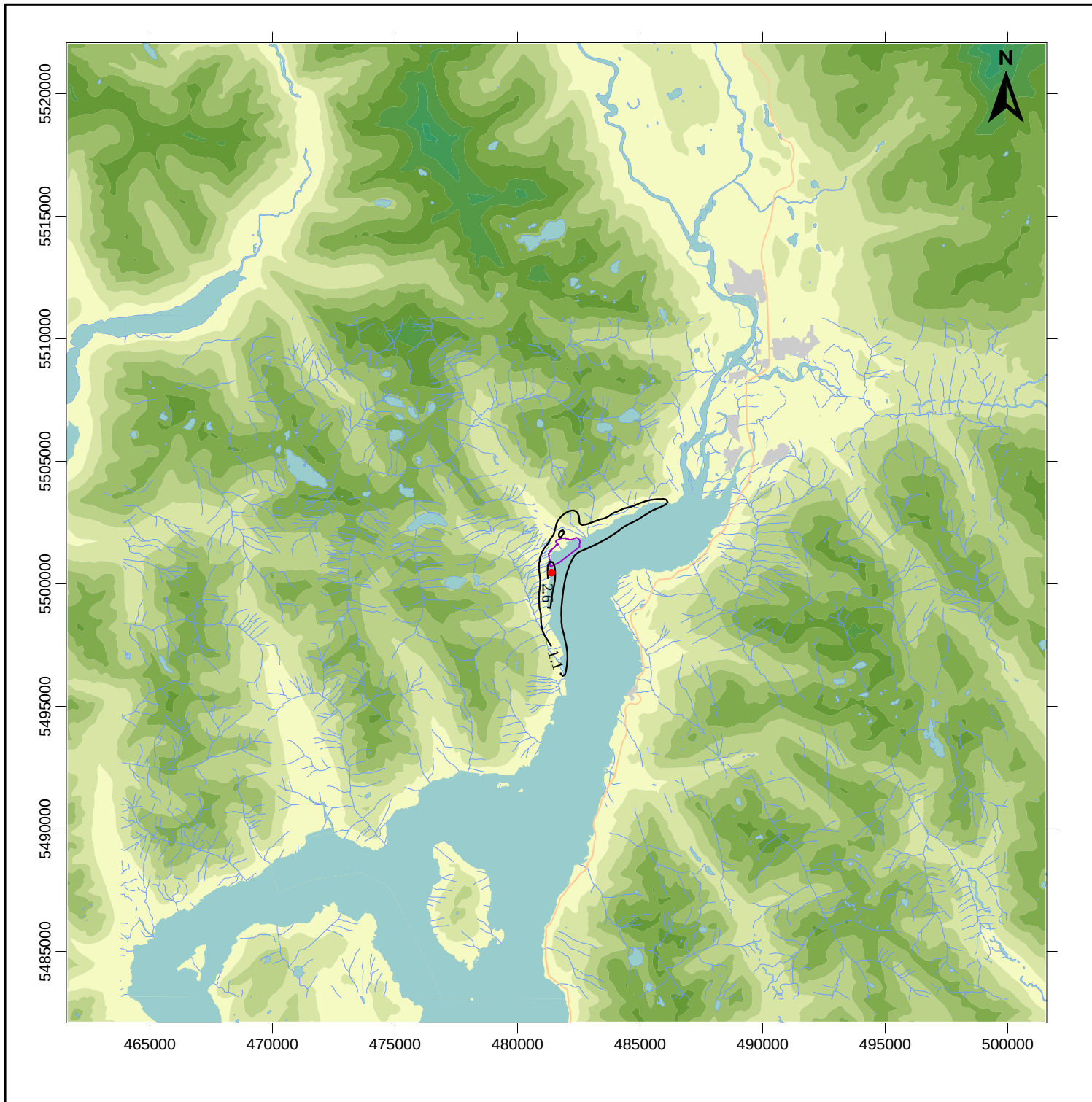
Figure No.

D.27

Title

Application Case - Stabilizing Operations Predicted Ground-Level
99th Percentile of 1-hour Daily Maximum
SO₂ Concentrations (µg/m³)

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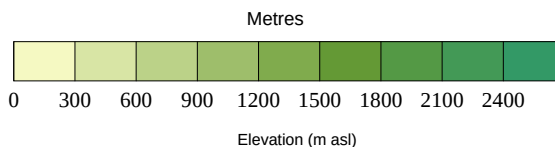


Notes
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average SO₂ Concentration: 5.1 µg/m³
- Annual SO₂ BC AQO: 10.5 µg/m³

Contour Levels: 1.1, 2.6 µg/m³
 Baseline: 0.7 µg/m³



0 4000 8000 m



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Woodfibre LNG Limited Operations Air Quality Assessment

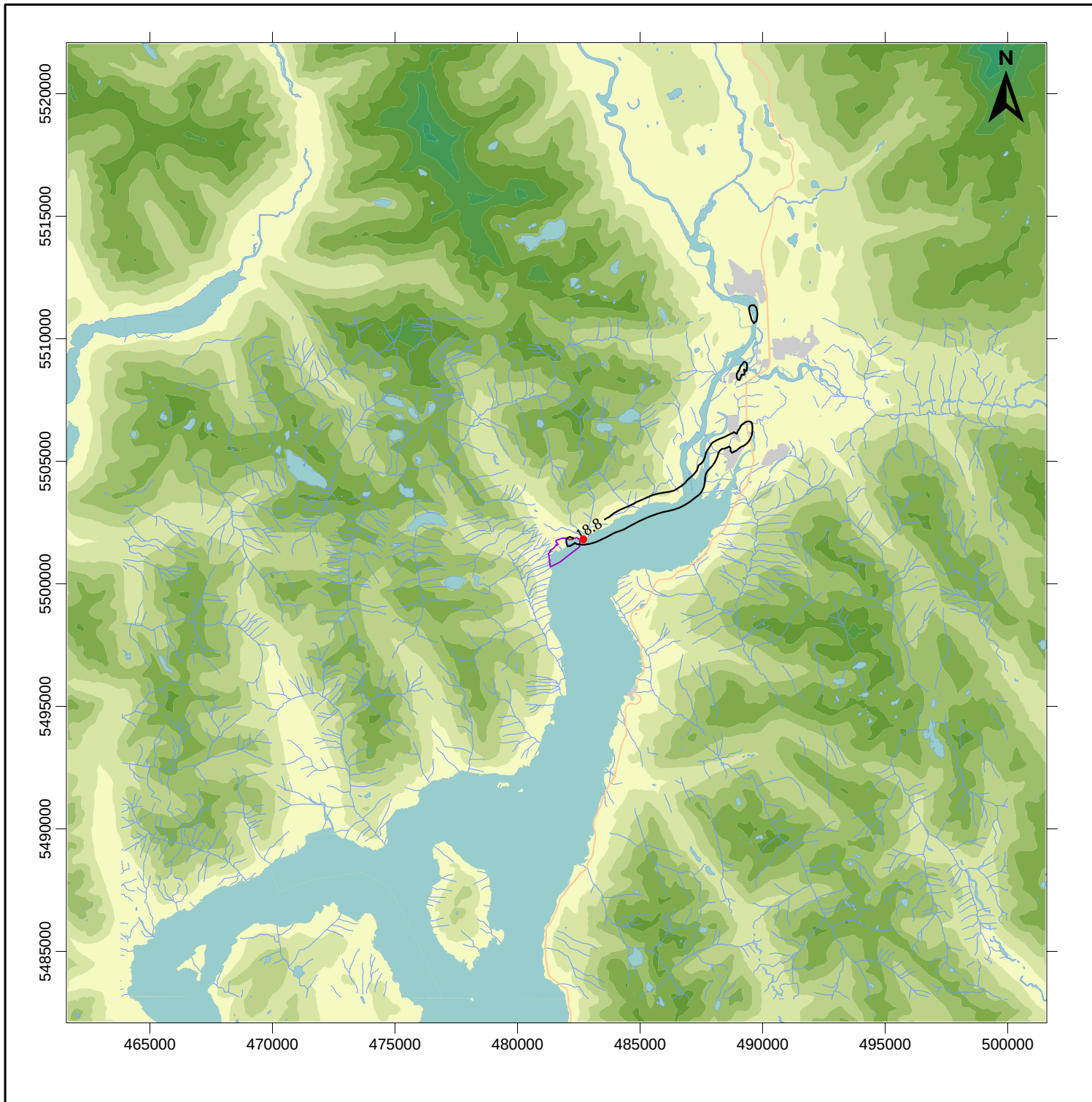
Figure No.

D.28

Title

Application Case - Stabilizing Operations Predicted Ground-Level
Annual Average SO₂ Concentrations (µg/m³)

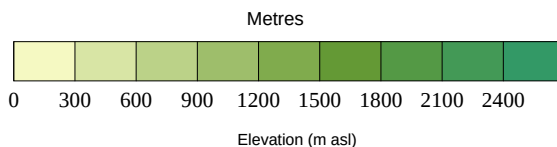
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 24-Hour Average PM_{2.5} Concentration: 20.2 µg/m³
- 24-Hour PM_{2.5} BC AQO: 25 µg/m³
- Contour Levels: 18.8 µg/m³
- Baseline: 17.7 µg/m³



0 4000 8000 m



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Woodfibre LNG Limited Operations Air Quality Assessment

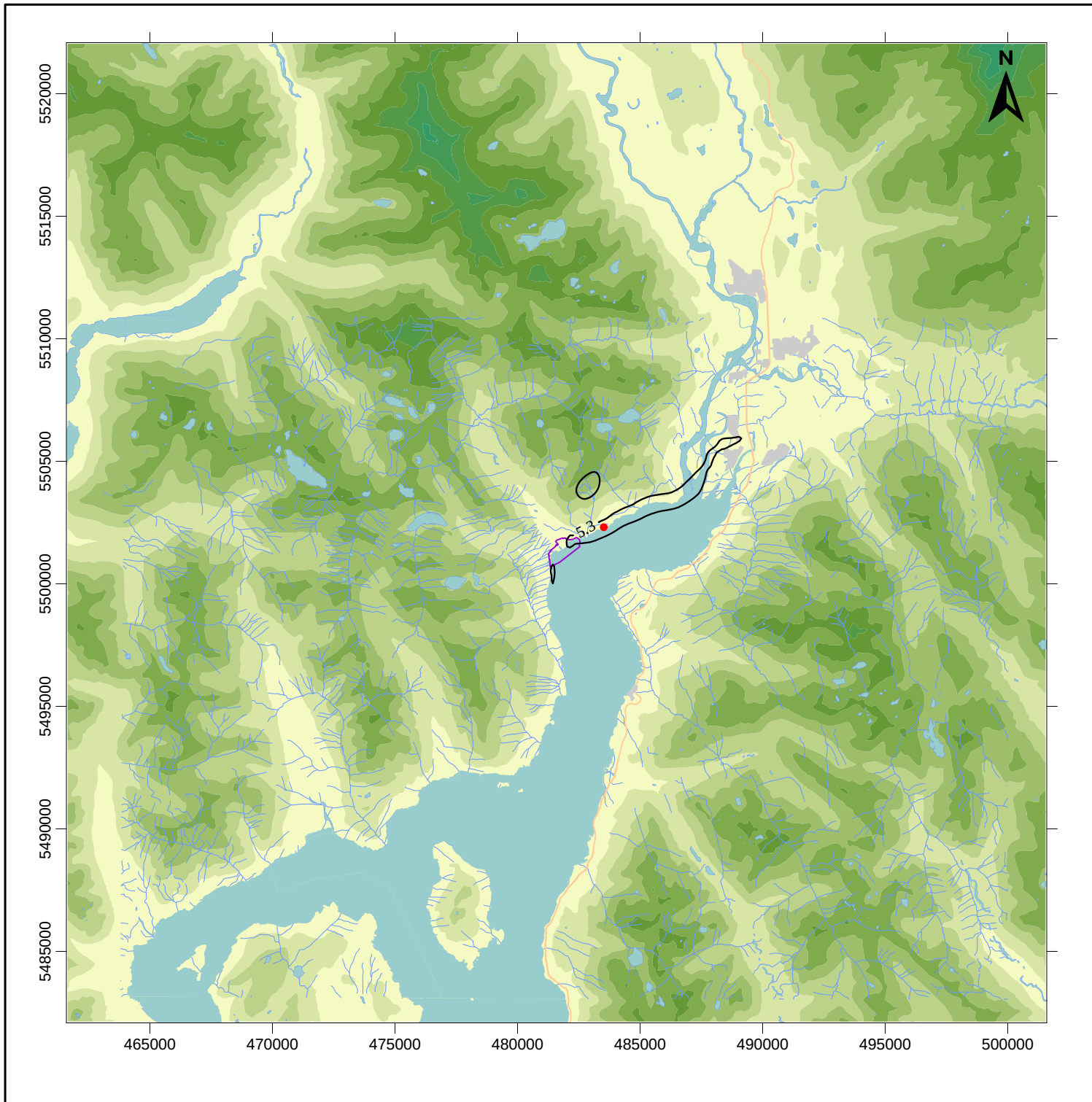
Figure No.

D.29

Title

Application Case - Stabilizing Operations Predicted Ground-Level
98th Percentile 24-Hour Average PM_{2.5} Concentrations (µg/m³)

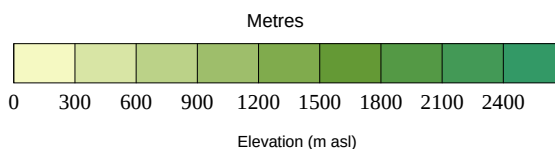
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum Annual Average $PM_{2.5}$ Concentration: $5.4 \mu g/m^3$
 Annual $PM_{2.5}$ BC AQO: $8 \mu g/m^3$
- Contour Levels: $5.3 \mu g/m^3$
 Baseline: $5.2 \mu g/m^3$



Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

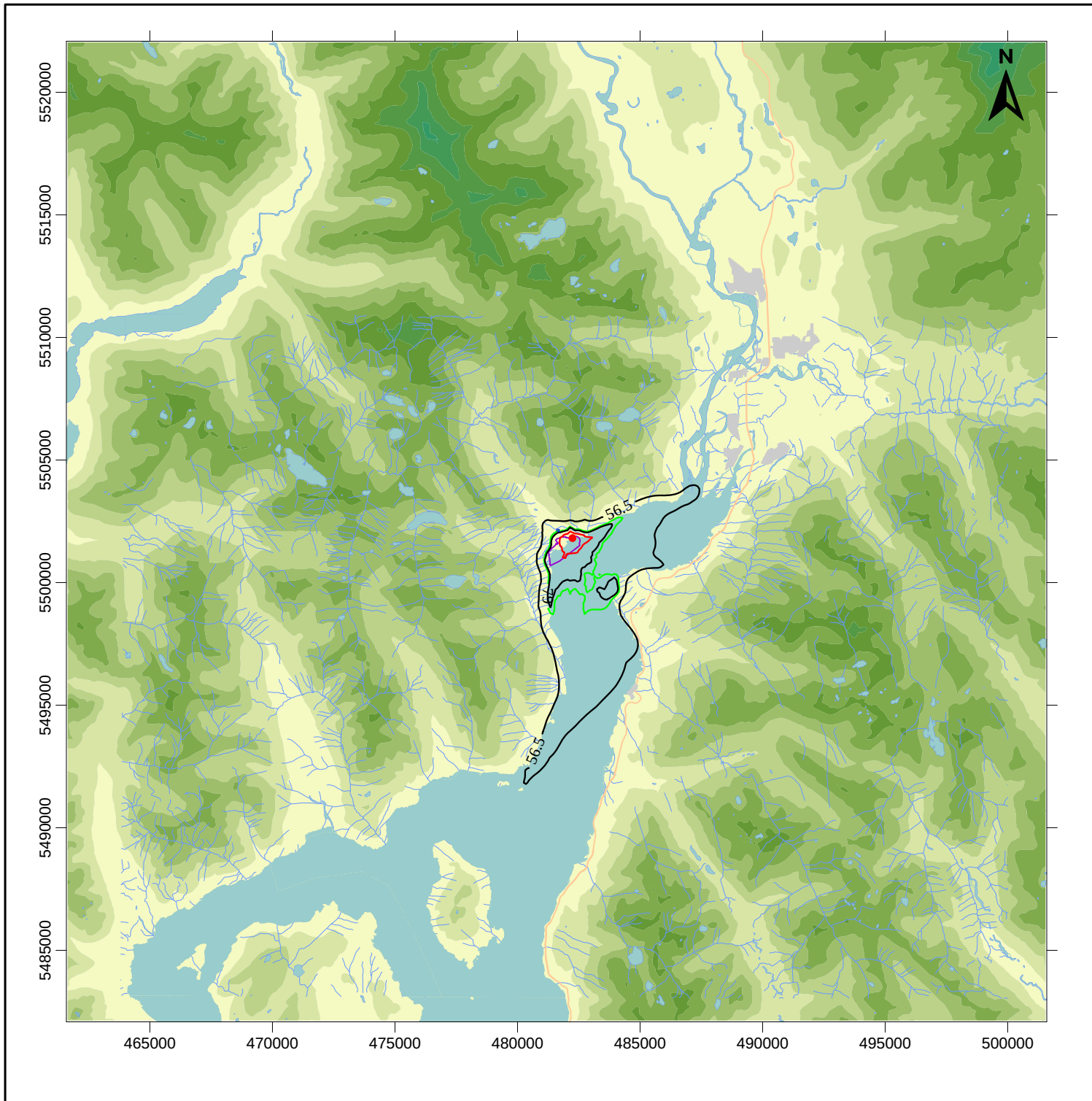
Figure No.

D.30

Title

Application Case - Stabilizing Operations Predicted Ground-Level
Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)

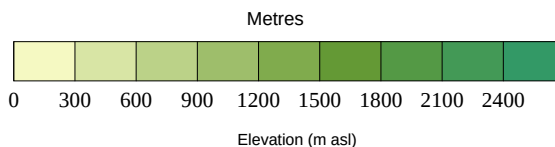
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Notes
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 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fenceline
- Squamish Community
- Water Body

- Maximum 1-hour Average 98th Daily Maximum NO₂ Concentration: 126.5 µg/m³
- 1-hour NO₂ BC AQO: 113 µg/m³ —
- 1-hour NO₂ 2025 CAAQS: 79 µg/m³ —
- Contour Levels: 56.5, 79, 84.8, 113 µg/m³
- Baseline: 41.6 µg/m³



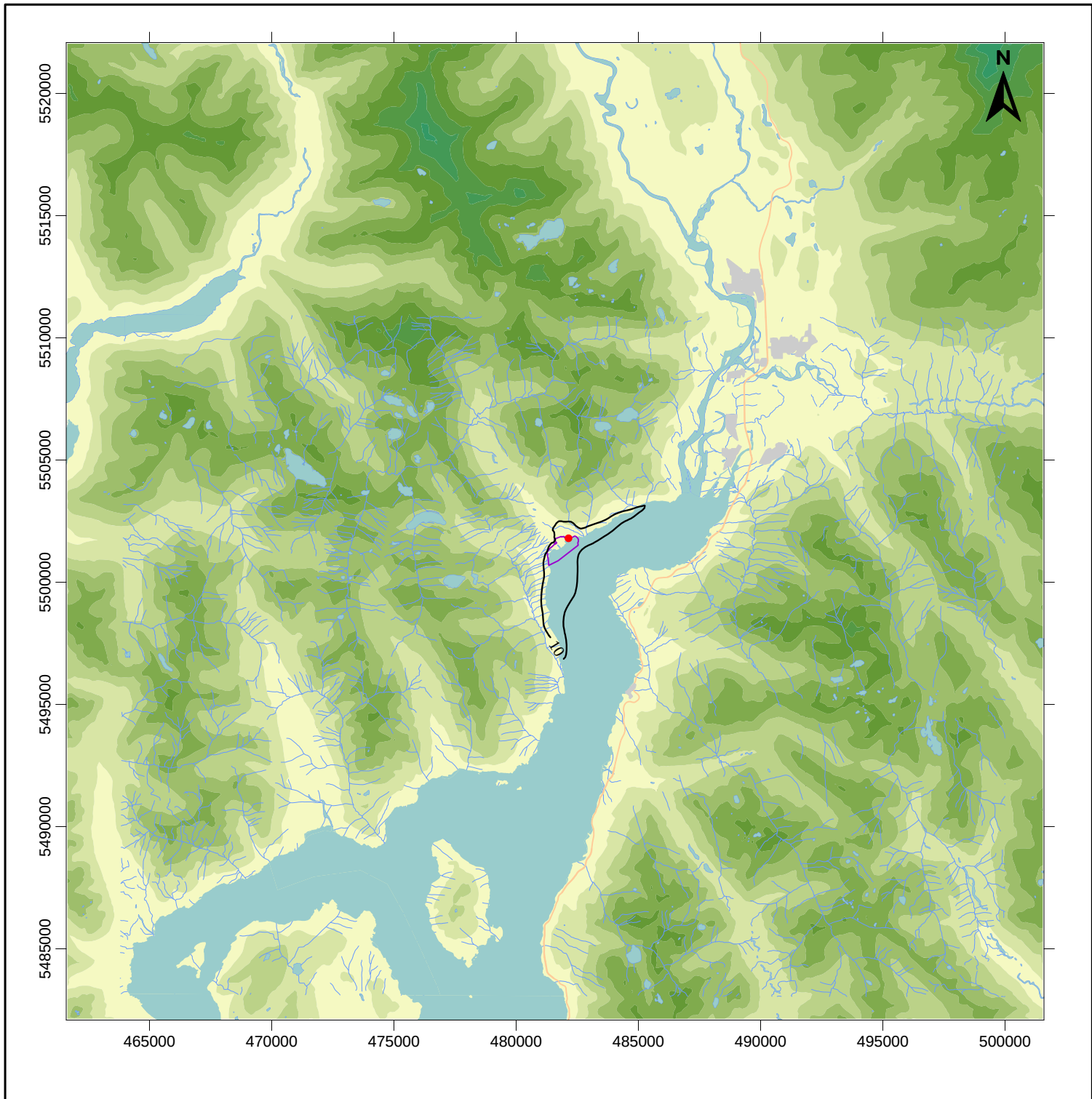
Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.31

Title Cumulative Case - Normal Operations Predicted Ground-Level 98th Percentile of 1-hour Daily Maximum NO₂ Concentrations (µg/m³)

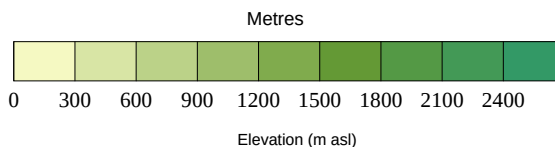


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fenceline
- Squamish Community
- Water Body

- Maximum Annual Average NO₂ Concentration: 14.1 µg/m³
- Annual NO₂ BC AQO: 32 µg/m³

- Contour Levels: 10 µg/m³
- Baseline: 9.4 µg/m³



Client/Project/Report

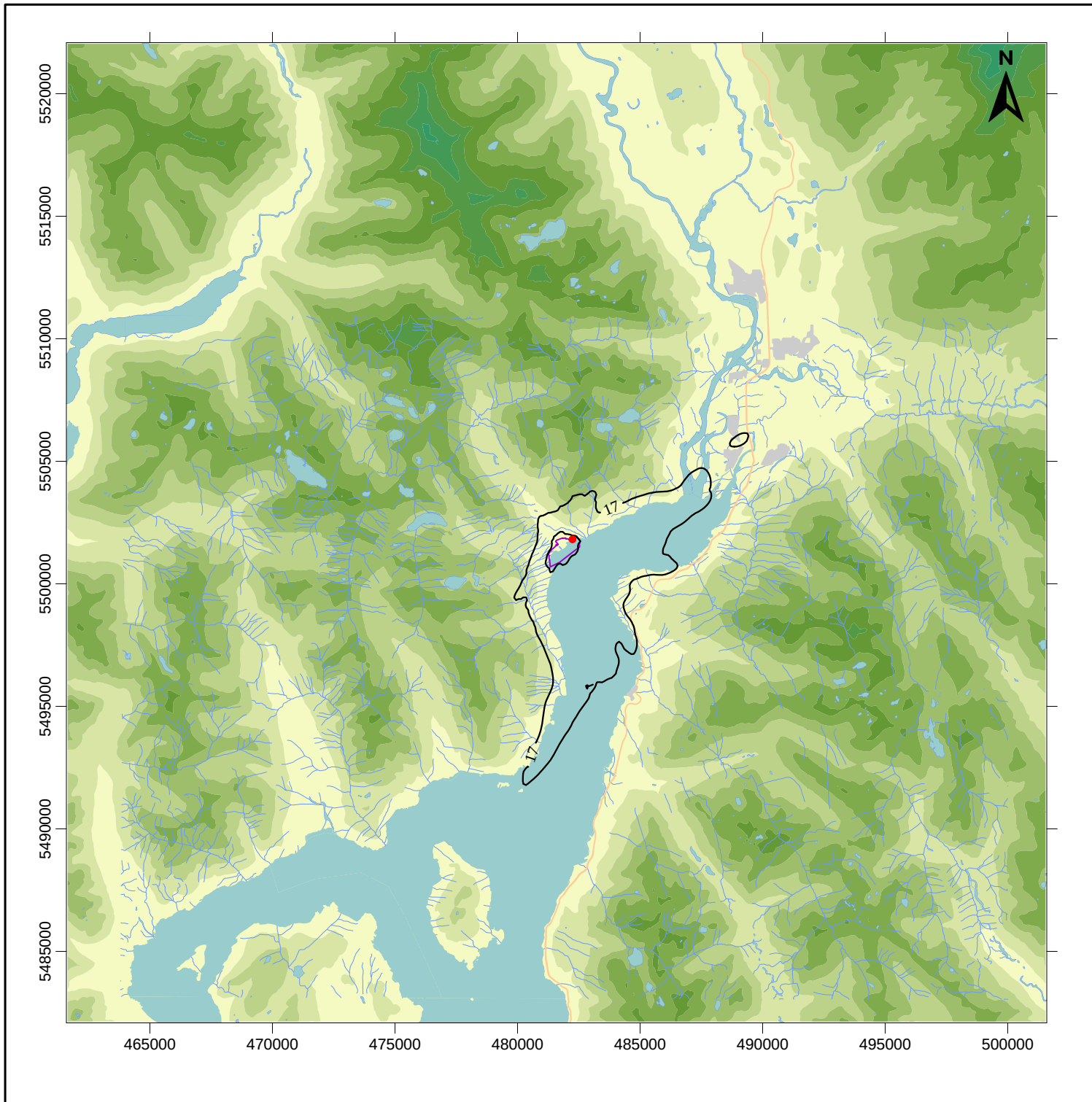
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.32

Title
Cumulative Case - Normal Operations Predicted Ground-Level
Annual Average NO₂ Concentrations (µg/m³)

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

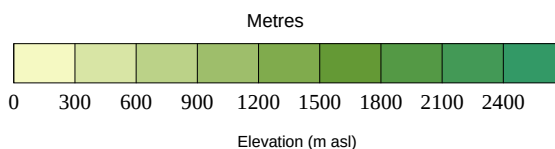


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fenceline
- Squamish Community
- Water Body

Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration: 64.4 µg/m³
 1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17, 42.5 µg/m³
 Baseline: 11.1 µg/m³



0 4000 8000 m



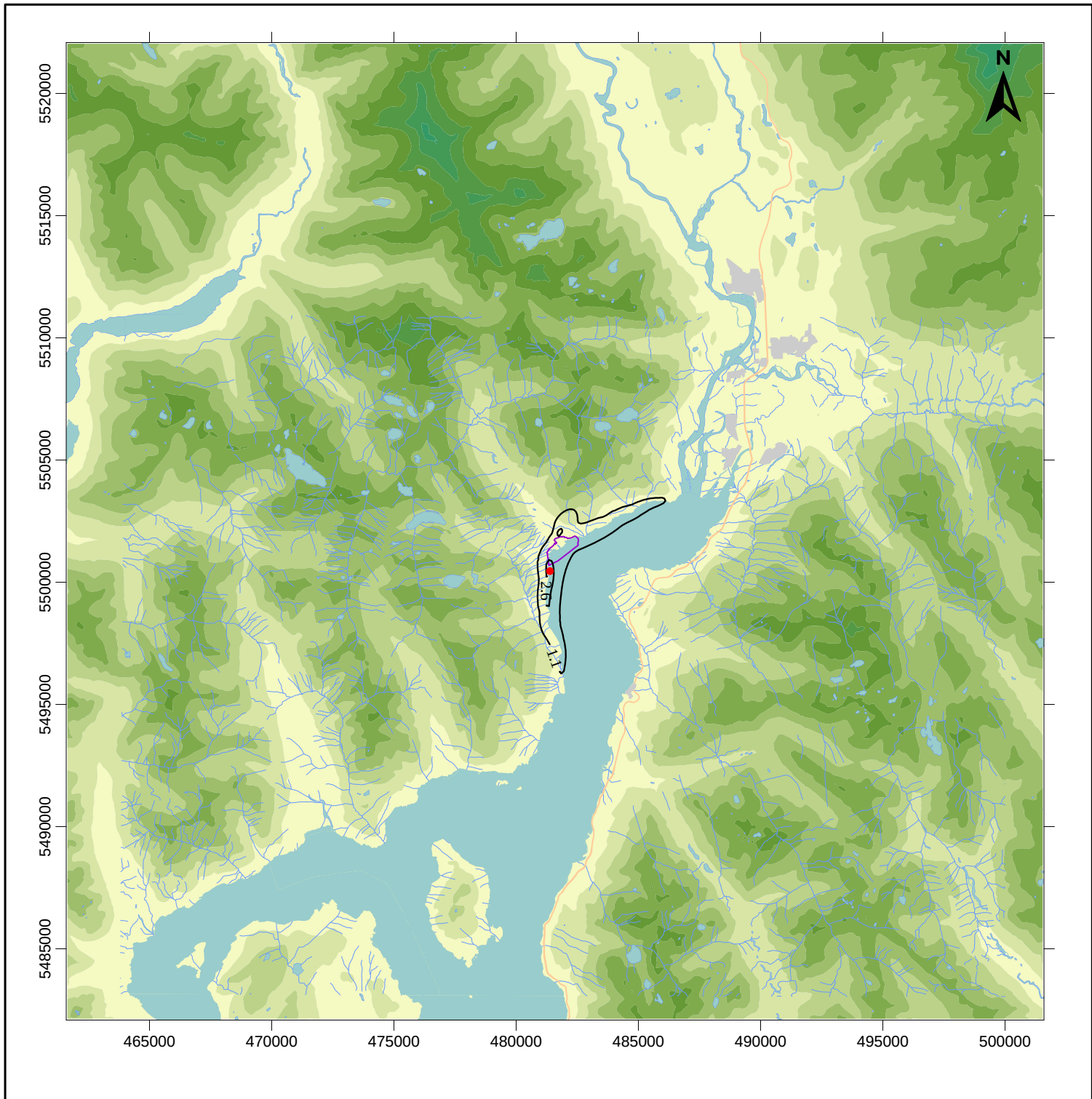
Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.33

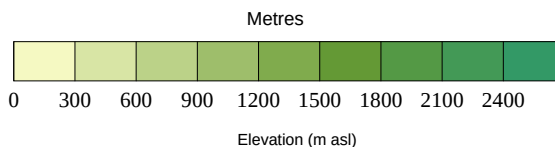
Title
Cumulative Case - Normal Operations Predicted Ground-Level
99th Percentile of 1-hour Daily Maximum
SO₂ Concentrations (µg/m³)



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fence Line
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fence Line
- Squamish Community
- Water Body

- Maximum Annual Average SO₂ Concentration: 5.1 µg/m³
- Annual SO₂ BC AQO: 10.5 µg/m³
- Contour Levels: 1.1, 2.6 µg/m³
- Baseline: 0.7 µg/m³



0 4000 8000 m



Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

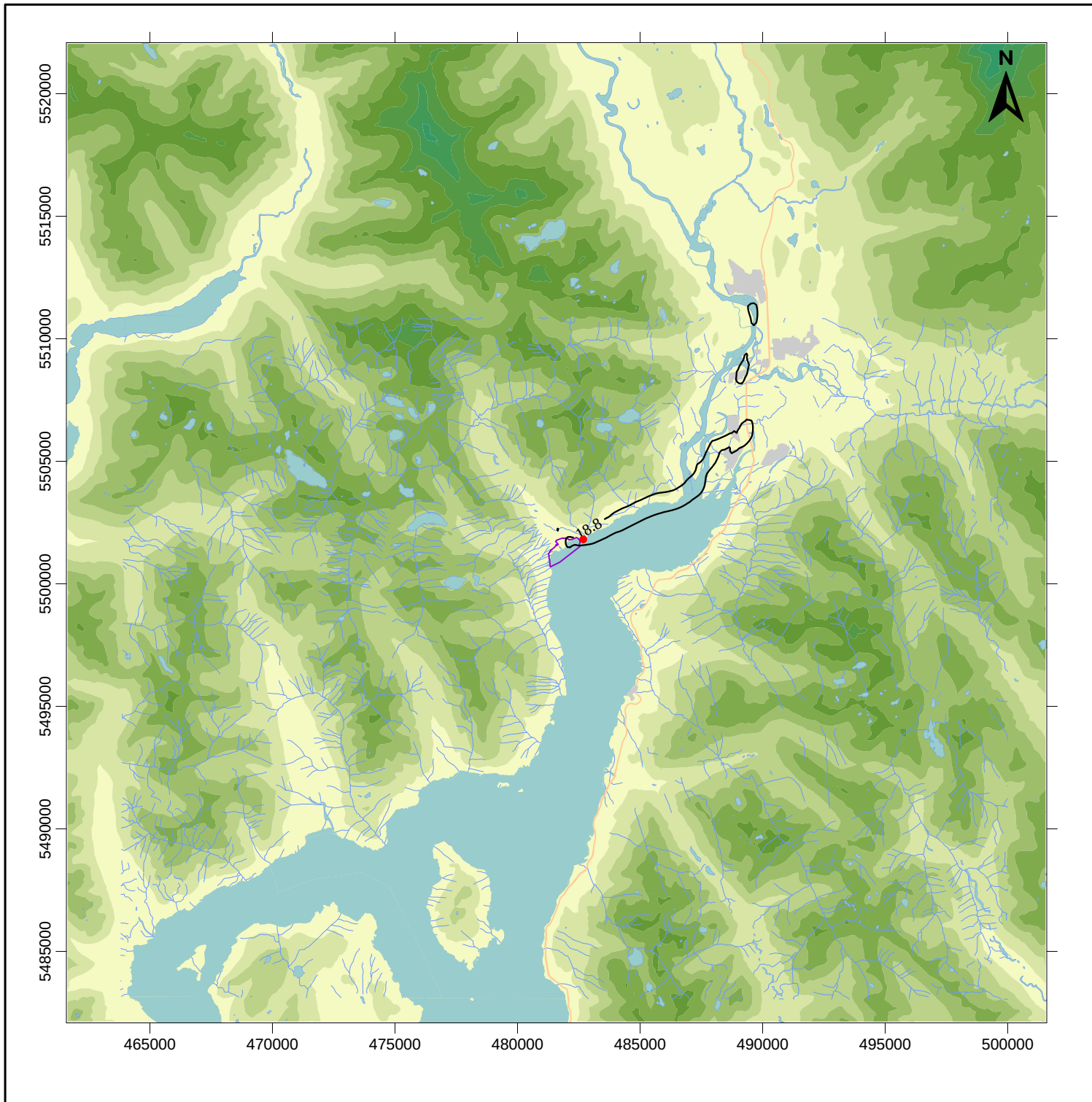
Figure No.

D.34

Title

Cumulative Case - Normal Operations Predicted Ground-Level
Annual Average SO₂ Concentrations (µg/m³)

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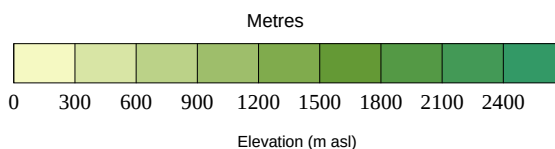


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fence Line
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fence Line
- Squamish Community
- Water Body

- Maximum 24-Hour Average PM_{2.5} Concentration: 20.3 µg/m³
- 24-Hour PM_{2.5} BC AQO: 25 µg/m³

Contour Levels: 18.8 µg/m³
 Baseline: 17.7 µg/m³



0 4000 8000 m



Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

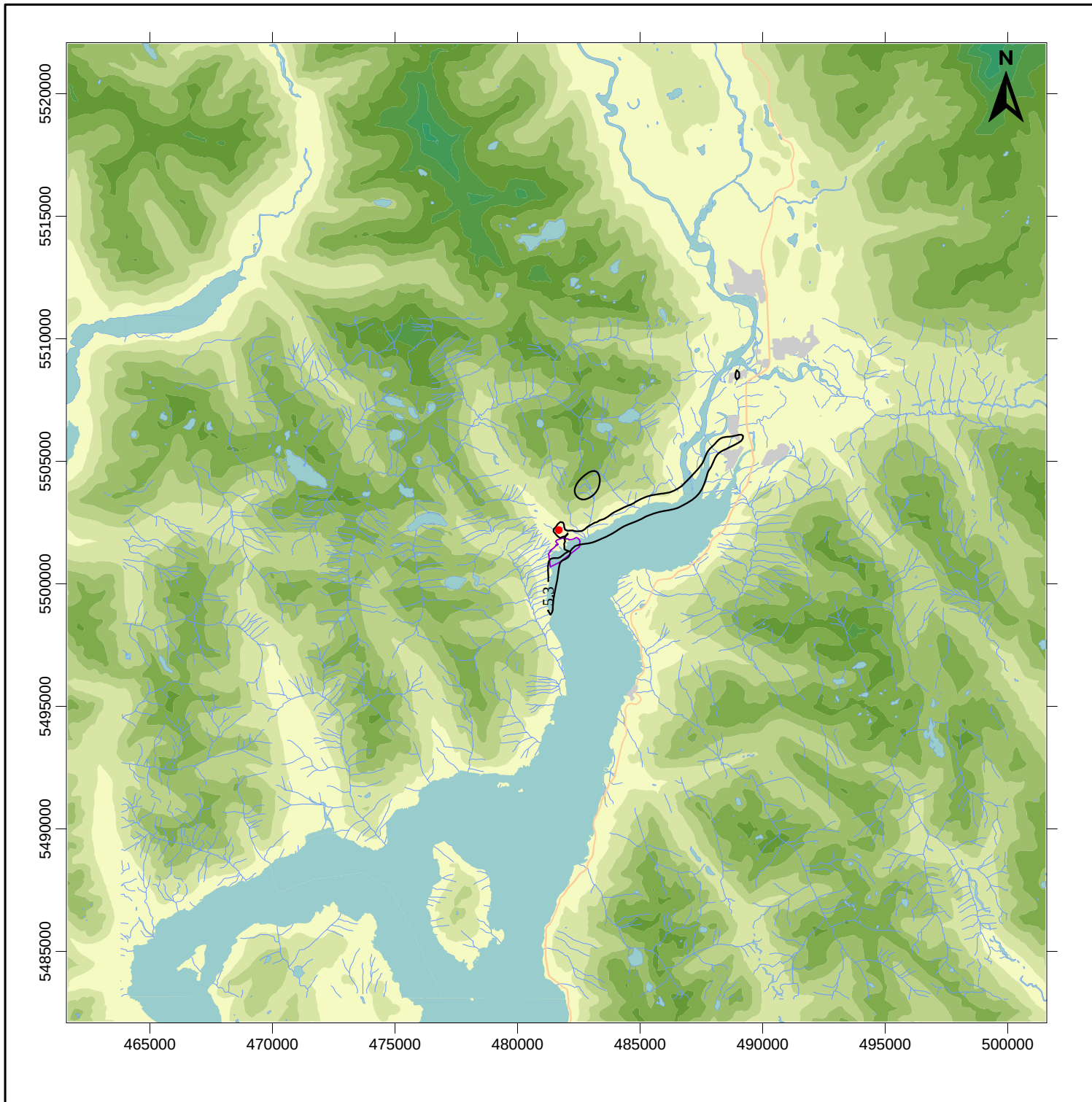
Figure No.

D.35

Title

Cumulative Case - Normal Operations Predicted Ground-Level
98th Percentile 24-Hour Average PM_{2.5} Concentrations (µg/m³)

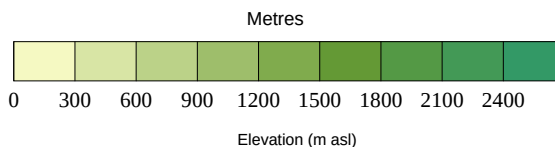
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fenceline
- Squamish Community
- Water Body

- Maximum Annual Average PM_{2.5} Concentration: 5.6 µg/m³
- Annual PM_{2.5} BC AQO: 8 µg/m³
- Contour Levels: 5.3 µg/m³
- Baseline: 5.2 µg/m³



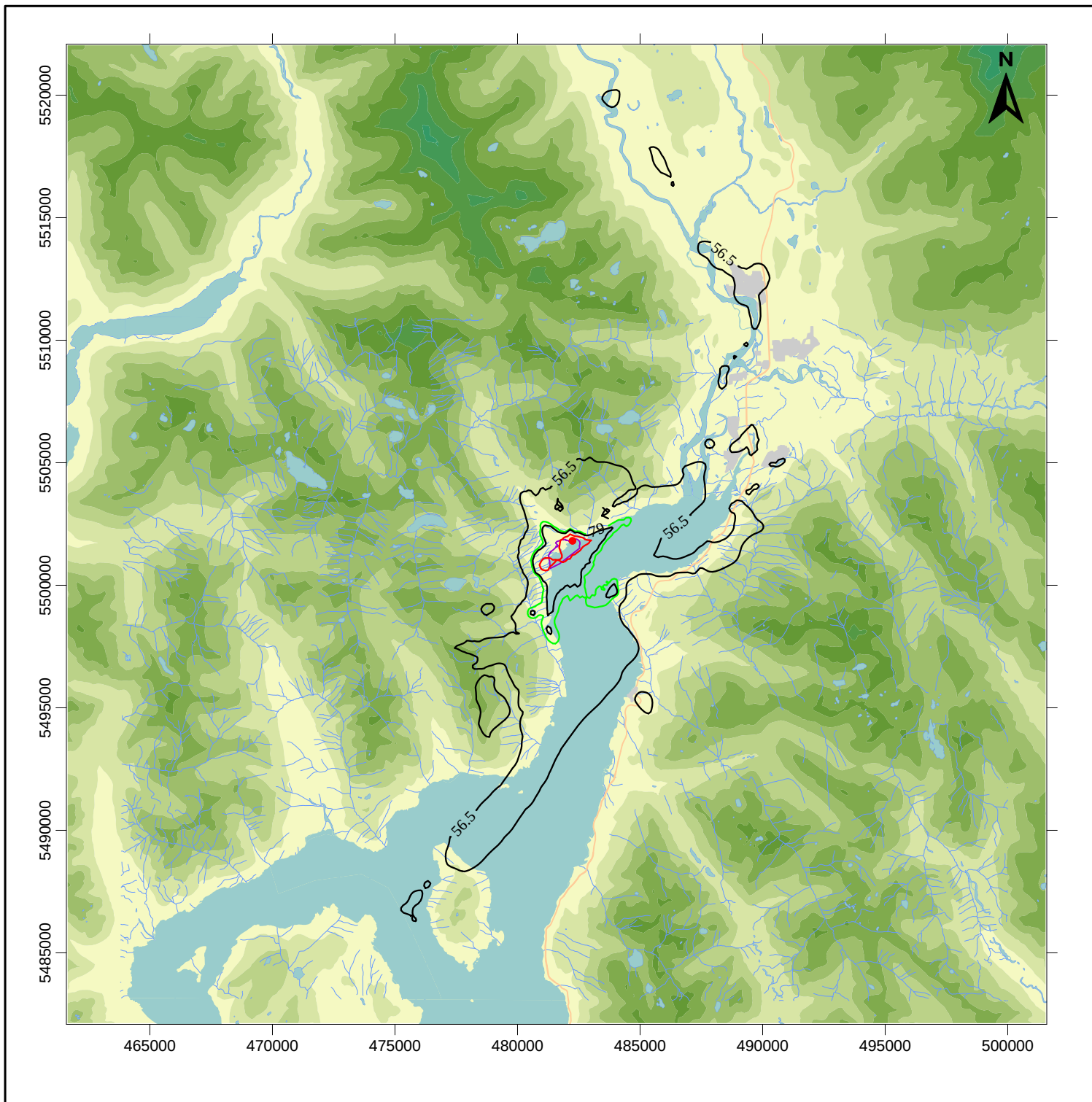
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Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.36

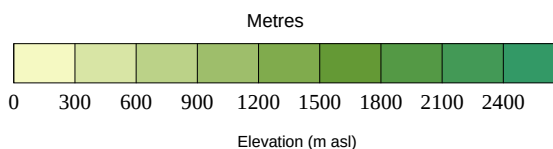
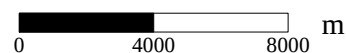
Title
 Cumulative Case - Normal Operations Predicted Ground-Level Annual Average PM_{2.5} Concentrations (µg/m³)



Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 1-hour Average 98th Daily Maximum NO₂ Concentration: 126.5 µg/m³
- 1-hour NO₂ BC AQO: 113 µg/m³ —
- 1-hour NO₂ 2025 CAAQS: 79 µg/m³ —
- Contour Levels: 56.5, 79, 84.8, 113 µg/m³
- Baseline: 41.6 µg/m³



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Woodfibre LNG Limited Operations Air Quality Assessment

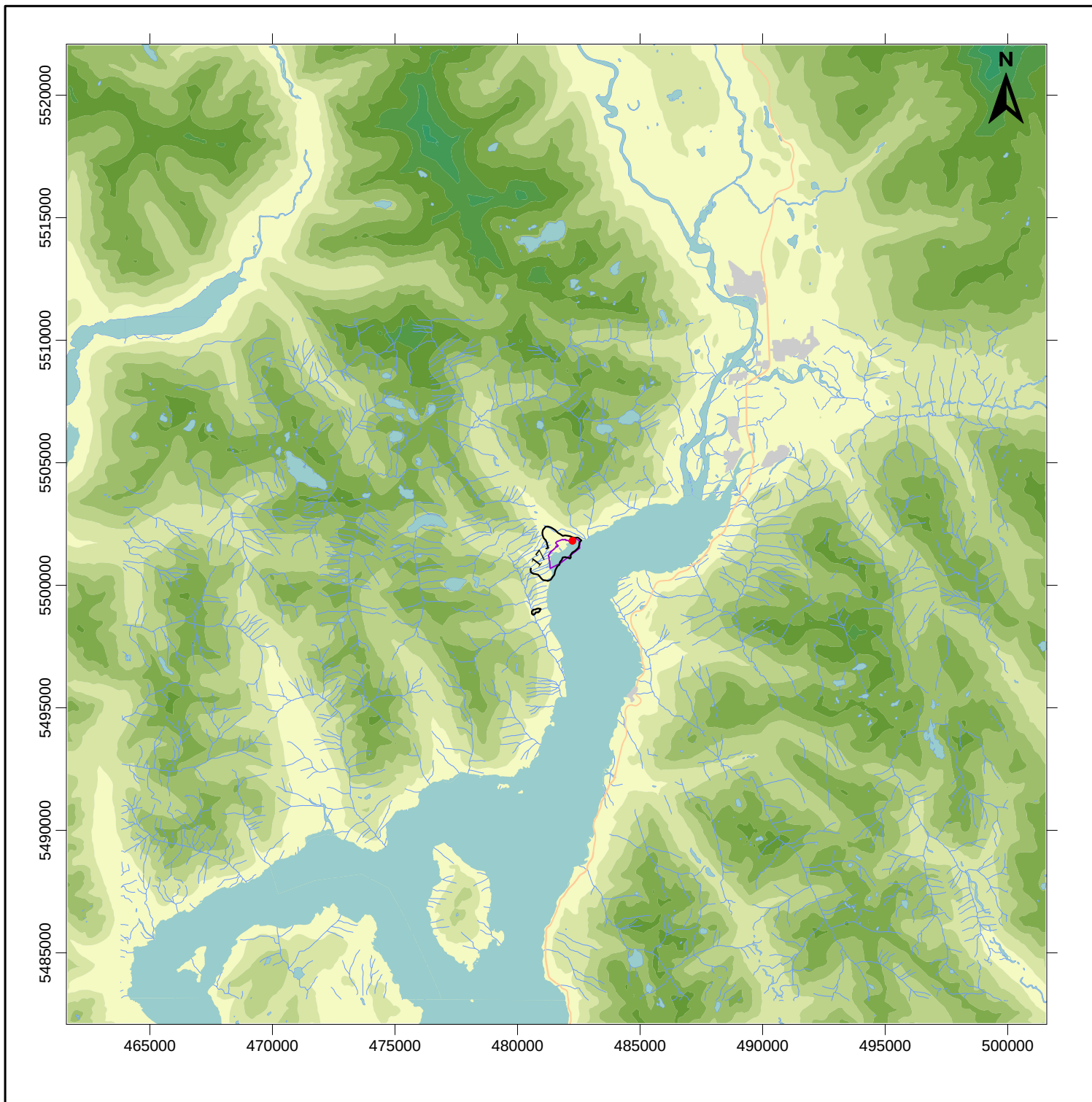
Figure No.

D.37

Title

Process Upsets Application Case Predicted Ground-Level
98th Percentile of 1-hour Daily Maximum
NO₂ Concentrations (µg/m³)

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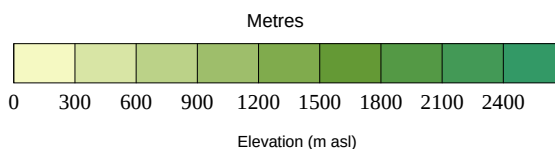


Notes
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 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration: 36.3 µg/m³
 1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17 µg/m³
 Baseline: 11.1 µg/m³



Client/Project/Report

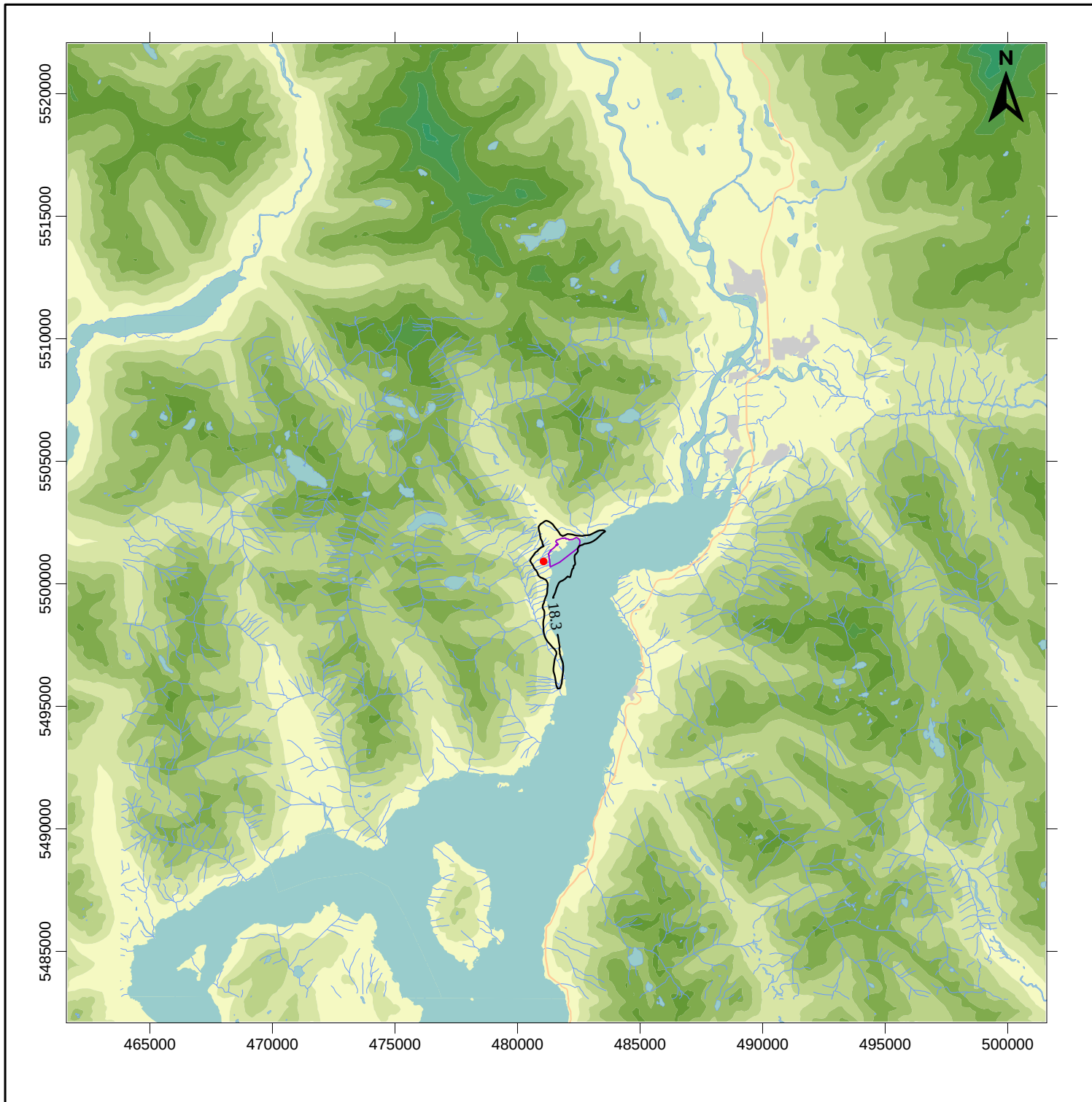
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.38

Title
 Process Upsets Application Case Predicted Ground-Level
 99th Percentile of 1-hour Daily Maximum
 SO₂ Concentrations (µg/m³)

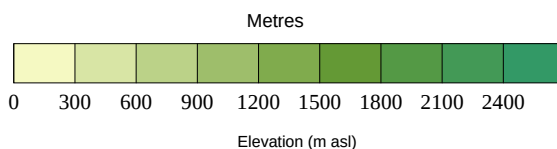
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Notes
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 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- Maximum 24-Hour Average $PM_{2.5}$ Concentration: 19.2 $\mu g/m^3$
- 24-Hour $PM_{2.5}$ BC AQO: 25 $\mu g/m^3$
- Contour Levels: 18.3 $\mu g/m^3$
- Baseline: 17.7 $\mu g/m^3$



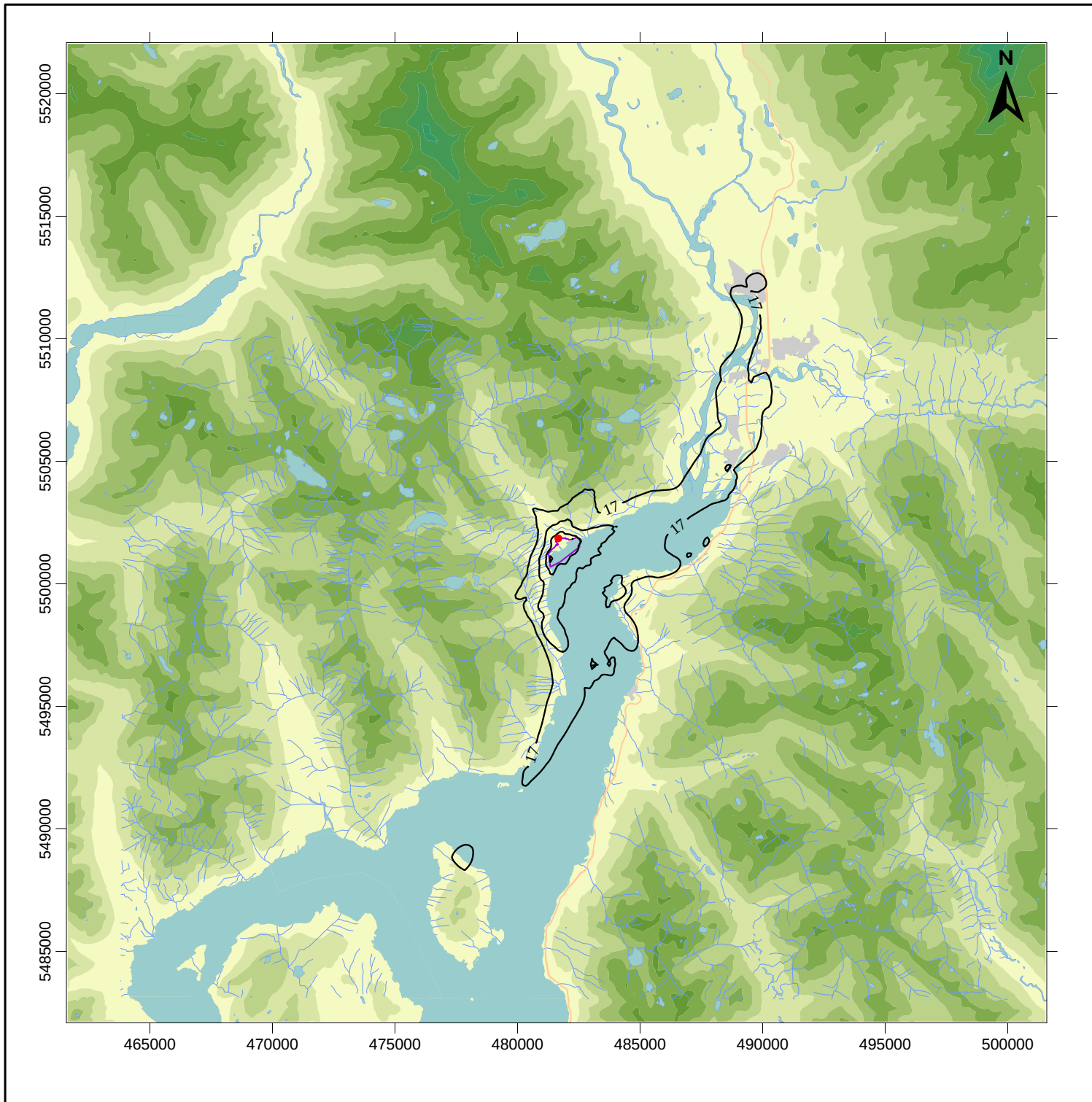
Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.39

Title
Process Upsets Application Case Predicted Ground-Level
98th Percentile 24-Hour Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)

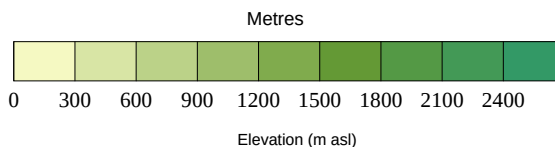


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fenceline
- Squamish Community
- Water Body

● Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration: 139.1 µg/m³
 1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17, 42.5, 85, 127.5 µg/m³
 Baseline: not added



0 4000 8000 m



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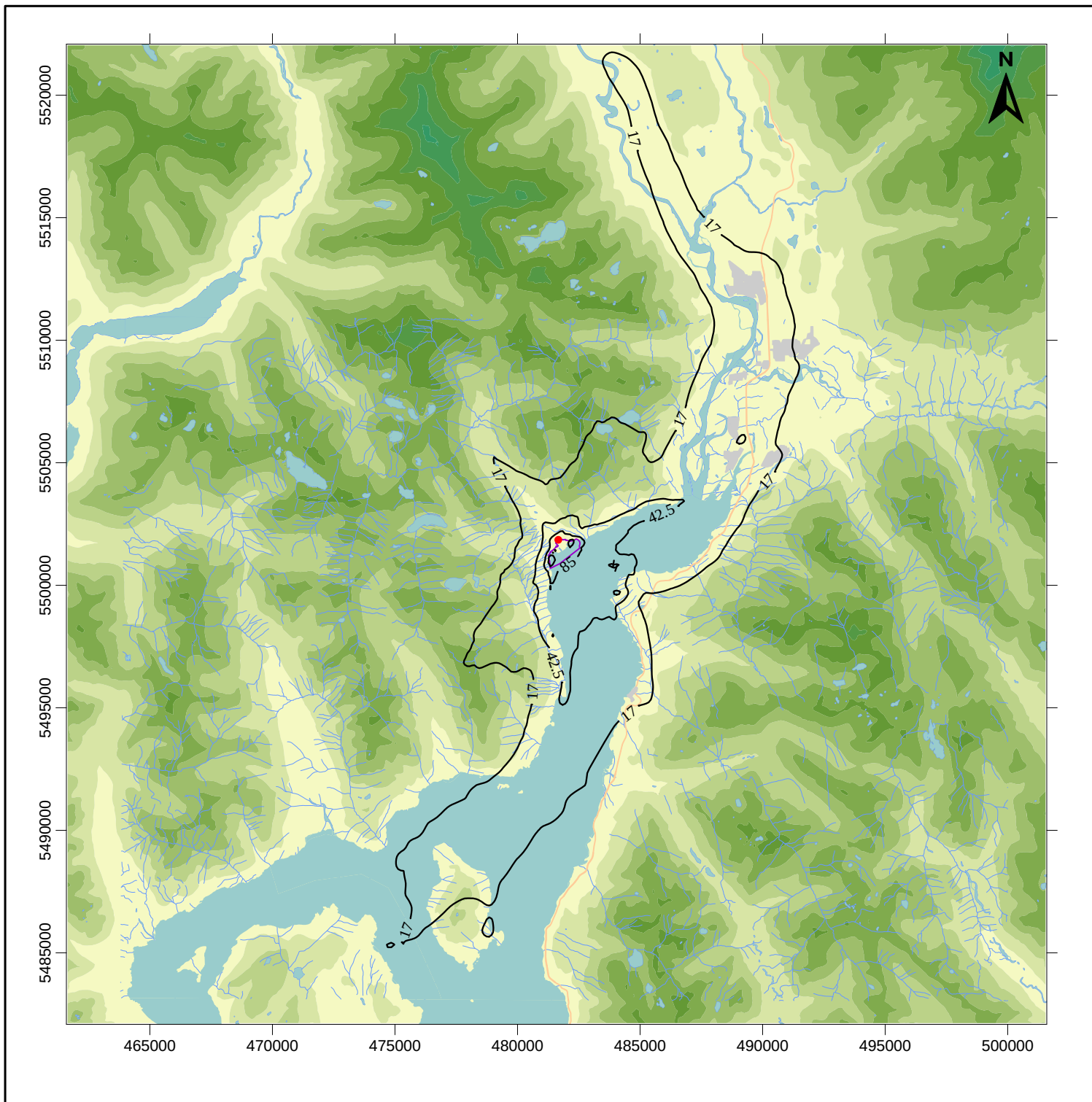
Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.40

Title
 High Inlet Sulphur Project Alone Case Predicted Ground-Level
 99th Percentile of 1-hour Daily Maximum
 SO₂ Concentrations (µg/m³)

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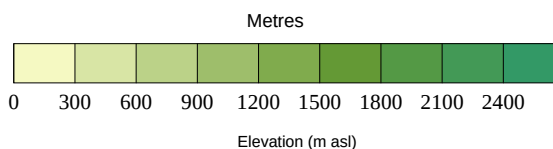


Notes
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 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fence Line
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fence Line
- Squamish Community
- Water Body

● Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration: 151.1 µg/m³
 1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17, 42.5, 85, 127.5 µg/m³
 Baseline: 11.1 µg/m³



0 4000 8000 m



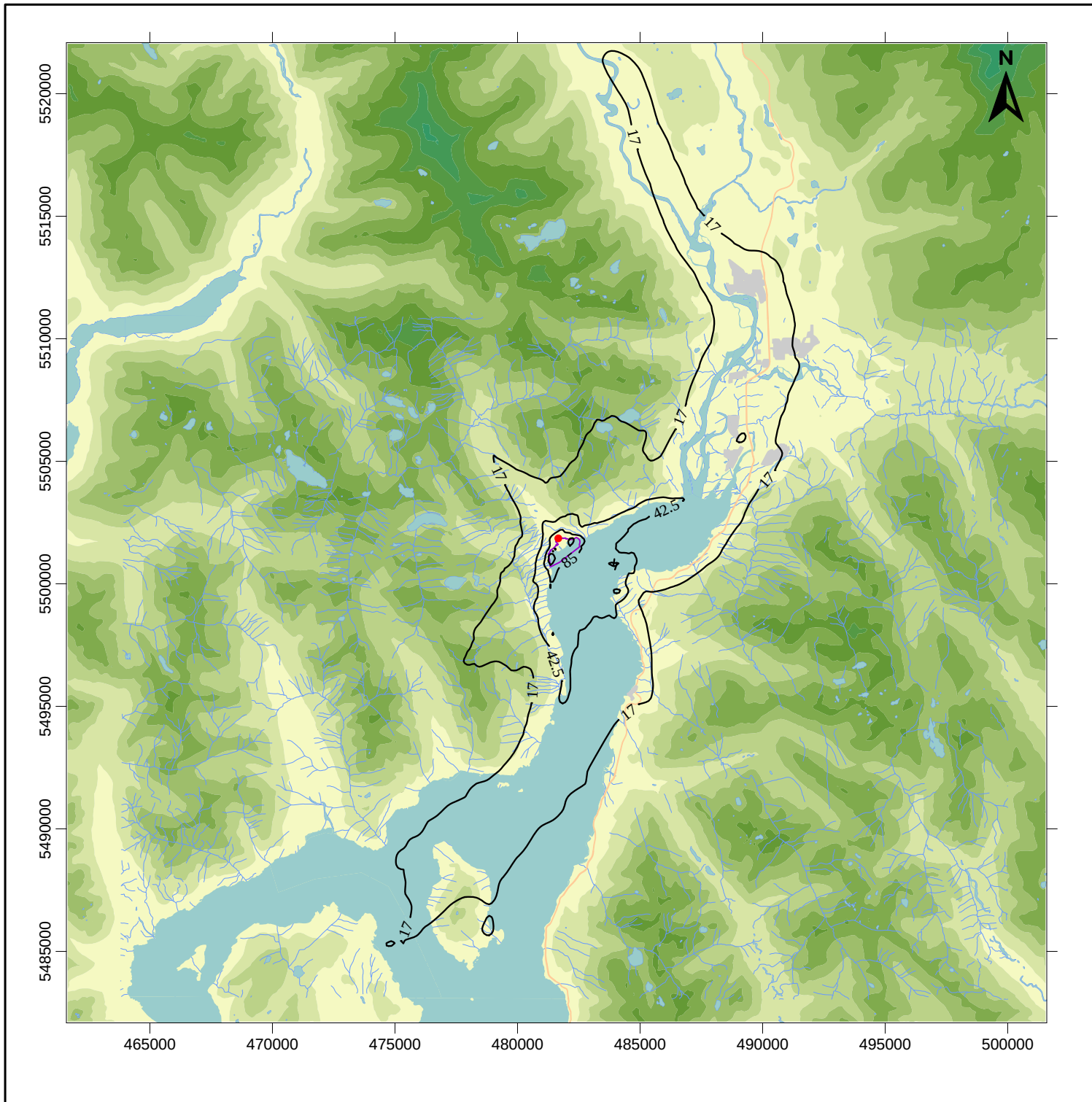
Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.41

Title
 High Inlet Sulphur Application Case Predicted Ground-Level
 99th Percentile of 1-hour Daily Maximum
 SO₂ Concentrations (µg/m³)

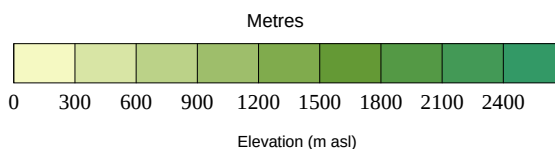
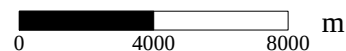


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Fortis BC Squamish V2 Compressor Station Fenceline
- Squamish Community
- Water Body

● Maximum 1-hour Average 99th Daily Maximum SO₂ Concentration: 151.1 µg/m³
 1-hour SO₂ BC AQO: 170 µg/m³

Contour Levels: 17, 42.5, 85, 127.5 µg/m³
 Baseline: 11.1 µg/m³



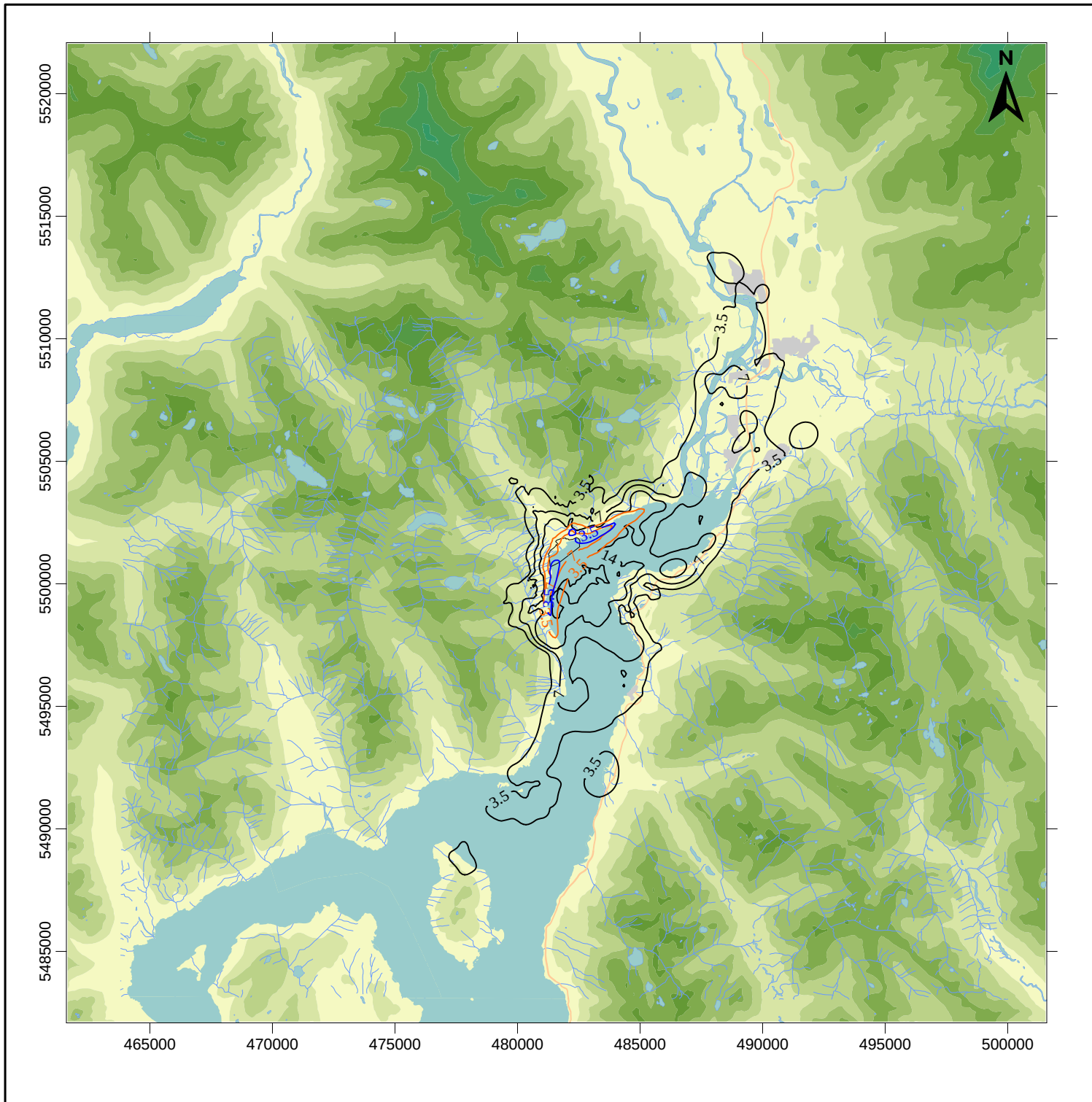
Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

Figure No.

D.42

Title
 High Inlet Sulphur Cumulative Case Predicted Ground-Level
 99th Percentile of 1-hour Daily Maximum
 SO₂ Concentrations (µg/m³)

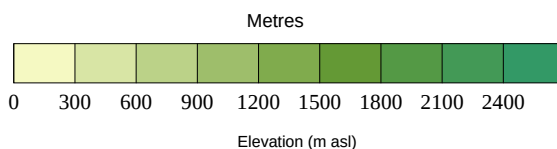


Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Facility Fenceline
- Water Course
- Major Road
- Squamish Community
- Water Body

- 100th percentile 1-hour H₂S concentrations contours
- 99th percentile 1-hour H₂S concentrations contours
- 95th percentile 1-hour H₂S concentrations contours

1-hour H₂S AQO: 14 µg/m³



0 4000 8000 m



Client/Project/Report

Woodfibre LNG Limited Operations Air Quality Assessment

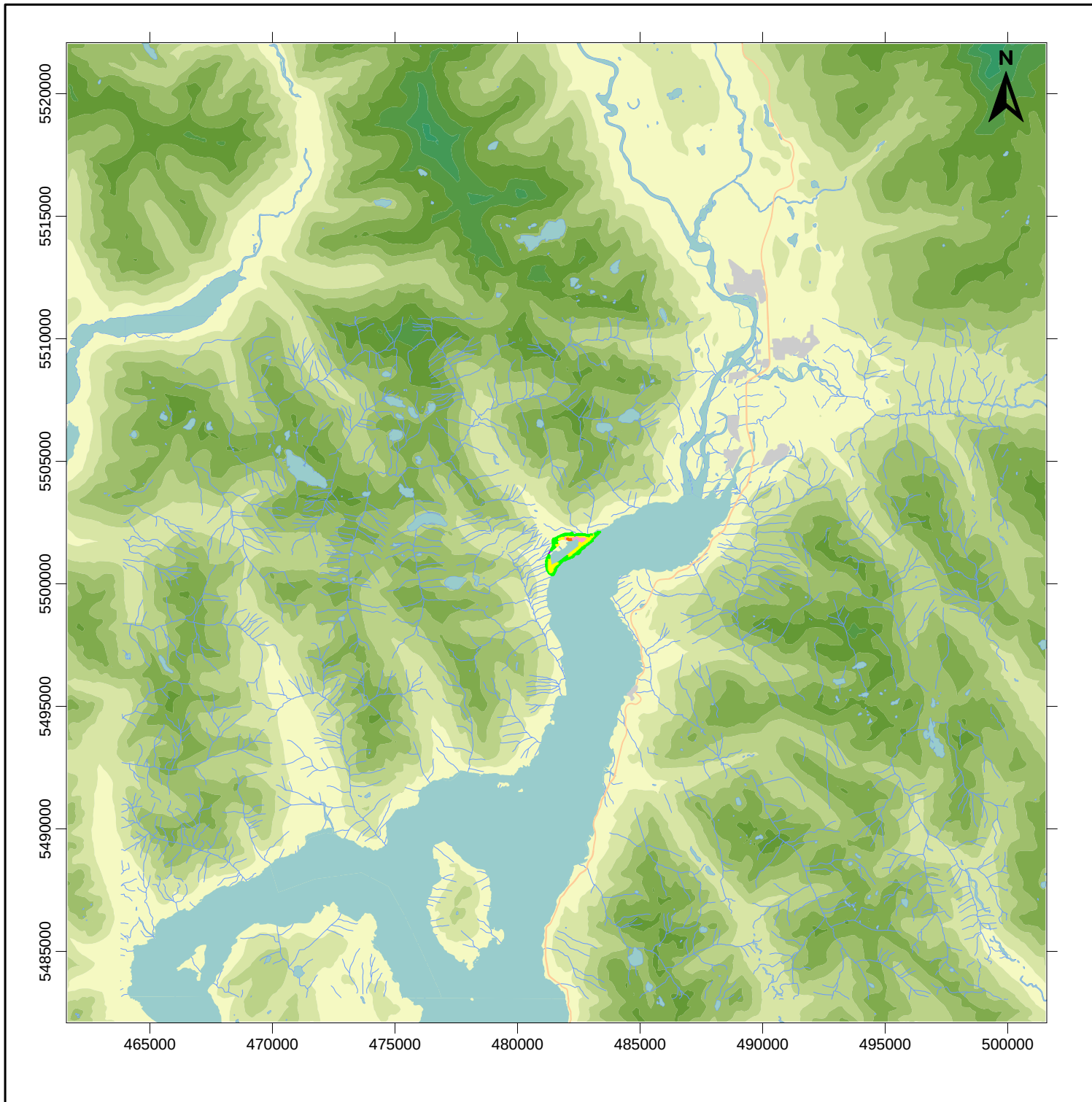
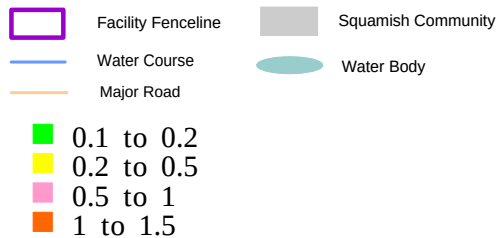
Figure No.

D.43

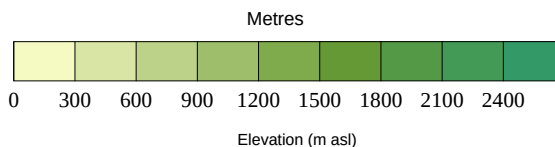
Title

Thermal oxidizer Trip Scenario Predicted Ground-Level
Maximum (100th), 99th, and 95th percentile
1-hour H₂S Concentrations (µg/m³)

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1-hour H₂S Probability of Exceedance (hours)



Client/Project/Report

**Woodfibre LNG Limited
Operations Air Quality Assessment**

Figure No.

D.44

Title

Thermal oxidizer Trip Scenario
1-hour H₂S Probability of Exceedance
(Average of 5 years)

Notes
 1. Coordinate System: NAD 1983 BC Environment Albers
 2. Data Sources: DataBC, Government of British Columbia, Natural Resources Canada
 3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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**WOODFIBRE LNG PROJECT:
TECHNICAL ASSESSMENT REPORT FOR THE WOODFIBRE LNG PROJECT WASTE
DISCHARGE AUTHORIZATION APPLICATION TO THE BRITISH COLUMBIA ENERGY
REGULATOR**

October 16, 2026

APPENDIX B VENT SOURCE LIST

WOODFIBRE LNG PROJECT:
TECHNICAL ASSESSMENT REPORT FOR THE WOODFIBRE LNG PROJECT WASTE
DISCHARGE AUTHORIZATION APPLICATION TO THE BRITISH COLUMBIA ENERGY
REGULATOR

October 16, 2026

Discharge to ATM to Safe Location * Excludes emergency venting from combustion sources
due to flame-outs

Line #	Equipment	Line # / Source	Frequency	Flow rate
1	Floating Storage Tanks (10)	PSVs (2 per tank)	Emergency	103,000 kg/hr
2	Condensate Storage Tank (01-T-7509)	PV-75046	Emergency	992 kg/hr
3	Condensate Storage Tank (01-T-7509)	PVRV 75049A/B	Emergency	4,977 kg/hr
4	Loading Arms – LNG Vapor and Hybrid (Vapor)	00-LA-7135-V, 00-LA-7135-H(V)	Intermittent	25 L/min
5	FST 2 Jumper Arms Hybrid and Vapor Return	01-LA-7133-V, 01-LA-7133-H(V)	Intermittent	25 L/min
6	Loading Arms – LNG Liquid and Hybrid (Liquid)	00-LA-7135-L, 00-LA-7136-L, 00-LA-7135-H(L)	Intermittent	25 L/min
7	FST 1 and FST 2 Jumper Arms – Vapor and Hybrid (Vapor)	01-LA-7131/7132-V, 01-LA-7131/7132-H(V)	Intermittent	25 L/min
8	FST 1 and FST 2 Jumper Arms – LNG Liquid Rundown	01-LA-7131/7132-L/LS	Intermittent	25 L/min
9	FST 1 and FST 2 Jumper Arms - Hybrid (Liquid)	01-LA-7131/7132/7133-H(L)	Intermittent	25 L/min
10	Diesel Storage Tank 01-T-6603	Vent to ATM	Intermittent	1 L/min
11	Fire Water Diesel Pump Day Tanks (2)	Vent to ATM	Intermittent	1 L/min
12	Essential Gen Diesel Day Tank (3) – 01-A-6601-A/B/C	Vent to ATM	Intermittent	1 L/min
13	TO Fuel Gas Skid (Main Fuel Gas)	Vent to ATM 01-V-12002-2"(1P3)	Intermittent	1 L/min
14	TO Fuel Gas Skid (Pilot Fuel Gas)	Vent to ATM 01-V-12003-2"(1P3)	Intermittent	0.5 L/min
15	TO Fuel Gas Skid (Flash Gas)	Vent to ATM 01-V-12004-2"(1P3)	Intermittent	1 L/min
16	Heating Medium Furnace Fuel Gas Skid	Vent to ATM 01-AV-58001-2"(1P1)	Intermittent	1 L/min
17	Heating Medium Furnace Burner/Pilot Gas Manifold	Vent to ATM 01-AV-58002-1 3/4" (1P1)	Intermittent	0.5 L/min

WOODFIBRE LNG PROJECT:
TECHNICAL ASSESSMENT REPORT FOR THE WOODFIBRE LNG PROJECT WASTE
DISCHARGE AUTHORIZATION APPLICATION TO THE BRITISH COLUMBIA ENERGY
REGULATOR

October 16, 2026

Line #	Equipment	Line # / Source	Frequency	Flow rate
18	Feed Gas Booster Compressor (K-0103) Lube Oil Tank	Vent to ATM 01-V-01001-4"(1P0JL)	Continuous	0.01 L/min
19	Regeneration Gas Compressor (K-1308) Lube Oil Tank	Vent to ATM 01-V-13001-1"(1P0JL)	Continuous	0.01 L/min
20	LP MR Compressor (K-1602) Lube Oil Tank	Vent to ATM 01-V-16011-4"(1P0JL)	Continuous	0.01 L/min
21	LP MR Compressor (K-1602) Lube Oil Tank	Vent to ATM 01-V-16013-4"(1P0JL)	Continuous	0.01 L/min
22	HP MR Compressor (K-1605) Lube Oil Tank	Vent to ATM 01-V-16007-4"(1P0JL)	Continuous	0.01 L/min
23	HP MR Compressor (K-1605) Lube Oil Tank	Vent to ATM 01-V-16009-4"(1P0JL)	Continuous	0.01 L/min
24	Air Compressor Package (01-A-5601-A) Lube Oil Tank	Vent to ATM 01-AV-56004-2"(1P3)	Continuous	0.01 L/min
25	Air Compressor Package (01-A-5601-B) Lube Oil Tank	Vent to ATM 01-AV-56005-2"(1P3)	Continuous	0.01 L/min
26	Air Compressor Package (01-A-5601-C) Lube Oil Tank	Vent to ATM 01-AV-56006-2"(1P3)	Continuous	0.01 L/min
27	BOG Gas Compressor A (K-7105/8) Lube Oil Tank	Vent to ATM 01-V-71001-6"(1P0JL)	Continuous	0.01 L/min
28	BOG Gas Compressor B (K-7105/8) Lube Oil Tank	Vent to ATM 01-V-71006-6"(1P0JL)	Continuous	0.01 L/min

October 16, 2026

APPENDIX C AQUATIC ACIDIFICATION AND EUTROPHICATION ASSESSMENT

Surface Water Acidification and Eutrophication Assessment

Technical Data Report

October 20, 2026

Prepared by:
Stantec Consulting Ltd.
#500 - 4515 Central Blvd
Burnaby, BC, V5H 0C6

Prepared for:
Woodfibre LNG General Partner Inc.
#900 - 1185 W Georgia Street
Vancouver, BC, V6E 4E6
WLNG-W0001-RE-RP-00359



Preamble

The Woodfibre Liquefied Natural Gas Project (the Project) is a liquefied natural gas export facility being constructed on the former Woodfibre Pulp and Paper Mill site (the Project) in Átl'ka7tsem (Howe Sound), approximately seven kilometres south of Skwxwú7mesh (Squamish). The Project is on the historical location of a Skwxwú7mesh Úxwumixw (Squamish Nation) village known as Swiyát. Swiyát and Átl'ka7tsem (Howe Sound) are tied to the cultural well-being of Skwxwú7mesh Úxwumixw (Squamish Nation) members, their ancestors, and their descendants, and to other Indigenous groups as defined in the Project's Environmental Assessment Certificates. Woodfibre LNG General Partner Inc. recognizes the importance of these areas to the Skwxwú7mesh stélmexw (Squamish People), and other Indigenous groups. Woodfibre LNG General Partner Inc. seeks to construct and operate the Project in a manner that is respectful of Indigenous values. This Technical Assessment Report is primarily written in English with important place names, species, phrases, and passages provided in the Skwxwú7mesh Sníchim (Squamish language).

Temíxwiýikw chet wa naantem chet ti temíxw Swiyát
Chet wa sménhemswit kwis ns7éyxnitás chet ti temíxw
We7ú chet kwis t'íchimwit iy íwas chet ek' l tti.

Our ancient ancestors named this place Swiyát
We, as their descendants safeguard these lands
We will continue to swim and fish in these clear waters.

Executive Summary

Woodfibre LNG General Partner Inc. (Woodfibre LNG), as General Partner on behalf of the Woodfibre LNG Limited Partnership will operate the Woodfibre Liquefied Natural Gas (LNG) Project (the Project), which is located approximately 7 kilometres (km) southwest of Skwxwú7mesh (Squamish), British Columbia (BC). The Project will have the capacity to liquefy up to 2.1 million tonnes per year of natural gas and export the LNG via carriers.

Woodfibre LNG is seeking a Waste Discharge Authorization (WDA) from the BC Energy Regulator to authorize the discharge of air emissions from the Project under the *Environmental Management Act*. Stantec Consulting Ltd. (Stantec) has been retained to complete a surface water acidification and eutrophication assessment to support the WDA application.

The Project will generate air emissions that have the potential to cause acidification and eutrophication in waterbodies surrounding the Project. The effect pathway of Project air emissions on the aquatic receiving environment is the deposition of sulphur (S) and nitrogen (N) compounds with potential to generate changes in water quality (chemistry) and ultimately cause adverse effects on freshwater systems through shifts in pH (acidification) or the nutrient regime (eutrophication).

Four stream sites (two in Woodfibre Creek [SW-01 and SW-08] and two in Mill Creek [SW-02 and SW-07]) with existing background water quality data were selected within the 40 km by 40 km air quality deposition model domain centered over the Project for acidification and eutrophication assessments under air quality modelling scenarios (Baseline, Project-Alone Case, Application Case, and Cumulative Case). The study area boundaries and the number of stream sites were defined by the BC Ministry of Environment 2015 *Guidance for the Assessment of Acidification and Eutrophication of Aquatic Ecosystems*. The boundary for the acidification assessment was defined by the 100 equivalents per hectare per year (eq/ha/y) S+N isopleth while the boundary for eutrophication assessment was defined by the 3 kilograms per hectare per year (kg/ha/y) N isopleth for the Cumulative Case.

Results from background water chemistry and the Baseline air and predicted deposition rates from the air dispersion modelling scenarios for the Project-Alone Case, Application Case, and Cumulative Case showed that there were no predicted critical load of acidity ($CL_{(A)}$) exceedances for the stream sites except at SW-01 in 2025 with $CL_{(A)}$ exceedances for Application Case and Cumulative Case. Further investigation revealed the predicted $CL_{(A)}$ exceedance may be related to a sea spray event on January 24, 2025 that affected ionic composition, thereby reducing $CL_{(A)}$ and organic acid adjusted acid neutralizing capacity but had no influence on pH. As such, SW-01 in 2025 was classified as having a “low biological concern” while other stream sites and the rest of the sampling periods were classified as having “no biological concern” to acidification. However, without the sea spray event on January 24, 2025, SW-01 in 2025 would be classified as having “no biological concern” to acidification.

Results from background estimated and calculated total nitrogen and predicted nitrogen deposition rates for Baseline, Project-Alone Case, Application Case, and Cumulative Case showed that the four stream sites were classified as oligotrophic (i.e., nutrient poor) at background and under the three modelling scenarios, with no predicted change to their trophic state.

Limitations

This document entitled Technical Assessment Report for Woodfibre LNG Project was prepared by Stantec Consulting Ltd. (“Stantec”) for the account of Woodfibre LNG Limited Partnership (the “Client”) to support the regulatory review process for its Waste Discharge Authorization (the “Application”) for the Woodfibre LNG (the “Project”). In connection therewith, this document may be reviewed and used by the BC Energy Regulator (BCER) participating in the review process in the normal course of its duties. Except as set forth in the previous sentence, any reliance on this document by any other party or use of it for any other purpose is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document. The information and conclusions in the document are based on the conditions existing at the time the document was published and does not take into account any subsequent changes. Stantec has assumed all information received from the Client and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein. Any use which another party makes of this document is the responsibility and risk of such party. Such party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other party as a result of decisions made or actions taken based on this document.

October 20, 2026

Review and Sign-Off

This document entitled Technical Data Report Woodfibre LNG Project - Surface Water Acidification and Eutrophication Assessment was prepared by Stantec Consulting Ltd. ("Stantec") for the account of Woodfibre LNG Limited Partnership (the "Client") to support the application to the British Columbia (BC) Energy Regulator (BCER) for a Waste Discharge Authorization (WDA) (the "Application") for air emissions from the Woodfibre LNG Project (the "Project").

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Prepared by: On behalf of _____
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Oghenemise Abirhire, Ph.D., R.P.Bio.
Printed Name

**Penner,
Michelle** Digitally signed
by Penner,
Michelle
Date:
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Signature

Michelle Penner, B.Sc., R.P.Bio
Printed Name

**Pam
Reece** Digitally signed
by Pam Reece
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Reviewed by: _____
Signature

Pam Reece, M.Sc., R.P.Bio
Printed Name

MacLeod

Signature

Adriana Calderon, B.Sc.
Printed Name

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Squamish-English Translation

Squamish	English
Ínexwantas	Monitoring
Skwxwú7mesh	Squamish
Skwxwú7mesh Sníchim	Squamish language
Skwxwú7mesh Úxwumixw	Squamish Nation
Skwxwú7mesh stélmexw	Squamish people
Staḵw	Water, river
Temíxw	Land, earth, dirt
Nexwnéwu7ts Átlk'a7tsem	Howe Sound

Abbreviations

ANC	acid neutralizing capacity
ANC _{limit}	acid neutralizing capacity adjusted for organic acids
ANCoaa	organic acid adjusted acid neutralizing capacity
BC	British Columbia
[BC*] ₀	corrected pre-acidification base cations for a waterbody
[BC*] _t	sum of the corrected present base cation concentrations
CD	charge density
CL _(A)	critical load of acidity
CLRTAP	Convention on Long-range Transboundary Air Pollution
DOC	dissolved organic carbon
ENV	BC Ministry of Environment and Parks
eq/ha/y	equivalents per hectare per year
ESSA	ESSA Technologies Ltd.
EX _(A)	acid input exceedance
F	a ratio called the F-factor
g/m ³	grams per cubic metre
g/m ² /y	grams per square metre per year
GOBC	Government of BC
kg/ha/y	kilograms per hectare per year
km	kilometre
LNG	liquefied natural gas
Lorax	Lorax Environmental Services Ltd.
LSA	local study area
m/y	metres per year
m ³	cubic metres
meq/m ² /y	milliequivalents per square metre per year
meq/m ³	milliequivalents per cubic metre
mg/L	milligrams per litre

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MOE	BC Ministry of Environment
N	nitrogen
N _{dep}	deposited nitrogen
N _{leach}	nitrogen leaching
[NO ₃] ₀	the pre-acidification nitrate concentration
[NO ₃] _t	the present nitrate concentration
NO _x	oxides of nitrogen
P	phosphorus
the Project	Woodfibre Liquefied Natural Gas Project
Q	annual catchment runoff
RSA	regional study area
S	sulphur
S _{dep}	deposited sulphur
[SO ₄] ₀	the corrected, pre-acidification sulphate concentration
[SO ₄] _t	the corrected, present sulphate concentration
SO ₂	sulphur dioxide
SO ₄ ⁻	sulphate
SRP	soluble reactive phosphorus
SSWC	Steady-State Water Chemistry
Stantec	Stantec Consulting Ltd.
t/day	tonnes per day
TOC	total organic carbon
TKN	total Kjeldahl nitrogen
TN	total nitrogen
TP	total phosphorus
µeq/L	microequivalents per litre
µeq/mg	microequivalents per milligram
WDA	Waste Discharge Authorization
Woodfibre LNG	Woodfibre LNG General Partner Inc.

Glossary

acidification	The process resulting in a decrease in pH levels in a body of water.
acid neutralizing capacity (ANC)	The amount of acid that an aquatic ecosystem can neutralize.
ANClimit	The threshold of alkalinity required in an aquatic ecosystem, to protect biota from acidification. Defined as 40 µeq/L.
ANCoaa	The acid neutralization capacity adjusted for organic acids in a body of water.
annual catchment runoff	The amount of annual water input from precipitation and ice melt into a body of water.
critical load of acidity (CL(A))	The maximum annual amount of acid deposition that an aquatic environment can receive without showing adverse effects on aquatic biota
eutrophic	Classification in the Trophic State Index, identifying that an aquatic system has high nutrient concentrations and biomass of aquatic vegetation (i.e., algal productivity).
eutrophication	The process of an increase of nutrients and minerals in a body of water.
mesotrophic	Classification in the Trophic State Index, identifying that an aquatic system has moderate nutrient concentrations and biomass of aquatic vegetation (i.e., algal productivity).
oligotrophic	Classification in the Trophic State Index, identifying that an aquatic system has low nutrient concentrations and biomass of aquatic vegetation (i.e., algal productivity).
Term	Definition
acidification	The process resulting in a decrease in pH levels in a body of water.
acid neutralizing capacity (ANC)	The amount of acid that an aquatic ecosystem can neutralize.

**WOODFIBRE LNG PROJECT:
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ANClimit	The threshold of alkalinity required in an aquatic ecosystem, to protect biota from acidification. Defined as 40 µeq/L.
ANCoaa	The acid neutralization capacity adjusted for organic acids in a body of water.
annual catchment runoff	The amount of annual water input from precipitation and ice melt into a body of water.
critical load of acidity (CL(A))	The maximum annual amount of acid deposition that an aquatic environment can receive without showing adverse effects on aquatic biota

1.0 INTRODUCTION

This report was prepared to provide an assessment of acidification and eutrophication to support the Project's application for a Waste Discharge Authorization (WDA) for emissions associated with commissioning and operation of the Project.

1.1 PROJECT OVERVIEW

Woodfibre LNG General Partner Inc. (Woodfibre LNG), as General Partner on behalf of the Woodfibre LNG Limited Partnership, will operate the Woodfibre Liquefied Natural Gas (LNG) Project (the Project), which is located on the former Woodfibre Pulp Mill site approximately 7 kilometres (km) southwest of Sk̓wx̓wú7mesh (Squamish), British Columbia (BC). The Project will have the capacity to liquefy up to 2.1 million tonnes per year of natural gas, have a storage capacity of 250,000 cubic metres (m³), and export the LNG via carriers.

1.2 PURPOSE

Woodfibre LNG is seeking a Waste Discharge Authorization (WDA) permit from the BC Energy Regulator (BCER) to authorize the discharge of air emissions for the Project under the *Environmental Management Act*. The WDA permit application includes emissions from commissioning and operations of the Project. Stantec Consulting Ltd. (Stantec) has been retained to complete a surface water acidification and eutrophication assessment to support the Technical Assessment Report, required for the WDA application.

This report presents the results of the surface water acidification and eutrophication assessment based on the air quality dispersion modelling. It is intended to assist regulatory decision making by providing information about the aquatic receiving environment and the potential environmental effects of Project emissions on surface water.

1.3 POTENTIAL EFFECTS AND EFFECT PATHWAYS

Air emissions have the potential to result in a change in the chemical composition of surface water, specifically a change in acidification potential and change in trophic status due to eutrophication. The effect pathway of Project air emissions on the aquatic receiving environment is the deposition of sulphur (S) and nitrogen (N) compounds. Sulphur dioxide (SO₂) and oxides of nitrogen (NO_x) air emissions from the Project have the potential to react with water and oxygen in the atmosphere and precipitate as nitrate, other N species, sulphate, and hydrogen-containing compounds, resulting in the introduction of sulphate (SO₄⁻) and N forms into freshwater systems (lakes and streams). This deposition has the potential to generate changes in water quality (chemistry) of freshwater systems through shifts in pH (acidification) or the nutrient regime (eutrophication). Acidification can lead to a reduction in pH and ultimately result in adverse effects on Sts'úkwí7 (fish) as sensitive receptors. Nitrogen deposition can result in eutrophication and a change in trophic status, which can lead to

increased plant or algae growth, which in turn can deplete oxygen in the water when plants decompose and can lead to decreased diversity in the affected aquatic system.

1.4 SCOPE AND APPROACH OF SURFACE WATER ASSESSMENT

The BC Ministry of Environment and Parks (ENV) provides general guidance for undertaking environmental effects assessments related to air emissions impacts for LNG export terminal facilities (BC Ministry of Environment [MOE] 2015a, ENV 2021). The *Guidance for the Assessment of Acidification and Eutrophication of Aquatic Ecosystems* (MOE 2015b) provides direction on assessing critical loads for acidification and eutrophication on aquatic ecosystems due to deposition of emissions from LNG facilities. The MOE (2015b) guidance applies to freshwater aquatic systems and not to marine systems. Marine systems are buffered from acidification related to S + N deposition as they contain large amount of dissolved carbonate and bicarbonate and sulphate (Howarth 2007). This document was followed in developing the methods used in this assessment.

According to the MOE (2015b) recommendations, *“the assessment of acidification and eutrophication requires the collection of surface water chemistry data from a representative set of surface waters (e.g., lake and stream) within the area predicted to receive S and/or N deposition. The recommended study area boundary for assessing surface waters is delineated by the 100 eq/ha/y S + N isopleth or the 3 kg/ha/y N isopleth, whichever is greater”, as summarized in Table 1. Furthermore, “Projects with a predicted nitrogen deposition isopleth of ≥ 3 kg/ha of nitrogen beyond the project footprint must assess the effects of eutrophication through comparisons with empirical critical loads for protection of surface waters from eutrophication from the recent literature”*

The acidification assessment used the Steady-State Water Chemistry (SSWC) model described in Henriksen et al. (1995), Henriksen and Posch (2001), and Henriksen et al. (2002) to estimate critical loads and critical load exceedances in select streams using water chemistry data. The eutrophication assessment used empirical critical loads to assess potential for eutrophication. Background nitrogen data were used to calculate background trophic status and predicted trophic status after the deposition of Project-related nitrogen to further assess the potential for eutrophication, using change in trophic status as an indicator. Methods used in the acidification and eutrophication assessment are summarized in Section 3.0.

Table 1 Recommended Aquatic Ecosystem Acidification and Eutrophication Study Area Boundaries (MOE 2015b)

Parameter	Study Area Boundary
S+N	100 eq/ha/y
N	3 kg/ha/y

Notes:

eq/ha/y = equivalents per hectare per year

kg/ha/y = kilograms per hectare per year

**WOODFIBRE LNG PROJECT:
SURFACE WATER ACIDIFICATION AND EUTROPHICATION ASSESSMENT**

October 20, 2026

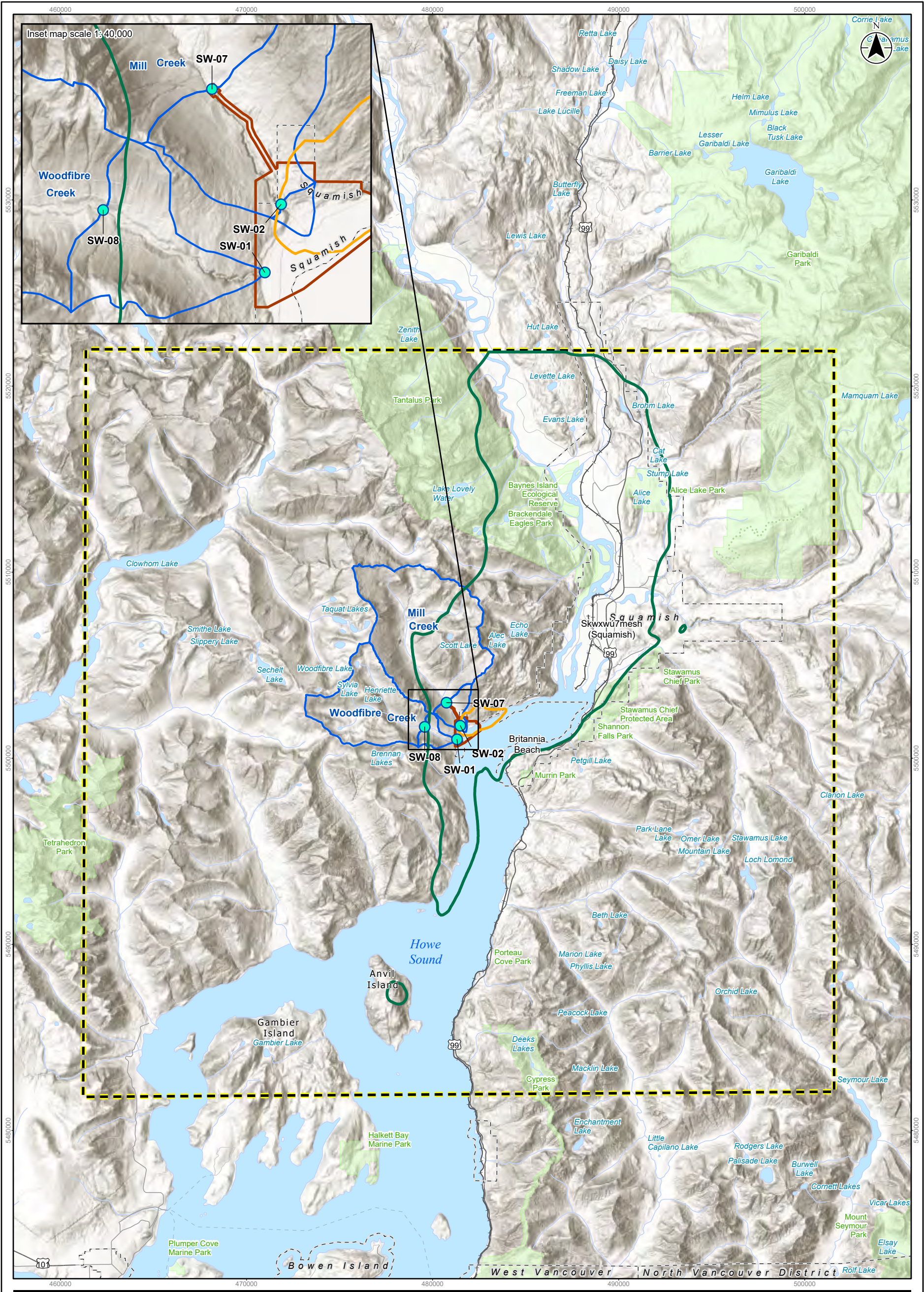
The following modelling scenarios were assessed:

1. Baseline: Background concentrations defined from an Environment and Climate Change Canada air and precipitation monitoring site on Saturna Island. Though this is outside of the regional study area (RSA), it is the closest location to the Project where atmospheric precipitation chemistry is monitored.
2. Project-Alone Case (Normal Operations): Emissions from the Project only including the heat medium heater, thermal oxidizer, and routine flaring (i.e., pilot and purge).
3. Application Case (Normal Operations): Includes the sources from the Project-Alone Case (Normal Operations), plus associated marine vessels and the addition of Baseline.
4. Cumulative Case: Includes the Application Case (Normal Operations) plus the FortisBC Squamish V2 Compressor Station annual emissions and the addition of Baseline.

Details on the air dispersion modelling approach are provided in the Technical Data Report (WLNG-W0001-RE-RP-00285; which is included as an Appendix of the Technical Assessment Report).

Figure 1 shows the dispersion modelling domain for the air quality assessment (i.e., the RSA), which was defined as a 40 km by 40 km domain centered around the Project as well as the local study area (LSA). The model domain includes the communities of Skwxwú7mesh (Squamish), located 7 km to the northeast of the Project, and Shisháyu7ay (Britannia Beach), located 5.2 km southeast of the Project. Terrain in the modelling domain is complex, ranging from approximately sea level to over 2,500 metres above sea level. Higher elevations are located in the north, northwest, east, and northeast sections of the modelling domain. The lowest elevations (sea level) are in the southern and center sections of the model domain in Átl'ka7tsem (Howe Sound). The LSA was defined by the greater of the isopleths defined in Table 1 for the Cumulative Case scenario, which is the S+N 100 eq/ha/y isopleth (Figure 1).

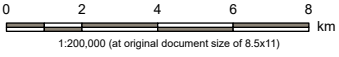
The number of stream sites included in the assessment was proportional to the modeled SO₂ and NO_x emissions following The *Guidance for the Assessment of Acidification and Eutrophication of Aquatic Ecosystems* (MOE 2015b). The Guidance recommends that a project with a maximum build-out of 4 tonnes (t)/day of emissions (NO_x + SO_x) sample four lakes and one stream for assessment. The Cumulative Case is based on 88.2 t/year of NO_x and 97.2 t/year of SO₂, which equates to a combined rate of approximately 0.5 t/d, therefore, a lower number of sampling sites is needed for assessment (for further details, refer to the Technical Data Report (WLNG-W0001-RE-RP-00285).



Notes
1. Coordinate System: NAD 1983 BC Environment Albers
2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada; Esri, NASA, NSA, USGS, Esri, NASA, NSA, USGS, FEMA

- Highway
- Road
- Local Street
- Resource Road
- Trail
- Ferry Route
- Railway
- Watercourse
- Waterbody
- Provincial Park, Ecological Reserve, or Protected Area
- Municipal Boundary

- Water Quality Monitoring Sites
- Regional Study Area
- WLNG Watershed and Sub-watershed Boundaries
- Local Study Area (S+N 100 eq/ha/y isopleth in Cumulative Case Scenario)
- Predicted Nitrogen Deposition (3kg/ha/y Cumulative Case)
- Certified Project Area



Project Location: Project Number: 123222939
Prepared by PKASIANCHUK on 20260727
Requested by MPENNER on 20260527
Checked by SPARKER on 20260603

Client/Project/Report
Woodfibre LNG
Woodfibre Liquefied Natural Gas Project
Surface Water Acidification and Eutrophication Assessment
Technical Data Report

Figure No.
1

Title
Surface Water Acidification and Eutrophication Study Area Overview

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2.0 RECEIVING ENVIRONMENT

Characterization of the existing conditions for the receiving environment surface water is provided in this section to support this acidification and eutrophication assessment.

The RSA extends north past Skwxwú7mesh (Squamish) and south along Átl'ka7tsem (Howe Sound) to Gambier Island (Figure 1). Areas east and west of Átl'ka7tsem (Howe Sound) within the RSA are primarily uninhabited, mountainous terrain. The LSA primarily extends north-south (Figure 1), with the southern extent of the Project on the west side of Átl'ka7tsem (Howe Sound) near Defence Island 28 as well as a small area on Anvil Island that is discontinuous from the rest of the isopleth. The northern extent extends north of Skwxwú7mesh (Squamish) to the edge of the RSA (the S+N 100 eq/ha/y isopleth would otherwise extend further north of the RSA).

Water chemistry data have been collected at several locations in proximity to the Project (within the LSA). From these data, four stream sites were chosen for the acidification and eutrophication assessment based on the criteria of:

- Upstream of marine influences
- Permanent watercourses (i.e., have year-round water flow)
- Unlikely to be affected by construction or land disturbance activities (e.g., influence water quality data results)

For example, sites where erosion and sediment control issues could affect surface water quality were not chosen for the acidification and eutrophication assessment.

Based on the combined rate of approximately 0.5 t/day of SO₂ and NO_x emissions from the Cumulative Case (refer to Section 1.4), a total of four stream sites were selected to meet the guidance requirements (MOE 2015b); two locations in Woodfibre Creek and two locations in Mill Creek (shown in Figure 1 and summarized in Table 2). These sites were used as a combination of exposures sites and reference sites depending on their location within or outside the cumulative effect isopleth (i.e., sites outside the applicable cumulative effect isopleth were used as reference sites). Though there are other watercourses within the LSA (e.g., the Squamish River and a number of lakes), these stream sites were sufficient for this assessment due to their proximity to the Project and its air emissions and the amount of background water quality data available to incorporate into the assessment.

The dataset used in this assessment is outlined in Table 2. Water samples were collected at least once a month from the four stream sites. This dataset is used in the acidification and eutrophication assessments and is further described in Section 3.0 and characterized in Section 4.0.

**WOODFIBRE LNG PROJECT:
SURFACE WATER ACIDIFICATION AND EUTROPHICATION ASSESSMENT**

October 20, 2026

Table 2 Sampling Sites Used for the Acidification and Eutrophication Assessment

Site ID	Waterbody Name	UTM (Zone 10)		Assessment Type Completed	Site Type	Year Range Data Used
		Easting	Northing			
SW-01	Woodfibre Creek	481313	5501016	Acidification and Eutrophication	Exposure (acidification) Reference (eutrophication)	2022-2025
SW-02 ^a	Mill Creek	481488	5501748	Acidification and Eutrophication	Exposure	2022-2025
SW-07	Mill Creek	480745	5502987	Acidification and Eutrophication	Exposure (acidification) Reference (eutrophication)	2023-2025
SW-08	Woodfibre Creek	479575	5501687	Acidification and Eutrophication	Reference	2024

Note:

^a Site is within the Certified Project Area and close to the main source of Project emissions

Woodfibre Creek flows into Átl'ka7tsem (Howe Sound) at the south end of the Project site. It has a catchment area of 21.8 km² and an elevation range between sea level and 1,600 m above sea level at its headwaters (Lorax 2026). Flows in the creek originate from a number of lakes including Henriette Lake, Sylvia Lake, and Woodfibre Lake. Henriette Lake is the largest lake in the watershed and there is a small dam at its outlet that influences the flow regime in the watershed, as Woodfibre Creek has higher summer flows and lower freshet flows than neighbouring Mill Creek (Lorax 2026). Channel gradient in Woodfibre Creek is steep with a cascade-pool morphology, averaging 15% throughout its length, and substrate was made up of large boulders, cobbles, and gravels (Lorax 2026, Golder Associates 2014). Average channel width was 13.1 m in proximity to the Project (Golder Associates 2014).

Woodfibre Creek is a fish-bearing stream with previous records of Skíw̱x̱ (rainbow trout [*Oncorhynchus* (*O.*) *mykiss*]), coastal cutthroat trout (*O. clarkii clarkii*), Kwu7s (Chinook salmon [*O. tshawytscha*]), and sculpin (*Cottus* sp.) in its watershed (Government of BC [GOBC] 2026a, 2026b; Golder Associates 2014). In addition, Lháwichen (pink salmon [*O. gorbuscha*]) were observed in potential spawning locations in the lower 25 m of the stream during background studies for the Project (Golder Associates 2014). A 10 m high falls is located approximately 150 m from the stream's outfall into Átl'ka7tsem (Howe Sound), which limits the distribution of anadromous Sts'úkwi7 (fish [e.g., Cháyilhen (salmon)]) in the watershed (Golder Associates 2014). Other barriers have also been documented along the length of Woodfibre Creek and resident Sts'úkwi7 (fish) have been documented upstream of these barriers (GOBC 2026a). Spawning substates in proximity to the Project were limited and were typically documented in pool tail outs and glide habitat (Golder Associates 2014).

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Mill Creek flows into Átl'ka7tsem (Howe Sound) within the Project site. It has a catchment area of 40.8 km² and an elevation range between sea level and 2,000 m above sea level at its headwaters near Mount Sedgwick (Lorax 2026). There is one named lake within the watershed (Scott Lake), which provide a negligible contribution to the total catchment area (Lorax 2026). Channel gradient averages 7.5% and is steeper in headwater areas and lower elevations; gradient is moderate at mid-elevation areas of Mill Creek (Lorax 2026). There is an alluvial fan at the mouth of the stream where gradient is approximately 4% (Lorax 2026). The portion of the stream that intersects the Project area has been channelized with riprap armouring on the south bank (Lorax 2026). The lower reach of Mill Creek is estuarine and tidally influenced (Lorax 2026). Substrates were primarily dominated by boulder and cobble, and average channel width was 14.4 m in proximity to the Project (Golder Associates 2014).

Mill Creek is a fish-bearing stream with previous records of Tsáwín (coho salmon [*O. kisutch*]), Kwu7s (Chinook salmon), chum salmon (*O. keta*), Tl'ít'elxiws (Dolly Varden [*Salvelinus malma*]), Skiw̓x (rainbow trout/steelhead), gunnel fish (*Pholidae* sp.), coastrange sculpin (*Cottus aleuticus*), and sculpin (general) in its watershed (GOBC 2026a, 2026b; Golder Associates 2014). In addition, Lháwichen (pink salmon) have been documented spawning along Mill Creek below a barrier located 415 m upstream from the mouth of the stream (Golder Associates 2014). Additional barriers to Sts'úkwi7 (fish) passage are present upstream of this initial barrier; however, resident Sts'úkwi7 (fish) have been documented upstream of these barriers (Golder Associates 2014; GOBC 2026a). Spawning habitat was limited in Mill Creek and was primarily located in lower gradient glides (Golder Associates 2014). Lháwichen (pink salmon) were primarily observed in riffle-glide and cascade-pool habitat (Golder Associates 2014).

3.0 SURFACE WATER ACIDIFICATION AND EUTROPHICATION ASSESSMENT METHODS

This section provides an overview of the methods used to conduct the surface water acidification and eutrophication effects assessment for the Project.

To assess potential effects of the Project's SO₂ and NO_x emissions, background conditions of waterbodies in the surface water RSA were characterized to establish the extent of their capacity to accept changes in water quality without resulting in adverse effects to aquatic biota. Background conditions were described in terms of acid sensitivity (acidification assessment) and trophic status (eutrophication assessment). Changes in acidification potential and trophic status were evaluated using four modelling scenarios: Baseline, Project-Alone Case, Application Case, and Cumulative Case (Section 1.4).

For the acidification assessment of streams, acid sensitivity was established by calculating the critical load of acidity (CL_(A)) using the SSWC model. The CL_(A) is the maximum annual amount of acid deposition that an aquatic environment can receive without showing adverse effects on aquatic biota. Based on the CL_(A) values, streams were classified as naturally acidic, high acid sensitivity, sensitive to acid inputs, moderately acid sensitivity, low acid sensitivity, or very low acid sensitivity.

The eutrophication assessment included comparison of modelled nitrogen deposition rates with empirical critical loads and by classifying trophic status of the streams based on existing and predicted nutrient levels. Empirical critical loads for N represent levels above which changes have been found to occur based on field studies. The trophic status of streams was estimated from the total nitrogen (TN) concentration, within a classification system of oligotrophic, mesotrophic, or eutrophic. Changes in TN were estimated by calculating the increase in TN between the Baseline and the Application Case by adding the increase to the TN concentration from the background water chemistry data. The trophic status and potential for eutrophication is related to both phosphorus (P) and N concentrations (Wetzel et al. 2024); no change in phosphorus concentrations related to the air emissions is predicted.

Assumptions and Limitation of Assessments

The following assumptions and limitations apply to the acidification and eutrophication assessment:

- The acidification and eutrophication assessment was based on water quality data that was previously collected for the Project in proximity to the Certified Project Area; no additional water quality data was collected specifically for the acidification and eutrophication assessment.
- Background concentration of water quality parameters used in the assessments were sometimes below the detection limits. In these cases, detection limits were used for these parameters, which could introduced uncertainty in the assessments.
- Background water chemistry captures both terrestrial watershed processes and aquatic ecosystem processes.

- The models used for pH predictions assume that the parameters relating to carbon dioxide and weak acids (a, c, and d in Equation 7) described in Section 3.2.4 are the same for the streams sites and consistent throughout the year; however, these values could change temporally, seasonally, or due to other unknown factors.
- Catchment runoff is assumed to be consistent and did not consider seasonal and inter-annual variability due to factors related to variable weather conditions.
- The assessment assumes 100% of S and N deposited in a catchment is mobilized to surface water and does not recognize the role of vegetation and soil in taking up the N (Henrikson and Posch 2001, Sutton et al. 2014, Gurmessa et al. 2022).

3.1 ANNUAL CATCHMENT RUNOFF

Stream catchment areas were determined from data available in the Freshwater Atlas Assessment Watersheds dataset (GOBC 2026c). The dataset provided catchment area boundaries for Woodfibre Creek and Mill Creek. GIS analysis was used to remove areas downstream of each stream site from each catchment and determine the site-specific stream catchment area.

Annual catchment runoff (Q) values for Woodfibre Creek and Mill Creek were obtained from the Project's *Water Management Plan – Construction* (Knight Piésold Ltd. 2025) where Q had been derived from hydrology gauges in each stream. The values from the report were converted to metres per year (m/y).

3.2 ACIDIFICATION ASSESSMENT

The acidification assessment was conducted using stream water chemistry data collected for the Project between 2022 and 2025 (Table 2).

The acidification assessment used $CL_{(A)}$ values to quantify aquatic ecosystem sensitivity to acid inputs. To estimate $CL_{(A)}$ from the water chemistry measurements in streams, the SSWC model described in Henriksen *et al.* (1995), Henriksen and Posch (2001), and Henriksen *et al.* (2002) was used.

The SSWC model is widely used in the scientific community and was used to assess potential effects of other projects in BC (ESSA Technologies Ltd. [ESSA] 2023). The methods used to estimate $CL_{(A)}$ and assess the potential for $CL_{(A)}$ exceedances are described in Sections 3.2.1 to 3.2.4. The stream acidification assessment used both annual average and summer and fall average water quality.

3.2.1 Critical Load

The SSWC model is based on the principle that the $CL_{(A)}$ “... *should not exceed the non-marine and non anthropogenic base cation input, sources and sinks in a catchment minus a buffer to protect selected biota...*” (Henriksen and Posch 2001) and is calculated using Equation 1. In Equation 1, the $CL_{(A)}$ is the difference between the sum of the corrected base cations concentration pre-acidification (BC^*_0) and the ANC_{limit} multiplied by Q. The lower the $CL_{(A)}$, the greater the sensitivity of the waterbody to acid inputs.

Equation 1

$$CL_{(A)} = Q([BC^*]_0 - [ANC]_{limit})$$

Where:

- $CL_{(A)}$ = the critical load of acidity (milliequivalents per square metre per year [meq/m²/y])
- $[BC^*]_0$ = corrected pre-acidification base cations for a waterbody (microequivalents per litre [μeq/L])
- $[ANC]_{limit}$ = acid neutralizing capacity critical lower limit (μeq/L)
- Q = mean annual catchment runoff (m/y) (Section 3.1)

3.2.1.1 Corrected Pre-acidification Base Cation Concentrations

The sum of the corrected base cations pre-acidification (BC^*_0) is estimated using Equation 2.

Equation 2

$$[BC^*]_0 = [BC^*]_t - F \times ([SO^*_4]_t - [SO^*_4]_0 + [NO_3]_t - [NO_3]_0)$$

Where:

- $[BC^*]_t$ = The sum of the corrected present base cation concentrations (μeq/L)
- F = A ratio called the F-factor (no units)
- $[SO^*_4]_t$ = The corrected, present sulphate concentration (μeq/L)
- $[SO^*_4]_0$ = The corrected, pre-acidification sulphate concentration (μeq/L)
- $[NO_3]_t$ = The present nitrate concentration (μeq/L)
- $[NO_3]_0$ = The pre-acidification nitrate concentration (μeq/L). The pre-acidification nitrate concentration is assumed to be zero according to Henriksen and Posch (2001)

3.2.1.2 Cation and Anion Correction

The initial step to estimate BC^*_0 (see Equation 2) is to apply a sea salt correction to base cation concentrations from measured stream water chemistry to estimate changes due to anthropogenic atmospheric deposition. It is assumed all chloride present in the water originates from sea salt spray. Table 3 summarizes the corrections applied to the base cations.

Table 3 Derivation of Corrected Cations and Anions

Present Cation and Anion Concentration (µeq/L)	Corrected Cation and Anion Concentration (µeq/L)
Calcium [Ca]	[Ca*] = [Ca] – 0.037 [Cl]
Magnesium [Mg]	[Mg*] = [Mg] – 0.198 [Cl]
Potassium [K]	[K*] = [K] – 0.018 [Cl]
Sodium [Na]	[Na*] = [Na] – 0.858 [Cl]
Sulphate [SO ₄]	[SO ₄ *] = [SO ₄] – 0.103 [Cl]
Chloride [Cl]	[Cl*] = 0

Notes:

[] indicates concentration

* indicates sea salt correct concentrations

Cations are measures as total metal concentrations

Reference: Henriksen and Posch (2001)

3.2.1.3 F-factor Determination

The next step to estimate BC*₀ is to determine the F-factor. The F-factor is the sine of the ratio of change between the sum of the corrected present base cation concentration multiplied by the annual catchment runoff and the flux of the sum of the uncorrected base cation concentration (Equation 3). It represents the ratio of change in base cations flux due to changes in strong acid anion concentrations (Henriksen and Posch 2001).

Equation 3

$$F = \sin \left(\frac{\frac{\pi}{2} \times Q \times [BC^*]_t}{S} \right)$$

Where:

- Q = The annual catchment runoff (m/y)
- [BC*]_t = The sum of the corrected present base cation concentration (µeq/L)
- S = Uncorrected base cation (meq/m²/y) flux at which F = 1. The S value was set to 400 meq/m²/y, consistent with previous studies (Henriksen and Posch 2001)

3.2.1.4 Corrected Pre-acidification Sulphate Concentration

The final step in estimating BC*₀ is to estimate the corrected pre-acidification sulphate concentration using Equation 4. The values for constants (a and b) used in this equation were developed by Henriksen and Posch (2001) (coefficient of determination= 0.78, sample size = 289 lakes). The pre-acidification sulphate concentration ([SO₄*]₀) was constrained to be no greater than the observed sulphate concentration ([SO₄*]_i) as per Henriksen et al. (2002).

Equation 4

$$[SO^*_4]_0 = a + b \times [BC^*]_t$$

Where:

- $[SO^*_4]_0$ = Corrected pre-acidification sulphate concentration ($\mu\text{eq/L}$)
- a = The intercept ($8 \mu\text{eq/L}$)
- b = The slope of the regression model (0.17)
- $[BC^*]_t$ = The sum of the corrected present base cation concentrations ($\mu\text{eq/L}$)

3.2.1.5 Acid Neutralizing Capacity

The acid neutralizing capacity (ANC) is a measure of the buffering capacity of surface water against acidification. The ANC_{limit} is a critical lower limit of ANC that is protective of sensitive aquatic biota. Previous studies have found an ANC_{limit} of 8 to 50 $\mu\text{eq/L}$ to be protective, depending on the aquatic biota. Overall, a higher ANC_{limit} offers increased ecosystem protection. Therefore, an ANC_{limit} threshold of 40 $\mu\text{eq/L}$ was used, based on Henriksen et al. (2002), and to provide a margin of safety.

3.2.2 Acid Sensitivity Assessment

The $CL_{(A)}$ values were used to qualitatively assess acid sensitivity in surface water using a critical load classification system (ESSA 2013). Table 4 shows the critical load classification system used to identify acid sensitive waterbodies.

Table 4 Acid Sensitivity Classifications Based on Critical Load

Acid Sensitivity	Critical Load ($CL_{(A)}$) ($\text{meq/m}^2/\text{y}$)	Shading Colour
Acidic	< 0	Red
High	0–20	Orange
Sensitive	20–40	Yellow
Moderate	40–60	Light Green
Low	60–100	Light Blue
Very Low	> 100	White

Notes:

$\text{meq/m}^2/\text{y}$ = milliequivalents per square metre per year

Source: ESSA 2013

3.2.3 Critical Load Exceedance Assessment

The change in acidification potential was evaluated using predicted deposition rates from the air dispersion modelling scenarios for the Baseline, Project-Alone Case, Application Case, and Cumulative Case. The deposition rates for each stream site represent the maximum annual average values derived from one-hour deposition rates modelled over the five-year model period. The deposition data for each stream site were derived from the nearest modelled receptor in the air dispersion modelling. Distances between the stream sites and the nearest receptor range from 7.4 m to 31.4 m. In addition, deposition rates are based on the surface area of the entire catchment (vegetated, as well as surface water components) and calculations for $CL_{(A)}$ exceedances assume that 100% of depositional $S + N$ () are mobilized to surface water.

Using these deposition values is conservative due to (1) the assumption of continuous deposition at maximum rates, which does not reflect the fluctuations in deposition that occur over the five-year model period, and (2) the assumption that 100% of depositional S and N within a catchment is mobilized to surface water (despite the potential for depositional N to be retained in the biomass and soil of vegetated areas within a catchment).

Potential $CL_{(A)}$ exceedances were calculated in the SSWC model using Equation 5.

Equation 5

$$EX_{(A)} = S^*_{dep} + N_{dep} - CL_{(A)}$$

Where:

- $EX_{(A)}$ = the $CL_{(A)}$ exceedance calculated using $S + N$ from atmospheric deposition
- S^*_{dep} = the long-term deposition flux of nonmarine (i.e., sea-spray corrected) S (as SO_4^{2-})
- N_{dep} = the long-term deposition flux of N (as N)
- $CL_{(A)}$ = the critical load of acidity

In Equation 5, it is assumed that both S and N deposition contribute to potential acidification. Therefore, Equation 5 uses N deposition to calculate the contribution of N to exceedance. Equation 5 assumes that 100% of depositional S and N within a catchment are mobilized to surface water. This is considered an overestimation of N mobilization to surface water in catchments that contain forested/vegetated landcover as a portion of the N deposited in the catchment will be absorbed and retained in biomass and the soil organic layer (Henrikson and Posch 2001; Sutton et al. 2014, Gurmesa et al. 2022).

To capture Project-related changes in atmospheric $S + N$ deposition, the assessment of potential residual and cumulative effects to surface water quality associated with acidification (Section 4.2) is based on $CL_{(A)}$ exceedance values calculated using Equation 5.

3.2.4 Change in pH and Acid Neutralizing Capacity

Acidification due to S+N deposition can result in lowering the ANC and pH of a waterbody, leading to the waterbody potentially exceeding the $CL_{(A)}$. Hence, it is necessary to understand potential changes in pH and ANC of a waterbody to protect the most sensitive species present. For instance, Fölster et al. (2007) suggest that a threshold for acidification is a decrease of 0.4 pH units from the pre-industrial pH level in the waterbody to protect sensitive receptors. ESSA (2023) used a decrease of ≥ 0.3 pH units as a relative threshold change limit, in addition to a decrease below pH 6.0 as a level of protection.

Several studies have used different measures of ANC such as calculated acid neutralizing capacity, Gran ANC (titration-based ANC), base-cation surplus adjusted for organic acid, and ANC adjusted to include organic acids (ANCoaa) (Lydersen et al. 2004; Baldigo et al. 2009; ESSA 2023). ANCoaa accounts for the presence of acids associated with organic carbon that complicate acid deposition assessments (Lydersen et al. 2004). As such, the ANCoaa was used to assess potential change in ANC in this report. ANCoaa was calculated using Equation 6.

Equation 6

$$ANCoaa = ([Ca^{2+}] + [Mg^{2+}] + [Na^+] + [K^+]) - ([SO_4^{2-}] + [NO_3^-] + [Cl^-] + \frac{1}{3} CD * TOC \text{ or } DOC)$$

Where:

- Ca^{2+} , Mg^{2+} , Na^+ , K^+ , SO_4^{2-} , NO_3^- , and Cl^- are calcium, magnesium, potassium, sulphate, nitrate, and chloride, respectively, and are expressed as $\mu\text{eq/L}$. Cation concentrations are derived from total metal analyses. The atomic mass of N was used to convert nitrate (measured as N) to its ionic concentration
- $CD = 10.2$, the charge density of organic matter (microequivalents per milligram [$\mu\text{eq/mg}$] carbon)
- TOC = total organic carbon (milligrams per litre [mg/L])
- DOC = dissolved organic carbon (mg/L) is a suitable alternative for TOC . DOC was used in this report

Various ANCoaa values have been reported as protective of Sts'úkwí7 (fish) species. A 95% probability of no damage was observed for brown trout (*Salmo trutta*) at an ANCoaa of 8 milliequivalents per cubic metre (meq/m^3), Arctic char (*Salvelinus alpinus*) at ANCoaa of 11 meq/m^3 , and perch (*Perca fluviatilis*) at ANCoaa of -2 meq/m^3 in Norwegian lakes (Lydersen et al. 2004). An ANCoaa of 20 to 25 meq/m^3 was found to be necessary for the recovery of and to avoid damage to young brown trout in Norwegian lakes (Hesthagen et al. 2016). ESSA (2023) proposed an ANCoaa of 25 meq/m^3 as a criterion to protect aquatic biota. Base-cation surplus (adjusted for organic acid like ANCoaa) values of <0 indicate that acid neutralization in a watershed is not sufficient to buffer acidic deposition, and toxic inorganic aluminum is mobilized (Baldigo et al. 2009). Waterbodies with a negative base-cation surplus are considered acidified at the time of sampling (Baldigo et al. 2009).

The steps used for the Project assessment to predict change in pH and ANCoaa are described as follows:

Step 1:

The relationship between measured pH and calculated ANCoaa was derived from an inverse hyperbolic sine function according to a modified method described by Small and Sutton (1986) shown in Equation 7.

Equation 7

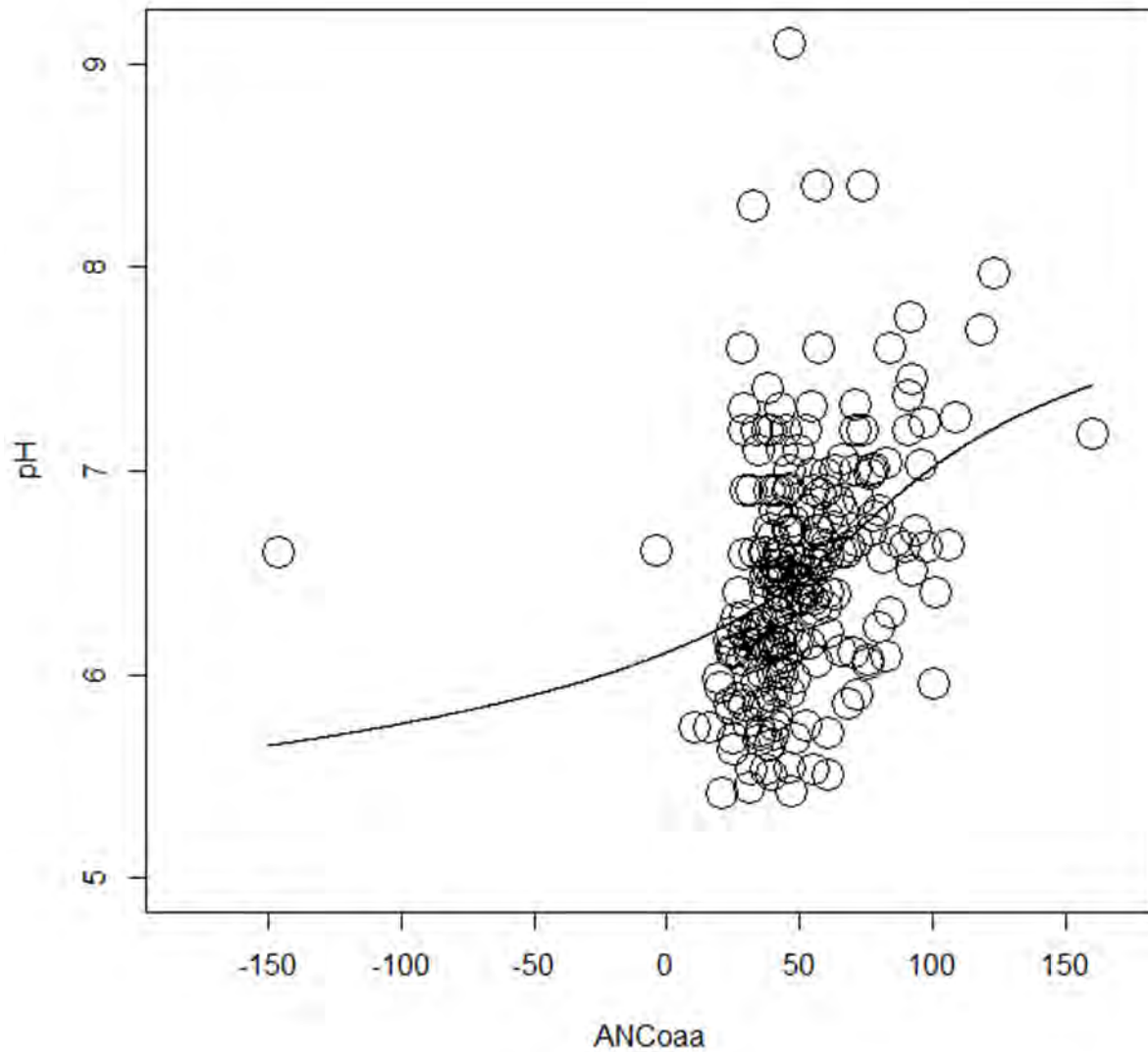
$$pH = a + \frac{1}{\ln(10)} \operatorname{arcsinh} \left[\frac{(ANCoaa - d)}{c} \right]$$

Where:

- ANCoaa = organic acid adjusted acid neutralizing capacity (meq/m³)
- pH = Measured in pH unit, which is on a logarithmic scale. The pH is converted from the logarithmic scale before performing any arithmetic operation, then back to the logarithmic scale
- a and c = Parameters related to carbon dioxide saturation
- d = Parameter related to the quantity of weak acid

The values for the parameters (a, c, and d) were estimated using the nonlinear square least squares function in R statistical software (R version 4.2.2) from the nonlinear regression model between measured pH and calculated ANCoaa for streams and the relationship plotted in Figure 2.

Figure 2 Relationship between measured pH and calculated ANCoaa for streams in the RSA (n= 229)



Step 2:

The change in ANCoaa (ΔANCoaa) was estimated using a modified ESSA/Fisheries and Oceans Canada model (ESSA 2013) described in Marmorek et al. (1990) and shown in Equation 8.

Equation 8

$$\Delta\text{ANCoaa} = -1 \times (1 - F) \times (S \text{ and } N_{\text{dep}}) / Q$$

Where:

- F = F-factor (no units) representing cation exchange processes (Section 3.2.1.1)
- S and N_{dep} = The sulphur and nitrogen deposition rates from the deposition modelling for different modelling scenarios (meq/m²/y)
- Q = The annual catchment runoff (m/y)

Step 3:

The predicted or steady state ANCoaa (ANCoaa^∞) for deposition model scenarios was estimated from Equation 9.

Equation 9

$$\text{ANCoaa}^\infty = \text{ANCoaa} + \Delta\text{ANCoaa}$$

Where:

- ANCoaa = The current calculated organic acid adjusted ANC
- ΔANCoaa = The change in organic acid adjusted ANC obtained from Equation 8

Step 4:

The predicted or steady state pH (pH^∞) was estimated from the ANCoaa^∞ for deposition model scenarios (Equation 9) using the relationship described in Equation 7, correcting for the residual from the fit of the curve shown in Figure 2.

Step 5:

Change is the difference in predicted or steady state pH (pH^∞) and predicted or steady state ANCoaa (ANCoaa^∞) between Baseline to Application Case.

ESSA (2014) developed categories of biological concern for each lake they studied, based on potential $\text{CL}_{(A)}$ exceedance and change in pH (Table 5). The biological concern categories were applied to the background data and the predicted data for the streams.

Table 5 Acidification Biological Concern Categories

	$\Delta\text{pH} < 0.3$ units	$\Delta\text{pH} \geq 0.3$ units
CL(A) Not Exceeded	No concern (CL _(A) not exceeded, $\Delta\text{pH} < 0.3$ units)	Intermediate concern (CL _(A) not exceeded, $\Delta\text{pH} \geq 0.3$ units)
CL(A) Exceeded	Low concern (CL _(A) exceeded, $\Delta\text{pH} < 0.3$ units)	High concern (CL _(A) exceeded, $\Delta\text{pH} \geq 0.3$ units)

Notes:

ΔpH = change in pH

Source: Adapted from ESSA 2014

3.3 EUTROPHICATION ASSESSMENT

Eutrophication occurs when there is an increase in nutrients (TN and/or P) available to an aquatic ecosystem. The potential for eutrophication (increase in TN) was evaluated using modelled N deposition rates and empirical critical loads from the literature. Background and conservatively predicted TN concentrations were used to calculate background and predicted trophic status after deposition of Project-related N to further assess potential eutrophication effects, using change in trophic status as an indicator.

3.3.1 Empirical Critical Loads

When the modelled depositional rate is ≥ 3 kg/ha/y N deposition isopleth, potential eutrophication may occur with the addition of N from deposition. Provided other conditions are favorable (e.g., temperature, light, and P are not limiting), the addition of N to these streams could potentially result in a change in algal community, increase in algal productivity, and shift from N to P as the limiting nutrient, as described in Bobbink and Hettelingh (2010).

Empirical critical load exceedance (i.e., possible eutrophication effect) is determined when N depositional values exceed critical load ranges from literature (Bobbink and Hettelingh 2010, de Wit and Lindholm 2010, Baron et al. 2011, Convention on Long-range Transboundary Air Pollution [CLRTAP] 2024). Empirical critical loads for N deposition for inland surface waters range from 2 to 10 kg/ha/y N depending on ecosystem type. For permanent oligotrophic waterbodies in temperate and boreal regions, deposition rates of 3 to 6 kg N/ha/y have been found to be reliable empirical critical load estimates (CLRTAP 2024). Empirical critical loads of 5 to 10 kg N/ha/y for permanent dystrophic lakes, ponds, and pools are based on expert judgement (CLRTAP 2024). The 3 kg/ha/y value is consistent with the MOE (2015b) recommended study area boundary, which identifies coastal oligotrophic and dystrophic aquatic systems as sensitive to nitrogen deposition and potential eutrophication.

3.3.2 Background Trophic Status

Eutrophication responses can include a change in trophic state, an increase in primary production associated with increased algal growth and blooms, and a change in community composition. As the algal growth and blooms die off, microbial decomposition of the algae consumes dissolved oxygen, potentially leading to low dissolved oxygen levels and fish kills, habitat deterioration, and loss of biodiversity at all trophic levels (Schindler et al. 2008, Paerl et al. 2014). The potential for a change in trophic status associated with N deposition was assessed.

Stream trophic classifications based on TN concentrations are provided in Table 6. Trophic status was determined using background total N data (i.e., calculated TN and estimated TN described in sections 3.3.2.1 and 3.3.2.2).

Table 6 Stream Trophic State Classification and Associated Average Nutrient Concentrations

Trophic State	Total N (mg/L)
Oligotrophic	<0.7
Mesotrophic	0.7 – 1.5
Eutrophic	>1.5

Sources: Kalff 2002. Limnology: Inland Water Ecosystems based on Dodds et al. 1998

3.3.2.1 Calculated Total Nitrogen

Total N was calculated from the sum of measured total Kjeldahl nitrogen (TKN), nitrate as N, and nitrite as N as shown in Equation 10.

Equation 10

$$\text{Calculated TN} = \text{TKN} + \text{NO}_3 + \text{NO}_2$$

Where:

- TKN = consists of organic nitrogen and total ammonia as N (mg/L)
- NO₃ = nitrate as N (mg/L)
- NO₂ = nitrite as N (mg/L)

A total of 32 calculated TN concentrations were derived from measured TKN, nitrate as N, and nitrite as N using the data from 9 samples collected at SW-01, 11 samples collected at SW-02 and 12 samples collected at SW-07. TKN, nitrate as N, and nitrite as N were not measured at SW-08.

3.3.2.2 Estimated Total Nitrogen

Because calculated TN was limited to 32 samples from three stream sites (SW-01, SW-02 and SW-07), TN was estimated from nitrate as N to provide annual and seasonal averages at the four stream sites. First, estimated TN was derived from an ordinary least square linear model between calculated TN and nitrate measured as N as shown Figure 3. Results from the ordinary least square linear model showed that nitrate as N was positively ($P < 0.001$, $n = 32$ [i.e., sample size]) related to calculated TN and explained 92 % ($r^2 = 0.92$ [i.e., coefficient of determination]) of the variability in calculated TN. Second, the ordinary least square linear model was used to obtain long-term estimated TN for the four streams (i.e., annual and season averages of background estimated TN for assessment) from nitrate as N dataset using Equation 11.

Equation 11

$$\text{Estimated TN} = 1.007326 \times \text{NO}_3 + 0.0571$$

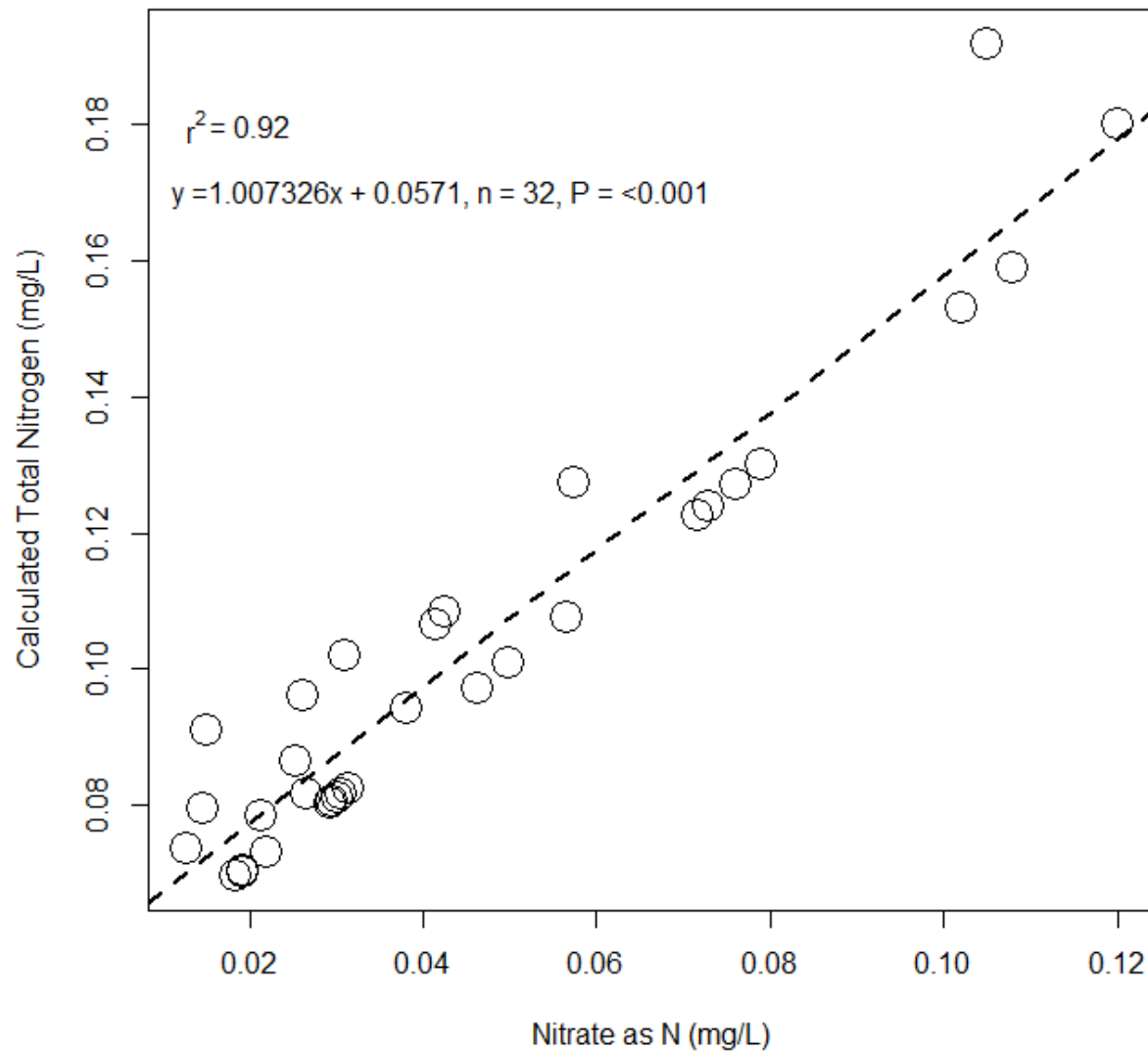
Where:

- Estimated TN = estimated total nitrogen (mg/L)
- NO_3 = nitrate as N (mg/L) measured consistently at the four streams
- Slope = 1.007326, a positive slope
- Intercept= 0.0571, the point at which the regression line crosses the vertical axis

Trophic status was determined from the background calculated TN and estimated TN. Background TN consists of individual data for SW-01, SW-02 and SW-07 as well as estimated TN for the four stream sites that consist of annual average concentrations (minimum of five monthly samples to maximum of multiple 12 monthly samples), summer representing the growing season average concentration (late June to late September) and fall averages (late September to December).

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Figure 3 Relationship Between Calculated Total Nitrogen and Measured Nitrate as N from Woodfibre Creek and Mill Creek, 2022 - 2025



3.3.3 Background Limiting Nutrient

To assess whether the increase in TN will have an influence on nutrient limitation in the streams, the ratio of estimated TN to soluble reactive phosphorus (SRP) and estimated TN to total phosphorus (TP) were calculated using available data for stream sites. SRP was measured on five occasions at SW-02 and three occasions at SW-07 while TP was measured on eight occasions at SW-01 and once at SW-02. Both SRP and TP are assumed to not change due to the Project.

Whether N or P or both is limiting is dependent on the concentration of TN, TP and SRP and the TN:TP and TN:SRP ratios. A TN:TP/SRP mass ratio <9 is indicative of N limitation, a TN:TP/SRP mass ratio >22.5 is indicative of P limitation, and a TN:TP/SRP mass ratio >9 and <22.5 is indicative of co-limitation by N and P (Guildford and Hecky 2000). A shift in the limiting nutrient is a favorable condition for predominance of cyanobacteria, of which some species produce taste and odor compounds and harmful cyanotoxins (Downing et al. 2001, Schindler et al. 2008, Dolman et al. 2012, Paerl et al. 2014).

3.3.4 Predicted Total Nitrogen

Predicted Project-related N deposition was used to conservatively estimate the potential increase in TN in streams and the potential change in trophic status due to N deposition. As discussed in Section 3.2.3, the N deposition data for each stream site was derived from the nearest modelled receptor in the air dispersion modelling. Predicted TN concentrations were compared to the trophic categories in Table 6 and the potential for change in trophic status and limiting nutrient predicted to occur as a result of Project's emissions was noted. The predicted TN in streams was calculated using Equation 12.

Equation 12

$$\text{Predicted TN} = \text{Baseline TN} + \text{Project TN}$$

Where:

- Background TN (as N) (mg/L or grams per cubic metre [g/m³]) = individual calculated total N or annual or seasonal average of estimated total N (mg/L or g/m³)
- Project TN (mg/L or g/m³) = N_{dep} (deposition flux of nitrogen [as N]) (grams per square metre per year [g/m²/y]) / Q (m/y)

Assumptions and limitations associated with using the predicted increase in TN due to N deposition approach are:

- The assessment assumes 100% of N deposited in a catchment is mobilized to surface water and does not recognize the role of vegetation and soil in taking up the N (Henrikson and Posch 2001, Sutton et al. 2014, Gurmesa et al. 2022).
- Ecosystem processes (i.e., nutrient cycling) that could influence N in the calculation are not accounted for.
- Project activities will not interact with or change the regular stream processes.
- Background water chemistry data used for this evaluation captured both terrestrial watershed processes and aquatic ecosystem processes.

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- An increase in the flux of N will eventually lead to a new steady state in the waterbody at the higher concentration without considering the roles of water residence time and the size of the aquatic systems.
- The assessment focuses on N inputs and assumes N is the limiting nutrient for productivity and algal growth. Phosphorous is also a limiting nutrient for aquatic systems and is not predicted to change as a result of Project activities.

In summary, the predicted TN was then used to determine whether there is a change in nutrient status of the stream sites associated with the Project as described in Section 3.3.2. The predicted TN was also used to determine whether there is a change in limiting nutrient in the stream sites associated with the Project as described in Section 3.3.3, with the assumption that both SRP and TP will remain unchanged from background levels and are not associated with the Project.

4.0 RESULTS

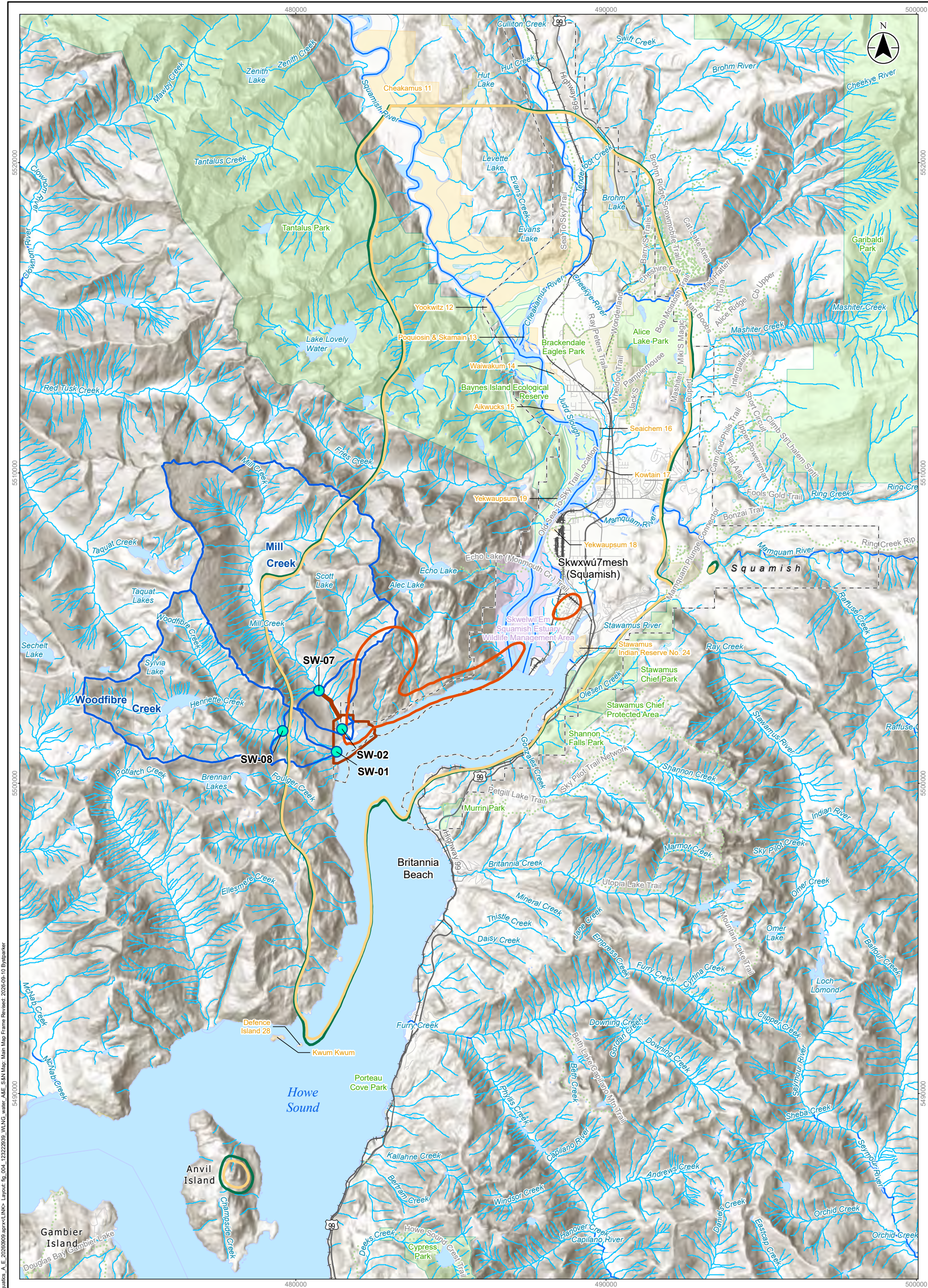
Results for acidification and eutrophication assessments are presented in this section with detailed results presented in the appendices as follows:

- Appendix A - predicted N and S+N deposition rates for the stream sites
- Appendix B.1- individual $CL_{(A)}$ and acid sensitivity classification
- Appendix B.2- individual $CL_{(A)}$ exceedances
- Appendix B.3- individual predicted changes in pH and ANCoaa
- Appendix C.1- individual predicted changes in trophic status
- Appendix C.2- predicted nutrient limitations
- Appendix D - laboratory data

4.1 AIR QUALITY MODELLING

Predicted N and S+N deposition rates for the stream sites are presented in Appendix A. As discussed in Section 3.2.3 and 3.3.4, the deposition data for each stream site were derived from the nearest modelled receptor in the air dispersion modelling. Distances between the stream sites and the nearest receptor range from 7.4 m to 31.4 m and are indicated in Appendix A.

Figure 4 illustrates the 100 eq/ha/y S+N deposition isopleth for the Project-Alone Case, Application Case, and Cumulative Case. Figure 5 illustrates the 3 kg/ha/y N deposition isopleths for the Application Case and Cumulative Case; the Project-Alone Case is not included as the maximum N deposition for the Project-Alone Case is less than 3 kg/ha/y (1.8 kg/ha/y). The large increase in isopleth size when the Project-Alone Cases are compared to the Application and Cumulative Cases can be explained by the addition of Baseline to these modelling scenarios. The background deposition levels of N and S+N represented by Baseline far exceed the amount of deposition predicted from the Project.

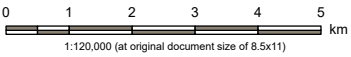


Notes
1. Coordinate System: NAD 1983 BC Environment Albers
2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
Esri, NASA, NSA, USGS

- Highway
- Road
- Local Street
- Resource Road
- Railway
- Watercourse
- Waterbody
- Indian Reserve
- Recreation Reserve/Site
- Provincial Park, Ecological Reserve, or Protected Area
- Wildlife Management Area
- Municipal Boundary

- Freshwater Atlas Stream Network**
- Stream - Main Flow
 - Stream - Secondary Flow
 - River Skeleton - Main Flow
 - River Skeleton - Secondary Flow

- Water Quality Monitoring Sites
- WLNG Watershed and Sub-watershed Boundaries
- Certified Project Area
- Predicted S+N Deposition (100 eq/ha/y)**
- Project-alone Case
- Application Case
- Cumulative Case

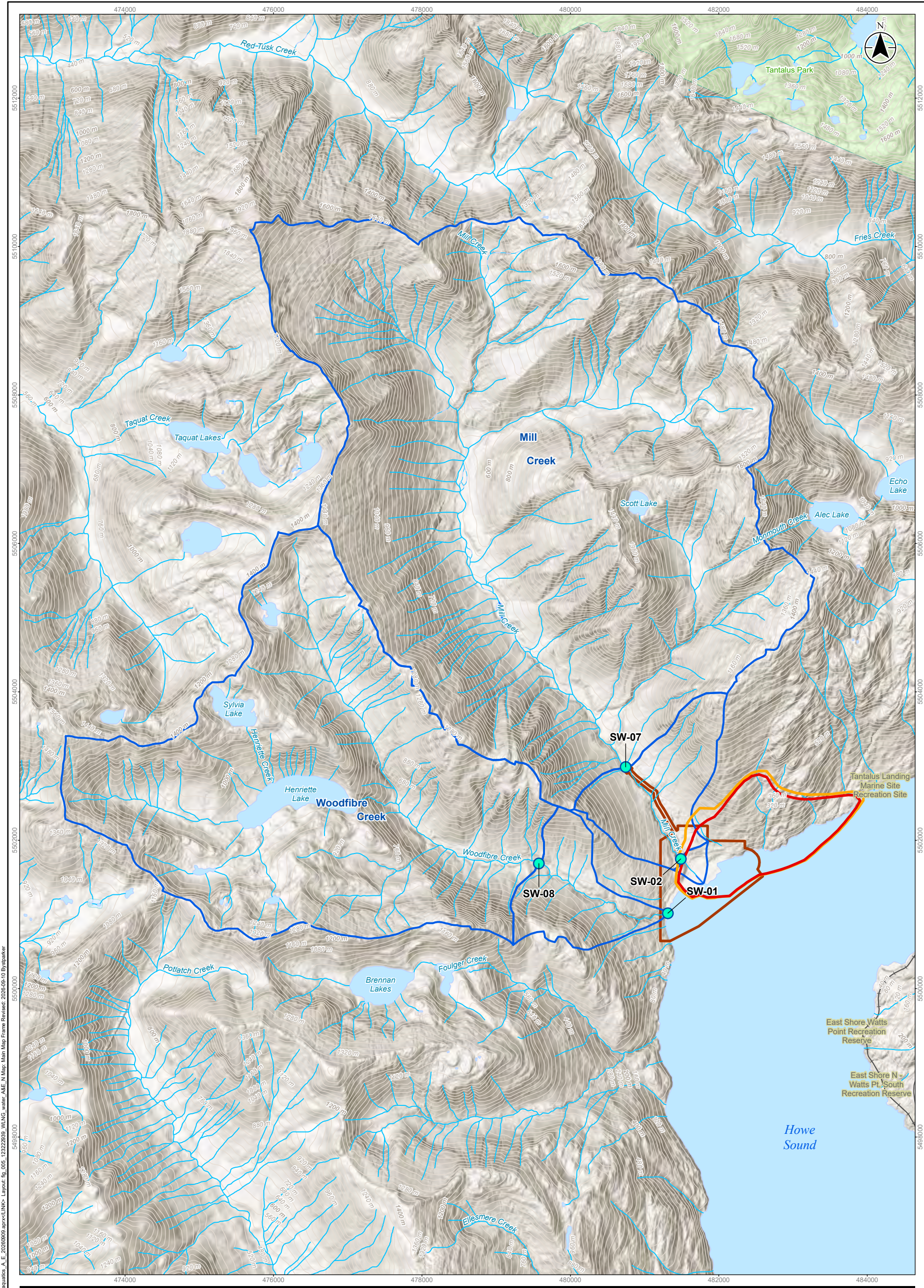


Project Location: Project Number: 123222939
Prepared by PKASIANCHUK on 20260727
Requested by MPENNER on 20260527
Checked by SPARKER on 20260603

Client/Project/Report
Woodfibre LNG
Woodfibre Liquefied Natural Gas Project
Surface Water Acidification and Eutrophication Assessment
Technical Data Report
Figure No.
4

Title
Predicted S+N Deposition in the Project-Alone, Application, and Cumulative Cases

Disclaimer: This document has been prepared based on information provided by third parties as cited in the Notes section. Stantec has not verified the accuracy, timeliness and/or completeness of this information and is not responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy, timeliness, and completeness of the data. The recipient releases Stantec, its affiliates, officers, employees, consultants, and agents, from any and all claims arising in any way from its use of, or reliance upon, the content contained herein.



Notes

1. Coordinate System: NAD 1983 BC Environment Albers
2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
Esri, NASA, NSA, USGS, FEMA

— Highway
— Topographic Contour
— Railway
— Watercourse
— Waterbody
— Wetland
— Recreation Reserve/Site
— Provincial Park, Ecological Reserve, or Protected Area

Freshwater Atlas Stream Network

— Stream - Main Flow
— Stream - Secondary Flow
— River Skeleton - Main Flow
— River Skeleton - Secondary Flow

● Water Quality Monitoring Sites
□ WLNG Watershed and Sub-watershed Boundaries
□ Certified Project Area

Predicted Nitrogen Deposition (3kg/ha/yr)

□ Application Case
□ Cumulative Case

NOTE:
Project-Alone Case isopleths are not shown on the figure, as the maximum N deposition for the Project-Alone Case is less than 3 kg/ha/yr (1.8 kg/ha/yr)

0 500 1,000 1,500 2,000
1:50,000 (at original document size of 8.5x11)
m

Stantec **Woodfibre LNG**

Project Location: Project Number: 123222939
Prepared by PKASIANCHUK on 20260611
Requested by MPENNER on 20260527
Checked by SPARKER on 20260603

Client/Project/Report
Woodfibre LNG
Woodfibre Liquefied Natural Gas Project
Surface Water Acidification and Eutrophication Assessment
Technical Data Report
Figure No.
5
Title
Predicted N Deposition in the Application and Cumulative Cases

Disclaimer: This document has been prepared based on information provided by third parties as cited in the Notes section. Stantec has not verified the accuracy, timeliness and/or completeness of this information and is not responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy, timeliness, and completeness of the data. The recipient releases Stantec, its affiliates, officers, employees, consultants, and agents, from any and all claims arising in any way from its use of, or reliance upon, the content contained herein.

4.2 ANNUAL CATCHMENT RUNOFF

Catchment areas and annual catchment runoff are summarized in Table 7. These values were used in the acidification and eutrophication assessments.

Table 7 Catchment Area and Mean Annual Catchment Runoff for Streams Used in the Acidification and Eutrophication Assessments

Site ID	Waterbody Name	Catchment Area (km ²)	Mean Annual Catchment Runoff (Q [m/y]) ^a
SW-01	Woodfibre Creek	21.86	3.72
SW-02	Mill Creek	40.68	3.37
SW-07	Mill Creek	38.20	3.37
SW-08	Woodfibre Creek	19.90	3.72

Notes:

^a Knight Piésold Ltd. 2025

4.3 ACIDIFICATION ASSESSMENT

The acidification assessment was conducted using the stream background data collected between February 2022 and May 2025 along with predicted S+N deposition rates from the air quality dispersion modelling (Section 4.1) and Q (Section 4.2). Detailed results are presented in Appendix B.

4.3.1 Acid Sensitivity Classification

CL_(A) estimates (annual or seasonal average) for background were calculated and used to assess acid sensitivity (Table 11) based on the classifications summarized in Table 4. Detailed results of individual sampling events are presented in Appendix B.1. A summary of the results is as follows:

- SW-01 CL(A) estimates ranged from 13 meq/m²/y to 228 meq/m²/y and were classified as
 - Sensitive to acid inputs in the summer of 2022 (35 meq/m²/y)
 - Low sensitivity to acid inputs in 2024 (67 meq/m²/y) and in summer (84 meq/m²/y) and fall (89 meq/m²/y) of 2024
 - Highly sensitive to acid inputs in 2025 (13 meq/m²/y)
 - Very low sensitivity to acid inputs for the remaining annual and seasonal averages of CL(A)
- SW-02 CL(A) was classified as having very low sensitivity to acid inputs for annual, summer, and fall averages (146 meq/m²/y to 384 meq/m²/y)
- SW-07 was classified as having very low sensitivity to acid inputs except for 2025 with low sensitivity to acid inputs (99 meq/m²/y), with a range from 99 to 324 meq/m²/y
- SW-08 was classified as having low sensitivity to acid inputs in 2024 (73 meq/m²/y) and moderately sensitive to acid inputs in 2024 (59 meq/m²/y) and summer of 2024 (53 meq/m²/y)

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Table 8 Background Acid Sensitivity Based on Critical Load of Acidity Values

Site ID	Waterbody Name	Sampling Period	Number of Samples	Catchment Runoff (Q [m/y])	Base Cation (BC* ₀ [meq/m ² /y])	Critical Load (CL _(A)) and Acid Sensitivity Classification (meq/m ² /y)	
SW-01	Woodfibre Creek	Summer 2022 ^a	4	3.72	49	35	Sensitive
SW-01	Woodfibre Creek	Fall 2022 ^b	3	3.72	101	228	Very Low Sensitivity
SW-01	Woodfibre Creek	Annual 2022	10	3.72	71	114	Very Low Sensitivity
SW-01	Woodfibre Creek	Summer 2023 ^{c1}	2	3.72	72	120	Very Low Sensitivity
SW-01	Woodfibre Creek	Fall 2023 ^d	2	3.72	76	132	Very Low Sensitivity
SW-01	Woodfibre Creek	Annual 2023	9	3.72	70	110	Very Low Sensitivity
SW-01	Woodfibre Creek	Summer 2024 ^{e1}	6	3.72	63	84	Low Sensitivity
SW-01	Woodfibre Creek	Fall 2024 ^{f1}	13	3.72	64	89	Low Sensitivity
SW-01	Woodfibre Creek	Annual 2024	33	3.72	58	67	Low Sensitivity
SW-01	Woodfibre Creek	Annual 2025	16	3.72	43	13	Highly Sensitive
SW-02	Mill Creek	Summer 2022 ^a	4	3.37	83	146	Very Low Sensitivity
SW-02	Mill Creek	Fall 2022 ^b	3	3.37	137	327	Very Low Sensitivity
SW-02	Mill Creek	Annual 2022	10	3.37	103	211	Very Low Sensitivity
SW-02	Mill Creek	Summer 2023 ^{c2}	1	3.37	154	384	Very Low Sensitivity
SW-02	Mill Creek	Fall 2023 ^d	2	3.37	119	265	Very Low Sensitivity
SW-02	Mill Creek	Annual 2023	8	3.37	107	226	Very Low Sensitivity
SW-02	Mill Creek	Summer 2024 ^{e2}	6	3.37	106	223	Very Low Sensitivity
SW-02	Mill Creek	Fall 2024 ^{f2}	13	3.37	106	222	Very Low Sensitivity
SW-02	Mill Creek	Annual 2024	32	3.37	93	180	Very Low Sensitivity
SW-02	Mill Creek	Annual 2025	16	3.37	88	160	Very Low Sensitivity
SW-07	Mill Creek	Summer 2023 ^{c1}	2	3.37	137	325	Very Low Sensitivity
SW-07	Mill Creek	Fall 2023 ^d	2	3.37	98	194	Very Low Sensitivity
SW-07	Mill Creek	Annual 2023	4	3.37	117	260	Very Low Sensitivity
SW-07	Mill Creek	Summer 2024 ^{e3}	6	3.37	95	186	Very Low Sensitivity

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October 20, 2026

Site ID	Waterbody Name	Sampling Period	Number of Samples	Catchment Runoff (Q [m/y])	Base Cation (BC* ₀ [meq/m ² /y])	Critical Load (CL _(A)) and Acid Sensitivity Classification (meq/m ² /y)	
SW-07	Mill Creek	Fall 2024 ^{f3}	12	3.37	74	115	Very Low Sensitivity
SW-07	Mill Creek	Annual 2024	31	3.37	76	122	Very Low Sensitivity
SW-07	Mill Creek	Annual 2025	16	3.37	69	99	Low Sensitivity
SW-08	Woodfibre Creek	Summer 2024 ^{e4}	3	3.72	56	59	Moderately Sensitive
SW-08	Woodfibre Creek	Fall 2024 ^{f4}	5	3.72	60	73	Low Sensitivity
SW-08	Woodfibre Creek	Annual 2024	14	3.72	54	53	Moderately Sensitive

Notes:

BC*₀ and CL_(A) values are the average value from the number of samples

^a June 22, July 14, August 18, and September 15, 2022

^b October 13, November 9, and December 6, 2022

^{c1} August 25 and September 20, 2023

^{c2} August 25, 2023

^d November 16, December 13, 2023

^{e1} June 26, July 18 & 31, August 22 & 27, and September 19, 2024

^{e2} June 27, July 19 & 31, August 23 & 27, and September 20, 2024

^{e3} June 26, July 19 & 31, August 23 & 27, and September 20, 2024

^{e4} July 18, August 22, and September 19, 2024

^{f1} September 28, October 3, 12, 22, 24, 26 & 31, November 7, 12, 14 & 19, and December 6 & 19, 2024

^{f2} September 29, October 4, 12, 22 & 25 (twice), November 1, 8, 15, 16 & 20, and December 8 & 19, 2024

^{f3} September 29, October 3, 22 & 25 (twice), November 1, 8, 15, 16 & 20, and December 8 & 19, 2024

^{f4} October 24 & 31, and November 7, 14 & 19, 2024

Acid sensitivity classifications are based on critical load values in the following ranges:

	Acidic (< 0 meq/m ² /y)
	Highly sensitive (0 to 20 meq/m ² /y)
	Sensitive (20 to 40 meq/m ² /y)
	Moderately Sensitive (40 to 60 meq/m ² /y)
	Low sensitivity (60 to 100 meq/m ² /y)
	Very low sensitivity (> 100 meq/m ² /y)

4.3.2 Critical Load Exceedance Assessment

CL_(A) exceedance (EX_(A)) values (annual or seasonal average) were calculated for the four deposition modelling scenarios (Baseline, Project-Alone Case, Application Case, and Cumulative Case). Results are presented with potential exceedances flagged in Table 9. Detailed results of individual sampling events are provided in Table 9 and are summarized as follows:

- CL_(A) exceedances were predicted for SW-01 in 2025 for Application Case and Cumulative Case. Predicted SW-01 CL_(A) exceedance in 2025 is consistent with the highly sensitive to acid inputs classification shown in Table 11.
 - Further investigation revealed the CL_(A) exceedances in 2025 was likely driven by a single event with a negative CL_(A) (-693 meq/m²/y) that occurred on January 24, 2025 at SW-01 (Appendix B.2). The exceptional observation on January 24, 2025 at SW-01 could be considered an episodic event related to sea spray influence on the ion composition of sodium, magnesium, sulphate and chloride (Wetzel et al. 2024). For example, chloride was about ten-fold higher on January 24, 2025 (10.4 mg/L) compared to concentrations observed on December 19, 2024 (0.95 mg/L) and February 20, 2025 (0.53 mg/L) at SW-01.
- There were no predicted CL_(A) exceedances for the other stream sites and the rest of the sampling periods.

Table 9 Predicted Critical Load Exceedances for Air Quality Modelling Scenarios

Site ID	Waterbody Name	Sampling Depth	Sample Period	Number of Samples	Watershed Area (km²)	Catchment Runoff (m/y)	BC ₀ (µeq/L)	Critical Load using 40 ueq/L for ANC _{limit} (meq/m²/y)	Baseline Exceedance (meq/m²/y)	Project-Alone Case Exceedance (meq/m²/y)	Application Case Exceedance (meq/m²/y)	Cumulative Case Exceedance (meq/m²/y)
SW-01	Woodfibre Creek	Surface	Summer 2022 ^a	4	21.86	3.72	49.37	34.85	-27.00	-29.40	-15.29	-14.92
SW-01	Woodfibre Creek	Surface	Fall 2022 ^b	3	21.86	3.72	101.29	227.99	-220.14	-222.53	-208.43	-208.06
SW-01	Woodfibre Creek	Surface	Annual 2022	10	21.86	3.72	70.62	113.92	-106.07	-108.47	-94.36	-93.99
SW-01	Woodfibre Creek	Surface	Summer 2023 ^{c1}	2	21.86	3.72	72.34	120.30	-112.45	-114.84	-100.74	-100.37
SW-01	Woodfibre Creek	Surface	Fall 2023 ^d	2	21.86	3.72	75.57	132.32	-124.47	-126.87	-112.76	-112.39
SW-01	Woodfibre Creek	Surface	Annual 2023	9	21.86	3.72	69.59	110.06	-102.21	-104.61	-90.50	-90.13
SW-01	Woodfibre Creek	Surface	Summer 2024 ^{e1}	6	21.86	3.72	62.69	84.39	-76.54	-78.94	-64.83	-64.46
SW-01	Woodfibre Creek	Surface	Fall 2024 ^{f1}	13	21.86	3.72	64.00	89.28	-81.43	-83.83	-69.72	-69.35
SW-01	Woodfibre Creek	Surface	Annual 2024	33	21.86	3.72	57.94	66.74	-58.88	-61.28	-47.18	-46.80
SW-01	Woodfibre Creek	Surface	Annual 2025	16	21.86	3.72	43.43	12.75	-4.90	-7.29	6.81	7.18
SW-02	Mill Creek	Surface	Summer 2022 ^a	4	40.68	3.37	83.27	145.81	-137.96	-139.87	-119.10	-118.29
SW-02	Mill Creek	Surface	Fall 2022 ^b	3	40.68	3.37	136.96	326.76	-318.91	-320.82	-300.05	-299.24
SW-02	Mill Creek	Surface	Annual 2022	10	40.68	3.37	102.68	211.25	-203.39	-205.31	-184.54	-183.73
SW-02	Mill Creek	Surface	Summer 2023 ^{c2}	1	40.68	3.37	153.85	383.67	-375.82	-377.73	-356.96	-356.15
SW-02	Mill Creek	Surface	Fall 2023 ^d	2	40.68	3.37	118.54	264.68	-256.82	-258.74	-237.96	-237.16
SW-02	Mill Creek	Surface	Annual 2023	8	40.68	3.37	107.19	226.43	-218.58	-220.49	-199.72	-198.91
SW-02	Mill Creek	Surface	Summer 2024 ^{e2}	6	40.68	3.37	106.20	223.08	-215.23	-217.15	-196.37	-195.57
SW-02	Mill Creek	Surface	Fall 2024 ^{f2}	13	40.68	3.37	105.80	221.75	-213.90	-215.82	-195.04	-194.24
SW-02	Mill Creek	Surface	Annual 2024	32	40.68	3.37	93.43	180.05	-172.20	-174.11	-153.34	-152.53
SW-02	Mill Creek	Surface	Annual 2025	16	40.68	3.37	87.55	160.24	-152.39	-154.31	-133.53	-132.73
SW-07	Mill Creek	Surface	Summer 2023 ^{c1}	2	38.20	3.37	136.56	325.41	-317.56	-321.63	-308.97	-308.86
SW-07	Mill Creek	Surface	Fall 2023 ^d	2	38.20	3.37	97.56	193.97	-186.12	-190.20	-177.53	-177.43
SW-07	Mill Creek	Surface	Annual 2023	4	38.20	3.37	117.06	259.69	-251.84	-255.91	-243.25	-243.14
SW-07	Mill Creek	Surface	Summer 2024 ^{e3}	6	38.20	3.37	95.31	186.39	-178.54	-182.62	-169.96	-169.85
SW-07	Mill Creek	Surface	Fall 2024 ^{f3}	12	38.20	3.37	74.14	115.05	-107.20	-111.28	-98.62	-98.51
SW-07	Mill Creek	Surface	Annual 2024	31	38.20	3.37	76.14	121.81	-113.95	-118.03	-105.37	-105.26
SW-07	Mill Creek	Surface	Annual 2025	16	38.20	3.37	69.44	99.23	-91.38	-95.45	-82.79	-82.68
SW-08	Woodfibre Creek	Surface	Summer 2024 ^{e4}	3	19.90	3.72	55.94	59.29	-51.43	-58.56	-50.09	-50.06

Site ID	Waterbody Name	Sampling Depth	Sample Period	Number of Samples	Watershed Area (km ²)	Catchment Runoff (m/y)	BC ₀ (µeq/L)	Critical Load using 40 ueq/L for ANC _{limit} (meq/m ² /y)	Baseline Exceedance (meq/m ² /y)	Project-Alone Case Exceedance (meq/m ² /y)	Application Case Exceedance (meq/m ² /y)	Cumulative Case Exceedance (meq/m ² /y)
SW-08	Woodfibre Creek	Surface	Fall 2024 ^{f4}	5	19.90	3.72	59.68	73.21	-65.35	-72.48	-64.01	-63.98
SW-08	Woodfibre Creek	Surface	Annual 2024	14	19.90	3.72	54.30	53.21	-45.36	-52.48	-44.02	-43.99

Notes:
Grey highlights indicate positive acid input exceedance (EX_a) values. A positive EX_a value indicates that inputs of S and N are predicted to exceed the waterbody's ability to buffer increases in acidity, with the risk of the pH of the waterbody declining below the ANC_{limit} and no longer being protective of aquatic biota.
BC*₀ and CL_(A) values are the average value from the number of samples
The superscript letters indicate the sampling date below:

Annual 2022: Monthly sample from Feb to Apr, Jun to Dec for SW-01 and SW-02
Annual 2023: Monthly sample from Jan to May, Aug to Sep, Nov to Dec for SW-01, Jan to May, Aug, Nov to Dec for SW-02 and Aug to Sep, Nov to Dec for SW-07
Annual 2024: Some multiple monthly samples from Jan to Dec for SW-01, SW-02 and SW-07 and Apr to Nov for SW-08
Annual 2025: Some multiple monthly samples from Jan to May for SW-01, SW-02 and SW-07

^a June 22, July 14, August 18, and September 15, 2022
^b October 13, November 9, and December 6, 2022
^{c1} August 25 and September 20, 2023
^{c2} August 25, 2023
^d November 16, December 13, 2023
^{e1} June 26, July 18 & 31, August 22 & 27, and September 19, 2024
^{e2} June 27, July 19 & 31, August 23 & 27, and September 20, 2024
^{e3} June 26, July 19 & 31, August 23 & 27, and September 20, 2024
^{e4} July 18, August 22, and September 19, 2024
^{f1} September 28, October 3, 12, 22, 24, 26 & 31, November 7, 12, 14 & 19, and December 6 & 19, 2024
^{f2} September 29, October 4, 12, 22 & 25 (twice), November 1, 8, 15, 16 & 20, and December 8 & 19, 2024
^{f3} September 29, October 3, 22 & 25 (twice), November 1, 8, 15, 16 & 20, and December 8 & 19, 2024
^{f4} October 24 & 31, and November 7, 14 & 19, 2024

4.3.3 Predicted Change in pH and ANCoaa

Predicted changes in pH and ANCoaa (annual or seasonal average) were assessed for Baseline, Project-Alone, Application Case and Cumulative Case modelling scenarios and biological concern categories were assigned according to Table 5, with results shown in Table 10. Detailed results of individual sampling events are presented in B.3. Results are as follows:

- There were no predicted changes in pH >0.3 pH units (protective threshold by ESSA 2014) nor >0.4 pH units (threshold decrease related to acidification by Fölster et al. 2007) from background to the four model scenarios (Baseline, Project-Alone Case, Application Case, and Cumulative Case) for the stream sites. Predicted changes in pH ranged from 0.00 pH units to -0.01 pH units from background to Baseline and Project-Alone Case and 0.00 pH units to -0.02 pH units from background to Application Case and Cumulative Case for the stream sites.
- Predicted changes in ANCoaa from background to Baseline, Project-Alone Case, Application Case, and Cumulative Case for the stream sites were negligible (i.e., a maximum decrease of -2 meq/m³).

The stream sites were further placed into biological concern categories for acidification based on CL_(A) exceedances and predicted change in pH according to ESSA (2014) (Table 5). Results are as follows:

- SW-1 in 2025 was classified as having a “low biological concern” to acidification due to CL_(A) exceedance and no predicted change in pH >0.3 pH units from background to Application Case and background to Cumulative Case.
 - The classification of SW-01 in 2025 as having a “low biological concern” to acidification is related to a sea spray event on January 24, 2025 that affected ionic composition, thereby reducing CL_(A) and ANCoaa, but had no influence on pH.

Other stream sites and the rest of the sampling periods were classified as having “no biological concern” to acidification based on no CL_(A) exceedances and no predicted change in pH >0.3 pH units from Background to Application Case.

Table 10 Background and Predicted Change in pH and ANCoaa for Air Modelling Scenarios

Site ID	Background				Baseline			Project-Alone Case			Application Case			Cumulative Case			Change from Background to Baseline			Change from Background to Project-Alone Case			Change from Background Case to Application Case			Change from Background Case to Cumulative Case		
	Sampling Period	CL _(A)	Calculated ANCoaa	Field pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category
		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³	pH	meq/m ² /y	meq/m ³	pH	meq/m ² /y	meq/m ³	pH	meq/m ² /y	meq/m ³	pH	meq/m ³			meq/m ³			meq/m ³			meq/m ³		
SW-01	Summer 2022 ^a	35	31	6.15	-27	31	6.15	-29	31	6.15	-15	30	6.14	-15	30	6.14	0	0.00	No concern	0	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-01	Fall 2022 ^b	228	82	6.57	-220	82	6.57	-223	82	6.57	-208	82	6.57	-208	82	6.57	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-01	Annual 2022	114	51	6.37	-106	51	6.37	-108	51	6.37	-94	50	6.36	-94	50	6.36	0	0.00	No concern	0	0.00	No concern	-1	0.00	No concern	-1	0.00	No concern
SW-01	Summer 2023 ^{c1}	120	47	6.91	-112	47	6.91	-115	47	6.91	-101	46	6.90	-100	46	6.90	0	0.00	No concern	0	-0.01	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	Fall 2023 ^d	132	57	6.56	-124	56	6.56	-127	56	6.56	-113	56	6.56	-112	56	6.55	0	0.00	No concern	0	-0.01	No concern	0	-0.01	No concern	0	-0.01	No concern
SW-01	Annual 2023	110	44	6.00	-102	44	5.99	-105	43	5.99	-91	43	5.99	-90	43	5.99	0	-0.01	No concern	0	-0.01	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	Summer 2024 ^{e1}	84	48	6.48	-77	48	6.48	-79	48	6.48	-65	47	6.47	-64	47	6.47	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	Fall 2024 ^{f1}	89	45	6.09	-81	45	6.09	-84	45	6.09	-70	44	6.08	-69	44	6.08	0	0.00	No concern	0	0.00	No concern	-1	0.00	No concern	-1	0.00	No concern
SW-01	Annual 2024	67	40	6.17	-59	40	6.17	-61	40	6.17	-47	39	6.16	-47	39	6.16	0	0.00	No concern	0	-0.01	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	Annual 2025	13	25	6.20	-5	25	6.20	-7	24	6.20	7	23	6.19	7	23	6.19	0	0.00	No concern	-1	-0.01	No concern	-2	-0.02	Low concern	-2	-0.02	Low concern
SW-02	Summer 2022 ^a	146	57	6.53	-138	57	6.53	-140	57	6.53	-119	57	6.53	-118	57	6.53	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	Fall 2022 ^b	327	98	7.23	-319	98	7.23	-321	98	7.23	-300	98	7.23	-299	98	7.23	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	Annual 2022	211	72	6.65	-203	72	6.65	-205	72	6.65	-185	72	6.65	-184	72	6.65	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	Summer 2023 ^{c2}	384	109	7.26	-376	109	7.26	-378	109	7.26	-357	109	7.26	-356	109	7.26	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	Fall 2023 ^d	265	86	6.65	-257	86	6.65	-259	86	6.65	-238	86	6.65	-237	86	6.65	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	Annual 2023	226	76	6.05	-219	76	6.05	-220	76	6.05	-200	76	6.05	-199	76	6.05	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	Summer 2024 ^{e2}	223	73	6.86	-215	73	6.86	-217	73	6.86	-196	73	6.86	-196	73	6.86	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	Fall 2024 ^{f2}	222	69	6.62	-214	69	6.62	-216	69	6.62	-195	69	6.62	-194	69	6.62	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	Annual 2024	180	61	6.58	-172	61	6.58	-174	61	6.58	-153	61	6.58	-153	61	6.58	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	Annual 2025	160	56	6.54	-152	56	6.54	-154	56	6.54	-134	56	6.54	-133	56	6.54	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	Summer 2023 ^{c1}	325	98	6.62	-318	98	6.62	-322	98	6.62	-309	98	6.62	-309	98	6.62	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	Fall 2023 ^d	194	68	5.85	-186	68	5.85	-190	68	5.85	-178	68	5.85	-177	68	5.85	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	Annual 2023	260	83	6.09	-252	83	6.09	-256	83	6.09	-243	83	6.09	-243	83	6.09	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	Summer 2024 ^{e3}	186	64	6.39	-179	64	6.39	-183	64	6.39	-170	64	6.39	-170	64	6.39	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	Fall 2024 ^{f3}	115	42	6.30	-107	42	6.30	-111	42	6.30	-99	42	6.30	-99	42	6.30	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	Annual 2024	122	46	6.21	-114	46	6.21	-118	46	6.21	-105	46	6.21	-105	46	6.21	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern

Site ID	Background				Baseline			Project-Alone Case			Application Case			Cumulative Case			Change from Background to Baseline			Change from Background to Project-Alone Case			Change from Background Case to Application Case			Change from Background Case to Cumulative Case		
	Sampling Period	CL _(A)	Calculated ANCoaa	Field pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category
		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y			meq/m ³			meq/m ³			meq/m ³		
SW-07	Annual 2025	99	40	5.99	-91	40	5.99	-95	40	5.99	-83	40	6.00	-83	40	5.99	0	0.00	No concern	0	0.00	No concern	0	0.01	No concern	0	0.00	No concern
SW-08	Summer 2024 ^{a4}	59	42	5.92	-51	42	5.92	-59	42	5.92	-50	41	5.91	-50	41	5.91	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	Fall 2024 ^{f4}	73	39	5.89	-65	39	5.89	-72	39	5.89	-64	39	5.89	-64	39	5.89	0	0.00	No concern	0	0.00	No concern	-1	0.00	No concern	-1	0.00	No concern
SW-08	Annual 2024	53	37	5.85	-45	37	5.85	-52	37	5.85	-44	36	5.84	-44	36	5.84	0	0.00	No concern	0	0.00	No concern	-1	0.00	No concern	-1	0.00	No concern
Notes: CL _(A) - critical load of acidity (milliequivalents per square metre per year [meq/m ² /y]) using an ANC limit of 40 meq/m ³ ; ANCoaa - organic acid adjusted acid neutralizing capacity; Δ= change Grey and bold values indicate CL _(A) Exceedance (i.e., values above zero) Grey and italic values indicate ANCoaa below 20 meq/m ³ Grey, bold and italic values indicated change in pH by ≥ 0.3 pH unit (i.e., decrease in value) Grey when pH < 6.0																												
	High concern (CL _(A) Exceedance and pH ≥ 0.3)																											
	Intermediate concern (No CL _(A) Exceedance and pH ≥ 0.3)																											
	Low concern (CL _(A) Exceedance but no pH ≥ 0.3)																											
	No concern (No CL _(A) Exceedance and no pH ≥ 0.3)																											
Average pH values were calculated following conversion to hydrogen ion concentrations due to the logarithmic scale pH, ANCoaa and CL _(A) are the average values for more than one sample The superscript letters indicate the sampling date below Annual 2022: Monthly sample from Feb to Apr, Jun to Dec for SW-01 and SW-02 Annual 2023: Monthly sample from Jan to May, Aug to Sep, Nov to Dec for SW-01, Jan to May, Aug, Nov to Dec for SW-02 and Aug to Sep, Nov to Dec for SW-07 Annual 2024: Some multiple monthly samples from Jan to Dec for SW-01, SW-02 and SW-07 and Apr to Nov for SW-08 Annual 2025: Some multiple monthly samples from Jan to May for SW-01, SW-02 and SW-07 ^a June 22, July 14, August 18, September 15, 2022 ^b October 13, November 9, December 6, 2022 ^{c1} August 25, September 20, 2023 ^{c2} August 25, 2023 ^d November 16, December 13, 2023 ^{e1} June 26, July 18 & 31, August 22 & 27, September 19, 2024 ^{e2} June 27, July 19 & 31, August 23 & 27, September 20, 2024 ^{e3} June 26, July 19 & 31, August 23 & 27, September 20, 2024 ^{e4} July 18, August 22, September 19, 2024 ^{f1} September 28, October 3, 12, 22, 24, 26 & 31, November 7, 12, 14 & 19, December 6 & 19, 2024 ^{f2} September 29, October 4, 12, 22 & 25 (twice), November 1, 8, 15, 16 & 20, December 8 & 19, 2024 ^{f3} September 29, October 3, 22 & 25 (twice), November 1, 8, 15, 16 & 20, December 8 & 19, 2024 ^{f4} October 24 & 31, November 7, 14 & 19, 2024																												

4.4 EUTROPHICATION ASSESSMENT

The eutrophication assessment was conducted using stream background data collected between August 2023 and May 2025 along with predicted N deposition rates from the air quality dispersion modelling (Section 4.1). Detailed results are presented in Appendix C.

4.4.1 Empirical Critical Loads

To assess eutrophication potential, empirical loads of 2 to 10 kg N/ha/y for soft water oligotrophic systems and 3 to 6 kg N/ha/y for boreal clear water systems were compared to the N depositional values for four model scenarios (Baseline, Project-Alone Case, Application Case, and Cumulative Case) for the nearest modelled receptor to the stream sites (Table 11). Exceedance (i.e., possible eutrophication effect) was determined when N depositional values exceed a specific critical load range (CLRTAP 2024).

The empirical loads of 2 to 10 kg N/ha/y were used because the monitoring sites are classified as very soft water to moderately soft water (1.49 to 79.4 mg/L CaCO₃) and are classified as oligotrophic based on calculated TN concentrations (see Section 4.4.2; Appendix C.1). Additionally, comparison was done with 3 to 6 kg N/ha/y for boreal clear water systems.

Table 11 Predicted Modelled Deposition Rates for Nitrogen for Modelling Scenarios

Site ID	Waterbody Name	Modelled Deposition Rates (N _{dep} as N, kg/ha/y)			
		Baseline	Project-Alone Case	Application Case	Cumulative Case
SW-01	Woodfibre Creek	1.80	0.16	2.40	2.45
SW-02	Mill Creek	1.80	0.13	2.69	2.80
SW-07	Mill Creek	1.80	0.02	2.11	2.12
SW-08	Woodfibre Creek	1.80	0.01	1.86	1.86

The results are as follows:

- Predicted maximum N depositions (i.e., under the four modelled scenarios) for the stream sites were <3 kg/ha/y N deposition isopleth (though SW-02 is within the Cumulative Case 3 kg/ha/y N isopleth) (Figure 5), which the MOE (2015b) recommends as the threshold for assessing potential effects of eutrophication.
 - No expected eutrophication effects in the stream sites are expected because predicted N depositions for all four model scenarios for the stream sites did not exceed the empirical critical load range of 2 to 10 kg N/ha/y for soft water oligotrophic systems nor 3 to 6 kg N/ha/y for boreal clear water systems.
 - Although the Application Case and Cumulative Case of SW-01, SW-02 and SW-07 had N deposition values that were marginally above the lower limit of empirical critical load for soft water oligotrophic systems (2 N/ha/y), no eutrophication effect is expected as the empirical critical load range was not exceeded (CLRTAP 2024).

4.4.2 Predicted Change in Trophic Status

The potential for change in trophic status was used to assess implications of the conservatively predicted change in TN concentrations due to N deposition. Trophic status was assessed using calculated TN (individual sampling event; Table 12) and estimated TN (annual or seasonal average; Table 13) for streams. There is no change in trophic status classification due to Project emissions even with the assumptions of maximum deposition rates over the entire watershed and that 100% of depositional N reaches an assessment site (Table 12, Table 13, and Appendix C.1).

- The stream sites were classified as oligotrophic (i.e., low nutrient; <0.7 mg/L; Kalff 2002) at background (0.070 to 0.192 mg/L for calculated TN and 0.67 to 0.260 mg/L for estimated TN) and under Baseline, Project-Alone Case, Application Case, and Cumulative Case.

4.4.3 Predicted Change in Limiting Nutrient

The limiting nutrient was assessed using limited data of estimated TN to SRP ratio (Table 14) and TN to TP ratio (Table 15) (Appendix C.2). The results are presented in this section to provide some limnological context but are not discussed further due to limited SRP and TP data.

4.4.3.1 Predicted Change in Limiting Nutrient Using TN:SRP

Based on TN:SRP, the background limiting nutrient at SW-02 and SW-07 was similar to the predicted Project-Alone Case while Baseline limiting nutrient at SW-02 and SW-07 was similar to the predicted Application Case and Cumulative case (Table 14). The results are as follows:

- At SW-02, Background and Project-Alone Case - Co-limitation of N and P occurred four times and P limitation occurred once during the five sampling events
- At SW-07, Background and Project-Alone Case - Co-limitation of N and P occurred once and P limitation occurred twice during the three sampling events
- At SW-02, Baseline, Application, and Cumulative Case - P limitation occurred throughout the five sample events
- At SW-07, Baseline, Application, and Cumulative Case - P limitation occurred throughout the three sampling events

4.4.3.2 Predicted Change in Limiting Nutrient Using TN:TP

Based on TN:TP, the background limiting nutrient at SW-01 and SW-02 was similar to the predicted Project Alone-Case while the Baseline limiting nutrient at SW-01 and SW-02 was similar to the predicted Application Case and Cumulative case (Table 15). The results are as follows:

- At SW-01, Background and Project-Alone Case - Co-limitation of N and P occurred three times, P limitation occurred three times, and N limitation occurred twice during the eight sampling events
- At SW-02, Background and Project-Alone Case - Co-limitation of N and P occurred during the one sampling event

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- At SW-01, Baseline, Application Case and Cumulative Case - P limitation occurred five times and co-limitation of N and P occurred three times during the eight sampling events
- At SW-02, Baseline, Application Case and Cumulative Case - P limitation occurred during the one sampling event

Limiting nutrients at background and Project-Alone Case were similar at the stream sites suggesting Project emissions are not predicted to change the status of limiting nutrients. No further discussions and conclusions were drawn from the predicted limiting nutrient eutrophication assessment due to limited SRP and TP data.

Table 12 Background (Calculated Total Nitrogen) and Predicted Trophic Status (for Individual Values) Associated with Baseline, Project-Alone Case, Application Case, and Cumulative Case Maximum Nitrogen

Site ID	Waterbody Name	Sample Depth	Sample Period	Number of Samples	Background	Baseline	Project-Alone Case	Application Case	Cumulative Case
SW-01	Woodfibre Creek	Surface	August 25, 2023	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	September 20, 2023	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	December 19, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	February 20, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	March 27, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	April 24, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	April 29, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	May 08, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	May 22, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	October 25, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	November 01, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	November 08, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	November 15, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	December 19, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	February 20, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	March 27, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	April 24, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	April 29, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	May 08, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	May 22, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	October 25, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	November 01, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	November 08, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	November 15, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	November 20, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	December 19, 2024	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	February 20, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	March 27, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	April 24, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	April 29, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	May 08, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	May 22, 2025	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic

Notes:
The trophic state was determined using calculated total nitrogen (mg/L)
Calculated total nitrogen was the sum of total Kjeldahl (mg/L), nitrate as N (mg/L) and nitrite as N (mg/L)
Trophic Status is colour coded to the following:

Hypereutrophic

Eutrophic

Mesotrophic

Oligotrophic

Table 13 Background (Estimated Total Nitrogen) and Predicted Trophic Status (for Seasonal and Annual Averages) Associated with Baseline, Project-Alone Case, Application Case, and Cumulative Case Maximum Nitrogen Deposition Rates

Site ID	Waterbody Name	Sample Depth	Sample Period	Number of Samples	Background	Baseline	Project-Alone Case	Application Case	Cumulative Case
SW-01	Woodfibre Creek	Surface	Summer 2022 ^a	4	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	Fall 2022 ^b	3	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	Annual 2022	11	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	Summer 2023 ^{c1}	2	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	Fall 2023 ^d	2	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	Annual 2023	9	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	Summer 2024 ^{e1}	6	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	Fall 2024 ^{f1}	13	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	Annual 2024	33	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-01	Woodfibre Creek	Surface	Annual 2025	17	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Summer 2022 ^a	4	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Fall 2022 ^b	3	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Annual 2022	11	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Summer 2023 ^{c2}	1	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Fall 2023 ^d	2	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Annual 2023	8	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Summer 2024 ^{e2}	6	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Fall 2024 ^{f2}	13	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Annual 2024	34	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-02	Mill Creek	Surface	Annual 2025	17	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	Summer 2023 ^{c1}	2	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	Fall 2023 ^d	2	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	Annual 2023	4	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	Summer 2024 ^{e3}	6	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	Fall 2024 ^{f3}	13	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	Annual 2024	33	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-07	Mill Creek	Surface	Annual 2025	17	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-08	Woodfibre Creek	Surface	Summer 2024 ^{e4}	3	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic

Site ID	Waterbody Name	Sample Depth	Sample Period	Number of Samples	Background	Baseline	Project-Alone Case	Application Case	Cumulative Case
SW-08	Woodfibre Creek	Surface	Fall 2024 ^{f4}	5	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic
SW-08	Woodfibre Creek	Surface	Annual 2024	14	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic	Oligotrophic

Notes:
The trophic state was determined using Total nitrogen (mg/L)
Background TN = Estimated TN derived from a predictive model
Estimated TN =1.007326 x Nitrate as N + 0.0571, $r^2 = 0.92$, n = 32, P < 0.001
Predicted TN (Baseline, Project-Alone Case, Application Case and Cumulative Case) = Background estimated TN + Project TN
The superscript letters indicate the sampling date below
Annual 2022: Monthly sample from Feb to Dec for SW-01 and SW-02
Annual 2023: Monthly sample from Jan to May, Aug to Sep, Nov to Dec for SW-01, Jan to May, Aug, Nov to Dec for SW-02 and Aug to Sep, Nov to Dec for SW-07
Annual 2024: Some multiple monthly samples from Jan to Dec for SW-01, SW-02 and SW-07 and Apr to Nov for SW-08
Annual 2025: Some multiple monthly samples from Jan to May for SW-01, SW-02 and SW-07
^a June 22, July 14, August 18, and September 15, 2022
^b October 13, November 9, December 6, 2022
^{c1} August 25 and September 20, 2023
^{c2} August 25, 2023
^d November 16 and December 13, 2023
^{e1} June 26, July 18 & 31, August 22 & 27, and September 19, 2024
^{e2} June 27, July 19 & 31, August 23 & 27, and September 20, 2024
^{e3} June 26, July 19 & 31, August 23 & 27, and September 20, 2024
^{e4} July 18, August 22, and September 19, 2024
^{f1} September 28, October 3, 12, 22, 24, 26 & 31, November 7, 12, 14 & 19, and December 6 & 19, 2024
^{f2} September 29, October 4, 12, 22 & 25 (twice), November 1, 8, 15, 16 & 20, and December 8 & 19, 2024
^{f3} September 29, October 3, 12, 22 & 25 (twice), November 1, 8, 15, 16 & 20, and December 8 & 19, 2024
^{f4} October 24 & 31, and November 7, 14 & 19, 2024

Trophic Status is colour coded to the following:

	Hypereutrophic
	Eutrophic
	Mesotrophic
	Oligotrophic

Table 14 Background and Predicted Limiting Nutrient from TN:SRP Ratios

Site ID	Sample Date	Background	Baseline	Project Alone Case	Application Case	Cumulative Case
SW-02	April 26, 2024	Co-limitation of N and P	P-limited	Co-limitation of N and P	P-limited	P-limited
SW-02	May 03, 2024	Co-limitation of N and P	P-limited	Co-limitation of N and P	P-limited	P-limited
SW-02	May 09, 2024	Co-limitation of N and P	P-limited	Co-limitation of N and P	P-limited	P-limited
SW-02	August 27, 2024	P-limited	P-limited	P-limited	P-limited	P-limited
SW-02	November 08, 2024	Co-limitation of N and P	P-limited	Co-limitation of N and P	P-limited	P-limited
SW-07	February 15, 2024	P-limited	P-limited	P-limited	P-limited	P-limited
SW-07	November 16, 2024	P-limited	P-limited	P-limited	P-limited	P-limited
SW-07	April 02, 2025	Co-limitation of N and P	P-limited	Co-limitation of N and P	P-limited	P-limited
<div>Notes: Background TN = Estimated TN derived from a predictive model Estimated TN =1.007326 x Nitrate as N+0.0571, r² = 0.92, n = 32, P < 0.001 Predicted TN (Baseline, Project-Alone Case, Application Case and Cumulative Case) = Background estimated TN + Project TN Soluble reactive phosphorus (SRP) measured as phosphate (mg/L) assumed not change due to the Project Limiting nutrient threshold from TN:SRP ratio is based on Guildford and Hecky (2000): >22.5 is P-limited, <9 is N-limited and >9 but <22.5 is co-limitation of N and P</div>						

Table 15 Background and Predicted Limiting Nutrient from TN:TP Ratios

Site ID	Sample Date	Background	Baseline	Project Alone Case	Application Case	Cumulative Case
SW-01	August 14, 2018	N-limited	Co-limitation of N and P	N-limited	Co-limitation of N and P	Co-limitation of N and P
SW-01	November 21, 2018	P-limited	P-limited	P-limited	P-limited	P-limited
SW-01	May 03, 2019	Co-limitation of N and P	P-limited	Co-limitation of N and P	P-limited	P-limited
SW-01	May 27, 2019	P-limited	P-limited	P-limited	P-limited	P-limited
SW-01	September 26, 2019	N-limited	Co-limitation of N and P	N-limited	Co-limitation of N and P	Co-limitation of N and P
SW-01	December 27, 2019	P-limited	P-limited	P-limited	P-limited	P-limited
SW-01	February 26, 2020	Co-limitation of N and P	Co-limitation of N and P	Co-limitation of N and P	P-limited	P-limited
SW-01	January 06, 2020	Co-limitation of N and P	P-limited	Co-limitation of N and P	P-limited	P-limited
SW-02	February 06, 2023	Co-limitation of N and P	P-limited	Co-limitation of N and P	P-limited	P-limited
<div>Notes: Background TN = Estimated TN derived from a predictive model Estimated TN =1.007326 x Nitrate as N+0.0571, r² = 0.92, n = 32, P < 0.001 Predicted TN (Baseline, Project-Alone Case, Application Case and Cumulative Case) = Background estimated TN + Project TN TP =Total phosphorus (mg/L) assumed not change due to the Project Limiting nutrient threshold from TN:TP ratio is based on Guildford and Hecky (2000): >22.5 is P-limited, <9 is N-limited and >9 but <22.5 is co-limitation of N and P</div>						

5.0 CONCLUSIONS

5.1 ACIDIFICATION ASSESSMENT

For the acidification assessment, there were three exposure sites (SW-01, SW-02, SW-07) and a reference site (SW-08). At Woodfibre Creek, acid sensitivity at the upstream site (SW-08) ranged from low sensitivity to moderate sensitivity to acid inputs while acid sensitivity at the downstream site (SW-01) was highly variable likely due to sea spray events and ranged from very low sensitivity to high sensitivity to acid inputs. At Mill Creek, acid sensitivity at the upstream site (SW-07) ranged from low sensitivity to very low sensitivity to acid inputs while at downstream site (SW-02) was generally classified as having a very low sensitivity to acid inputs.

There were no predicted $CL_{(A)}$ exceedances for the stream sites except at SW-01 in 2025 with $CL_{(A)}$ exceedances for Application Case and Cumulative Case. Further investigation revealed the predicted $CL_{(A)}$ exceedance could be related to a sea spray event on January 24, 2025 that affected ionic composition, thereby reducing $CL_{(A)}$ and $ANCoaa$ but had no influence on pH. As such, SW-01 in 2025 was classified as having a “low biological concern” while other stream sites and the rest of the sampling periods were classified as having “no biological concern” for acidification based on the four cases assessed. Thus, Project emissions are not predicted to result in acidification effects in the stream sites.

5.2 EUTROPHICATION ASSESSMENT

For the eutrophication assessment, the exposure site was SW-02 and reference sites were SW-01, SW-07, SW-08 because SW-02 is located within the 3 kg/ha/y isopleths. The stream sites were classified as oligotrophic using background water quality data. There were no predicted changes in the trophic state in the stream sites associated with the four maximum N deposition modelled scenarios (Baseline, Project-Alone Case, Application Case, and Cumulative Case) and the sites were also classified as oligotrophic for these scenarios. Thus, Project emissions are not predicted to result in eutrophication effects in the stream sites.

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APPENDIX A PREDICTED N AND S+N DEPOSITION FOR STREAMS

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Table A.1 Woodfibre LNG 2025 Air Emissions Modelled Deposition Scenarios

CALPUFF Model Scenario	Site ID	Receptor Code	UTM Zone 10		Distance to Receptor (m)	NDEP as N (kg/ha/yr)	S + N (keq/ha/yr)	S + N (eq/ha/yr)
			Easting	Northing				
Baseline	Saturna Island		490630	5402455	-	1.80	0.08	78.50
Project-Alone Case Emissions from the facility only including the heat medium heater, thermal oxidizer, and routine flaring	SW-01	WLNG Fenceline	481313	5501016	17.0	0.16	0.05	54.56
	SW-02	Grid	481488	5501748	7.4	0.13	0.06	59.38
	SW-07	Grid	480745	5502987	31.4	0.02	0.04	37.73
	SW-08	Grid	479575	5501687	22.6	0.01	0.01	7.26
Application Case Baseline + Project-Alone Case + associated marine vessels	SW-01	WLNG Fenceline	481313	5501016	17.0	2.4	0.2	195.6
	SW-02	Grid	481488	5501748	7.4	2.7	0.3	267.1
	SW-07	Grid	480745	5502987	31.4	2.1	0.2	164.3
	SW-08	Grid	479575	5501687	22.6	1.9	0.1	91.9
Cumulative Case Baseline + Application Case + the FortisBC Squamish V2 Compressor Station	SW-01	WLNG Fenceline	481313	5501016	17.0	2.5	0.2	199.3
	SW-02	Grid	481488	5501748	7.4	2.8	0.3	275.2
	SW-07	Grid	480745	5502987	31.4	2.1	0.2	165.4
	SW-08	Grid	479575	5501687	22.6	1.9	0.1	92.2

APPENDIX B ACIDIFICATION ASSESSMENT

B.1 CRITICAL LOAD OF ACIDITY AND ACID SENSITIVITY CLASSIFICATION

Table B.1 Acid Sensitivity Based on Critical Load of Acidity Values

Site ID	Waterbody Name	Sampling Date	Catchment Runoff (Q [m/yr])	Base Cations (BC ⁺ ₀ [meq/m ² /yr])	Critical Load (CL _(A)) and Acid Sensitivity Classification (meq/m ² /yr)	
SW-01	Lower reach of Woodfibre Creek	February 17, 2022	3.72	69	106	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	March 22, 2022	3.72	55	57	Moderately Sensitive
SW-01	Lower reach of Woodfibre Creek	April 19, 2022	3.72	72	119	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	June 22, 2022	3.72	34	-23	Acidic
SW-01	Lower reach of Woodfibre Creek	July 14, 2022	3.72	44	14	Highly Sensitive
SW-01	Lower reach of Woodfibre Creek	August 18, 2022	3.72	60	73	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	September 15, 2022	3.72	61	78	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	October 13, 2022	3.72	109	258	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	November 9, 2022	3.72	81	152	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	December 6, 2022	3.72	114	274	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	January 26, 2023	3.72	74	128	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	February 27, 2023	3.72	72	119	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	March 16, 2023	3.72	76	132	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	April 27, 2023	3.72	66	98	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	May 18, 2023	3.72	39	-3	Acidic
SW-01	Lower reach of Woodfibre Creek	August 25, 2023	3.72	65	92	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	September 20, 2023	3.72	80	148	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	November 16, 2023	3.72	69	108	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	December 13, 2023	3.72	82	157	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	January 23, 2024	3.72	52	44	Moderately Sensitive
SW-01	Lower reach of Woodfibre Creek	February 15, 2024	3.72	57	62	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	March 19, 2024	3.72	53	50	Moderately Sensitive
SW-01	Lower reach of Woodfibre Creek	April 25, 2024	3.72	56	60	Moderately Sensitive
SW-01	Lower reach of Woodfibre Creek	April 29, 2024	3.72	51	40	Moderately Sensitive
SW-01	Lower reach of Woodfibre Creek	May 2, 2024	3.72	61	79	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	3.72	46	22	Sensitive
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	3.72	45	19	Highly Sensitive
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	3.72	43	13	Highly Sensitive
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	3.72	45	17	Highly Sensitive
SW-01	Lower reach of Woodfibre Creek	May 22, 2024	3.72	48	31	Sensitive
SW-01	Lower reach of Woodfibre Creek	May 23, 2024	3.72	50	36	Sensitive
SW-01	Lower reach of Woodfibre Creek	May 27, 2024	3.72	42	8	Highly Sensitive
SW-01	Lower reach of Woodfibre Creek	June 20, 2024	3.72	53	49	Moderately Sensitive

Site ID	Waterbody Name	Sampling Date	Catchment Runoff (Q [m/yr])	Base Cations (BC ⁺ ₀ [meq/m ² /yr])	Critical Load (CL _(A)) and Acid Sensitivity Classification (meq/m ² /yr)	
SW-01	Lower reach of Woodfibre Creek	June 26, 2024	3.72	67	102	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	July 18, 2024	3.72	57	62	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	July 31, 2024	3.72	58	67	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	August 22, 2024	3.72	59	69	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	August 27, 2024	3.72	72	118	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	September 19, 2024	3.72	64	89	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	September 28, 2024	3.72	76	134	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	October 3, 2024	3.72	70	113	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	October 12, 2024	3.72	69	109	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	October 22, 2024	3.72	69	107	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	October 24, 2024	3.72	64	88	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	October 26, 2024	3.72	70	112	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	October 31, 2024	3.72	63	87	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	November 7, 2024	3.72	70	113	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	November 12, 2024	3.72	60	75	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	November 14, 2024	3.72	48	28	Sensitive
SW-01	Lower reach of Woodfibre Creek	November 19, 2024	3.72	62	81	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	December 6, 2024	3.72	63	85	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	December 19, 2024	3.72	47	28	Sensitive
SW-01	Lower reach of Woodfibre Creek	January 24, 2025	3.72	-146	-693	Acidic
SW-01	Lower reach of Woodfibre Creek	February 20, 2025	3.72	78	143	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	February 21, 2025	3.72	82	157	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	March 19, 2025	3.72	69	107	Very Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	March 27, 2025	3.72	43	10	Highly Sensitive
SW-01	Lower reach of Woodfibre Creek	April 2, 2025	3.72	65	91	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	April 8, 2025	3.72	49	35	Sensitive
SW-01	Lower reach of Woodfibre Creek	April 13, 2025	3.72	63	85	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	April 22, 2025	3.72	57	64	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	April 24, 2025	3.72	59	71	Low Sensitivity
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	3.72	50	37	Sensitive
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	3.72	50	38	Sensitive
SW-01	Lower reach of Woodfibre Creek	May 8, 2025	3.72	45	18	Highly Sensitive
SW-01	Lower reach of Woodfibre Creek	May 12, 2025	3.72	50	36	Sensitive
SW-01	Lower reach of Woodfibre Creek	May 14, 2025	3.72	46	23	Sensitive
SW-01	Lower reach of Woodfibre Creek	May 22, 2025	3.72	51	42	Moderately Sensitive
SW-02	Lower reach of Mill Creek	February 17, 2022	3.37	102	209	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	March 22, 2022	3.37	83	147	Very Low Sensitivity

Site ID	Waterbody Name	Sampling Date	Catchment Runoff (Q [m/yr])	Base Cations (BC ⁺ ₀ [meq/m ² /yr])	Critical Load (CL _(A)) and Acid Sensitivity Classification (meq/m ² /yr)	
SW-02	Lower reach of Mill Creek	April 20, 2022	3.37	99	199	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	June 22, 2022	3.37	42	7	Highly Sensitive
SW-02	Lower reach of Mill Creek	July 14, 2022	3.37	56	53	Moderately Sensitive
SW-02	Lower reach of Mill Creek	August 18, 2022	3.37	107	224	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	September 15, 2022	3.37	131	306	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	October 13, 2022	3.37	167	427	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	November 9, 2022	3.37	116	257	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	December 6, 2022	3.37	128	296	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	January 26, 2023	3.37	98	196	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	February 27, 2023	3.37	128	296	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	March 16, 2023	3.37	138	329	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	April 27, 2023	3.37	80	135	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	May 18, 2023	3.37	28	-41	Acidic
SW-02	Lower reach of Mill Creek	August 25, 2023	3.37	154	384	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	November 16, 2023	3.37	102	208	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	December 13, 2023	3.37	135	322	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	January 23, 2024	3.37	75	118	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	February 15, 2024	3.37	95	186	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	March 19, 2024	3.37	73	110	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	April 26, 2024	3.37	89	165	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	May 3, 2024	3.37	88	161	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	May 9, 2024	3.37	76	123	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	May 9, 2024	3.37	86	155	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	May 14, 2024	3.37	66	88	Low Sensitivity
SW-02	Lower reach of Mill Creek	May 17, 2024	3.37	66	88	Low Sensitivity
SW-02	Lower reach of Mill Creek	May 23, 2024	3.37	69	96	Low Sensitivity
SW-02	Lower reach of Mill Creek	May 24, 2024	3.37	68	93	Low Sensitivity
SW-02	Lower reach of Mill Creek	May 26, 2024	3.37	68	93	Low Sensitivity
SW-02	Lower reach of Mill Creek	June 21, 2024	3.37	61	71	Low Sensitivity
SW-02	Lower reach of Mill Creek	June 27, 2024	3.37	57	59	Moderately Sensitive
SW-02	Lower reach of Mill Creek	July 19, 2024	3.37	93	179	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	July 31, 2024	3.37	109	232	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	August 23, 2024	3.37	133	315	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	August 27, 2024	3.37	100	202	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	September 20, 2024	3.37	141	340	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	September 29, 2024	3.37	118	262	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	October 4, 2024	3.37	131	308	Very Low Sensitivity

Site ID	Waterbody Name	Sampling Date	Catchment Runoff (Q [m/yr])	Base Cations (BC ⁺ ₀ [meq/m ² /yr])	Critical Load (CL _(A)) and Acid Sensitivity Classification (meq/m ² /yr)	
SW-02	Lower reach of Mill Creek	October 12, 2024	3.37	212	578	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	October 22, 2024	3.37	92	176	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	October 25, 2024	3.37	92	176	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	October 25, 2024	3.37	89	165	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	November 1, 2024	3.37	81	138	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	November 8, 2024	3.37	91	170	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	November 15, 2024	3.37	78	128	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	November 16, 2024	3.37	108	229	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	November 20, 2024	3.37	115	254	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	December 8, 2024	3.37	77	125	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	December 19, 2024	3.37	93	180	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	January 24, 2025	3.37	124	282	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	February 19, 2025	3.37	172	445	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	February 20, 2025	3.37	117	258	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	March 18, 2025	3.37	103	213	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	March 27, 2025	3.37	59	65	Low Sensitivity
SW-02	Lower reach of Mill Creek	April 2, 2025	3.37	111	238	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	April 7, 2025	3.37	64	82	Low Sensitivity
SW-02	Lower reach of Mill Creek	April 12, 2025	3.37	76	122	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	April 20, 2025	3.37	73	112	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	April 24, 2025	3.37	82	142	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	April 28, 2025	3.37	87	157	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	April 29, 2025	3.37	66	88	Low Sensitivity
SW-02	Lower reach of Mill Creek	May 8, 2025	3.37	58	62	Low Sensitivity
SW-02	Lower reach of Mill Creek	May 13, 2025	3.37	71	105	Very Low Sensitivity
SW-02	Lower reach of Mill Creek	May 14, 2025	3.37	67	90	Low Sensitivity
SW-02	Lower reach of Mill Creek	May 22, 2025	3.37	73	110	Very Low Sensitivity
SW-07	Upstream Mill Creek	August 25, 2023	3.37	149	367	Very Low Sensitivity
SW-07	Upstream Mill Creek	September 20, 2023	3.37	124	284	Very Low Sensitivity
SW-07	Upstream Mill Creek	November 16, 2023	3.37	89	166	Very Low Sensitivity
SW-07	Upstream Mill Creek	December 13, 2023	3.37	106	222	Very Low Sensitivity
SW-07	Upstream Mill Creek	January 23, 2024	3.37	66	88	Low Sensitivity
SW-07	Upstream Mill Creek	February 15, 2024	3.37	74	113	Very Low Sensitivity
SW-07	Upstream Mill Creek	March 19, 2024	3.37	67	92	Low Sensitivity
SW-07	Upstream Mill Creek	April 26, 2024	3.37	87	158	Very Low Sensitivity
SW-07	Upstream Mill Creek	May 3, 2024	3.37	83	146	Very Low Sensitivity
SW-07	Upstream Mill Creek	May 9, 2024	3.37	72	108	Very Low Sensitivity

Site ID	Waterbody Name	Sampling Date	Catchment Runoff (Q [m/yr])	Base Cations (BC ⁺ ₀ [meq/m ² /yr])	Critical Load (CL _(A)) and Acid Sensitivity Classification (meq/m ² /yr)	
SW-07	Upstream Mill Creek	May 9, 2024	3.37	71	104	Very Low Sensitivity
SW-07	Upstream Mill Creek	May 14, 2024	3.37	63	77	Low Sensitivity
SW-07	Upstream Mill Creek	May 17, 2024	3.37	55	50	Moderately Sensitive
SW-07	Upstream Mill Creek	May 23, 2024	3.37	62	76	Low Sensitivity
SW-07	Upstream Mill Creek	May 24, 2024	3.37	64	80	Low Sensitivity
SW-07	Upstream Mill Creek	May 26, 2024	3.37	63	78	Low Sensitivity
SW-07	Upstream Mill Creek	June 21, 2024	3.37	61	71	Low Sensitivity
SW-07	Upstream Mill Creek	June 26, 2024	3.37	63	77	Low Sensitivity
SW-07	Upstream Mill Creek	July 19, 2024	3.37	88	161	Very Low Sensitivity
SW-07	Upstream Mill Creek	July 31, 2024	3.37	94	182	Very Low Sensitivity
SW-07	Upstream Mill Creek	August 23, 2024	3.37	117	259	Very Low Sensitivity
SW-07	Upstream Mill Creek	August 27, 2024	3.37	93	178	Very Low Sensitivity
SW-07	Upstream Mill Creek	September 20, 2024	3.37	119	266	Very Low Sensitivity
SW-07	Upstream Mill Creek	September 29, 2024	3.37	105	220	Very Low Sensitivity
SW-07	Upstream Mill Creek	October 3, 2024	3.37	109	232	Very Low Sensitivity
SW-07	Upstream Mill Creek	October 22, 2024	3.37	64	79	Low Sensitivity
SW-07	Upstream Mill Creek	October 25, 2024	3.37	81	139	Very Low Sensitivity
SW-07	Upstream Mill Creek	October 25, 2024	3.37	58	59	Moderately Sensitive
SW-07	Upstream Mill Creek	November 1, 2024	3.37	76	120	Very Low Sensitivity
SW-07	Upstream Mill Creek	November 8, 2024	3.37	80	135	Very Low Sensitivity
SW-07	Upstream Mill Creek	November 15, 2024	3.37	62	73	Low Sensitivity
SW-07	Upstream Mill Creek	November 16, 2024	3.37	64	80	Low Sensitivity
SW-07	Upstream Mill Creek	November 20, 2024	3.37	61	71	Low Sensitivity
SW-07	Upstream Mill Creek	December 8, 2024	3.37	87	158	Very Low Sensitivity
SW-07	Upstream Mill Creek	December 19, 2024	3.37	52	40	Moderately Sensitive
SW-07	Upstream Mill Creek	January 25, 2025	3.37	104	216	Very Low Sensitivity
SW-07	Upstream Mill Creek	February 19, 2025	3.37	29	-38	Acidic
SW-07	Upstream Mill Creek	February 20, 2025	3.37	70	101	Very Low Sensitivity
SW-07	Upstream Mill Creek	March 18, 2025	3.37	106	221	Very Low Sensitivity
SW-07	Upstream Mill Creek	March 27, 2025	3.37	52	42	Moderately Sensitive
SW-07	Upstream Mill Creek	April 2, 2025	3.37	81	138	Very Low Sensitivity
SW-07	Upstream Mill Creek	April 7, 2025	3.37	56	54	Moderately Sensitive
SW-07	Upstream Mill Creek	April 12, 2025	3.37	70	101	Very Low Sensitivity
SW-07	Upstream Mill Creek	April 20, 2025	3.37	70	100	Low Sensitivity
SW-07	Upstream Mill Creek	April 24, 2025	3.37	77	125	Very Low Sensitivity
SW-07	Upstream Mill Creek	April 28, 2025	3.37	66	88	Low Sensitivity
SW-07	Upstream Mill Creek	April 29, 2025	3.37	58	61	Low Sensitivity

Site ID	Waterbody Name	Sampling Date	Catchment Runoff (Q [m/yr])	Base Cations (BC ⁺ ₀ [meq/m ² /yr])	Critical Load (CL _(A)) and Acid Sensitivity Classification (meq/m ² /yr)	
SW-07	Upstream Mill Creek	May 8, 2025	3.37	56	53	Moderately Sensitive
SW-07	Upstream Mill Creek	May 13, 2025	3.37	75	117	Very Low Sensitivity
SW-07	Upstream Mill Creek	May 14, 2025	3.37	64	81	Low Sensitivity
SW-07	Upstream Mill Creek	May 22, 2025	3.37	74	114	Very Low Sensitivity
SW-08	Upstream Woodfibre Creek	April 25, 2024	3.72	54	51	Moderately Sensitive
SW-08	Upstream Woodfibre Creek	May 2, 2024	3.72	59	69	Low Sensitivity
SW-08	Upstream Woodfibre Creek	May 10, 2024	3.72	43	11	Highly Sensitive
SW-08	Upstream Woodfibre Creek	May 16, 2024	3.72	41	4	Highly Sensitive
SW-08	Upstream Woodfibre Creek	May 23, 2024	3.72	46	23	Sensitive
SW-08	Upstream Woodfibre Creek	June 20, 2024	3.72	51	42	Moderately Sensitive
SW-08	Upstream Woodfibre Creek	July 18, 2024	3.72	52	46	Moderately Sensitive
SW-08	Upstream Woodfibre Creek	August 22, 2024	3.72	54	51	Moderately Sensitive
SW-08	Upstream Woodfibre Creek	September 19, 2024	3.72	62	80	Low Sensitivity
SW-08	Upstream Woodfibre Creek	October 24, 2024	3.72	62	82	Low Sensitivity
SW-08	Upstream Woodfibre Creek	October 31, 2024	3.72	62	82	Low Sensitivity
SW-08	Upstream Woodfibre Creek	November 7, 2024	3.72	68	103	Very Low Sensitivity
SW-08	Upstream Woodfibre Creek	November 14, 2024	3.72	46	22	Sensitive
SW-08	Upstream Woodfibre Creek	November 19, 2024	3.72	61	78	Low Sensitivity
Notes:						
Acid sensitivity classifications are based on critical load values in the following ranges.						
	Acidic (< 0 meq/m ² /y)					
	Highly sensitive (0 to 20 meq/m ² /y)					
	Sensitive (20 to 40 meq/m ² /y)					
	Moderately Sensitive (40 to 60 meq/m ² /y)					
	Low sensitivity (60 to 100 meq/m ² /y)					
	Very low sensitivity (> 100 meq/m ² /y)					

B.2 CRITICAL LOAD OF ACIDITY EXCEEDANCES

Table B.2 Predicted Critical Load Exceedances for Air Quality Modelling Scenarios

Site ID	Sampling Depth	Sample Date	Number of samples	Watershed Area	Catchment Runoff	BC ₀	Critical Load using 40 ueq/L for ANClimit	Baseline	Project Alone Case	Application Case	Cumulative Case
				km ²	m/y	µeq/L	meq/m ² /y	Exceedance	Exceedance	Exceedance	Exceedance
								meq/m ² /y	meq/m ² /y	meq/m ² /y	meq/m ² /y
SW-01	Surface	February 17, 2022	1	21.86	3.72	68.57	106.30	-98.4	-100.8	-86.7	-86.4
SW-01	Surface	March 22, 2022	1	21.86	3.72	55.38	57.20	-49.3	-51.7	-37.6	-37.3
SW-01	Surface	April 19, 2022	1	21.86	3.72	72.03	119.15	-111.3	-113.7	-99.6	-99.2
SW-01	Surface	June 22, 2022	1	21.86	3.72	33.85	-22.87	30.7	28.3	42.4	42.8
SW-01	Surface	July 14, 2022	1	21.86	3.72	43.90	14.49	-6.6	-9.0	5.1	5.4
SW-01	Surface	August 18, 2022	1	21.86	3.72	59.70	73.28	-65.4	-67.8	-53.7	-53.3
SW-01	Surface	September 15, 2022	1	21.86	3.72	60.85	77.57	-69.7	-72.1	-58.0	-57.6
SW-01	Surface	October 13, 2022	1	21.86	3.72	109.41	258.22	-250.4	-252.8	-238.7	-238.3
SW-01	Surface	November 9, 2022	1	21.86	3.72	80.96	152.36	-144.5	-146.9	-132.8	-132.4
SW-01	Surface	December 6, 2022	1	21.86	3.72	113.68	274.10	-266.2	-268.6	-254.5	-254.2
SW-01	Surface	January 26, 2023	1	21.86	3.72	74.48	128.26	-120.4	-122.8	-108.7	-108.3
SW-01	Surface	February 27, 2023	1	21.86	3.72	72.05	119.23	-111.4	-113.8	-99.7	-99.3
SW-01	Surface	March 16, 2023	1	21.86	3.72	75.60	132.41	-124.6	-127.0	-112.9	-112.5
SW-01	Surface	April 27, 2023	1	21.86	3.72	66.44	98.35	-90.5	-92.9	-78.8	-78.4
SW-01	Surface	May 18, 2023	1	21.86	3.72	39.23	-2.86	10.7	8.3	22.4	22.8
SW-01	Surface	August 25, 2023	1	21.86	3.72	64.82	92.31	-84.5	-86.9	-72.8	-72.4
SW-01	Surface	September 20, 2023	1	21.86	3.72	79.92	148.49	-140.6	-143.0	-128.9	-128.6
SW-01	Surface	November 16, 2023	1	21.86	3.72	68.97	107.78	-99.9	-102.3	-88.2	-87.8
SW-01	Surface	December 13, 2023	1	21.86	3.72	82.15	156.79	-148.9	-151.3	-137.2	-136.9
SW-01	Surface	January 23, 2024	1	21.86	3.72	51.94	44.41	-36.6	-39.0	-24.8	-24.5
SW-01	Surface	February 15, 2024	1	21.86	3.72	56.55	61.58	-53.7	-56.1	-42.0	-41.6
SW-01	Surface	March 19, 2024	1	21.86	3.72	53.31	49.50	-41.7	-44.0	-29.9	-29.6
SW-01	Surface	April 25, 2024	1	21.86	3.72	56.08	59.82	-52.0	-54.4	-40.3	-39.9
SW-01	Surface	April 29, 2024	1	21.86	3.72	50.87	40.43	-32.6	-35.0	-20.9	-20.5
SW-01	Surface	May 2, 2024	1	21.86	3.72	61.13	78.60	-70.7	-73.1	-59.0	-58.7
SW-01	Surface	May 10, 2024	1	21.86	3.72	45.92	22.00	-14.2	-16.5	-2.4	-2.1
SW-01	Surface	May 10, 2024	1	21.86	3.72	45.06	18.82	-11.0	-13.4	0.7	1.1
SW-01	Surface	May 16, 2024	1	21.86	3.72	43.44	12.80	-4.9	-7.3	6.8	7.1
SW-01	Surface	May 16, 2024	1	21.86	3.72	44.61	17.15	-9.3	-11.7	2.4	2.8
SW-01	Surface	May 22, 2024	1	21.86	3.72	48.46	31.48	-23.6	-26.0	-11.9	-11.6
SW-01	Surface	May 23, 2024	1	21.86	3.72	49.78	36.39	-28.5	-30.9	-16.8	-16.5
SW-01	Surface	May 27, 2024	1	21.86	3.72	42.06	7.65	0.2	-2.2	11.9	12.3
SW-01	Surface	June 20, 2024	1	21.86	3.72	53.28	49.39	-41.5	-43.9	-29.8	-29.5
SW-01	Surface	June 26, 2024	1	21.86	3.72	67.34	101.71	-93.9	-96.3	-82.2	-81.8

Site ID	Sampling Depth	Sample Date	Number of samples	Watershed Area	Catchment Runoff	BC ₀	Critical Load using 40 ueq/L for ANClimit	Baseline	Project Alone Case	Application Case	Cumulative Case
				km ²	m/y	µeq/L	meq/m ² /y	Exceedance	Exceedance	Exceedance	Exceedance
								meq/m ² /y	meq/m ² /y	meq/m ² /y	meq/m ² /y
SW-01	Surface	July 18, 2024	1	21.86	3.72	56.55	61.57	-53.7	-56.1	-42.0	-41.6
SW-01	Surface	July 31, 2024	1	21.86	3.72	58.00	66.95	-59.1	-61.5	-47.4	-47.0
SW-01	Surface	August 22, 2024	1	21.86	3.72	58.63	69.29	-61.4	-63.8	-49.7	-49.4
SW-01	Surface	August 27, 2024	1	21.86	3.72	71.73	118.05	-110.2	-112.6	-98.5	-98.1
SW-01	Surface	September 19, 2024	1	21.86	3.72	63.81	88.59	-80.7	-83.1	-69.0	-68.7
SW-01	Surface	September 28, 2024	1	21.86	3.72	76.13	134.40	-126.5	-128.9	-114.8	-114.5
SW-01	Surface	October 3, 2024	1	21.86	3.72	70.48	113.40	-105.5	-107.9	-93.8	-93.5
SW-01	Surface	October 12, 2024	1	21.86	3.72	69.34	109.14	-101.3	-103.7	-89.6	-89.2
SW-01	Surface	October 22, 2024	1	21.86	3.72	68.72	106.84	-99.0	-101.4	-87.3	-86.9
SW-01	Surface	October 24, 2024	1	21.86	3.72	63.53	87.52	-79.7	-82.1	-68.0	-67.6
SW-01	Surface	October 26, 2024	1	21.86	3.72	70.17	112.22	-104.4	-106.8	-92.7	-92.3
SW-01	Surface	October 31, 2024	1	21.86	3.72	63.46	87.27	-79.4	-81.8	-67.7	-67.3
SW-01	Surface	November 7, 2024	1	21.86	3.72	70.28	112.65	-104.8	-107.2	-93.1	-92.7
SW-01	Surface	November 12, 2024	1	21.86	3.72	60.28	75.43	-67.6	-70.0	-55.9	-55.5
SW-01	Surface	November 14, 2024	1	21.86	3.72	47.58	28.19	-20.3	-22.7	-8.6	-8.3
SW-01	Surface	November 19, 2024	1	21.86	3.72	61.84	81.25	-73.4	-75.8	-61.7	-61.3
SW-01	Surface	December 6, 2024	1	21.86	3.72	62.88	85.11	-77.3	-79.7	-65.5	-65.2
SW-01	Surface	December 19, 2024	1	21.86	3.72	47.48	27.84	-20.0	-22.4	-8.3	-7.9
SW-01	Surface	January 24, 2025	1	21.86	3.72	-146.24	-692.81	700.7	698.3	712.4	712.7
SW-01	Surface	February 20, 2025	1	21.86	3.72	78.41	142.87	-135.0	-137.4	-123.3	-122.9
SW-01	Surface	February 21, 2025	1	21.86	3.72	82.20	156.97	-149.1	-151.5	-137.4	-137.0
SW-01	Surface	March 19, 2025	1	21.86	3.72	68.88	107.43	-99.6	-102.0	-87.9	-87.5
SW-01	Surface	March 27, 2025	1	21.86	3.72	42.63	9.79	-1.9	-4.3	9.8	10.1
SW-01	Surface	April 2, 2025	1	21.86	3.72	64.51	91.19	-83.3	-85.7	-71.6	-71.3
SW-01	Surface	April 8, 2025	1	21.86	3.72	49.43	35.08	-27.2	-29.6	-15.5	-15.2
SW-01	Surface	April 13, 2025	1	21.86	3.72	62.86	85.02	-77.2	-79.6	-65.5	-65.1
SW-01	Surface	April 22, 2025	1	21.86	3.72	57.14	63.77	-55.9	-58.3	-44.2	-43.8
SW-01	Surface	April 24, 2025	1	21.86	3.72	59.06	70.89	-63.0	-65.4	-51.3	-51.0
SW-01	Surface	April 29, 2025	1	21.86	3.72	50.06	37.44	-29.6	-32.0	-17.9	-17.5
SW-01	Surface	April 29, 2025	1	21.86	3.72	50.25	38.12	-30.3	-32.7	-18.6	-18.2
SW-01	Surface	May 8, 2025	1	21.86	3.72	44.80	17.86	-10.0	-12.4	1.7	2.1
SW-01	Surface	May 12, 2025	1	21.86	3.72	49.72	36.17	-28.3	-30.7	-16.6	-16.2
SW-01	Surface	May 14, 2025	1	21.86	3.72	46.06	22.56	-14.7	-17.1	-3.0	-2.6
SW-01	Surface	May 22, 2025	1	21.86	3.72	51.34	42.17	-34.3	-36.7	-15.5	-22.2
SW-02	Surface	February 17, 2022	1	40.68	3.37	101.89	208.55	-200.7	-202.6	-181.8	-181.0
SW-02	Surface	March 22, 2022	1	40.68	3.37	83.48	146.51	-138.7	-140.6	-119.8	-119.0
SW-02	Surface	April 20, 2022	1	40.68	3.37	99.12	199.22	-191.4	-193.3	-172.5	-171.7

Site ID	Sampling Depth	Sample Date	Number of samples	Watershed Area	Catchment Runoff	BC ₀	Critical Load using 40 ueq/L for ANClimit	Baseline	Project Alone Case	Application Case	Cumulative Case
				km ²	m/y	µeq/L	meq/m ² /y	Exceedance	Exceedance	Exceedance	Exceedance
								meq/m ² /y	meq/m ² /y	meq/m ² /y	meq/m ² /y
SW-02	Surface	June 22, 2022	1	40.68	3.37	41.97	6.62	1.2	-0.7	20.1	20.9
SW-02	Surface	July 14, 2022	1	40.68	3.37	55.84	53.38	-45.5	-47.4	-26.7	-25.9
SW-02	Surface	August 18, 2022	1	40.68	3.37	106.55	224.26	-216.4	-218.3	-197.6	-196.7
SW-02	Surface	September 15, 2022	1	40.68	3.37	130.71	305.68	-297.8	-299.7	-279.0	-278.2
SW-02	Surface	October 13, 2022	1	40.68	3.37	166.82	427.37	-419.5	-421.4	-400.7	-399.9
SW-02	Surface	November 9, 2022	1	40.68	3.37	116.12	256.51	-248.7	-250.6	-229.8	-229.0
SW-02	Surface	December 6, 2022	1	40.68	3.37	127.95	296.40	-288.5	-290.5	-269.7	-268.9
SW-02	Surface	January 26, 2023	1	40.68	3.37	98.09	195.77	-187.9	-189.8	-169.1	-168.2
SW-02	Surface	February 27, 2023	1	40.68	3.37	127.89	296.20	-288.3	-290.3	-269.5	-268.7
SW-02	Surface	March 16, 2023	1	40.68	3.37	137.75	329.43	-321.6	-323.5	-302.7	-301.9
SW-02	Surface	April 27, 2023	1	40.68	3.37	79.95	134.64	-126.8	-128.7	-107.9	-107.1
SW-02	Surface	May 18, 2023	1	40.68	3.37	27.93	-40.67	48.5	46.6	67.4	68.2
SW-02	Surface	August 25, 2023	1	40.68	3.37	153.85	383.67	-375.8	-377.7	-357.0	-356.2
SW-02	Surface	November 16, 2023	1	40.68	3.37	101.64	207.72	-199.9	-201.8	-181.0	-180.2
SW-02	Surface	December 13, 2023	1	40.68	3.37	135.44	321.63	-313.8	-315.7	-294.9	-294.1
SW-02	Surface	January 23, 2024	1	40.68	3.37	75.08	118.21	-110.4	-112.3	-91.5	-90.7
SW-02	Surface	February 15, 2024	1	40.68	3.37	95.06	185.56	-177.7	-179.6	-158.8	-158.0
SW-02	Surface	March 19, 2024	1	40.68	3.37	72.67	110.11	-102.3	-104.2	-83.4	-82.6
SW-02	Surface	April 26, 2024	1	40.68	3.37	88.88	164.74	-156.9	-158.8	-138.0	-137.2
SW-02	Surface	May 3, 2024	1	40.68	3.37	87.77	160.97	-153.1	-155.0	-134.3	-133.5
SW-02	Surface	May 9, 2024	1	40.68	3.37	76.37	122.56	-114.7	-116.6	-95.9	-95.0
SW-02	Surface	May 9, 2024	1	40.68	3.37	86.13	155.46	-147.6	-149.5	-128.7	-127.9
SW-02	Surface	May 14, 2024	1	40.68	3.37	66.19	88.25	-80.4	-82.3	-61.5	-60.7
SW-02	Surface	May 17, 2024	1	40.68	3.37	66.06	87.81	-80.0	-81.9	-61.1	-60.3
SW-02	Surface	May 23, 2024	1	40.68	3.37	68.60	96.39	-88.5	-90.5	-69.7	-68.9
SW-02	Surface	May 24, 2024	1	40.68	3.37	67.64	93.15	-85.3	-87.2	-66.4	-65.6
SW-02	Surface	May 26, 2024	1	40.68	3.37	67.50	92.68	-84.8	-86.7	-66.0	-65.2
SW-02	Surface	June 21, 2024	1	40.68	3.37	61.11	71.13	-63.3	-65.2	-44.4	-43.6
SW-02	Surface	June 27, 2024	1	40.68	3.37	57.49	58.95	-51.1	-53.0	-32.2	-31.4
SW-02	Surface	July 19, 2024	1	40.68	3.37	93.12	179.03	-171.2	-173.1	-152.3	-151.5
SW-02	Surface	July 31, 2024	1	40.68	3.37	108.70	231.52	-223.7	-225.6	-204.8	-204.0
SW-02	Surface	August 23, 2024	1	40.68	3.37	133.36	314.64	-306.8	-308.7	-287.9	-287.1
SW-02	Surface	August 27, 2024	1	40.68	3.37	99.91	201.91	-194.1	-196.0	-175.2	-174.4
SW-02	Surface	September 20, 2024	1	40.68	3.37	140.81	339.74	-331.9	-333.8	-313.0	-312.2
SW-02	Surface	September 29, 2024	1	40.68	3.37	117.63	261.60	-253.7	-255.7	-234.9	-234.1
SW-02	Surface	October 4, 2024	1	40.68	3.37	131.36	307.87	-300.0	-301.9	-281.2	-280.4
SW-02	Surface	October 12, 2024	1	40.68	3.37	211.58	578.21	-570.4	-572.3	-551.5	-550.7

Site ID	Sampling Depth	Sample Date	Number of samples	Watershed Area	Catchment Runoff	BC ₀	Critical Load using 40 ueq/L for ANClimit	Baseline	Project Alone Case	Application Case	Cumulative Case
				km ²	m/y	µeq/L	meq/m ² /y	Exceedance	Exceedance	Exceedance	Exceedance
								meq/m ² /y	meq/m ² /y	meq/m ² /y	meq/m ² /y
SW-02	Surface	October 22, 2024	1	40.68	3.37	92.10	175.58	-167.7	-169.6	-148.9	-148.1
SW-02	Surface	October 25, 2024	1	40.68	3.37	92.34	176.39	-168.5	-170.5	-149.7	-148.9
SW-02	Surface	October 25, 2024	1	40.68	3.37	88.88	164.72	-156.9	-158.8	-138.0	-137.2
SW-02	Surface	November 1, 2024	1	40.68	3.37	80.83	137.60	-129.7	-131.7	-110.9	-110.1
SW-02	Surface	November 8, 2024	1	40.68	3.37	90.56	170.40	-162.5	-164.5	-143.7	-142.9
SW-02	Surface	November 15, 2024	1	40.68	3.37	78.10	128.41	-120.6	-122.5	-101.7	-100.9
SW-02	Surface	November 16, 2024	1	40.68	3.37	108.09	229.48	-221.6	-223.5	-202.8	-202.0
SW-02	Surface	November 20, 2024	1	40.68	3.37	115.31	253.78	-245.9	-247.8	-227.1	-226.3
SW-02	Surface	December 8, 2024	1	40.68	3.37	77.16	125.22	-117.4	-119.3	-98.5	-97.7
SW-02	Surface	December 19, 2024	1	40.68	3.37	93.48	180.22	-172.4	-174.3	-153.5	-152.7
SW-02	Surface	January 24, 2025	1	40.68	3.37	123.81	282.44	-274.6	-276.5	-255.7	-254.9
SW-02	Surface	February 19, 2025	1	40.68	3.37	172.00	444.83	-437.0	-438.9	-418.1	-417.3
SW-02	Surface	February 20, 2025	1	40.68	3.37	116.57	258.05	-250.2	-252.1	-231.3	-230.5
SW-02	Surface	March 18, 2025	1	40.68	3.37	103.18	212.91	-205.1	-207.0	-186.2	-185.4
SW-02	Surface	March 27, 2025	1	40.68	3.37	59.25	64.89	-57.0	-59.0	-38.2	-37.4
SW-02	Surface	April 2, 2025	1	40.68	3.37	110.51	237.61	-229.8	-231.7	-210.9	-210.1
SW-02	Surface	April 7, 2025	1	40.68	3.37	64.45	82.40	-74.5	-76.5	-55.7	-54.9
SW-02	Surface	April 12, 2025	1	40.68	3.37	76.19	121.96	-114.1	-116.0	-95.2	-94.4
SW-02	Surface	April 20, 2025	1	40.68	3.37	73.13	111.65	-103.8	-105.7	-84.9	-84.1
SW-02	Surface	April 24, 2025	1	40.68	3.37	82.03	141.63	-133.8	-135.7	-114.9	-114.1
SW-02	Surface	April 28, 2025	1	40.68	3.37	86.74	157.50	-149.6	-151.6	-130.8	-130.0
SW-02	Surface	April 29, 2025	1	40.68	3.37	66.14	88.09	-80.2	-82.2	-61.4	-60.6
SW-02	Surface	May 8, 2025	1	40.68	3.37	58.25	61.51	-53.7	-55.6	-34.8	-34.0
SW-02	Surface	May 13, 2025	1	40.68	3.37	71.20	105.15	-97.3	-99.2	-78.4	-77.6
SW-02	Surface	May 14, 2025	1	40.68	3.37	66.66	89.86	-82.0	-83.9	-63.1	-62.3
SW-02	Surface	May 22, 2025	1	40.68	3.37	72.52	109.59	-101.7	-103.7	-82.9	-82.1
SW-07	Surface	August 25, 2023	1	38.20	3.37	148.84	366.78	-358.9	-363.0	-350.3	-350.2
SW-07	Surface	September 20, 2023	1	38.20	3.37	124.28	284.04	-276.2	-280.3	-267.6	-267.5
SW-07	Surface	November 16, 2023	1	38.20	3.37	89.26	166.00	-158.2	-162.2	-149.6	-149.5
SW-07	Surface	December 13, 2023	1	38.20	3.37	105.86	221.93	-214.1	-218.2	-205.5	-205.4
SW-07	Surface	January 23, 2024	1	38.20	3.37	66.19	88.25	-80.4	-84.5	-71.8	-71.7
SW-07	Surface	February 15, 2024	1	38.20	3.37	73.68	113.50	-105.6	-109.7	-97.1	-97.0
SW-07	Surface	March 19, 2024	1	38.20	3.37	67.42	92.40	-84.5	-88.6	-76.0	-75.9
SW-07	Surface	April 26, 2024	1	38.20	3.37	86.80	157.72	-149.9	-153.9	-141.3	-141.2
SW-07	Surface	May 3, 2024	1	38.20	3.37	83.22	145.65	-137.8	-141.9	-129.2	-129.1
SW-07	Surface	May 9, 2024	1	38.20	3.37	72.12	108.24	-100.4	-104.5	-91.8	-91.7
SW-07	Surface	May 9, 2024	1	38.20	3.37	70.92	104.19	-96.3	-100.4	-87.8	-87.6

Site ID	Sampling Depth	Sample Date	Number of samples	Watershed Area	Catchment Runoff	BC ₀	Critical Load using 40 ueq/L for ANClimit	Baseline	Project Alone Case	Application Case	Cumulative Case
				km ²	m/y	µeq/L	meq/m ² /y	Exceedance	Exceedance	Exceedance	Exceedance
								meq/m ² /y	meq/m ² /y	meq/m ² /y	meq/m ² /y
SW-07	Surface	May 14, 2024	1	38.20	3.37	62.89	77.14	-69.3	-73.4	-60.7	-60.6
SW-07	Surface	May 17, 2024	1	38.20	3.37	54.75	49.72	-41.9	-45.9	-33.3	-33.2
SW-07	Surface	May 23, 2024	1	38.20	3.37	62.49	75.80	-68.0	-72.0	-59.4	-59.3
SW-07	Surface	May 24, 2024	1	38.20	3.37	63.69	79.84	-72.0	-76.1	-63.4	-63.3
SW-07	Surface	May 26, 2024	1	38.20	3.37	63.25	78.36	-70.5	-74.6	-61.9	-61.8
SW-07	Surface	June 21, 2024	1	38.20	3.37	61.00	70.77	-62.9	-67.0	-54.3	-54.2
SW-07	Surface	June 26, 2024	1	38.20	3.37	62.95	77.34	-69.5	-73.6	-60.9	-60.8
SW-07	Surface	July 19, 2024	1	38.20	3.37	87.90	161.42	-153.6	-157.6	-145.0	-144.9
SW-07	Surface	July 31, 2024	1	38.20	3.37	93.95	181.83	-174.0	-178.1	-165.4	-165.3
SW-07	Surface	August 23, 2024	1	38.20	3.37	116.81	258.86	-251.0	-255.1	-242.4	-242.3
SW-07	Surface	August 27, 2024	1	38.20	3.37	92.89	178.23	-170.4	-174.5	-161.8	-161.7
SW-07	Surface	September 20, 2024	1	38.20	3.37	119.02	266.31	-258.5	-262.5	-249.9	-249.8
SW-07	Surface	September 29, 2024	1	38.20	3.37	105.18	219.66	-211.8	-215.9	-203.2	-203.1
SW-07	Surface	October 3, 2024	1	38.20	3.37	108.91	232.22	-224.4	-228.4	-215.8	-215.7
SW-07	Surface	October 22, 2024	1	38.20	3.37	63.55	79.37	-71.5	-75.6	-62.9	-62.8
SW-07	Surface	October 25, 2024	1	38.20	3.37	81.13	138.61	-130.8	-134.8	-122.2	-122.1
SW-07	Surface	October 25, 2024	1	38.20	3.37	57.59	59.27	-51.4	-55.5	-42.8	-42.7
SW-07	Surface	November 1, 2024	1	38.20	3.37	75.63	120.06	-112.2	-116.3	-103.6	-103.5
SW-07	Surface	November 8, 2024	1	38.20	3.37	79.96	134.68	-126.8	-130.9	-118.2	-118.1
SW-07	Surface	November 15, 2024	1	38.20	3.37	61.53	72.57	-64.7	-68.8	-56.1	-56.0
SW-07	Surface	November 16, 2024	1	38.20	3.37	63.67	79.76	-71.9	-76.0	-63.3	-63.2
SW-07	Surface	November 20, 2024	1	38.20	3.37	61.10	71.09	-63.2	-67.3	-54.7	-54.6
SW-07	Surface	December 8, 2024	1	38.20	3.37	86.84	157.85	-150.0	-154.1	-141.4	-141.3
SW-07	Surface	December 19, 2024	1	38.20	3.37	51.94	40.22	-32.4	-36.5	-23.8	-23.7
SW-07	Surface	January 25, 2025	1	38.20	3.37	104.01	215.73	-207.9	-212.0	-199.3	-199.2
SW-07	Surface	February 19, 2025	1	38.20	3.37	28.86	-37.54	45.4	41.3	54.0	54.1
SW-07	Surface	February 20, 2025	1	38.20	3.37	69.96	100.97	-93.1	-97.2	-84.5	-84.4
SW-07	Surface	March 18, 2025	1	38.20	3.37	105.61	221.09	-213.2	-217.3	-204.7	-204.5
SW-07	Surface	March 27, 2025	1	38.20	3.37	52.45	41.94	-34.1	-38.2	-25.5	-25.4
SW-07	Surface	April 2, 2025	1	38.20	3.37	80.80	137.50	-129.7	-133.7	-121.1	-121.0
SW-07	Surface	April 7, 2025	1	38.20	3.37	56.02	53.99	-46.1	-50.2	-37.6	-37.4
SW-07	Surface	April 12, 2025	1	38.20	3.37	69.99	101.06	-93.2	-97.3	-84.6	-84.5
SW-07	Surface	April 20, 2025	1	38.20	3.37	69.61	99.79	-91.9	-96.0	-83.4	-83.3
SW-07	Surface	April 24, 2025	1	38.20	3.37	77.13	125.12	-117.3	-121.4	-108.7	-108.6
SW-07	Surface	April 28, 2025	1	38.20	3.37	66.17	88.19	-80.3	-84.4	-71.8	-71.6
SW-07	Surface	April 29, 2025	1	38.20	3.37	58.04	60.78	-52.9	-57.0	-44.3	-44.2
SW-07	Surface	May 8, 2025	1	38.20	3.37	55.60	52.59	-44.7	-48.8	-36.2	-36.0

Site ID	Sampling Depth	Sample Date	Number of samples	Watershed Area	Catchment Runoff	BC ₀	Critical Load using 40 ueq/L for ANClimit	Baseline	Project Alone Case	Application Case	Cumulative Case
				km ²	m/y	µeq/L	meq/m ² /y	Exceedance	Exceedance	Exceedance	Exceedance
								meq/m ² /y	meq/m ² /y	meq/m ² /y	meq/m ² /y
SW-07	Surface	May 13, 2025	1	38.20	3.37	74.60	116.61	-108.8	-112.8	-100.2	-100.1
SW-07	Surface	May 14, 2025	1	38.20	3.37	63.92	80.61	-72.8	-76.8	-64.2	-64.1
SW-07	Surface	May 22, 2025	1	38.20	3.37	73.97	114.47	-106.6	-110.7	-98.0	-97.9
SW-08	Surface	April 25, 2024	1	19.90	3.72	53.64	50.74	-42.9	-50.0	-41.5	-41.5
SW-08	Surface	May 2, 2024	1	19.90	3.72	58.55	69.01	-61.2	-68.3	-59.8	-59.8
SW-08	Surface	May 10, 2024	1	19.90	3.72	42.86	10.63	-2.8	-9.9	-1.4	-1.4
SW-08	Surface	May 16, 2024	1	19.90	3.72	41.08	4.03	3.8	-3.3	5.2	5.2
SW-08	Surface	May 23, 2024	1	19.90	3.72	46.21	23.09	-15.2	-22.4	-13.9	-13.9
SW-08	Surface	June 20, 2024	1	19.90	3.72	51.19	41.64	-33.8	-40.9	-32.4	-32.4
SW-08	Surface	July 18, 2024	1	19.90	3.72	52.39	46.09	-38.2	-45.4	-36.9	-36.9
SW-08	Surface	August 22, 2024	1	19.90	3.72	53.84	51.47	-43.6	-50.7	-42.3	-42.2
SW-08	Surface	September 19, 2024	1	19.90	3.72	61.61	80.39	-72.5	-79.7	-71.2	-71.2
SW-08	Surface	October 24, 2024	1	19.90	3.72	62.12	82.27	-74.4	-81.5	-73.1	-73.1
SW-08	Surface	October 31, 2024	1	19.90	3.72	62.05	82.02	-74.2	-81.3	-72.8	-72.8
SW-08	Surface	November 7, 2024	1	19.90	3.72	67.58	102.60	-94.7	-101.9	-93.4	-93.4
SW-08	Surface	November 14, 2024	1	19.90	3.72	45.79	21.53	-13.7	-20.8	-12.3	-12.3
SW-08	Surface	November 19, 2024	1	19.90	3.72	60.87	77.63	-69.8	-76.9	-68.4	-68.4
Notes: Grey highlights indicate positive acid input exceedance (EXa) values. A positive EXa value indicates that inputs of S and N are predicted to exceed the waterbody's ability to buffer increases in acidity, with the risk of the pH of the waterbody declining below the ANClimit and no longer being protective of aquatic biota.											

B.3 PREDICTED CHANGES IN PH AND ANCOAA

Table B.3 Background and Predicted Change in pH and ANCoaa for Air Modelling Scenarios

Site ID	Background				Baseline			Project-Alone Case			Application Case			Cumulative Case			Change from Background to Baseline			Change from Background to Project-Alone Case			Change from Background to Application Case			Change from Background to Cumulative Case		
	Sampling Date	CL _(A)	Calculated ANCoaa	Field pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	ΔANCoaa	Δ	Biological Concern Category	ΔANCoaa	Δ	Biological Concern Category	ΔANCoaa	Δ	Biological Concern Category	ΔANCoaa	Δ	Biological Concern Category
		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ³	pH		meq/m ³	pH		meq/m ³	pH		meq/m ³	pH	
SW-01	February 17, 2022	106	49	6.52	-98	49	6.52	-101	49	6.52	-87	48	6.51	-86	48	6.51	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	March 22, 2022	57	37	6.60	-49	37	6.60	-52	36	6.60	-38	35	6.59	-37	35	6.59	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	April 19, 2022	119	53	7.20	-111	53	7.20	-114	53	7.20	-100	52	7.19	-99	52	7.19	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	June 22, 2022	-23	16	5.74	31	16	5.74	28	16	5.74	42	14	5.72	43	14	5.72	0	0.00	Low concern	-1	0.00	Low concern	-3	-0.02	Low concern	-3	-0.02	Low concern
SW-01	July 14, 2022	14	26	6.27	-7	26	6.27	-9	26	6.27	5	24	6.26	5	24	6.26	0	0.00	No concern	-1	0.00	No concern	-2	-0.01	Low concern	-2	-0.01	Low concern
SW-01	August 18, 2022	73	41	6.68	-65	41	6.68	-68	40	6.68	-54	39	6.67	-53	39	6.67	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	September 15, 2022	78	42	6.53	-70	42	6.53	-72	41	6.53	-58	41	6.52	-58	41	6.52	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	October 13, 2022	258	92	7.45	-250	92	7.45	-253	92	7.45	-239	92	7.45	-238	92	7.45	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-01	November 9, 2022	152	60	6.33	-145	60	6.33	-147	60	6.33	-133	60	6.33	-132	60	6.33	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-01	December 6, 2022	274	93	6.51	-266	93	6.51	-269	93	6.51	-255	93	6.51	-254	93	6.51	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-01	January 26, 2023	128	55	6.36	-120	55	6.36	-123	55	6.36	-109	55	6.36	-108	55	6.36	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-01	February 27, 2023	119	53	5.75	-111	53	5.75	-114	53	5.75	-100	52	5.74	-99	52	5.74	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	March 16, 2023	132	57	6.06	-125	57	6.06	-127	57	6.06	-113	56	6.05	-112	56	6.05	0	0.00	No concern	0	0.00	No concern	0	-0.01	No concern	0	-0.01	No concern
SW-01	April 27, 2023	98	47	5.91	-91	47	5.91	-93	46	5.91	-79	46	5.90	-78	46	5.90	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	May 18, 2023	-3	21	5.41	11	21	5.41	8	20	5.41	22	19	5.40	23	19	5.40	0	0.00	Low concern	-1	0.00	Low concern	-2	-0.01	Low concern	-2	-0.01	Low concern
SW-01	August 25, 2023	92	39	6.71	-84	39	6.71	-87	38	6.71	-73	38	6.70	-72	38	6.70	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	September 20, 2023	148	55	7.31	-141	55	7.31	-143	55	7.31	-129	54	7.31	-129	54	7.31	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-01	November 16, 2023	108	50	6.45	-100	50	6.45	-102	50	6.45	-88	49	6.44	-88	49	6.44	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	December 13, 2023	157	63	6.72	-149	63	6.72	-151	63	6.72	-137	63	6.72	-137	63	6.72	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-01	January 23, 2024	44	32	5.53	-37	32	5.53	-39	32	5.53	-25	31	5.52	-24	31	5.52	0	0.00	No concern	0	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-01	February 15, 2024	62	38	6.49	-54	38	6.49	-56	37	6.49	-42	36	6.48	-42	36	6.48	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	March 19, 2024	50	35	6.16	-42	35	6.16	-44	34	6.16	-30	33	6.15	-30	33	6.15	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-2	-0.01	No concern
SW-01	April 25, 2024	60	39	6.24	-52	39	6.24	-54	39	6.24	-40	38	6.23	-40	38	6.23	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	April 29, 2024	40	32	6.10	-33	32	6.10	-35	31	6.10	-21	30	6.09	-20	30	6.09	0	0.00	No concern	0	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-01	May 2, 2024	79	43	6.53	-71	43	6.53	-73	43	6.53	-59	42	6.52	-59	42	6.52	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-01	May 10, 2024	22	29	7.30	-14	29	7.30	-17	29	7.30	-2	27	7.29	-2	27	7.29	0	0.00	No concern	-1	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-01	May 10, 2024	19	27	5.88	-11	27	5.88	-13	27	5.88	1	25	5.87	1	25	5.87	0	0.00	No concern	-1	0.00	No concern	-2	-0.01	Low concern	-2	-0.01	Low concern
SW-01	May 16, 2024	13	29	7.20	-5	29	7.20	-7	29	7.20	7	27	7.18	7	27	7.18	0	0.00	No concern	-1	0.00	No concern	-2	-0.02	Low concern	-2	-0.02	Low concern
SW-01	May 16, 2024	17	29	6.07	-9	29	6.07	-12	28	6.07	2	27	6.06	3	27	6.05	0	0.00	No concern	-1	0.00	No concern	-2	-0.01	Low concern	-2	-0.02	Low concern
SW-01	May 22, 2024	31	32	8.30	-24	32	8.30	-26	32	8.30	-12	31	8.29	-12	31	8.29	0	0.00	No concern	-1	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-01	May 23, 2024	36	36	6.26	-29	36	6.26	-31	36	6.26	-17	35	6.25	-16	35	6.25	0	0.00	No concern	0	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-01	May 27, 2024	8	25	6.10	0	25	6.10	-2	25	6.10	12	23	6.08	12	23	6.08	0	0.00	Low concern	-1	0.00	No concern	-2	-0.02	Low concern	-2	-0.02	Low concern
SW-01	June 20, 2024	49	38	6.60	-42	38	6.60	-44	37	6.60	-30	36	6.59	-29	36	6.59	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-2	-0.01	No concern
SW-01	June 26, 2024	102	53	6.40	-94	53	6.40	-96	53	6.40	-82	53	6.39	-82	53	6.39	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern

Site ID	Background				Baseline			Project-Alone Case			Application Case			Cumulative Case			Change from Background to Baseline			Change from Background to Project-Alone Case			Change from Background to Application Case			Change from Background to Cumulative Case		
	Sampling Date	CL _(A)	Calculated ANCoaa	Field pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category
		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ³			meq/m ³			meq/m ³			meq/m ³		
SW-01	July 18, 2024	62	41	6.46	-54	41	6.46	-56	41	6.46	-42	40	6.45	-42	40	6.45	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	July 31, 2024	67	44	6.50	-59	44	6.50	-61	44	6.50	-47	43	6.49	-47	43	6.49	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	August 22, 2024	69	44	6.38	-61	44	6.38	-64	43	6.38	-50	43	6.37	-49	43	6.37	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	August 27, 2024	118	53	6.80	-110	53	6.80	-113	53	6.80	-98	53	6.79	-98	53	6.79	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	September 19, 2024	89	51	6.46	-81	51	6.46	-83	50	6.46	-69	50	6.45	-69	50	6.45	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	September 28, 2024	134	61	5.50	-127	61	5.50	-129	61	5.50	-115	60	5.50	-114	60	5.49	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	-	No concern
SW-01	October 3, 2024	113	58	7.60	-106	58	7.60	-108	57	7.60	-94	57	7.59	-93	57	7.59	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	October 12, 2024	109	55	6.98	-101	55	6.98	-104	55	6.98	-90	54	6.97	-89	54	6.97	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	October 22, 2024	107	47	9.10	-99	47	9.10	-101	47	9.10	-87	46	9.09	-87	46	9.09	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	October 24, 2024	88	43	6.45	-80	43	6.45	-82	43	6.45	-68	42	6.44	-68	42	6.44	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	October 26, 2024	112	47	5.42	-104	47	5.42	-107	47	5.42	-93	47	5.41	-92	47	5.41	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	October 31, 2024	87	40	6.48	-79	40	6.48	-82	40	6.48	-68	39	6.47	-67	39	6.47	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	November 7, 2024	113	52	6.46	-105	52	6.46	-107	52	6.46	-93	51	6.45	-93	51	6.45	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	November 12, 2024	75	37	6.40	-68	37	6.40	-70	37	6.40	-56	36	6.39	-55	36	6.39	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	November 14, 2024	28	26	6.11	-20	26	6.11	-23	26	6.11	-9	24	6.10	-8	24	6.10	0	0.00	No concern	0	0.00	No concern	-2	-	No concern	-2	-	No concern
SW-01	November 19, 2024	81	44	6.20	-73	44	6.20	-76	43	6.20	-62	43	6.19	-61	43	6.19	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	December 6, 2024	85	44	7.10	-77	44	7.10	-80	43	7.10	-66	43	7.09	-65	43	7.09	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	December 19, 2024	28	29	6.19	-20	29	6.19	-22	29	6.19	-8	27	6.18	-8	27	6.18	0	0.00	No concern	0	0.00	No concern	-2	-	No concern	-2	-	No concern
SW-01	January 24, 2025	-693	-182	6.60	701	-182	6.54	698	-184	6.53	712	-191	6.52	713	-191	6.52	0	-0.06	Low concern	-2	-0.07	Low concern	-9	-	Low concern	-9	-	Low concern
SW-01	February 20, 2025	143	56	6.31	-135	56	6.31	-137	56	6.31	-123	56	6.31	-123	56	6.31	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-01	February 21, 2025	157	61	6.20	-149	61	6.20	-152	61	6.20	-137	60	6.20	-137	60	6.20	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-01	March 19, 2025	107	42	6.60	-100	42	6.60	-102	42	6.60	-88	42	6.59	-87	42	6.59	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	March 27, 2025	10	20	5.98	-2	20	5.98	-4	19	5.98	10	18	5.97	10	18	5.97	0	0.00	No concern	-1	0.00	No concern	-2	-	Low concern	-2	-	Low concern
SW-01	April 2, 2025	91	45	6.40	-83	45	6.40	-86	45	6.40	-72	44	6.39	-71	44	6.39	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	April 8, 2025	35	30	6.90	-27	30	6.90	-30	30	6.90	-16	29	6.89	-15	29	6.89	0	0.00	No concern	0	0.00	No concern	-2	-	No concern	-2	-	No concern
SW-01	April 13, 2025	85	44	6.50	-77	44	6.50	-80	43	6.50	-65	43	6.49	-65	43	6.49	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	April 22, 2025	64	40	7.20	-56	40	7.20	-58	39	7.20	-44	38	7.19	-44	38	7.19	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	April 24, 2025	71	42	6.01	-63	42	6.01	-65	42	6.01	-51	41	5.99	-51	41	6.00	0	0.00	No concern	0	0.00	No concern	-1	-	No concern	-1	-	No concern
SW-01	April 29, 2025	37	33	6.60	-30	33	6.60	-32	33	6.60	-18	32	6.59	-18	32	6.59	0	0.00	No concern	0	0.00	No concern	-2	-	No concern	-2	-	No concern
SW-01	April 29, 2025	38	35	5.84	-30	35	5.84	-33	34	5.84	-19	33	5.83	-18	33	5.83	0	0.00	No concern	0	0.00	No concern	-2	-	No concern	-2	-	No concern
SW-01	May 8, 2025	18	29	5.84	-10	29	5.84	-12	29	5.84	2	27	5.83	2	27	5.82	0	0.00	No concern	-1	0.00	No concern	-2	-	Low concern	-2	-	Low concern
SW-01	May 12, 2025	36	34	7.20	-28	34	7.20	-31	34	7.20	-17	33	7.19	-16	33	7.19	0	0.00	No concern	0	0.00	No concern	-2	-	No concern	-2	-	No concern
SW-01	May 14, 2025	23	31	5.76	-15	31	5.76	-17	30	5.76	-3	29	5.75	-3	29	5.75	0	0.00	No concern	-1	0.00	No concern	-2	-	No concern	-2	-	No concern
SW-01	May 22, 2025	42	34	6.24	-34	34	6.24	-37	34	6.24	-15	32	6.22	-22	33	6.23	0	0.00	No concern	0	0.00	No concern	-2	-	No concern	-2	-	No concern
SW-02	February 17, 2022	209	71	7.20	-201	71	7.20	-203	71	7.20	-182	71	7.20	-181	71	7.20	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	March 22, 2022	147	57	8.40	-139	57	8.40	-141	57	8.40	-120	57	8.40	-119	57	8.40	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern

Site ID	Background				Baseline			Project-Alone Case			Application Case			Cumulative Case			Change from Background to Baseline			Change from Background to Project-Alone Case			Change from Background to Application Case			Change from Background to Cumulative Case		
	Sampling Date	CL _(A)	Calculated ANCoaa	Field pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category
		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³													
SW-02	April 20, 2022	199	70	6.10	-191	70	6.10	-193	70	6.10	-173	70	6.10	-172	70	6.10	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	June 22, 2022	7	24	6.17	1	24	6.17	-1	23	6.16	20	20	6.15	21	20	6.15	0	0.00	Low concern	-1	-0.01	No concern	-3	-0.02	Low concern	-4	-0.02	Low concern
SW-02	July 14, 2022	53	37	6.45	-46	37	6.45	-47	37	6.45	-27	35	6.43	-26	35	6.43	0	0.00	No concern	-1	0.00	No concern	-2	-0.02	No concern	-2	-0.02	No concern
SW-02	August 18, 2022	224	77	6.98	-216	77	6.98	-218	77	6.98	-198	77	6.98	-197	77	6.98	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	September 15, 2022	306	91	7.37	-298	91	7.37	-300	91	7.37	-279	91	7.37	-278	91	7.37	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	October 13, 2022	427	119	7.69	-420	119	7.69	-421	119	7.69	-401	119	7.69	-400	119	7.69	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	November 9, 2022	257	83	7.04	-249	83	7.04	-251	83	7.04	-230	83	7.04	-229	83	7.04	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	December 6, 2022	296	91	7.20	-289	91	7.20	-290	91	7.20	-270	91	7.20	-269	91	7.20	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	January 26, 2023	196	66	6.11	-188	66	6.11	-190	66	6.11	-169	66	6.11	-168	66	6.11	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	February 27, 2023	296	92	7.75	-288	92	7.75	-290	92	7.75	-269	92	7.75	-269	92	7.75	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	March 16, 2023	329	101	5.95	-322	101	5.95	-323	101	5.95	-303	101	5.95	-302	101	5.95	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	April 27, 2023	135	56	5.53	-127	56	5.53	-129	55	5.53	-108	55	5.53	-107	55	5.52	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	-0.01	No concern
SW-02	May 18, 2023	-41	11	5.74	49	11	5.74	47	10	5.73	67	6	5.71	68	6	5.71	0	0.00	Low concern	-1	-0.01	Low concern	-5	-0.03	Low concern	-5	-0.03	Low concern
SW-02	August 25, 2023	384	109	7.26	-376	109	7.26	-378	109	7.26	-357	109	7.26	-356	109	7.26	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	November 16, 2023	208	71	7.32	-200	71	7.32	-202	71	7.32	-181	71	7.32	-180	71	7.32	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	December 13, 2023	322	101	6.40	-314	101	6.40	-316	101	6.40	-295	101	6.40	-294	101	6.40	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	January 23, 2024	118	44	6.08	-110	44	6.08	-112	43	6.08	-91	43	6.07	-91	43	6.07	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-02	February 15, 2024	186	60	6.63	-178	60	6.63	-180	60	6.63	-159	60	6.63	-158	60	6.63	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	March 19, 2024	110	42	6.39	-102	42	6.39	-104	42	6.39	-83	42	6.38	-83	42	6.38	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-02	April 26, 2024	165	57	6.39	-157	57	6.39	-159	57	6.39	-138	57	6.39	-137	57	6.39	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	May 3, 2024	161	57	6.64	-153	57	6.64	-155	57	6.64	-134	57	6.64	-133	57	6.64	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	May 9, 2024	123	46	6.70	-115	46	6.70	-117	46	6.70	-96	45	6.69	-95	45	6.69	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-02	May 9, 2024	155	56	6.70	-148	56	6.70	-150	56	6.70	-129	56	6.69	-128	56	6.69	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-02	May 14, 2024	88	42	6.90	-80	42	6.90	-82	42	6.90	-62	40	6.88	-61	40	6.88	0	0.00	No concern	0	0.00	No concern	-2	-0.02	No concern	-2	-0.02	No concern
SW-02	May 17, 2024	88	45	6.32	-80	45	6.32	-82	45	6.32	-61	43	6.30	-60	43	6.30	0	0.00	No concern	0	0.00	No concern	-2	-0.02	No concern	-2	-0.02	No concern
SW-02	May 23, 2024	96	42	6.30	-89	42	6.30	-90	42	6.30	-70	41	6.29	-69	41	6.29	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-02	May 24, 2024	93	42	6.30	-85	42	6.30	-87	42	6.30	-66	40	6.29	-66	40	6.29	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-2	-0.01	No concern
SW-02	May 26, 2024	93	43	7.30	-85	43	7.30	-87	43	7.30	-66	41	7.29	-65	41	7.29	0	0.00	No concern	0	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-02	June 21, 2024	71	39	6.50	-63	39	6.50	-65	39	6.50	-44	37	6.48	-44	37	6.48	0	0.00	No concern	0	0.00	No concern	-2	-0.02	No concern	-2	-0.02	No concern
SW-02	June 27, 2024	59	38	7.40	-51	38	7.40	-53	38	7.40	-32	36	7.38	-31	36	7.38	0	0.00	No concern	-1	0.00	No concern	-2	-0.02	No concern	-2	-0.02	No concern
SW-02	July 19, 2024	179	65	6.85	-171	65	6.85	-173	65	6.85	-152	65	6.85	-152	65	6.85	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	July 31, 2024	232	78	7.00	-224	78	7.00	-226	78	7.00	-205	78	7.00	-204	78	7.00	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	August 23, 2024	315	94	6.70	-307	94	6.70	-309	94	6.70	-288	94	6.70	-287	94	6.70	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	August 27, 2024	202	66	6.60	-194	66	6.60	-196	66	6.60	-175	66	6.60	-174	66	6.60	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	September 20, 2024	340	96	7.03	-332	96	7.03	-334	96	7.03	-313	96	7.03	-312	96	7.03	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	September 29, 2024	262	80	6.80	-254	80	6.80	-256	80	6.80	-235	80	6.80	-234	80	6.80	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern

Site ID	Background				Baseline			Project-Alone Case			Application Case			Cumulative Case			Change from Background to Baseline			Change from Background to Project-Alone Case			Change from Background to Application Case			Change from Background to Cumulative Case		
	Sampling Date	CL _(A)	Calculated ANCoaa	Field pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category
		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ³			meq/m ³			meq/m ³			meq/m ³		
SW-02	October 4, 2024	308	84	6.30	-300	84	6.30	-302	84	6.30	-281	84	6.30	-280	84	6.30	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	October 12, 2024	578	160	7.18	-570	160	7.18	-572	160	7.18	-552	160	7.18	-551	160	7.18	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	October 22, 2024	176	58	6.70	-168	58	6.70	-170	58	6.70	-149	58	6.70	-148	58	6.70	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	October 25, 2024	176	58	6.88	-169	58	6.88	-170	58	6.88	-150	58	6.88	-149	58	6.88	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	October 25, 2024	165	53	6.42	-157	53	6.42	-159	53	6.42	-138	53	6.42	-137	53	6.42	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	November 1, 2024	138	48	6.75	-130	48	6.75	-132	48	6.75	-111	48	6.75	-110	48	6.75	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	November 8, 2024	170	60	6.98	-163	60	6.98	-164	60	6.98	-144	60	6.98	-143	60	6.98	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	November 15, 2024	128	48	6.18	-121	48	6.18	-122	48	6.18	-102	48	6.18	-101	48	6.18	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	November 16, 2024	229	72	7.00	-222	72	7.00	-224	72	7.00	-203	72	7.00	-202	72	7.00	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	November 20, 2024	254	77	6.70	-246	77	6.70	-248	77	6.70	-227	77	6.70	-226	77	6.70	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	December 8, 2024	125	47	6.70	-117	47	6.70	-119	47	6.70	-99	46	6.70	-98	46	6.70	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	December 19, 2024	180	59	6.60	-172	59	6.60	-174	59	6.60	-154	59	6.60	-153	59	6.60	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	January 24, 2025	282	84	7.60	-275	84	7.60	-277	84	7.60	-256	84	7.60	-255	84	7.60	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	February 19, 2025	445	123	7.97	-437	123	7.97	-439	123	7.97	-418	123	7.97	-417	123	7.97	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	February 20, 2025	258	78	7.01	-250	78	7.01	-252	78	7.01	-231	78	7.01	-231	78	7.01	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	March 18, 2025	213	66	7.05	-205	66	7.05	-207	66	7.05	-186	66	7.05	-185	66	7.05	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	March 27, 2025	65	30	6.20	-57	30	6.20	-59	29	6.20	-38	28	6.19	-37	28	6.19	0	0.00	No concern	0	0.00	No concern	-2	- 0.01	No concern	-2	- 0.01	No concern
SW-02	April 2, 2025	238	74	7.20	-230	74	7.20	-232	74	7.20	-211	74	7.20	-210	74	7.20	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	April 7, 2025	82	35	7.10	-75	35	7.10	-76	34	7.10	-56	33	7.09	-55	33	7.09	0	0.00	No concern	0	0.00	No concern	-2	- 0.01	No concern	-2	- 0.01	No concern
SW-02	April 12, 2025	122	46	7.00	-114	46	7.00	-116	46	7.00	-95	46	7.00	-94	46	7.00	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-02	April 20, 2025	112	45	7.20	-104	45	7.20	-106	45	7.20	-85	44	7.19	-84	44	7.19	0	0.00	No concern	0	0.00	No concern	-1	- 0.01	No concern	-1	- 0.01	No concern
SW-02	April 24, 2025	142	53	6.51	-134	53	6.51	-136	53	6.51	-115	53	6.50	-114	53	6.50	0	0.00	No concern	0	0.00	No concern	-1	- 0.01	No concern	-1	- 0.01	No concern
SW-02	April 28, 2025	157	60	6.90	-150	60	6.90	-152	60	6.90	-131	60	6.89	-130	60	6.89	0	0.00	No concern	0	0.00	No concern	-1	- 0.01	No concern	-1	- 0.01	No concern
SW-02	April 29, 2025	88	41	6.53	-80	41	6.53	-82	41	6.53	-61	39	6.51	-61	39	6.51	0	0.00	No concern	0	0.00	No concern	-2	- 0.02	No concern	-2	- 0.02	No concern
SW-02	May 8, 2025	62	35	5.67	-54	35	5.67	-56	34	5.67	-35	32	5.65	-34	32	5.65	0	0.00	No concern	-1	0.00	No concern	-2	- 0.02	No concern	-2	- 0.02	No concern
SW-02	May 13, 2025	105	46	6.90	-97	46	6.90	-99	46	6.90	-78	45	6.89	-78	45	6.89	0	0.00	No concern	0	0.00	No concern	-1	- 0.01	No concern	-1	- 0.01	No concern
SW-02	May 14, 2025	90	42	6.49	-82	42	6.49	-84	42	6.49	-63	40	6.48	-62	40	6.48	0	0.00	No concern	0	0.00	No concern	-2	- 0.01	No concern	-2	- 0.01	No concern
SW-02	May 22, 2025	110	43	6.79	-102	43	6.79	-104	43	6.79	-83	42	6.78	-82	42	6.78	0	0.00	No concern	0	0.00	No concern	-1	- 0.01	No concern	-1	- 0.01	No concern
SW-07	August 25, 2023	367	106	6.63	-359	106	6.63	-363	106	6.63	-350	106	6.63	-350	106	6.63	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	September 20, 2023	284	90	6.62	-276	90	6.62	-280	90	6.62	-268	90	6.62	-267	90	6.62	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	November 16, 2023	166	61	5.71	-158	61	5.71	-162	61	5.71	-150	61	5.71	-149	61	5.71	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	December 13, 2023	222	76	6.07	-214	76	6.07	-218	76	6.07	-205	76	6.07	-205	76	6.07	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	January 23, 2024	88	36	5.72	-80	36	5.72	-84	36	5.72	-72	35	5.72	-72	35	5.72	0	0.00	No concern	0	0.00	No concern	-1	0.00	No concern	-1	0.00	No concern
SW-07	February 15, 2024	113	41	6.13	-106	41	6.13	-110	41	6.13	-97	41	6.13	-97	41	6.13	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	March 19, 2024	92	38	5.53	-85	38	5.53	-89	37	5.53	-76	37	5.53	-76	37	5.53	0	0.00	No concern	0	0.00	No concern	-1	0.00	No concern	-1	0.00	No concern
SW-07	April 26, 2024	158	54	6.15	-150	54	6.15	-154	54	6.15	-141	54	6.15	-141	54	6.15	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern

Site ID	Background				Baseline			Project-Alone Case			Application Case			Cumulative Case			Change from Background to Baseline			Change from Background to Project-Alone Case			Change from Background to Application Case			Change from Background to Cumulative Case		
	Sampling Date	CL _(A)	Calculated ANCoaa	Field pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category	ΔANCoaa	Δ pH	Biological Concern Category
		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ³			meq/m ³			meq/m ³			meq/m ³		
SW-07	May 3, 2024	146	52	6.36	-138	52	6.36	-142	52	6.36	-129	51	6.36	-129	51	6.36	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	May 9, 2024	108	43	6.16	-100	43	6.16	-104	43	6.16	-92	43	6.15	-92	43	6.15	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	May 9, 2024	104	43	6.60	-96	43	6.60	-100	43	6.60	-88	43	6.59	-88	43	6.59	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	May 14, 2024	77	39	6.90	-69	39	6.90	-73	39	6.90	-61	38	6.89	-61	38	6.89	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	May 17, 2024	50	34	5.96	-42	34	5.96	-46	34	5.96	-33	32	5.95	-33	32	5.95	0	0.00	No concern	0	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-07	May 23, 2024	76	36	6.10	-68	36	6.10	-72	36	6.10	-59	35	6.09	-59	35	6.09	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	May 24, 2024	80	39	6.13	-72	39	6.13	-76	38	6.13	-63	38	6.12	-63	38	6.12	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	May 26, 2024	78	38	7.20	-71	38	7.20	-75	38	7.20	-62	37	7.19	-62	37	7.19	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	June 21, 2024	71	39	6.50	-63	39	6.50	-67	39	6.50	-54	38	6.49	-54	38	6.49	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	June 26, 2024	77	40	6.00	-69	40	5.99	-74	40	5.99	-61	39	5.99	-61	39	5.99	0	-0.01	No concern	0	-0.01	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	July 19, 2024	161	61	6.77	-154	61	6.77	-158	61	6.77	-145	60	6.77	-145	60	6.77	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	July 31, 2024	182	64	7.00	-174	64	7.00	-178	64	7.00	-165	64	7.00	-165	64	7.00	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	August 23, 2024	259	80	6.23	-251	80	6.23	-255	80	6.23	-242	80	6.23	-242	80	6.23	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	August 27, 2024	178	61	6.40	-170	61	6.40	-174	61	6.40	-162	61	6.40	-162	61	6.40	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	September 20, 2024	266	78	6.78	-258	78	6.78	-263	78	6.78	-250	78	6.78	-250	78	6.78	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	September 29, 2024	220	72	5.90	-212	72	5.90	-216	72	5.90	-203	72	5.90	-203	72	5.90	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	October 3, 2024	232	74	8.40	-224	74	8.40	-228	74	8.40	-216	74	8.40	-216	74	8.40	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	October 22, 2024	79	29	6.59	-72	29	6.59	-76	29	6.59	-63	29	6.59	-63	29	6.59	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	October 25, 2024	139	49	6.56	-131	49	6.56	-135	49	6.56	-122	49	6.56	-122	49	6.56	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	October 25, 2024	59	25	6.11	-51	25	6.11	-56	25	6.11	-43	25	6.11	-43	25	6.11	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	November 1, 2024	120	43	6.15	-112	43	6.15	-116	43	6.15	-104	43	6.15	-104	43	6.15	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	November 8, 2024	135	49	6.36	-127	49	6.36	-131	48	6.36	-118	48	6.36	-118	48	6.36	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	November 15, 2024	73	30	6.28	-65	30	6.28	-69	30	6.28	-56	30	6.28	-56	30	6.28	0	0.00	No concern	0	0.00	No concern	-1	0.00	No concern	-1	0.00	No concern
SW-07	November 16, 2024	80	32	6.90	-72	32	6.90	-76	32	6.90	-63	32	6.90	-63	32	6.90	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	November 20, 2024	71	27	6.40	-63	27	6.40	-67	27	6.40	-55	27	6.40	-55	27	6.40	0	0.00	No concern	0	0.00	No concern	-1	0.00	No concern	-1	0.00	No concern
SW-07	December 8, 2024	158	56	6.90	-150	56	6.90	-154	56	6.90	-141	56	6.90	-141	56	6.90	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	December 19, 2024	40	21	5.93	-32	21	5.93	-36	20	5.93	-24	20	5.92	-24	20	5.92	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	January 25, 2025	216	67	6.80	-208	67	6.80	-212	67	6.80	-199	67	6.80	-199	67	6.80	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	February 19, 2025	-38	-4	6.61	45	-4	6.61	41	-4	6.61	54	-4	6.61	54	-4	6.61	0	0.00	Low concern	0	0.00	Low concern	-1	0.00	Low concern	-1	0.00	Low concern
SW-07	February 20, 2025	101	38	6.11	-93	38	6.11	-97	38	6.11	-85	38	6.11	-84	38	6.11	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	March 18, 2025	221	68	6.60	-213	68	6.60	-217	68	6.60	-205	68	6.60	-205	68	6.60	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	March 27, 2025	42	24	5.85	-34	24	5.85	-38	23	5.85	-26	22	5.84	-25	22	5.84	0	0.00	No concern	0	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-07	April 2, 2025	138	50	7.10	-130	50	7.10	-134	50	7.10	-121	50	7.10	-121	50	7.10	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	April 7, 2025	54	28	7.60	-46	28	7.60	-50	28	7.60	-38	27	7.59	-37	27	7.59	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	April 12, 2025	101	41	6.90	-93	41	6.90	-97	41	6.90	-85	40	6.90	-85	40	6.90	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	April 20, 2025	100	41	6.80	-92	41	6.80	-96	41	6.80	-83	40	6.79	-83	40	6.79	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern

Site ID	Background				Baseline			Project-Alone Case			Application Case			Cumulative Case			Change from Background to Baseline			Change from Background to Project-Alone Case			Change from Background to Application Case			Change from Background to Cumulative Case		
	Sampling Date	CL _(A)	Calculated ANCoaa	Field pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	CL _(A) Exceedance	Predicted ANCoaa	Predicted pH	ΔANCoaa	Δ	Biological Concern Category	ΔANCoaa	Δ	Biological Concern Category	ΔANCoaa	Δ	Biological Concern Category	ΔANCoaa	Δ	Biological Concern Category
		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ² /y	meq/m ³		meq/m ³	meq/m ³		meq/m ³	meq/m ³		meq/m ³		
SW-07	April 24, 2025	125	49	5.68	-117	49	5.68	-121	49	5.68	-109	48	5.68	-109	48	5.68	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-07	April 28, 2025	88	41	6.90	-80	41	6.90	-84	41	6.90	-72	40	6.89	-72	40	6.89	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	April 29, 2025	61	33	6.09	-53	33	6.09	-57	32	6.09	-44	31	6.08	-44	31	6.08	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	May 8, 2025	53	32	5.44	-45	32	5.44	-49	31	5.44	-36	30	5.43	-36	30	5.43	0	0.00	No concern	0	0.00	No concern	-2	-0.01	No concern	-2	-0.01	No concern
SW-07	May 13, 2025	117	49	6.70	-109	49	6.70	-113	49	6.70	-100	48	6.69	-100	48	6.69	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	May 14, 2025	81	39	5.50	-73	39	5.50	-77	39	5.50	-64	38	5.49	-64	38	5.49	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-07	May 22, 2025	114	46	5.54	-107	46	5.54	-111	46	5.54	-98	46	5.53	-98	46	5.53	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	April 25, 2024	51	36	6.01	-43	36	6.01	-50	36	6.01	-42	35	6.00	-42	35	6.00	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	May 2, 2024	69	41	5.75	-61	41	5.75	-68	41	5.75	-60	41	5.74	-60	41	5.74	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	May 10, 2024	11	25	5.68	-3	25	5.68	-10	25	5.68	-1	24	5.67	-1	24	5.67	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	May 16, 2024	4	25	5.63	4	25	5.63	-3	25	5.63	5	24	5.62	5	24	5.62	0	0.00	Low concern	0	0.00	No concern	-1	-0.01	Low concern	-1	-0.01	Low concern
SW-08	May 23, 2024	23	33	6.22	-15	33	6.22	-22	33	6.22	-14	32	6.21	-14	32	6.21	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	June 20, 2024	42	36	5.70	-34	36	5.70	-41	36	5.70	-32	35	5.69	-32	35	5.69	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	July 18, 2024	46	38	6.49	-38	38	6.49	-45	38	6.49	-37	37	6.48	-37	37	6.48	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	August 22, 2024	51	39	5.65	-44	39	5.65	-51	39	5.65	-42	38	5.64	-42	38	5.64	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	September 19, 2024	80	49	5.98	-73	49	5.98	-80	49	5.98	-71	48	5.98	-71	48	5.98	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-08	October 24, 2024	82	41	5.70	-74	41	5.70	-82	41	5.70	-73	40	5.70	-73	40	5.70	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-08	October 31, 2024	82	40	6.14	-74	40	6.14	-81	40	6.14	-73	40	6.14	-73	40	6.14	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-08	November 7, 2024	103	49	6.14	-95	49	6.14	-102	49	6.14	-93	49	6.14	-93	49	6.14	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern	0	0.00	No concern
SW-08	November 14, 2024	22	25	5.83	-14	25	5.83	-21	25	5.83	-12	24	5.82	-12	24	5.82	0	0.00	No concern	0	0.00	No concern	-1	-0.01	No concern	-1	-0.01	No concern
SW-08	November 19, 2024	78	42	5.80	-70	42	5.80	-77	42	5.80	-68	41	5.80	-68	41	5.80	0	0.00	No concern	0	0.00	No concern	-1	0.00	No concern	-1	0.00	No concern
<div>Notes: CL_(A) - critical load of acidity (milliequivalents per square metre per year [meq/m²/y]) using an ANC limit of 40 meq/m³; ANCoaa - organic acid adjusted acid neutralizing capacity; Δ= change Grey and bold values indicate CL_(A) Exceedance (i.e., values above zero) Grey and italic values indicate ANCoaa is below 20 meq/m³ Grey, bold and italic values indicated change in pH by ≥ 0.3 pH unit (i.e, decrease in value) Grey when pH < 6.0</div>																												
	High concern (CL _(A) Exceedance and pH ≥ 0.3)																											
	Intermediate concern (No CL _(A) Exceedance and pH ≥ 0.3)																											
	Low concern (CL _(A) Exceedance but no pH ≥ 0.3)																											
	No concern (No CL _(A) Exceedance and no pH ≥ 0.3)																											

APPENDIX C EUTROPHICATION ASSESSMENT

C.1 PREDICTED TROPHIC STATUS

Table C.1 Background (Estimated Total Nitrogen) and Predicted Trophic Status Associated with Baseline, Project Alone 1 Case, and Application Case Maximum Nitrogen Deposition Rates

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-01	Lower reach of Woodfibre Creek	February 17, 2022	1	21.86	3.72	Baseline	0.092	3.44	1.8	0.0484	0.140745	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 17, 2022	1	21.86	3.72	Project-Alone Case	0.092	3.44	0.15524	0.0042	0.096531	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 17, 2022	1	21.86	3.72	Application Case	0.092	3.44	2.4047	0.0646	0.157000	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 17, 2022	1	21.86	3.72	Cumulative Case	0.092	3.44	2.4546	0.0660	0.158342	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 22, 2022	1	21.86	3.72	Baseline	0.089	3.32	1.8	0.0484	0.137723	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 22, 2022	1	21.86	3.72	Project-Alone Case	0.089	3.32	0.15524	0.0042	0.093509	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 22, 2022	1	21.86	3.72	Application Case	0.089	3.32	2.4047	0.0646	0.153978	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 22, 2022	1	21.86	3.72	Cumulative Case	0.089	3.32	2.4546	0.0660	0.155320	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 19, 2022	1	21.86	3.72	Baseline	0.087	3.25	1.8	0.0484	0.135708	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 19, 2022	1	21.86	3.72	Project-Alone Case	0.087	3.25	0.15524	0.0042	0.091494	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 19, 2022	1	21.86	3.72	Application Case	0.087	3.25	2.4047	0.0646	0.151964	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 19, 2022	1	21.86	3.72	Cumulative Case	0.087	3.25	2.4546	0.0660	0.153305	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 18, 2022	1	21.86	3.72	Baseline	0.080	2.99	1.8	0.0484	0.128657	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 18, 2022	1	21.86	3.72	Project-Alone Case	0.080	2.99	0.15524	0.0042	0.084443	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 18, 2022	1	21.86	3.72	Application Case	0.080	2.99	2.4047	0.0646	0.144912	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 18, 2022	1	21.86	3.72	Cumulative Case	0.080	2.99	2.4546	0.0660	0.146253	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 22, 2022	1	21.86	3.72	Baseline	0.067	2.50	1.8	0.0484	0.115561	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 22, 2022	1	21.86	3.72	Project-Alone Case	0.067	2.50	0.15524	0.0042	0.071347	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 22, 2022	1	21.86	3.72	Application Case	0.067	2.50	2.4047	0.0646	0.131816	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 22, 2022	1	21.86	3.72	Cumulative Case	0.067	2.50	2.4546	0.0660	0.133158	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 14, 2022	1	21.86	3.72	Baseline	0.070	2.61	1.8	0.0484	0.118583	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 14, 2022	1	21.86	3.72	Project-Alone Case	0.070	2.61	0.15524	0.0042	0.074369	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 14, 2022	1	21.86	3.72	Application Case	0.070	2.61	2.4047	0.0646	0.134838	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 14, 2022	1	21.86	3.72	Cumulative Case	0.070	2.61	2.4546	0.0660	0.136180	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 18, 2022	1	21.86	3.72	Baseline	0.092	3.44	1.8	0.0484	0.140745	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 18, 2022	1	21.86	3.72	Project-Alone Case	0.092	3.44	0.15524	0.0042	0.096531	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 18, 2022	1	21.86	3.72	Application Case	0.092	3.44	2.4047	0.0646	0.157000	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 18, 2022	1	21.86	3.72	Cumulative Case	0.092	3.44	2.4546	0.0660	0.158342	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 15, 2022	1	21.86	3.72	Baseline	0.096	3.59	1.8	0.0484	0.144775	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-01	Lower reach of Woodfibre Creek	September 15, 2022	1	21.86	3.72	Project-Alone Case	0.096	3.59	0.15524	0.0042	0.100561	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 15, 2022	1	21.86	3.72	Application Case	0.096	3.59	2.4047	0.0646	0.161030	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 15, 2022	1	21.86	3.72	Cumulative Case	0.096	3.59	2.4546	0.0660	0.162372	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 13, 2022	1	21.86	3.72	Baseline	0.155	5.76	1.8	0.0484	0.203203	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 13, 2022	1	21.86	3.72	Project-Alone Case	0.155	5.76	0.15524	0.0042	0.158989	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 13, 2022	1	21.86	3.72	Application Case	0.155	5.76	2.4047	0.0646	0.219458	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 13, 2022	1	21.86	3.72	Cumulative Case	0.155	5.76	2.4546	0.0660	0.220800	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 9, 2022	1	21.86	3.72	Baseline	0.104	3.89	1.8	0.0484	0.152834	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 9, 2022	1	21.86	3.72	Project-Alone Case	0.104	3.89	0.15524	0.0042	0.108620	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 9, 2022	1	21.86	3.72	Application Case	0.104	3.89	2.4047	0.0646	0.169089	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 9, 2022	1	21.86	3.72	Cumulative Case	0.104	3.89	2.4546	0.0660	0.170431	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 6, 2022	1	21.86	3.72	Baseline	0.141	5.23	1.8	0.0484	0.188898	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 6, 2022	1	21.86	3.72	Project-Alone Case	0.141	5.23	0.15524	0.0042	0.144684	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 6, 2022	1	21.86	3.72	Application Case	0.141	5.23	2.4047	0.0646	0.205153	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 6, 2022	1	21.86	3.72	Cumulative Case	0.141	5.23	2.4546	0.0660	0.206495	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 26, 2023	1	21.86	3.72	Baseline	0.133	4.95	1.8	0.0484	0.181544	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 26, 2023	1	21.86	3.72	Project-Alone Case	0.133	4.95	0.15524	0.0042	0.137330	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 26, 2023	1	21.86	3.72	Application Case	0.133	4.95	2.4047	0.0646	0.197799	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 26, 2023	1	21.86	3.72	Cumulative Case	0.133	4.95	2.4546	0.0660	0.199141	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 27, 2023	1	21.86	3.72	Baseline	0.093	3.47	1.8	0.0484	0.141753	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 27, 2023	1	21.86	3.72	Project-Alone Case	0.093	3.47	0.15524	0.0042	0.097539	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 27, 2023	1	21.86	3.72	Application Case	0.093	3.47	2.4047	0.0646	0.158008	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 27, 2023	1	21.86	3.72	Cumulative Case	0.093	3.47	2.4546	0.0660	0.159349	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 16, 2023	1	21.86	3.72	Baseline	0.090	3.36	1.8	0.0484	0.138731	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 16, 2023	1	21.86	3.72	Project-Alone Case	0.090	3.36	0.15524	0.0042	0.094517	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 16, 2023	1	21.86	3.72	Application Case	0.090	3.36	2.4047	0.0646	0.154986	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 16, 2023	1	21.86	3.72	Cumulative Case	0.090	3.36	2.4546	0.0660	0.156327	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 27, 2023	1	21.86	3.72	Baseline	0.099	3.70	1.8	0.0484	0.147797	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 27, 2023	1	21.86	3.72	Project-Alone Case	0.099	3.70	0.15524	0.0042	0.103583	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 27, 2023	1	21.86	3.72	Application Case	0.099	3.70	2.4047	0.0646	0.164052	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 27, 2023	1	21.86	3.72	Cumulative Case	0.099	3.70	2.4546	0.0660	0.165394	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 18, 2023	1	21.86	3.72	Baseline	0.097	3.59	1.8	0.0484	0.144976	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 18, 2023	1	21.86	3.72	Project-Alone Case	0.097	3.59	0.15524	0.0042	0.100762	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-01	Lower reach of Woodfibre Creek	May 18, 2023	1	21.86	3.72	Application Case	0.097	3.59	2.4047	0.0646	0.161231	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 18, 2023	1	21.86	3.72	Cumulative Case	0.097	3.59	2.4546	0.0660	0.162573	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 25, 2023	1	21.86	3.72	Baseline	0.084	3.12	1.8	0.0484	0.132183	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 25, 2023	1	21.86	3.72	Project-Alone Case	0.084	3.12	0.15524	0.0042	0.087969	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 25, 2023	1	21.86	3.72	Application Case	0.084	3.12	2.4047	0.0646	0.148438	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 25, 2023	1	21.86	3.72	Cumulative Case	0.084	3.12	2.4546	0.0660	0.149779	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 20, 2023	1	21.86	3.72	Baseline	0.072	2.69	1.8	0.0484	0.120598	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 20, 2023	1	21.86	3.72	Project-Alone Case	0.072	2.69	0.15524	0.0042	0.076384	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 20, 2023	1	21.86	3.72	Application Case	0.072	2.69	2.4047	0.0646	0.136853	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 20, 2023	1	21.86	3.72	Cumulative Case	0.072	2.69	2.4546	0.0660	0.138194	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 16, 2023	1	21.86	3.72	Baseline	0.093	3.47	1.8	0.0484	0.141753	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 16, 2023	1	21.86	3.72	Project-Alone Case	0.093	3.47	0.15524	0.0042	0.097539	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 16, 2023	1	21.86	3.72	Application Case	0.093	3.47	2.4047	0.0646	0.158008	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 16, 2023	1	21.86	3.72	Cumulative Case	0.093	3.47	2.4546	0.0660	0.159349	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 13, 2023	1	21.86	3.72	Baseline	0.110	4.11	1.8	0.0484	0.158878	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 13, 2023	1	21.86	3.72	Project-Alone Case	0.110	4.11	0.15524	0.0042	0.114664	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 13, 2023	1	21.86	3.72	Application Case	0.110	4.11	2.4047	0.0646	0.175133	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 13, 2023	1	21.86	3.72	Cumulative Case	0.110	4.11	2.4546	0.0660	0.176475	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 23, 2024	1	21.86	3.72	Baseline	0.093	3.47	1.8	0.0484	0.141753	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 23, 2024	1	21.86	3.72	Project-Alone Case	0.093	3.47	0.15524	0.0042	0.097539	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 23, 2024	1	21.86	3.72	Application Case	0.093	3.47	2.4047	0.0646	0.158008	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 23, 2024	1	21.86	3.72	Cumulative Case	0.093	3.47	2.4546	0.0660	0.159349	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 15, 2024	1	21.86	3.72	Baseline	0.088	3.27	1.8	0.0484	0.136212	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 15, 2024	1	21.86	3.72	Project-Alone Case	0.088	3.27	0.15524	0.0042	0.091998	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 15, 2024	1	21.86	3.72	Application Case	0.088	3.27	2.4047	0.0646	0.152467	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 15, 2024	1	21.86	3.72	Cumulative Case	0.088	3.27	2.4546	0.0660	0.153809	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 19, 2024	1	21.86	3.72	Baseline	0.085	3.17	1.8	0.0484	0.133492	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 19, 2024	1	21.86	3.72	Project-Alone Case	0.085	3.17	0.15524	0.0042	0.089278	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 19, 2024	1	21.86	3.72	Application Case	0.085	3.17	2.4047	0.0646	0.149747	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 19, 2024	1	21.86	3.72	Cumulative Case	0.085	3.17	2.4546	0.0660	0.151089	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 25, 2024	1	21.86	3.72	Baseline	0.077	2.88	1.8	0.0484	0.125735	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 25, 2024	1	21.86	3.72	Project-Alone Case	0.077	2.88	0.15524	0.0042	0.081521	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 25, 2024	1	21.86	3.72	Application Case	0.077	2.88	2.4047	0.0646	0.141990	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-01	Lower reach of Woodfibre Creek	April 25, 2024	1	21.86	3.72	Cumulative Case	0.077	2.88	2.4546	0.0660	0.143332	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2024	1	21.86	3.72	Baseline	0.083	3.10	1.8	0.0484	0.131780	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2024	1	21.86	3.72	Project-Alone Case	0.083	3.10	0.15524	0.0042	0.087566	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2024	1	21.86	3.72	Application Case	0.083	3.10	2.4047	0.0646	0.148035	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2024	1	21.86	3.72	Cumulative Case	0.083	3.10	2.4546	0.0660	0.149376	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 2, 2024	1	21.86	3.72	Baseline	0.083	3.09	1.8	0.0484	0.131578	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 2, 2024	1	21.86	3.72	Project-Alone Case	0.083	3.09	0.15524	0.0042	0.087364	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 2, 2024	1	21.86	3.72	Application Case	0.083	3.09	2.4047	0.0646	0.147833	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 2, 2024	1	21.86	3.72	Cumulative Case	0.083	3.09	2.4546	0.0660	0.149175	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	1	21.86	3.72	Baseline	0.071	2.63	1.8	0.0484	0.119087	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	1	21.86	3.72	Project-Alone Case	0.071	2.63	0.15524	0.0042	0.074873	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	1	21.86	3.72	Application Case	0.071	2.63	2.4047	0.0646	0.135342	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	1	21.86	3.72	Cumulative Case	0.071	2.63	2.4546	0.0660	0.136683	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	1	21.86	3.72	Baseline	0.070	2.60	1.8	0.0484	0.118281	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	1	21.86	3.72	Project-Alone Case	0.070	2.60	0.15524	0.0042	0.074067	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	1	21.86	3.72	Application Case	0.070	2.60	2.4047	0.0646	0.134536	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 10, 2024	1	21.86	3.72	Cumulative Case	0.070	2.60	2.4546	0.0660	0.135877	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	1	21.86	3.72	Baseline	0.070	2.62	1.8	0.0484	0.118684	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	1	21.86	3.72	Project-Alone Case	0.070	2.62	0.15524	0.0042	0.074470	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	1	21.86	3.72	Application Case	0.070	2.62	2.4047	0.0646	0.134939	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	1	21.86	3.72	Cumulative Case	0.070	2.62	2.4546	0.0660	0.136280	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	1	21.86	3.72	Baseline	0.069	2.58	1.8	0.0484	0.117676	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	1	21.86	3.72	Project-Alone Case	0.069	2.58	0.15524	0.0042	0.073462	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	1	21.86	3.72	Application Case	0.069	2.58	2.4047	0.0646	0.133931	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 16, 2024	1	21.86	3.72	Cumulative Case	0.069	2.58	2.4546	0.0660	0.135273	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 22, 2024	1	21.86	3.72	Baseline	0.070	2.61	1.8	0.0484	0.118583	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 22, 2024	1	21.86	3.72	Project-Alone Case	0.070	2.61	0.15524	0.0042	0.074369	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 22, 2024	1	21.86	3.72	Application Case	0.070	2.61	2.4047	0.0646	0.134838	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 22, 2024	1	21.86	3.72	Cumulative Case	0.070	2.61	2.4546	0.0660	0.136180	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 23, 2024	1	21.86	3.72	Baseline	0.071	2.63	1.8	0.0484	0.118986	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 23, 2024	1	21.86	3.72	Project-Alone Case	0.071	2.63	0.15524	0.0042	0.074772	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 23, 2024	1	21.86	3.72	Application Case	0.071	2.63	2.4047	0.0646	0.135241	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 23, 2024	1	21.86	3.72	Cumulative Case	0.071	2.63	2.4546	0.0660	0.136583	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-01	Lower reach of Woodfibre Creek	May 27, 2024	1	21.86	3.72	Baseline	0.074	2.75	1.8	0.0484	0.122210	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 27, 2024	1	21.86	3.72	Project-Alone Case	0.074	2.75	0.15524	0.0042	0.077996	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 27, 2024	1	21.86	3.72	Application Case	0.074	2.75	2.4047	0.0646	0.138465	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 27, 2024	1	21.86	3.72	Cumulative Case	0.074	2.75	2.4546	0.0660	0.139806	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 20, 2024	1	21.86	3.72	Baseline	0.082	3.03	1.8	0.0484	0.129966	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 20, 2024	1	21.86	3.72	Project-Alone Case	0.082	3.03	0.15524	0.0042	0.085752	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 20, 2024	1	21.86	3.72	Application Case	0.082	3.03	2.4047	0.0646	0.146221	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 20, 2024	1	21.86	3.72	Cumulative Case	0.082	3.03	2.4546	0.0660	0.147563	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 26, 2024	1	21.86	3.72	Baseline	0.079	2.96	1.8	0.0484	0.127851	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 26, 2024	1	21.86	3.72	Project-Alone Case	0.079	2.96	0.15524	0.0042	0.083637	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 26, 2024	1	21.86	3.72	Application Case	0.079	2.96	2.4047	0.0646	0.144106	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	June 26, 2024	1	21.86	3.72	Cumulative Case	0.079	2.96	2.4546	0.0660	0.145448	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 18, 2024	1	21.86	3.72	Baseline	0.091	3.38	1.8	0.0484	0.139335	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 18, 2024	1	21.86	3.72	Project-Alone Case	0.091	3.38	0.15524	0.0042	0.095121	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 18, 2024	1	21.86	3.72	Application Case	0.091	3.38	2.4047	0.0646	0.155590	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 18, 2024	1	21.86	3.72	Cumulative Case	0.091	3.38	2.4546	0.0660	0.156932	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 31, 2024	1	21.86	3.72	Baseline	0.085	3.16	1.8	0.0484	0.133291	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 31, 2024	1	21.86	3.72	Project-Alone Case	0.085	3.16	0.15524	0.0042	0.089077	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 31, 2024	1	21.86	3.72	Application Case	0.085	3.16	2.4047	0.0646	0.149546	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	July 31, 2024	1	21.86	3.72	Cumulative Case	0.085	3.16	2.4546	0.0660	0.150887	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 22, 2024	1	21.86	3.72	Baseline	0.102	3.78	1.8	0.0484	0.149913	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 22, 2024	1	21.86	3.72	Project-Alone Case	0.102	3.78	0.15524	0.0042	0.105698	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 22, 2024	1	21.86	3.72	Application Case	0.102	3.78	2.4047	0.0646	0.166168	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 22, 2024	1	21.86	3.72	Cumulative Case	0.102	3.78	2.4546	0.0660	0.167509	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 27, 2024	1	21.86	3.72	Baseline	0.113	4.19	1.8	0.0484	0.161094	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 27, 2024	1	21.86	3.72	Project-Alone Case	0.113	4.19	0.15524	0.0042	0.116880	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 27, 2024	1	21.86	3.72	Application Case	0.113	4.19	2.4047	0.0646	0.177350	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	August 27, 2024	1	21.86	3.72	Cumulative Case	0.113	4.19	2.4546	0.0660	0.178691	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 19, 2024	1	21.86	3.72	Baseline	0.098	3.65	1.8	0.0484	0.146387	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 19, 2024	1	21.86	3.72	Project-Alone Case	0.098	3.65	0.15524	0.0042	0.102173	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 19, 2024	1	21.86	3.72	Application Case	0.098	3.65	2.4047	0.0646	0.162642	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 19, 2024	1	21.86	3.72	Cumulative Case	0.098	3.65	2.4546	0.0660	0.163983	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 28, 2024	1	21.86	3.72	Baseline	0.103	3.85	1.8	0.0484	0.151827	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-01	Lower reach of Woodfibre Creek	September 28, 2024	1	21.86	3.72	Project-Alone Case	0.103	3.85	0.15524	0.0042	0.107612	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 28, 2024	1	21.86	3.72	Application Case	0.103	3.85	2.4047	0.0646	0.168082	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	September 28, 2024	1	21.86	3.72	Cumulative Case	0.103	3.85	2.4546	0.0660	0.169423	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 3, 2024	1	21.86	3.72	Baseline	0.081	3.02	1.8	0.0484	0.129463	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 3, 2024	1	21.86	3.72	Project-Alone Case	0.081	3.02	0.15524	0.0042	0.085249	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 3, 2024	1	21.86	3.72	Application Case	0.081	3.02	2.4047	0.0646	0.145718	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 3, 2024	1	21.86	3.72	Cumulative Case	0.081	3.02	2.4546	0.0660	0.147059	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 12, 2024	1	21.86	3.72	Baseline	0.087	3.24	1.8	0.0484	0.135406	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 12, 2024	1	21.86	3.72	Project-Alone Case	0.087	3.24	0.15524	0.0042	0.091192	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 12, 2024	1	21.86	3.72	Application Case	0.087	3.24	2.4047	0.0646	0.151661	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 12, 2024	1	21.86	3.72	Cumulative Case	0.087	3.24	2.4546	0.0660	0.153003	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 22, 2024	1	21.86	3.72	Baseline	0.112	4.17	1.8	0.0484	0.160389	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 22, 2024	1	21.86	3.72	Project-Alone Case	0.112	4.17	0.15524	0.0042	0.116175	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 22, 2024	1	21.86	3.72	Application Case	0.112	4.17	2.4047	0.0646	0.176644	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 22, 2024	1	21.86	3.72	Cumulative Case	0.112	4.17	2.4546	0.0660	0.177986	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 24, 2024	1	21.86	3.72	Baseline	0.099	3.67	1.8	0.0484	0.146991	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 24, 2024	1	21.86	3.72	Project-Alone Case	0.099	3.67	0.15524	0.0042	0.102777	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 24, 2024	1	21.86	3.72	Application Case	0.099	3.67	2.4047	0.0646	0.163246	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 24, 2024	1	21.86	3.72	Cumulative Case	0.099	3.67	2.4546	0.0660	0.164588	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 26, 2024	1	21.86	3.72	Baseline	0.094	3.49	1.8	0.0484	0.142256	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 26, 2024	1	21.86	3.72	Project-Alone Case	0.094	3.49	0.15524	0.0042	0.098042	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 26, 2024	1	21.86	3.72	Application Case	0.094	3.49	2.4047	0.0646	0.158512	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 26, 2024	1	21.86	3.72	Cumulative Case	0.094	3.49	2.4546	0.0660	0.159853	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 31, 2024	1	21.86	3.72	Baseline	0.096	3.59	1.8	0.0484	0.144775	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 31, 2024	1	21.86	3.72	Project-Alone Case	0.096	3.59	0.15524	0.0042	0.100561	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 31, 2024	1	21.86	3.72	Application Case	0.096	3.59	2.4047	0.0646	0.161030	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	October 31, 2024	1	21.86	3.72	Cumulative Case	0.096	3.59	2.4546	0.0660	0.162372	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 7, 2024	1	21.86	3.72	Baseline	0.099	3.68	1.8	0.0484	0.147193	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 7, 2024	1	21.86	3.72	Project-Alone Case	0.099	3.68	0.15524	0.0042	0.102979	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 7, 2024	1	21.86	3.72	Application Case	0.099	3.68	2.4047	0.0646	0.163448	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 7, 2024	1	21.86	3.72	Cumulative Case	0.099	3.68	2.4546	0.0660	0.164789	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 12, 2024	1	21.86	3.72	Baseline	0.096	3.58	1.8	0.0484	0.144674	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 12, 2024	1	21.86	3.72	Project-Alone Case	0.096	3.58	0.15524	0.0042	0.100460	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-01	Lower reach of Woodfibre Creek	November 12, 2024	1	21.86	3.72	Application Case	0.096	3.58	2.4047	0.0646	0.160929	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 12, 2024	1	21.86	3.72	Cumulative Case	0.096	3.58	2.4546	0.0660	0.162271	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 14, 2024	1	21.86	3.72	Baseline	0.093	3.47	1.8	0.0484	0.141551	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 14, 2024	1	21.86	3.72	Project-Alone Case	0.093	3.47	0.15524	0.0042	0.097337	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 14, 2024	1	21.86	3.72	Application Case	0.093	3.47	2.4047	0.0646	0.157806	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 14, 2024	1	21.86	3.72	Cumulative Case	0.093	3.47	2.4546	0.0660	0.159148	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 19, 2024	1	21.86	3.72	Baseline	0.095	3.52	1.8	0.0484	0.142962	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 19, 2024	1	21.86	3.72	Project-Alone Case	0.095	3.52	0.15524	0.0042	0.098748	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 19, 2024	1	21.86	3.72	Application Case	0.095	3.52	2.4047	0.0646	0.159217	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	November 19, 2024	1	21.86	3.72	Cumulative Case	0.095	3.52	2.4546	0.0660	0.160558	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 6, 2024	1	21.86	3.72	Baseline	0.092	3.44	1.8	0.0484	0.140745	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 6, 2024	1	21.86	3.72	Project-Alone Case	0.092	3.44	0.15524	0.0042	0.096531	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 6, 2024	1	21.86	3.72	Application Case	0.092	3.44	2.4047	0.0646	0.157000	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 6, 2024	1	21.86	3.72	Cumulative Case	0.092	3.44	2.4546	0.0660	0.158342	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 19, 2024	1	21.86	3.72	Baseline	0.096	3.56	1.8	0.0484	0.143969	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 19, 2024	1	21.86	3.72	Project-Alone Case	0.096	3.56	0.15524	0.0042	0.099755	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 19, 2024	1	21.86	3.72	Application Case	0.096	3.56	2.4047	0.0646	0.160224	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	December 19, 2024	1	21.86	3.72	Cumulative Case	0.096	3.56	2.4546	0.0660	0.161566	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 23, 2025	1	21.86	3.72	Baseline	0.093	3.45	1.8	0.0484	0.141048	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 23, 2025	1	21.86	3.72	Project-Alone Case	0.093	3.45	0.15524	0.0042	0.096834	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 23, 2025	1	21.86	3.72	Application Case	0.093	3.45	2.4047	0.0646	0.157303	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 23, 2025	1	21.86	3.72	Cumulative Case	0.093	3.45	2.4546	0.0660	0.158644	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 24, 2025	1	21.86	3.72	Baseline	0.095	3.55	1.8	0.0484	0.143768	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 24, 2025	1	21.86	3.72	Project-Alone Case	0.095	3.55	0.15524	0.0042	0.099553	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 24, 2025	1	21.86	3.72	Application Case	0.095	3.55	2.4047	0.0646	0.160023	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	January 24, 2025	1	21.86	3.72	Cumulative Case	0.095	3.55	2.4546	0.0660	0.161364	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 20, 2025	1	21.86	3.72	Baseline	0.115	4.28	1.8	0.0484	0.163411	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 20, 2025	1	21.86	3.72	Project-Alone Case	0.115	4.28	0.15524	0.0042	0.119197	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 20, 2025	1	21.86	3.72	Application Case	0.115	4.28	2.4047	0.0646	0.179666	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 20, 2025	1	21.86	3.72	Cumulative Case	0.115	4.28	2.4546	0.0660	0.181008	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 21, 2025	1	21.86	3.72	Baseline	0.111	4.14	1.8	0.0484	0.159785	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 21, 2025	1	21.86	3.72	Project-Alone Case	0.111	4.14	0.15524	0.0042	0.115571	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	February 21, 2025	1	21.86	3.72	Application Case	0.111	4.14	2.4047	0.0646	0.176040	Oligotrophic

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				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-01	Lower reach of Woodfibre Creek	February 21, 2025	1	21.86	3.72	Cumulative Case	0.111	4.14	2.4546	0.0660	0.177382	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 19, 2025	1	21.86	3.72	Baseline	0.093	3.47	1.8	0.0484	0.141753	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 19, 2025	1	21.86	3.72	Project-Alone Case	0.093	3.47	0.15524	0.0042	0.097539	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 19, 2025	1	21.86	3.72	Application Case	0.093	3.47	2.4047	0.0646	0.158008	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 19, 2025	1	21.86	3.72	Cumulative Case	0.093	3.47	2.4546	0.0660	0.159349	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 27, 2025	1	21.86	3.72	Baseline	0.083	3.11	1.8	0.0484	0.131880	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 27, 2025	1	21.86	3.72	Project-Alone Case	0.083	3.11	0.15524	0.0042	0.087666	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 27, 2025	1	21.86	3.72	Application Case	0.083	3.11	2.4047	0.0646	0.148136	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	March 27, 2025	1	21.86	3.72	Cumulative Case	0.083	3.11	2.4546	0.0660	0.149477	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 2, 2025	1	21.86	3.72	Baseline	0.087	3.25	1.8	0.0484	0.135708	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 2, 2025	1	21.86	3.72	Project-Alone Case	0.087	3.25	0.15524	0.0042	0.091494	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 2, 2025	1	21.86	3.72	Application Case	0.087	3.25	2.4047	0.0646	0.151964	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 2, 2025	1	21.86	3.72	Cumulative Case	0.087	3.25	2.4546	0.0660	0.153305	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 8, 2025	1	21.86	3.72	Baseline	0.081	3.02	1.8	0.0484	0.129563	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 8, 2025	1	21.86	3.72	Project-Alone Case	0.081	3.02	0.15524	0.0042	0.085349	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 8, 2025	1	21.86	3.72	Application Case	0.081	3.02	2.4047	0.0646	0.145819	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 8, 2025	1	21.86	3.72	Cumulative Case	0.081	3.02	2.4546	0.0660	0.147160	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 13, 2025	1	21.86	3.72	Baseline	0.083	3.09	1.8	0.0484	0.131377	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 13, 2025	1	21.86	3.72	Project-Alone Case	0.083	3.09	0.15524	0.0042	0.087163	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 13, 2025	1	21.86	3.72	Application Case	0.083	3.09	2.4047	0.0646	0.147632	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 13, 2025	1	21.86	3.72	Cumulative Case	0.083	3.09	2.4546	0.0660	0.148973	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 22, 2025	1	21.86	3.72	Baseline	0.080	2.99	1.8	0.0484	0.128657	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 22, 2025	1	21.86	3.72	Project-Alone Case	0.080	2.99	0.15524	0.0042	0.084443	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 22, 2025	1	21.86	3.72	Application Case	0.080	2.99	2.4047	0.0646	0.144912	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 22, 2025	1	21.86	3.72	Cumulative Case	0.080	2.99	2.4546	0.0660	0.146253	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 24, 2025	1	21.86	3.72	Baseline	0.076	2.82	1.8	0.0484	0.124124	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 24, 2025	1	21.86	3.72	Project-Alone Case	0.076	2.82	0.15524	0.0042	0.079910	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 24, 2025	1	21.86	3.72	Application Case	0.076	2.82	2.4047	0.0646	0.140379	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 24, 2025	1	21.86	3.72	Cumulative Case	0.076	2.82	2.4546	0.0660	0.141720	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	1	21.86	3.72	Baseline	0.072	2.67	1.8	0.0484	0.120094	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	1	21.86	3.72	Project-Alone Case	0.072	2.67	0.15524	0.0042	0.075880	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	1	21.86	3.72	Application Case	0.072	2.67	2.4047	0.0646	0.136349	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	1	21.86	3.72	Cumulative Case	0.072	2.67	2.4546	0.0660	0.137691	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	1	21.86	3.72	Baseline	0.072	2.67	1.8	0.0484	0.120195	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	1	21.86	3.72	Project-Alone Case	0.072	2.67	0.15524	0.0042	0.075981	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	1	21.86	3.72	Application Case	0.072	2.67	2.4047	0.0646	0.136450	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	April 29, 2025	1	21.86	3.72	Cumulative Case	0.072	2.67	2.4546	0.0660	0.137791	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 8, 2025	1	21.86	3.72	Baseline	0.070	2.60	1.8	0.0484	0.118281	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 8, 2025	1	21.86	3.72	Project-Alone Case	0.070	2.60	0.15524	0.0042	0.074067	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 8, 2025	1	21.86	3.72	Application Case	0.070	2.60	2.4047	0.0646	0.134536	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 8, 2025	1	21.86	3.72	Cumulative Case	0.070	2.60	2.4546	0.0660	0.135877	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 12, 2025	1	21.86	3.72	Baseline	0.073	2.73	1.8	0.0484	0.121706	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 12, 2025	1	21.86	3.72	Project-Alone Case	0.073	2.73	0.15524	0.0042	0.077492	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 12, 2025	1	21.86	3.72	Application Case	0.073	2.73	2.4047	0.0646	0.137961	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 12, 2025	1	21.86	3.72	Cumulative Case	0.073	2.73	2.4546	0.0660	0.139303	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 14, 2025	1	21.86	3.72	Baseline	0.069	2.59	1.8	0.0484	0.117878	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 14, 2025	1	21.86	3.72	Project-Alone Case	0.069	2.59	0.15524	0.0042	0.073664	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 14, 2025	1	21.86	3.72	Application Case	0.069	2.59	2.4047	0.0646	0.134133	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 14, 2025	1	21.86	3.72	Cumulative Case	0.069	2.59	2.4546	0.0660	0.135475	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 22, 2025	1	21.86	3.72	Baseline	0.079	2.92	1.8	0.0484	0.126944	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 22, 2025	1	21.86	3.72	Project-Alone Case	0.079	2.92	0.15524	0.0042	0.082730	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 22, 2025	1	21.86	3.72	Application Case	0.079	2.92	2.4047	0.0646	0.143199	Oligotrophic
SW-01	Lower reach of Woodfibre Creek	May 22, 2025	1	21.86	3.72	Cumulative Case	0.079	2.92	2.4546	0.0660	0.144541	Oligotrophic
SW-02	Lower reach of Mill Creek	February 17, 2022	1	40.68	3.37	Baseline	0.119	4.00	1.8	0.0534	0.171963	Oligotrophic
SW-02	Lower reach of Mill Creek	February 17, 2022	1	40.68	3.37	Project-Alone Case	0.119	4.00	0.12874	0.0038	0.122370	Oligotrophic
SW-02	Lower reach of Mill Creek	February 17, 2022	1	40.68	3.37	Application Case	0.119	4.00	2.6942	0.0799	0.198497	Oligotrophic
SW-02	Lower reach of Mill Creek	February 17, 2022	1	40.68	3.37	Cumulative Case	0.119	4.00	2.7994	0.0831	0.201620	Oligotrophic
SW-02	Lower reach of Mill Creek	March 22, 2022	1	40.68	3.37	Baseline	0.113	3.79	1.8	0.0534	0.165918	Oligotrophic
SW-02	Lower reach of Mill Creek	March 22, 2022	1	40.68	3.37	Project-Alone Case	0.113	3.79	0.12874	0.0038	0.116326	Oligotrophic
SW-02	Lower reach of Mill Creek	March 22, 2022	1	40.68	3.37	Application Case	0.113	3.79	2.6942	0.0799	0.192453	Oligotrophic
SW-02	Lower reach of Mill Creek	March 22, 2022	1	40.68	3.37	Cumulative Case	0.113	3.79	2.7994	0.0831	0.195576	Oligotrophic
SW-02	Lower reach of Mill Creek	April 20, 2022	1	40.68	3.37	Baseline	0.116	3.89	1.8	0.0534	0.168941	Oligotrophic
SW-02	Lower reach of Mill Creek	April 20, 2022	1	40.68	3.37	Project-Alone Case	0.116	3.89	0.12874	0.0038	0.119348	Oligotrophic
SW-02	Lower reach of Mill Creek	April 20, 2022	1	40.68	3.37	Application Case	0.116	3.89	2.6942	0.0799	0.195475	Oligotrophic
SW-02	Lower reach of Mill Creek	April 20, 2022	1	40.68	3.37	Cumulative Case	0.116	3.89	2.7994	0.0831	0.198598	Oligotrophic
SW-02	Lower reach of Mill Creek	May 18, 2022	1	40.68	3.37	Baseline	0.106	3.59	1.8	0.0534	0.159874	Oligotrophic

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				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-02	Lower reach of Mill Creek	May 18, 2022	1	40.68	3.37	Project-Alone Case	0.106	3.59	0.12874	0.0038	0.110282	Oligotrophic
SW-02	Lower reach of Mill Creek	May 18, 2022	1	40.68	3.37	Application Case	0.106	3.59	2.6942	0.0799	0.186409	Oligotrophic
SW-02	Lower reach of Mill Creek	May 18, 2022	1	40.68	3.37	Cumulative Case	0.106	3.59	2.7994	0.0831	0.189531	Oligotrophic
SW-02	Lower reach of Mill Creek	June 22, 2022	1	40.68	3.37	Baseline	0.069	2.33	1.8	0.0534	0.122601	Oligotrophic
SW-02	Lower reach of Mill Creek	June 22, 2022	1	40.68	3.37	Project-Alone Case	0.069	2.33	0.12874	0.0038	0.073009	Oligotrophic
SW-02	Lower reach of Mill Creek	June 22, 2022	1	40.68	3.37	Application Case	0.069	2.33	2.6942	0.0799	0.149135	Oligotrophic
SW-02	Lower reach of Mill Creek	June 22, 2022	1	40.68	3.37	Cumulative Case	0.069	2.33	2.7994	0.0831	0.152258	Oligotrophic
SW-02	Lower reach of Mill Creek	July 14, 2022	1	40.68	3.37	Baseline	0.070	2.37	1.8	0.0534	0.123608	Oligotrophic
SW-02	Lower reach of Mill Creek	July 14, 2022	1	40.68	3.37	Project-Alone Case	0.070	2.37	0.12874	0.0038	0.074016	Oligotrophic
SW-02	Lower reach of Mill Creek	July 14, 2022	1	40.68	3.37	Application Case	0.070	2.37	2.6942	0.0799	0.150143	Oligotrophic
SW-02	Lower reach of Mill Creek	July 14, 2022	1	40.68	3.37	Cumulative Case	0.070	2.37	2.7994	0.0831	0.153266	Oligotrophic
SW-02	Lower reach of Mill Creek	August 18, 2022	1	40.68	3.37	Baseline	0.141	4.74	1.8	0.0534	0.194125	Oligotrophic
SW-02	Lower reach of Mill Creek	August 18, 2022	1	40.68	3.37	Project-Alone Case	0.141	4.74	0.12874	0.0038	0.144533	Oligotrophic
SW-02	Lower reach of Mill Creek	August 18, 2022	1	40.68	3.37	Application Case	0.141	4.74	2.6942	0.0799	0.220659	Oligotrophic
SW-02	Lower reach of Mill Creek	August 18, 2022	1	40.68	3.37	Cumulative Case	0.141	4.74	2.7994	0.0831	0.223782	Oligotrophic
SW-02	Lower reach of Mill Creek	September 15, 2022	1	40.68	3.37	Baseline	0.213	7.19	1.8	0.0534	0.266656	Oligotrophic
SW-02	Lower reach of Mill Creek	September 15, 2022	1	40.68	3.37	Project-Alone Case	0.213	7.19	0.12874	0.0038	0.217064	Oligotrophic
SW-02	Lower reach of Mill Creek	September 15, 2022	1	40.68	3.37	Application Case	0.213	7.19	2.6942	0.0799	0.293191	Oligotrophic
SW-02	Lower reach of Mill Creek	September 15, 2022	1	40.68	3.37	Cumulative Case	0.213	7.19	2.7994	0.0831	0.296314	Oligotrophic
SW-02	Lower reach of Mill Creek	October 13, 2022	1	40.68	3.37	Baseline	0.260	8.75	1.8	0.0534	0.312996	Oligotrophic
SW-02	Lower reach of Mill Creek	October 13, 2022	1	40.68	3.37	Project-Alone Case	0.260	8.75	0.12874	0.0038	0.263404	Oligotrophic
SW-02	Lower reach of Mill Creek	October 13, 2022	1	40.68	3.37	Application Case	0.260	8.75	2.6942	0.0799	0.339530	Oligotrophic
SW-02	Lower reach of Mill Creek	October 13, 2022	1	40.68	3.37	Cumulative Case	0.260	8.75	2.7994	0.0831	0.342653	Oligotrophic
SW-02	Lower reach of Mill Creek	November 9, 2022	1	40.68	3.37	Baseline	0.166	5.59	1.8	0.0534	0.219310	Oligotrophic
SW-02	Lower reach of Mill Creek	November 9, 2022	1	40.68	3.37	Project-Alone Case	0.166	5.59	0.12874	0.0038	0.169717	Oligotrophic
SW-02	Lower reach of Mill Creek	November 9, 2022	1	40.68	3.37	Application Case	0.166	5.59	2.6942	0.0799	0.245844	Oligotrophic
SW-02	Lower reach of Mill Creek	November 9, 2022	1	40.68	3.37	Cumulative Case	0.166	5.59	2.7994	0.0831	0.248967	Oligotrophic
SW-02	Lower reach of Mill Creek	December 6, 2022	1	40.68	3.37	Baseline	0.189	6.37	1.8	0.0534	0.242479	Oligotrophic
SW-02	Lower reach of Mill Creek	December 6, 2022	1	40.68	3.37	Project-Alone Case	0.189	6.37	0.12874	0.0038	0.192887	Oligotrophic
SW-02	Lower reach of Mill Creek	December 6, 2022	1	40.68	3.37	Application Case	0.189	6.37	2.6942	0.0799	0.269014	Oligotrophic
SW-02	Lower reach of Mill Creek	December 6, 2022	1	40.68	3.37	Cumulative Case	0.189	6.37	2.7994	0.0831	0.272136	Oligotrophic
SW-02	Lower reach of Mill Creek	January 26, 2023	1	40.68	3.37	Baseline	0.164	5.52	1.8	0.0534	0.217295	Oligotrophic
SW-02	Lower reach of Mill Creek	January 26, 2023	1	40.68	3.37	Project-Alone Case	0.164	5.52	0.12874	0.0038	0.167703	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-02	Lower reach of Mill Creek	January 26, 2023	1	40.68	3.37	Application Case	0.164	5.52	2.6942	0.0799	0.243829	Oligotrophic
SW-02	Lower reach of Mill Creek	January 26, 2023	1	40.68	3.37	Cumulative Case	0.164	5.52	2.7994	0.0831	0.246952	Oligotrophic
SW-02	Lower reach of Mill Creek	February 27, 2023	1	40.68	3.37	Baseline	0.136	4.57	1.8	0.0534	0.189088	Oligotrophic
SW-02	Lower reach of Mill Creek	February 27, 2023	1	40.68	3.37	Project-Alone Case	0.136	4.57	0.12874	0.0038	0.139496	Oligotrophic
SW-02	Lower reach of Mill Creek	February 27, 2023	1	40.68	3.37	Application Case	0.136	4.57	2.6942	0.0799	0.215623	Oligotrophic
SW-02	Lower reach of Mill Creek	February 27, 2023	1	40.68	3.37	Cumulative Case	0.136	4.57	2.7994	0.0831	0.218745	Oligotrophic
SW-02	Lower reach of Mill Creek	March 16, 2023	1	40.68	3.37	Baseline	0.134	4.50	1.8	0.0534	0.187073	Oligotrophic
SW-02	Lower reach of Mill Creek	March 16, 2023	1	40.68	3.37	Project-Alone Case	0.134	4.50	0.12874	0.0038	0.137481	Oligotrophic
SW-02	Lower reach of Mill Creek	March 16, 2023	1	40.68	3.37	Application Case	0.134	4.50	2.6942	0.0799	0.213608	Oligotrophic
SW-02	Lower reach of Mill Creek	March 16, 2023	1	40.68	3.37	Cumulative Case	0.134	4.50	2.7994	0.0831	0.216730	Oligotrophic
SW-02	Lower reach of Mill Creek	April 27, 2023	1	40.68	3.37	Baseline	0.130	4.37	1.8	0.0534	0.183044	Oligotrophic
SW-02	Lower reach of Mill Creek	April 27, 2023	1	40.68	3.37	Project-Alone Case	0.130	4.37	0.12874	0.0038	0.133452	Oligotrophic
SW-02	Lower reach of Mill Creek	April 27, 2023	1	40.68	3.37	Application Case	0.130	4.37	2.6942	0.0799	0.209578	Oligotrophic
SW-02	Lower reach of Mill Creek	April 27, 2023	1	40.68	3.37	Cumulative Case	0.130	4.37	2.7994	0.0831	0.212701	Oligotrophic
SW-02	Lower reach of Mill Creek	May 18, 2023	1	40.68	3.37	Baseline	0.086	2.90	1.8	0.0534	0.139324	Oligotrophic
SW-02	Lower reach of Mill Creek	May 18, 2023	1	40.68	3.37	Project-Alone Case	0.086	2.90	0.12874	0.0038	0.089731	Oligotrophic
SW-02	Lower reach of Mill Creek	May 18, 2023	1	40.68	3.37	Application Case	0.086	2.90	2.6942	0.0799	0.165858	Oligotrophic
SW-02	Lower reach of Mill Creek	May 18, 2023	1	40.68	3.37	Cumulative Case	0.086	2.90	2.7994	0.0831	0.168981	Oligotrophic
SW-02	Lower reach of Mill Creek	August 25, 2023	1	40.68	3.37	Baseline	0.208	7.02	1.8	0.0534	0.261619	Oligotrophic
SW-02	Lower reach of Mill Creek	August 25, 2023	1	40.68	3.37	Project-Alone Case	0.208	7.02	0.12874	0.0038	0.212027	Oligotrophic
SW-02	Lower reach of Mill Creek	August 25, 2023	1	40.68	3.37	Application Case	0.208	7.02	2.6942	0.0799	0.288154	Oligotrophic
SW-02	Lower reach of Mill Creek	August 25, 2023	1	40.68	3.37	Cumulative Case	0.208	7.02	2.7994	0.0831	0.291277	Oligotrophic
SW-02	Lower reach of Mill Creek	November 16, 2023	1	40.68	3.37	Baseline	0.140	4.71	1.8	0.0534	0.193118	Oligotrophic
SW-02	Lower reach of Mill Creek	November 16, 2023	1	40.68	3.37	Project-Alone Case	0.140	4.71	0.12874	0.0038	0.143525	Oligotrophic
SW-02	Lower reach of Mill Creek	November 16, 2023	1	40.68	3.37	Application Case	0.140	4.71	2.6942	0.0799	0.219652	Oligotrophic
SW-02	Lower reach of Mill Creek	November 16, 2023	1	40.68	3.37	Cumulative Case	0.140	4.71	2.7994	0.0831	0.222775	Oligotrophic
SW-02	Lower reach of Mill Creek	December 13, 2023	1	40.68	3.37	Baseline	0.137	4.61	1.8	0.0534	0.190095	Oligotrophic
SW-02	Lower reach of Mill Creek	December 13, 2023	1	40.68	3.37	Project-Alone Case	0.137	4.61	0.12874	0.0038	0.140503	Oligotrophic
SW-02	Lower reach of Mill Creek	December 13, 2023	1	40.68	3.37	Application Case	0.137	4.61	2.6942	0.0799	0.216630	Oligotrophic
SW-02	Lower reach of Mill Creek	December 13, 2023	1	40.68	3.37	Cumulative Case	0.137	4.61	2.7994	0.0831	0.219753	Oligotrophic
SW-02	Lower reach of Mill Creek	January 23, 2024	1	40.68	3.37	Baseline	0.108	3.64	1.8	0.0534	0.161486	Oligotrophic
SW-02	Lower reach of Mill Creek	January 23, 2024	1	40.68	3.37	Project-Alone Case	0.108	3.64	0.12874	0.0038	0.111894	Oligotrophic
SW-02	Lower reach of Mill Creek	January 23, 2024	1	40.68	3.37	Application Case	0.108	3.64	2.6942	0.0799	0.188020	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-02	Lower reach of Mill Creek	January 23, 2024	1	40.68	3.37	Cumulative Case	0.108	3.64	2.7994	0.0831	0.191143	Oligotrophic
SW-02	Lower reach of Mill Creek	February 15, 2024	1	40.68	3.37	Baseline	0.123	4.14	1.8	0.0534	0.176395	Oligotrophic
SW-02	Lower reach of Mill Creek	February 15, 2024	1	40.68	3.37	Project-Alone Case	0.123	4.14	0.12874	0.0038	0.126803	Oligotrophic
SW-02	Lower reach of Mill Creek	February 15, 2024	1	40.68	3.37	Application Case	0.123	4.14	2.6942	0.0799	0.202930	Oligotrophic
SW-02	Lower reach of Mill Creek	February 15, 2024	1	40.68	3.37	Cumulative Case	0.123	4.14	2.7994	0.0831	0.206052	Oligotrophic
SW-02	Lower reach of Mill Creek	March 19, 2024	1	40.68	3.37	Baseline	0.109	3.66	1.8	0.0534	0.162090	Oligotrophic
SW-02	Lower reach of Mill Creek	March 19, 2024	1	40.68	3.37	Project-Alone Case	0.109	3.66	0.12874	0.0038	0.112498	Oligotrophic
SW-02	Lower reach of Mill Creek	March 19, 2024	1	40.68	3.37	Application Case	0.109	3.66	2.6942	0.0799	0.188625	Oligotrophic
SW-02	Lower reach of Mill Creek	March 19, 2024	1	40.68	3.37	Cumulative Case	0.109	3.66	2.7994	0.0831	0.191747	Oligotrophic
SW-02	Lower reach of Mill Creek	April 12, 2024	1	40.68	3.37	Baseline	0.099	3.35	1.8	0.0534	0.152722	Oligotrophic
SW-02	Lower reach of Mill Creek	April 12, 2024	1	40.68	3.37	Project-Alone Case	0.099	3.35	0.12874	0.0038	0.103130	Oligotrophic
SW-02	Lower reach of Mill Creek	April 12, 2024	1	40.68	3.37	Application Case	0.099	3.35	2.6942	0.0799	0.179256	Oligotrophic
SW-02	Lower reach of Mill Creek	April 12, 2024	1	40.68	3.37	Cumulative Case	0.099	3.35	2.7994	0.0831	0.182379	Oligotrophic
SW-02	Lower reach of Mill Creek	April 26, 2024	1	40.68	3.37	Baseline	0.091	3.08	1.8	0.0534	0.144663	Oligotrophic
SW-02	Lower reach of Mill Creek	April 26, 2024	1	40.68	3.37	Project-Alone Case	0.091	3.08	0.12874	0.0038	0.095070	Oligotrophic
SW-02	Lower reach of Mill Creek	April 26, 2024	1	40.68	3.37	Application Case	0.091	3.08	2.6942	0.0799	0.171197	Oligotrophic
SW-02	Lower reach of Mill Creek	April 26, 2024	1	40.68	3.37	Cumulative Case	0.091	3.08	2.7994	0.0831	0.174320	Oligotrophic
SW-02	Lower reach of Mill Creek	April 28, 2024	1	40.68	3.37	Baseline	0.094	3.18	1.8	0.0534	0.147786	Oligotrophic
SW-02	Lower reach of Mill Creek	April 28, 2024	1	40.68	3.37	Project-Alone Case	0.094	3.18	0.12874	0.0038	0.098193	Oligotrophic
SW-02	Lower reach of Mill Creek	April 28, 2024	1	40.68	3.37	Application Case	0.094	3.18	2.6942	0.0799	0.174320	Oligotrophic
SW-02	Lower reach of Mill Creek	April 28, 2024	1	40.68	3.37	Cumulative Case	0.094	3.18	2.7994	0.0831	0.177443	Oligotrophic
SW-02	Lower reach of Mill Creek	May 3, 2024	1	40.68	3.37	Baseline	0.098	3.30	1.8	0.0534	0.151311	Oligotrophic
SW-02	Lower reach of Mill Creek	May 3, 2024	1	40.68	3.37	Project-Alone Case	0.098	3.30	0.12874	0.0038	0.101719	Oligotrophic
SW-02	Lower reach of Mill Creek	May 3, 2024	1	40.68	3.37	Application Case	0.098	3.30	2.6942	0.0799	0.177846	Oligotrophic
SW-02	Lower reach of Mill Creek	May 3, 2024	1	40.68	3.37	Cumulative Case	0.098	3.30	2.7994	0.0831	0.180969	Oligotrophic
SW-02	Lower reach of Mill Creek	May 9, 2024	1	40.68	3.37	Baseline	0.089	3.01	1.8	0.0534	0.142648	Oligotrophic
SW-02	Lower reach of Mill Creek	May 9, 2024	1	40.68	3.37	Project-Alone Case	0.089	3.01	0.12874	0.0038	0.093056	Oligotrophic
SW-02	Lower reach of Mill Creek	May 9, 2024	1	40.68	3.37	Application Case	0.089	3.01	2.6942	0.0799	0.169182	Oligotrophic
SW-02	Lower reach of Mill Creek	May 9, 2024	1	40.68	3.37	Cumulative Case	0.089	3.01	2.7994	0.0831	0.172305	Oligotrophic
SW-02	Lower reach of Mill Creek	May 9, 2024	1	40.68	3.37	Baseline	0.087	2.92	1.8	0.0534	0.139928	Oligotrophic
SW-02	Lower reach of Mill Creek	May 9, 2024	1	40.68	3.37	Project-Alone Case	0.087	2.92	0.12874	0.0038	0.090336	Oligotrophic
SW-02	Lower reach of Mill Creek	May 9, 2024	1	40.68	3.37	Application Case	0.087	2.92	2.6942	0.0799	0.166462	Oligotrophic
SW-02	Lower reach of Mill Creek	May 9, 2024	1	40.68	3.37	Cumulative Case	0.087	2.92	2.7994	0.0831	0.169585	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-02	Lower reach of Mill Creek	May 14, 2024	1	40.68	3.37	Baseline	0.080	2.70	1.8	0.0534	0.133581	Oligotrophic
SW-02	Lower reach of Mill Creek	May 14, 2024	1	40.68	3.37	Project-Alone Case	0.080	2.70	0.12874	0.0038	0.083989	Oligotrophic
SW-02	Lower reach of Mill Creek	May 14, 2024	1	40.68	3.37	Application Case	0.080	2.70	2.6942	0.0799	0.160116	Oligotrophic
SW-02	Lower reach of Mill Creek	May 14, 2024	1	40.68	3.37	Cumulative Case	0.080	2.70	2.7994	0.0831	0.163239	Oligotrophic
SW-02	Lower reach of Mill Creek	May 17, 2024	1	40.68	3.37	Baseline	0.075	2.51	1.8	0.0534	0.128041	Oligotrophic
SW-02	Lower reach of Mill Creek	May 17, 2024	1	40.68	3.37	Project-Alone Case	0.075	2.51	0.12874	0.0038	0.078449	Oligotrophic
SW-02	Lower reach of Mill Creek	May 17, 2024	1	40.68	3.37	Application Case	0.075	2.51	2.6942	0.0799	0.154575	Oligotrophic
SW-02	Lower reach of Mill Creek	May 17, 2024	1	40.68	3.37	Cumulative Case	0.075	2.51	2.7994	0.0831	0.157698	Oligotrophic
SW-02	Lower reach of Mill Creek	May 23, 2024	1	40.68	3.37	Baseline	0.078	2.62	1.8	0.0534	0.131164	Oligotrophic
SW-02	Lower reach of Mill Creek	May 23, 2024	1	40.68	3.37	Project-Alone Case	0.078	2.62	0.12874	0.0038	0.081572	Oligotrophic
SW-02	Lower reach of Mill Creek	May 23, 2024	1	40.68	3.37	Application Case	0.078	2.62	2.6942	0.0799	0.157698	Oligotrophic
SW-02	Lower reach of Mill Creek	May 23, 2024	1	40.68	3.37	Cumulative Case	0.078	2.62	2.7994	0.0831	0.160821	Oligotrophic
SW-02	Lower reach of Mill Creek	May 24, 2024	1	40.68	3.37	Baseline	0.080	2.71	1.8	0.0534	0.133682	Oligotrophic
SW-02	Lower reach of Mill Creek	May 24, 2024	1	40.68	3.37	Project-Alone Case	0.080	2.71	0.12874	0.0038	0.084090	Oligotrophic
SW-02	Lower reach of Mill Creek	May 24, 2024	1	40.68	3.37	Application Case	0.080	2.71	2.6942	0.0799	0.160217	Oligotrophic
SW-02	Lower reach of Mill Creek	May 24, 2024	1	40.68	3.37	Cumulative Case	0.080	2.71	2.7994	0.0831	0.163339	Oligotrophic
SW-02	Lower reach of Mill Creek	May 26, 2024	1	40.68	3.37	Baseline	0.079	2.68	1.8	0.0534	0.132876	Oligotrophic
SW-02	Lower reach of Mill Creek	May 26, 2024	1	40.68	3.37	Project-Alone Case	0.079	2.68	0.12874	0.0038	0.083284	Oligotrophic
SW-02	Lower reach of Mill Creek	May 26, 2024	1	40.68	3.37	Application Case	0.079	2.68	2.6942	0.0799	0.159411	Oligotrophic
SW-02	Lower reach of Mill Creek	May 26, 2024	1	40.68	3.37	Cumulative Case	0.079	2.68	2.7994	0.0831	0.162533	Oligotrophic
SW-02	Lower reach of Mill Creek	June 21, 2024	1	40.68	3.37	Baseline	0.075	2.54	1.8	0.0534	0.128847	Oligotrophic
SW-02	Lower reach of Mill Creek	June 21, 2024	1	40.68	3.37	Project-Alone Case	0.075	2.54	0.12874	0.0038	0.079255	Oligotrophic
SW-02	Lower reach of Mill Creek	June 21, 2024	1	40.68	3.37	Application Case	0.075	2.54	2.6942	0.0799	0.155381	Oligotrophic
SW-02	Lower reach of Mill Creek	June 21, 2024	1	40.68	3.37	Cumulative Case	0.075	2.54	2.7994	0.0831	0.158504	Oligotrophic
SW-02	Lower reach of Mill Creek	June 27, 2024	1	40.68	3.37	Baseline	0.075	2.54	1.8	0.0534	0.128746	Oligotrophic
SW-02	Lower reach of Mill Creek	June 27, 2024	1	40.68	3.37	Project-Alone Case	0.075	2.54	0.12874	0.0038	0.079154	Oligotrophic
SW-02	Lower reach of Mill Creek	June 27, 2024	1	40.68	3.37	Application Case	0.075	2.54	2.6942	0.0799	0.155280	Oligotrophic
SW-02	Lower reach of Mill Creek	June 27, 2024	1	40.68	3.37	Cumulative Case	0.075	2.54	2.7994	0.0831	0.158403	Oligotrophic
SW-02	Lower reach of Mill Creek	July 19, 2024	1	40.68	3.37	Baseline	0.108	3.64	1.8	0.0534	0.161385	Oligotrophic
SW-02	Lower reach of Mill Creek	July 19, 2024	1	40.68	3.37	Project-Alone Case	0.108	3.64	0.12874	0.0038	0.111793	Oligotrophic
SW-02	Lower reach of Mill Creek	July 19, 2024	1	40.68	3.37	Application Case	0.108	3.64	2.6942	0.0799	0.187920	Oligotrophic
SW-02	Lower reach of Mill Creek	July 19, 2024	1	40.68	3.37	Cumulative Case	0.108	3.64	2.7994	0.0831	0.191042	Oligotrophic
SW-02	Lower reach of Mill Creek	July 31, 2024	1	40.68	3.37	Baseline	0.101	3.40	1.8	0.0534	0.154233	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-02	Lower reach of Mill Creek	July 31, 2024	1	40.68	3.37	Project-Alone Case	0.101	3.40	0.12874	0.0038	0.104641	Oligotrophic
SW-02	Lower reach of Mill Creek	July 31, 2024	1	40.68	3.37	Application Case	0.101	3.40	2.6942	0.0799	0.180767	Oligotrophic
SW-02	Lower reach of Mill Creek	July 31, 2024	1	40.68	3.37	Cumulative Case	0.101	3.40	2.7994	0.0831	0.183890	Oligotrophic
SW-02	Lower reach of Mill Creek	August 23, 2024	1	40.68	3.37	Baseline	0.191	6.44	1.8	0.0534	0.244494	Oligotrophic
SW-02	Lower reach of Mill Creek	August 23, 2024	1	40.68	3.37	Project-Alone Case	0.191	6.44	0.12874	0.0038	0.194902	Oligotrophic
SW-02	Lower reach of Mill Creek	August 23, 2024	1	40.68	3.37	Application Case	0.191	6.44	2.6942	0.0799	0.271028	Oligotrophic
SW-02	Lower reach of Mill Creek	August 23, 2024	1	40.68	3.37	Cumulative Case	0.191	6.44	2.7994	0.0831	0.274151	Oligotrophic
SW-02	Lower reach of Mill Creek	August 27, 2024	1	40.68	3.37	Baseline	0.193	6.51	1.8	0.0534	0.246509	Oligotrophic
SW-02	Lower reach of Mill Creek	August 27, 2024	1	40.68	3.37	Project-Alone Case	0.193	6.51	0.12874	0.0038	0.196917	Oligotrophic
SW-02	Lower reach of Mill Creek	August 27, 2024	1	40.68	3.37	Application Case	0.193	6.51	2.6942	0.0799	0.273043	Oligotrophic
SW-02	Lower reach of Mill Creek	August 27, 2024	1	40.68	3.37	Cumulative Case	0.193	6.51	2.7994	0.0831	0.276166	Oligotrophic
SW-02	Lower reach of Mill Creek	September 20, 2024	1	40.68	3.37	Baseline	0.214	7.22	1.8	0.0534	0.267664	Oligotrophic
SW-02	Lower reach of Mill Creek	September 20, 2024	1	40.68	3.37	Project-Alone Case	0.214	7.22	0.12874	0.0038	0.218072	Oligotrophic
SW-02	Lower reach of Mill Creek	September 20, 2024	1	40.68	3.37	Application Case	0.214	7.22	2.6942	0.0799	0.294198	Oligotrophic
SW-02	Lower reach of Mill Creek	September 20, 2024	1	40.68	3.37	Cumulative Case	0.214	7.22	2.7994	0.0831	0.297321	Oligotrophic
SW-02	Lower reach of Mill Creek	September 29, 2024	1	40.68	3.37	Baseline	0.177	5.96	1.8	0.0534	0.230391	Oligotrophic
SW-02	Lower reach of Mill Creek	September 29, 2024	1	40.68	3.37	Project-Alone Case	0.177	5.96	0.12874	0.0038	0.180799	Oligotrophic
SW-02	Lower reach of Mill Creek	September 29, 2024	1	40.68	3.37	Application Case	0.177	5.96	2.6942	0.0799	0.256925	Oligotrophic
SW-02	Lower reach of Mill Creek	September 29, 2024	1	40.68	3.37	Cumulative Case	0.177	5.96	2.7994	0.0831	0.260048	Oligotrophic
SW-02	Lower reach of Mill Creek	October 4, 2024	1	40.68	3.37	Baseline	0.166	5.59	1.8	0.0534	0.219310	Oligotrophic
SW-02	Lower reach of Mill Creek	October 4, 2024	1	40.68	3.37	Project-Alone Case	0.166	5.59	0.12874	0.0038	0.169717	Oligotrophic
SW-02	Lower reach of Mill Creek	October 4, 2024	1	40.68	3.37	Application Case	0.166	5.59	2.6942	0.0799	0.245844	Oligotrophic
SW-02	Lower reach of Mill Creek	October 4, 2024	1	40.68	3.37	Cumulative Case	0.166	5.59	2.7994	0.0831	0.248967	Oligotrophic
SW-02	Lower reach of Mill Creek	October 12, 2024	1	40.68	3.37	Baseline	0.164	5.52	1.8	0.0534	0.217295	Oligotrophic
SW-02	Lower reach of Mill Creek	October 12, 2024	1	40.68	3.37	Project-Alone Case	0.164	5.52	0.12874	0.0038	0.167703	Oligotrophic
SW-02	Lower reach of Mill Creek	October 12, 2024	1	40.68	3.37	Application Case	0.164	5.52	2.6942	0.0799	0.243829	Oligotrophic
SW-02	Lower reach of Mill Creek	October 12, 2024	1	40.68	3.37	Cumulative Case	0.164	5.52	2.7994	0.0831	0.246952	Oligotrophic
SW-02	Lower reach of Mill Creek	October 22, 2024	1	40.68	3.37	Baseline	0.178	6.00	1.8	0.0534	0.231398	Oligotrophic
SW-02	Lower reach of Mill Creek	October 22, 2024	1	40.68	3.37	Project-Alone Case	0.178	6.00	0.12874	0.0038	0.181806	Oligotrophic
SW-02	Lower reach of Mill Creek	October 22, 2024	1	40.68	3.37	Application Case	0.178	6.00	2.6942	0.0799	0.257932	Oligotrophic
SW-02	Lower reach of Mill Creek	October 22, 2024	1	40.68	3.37	Cumulative Case	0.178	6.00	2.7994	0.0831	0.261055	Oligotrophic
SW-02	Lower reach of Mill Creek	October 25, 2024	1	40.68	3.37	Baseline	0.163	5.49	1.8	0.0534	0.216287	Oligotrophic
SW-02	Lower reach of Mill Creek	October 25, 2024	1	40.68	3.37	Project-Alone Case	0.163	5.49	0.12874	0.0038	0.166695	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-02	Lower reach of Mill Creek	October 25, 2024	1	40.68	3.37	Application Case	0.163	5.49	2.6942	0.0799	0.242822	Oligotrophic
SW-02	Lower reach of Mill Creek	October 25, 2024	1	40.68	3.37	Cumulative Case	0.163	5.49	2.7994	0.0831	0.245945	Oligotrophic
SW-02	Lower reach of Mill Creek	October 25, 2024	1	40.68	3.37	Baseline	0.162	5.45	1.8	0.0534	0.215280	Oligotrophic
SW-02	Lower reach of Mill Creek	October 25, 2024	1	40.68	3.37	Project-Alone Case	0.162	5.45	0.12874	0.0038	0.165688	Oligotrophic
SW-02	Lower reach of Mill Creek	October 25, 2024	1	40.68	3.37	Application Case	0.162	5.45	2.6942	0.0799	0.241814	Oligotrophic
SW-02	Lower reach of Mill Creek	October 25, 2024	1	40.68	3.37	Cumulative Case	0.162	5.45	2.7994	0.0831	0.244937	Oligotrophic
SW-02	Lower reach of Mill Creek	November 1, 2024	1	40.68	3.37	Baseline	0.137	4.61	1.8	0.0534	0.190095	Oligotrophic
SW-02	Lower reach of Mill Creek	November 1, 2024	1	40.68	3.37	Project-Alone Case	0.137	4.61	0.12874	0.0038	0.140503	Oligotrophic
SW-02	Lower reach of Mill Creek	November 1, 2024	1	40.68	3.37	Application Case	0.137	4.61	2.6942	0.0799	0.216630	Oligotrophic
SW-02	Lower reach of Mill Creek	November 1, 2024	1	40.68	3.37	Cumulative Case	0.137	4.61	2.7994	0.0831	0.219753	Oligotrophic
SW-02	Lower reach of Mill Creek	November 8, 2024	1	40.68	3.37	Baseline	0.107	3.62	1.8	0.0534	0.160781	Oligotrophic
SW-02	Lower reach of Mill Creek	November 8, 2024	1	40.68	3.37	Project-Alone Case	0.107	3.62	0.12874	0.0038	0.111189	Oligotrophic
SW-02	Lower reach of Mill Creek	November 8, 2024	1	40.68	3.37	Application Case	0.107	3.62	2.6942	0.0799	0.187315	Oligotrophic
SW-02	Lower reach of Mill Creek	November 8, 2024	1	40.68	3.37	Cumulative Case	0.107	3.62	2.7994	0.0831	0.190438	Oligotrophic
SW-02	Lower reach of Mill Creek	November 15, 2024	1	40.68	3.37	Baseline	0.134	4.51	1.8	0.0534	0.187174	Oligotrophic
SW-02	Lower reach of Mill Creek	November 15, 2024	1	40.68	3.37	Project-Alone Case	0.134	4.51	0.12874	0.0038	0.137582	Oligotrophic
SW-02	Lower reach of Mill Creek	November 15, 2024	1	40.68	3.37	Application Case	0.134	4.51	2.6942	0.0799	0.213709	Oligotrophic
SW-02	Lower reach of Mill Creek	November 15, 2024	1	40.68	3.37	Cumulative Case	0.134	4.51	2.7994	0.0831	0.216831	Oligotrophic
SW-02	Lower reach of Mill Creek	November 16, 2024	1	40.68	3.37	Baseline	0.135	4.56	1.8	0.0534	0.188584	Oligotrophic
SW-02	Lower reach of Mill Creek	November 16, 2024	1	40.68	3.37	Project-Alone Case	0.135	4.56	0.12874	0.0038	0.138992	Oligotrophic
SW-02	Lower reach of Mill Creek	November 16, 2024	1	40.68	3.37	Application Case	0.135	4.56	2.6942	0.0799	0.215119	Oligotrophic
SW-02	Lower reach of Mill Creek	November 16, 2024	1	40.68	3.37	Cumulative Case	0.135	4.56	2.7994	0.0831	0.218242	Oligotrophic
SW-02	Lower reach of Mill Creek	November 20, 2024	1	40.68	3.37	Baseline	0.129	4.36	1.8	0.0534	0.182842	Oligotrophic
SW-02	Lower reach of Mill Creek	November 20, 2024	1	40.68	3.37	Project-Alone Case	0.129	4.36	0.12874	0.0038	0.133250	Oligotrophic
SW-02	Lower reach of Mill Creek	November 20, 2024	1	40.68	3.37	Application Case	0.129	4.36	2.6942	0.0799	0.209377	Oligotrophic
SW-02	Lower reach of Mill Creek	November 20, 2024	1	40.68	3.37	Cumulative Case	0.129	4.36	2.7994	0.0831	0.212499	Oligotrophic
SW-02	Lower reach of Mill Creek	December 8, 2024	1	40.68	3.37	Baseline	0.120	4.04	1.8	0.0534	0.173373	Oligotrophic
SW-02	Lower reach of Mill Creek	December 8, 2024	1	40.68	3.37	Project-Alone Case	0.120	4.04	0.12874	0.0038	0.123781	Oligotrophic
SW-02	Lower reach of Mill Creek	December 8, 2024	1	40.68	3.37	Application Case	0.120	4.04	2.6942	0.0799	0.199907	Oligotrophic
SW-02	Lower reach of Mill Creek	December 8, 2024	1	40.68	3.37	Cumulative Case	0.120	4.04	2.7994	0.0831	0.203030	Oligotrophic
SW-02	Lower reach of Mill Creek	December 19, 2024	1	40.68	3.37	Baseline	0.129	4.35	1.8	0.0534	0.182641	Oligotrophic
SW-02	Lower reach of Mill Creek	December 19, 2024	1	40.68	3.37	Project-Alone Case	0.129	4.35	0.12874	0.0038	0.133049	Oligotrophic
SW-02	Lower reach of Mill Creek	December 19, 2024	1	40.68	3.37	Application Case	0.129	4.35	2.6942	0.0799	0.209175	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-02	Lower reach of Mill Creek	December 19, 2024	1	40.68	3.37	Cumulative Case	0.129	4.35	2.7994	0.0831	0.212298	Oligotrophic
SW-02	Lower reach of Mill Creek	January 23, 2025	1	40.68	3.37	Baseline	0.137	4.61	1.8	0.0534	0.190297	Oligotrophic
SW-02	Lower reach of Mill Creek	January 23, 2025	1	40.68	3.37	Project-Alone Case	0.137	4.61	0.12874	0.0038	0.140705	Oligotrophic
SW-02	Lower reach of Mill Creek	January 23, 2025	1	40.68	3.37	Application Case	0.137	4.61	2.6942	0.0799	0.216831	Oligotrophic
SW-02	Lower reach of Mill Creek	January 23, 2025	1	40.68	3.37	Cumulative Case	0.137	4.61	2.7994	0.0831	0.219954	Oligotrophic
SW-02	Lower reach of Mill Creek	January 24, 2025	1	40.68	3.37	Baseline	0.138	4.66	1.8	0.0534	0.191808	Oligotrophic
SW-02	Lower reach of Mill Creek	January 24, 2025	1	40.68	3.37	Project-Alone Case	0.138	4.66	0.12874	0.0038	0.142216	Oligotrophic
SW-02	Lower reach of Mill Creek	January 24, 2025	1	40.68	3.37	Application Case	0.138	4.66	2.6942	0.0799	0.218342	Oligotrophic
SW-02	Lower reach of Mill Creek	January 24, 2025	1	40.68	3.37	Cumulative Case	0.138	4.66	2.7994	0.0831	0.221465	Oligotrophic
SW-02	Lower reach of Mill Creek	February 19, 2025	1	40.68	3.37	Baseline	0.165	5.56	1.8	0.0534	0.218302	Oligotrophic
SW-02	Lower reach of Mill Creek	February 19, 2025	1	40.68	3.37	Project-Alone Case	0.165	5.56	0.12874	0.0038	0.168710	Oligotrophic
SW-02	Lower reach of Mill Creek	February 19, 2025	1	40.68	3.37	Application Case	0.165	5.56	2.6942	0.0799	0.244837	Oligotrophic
SW-02	Lower reach of Mill Creek	February 19, 2025	1	40.68	3.37	Cumulative Case	0.165	5.56	2.7994	0.0831	0.247959	Oligotrophic
SW-02	Lower reach of Mill Creek	February 20, 2025	1	40.68	3.37	Baseline	0.166	5.59	1.8	0.0534	0.219310	Oligotrophic
SW-02	Lower reach of Mill Creek	February 20, 2025	1	40.68	3.37	Project-Alone Case	0.166	5.59	0.12874	0.0038	0.169717	Oligotrophic
SW-02	Lower reach of Mill Creek	February 20, 2025	1	40.68	3.37	Application Case	0.166	5.59	2.6942	0.0799	0.245844	Oligotrophic
SW-02	Lower reach of Mill Creek	February 20, 2025	1	40.68	3.37	Cumulative Case	0.166	5.59	2.7994	0.0831	0.248967	Oligotrophic
SW-02	Lower reach of Mill Creek	March 18, 2025	1	40.68	3.37	Baseline	0.122	4.11	1.8	0.0534	0.175488	Oligotrophic
SW-02	Lower reach of Mill Creek	March 18, 2025	1	40.68	3.37	Project-Alone Case	0.122	4.11	0.12874	0.0038	0.125896	Oligotrophic
SW-02	Lower reach of Mill Creek	March 18, 2025	1	40.68	3.37	Application Case	0.122	4.11	2.6942	0.0799	0.202023	Oligotrophic
SW-02	Lower reach of Mill Creek	March 18, 2025	1	40.68	3.37	Cumulative Case	0.122	4.11	2.7994	0.0831	0.205146	Oligotrophic
SW-02	Lower reach of Mill Creek	March 27, 2025	1	40.68	3.37	Baseline	0.100	3.37	1.8	0.0534	0.153326	Oligotrophic
SW-02	Lower reach of Mill Creek	March 27, 2025	1	40.68	3.37	Project-Alone Case	0.100	3.37	0.12874	0.0038	0.103734	Oligotrophic
SW-02	Lower reach of Mill Creek	March 27, 2025	1	40.68	3.37	Application Case	0.100	3.37	2.6942	0.0799	0.179861	Oligotrophic
SW-02	Lower reach of Mill Creek	March 27, 2025	1	40.68	3.37	Cumulative Case	0.100	3.37	2.7994	0.0831	0.182983	Oligotrophic
SW-02	Lower reach of Mill Creek	April 2, 2025	1	40.68	3.37	Baseline	0.110	3.71	1.8	0.0534	0.163601	Oligotrophic
SW-02	Lower reach of Mill Creek	April 2, 2025	1	40.68	3.37	Project-Alone Case	0.110	3.71	0.12874	0.0038	0.114009	Oligotrophic
SW-02	Lower reach of Mill Creek	April 2, 2025	1	40.68	3.37	Application Case	0.110	3.71	2.6942	0.0799	0.190136	Oligotrophic
SW-02	Lower reach of Mill Creek	April 2, 2025	1	40.68	3.37	Cumulative Case	0.110	3.71	2.7994	0.0831	0.193259	Oligotrophic
SW-02	Lower reach of Mill Creek	April 7, 2025	1	40.68	3.37	Baseline	0.095	3.22	1.8	0.0534	0.148894	Oligotrophic
SW-02	Lower reach of Mill Creek	April 7, 2025	1	40.68	3.37	Project-Alone Case	0.095	3.22	0.12874	0.0038	0.099301	Oligotrophic
SW-02	Lower reach of Mill Creek	April 7, 2025	1	40.68	3.37	Application Case	0.095	3.22	2.6942	0.0799	0.175428	Oligotrophic
SW-02	Lower reach of Mill Creek	April 7, 2025	1	40.68	3.37	Cumulative Case	0.095	3.22	2.7994	0.0831	0.178551	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-02	Lower reach of Mill Creek	April 12, 2025	1	40.68	3.37	Baseline	0.100	3.38	1.8	0.0534	0.153830	Oligotrophic
SW-02	Lower reach of Mill Creek	April 12, 2025	1	40.68	3.37	Project-Alone Case	0.100	3.38	0.12874	0.0038	0.104238	Oligotrophic
SW-02	Lower reach of Mill Creek	April 12, 2025	1	40.68	3.37	Application Case	0.100	3.38	2.6942	0.0799	0.180364	Oligotrophic
SW-02	Lower reach of Mill Creek	April 12, 2025	1	40.68	3.37	Cumulative Case	0.100	3.38	2.7994	0.0831	0.183487	Oligotrophic
SW-02	Lower reach of Mill Creek	April 20, 2025	1	40.68	3.37	Baseline	0.091	3.06	1.8	0.0534	0.144360	Oligotrophic
SW-02	Lower reach of Mill Creek	April 20, 2025	1	40.68	3.37	Project-Alone Case	0.091	3.06	0.12874	0.0038	0.094768	Oligotrophic
SW-02	Lower reach of Mill Creek	April 20, 2025	1	40.68	3.37	Application Case	0.091	3.06	2.6942	0.0799	0.170895	Oligotrophic
SW-02	Lower reach of Mill Creek	April 20, 2025	1	40.68	3.37	Cumulative Case	0.091	3.06	2.7994	0.0831	0.174018	Oligotrophic
SW-02	Lower reach of Mill Creek	April 24, 2025	1	40.68	3.37	Baseline	0.087	2.93	1.8	0.0534	0.140331	Oligotrophic
SW-02	Lower reach of Mill Creek	April 24, 2025	1	40.68	3.37	Project-Alone Case	0.087	2.93	0.12874	0.0038	0.090739	Oligotrophic
SW-02	Lower reach of Mill Creek	April 24, 2025	1	40.68	3.37	Application Case	0.087	2.93	2.6942	0.0799	0.166865	Oligotrophic
SW-02	Lower reach of Mill Creek	April 24, 2025	1	40.68	3.37	Cumulative Case	0.087	2.93	2.7994	0.0831	0.169988	Oligotrophic
SW-02	Lower reach of Mill Creek	April 28, 2025	1	40.68	3.37	Baseline	0.083	2.81	1.8	0.0534	0.136906	Oligotrophic
SW-02	Lower reach of Mill Creek	April 28, 2025	1	40.68	3.37	Project-Alone Case	0.083	2.81	0.12874	0.0038	0.087314	Oligotrophic
SW-02	Lower reach of Mill Creek	April 28, 2025	1	40.68	3.37	Application Case	0.083	2.81	2.6942	0.0799	0.163440	Oligotrophic
SW-02	Lower reach of Mill Creek	April 28, 2025	1	40.68	3.37	Cumulative Case	0.083	2.81	2.7994	0.0831	0.166563	Oligotrophic
SW-02	Lower reach of Mill Creek	April 29, 2025	1	40.68	3.37	Baseline	0.079	2.67	1.8	0.0534	0.132675	Oligotrophic
SW-02	Lower reach of Mill Creek	April 29, 2025	1	40.68	3.37	Project-Alone Case	0.079	2.67	0.12874	0.0038	0.083083	Oligotrophic
SW-02	Lower reach of Mill Creek	April 29, 2025	1	40.68	3.37	Application Case	0.079	2.67	2.6942	0.0799	0.159209	Oligotrophic
SW-02	Lower reach of Mill Creek	April 29, 2025	1	40.68	3.37	Cumulative Case	0.079	2.67	2.7994	0.0831	0.162332	Oligotrophic
SW-02	Lower reach of Mill Creek	May 8, 2025	1	40.68	3.37	Baseline	0.076	2.58	1.8	0.0534	0.129854	Oligotrophic
SW-02	Lower reach of Mill Creek	May 8, 2025	1	40.68	3.37	Project-Alone Case	0.076	2.58	0.12874	0.0038	0.080262	Oligotrophic
SW-02	Lower reach of Mill Creek	May 8, 2025	1	40.68	3.37	Application Case	0.076	2.58	2.6942	0.0799	0.156389	Oligotrophic
SW-02	Lower reach of Mill Creek	May 8, 2025	1	40.68	3.37	Cumulative Case	0.076	2.58	2.7994	0.0831	0.159511	Oligotrophic
SW-02	Lower reach of Mill Creek	May 13, 2025	1	40.68	3.37	Baseline	0.078	2.64	1.8	0.0534	0.131869	Oligotrophic
SW-02	Lower reach of Mill Creek	May 13, 2025	1	40.68	3.37	Project-Alone Case	0.078	2.64	0.12874	0.0038	0.082277	Oligotrophic
SW-02	Lower reach of Mill Creek	May 13, 2025	1	40.68	3.37	Application Case	0.078	2.64	2.6942	0.0799	0.158403	Oligotrophic
SW-02	Lower reach of Mill Creek	May 13, 2025	1	40.68	3.37	Cumulative Case	0.078	2.64	2.7994	0.0831	0.161526	Oligotrophic
SW-02	Lower reach of Mill Creek	May 14, 2025	1	40.68	3.37	Baseline	0.076	2.55	1.8	0.0534	0.129149	Oligotrophic
SW-02	Lower reach of Mill Creek	May 14, 2025	1	40.68	3.37	Project-Alone Case	0.076	2.55	0.12874	0.0038	0.079557	Oligotrophic
SW-02	Lower reach of Mill Creek	May 14, 2025	1	40.68	3.37	Application Case	0.076	2.55	2.6942	0.0799	0.155683	Oligotrophic
SW-02	Lower reach of Mill Creek	May 14, 2025	1	40.68	3.37	Cumulative Case	0.076	2.55	2.7994	0.0831	0.158806	Oligotrophic
SW-02	Lower reach of Mill Creek	May 22, 2025	1	40.68	3.37	Baseline	0.087	2.92	1.8	0.0534	0.140129	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-02	Lower reach of Mill Creek	May 22, 2025	1	40.68	3.37	Project-Alone Case	0.087	2.92	0.12874	0.0038	0.090537	Oligotrophic
SW-02	Lower reach of Mill Creek	May 22, 2025	1	40.68	3.37	Application Case	0.087	2.92	2.6942	0.0799	0.166664	Oligotrophic
SW-02	Lower reach of Mill Creek	May 22, 2025	1	40.68	3.37	Cumulative Case	0.087	2.92	2.7994	0.0831	0.169787	Oligotrophic
SW-07	Upstream Mill Creek	August 25, 2023	1	38.20	3.37	Baseline	0.213	7.19	1.8	0.0534	0.266656	Oligotrophic
SW-07	Upstream Mill Creek	August 25, 2023	1	38.20	3.37	Project-Alone Case	0.213	7.19	0.02395	0.0007	0.213955	Oligotrophic
SW-07	Upstream Mill Creek	August 25, 2023	1	38.20	3.37	Application Case	0.213	7.19	2.1138	0.0627	0.275968	Oligotrophic
SW-07	Upstream Mill Creek	August 25, 2023	1	38.20	3.37	Cumulative Case	0.213	7.19	2.1244	0.0630	0.276282	Oligotrophic
SW-07	Upstream Mill Creek	September 20, 2023	1	38.20	3.37	Baseline	0.220	7.42	1.8	0.0534	0.273708	Oligotrophic
SW-07	Upstream Mill Creek	September 20, 2023	1	38.20	3.37	Project-Alone Case	0.220	7.42	0.02395	0.0007	0.221006	Oligotrophic
SW-07	Upstream Mill Creek	September 20, 2023	1	38.20	3.37	Application Case	0.220	7.42	2.1138	0.0627	0.283020	Oligotrophic
SW-07	Upstream Mill Creek	September 20, 2023	1	38.20	3.37	Cumulative Case	0.220	7.42	2.1244	0.0630	0.283334	Oligotrophic
SW-07	Upstream Mill Creek	November 16, 2023	1	38.20	3.37	Baseline	0.132	4.44	1.8	0.0534	0.185059	Oligotrophic
SW-07	Upstream Mill Creek	November 16, 2023	1	38.20	3.37	Project-Alone Case	0.132	4.44	0.02395	0.0007	0.132357	Oligotrophic
SW-07	Upstream Mill Creek	November 16, 2023	1	38.20	3.37	Application Case	0.132	4.44	2.1138	0.0627	0.194371	Oligotrophic
SW-07	Upstream Mill Creek	November 16, 2023	1	38.20	3.37	Cumulative Case	0.132	4.44	2.1244	0.0630	0.194685	Oligotrophic
SW-07	Upstream Mill Creek	December 13, 2023	1	38.20	3.37	Baseline	0.135	4.54	1.8	0.0534	0.188081	Oligotrophic
SW-07	Upstream Mill Creek	December 13, 2023	1	38.20	3.37	Project-Alone Case	0.135	4.54	0.02395	0.0007	0.135379	Oligotrophic
SW-07	Upstream Mill Creek	December 13, 2023	1	38.20	3.37	Application Case	0.135	4.54	2.1138	0.0627	0.197393	Oligotrophic
SW-07	Upstream Mill Creek	December 13, 2023	1	38.20	3.37	Cumulative Case	0.135	4.54	2.1244	0.0630	0.197707	Oligotrophic
SW-07	Upstream Mill Creek	January 23, 2024	1	38.20	3.37	Baseline	0.108	3.65	1.8	0.0534	0.161788	Oligotrophic
SW-07	Upstream Mill Creek	January 23, 2024	1	38.20	3.37	Project-Alone Case	0.108	3.65	0.02395	0.0007	0.109086	Oligotrophic
SW-07	Upstream Mill Creek	January 23, 2024	1	38.20	3.37	Application Case	0.108	3.65	2.1138	0.0627	0.171100	Oligotrophic
SW-07	Upstream Mill Creek	January 23, 2024	1	38.20	3.37	Cumulative Case	0.108	3.65	2.1244	0.0630	0.171414	Oligotrophic
SW-07	Upstream Mill Creek	February 15, 2024	1	38.20	3.37	Baseline	0.123	4.15	1.8	0.0534	0.176597	Oligotrophic
SW-07	Upstream Mill Creek	February 15, 2024	1	38.20	3.37	Project-Alone Case	0.123	4.15	0.02395	0.0007	0.123895	Oligotrophic
SW-07	Upstream Mill Creek	February 15, 2024	1	38.20	3.37	Application Case	0.123	4.15	2.1138	0.0627	0.185909	Oligotrophic
SW-07	Upstream Mill Creek	February 15, 2024	1	38.20	3.37	Cumulative Case	0.123	4.15	2.1244	0.0630	0.186223	Oligotrophic
SW-07	Upstream Mill Creek	March 19, 2024	1	38.20	3.37	Baseline	0.111	3.73	1.8	0.0534	0.164206	Oligotrophic
SW-07	Upstream Mill Creek	March 19, 2024	1	38.20	3.37	Project-Alone Case	0.111	3.73	0.02395	0.0007	0.111504	Oligotrophic
SW-07	Upstream Mill Creek	March 19, 2024	1	38.20	3.37	Application Case	0.111	3.73	2.1138	0.0627	0.173518	Oligotrophic
SW-07	Upstream Mill Creek	March 19, 2024	1	38.20	3.37	Cumulative Case	0.111	3.73	2.1244	0.0630	0.173832	Oligotrophic
SW-07	Upstream Mill Creek	April 26, 2024	1	38.20	3.37	Baseline	0.092	3.11	1.8	0.0534	0.145771	Oligotrophic
SW-07	Upstream Mill Creek	April 26, 2024	1	38.20	3.37	Project-Alone Case	0.092	3.11	0.02395	0.0007	0.093069	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-07	Upstream Mill Creek	April 26, 2024	1	38.20	3.37	Application Case	0.092	3.11	2.1138	0.0627	0.155083	Oligotrophic
SW-07	Upstream Mill Creek	April 26, 2024	1	38.20	3.37	Cumulative Case	0.092	3.11	2.1244	0.0630	0.155397	Oligotrophic
SW-07	Upstream Mill Creek	April 28, 2024	1	38.20	3.37	Baseline	0.093	3.13	1.8	0.0534	0.146174	Oligotrophic
SW-07	Upstream Mill Creek	April 28, 2024	1	38.20	3.37	Project-Alone Case	0.093	3.13	0.02395	0.0007	0.093472	Oligotrophic
SW-07	Upstream Mill Creek	April 28, 2024	1	38.20	3.37	Application Case	0.093	3.13	2.1138	0.0627	0.155486	Oligotrophic
SW-07	Upstream Mill Creek	April 28, 2024	1	38.20	3.37	Cumulative Case	0.093	3.13	2.1244	0.0630	0.155800	Oligotrophic
SW-07	Upstream Mill Creek	May 3, 2024	1	38.20	3.37	Baseline	0.097	3.28	1.8	0.0534	0.150606	Oligotrophic
SW-07	Upstream Mill Creek	May 3, 2024	1	38.20	3.37	Project-Alone Case	0.097	3.28	0.02395	0.0007	0.097905	Oligotrophic
SW-07	Upstream Mill Creek	May 3, 2024	1	38.20	3.37	Application Case	0.097	3.28	2.1138	0.0627	0.159918	Oligotrophic
SW-07	Upstream Mill Creek	May 3, 2024	1	38.20	3.37	Cumulative Case	0.097	3.28	2.1244	0.0630	0.160232	Oligotrophic
SW-07	Upstream Mill Creek	May 9, 2024	1	38.20	3.37	Baseline	0.088	2.95	1.8	0.0534	0.140935	Oligotrophic
SW-07	Upstream Mill Creek	May 9, 2024	1	38.20	3.37	Project-Alone Case	0.088	2.95	0.02395	0.0007	0.088234	Oligotrophic
SW-07	Upstream Mill Creek	May 9, 2024	1	38.20	3.37	Application Case	0.088	2.95	2.1138	0.0627	0.150247	Oligotrophic
SW-07	Upstream Mill Creek	May 9, 2024	1	38.20	3.37	Cumulative Case	0.088	2.95	2.1244	0.0630	0.150561	Oligotrophic
SW-07	Upstream Mill Creek	May 9, 2024	1	38.20	3.37	Baseline	0.088	2.95	1.8	0.0534	0.140935	Oligotrophic
SW-07	Upstream Mill Creek	May 9, 2024	1	38.20	3.37	Project-Alone Case	0.088	2.95	0.02395	0.0007	0.088234	Oligotrophic
SW-07	Upstream Mill Creek	May 9, 2024	1	38.20	3.37	Application Case	0.088	2.95	2.1138	0.0627	0.150247	Oligotrophic
SW-07	Upstream Mill Creek	May 9, 2024	1	38.20	3.37	Cumulative Case	0.088	2.95	2.1244	0.0630	0.150561	Oligotrophic
SW-07	Upstream Mill Creek	May 14, 2024	1	38.20	3.37	Baseline	0.100	3.36	1.8	0.0534	0.153125	Oligotrophic
SW-07	Upstream Mill Creek	May 14, 2024	1	38.20	3.37	Project-Alone Case	0.100	3.36	0.02395	0.0007	0.100423	Oligotrophic
SW-07	Upstream Mill Creek	May 14, 2024	1	38.20	3.37	Application Case	0.100	3.36	2.1138	0.0627	0.162437	Oligotrophic
SW-07	Upstream Mill Creek	May 14, 2024	1	38.20	3.37	Cumulative Case	0.100	3.36	2.1244	0.0630	0.162751	Oligotrophic
SW-07	Upstream Mill Creek	May 17, 2024	1	38.20	3.37	Baseline	0.074	2.49	1.8	0.0534	0.127436	Oligotrophic
SW-07	Upstream Mill Creek	May 17, 2024	1	38.20	3.37	Project-Alone Case	0.074	2.49	0.02395	0.0007	0.074735	Oligotrophic
SW-07	Upstream Mill Creek	May 17, 2024	1	38.20	3.37	Application Case	0.074	2.49	2.1138	0.0627	0.136749	Oligotrophic
SW-07	Upstream Mill Creek	May 17, 2024	1	38.20	3.37	Cumulative Case	0.074	2.49	2.1244	0.0630	0.137062	Oligotrophic
SW-07	Upstream Mill Creek	May 23, 2024	1	38.20	3.37	Baseline	0.079	2.67	1.8	0.0534	0.132574	Oligotrophic
SW-07	Upstream Mill Creek	May 23, 2024	1	38.20	3.37	Project-Alone Case	0.079	2.67	0.02395	0.0007	0.079872	Oligotrophic
SW-07	Upstream Mill Creek	May 23, 2024	1	38.20	3.37	Application Case	0.079	2.67	2.1138	0.0627	0.141886	Oligotrophic
SW-07	Upstream Mill Creek	May 23, 2024	1	38.20	3.37	Cumulative Case	0.079	2.67	2.1244	0.0630	0.142200	Oligotrophic
SW-07	Upstream Mill Creek	May 24, 2024	1	38.20	3.37	Baseline	0.079	2.66	1.8	0.0534	0.132272	Oligotrophic
SW-07	Upstream Mill Creek	May 24, 2024	1	38.20	3.37	Project-Alone Case	0.079	2.66	0.02395	0.0007	0.079570	Oligotrophic
SW-07	Upstream Mill Creek	May 24, 2024	1	38.20	3.37	Application Case	0.079	2.66	2.1138	0.0627	0.141584	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-07	Upstream Mill Creek	May 24, 2024	1	38.20	3.37	Cumulative Case	0.079	2.66	2.1244	0.0630	0.141898	Oligotrophic
SW-07	Upstream Mill Creek	May 26, 2024	1	38.20	3.37	Baseline	0.076	2.57	1.8	0.0534	0.129653	Oligotrophic
SW-07	Upstream Mill Creek	May 26, 2024	1	38.20	3.37	Project-Alone Case	0.076	2.57	0.02395	0.0007	0.076951	Oligotrophic
SW-07	Upstream Mill Creek	May 26, 2024	1	38.20	3.37	Application Case	0.076	2.57	2.1138	0.0627	0.138965	Oligotrophic
SW-07	Upstream Mill Creek	May 26, 2024	1	38.20	3.37	Cumulative Case	0.076	2.57	2.1244	0.0630	0.139279	Oligotrophic
SW-07	Upstream Mill Creek	June 21, 2024	1	38.20	3.37	Baseline	0.075	2.53	1.8	0.0534	0.128343	Oligotrophic
SW-07	Upstream Mill Creek	June 21, 2024	1	38.20	3.37	Project-Alone Case	0.075	2.53	0.02395	0.0007	0.075641	Oligotrophic
SW-07	Upstream Mill Creek	June 21, 2024	1	38.20	3.37	Application Case	0.075	2.53	2.1138	0.0627	0.137655	Oligotrophic
SW-07	Upstream Mill Creek	June 21, 2024	1	38.20	3.37	Cumulative Case	0.075	2.53	2.1244	0.0630	0.137969	Oligotrophic
SW-07	Upstream Mill Creek	June 26, 2024	1	38.20	3.37	Baseline	0.073	2.46	1.8	0.0534	0.126530	Oligotrophic
SW-07	Upstream Mill Creek	June 26, 2024	1	38.20	3.37	Project-Alone Case	0.073	2.46	0.02395	0.0007	0.073828	Oligotrophic
SW-07	Upstream Mill Creek	June 26, 2024	1	38.20	3.37	Application Case	0.073	2.46	2.1138	0.0627	0.135842	Oligotrophic
SW-07	Upstream Mill Creek	June 26, 2024	1	38.20	3.37	Cumulative Case	0.073	2.46	2.1244	0.0630	0.136156	Oligotrophic
SW-07	Upstream Mill Creek	July 19, 2024	1	38.20	3.37	Baseline	0.108	3.64	1.8	0.0534	0.161486	Oligotrophic
SW-07	Upstream Mill Creek	July 19, 2024	1	38.20	3.37	Project-Alone Case	0.108	3.64	0.02395	0.0007	0.108784	Oligotrophic
SW-07	Upstream Mill Creek	July 19, 2024	1	38.20	3.37	Application Case	0.108	3.64	2.1138	0.0627	0.170798	Oligotrophic
SW-07	Upstream Mill Creek	July 19, 2024	1	38.20	3.37	Cumulative Case	0.108	3.64	2.1244	0.0630	0.171112	Oligotrophic
SW-07	Upstream Mill Creek	July 31, 2024	1	38.20	3.37	Baseline	0.103	3.48	1.8	0.0534	0.156550	Oligotrophic
SW-07	Upstream Mill Creek	July 31, 2024	1	38.20	3.37	Project-Alone Case	0.103	3.48	0.02395	0.0007	0.103848	Oligotrophic
SW-07	Upstream Mill Creek	July 31, 2024	1	38.20	3.37	Application Case	0.103	3.48	2.1138	0.0627	0.165862	Oligotrophic
SW-07	Upstream Mill Creek	July 31, 2024	1	38.20	3.37	Cumulative Case	0.103	3.48	2.1244	0.0630	0.166176	Oligotrophic
SW-07	Upstream Mill Creek	August 23, 2024	1	38.20	3.37	Baseline	0.193	6.51	1.8	0.0534	0.246509	Oligotrophic
SW-07	Upstream Mill Creek	August 23, 2024	1	38.20	3.37	Project-Alone Case	0.193	6.51	0.02395	0.0007	0.193807	Oligotrophic
SW-07	Upstream Mill Creek	August 23, 2024	1	38.20	3.37	Application Case	0.193	6.51	2.1138	0.0627	0.255821	Oligotrophic
SW-07	Upstream Mill Creek	August 23, 2024	1	38.20	3.37	Cumulative Case	0.193	6.51	2.1244	0.0630	0.256135	Oligotrophic
SW-07	Upstream Mill Creek	August 27, 2024	1	38.20	3.37	Baseline	0.162	5.45	1.8	0.0534	0.215280	Oligotrophic
SW-07	Upstream Mill Creek	August 27, 2024	1	38.20	3.37	Project-Alone Case	0.162	5.45	0.02395	0.0007	0.162578	Oligotrophic
SW-07	Upstream Mill Creek	August 27, 2024	1	38.20	3.37	Application Case	0.162	5.45	2.1138	0.0627	0.224592	Oligotrophic
SW-07	Upstream Mill Creek	August 27, 2024	1	38.20	3.37	Cumulative Case	0.162	5.45	2.1244	0.0630	0.224906	Oligotrophic
SW-07	Upstream Mill Creek	September 20, 2024	1	38.20	3.37	Baseline	0.217	7.32	1.8	0.0534	0.270686	Oligotrophic
SW-07	Upstream Mill Creek	September 20, 2024	1	38.20	3.37	Project-Alone Case	0.217	7.32	0.02395	0.0007	0.217984	Oligotrophic
SW-07	Upstream Mill Creek	September 20, 2024	1	38.20	3.37	Application Case	0.217	7.32	2.1138	0.0627	0.279998	Oligotrophic
SW-07	Upstream Mill Creek	September 20, 2024	1	38.20	3.37	Cumulative Case	0.217	7.32	2.1244	0.0630	0.280312	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m³	g/m³	
SW-07	Upstream Mill Creek	September 29, 2024	1	38.20	3.37	Baseline	0.163	5.49	1.8	0.0534	0.216287	Oligotrophic
SW-07	Upstream Mill Creek	September 29, 2024	1	38.20	3.37	Project-Alone Case	0.163	5.49	0.02395	0.0007	0.163586	Oligotrophic
SW-07	Upstream Mill Creek	September 29, 2024	1	38.20	3.37	Application Case	0.163	5.49	2.1138	0.0627	0.225599	Oligotrophic
SW-07	Upstream Mill Creek	September 29, 2024	1	38.20	3.37	Cumulative Case	0.163	5.49	2.1244	0.0630	0.225913	Oligotrophic
SW-07	Upstream Mill Creek	October 3, 2024	1	38.20	3.37	Baseline	0.167	5.62	1.8	0.0534	0.220317	Oligotrophic
SW-07	Upstream Mill Creek	October 3, 2024	1	38.20	3.37	Project-Alone Case	0.167	5.62	0.02395	0.0007	0.167615	Oligotrophic
SW-07	Upstream Mill Creek	October 3, 2024	1	38.20	3.37	Application Case	0.167	5.62	2.1138	0.0627	0.229629	Oligotrophic
SW-07	Upstream Mill Creek	October 3, 2024	1	38.20	3.37	Cumulative Case	0.167	5.62	2.1244	0.0630	0.229943	Oligotrophic
SW-07	Upstream Mill Creek	October 12, 2024	1	38.20	3.37	Baseline	0.160	5.39	1.8	0.0534	0.213265	Oligotrophic
SW-07	Upstream Mill Creek	October 12, 2024	1	38.20	3.37	Project-Alone Case	0.160	5.39	0.02395	0.0007	0.160564	Oligotrophic
SW-07	Upstream Mill Creek	October 12, 2024	1	38.20	3.37	Application Case	0.160	5.39	2.1138	0.0627	0.222577	Oligotrophic
SW-07	Upstream Mill Creek	October 12, 2024	1	38.20	3.37	Cumulative Case	0.160	5.39	2.1244	0.0630	0.222891	Oligotrophic
SW-07	Upstream Mill Creek	October 22, 2024	1	38.20	3.37	Baseline	0.112	3.78	1.8	0.0534	0.165717	Oligotrophic
SW-07	Upstream Mill Creek	October 22, 2024	1	38.20	3.37	Project-Alone Case	0.112	3.78	0.02395	0.0007	0.113015	Oligotrophic
SW-07	Upstream Mill Creek	October 22, 2024	1	38.20	3.37	Application Case	0.112	3.78	2.1138	0.0627	0.175029	Oligotrophic
SW-07	Upstream Mill Creek	October 22, 2024	1	38.20	3.37	Cumulative Case	0.112	3.78	2.1244	0.0630	0.175343	Oligotrophic
SW-07	Upstream Mill Creek	October 25, 2024	1	38.20	3.37	Baseline	0.160	5.39	1.8	0.0534	0.213265	Oligotrophic
SW-07	Upstream Mill Creek	October 25, 2024	1	38.20	3.37	Project-Alone Case	0.160	5.39	0.02395	0.0007	0.160564	Oligotrophic
SW-07	Upstream Mill Creek	October 25, 2024	1	38.20	3.37	Application Case	0.160	5.39	2.1138	0.0627	0.222577	Oligotrophic
SW-07	Upstream Mill Creek	October 25, 2024	1	38.20	3.37	Cumulative Case	0.160	5.39	2.1244	0.0630	0.222891	Oligotrophic
SW-07	Upstream Mill Creek	October 25, 2024	1	38.20	3.37	Baseline	0.158	5.31	1.8	0.0534	0.210948	Oligotrophic
SW-07	Upstream Mill Creek	October 25, 2024	1	38.20	3.37	Project-Alone Case	0.158	5.31	0.02395	0.0007	0.158247	Oligotrophic
SW-07	Upstream Mill Creek	October 25, 2024	1	38.20	3.37	Application Case	0.158	5.31	2.1138	0.0627	0.220260	Oligotrophic
SW-07	Upstream Mill Creek	October 25, 2024	1	38.20	3.37	Cumulative Case	0.158	5.31	2.1244	0.0630	0.220574	Oligotrophic
SW-07	Upstream Mill Creek	November 1, 2024	1	38.20	3.37	Baseline	0.131	4.40	1.8	0.0534	0.184051	Oligotrophic
SW-07	Upstream Mill Creek	November 1, 2024	1	38.20	3.37	Project-Alone Case	0.131	4.40	0.02395	0.0007	0.131350	Oligotrophic
SW-07	Upstream Mill Creek	November 1, 2024	1	38.20	3.37	Application Case	0.131	4.40	2.1138	0.0627	0.193363	Oligotrophic
SW-07	Upstream Mill Creek	November 1, 2024	1	38.20	3.37	Cumulative Case	0.131	4.40	2.1244	0.0630	0.193677	Oligotrophic
SW-07	Upstream Mill Creek	November 8, 2024	1	38.20	3.37	Baseline	0.104	3.49	1.8	0.0534	0.157053	Oligotrophic
SW-07	Upstream Mill Creek	November 8, 2024	1	38.20	3.37	Project-Alone Case	0.104	3.49	0.02395	0.0007	0.104352	Oligotrophic
SW-07	Upstream Mill Creek	November 8, 2024	1	38.20	3.37	Application Case	0.104	3.49	2.1138	0.0627	0.166365	Oligotrophic
SW-07	Upstream Mill Creek	November 8, 2024	1	38.20	3.37	Cumulative Case	0.104	3.49	2.1244	0.0630	0.166679	Oligotrophic
SW-07	Upstream Mill Creek	November 15, 2024	1	38.20	3.37	Baseline	0.114	3.85	1.8	0.0534	0.167530	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-07	Upstream Mill Creek	November 15, 2024	1	38.20	3.37	Project-Alone Case	0.114	3.85	0.02395	0.0007	0.114829	Oligotrophic
SW-07	Upstream Mill Creek	November 15, 2024	1	38.20	3.37	Application Case	0.114	3.85	2.1138	0.0627	0.176842	Oligotrophic
SW-07	Upstream Mill Creek	November 15, 2024	1	38.20	3.37	Cumulative Case	0.114	3.85	2.1244	0.0630	0.177156	Oligotrophic
SW-07	Upstream Mill Creek	November 16, 2024	1	38.20	3.37	Baseline	0.129	4.35	1.8	0.0534	0.182641	Oligotrophic
SW-07	Upstream Mill Creek	November 16, 2024	1	38.20	3.37	Project-Alone Case	0.129	4.35	0.02395	0.0007	0.129939	Oligotrophic
SW-07	Upstream Mill Creek	November 16, 2024	1	38.20	3.37	Application Case	0.129	4.35	2.1138	0.0627	0.191953	Oligotrophic
SW-07	Upstream Mill Creek	November 16, 2024	1	38.20	3.37	Cumulative Case	0.129	4.35	2.1244	0.0630	0.192267	Oligotrophic
SW-07	Upstream Mill Creek	November 20, 2024	1	38.20	3.37	Baseline	0.088	2.98	1.8	0.0534	0.141741	Oligotrophic
SW-07	Upstream Mill Creek	November 20, 2024	1	38.20	3.37	Project-Alone Case	0.088	2.98	0.02395	0.0007	0.089040	Oligotrophic
SW-07	Upstream Mill Creek	November 20, 2024	1	38.20	3.37	Application Case	0.088	2.98	2.1138	0.0627	0.151053	Oligotrophic
SW-07	Upstream Mill Creek	November 20, 2024	1	38.20	3.37	Cumulative Case	0.088	2.98	2.1244	0.0630	0.151367	Oligotrophic
SW-07	Upstream Mill Creek	December 8, 2024	1	38.20	3.37	Baseline	0.117	3.95	1.8	0.0534	0.170754	Oligotrophic
SW-07	Upstream Mill Creek	December 8, 2024	1	38.20	3.37	Project-Alone Case	0.117	3.95	0.02395	0.0007	0.118052	Oligotrophic
SW-07	Upstream Mill Creek	December 8, 2024	1	38.20	3.37	Application Case	0.117	3.95	2.1138	0.0627	0.180066	Oligotrophic
SW-07	Upstream Mill Creek	December 8, 2024	1	38.20	3.37	Cumulative Case	0.117	3.95	2.1244	0.0630	0.180380	Oligotrophic
SW-07	Upstream Mill Creek	December 19, 2024	1	38.20	3.37	Baseline	0.088	2.95	1.8	0.0534	0.140935	Oligotrophic
SW-07	Upstream Mill Creek	December 19, 2024	1	38.20	3.37	Project-Alone Case	0.088	2.95	0.02395	0.0007	0.088234	Oligotrophic
SW-07	Upstream Mill Creek	December 19, 2024	1	38.20	3.37	Application Case	0.088	2.95	2.1138	0.0627	0.150247	Oligotrophic
SW-07	Upstream Mill Creek	December 19, 2024	1	38.20	3.37	Cumulative Case	0.088	2.95	2.1244	0.0630	0.150561	Oligotrophic
SW-07	Upstream Mill Creek	January 23, 2025	1	38.20	3.37	Baseline	0.135	4.55	1.8	0.0534	0.188484	Oligotrophic
SW-07	Upstream Mill Creek	January 23, 2025	1	38.20	3.37	Project-Alone Case	0.135	4.55	0.02395	0.0007	0.135782	Oligotrophic
SW-07	Upstream Mill Creek	January 23, 2025	1	38.20	3.37	Application Case	0.135	4.55	2.1138	0.0627	0.197796	Oligotrophic
SW-07	Upstream Mill Creek	January 23, 2025	1	38.20	3.37	Cumulative Case	0.135	4.55	2.1244	0.0630	0.198110	Oligotrophic
SW-07	Upstream Mill Creek	January 25, 2025	1	38.20	3.37	Baseline	0.143	4.83	1.8	0.0534	0.196845	Oligotrophic
SW-07	Upstream Mill Creek	January 25, 2025	1	38.20	3.37	Project-Alone Case	0.143	4.83	0.02395	0.0007	0.144143	Oligotrophic
SW-07	Upstream Mill Creek	January 25, 2025	1	38.20	3.37	Application Case	0.143	4.83	2.1138	0.0627	0.206157	Oligotrophic
SW-07	Upstream Mill Creek	January 25, 2025	1	38.20	3.37	Cumulative Case	0.143	4.83	2.1244	0.0630	0.206471	Oligotrophic
SW-07	Upstream Mill Creek	February 19, 2025	1	38.20	3.37	Baseline	0.143	4.81	1.8	0.0534	0.196039	Oligotrophic
SW-07	Upstream Mill Creek	February 19, 2025	1	38.20	3.37	Project-Alone Case	0.143	4.81	0.02395	0.0007	0.143337	Oligotrophic
SW-07	Upstream Mill Creek	February 19, 2025	1	38.20	3.37	Application Case	0.143	4.81	2.1138	0.0627	0.205351	Oligotrophic
SW-07	Upstream Mill Creek	February 19, 2025	1	38.20	3.37	Cumulative Case	0.143	4.81	2.1244	0.0630	0.205665	Oligotrophic
SW-07	Upstream Mill Creek	February 20, 2025	1	38.20	3.37	Baseline	0.178	6.00	1.8	0.0534	0.231398	Oligotrophic
SW-07	Upstream Mill Creek	February 20, 2025	1	38.20	3.37	Project-Alone Case	0.178	6.00	0.02395	0.0007	0.178696	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-07	Upstream Mill Creek	February 20, 2025	1	38.20	3.37	Application Case	0.178	6.00	2.1138	0.0627	0.240710	Oligotrophic
SW-07	Upstream Mill Creek	February 20, 2025	1	38.20	3.37	Cumulative Case	0.178	6.00	2.1244	0.0630	0.241024	Oligotrophic
SW-07	Upstream Mill Creek	March 18, 2025	1	38.20	3.37	Baseline	0.123	4.16	1.8	0.0534	0.176798	Oligotrophic
SW-07	Upstream Mill Creek	March 18, 2025	1	38.20	3.37	Project-Alone Case	0.123	4.16	0.02395	0.0007	0.124096	Oligotrophic
SW-07	Upstream Mill Creek	March 18, 2025	1	38.20	3.37	Application Case	0.123	4.16	2.1138	0.0627	0.186110	Oligotrophic
SW-07	Upstream Mill Creek	March 18, 2025	1	38.20	3.37	Cumulative Case	0.123	4.16	2.1244	0.0630	0.186424	Oligotrophic
SW-07	Upstream Mill Creek	March 27, 2025	1	38.20	3.37	Baseline	0.099	3.33	1.8	0.0534	0.152218	Oligotrophic
SW-07	Upstream Mill Creek	March 27, 2025	1	38.20	3.37	Project-Alone Case	0.099	3.33	0.02395	0.0007	0.099516	Oligotrophic
SW-07	Upstream Mill Creek	March 27, 2025	1	38.20	3.37	Application Case	0.099	3.33	2.1138	0.0627	0.161530	Oligotrophic
SW-07	Upstream Mill Creek	March 27, 2025	1	38.20	3.37	Cumulative Case	0.099	3.33	2.1244	0.0630	0.161844	Oligotrophic
SW-07	Upstream Mill Creek	April 2, 2025	1	38.20	3.37	Baseline	0.105	3.55	1.8	0.0534	0.158867	Oligotrophic
SW-07	Upstream Mill Creek	April 2, 2025	1	38.20	3.37	Project-Alone Case	0.105	3.55	0.02395	0.0007	0.106165	Oligotrophic
SW-07	Upstream Mill Creek	April 2, 2025	1	38.20	3.37	Application Case	0.105	3.55	2.1138	0.0627	0.168179	Oligotrophic
SW-07	Upstream Mill Creek	April 2, 2025	1	38.20	3.37	Cumulative Case	0.105	3.55	2.1244	0.0630	0.168493	Oligotrophic
SW-07	Upstream Mill Creek	April 7, 2025	1	38.20	3.37	Baseline	0.094	3.18	1.8	0.0534	0.147685	Oligotrophic
SW-07	Upstream Mill Creek	April 7, 2025	1	38.20	3.37	Project-Alone Case	0.094	3.18	0.02395	0.0007	0.094983	Oligotrophic
SW-07	Upstream Mill Creek	April 7, 2025	1	38.20	3.37	Application Case	0.094	3.18	2.1138	0.0627	0.156997	Oligotrophic
SW-07	Upstream Mill Creek	April 7, 2025	1	38.20	3.37	Cumulative Case	0.094	3.18	2.1244	0.0630	0.157311	Oligotrophic
SW-07	Upstream Mill Creek	April 12, 2025	1	38.20	3.37	Baseline	0.100	3.36	1.8	0.0534	0.153125	Oligotrophic
SW-07	Upstream Mill Creek	April 12, 2025	1	38.20	3.37	Project-Alone Case	0.100	3.36	0.02395	0.0007	0.100423	Oligotrophic
SW-07	Upstream Mill Creek	April 12, 2025	1	38.20	3.37	Application Case	0.100	3.36	2.1138	0.0627	0.162437	Oligotrophic
SW-07	Upstream Mill Creek	April 12, 2025	1	38.20	3.37	Cumulative Case	0.100	3.36	2.1244	0.0630	0.162751	Oligotrophic
SW-07	Upstream Mill Creek	April 20, 2025	1	38.20	3.37	Baseline	0.089	3.00	1.8	0.0534	0.142547	Oligotrophic
SW-07	Upstream Mill Creek	April 20, 2025	1	38.20	3.37	Project-Alone Case	0.089	3.00	0.02395	0.0007	0.089846	Oligotrophic
SW-07	Upstream Mill Creek	April 20, 2025	1	38.20	3.37	Application Case	0.089	3.00	2.1138	0.0627	0.151859	Oligotrophic
SW-07	Upstream Mill Creek	April 20, 2025	1	38.20	3.37	Cumulative Case	0.089	3.00	2.1244	0.0630	0.152173	Oligotrophic
SW-07	Upstream Mill Creek	April 24, 2025	1	38.20	3.37	Baseline	0.089	2.99	1.8	0.0534	0.142144	Oligotrophic
SW-07	Upstream Mill Creek	April 24, 2025	1	38.20	3.37	Project-Alone Case	0.089	2.99	0.02395	0.0007	0.089443	Oligotrophic
SW-07	Upstream Mill Creek	April 24, 2025	1	38.20	3.37	Application Case	0.089	2.99	2.1138	0.0627	0.151456	Oligotrophic
SW-07	Upstream Mill Creek	April 24, 2025	1	38.20	3.37	Cumulative Case	0.089	2.99	2.1244	0.0630	0.151770	Oligotrophic
SW-07	Upstream Mill Creek	April 28, 2025	1	38.20	3.37	Baseline	0.081	2.75	1.8	0.0534	0.134891	Oligotrophic
SW-07	Upstream Mill Creek	April 28, 2025	1	38.20	3.37	Project-Alone Case	0.081	2.75	0.02395	0.0007	0.082189	Oligotrophic
SW-07	Upstream Mill Creek	April 28, 2025	1	38.20	3.37	Application Case	0.081	2.75	2.1138	0.0627	0.144203	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m³	g/m³	
SW-07	Upstream Mill Creek	April 28, 2025	1	38.20	3.37	Cumulative Case	0.081	2.75	2.1244	0.0630	0.144517	Oligotrophic
SW-07	Upstream Mill Creek	April 29, 2025	1	38.20	3.37	Baseline	0.083	2.79	1.8	0.0534	0.136100	Oligotrophic
SW-07	Upstream Mill Creek	April 29, 2025	1	38.20	3.37	Project-Alone Case	0.083	2.79	0.02395	0.0007	0.083398	Oligotrophic
SW-07	Upstream Mill Creek	April 29, 2025	1	38.20	3.37	Application Case	0.083	2.79	2.1138	0.0627	0.145412	Oligotrophic
SW-07	Upstream Mill Creek	April 29, 2025	1	38.20	3.37	Cumulative Case	0.083	2.79	2.1244	0.0630	0.145726	Oligotrophic
SW-07	Upstream Mill Creek	May 8, 2025	1	38.20	3.37	Baseline	0.077	2.58	1.8	0.0534	0.129955	Oligotrophic
SW-07	Upstream Mill Creek	May 8, 2025	1	38.20	3.37	Project-Alone Case	0.077	2.58	0.02395	0.0007	0.077253	Oligotrophic
SW-07	Upstream Mill Creek	May 8, 2025	1	38.20	3.37	Application Case	0.077	2.58	2.1138	0.0627	0.139267	Oligotrophic
SW-07	Upstream Mill Creek	May 8, 2025	1	38.20	3.37	Cumulative Case	0.077	2.58	2.1244	0.0630	0.139581	Oligotrophic
SW-07	Upstream Mill Creek	May 13, 2025	1	38.20	3.37	Baseline	0.077	2.59	1.8	0.0534	0.130156	Oligotrophic
SW-07	Upstream Mill Creek	May 13, 2025	1	38.20	3.37	Project-Alone Case	0.077	2.59	0.02395	0.0007	0.077455	Oligotrophic
SW-07	Upstream Mill Creek	May 13, 2025	1	38.20	3.37	Application Case	0.077	2.59	2.1138	0.0627	0.139468	Oligotrophic
SW-07	Upstream Mill Creek	May 13, 2025	1	38.20	3.37	Cumulative Case	0.077	2.59	2.1244	0.0630	0.139782	Oligotrophic
SW-07	Upstream Mill Creek	May 14, 2025	1	38.20	3.37	Baseline	0.079	2.68	1.8	0.0534	0.132876	Oligotrophic
SW-07	Upstream Mill Creek	May 14, 2025	1	38.20	3.37	Project-Alone Case	0.079	2.68	0.02395	0.0007	0.080175	Oligotrophic
SW-07	Upstream Mill Creek	May 14, 2025	1	38.20	3.37	Application Case	0.079	2.68	2.1138	0.0627	0.142188	Oligotrophic
SW-07	Upstream Mill Creek	May 14, 2025	1	38.20	3.37	Cumulative Case	0.079	2.68	2.1244	0.0630	0.142502	Oligotrophic
SW-07	Upstream Mill Creek	May 22, 2025	1	38.20	3.37	Baseline	0.088	2.96	1.8	0.0534	0.141238	Oligotrophic
SW-07	Upstream Mill Creek	May 22, 2025	1	38.20	3.37	Project-Alone Case	0.088	2.96	0.02395	0.0007	0.088536	Oligotrophic
SW-07	Upstream Mill Creek	May 22, 2025	1	38.20	3.37	Application Case	0.088	2.96	2.1138	0.0627	0.150550	Oligotrophic
SW-07	Upstream Mill Creek	May 22, 2025	1	38.20	3.37	Cumulative Case	0.088	2.96	2.1244	0.0630	0.150864	Oligotrophic
SW-08	Upstream Woodfibre Creek	April 25, 2024	1	19.90	3.72	Baseline	0.077	2.86	1.8	0.0484	0.125232	Oligotrophic
SW-08	Upstream Woodfibre Creek	April 25, 2024	1	19.90	3.72	Project-Alone Case	0.077	2.86	0.00834	0.0002	0.077069	Oligotrophic
SW-08	Upstream Woodfibre Creek	April 25, 2024	1	19.90	3.72	Application Case	0.077	2.86	1.8607	0.0500	0.126864	Oligotrophic
SW-08	Upstream Woodfibre Creek	April 25, 2024	1	19.90	3.72	Cumulative Case	0.077	2.86	1.8645	0.0501	0.126964	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 2, 2024	1	19.90	3.72	Baseline	0.080	2.97	1.8	0.0484	0.128254	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 2, 2024	1	19.90	3.72	Project-Alone Case	0.080	2.97	0.00834	0.0002	0.080091	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 2, 2024	1	19.90	3.72	Application Case	0.080	2.97	1.8607	0.0500	0.129886	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 2, 2024	1	19.90	3.72	Cumulative Case	0.080	2.97	1.8645	0.0501	0.129987	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 10, 2024	1	19.90	3.72	Baseline	0.070	2.62	1.8	0.0484	0.118885	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 10, 2024	1	19.90	3.72	Project-Alone Case	0.070	2.62	0.00834	0.0002	0.070722	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 10, 2024	1	19.90	3.72	Application Case	0.070	2.62	1.8607	0.0500	0.120518	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 10, 2024	1	19.90	3.72	Cumulative Case	0.070	2.62	1.8645	0.0501	0.120618	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km ²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m ³	g/m ³	
SW-08	Upstream Woodfibre Creek	May 16, 2024	1	19.90	3.72	Baseline	0.069	2.57	1.8	0.0484	0.117576	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 16, 2024	1	19.90	3.72	Project-Alone Case	0.069	2.57	0.00834	0.0002	0.069413	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 16, 2024	1	19.90	3.72	Application Case	0.069	2.57	1.8607	0.0500	0.119208	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 16, 2024	1	19.90	3.72	Cumulative Case	0.069	2.57	1.8645	0.0501	0.119308	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 23, 2024	1	19.90	3.72	Baseline	0.071	2.63	1.8	0.0484	0.118986	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 23, 2024	1	19.90	3.72	Project-Alone Case	0.071	2.63	0.00834	0.0002	0.070823	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 23, 2024	1	19.90	3.72	Application Case	0.071	2.63	1.8607	0.0500	0.120618	Oligotrophic
SW-08	Upstream Woodfibre Creek	May 23, 2024	1	19.90	3.72	Cumulative Case	0.071	2.63	1.8645	0.0501	0.120719	Oligotrophic
SW-08	Upstream Woodfibre Creek	June 20, 2024	1	19.90	3.72	Baseline	0.078	2.90	1.8	0.0484	0.126340	Oligotrophic
SW-08	Upstream Woodfibre Creek	June 20, 2024	1	19.90	3.72	Project-Alone Case	0.078	2.90	0.00834	0.0002	0.078177	Oligotrophic
SW-08	Upstream Woodfibre Creek	June 20, 2024	1	19.90	3.72	Application Case	0.078	2.90	1.8607	0.0500	0.127972	Oligotrophic
SW-08	Upstream Woodfibre Creek	June 20, 2024	1	19.90	3.72	Cumulative Case	0.078	2.90	1.8645	0.0501	0.128073	Oligotrophic
SW-08	Upstream Woodfibre Creek	July 18, 2024	1	19.90	3.72	Baseline	0.089	3.32	1.8	0.0484	0.137723	Oligotrophic
SW-08	Upstream Woodfibre Creek	July 18, 2024	1	19.90	3.72	Project-Alone Case	0.089	3.32	0.00834	0.0002	0.089560	Oligotrophic
SW-08	Upstream Woodfibre Creek	July 18, 2024	1	19.90	3.72	Application Case	0.089	3.32	1.8607	0.0500	0.139356	Oligotrophic
SW-08	Upstream Woodfibre Creek	July 18, 2024	1	19.90	3.72	Cumulative Case	0.089	3.32	1.8645	0.0501	0.139456	Oligotrophic
SW-08	Upstream Woodfibre Creek	August 22, 2024	1	19.90	3.72	Baseline	0.098	3.66	1.8	0.0484	0.146689	Oligotrophic
SW-08	Upstream Woodfibre Creek	August 22, 2024	1	19.90	3.72	Project-Alone Case	0.098	3.66	0.00834	0.0002	0.098526	Oligotrophic
SW-08	Upstream Woodfibre Creek	August 22, 2024	1	19.90	3.72	Application Case	0.098	3.66	1.8607	0.0500	0.148321	Oligotrophic
SW-08	Upstream Woodfibre Creek	August 22, 2024	1	19.90	3.72	Cumulative Case	0.098	3.66	1.8645	0.0501	0.148422	Oligotrophic
SW-08	Upstream Woodfibre Creek	September 19, 2024	1	19.90	3.72	Baseline	0.088	3.28	1.8	0.0484	0.136514	Oligotrophic
SW-08	Upstream Woodfibre Creek	September 19, 2024	1	19.90	3.72	Project-Alone Case	0.088	3.28	0.00834	0.0002	0.088351	Oligotrophic
SW-08	Upstream Woodfibre Creek	September 19, 2024	1	19.90	3.72	Application Case	0.088	3.28	1.8607	0.0500	0.138147	Oligotrophic
SW-08	Upstream Woodfibre Creek	September 19, 2024	1	19.90	3.72	Cumulative Case	0.088	3.28	1.8645	0.0501	0.138247	Oligotrophic
SW-08	Upstream Woodfibre Creek	October 24, 2024	1	19.90	3.72	Baseline	0.096	3.56	1.8	0.0484	0.144170	Oligotrophic
SW-08	Upstream Woodfibre Creek	October 24, 2024	1	19.90	3.72	Project-Alone Case	0.096	3.56	0.00834	0.0002	0.096007	Oligotrophic
SW-08	Upstream Woodfibre Creek	October 24, 2024	1	19.90	3.72	Application Case	0.096	3.56	1.8607	0.0500	0.145803	Oligotrophic
SW-08	Upstream Woodfibre Creek	October 24, 2024	1	19.90	3.72	Cumulative Case	0.096	3.56	1.8645	0.0501	0.145903	Oligotrophic
SW-08	Upstream Woodfibre Creek	October 31, 2024	1	19.90	3.72	Baseline	0.093	3.47	1.8	0.0484	0.141753	Oligotrophic
SW-08	Upstream Woodfibre Creek	October 31, 2024	1	19.90	3.72	Project-Alone Case	0.093	3.47	0.00834	0.0002	0.093590	Oligotrophic
SW-08	Upstream Woodfibre Creek	October 31, 2024	1	19.90	3.72	Application Case	0.093	3.47	1.8607	0.0500	0.143385	Oligotrophic
SW-08	Upstream Woodfibre Creek	October 31, 2024	1	19.90	3.72	Cumulative Case	0.093	3.47	1.8645	0.0501	0.143485	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 7, 2024	1	19.90	3.72	Baseline	0.095	3.54	1.8	0.0484	0.143465	Oligotrophic

Site ID	Waterbody Name	Sample Date	Number of samples	Watershed Area	Catchment Runoff	Modelling Scenario	Estimated Background Total Nitrogen	Background Load	Project NDEP	Project Nitrogen	Predicted Total Nitrogen	Predicted Trophic Status from TN
				km²	m/year		mg/L	kg/ha/year	kg/ha/year	g/m³	g/m³	
SW-08	Upstream Woodfibre Creek	November 7, 2024	1	19.90	3.72	Project-Alone Case	0.095	3.54	0.00834	0.0002	0.095302	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 7, 2024	1	19.90	3.72	Application Case	0.095	3.54	1.8607	0.0500	0.145098	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 7, 2024	1	19.90	3.72	Cumulative Case	0.095	3.54	1.8645	0.0501	0.145198	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 14, 2024	1	19.90	3.72	Baseline	0.089	3.31	1.8	0.0484	0.137421	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 14, 2024	1	19.90	3.72	Project-Alone Case	0.089	3.31	0.00834	0.0002	0.089258	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 14, 2024	1	19.90	3.72	Application Case	0.089	3.31	1.8607	0.0500	0.139053	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 14, 2024	1	19.90	3.72	Cumulative Case	0.089	3.31	1.8645	0.0501	0.139154	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 19, 2024	1	19.90	3.72	Baseline	0.091	3.39	1.8	0.0484	0.139637	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 19, 2024	1	19.90	3.72	Project-Alone Case	0.091	3.39	0.00834	0.0002	0.091474	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 19, 2024	1	19.90	3.72	Application Case	0.091	3.39	1.8607	0.0500	0.141270	Oligotrophic
SW-08	Upstream Woodfibre Creek	November 19, 2024	1	19.90	3.72	Cumulative Case	0.091	3.39	1.8645	0.0501	0.141370	Oligotrophic
Notes:												
The trophic state was determined using total nitrogen (mg/L)												
Background TN = Estimated TN												
Estimated total nitrogen =1.007326 x Nitrate as N + 0.0571, r² = 0.92, n = 32, P < 0.001												
Estimated total nitrogen was derived from a predictive model between calculated total nitrogen and nitrate as N using 2023 to 2025 data at SW-01, SW-02 and SW-07												
Predicted TN (Baseline, Project-Alone Case, Application Case and Cumulative Case) = Background estimated TN + Project TN												
Trophic Status is colour coded to the following:												
	Hypereutrophic											
	Eutrophic											
	Mesotrophic											
	Oligotrophic											

C.2 PREDICTED NUTRIENT LIMITATION

Table C.2 Background and Predicted Limiting Nutrient from TN:TP Ratios and TN:SRP Ratios for Streams

Model Scenarios	Site ID	Sample Date	Total Nitrogen	Total Phosphorus	TN:TP	Limiting Nutrient (TN:TP)	Soluble Reactive Phosphorus	TN:SRP	Limiting Nutrient (TN:SRP)
			mg/L	mg/L	mass ratio		mg/L	mass ratio	
Background	SW-01	August 14, 2018	0.086	0.0129	7	N-limited	-	-	-
Background	SW-01	November 21, 2018	0.088	0.002	44	P-limited	-	-	-
Background	SW-01	May 03, 2019	0.097	0.0064	15	Co-limitation of N and P	-	-	-
Background	SW-01	May 27, 2019	0.067	0.0025	27	P-limited	-	-	-
Background	SW-01	September 26, 2019	0.067	0.0083	8	N-limited	-	-	-
Background	SW-01	December 27, 2019	0.115	0.0025	46	P-limited	-	-	-
Background	SW-01	February 26, 2020	0.084	0.0063	13	Co-limitation of N and P	-	-	-
Background	SW-01	January 06, 2020	0.067	0.0038	18	Co-limitation of N and P	-	-	-
Background	SW-02	February 06, 2023	0.076	0.005	15	Co-limitation of N and P	-	-	-
Background	SW-02	April 26, 2024	0.091	-	-	-	0.005	18	Co-limitation of N and P
Background	SW-02	May 03, 2024	0.098	-	-	-	0.005	20	Co-limitation of N and P
Background	SW-02	May 09, 2024	0.087	-	-	-	0.005	17	Co-limitation of N and P
Background	SW-02	August 27, 2024	0.193	-	-	-	0.005	39	P-limited
Background	SW-02	November 08, 2024	0.107	-	-	-	0.005	21	Co-limitation of N and P
Background	SW-07	February 15, 2024	0.123	-	-	-	0.005	25	P-limited
Background	SW-07	November 16, 2024	0.129	-	-	-	0.005	26	P-limited
Background	SW-07	April 02, 2025	0.105	-	-	-	0.005	21	Co-limitation of N and P
Baseline	SW-01	August 14, 2018	0.135	0.0129	10	Co-limitation of N and P	-	-	-
Baseline	SW-01	November 21, 2018	0.137	0.002	68	P-limited	-	-	-
Baseline	SW-01	May 03, 2019	0.146	0.0064	23	P-limited	-	-	-
Baseline	SW-01	May 27, 2019	0.116	0.0025	46	P-limited	-	-	-
Baseline	SW-01	September 26, 2019	0.116	0.0083	14	Co-limitation of N and P	-	-	-
Baseline	SW-01	December 27, 2019	0.163	0.0025	65	P-limited	-	-	-
Baseline	SW-01	February 26, 2020	0.133	0.0063	21	Co-limitation of N and P	-	-	-
Baseline	SW-01	January 06, 2020	0.116	0.0038	30	P-limited	-	-	-
Baseline	SW-02	February 06, 2023	0.130	0.005	26	P-limited	-	-	-
Baseline	SW-02	April 26, 2024	0.145	-	-	-	0.005	29	P-limited
Baseline	SW-02	May 03, 2024	0.151	-	-	-	0.005	30	P-limited
Baseline	SW-02	May 09, 2024	0.140	-	-	-	0.005	28	P-limited
Baseline	SW-02	August 27, 2024	0.247	-	-	-	0.005	49	P-limited
Baseline	SW-02	November 08, 2024	0.161	-	-	-	0.005	32	P-limited
Baseline	SW-07	February 15, 2024	0.177	-	-	-	0.005	35	P-limited
Baseline	SW-07	November 16, 2024	0.183	-	-	-	0.005	37	P-limited

Model Scenarios	Site ID	Sample Date	Total Nitrogen	Total Phosphorus	TN:TP	Limiting Nutrient (TN:TP)	Soluble Reactive Phosphorus	TN:SRP	Limiting Nutrient (TN:SRP)
			mg/L	mg/L	mass ratio		mg/L	mass ratio	
Baseline	SW-07	April 02, 2025	0.159	-	-	-	0.005	32	P-limited
Project Alone Case	SW-01	August 14, 2018	0.090	0.0129	7	N-limited	-	-	-
Project Alone Case	SW-01	November 21, 2018	0.093	0.002	46	P-limited	-	-	-
Project Alone Case	SW-01	May 03, 2019	0.102	0.0064	16	Co-limitation of N and P	-	-	-
Project Alone Case	SW-01	May 27, 2019	0.071	0.0025	29	P-limited	-	-	-
Project Alone Case	SW-01	September 26, 2019	0.071	0.0083	9	N-limited	-	-	-
Project Alone Case	SW-01	December 27, 2019	0.119	0.0025	47	P-limited	-	-	-
Project Alone Case	SW-01	February 26, 2020	0.088	0.0063	14	Co-limitation of N and P	-	-	-
Project Alone Case	SW-01	January 06, 2020	0.071	0.0038	19	Co-limitation of N and P	-	-	-
Project Alone Case	SW-02	February 06, 2023	0.080	0.005	16	Co-limitation of N and P	-	-	-
Project Alone Case	SW-02	April 26, 2024	0.095	-	-	-	0.005	19	Co-limitation of N and P
Project Alone Case	SW-02	May 03, 2024	0.102	-	-	-	0.005	20	Co-limitation of N and P
Project Alone Case	SW-02	May 09, 2024	0.090	-	-	-	0.005	18	Co-limitation of N and P
Project Alone Case	SW-02	August 27, 2024	0.197	-	-	-	0.005	39	P-limited
Project Alone Case	SW-02	November 08, 2024	0.111	-	-	-	0.005	22	Co-limitation of N and P
Project Alone Case	SW-07	February 15, 2024	0.127	-	-	-	0.005	25	P-limited
Project Alone Case	SW-07	November 16, 2024	0.133	-	-	-	0.005	27	P-limited
Project Alone Case	SW-07	April 02, 2025	0.109	-	-	-	0.005	22	Co-limitation of N and P
Application Case	SW-01	August 14, 2018	0.151	0.0129	12	Co-limitation of N and P	-	-	-
Application Case	SW-01	November 21, 2018	0.153	0.002	76	P-limited	-	-	-
Application Case	SW-01	May 03, 2019	0.162	0.0064	25	P-limited	-	-	-
Application Case	SW-01	May 27, 2019	0.132	0.0025	53	P-limited	-	-	-
Application Case	SW-01	September 26, 2019	0.132	0.0083	16	Co-limitation of N and P	-	-	-
Application Case	SW-01	December 27, 2019	0.179	0.0025	72	P-limited	-	-	-
Application Case	SW-01	February 26, 2020	0.149	0.0063	24	P-limited	-	-	-
Application Case	SW-01	January 06, 2020	0.132	0.0038	35	P-limited	-	-	-
Application Case	SW-02	February 06, 2023	0.156	0.005	31	P-limited	-	-	-
Application Case	SW-02	April 26, 2024	0.171	-	-	-	0.005	34	P-limited
Application Case	SW-02	May 03, 2024	0.178	-	-	-	0.005	36	P-limited
Application Case	SW-02	May 09, 2024	0.166	-	-	-	0.005	33	P-limited
Application Case	SW-02	August 27, 2024	0.273	-	-	-	0.005	55	P-limited
Application Case	SW-02	November 08, 2024	0.187	-	-	-	0.005	37	P-limited
Application Case	SW-07	February 15, 2024	0.203	-	-	-	0.005	41	P-limited
Application Case	SW-07	November 16, 2024	0.209	-	-	-	0.005	42	P-limited
Application Case	SW-07	April 02, 2025	0.185	-	-	-	0.005	37	P-limited
Cumulative Case	SW-01	August 14, 2018	0.152	0.0129	12	Co-limitation of N and P	-	-	-

Model Scenarios	Site ID	Sample Date	Total Nitrogen	Total Phosphorus	TN:TP	Limiting Nutrient (TN:TP)	Soluble Reactive Phosphorus	TN:SRP	Limiting Nutrient (TN:SRP)
			mg/L	mg/L	mass ratio		mg/L	mass ratio	
Cumulative Case	SW-01	November 21, 2018	0.154	0.002	77	P-limited	-	-	-
Cumulative Case	SW-01	May 03, 2019	0.163	0.0064	26	P-limited	-	-	-
Cumulative Case	SW-01	May 27, 2019	0.133	0.0025	53	P-limited	-	-	-
Cumulative Case	SW-01	September 26, 2019	0.133	0.0083	16	Co-limitation of N and P	-	-	-
Cumulative Case	SW-01	December 27, 2019	0.181	0.0025	72	P-limited	-	-	-
Cumulative Case	SW-01	February 26, 2020	0.150	0.0063	24	P-limited	-	-	-
Cumulative Case	SW-01	January 06, 2020	0.133	0.0038	35	P-limited	-	-	-
Cumulative Case	SW-02	February 06, 2023	0.159	0.005	32	P-limited	-	-	-
Cumulative Case	SW-02	April 26, 2024	0.174	-	-	-	0.005	35	P-limited
Cumulative Case	SW-02	May 03, 2024	0.181	-	-	-	0.005	36	P-limited
Cumulative Case	SW-02	May 09, 2024	0.170	-	-	-	0.005	34	P-limited
Cumulative Case	SW-02	August 27, 2024	0.276	-	-	-	0.005	55	P-limited
Cumulative Case	SW-02	November 08, 2024	0.190	-	-	-	0.005	38	P-limited
Cumulative Case	SW-07	February 15, 2024	0.206	-	-	-	0.005	41	P-limited
Cumulative Case	SW-07	November 16, 2024	0.212	-	-	-	0.005	42	P-limited
Cumulative Case	SW-07	April 02, 2025	0.189	-	-	-	0.005	38	P-limited
<div>Notes:</div> <div>Background TN = Estimated TN (mg/L)</div> <div>Estimated total nitrogen was derived from a predictive model between calculated total nitrogen and nitrate as N using 2023 to 2025 data at SW-01, SW-02 and SW-07</div> <div>Estimated total nitrogen =1.007326 x Nitrate as N + 0.0571, r² = 0.92, n = 32, P < 0.001</div> <div>Predicted TN (Baseline, Project-Alone Case, Application Case and Cumulative Case) = Background estimated TN + Project TN</div> <div>TP = Total phosphorus (mg/L) assumed not change due to the Project</div> <div>SRP = Soluble reactive phosphorus measured as phosphate (mg/L) assumed not change due to the Project</div> <div>Limiting nutrient threshold from TN:SRP/TP ratio is based on Guildford and Hecky (2000): >22.5 is P-limited, <9 is N-limited and >9 but <22.5 is co-limitation of N and P</div>									

APPENDIX D RAW LABORATORY DATA

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	3.2	3.2	<1
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	1.9	1.9	<1
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	2.6	2.6	<1
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<1	<1	<1
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<1	<1	<1
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	1	1	<1
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<1	<1	<1
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	1.8	1.8	<1
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	5.5	5.5	<1
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	3	3	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<1	<1	
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<1	<1	
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<1	<1	
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<1	<1	
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<1	<1	
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<1	<1	
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<1	<1	
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<1	<1	
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<1	<1	
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<1	<1	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	14.9		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	12.3		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	12.9		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	6.7		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	6.4		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	20.4		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	9.8		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	5.2		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	15.2		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	15.8		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		6.64		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		6.43		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		6.08		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		6.37		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		5.5		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		5.92		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		5.58		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		6.11		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		6.05		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		6.4		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<15	<2	4.19
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	17	<2	2.56
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<15	<4	3.99
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<15	<4	2.27
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<15	<2	3.51
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<15	<2	4.42
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<15	<2	3.65
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	15	<2	2.22
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<15	<2	4.66
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		<2	5.16

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	3.68		0.17	
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	3.33		0.73	
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	3.78		<0.1	
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	1.84		0.39	
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	2.97		0.34	
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	3.96		0.19	
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	3.4		0.17	
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	2.33		0.23	
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	5.01			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	5.09			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		<0.02	
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		<0.02	
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		0.023	
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		0.024	
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		0.037	
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		0.047	
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		<0.02	
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		0.078	
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			0.029
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			0.031
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			0.04
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			<0.01
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			<0.01
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			0.057
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			0.027
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			<0.01
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.01	0.0289	
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.01	0.0313	
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.01	0.0397	
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.01	<0.02	
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.01	<0.02	
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.005	0.057	
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.01	0.0266	
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.01	<0.02	
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			0.0129
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			<0.002
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			0.0064
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			0.0025
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			0.0083
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			0.0025
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			0.0063
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			0.0038
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		0.0753	0.0003	<0.0005
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		0.139	<0.0002	<0.0005
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		0.112	<0.0002	0.00101
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		0.125	<0.0002	<0.0005
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		0.211	<0.0002	<0.0005
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		0.103	<0.0002	<0.0005
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		0.119	<0.0002	<0.0005
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		0.14	<0.0002	<0.0005
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		0.0873	<0.0002	<0.0005
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		0.0769	<0.0002	<0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.005	<0.0001	<0.0001	0.028
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.005	<0.0001	<0.0001	0.0083
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.005	<0.0001	<0.0001	0.0177
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.005	<0.0001	<0.0001	0.0078
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.005	<0.0001	<0.0001	0.0104
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.005	<0.0001	<0.0001	0.039
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.005	<0.0001	<0.0001	0.0597
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.005	<0.0001	<0.0001	0.0202
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.005	<0.0001	<0.0001	<0.05
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.005	<0.0001	<0.0001	<0.05

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.00001	1.37		0.00057
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	0.000011	0.8		<0.0005
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.00001	1.3		<0.0005
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.00001	0.69		<0.0005
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.00001	1.2		<0.0005
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.00001	1.52		<0.0005
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.00001	1.2		<0.0005
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.00001	0.74		<0.0005
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	0.000047	1.54		<0.0005
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	0.000013	1.8		<0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			<0.0001
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			<0.0001
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			<0.0001
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			<0.0001
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			<0.0001
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			<0.0001
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			<0.0001
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			<0.0001
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			<0.0001
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			<0.0001

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0.00058		0.019	<0.0002
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.0004		0.043	<0.0002
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0.00067		0.023	<0.0002
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	0.00064		0.029	<0.0002
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	0.00052		0.049	<0.0002
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0.00047		0.036	<0.0002
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	0.00059		0.024	<0.0002
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.0004		0.027	<0.0002
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	0.00079		0.021	<0.0002
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	0.00056		0.011	<0.0002

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0.00071	0.183	0.00115	<0.00001
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	0.00069	0.133	0.00165	<0.00001
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0.00079	0.182	0.00054	<0.00001
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	0.0004	0.131	0.00094	<0.00001
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	0.00052	0.123	0.00165	<0.00001
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0.00068	0.151	0.00051	<0.00001
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	0.00066	0.155	0.00071	<0.00001
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0.00044	0.087	0.00088	<0.00001
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	0.00083	0.195	0.00045	<0.00001
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	0.00035	0.159	0.00043	<0.00001

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0.00063	<0.0004	<0.05	0.23	
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	0.00029	<0.0004	<0.05	0.18	
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0.00043	<0.0004	<0.05	0.17	
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	0.00017	<0.0004	<0.05	<0.1	
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	0.00039	<0.0004	<0.05	0.18	
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0.00041	0.00082	<0.05	0.17	
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	0.0012	<0.0004	<0.05	0.17	
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0.00022	<0.0004	<0.05	<0.1	
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	0.00057	<0.0004	<0.05	0.24	
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	0.00039	<0.0004	<0.05	0.28	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		<0.0005	1.6	<0.00005
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		<0.0005	1.5	<0.00005
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		<0.0005	1.7	<0.00005
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		<0.0005	<1	<0.00005
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		<0.0005	1.9	<0.00005
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		<0.0005	2.1	<0.00005
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		<0.0005	1.9	<0.00005
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		<0.0005	<1	<0.00005
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		<0.0005	1.6	<0.00005
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		<0.0005	1.5	<0.00005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	1.25	0.006	<3	<0.0005
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	0.84	0.0045	<3	<0.0005
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	1.1	0.0052	<3	<0.0005
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	0.73	0.003	<3	<0.0005
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	0.69	0.0047	<3	<0.0005
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0.91	0.006	<3	<0.0005
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	0.93	0.0054	<3	<0.0005
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	1.54	0.0041	<3	<0.0005
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	1.36	0.0067	<3	<0.0005
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	1.01	0.0076	<3	<0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.00002	<0.0001	<0.0002	<0.005
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.00002	<0.0001	<0.0002	<0.005
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.00002	<0.0001	<0.0002	<0.005
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.00002	<0.0001	<0.0002	<0.005
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.00002	<0.0001	<0.0002	<0.005
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.00002	<0.0001	<0.0002	<0.005
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.00002	<0.0001	<0.0002	<0.005
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.00002	<0.0001	<0.0002	<0.005
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.00002	<0.0001	<0.0002	<0.005
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.00002	<0.0001	<0.0002	<0.005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.001	0.000377	<0.001	
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.001	0.000435	<0.001	
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.001	0.000449	0.0015	
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.001	0.00055	<0.001	
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.001	0.000778	0.0011	
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.001	0.000457	<0.001	
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.001	0.000522	<0.001	
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.001	0.000536	<0.001	
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.001	0.000395	<0.001	
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.001	0.000176	<0.001	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.004	<0.0001	0.0639	<0.0002
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.004	<0.0001	0.108	<0.0002
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.004	<0.0001	0.1	<0.0002
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.004	<0.0001	0.119	<0.0002
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.004	<0.0001	0.193	<0.0002
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.004	<0.0001	0.0973	<0.0002
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.004	<0.0001	0.115	<0.0002
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.004	<0.0001	0.128	<0.0002
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.004	<0.0001	0.0813	<0.0002
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	0.0042	<0.0001	0.0763	<0.0002

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.0005	<0.005	<0.0001	<0.0001
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.0005	<0.005	<0.0001	<0.0001
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.0005	<0.005	<0.0001	<0.0001
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.0005	<0.005	<0.0001	<0.0001
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.0005	<0.005	<0.0001	<0.0001
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.0005	<0.005	<0.0001	<0.0001
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.0005	<0.005	<0.0001	<0.0001
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.0005	<0.005	<0.0001	<0.0001
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.0005	<0.005	<0.0001	<0.0001
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.0005	<0.005	<0.0001	<0.0001

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0.0232	<0.00001	1.2	
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	0.0073	0.000158	1.11	
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0.017	0.000016	1.21	
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.005	<0.00001	0.62	
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	0.025	<0.00001	1.01	
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0.0209	0.000011	1.36	
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	0.0161	<0.00001	1.14	
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.005	<0.00001	0.8	
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.05	<0.00001	1.69	
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.05	<0.00001	1.75	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.0005		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	0.00051		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.0005		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.0005		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.0005		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.0005		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.0005		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.0005		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.0005		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.0005		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.0001	<0.0004		<0.01
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.0001	0.00228		0.031
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.0001	0.00141		0.017
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.0001	<0.0004		0.021
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.0001	0.00044		0.032
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.0001	<0.0004		0.024
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.0001	<0.0004		0.018
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.0001	<0.0004		0.018
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.0001	0.00074		0.029
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.0001	<0.0004		<0.01

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.0002	0.0007	0.166	0.00039
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	0.00035	0.00079	0.137	0.00098
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.0002	0.00078	0.181	0.00049
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.0002	0.00033	0.069	0.00079
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.0002	0.00038	0.11	0.00073
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.0002	0.00056	0.138	<0.0002
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.0002	0.00058	0.135	0.00037
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.0002	0.0004	0.083	0.00033
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.0002	0.00071	0.189	0.00042
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.0002	<0.0001	0.176	<0.0002

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.00001	0.00061	<0.0004	<0.05
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.00001	0.00033	0.00045	<0.05
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.00001	0.0004	<0.0004	<0.05
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.00001	0.00019	<0.0004	<0.05
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	0.00002	0.00043	<0.0004	<0.05
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.00001	0.00042	<0.0004	<0.05
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.00001	0.00031	<0.0004	<0.05
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.00001	0.00025	<0.0004	<0.05
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.00001	0.0006	<0.0004	<0.05
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.00001	0.00042	0.00043	<0.05

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0.22			<0.0005	1.5
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	0.2			<0.0005	1.5
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0.2			<0.0005	1.5
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.1			<0.0005	<1
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	0.12			<0.0005	1.9
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0.14			<0.0005	2.1
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	0.15			<0.0005	1.8
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.1			<0.0005	1.1
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	0.32			<0.0005	1.6
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	0.23			<0.0005	2.6

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.00005	1.33	0.0057	<3
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.00005	0.79	0.0045	<3
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.00005	1.21	0.0051	3
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.00005	0.4	0.0026	<3
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.00005	0.34	0.0045	<3
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.00005	0.87	0.006	<3
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.00005	0.8	0.0051	<3
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.00005	0.47	0.0031	<3
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.00005	1.33	0.0065	<3
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.00005	1.15	0.0078	<3

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.0005	<0.00002	<0.0001	<0.0002
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.0005	<0.00002	<0.0001	<0.0002
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.0005	<0.00002	<0.0001	<0.0002
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.0005	<0.00002	<0.0001	<0.0002
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.0005	<0.00002	<0.0001	<0.0002
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.0005	<0.00002	<0.0001	<0.0002
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.0005	<0.00002	<0.0001	<0.0002
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.0005	<0.00002	0.00031	<0.0002
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.0005	<0.00002	<0.0001	<0.0002
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.0005	<0.00002	<0.0001	<0.0002

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.005	<0.001	0.000318	<0.001
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.005	<0.001	0.000445	<0.001
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.005	<0.001	0.0004	<0.001
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.005	<0.001	0.000535	<0.001
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.005	<0.001	0.00073	<0.001
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.005	<0.001	0.000442	<0.001
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.005	<0.001	0.000448	<0.001
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.005	<0.001	0.000539	<0.001
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.005	<0.001	0.000409	<0.001
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.005	<0.001	0.000176	<0.001

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		<0.004	<0.0001
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		0.0112	<0.0001
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		0.0046	<0.0001
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		<0.004	<0.0001
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		<0.004	<0.0001
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		<0.004	<0.0001
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		<0.004	<0.0001
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		<0.004	<0.0001
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		<0.004	<0.0001
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		0.018	<0.0001

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M				
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M				
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M				
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M				
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M				
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M				
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M				
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M				
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M				
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichlorobenzene	1-3-Dichlorobenzene	1-4-Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M		
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M		
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M		
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M		
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M		
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			<0.96
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			<0.23
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			<0.44
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			<0.63
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			<0.72
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.88	<0.73	<0.73
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.20	<0.34	<0.33
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.40	<0.68	<0.67
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.57	<0.74	<0.70
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.56	<0.52	<0.53
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.72	1.6	16.1	<0.85
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M				
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.32	0.42	2.9	<0.20
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M				
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M				
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.66	<1.1	<1.2	<0.46
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M				
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.70	<0.70	<2.0	<0.54
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.51	0.87	4.8	<0.57
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.53	<0.47	<0.30
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0.38	<0.19	<0.12
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0.42	<0.26	<0.24
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.43	<0.39	<0.34
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.42	<0.36	<0.24
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.27	<0.36	<0.31
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.11	<0.17	<0.13
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.23	<0.31	<0.24
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0.45	<0.44	<0.32
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.22	<0.29	<0.23
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0.44	<0.48	1.6
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0.31	<0.19	1.06
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.32	<0.51	<1.2
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0.7	<0.60	<1.2
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.38	<0.51	<1.4
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0	0
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0	0
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0	0
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0	1
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	1	0
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0	0
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0	0
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0	0
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0	1
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	0	0
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0	0
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M		
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0	1
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M		
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M		
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0	0
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M		
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0	0
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	0	0
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	0	0	<0.56
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0	0	<0.22
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0	0	<1.1
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0	0	<0.70
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	0	0	0.87
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.48	<0.73	<0.36	<0.88
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M				
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	<0.19	<0.34	<0.17	<0.20
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M				
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M				
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.51	<0.68	<0.31	<0.40
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M				
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0.7	<0.74	0.45	<0.57
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.51	<0.53	<0.29	<0.56
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	<0.53	<0.96	<0.85	
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M				
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0.38	<0.23	<0.20	
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M				
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M				
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	<0.31	<0.44	<0.46	
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M				
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	<0.43	<0.63	<0.54	
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	<0.42	<0.72	<0.57	
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			0.00972
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			0.0118
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			0
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			0.0518
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			0.0102
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	1.24	2.45	78
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	0.35	0.681	68
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	0.656	1.3	67
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	0.913	1.77	63
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	0.871	1.73	66
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	83	86	70
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	71	74	69
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	80	69	79
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	70	64	70
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	78	78	69
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	82	69	87
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	75	73	88
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	82	77	87
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	75	73	76
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	79	66	81
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	82	69	79
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	74	57	60
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	81	72	71
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	75	66	67
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	79	64	71
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	78	80	59
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	73	61	60
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	85	73	71
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	78	68	64
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	80	72	57
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M	69	71	66
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M	63	56	68
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M	70	47	68
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M	61	47	67
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M	65	51	65
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M				
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M				<0.25
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M				
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M				<0.25
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M				<0.25
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M				
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M				<0.25
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M				
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M				
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M	<0.25		96.7
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M	<0.25		91
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M	<0.25		94.6
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M	<0.25		94.5
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M	<0.25		108

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M			
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M			
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M			
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M			
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M			
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M			
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M			
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M			
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M			
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	Creek_1(WFC)	8081420Cr1WFC	2018/08/14	Water	M				
SW-01	Creek_1(WFC)	8111898Cr1WFC	2018/11/21	Water	M				
SW-01	Creek_1(WFC)	9030342Cr1WFC	2019/03/05	Water	M				
SW-01	Creek_1(WFC)	9052469Cr1WFC	2019/05/27	Water	M				
SW-01	Creek_1(WFC)	9092849Cr1WFC	2019/09/26	Water	M				
SW-01	Creek_1(WFC)	9122088Cr1WFC	2019/12/27	Water	M				
SW-01	Creek_1(WFC)	22242Cr1WFC	2020/02/26	Water	M				
SW-01	Creek_1(WFC)	60168Cr1WFC	2020/06/01	Water	M				
SW-01	Creek_1(WFC)	92623Cr1WFC	2020/09/18	Water	M				
SW-01	Woodfibre_Creek	20L0649WFC	2020/12/04	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		10.16
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		7.60
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		26.87
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M		6.60
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M		5.60
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		9.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	25.4		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		0.21	101.0
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	4.6	0.81	102.9
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	4		
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	19.7	0.97	106.8
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	4.4	0.00	99.5
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	3.8	0.00	101.6
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	7.3	1.12	100.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	12.79	11.5
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		11.5
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	13.02	11.3
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	13.30	11.9
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		11.3
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	12.20	10.1
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	11.77	11.3
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	12.03	10.3
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	12.01	10.5
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	10.62	10.4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	2.5		138.55
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	4.12		217.10
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	1.08		212.30
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	2.82		141.80
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	2.06		140.53
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	2.49		166.17
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	2.26		75.60

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	5.83	6.11		0.02
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		7.34		
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	6.39	5.53		
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	5.97	6.81		0
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		6.98		
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		6.55		
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	6.51	6.37		0.01
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	5.63	4.88		0
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	5.48	6.56		0
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	7.63	6.92		0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	3.70	
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	4.60	
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	4.50	
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	5.90	
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	11.00	
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	7.20	
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	8.10	
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	12.83	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		<2	3.45
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		9.6	4.57
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		<2	3.27
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	5	<2.0	3.41
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		<2.0	2.02
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		5.3	2.24
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	18	<2.0	2.01
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	4	<2.0	2.43
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	4	<2.0	1.87
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		4	2.27

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			0.80	<1
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				2
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			0.32	<1
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			0.17	<1
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				2
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			0.21	1
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			0.35	<1
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			2.05	<1
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			2.00	1
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			2.20	78

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		<0.05	
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		<0.05	
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		<0.05	
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		<0.050	
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		<0.050	
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		<0.050	
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		<0.050	
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M		0.112	
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M		<0.050	
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		<0.050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			0.04
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			0.059
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			0.046
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			0.025
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			0.021
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			0.021
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			0.014
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			0.019
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			0.02
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			0.03

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO ₄)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		0.119	<0.000050	0.000094
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		0.197	0.000458	0.000107
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		0.13	<0.000050	0.0001
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		0.195	<0.000050	0.000098
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		0.18	<0.00020	<0.00050
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		0.174	0.000117	0.000081
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		0.161	<0.000050	0.00009
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M		0.131	<0.000050	0.000085
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M		0.136	<0.000050	0.000089
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		0.198	<0.000050	0.000128

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	0.00211	<0.000010	<0.000010	0.0107
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0.00256	<0.000010	<0.000010	0.0071
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.0023	<0.000010	<0.000010	0.0115
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	0.00171	<0.000010	<0.000010	0.0366
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0.00164	<0.000010	<0.000010	0.0038
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	0.00143	<0.000010	<0.000010	0.0058
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0.00147	<0.000010	<0.000010	0.0167
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0.00163	<0.000010	<0.000010	0.0052
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0.00212	<0.000010	<0.000010	0.007

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	0.0000039	0.99		0.00014
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0.0000055	1.03		0.0002
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.0000051	1.07		0.00013
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	0.000003	1.06		0.00034
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000010	0.67		<0.00050
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0.0000022	0.743		0.00026
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.0000020	0.669		0.00023
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0.0000022	0.83		0.00017
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0.0000045	0.605		0.00017
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0.000002	0.719		0.00021

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			0.000018
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			0.0000727
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			0.0000235
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			0.0000287
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			<0.00010
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			0.0000284
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			0.0000193
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			0.0000158
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			0.0000331
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			0.000044

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	0.00041		0.0359	0.000076
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0.00053		0.0984	0.000153
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.00026		0.0304	0.000064
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	0.00065		0.0476	0.00017
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.00040		0.041	<0.00020
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0.00029		0.0529	0.000132
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.00020		0.0296	<0.000050
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0.00026		0.0257	0.000067
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0.00098		0.0416	0.000102
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0.00119		0.101	0.000521

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	0.000565	0.141	0.000709	<0.00001
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0.000557	0.173	0.00334	<0.00001
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.000567	0.144	0.000693	<0.00001
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	0.000569	0.183	0.00105	<0.000010
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0.00038	0.085	0.00109	<0.000010
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0.000394	0.0922	0.00128	<0.000010
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	0.000376	0.0824	0.000968	<0.000010
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0.000372	0.0861	0.000873	<0.0000050
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0.000262	0.0877	0.00177	<0.000010
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0.000499	0.114	0.0025	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	0.000323	0.000144	<0.01	0.136	
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0.000297	0.000232	<0.01	0.162	
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.000297	<0.00300	<0.01	0.11	
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	0.000399	0.000139	<0.01	0.235	
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0.00046	<0.00040	<0.050	<0.10	
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0.000263	0.000126	<0.01	0.082	
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	0.000196	0.000079	<0.01	0.071	
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0.000243	0.000103	<0.01	0.095	
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0.000206	0.000286	<0.01	0.119	
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0.000269	0.00012	<0.01	0.114	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		<0.00010	1.79	<0.000010
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		<0.00010	1.79	<0.000010
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		<0.00010	2.22	<0.000010
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		0.00054	1.59	<0.000010
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		<0.00050	<1.0	<0.000050
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		<0.00010	1.07	<0.000010
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		<0.00010	1.02	<0.000010
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M		<0.00010	1.17	<0.000010
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M		0.00021	0.89	<0.000010
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		<0.00010	0.93	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	0.825	0.00459	<1	<0.000050
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0.858	0.00427	<1	<0.000050
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.827	0.00472	<1	<0.000050
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	1.22	0.00467	<1	0.000069
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0.66	0.0027	<3.0	<0.00050
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0.486	0.003	<1	0.000105
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	0.504	0.00258	<1	<0.000050
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0.534	0.00269	<1	0.000062
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0.84	0.00255	<1	<0.000050
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0.616	0.00301	<1	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.0000040	0.000019	<0.000050	0.00071
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.0000040	0.000027	0.000089	0.00513
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.0000040	0.000014	<0.000050	0.00141
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.0000040	0.000019	0.000055	0.0019
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.0000040	0.000015	0.000078	0.00209
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.0000040	0.000016	<0.000050	0.00163
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.0000040	0.000017	<0.000050	0.00081
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.0000040	0.000011	<0.000050	0.00209
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.0000040	0.000017	<0.000050	0.00403

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.00020	0.000495	0.00041	
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.00020	0.000436	0.00097	
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.00020	0.000466	<0.00020	
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.00020	0.000629	<0.00020	
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.0010	0.000499	0.0015	
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.00020	0.000515	0.00035	
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.00020	0.000466	<0.00020	
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.00020	0.000531	<0.00020	
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.00020	0.000474	<0.00020	
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.00020	0.000486	0.00039	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	0.0012	0.000027		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0.0025	0.000036		
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.0043	0.000027		
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	0.002	0.000036		
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0.0058	<0.00010		
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0.0019	0.000027		
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	0.0012	0.000022		
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.0010	0.000027		
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0.0026	0.000027		
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.0010	0.000028		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M					
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M					
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M					
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M					
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M					
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M					
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M					
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M					
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M					
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.000000050	
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.000000024	
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.000000024	
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.000000023	
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.000000023	
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.000000025	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		<0.0005	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.0010	<0.0010	<0.0010
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.0010	<0.0010	<0.0010
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.0010	<0.0010	<0.0010
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.0010	<0.0010	<0.0010
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.0010	<0.0010	<0.0010
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.0010	<0.0010	<0.0010
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.0010	<0.0010	<0.0010
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.0010	<0.0010	<0.0010
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.0010	<0.0010	<0.0010
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.0010	<0.0010	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			<0.0020	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichloromethane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M		
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M		
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M		
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M		
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M		
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M		
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M		
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M		
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M		
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M		
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M		
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M		
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.000050	<0.000200	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.000050	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.000100	<0.000050	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.000030	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.000100	<0.000100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.000200	<0.000100	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.000050	<0.000200

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			<0.42
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			<0.41
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			<0.65
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			<0.15
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			<0.19
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			<0.28
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			<0.84

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.41	<0.29	<0.29
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.42	<0.31	<0.28
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.62	<0.76	<0.73
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.31	<0.19	<0.19
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	2.8	<0.40	<0.39
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.42	<0.37	<0.34
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.87	<0.89	<0.86

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.28	<0.78	5.2	<0.38
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.43	0.59	6.9	<0.48
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.71	<0.74	4.8	<0.56
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.19	<0.29	2.57	<0.36
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.38	<0.48	1.88	<0.29
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.34	0.61	1.7	<0.32
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.83	<1.1	<4.1	<0.74

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.36	<0.33	<0.24
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.51	<0.24	<0.22
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.44	<0.38	<0.38
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0.36	<0.12	<0.20
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0.54	<0.30	<0.22
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.30	<0.28	<0.27
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.49	<0.42	<0.55

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.22	<0.28	<0.21
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.21	<0.30	<0.22
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.35	<0.53	<0.38
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.20	<0.27	<0.21
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.22	0.32	<0.23
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.25	<0.37	<0.29
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.54	<0.90	<0.59

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.61	<0.79	<0.80
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.49	<0.39	1.8
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0.63	<0.59	3.4
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	1.3	<1.0	0.26
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.22	<0.30	1
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.26	<0.30	<0.60
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	1.6	<1.4	<4.3

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0	0
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0	0
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0	0
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0	0
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0	0
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0	0
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0	0
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	1	0
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0	0
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0	0
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0	0
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0	0
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0	2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M		
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0	0
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0	0
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M		
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0	0
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0	0
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M		
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0	0
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0	0
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0	0	<0.78
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0	0	<0.53
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0	0	<0.74
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0	0	<0.29
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	0	0	<0.48
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0	0	<0.38
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	0	0	<1.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.79	<0.29	<0.28	<0.41
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.39	0.43	<0.30	<0.42
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.59	<0.76	<0.53	<0.62
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<1.0	<0.19	<0.27	<0.31
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.30	<0.40	<0.26	<0.20
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.30	<0.37	<0.37	<0.42
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<1.4	<0.89	1.27	<0.87

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	<0.36	<0.42	<0.38	
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.28	<0.41	<0.48	
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	<0.44	<0.65	<0.56	
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.14	<0.15	<0.36	
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	<0.34	<0.19	<0.29	
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.30	<0.28	<0.32	
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	<0.49	<0.84	<0.74	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			0.00155
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			0.0459
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			0
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			0.000771
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			0.000564
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			0
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	0.592	1.18	56
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	0.626	1.18	85
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	0.934	1.86	65
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	0.37	0.715	83
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	3.1	3.35	58
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	0.534	1.06	78
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	1.25	2.48	71

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	51	51	59
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	82	90	78
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	66	68	65
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	82	80	90
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	59	61	61
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	72	81	84
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	73	69	72

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	55	59	57
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	79	85	85
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	67	69	71
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	86	88	87
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	57	61	60
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	83	84	87
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	89	81	96

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	56	60	56
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	82	92	89
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	69	82	78
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	82	84	82
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	61	95	65
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	78	106	96
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	79	73	76

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	60	59	57
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	83	93	75
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	69	81	65
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	84	81	88
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	59	69	71
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	79	101	83
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	89	79	61

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M	57	38	54
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	76	69	74
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M	66	52	75
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	81	77	77
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M	70	40	76
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	83	55	80
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M	64	35	62

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				<0.25
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				<0.25
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				<0.25
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				<0.25
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M				<0.25
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				<0.25
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M	<0.25		106
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M	<0.25		77.8
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M	<0.25		91.2
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M	<0.25		106
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<0.25		102
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M	<0.25		113
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M			
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M			
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M			
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M			
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M			
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M			
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M			<5.0
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M			
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M			
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21A2594-01	2021/01/27	Water	M				
SW-01	SW21-1	21B2778-17	2021/02/25	Water	M				
SW-01	SW21-1	21C3502-01	2021/03/25	Water	M				
SW-01	SW21-1	21D2478-13	2021/04/22	Water	M				
SW-01	SW21-1	21E1990-15	2021/05/18	Water	M				
SW-01	SW21-1	21E2917-15	2021/05/26	Water	M				
SW-01	SW21-1	21F0167-15	2021/06/01	Water	M	<5.0	<5.0	<10	<5.0
SW-01	SW21-1	21F1056-15	2021/06/08	Water	M				
SW-01	SW21-1	21F2014-13	2021/06/15	Water	M				
SW-01	SW21-1	21G2414-13	2021/07/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		34.27
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M		7.40
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		8.80
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	3.9	6.50
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	5.2	8.80
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M		
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	5	8.20
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	5.7	9.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	6.4	0.33	105.2
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		0.00	96.1
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	4.5	0.17	105.4
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	5.2	0.45	72.6
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		0.30	106.6
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		0.00	103.4
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		0.00	106.8
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		0.00	100.8

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		10.5
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	11.81	10.3
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	10.85	11
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	13.59	10.6
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	13.88	11.6
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	14.00	11.3
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	13.60	11.5
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M		
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	13.79	11.5
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	13.17	9.4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	1.97		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	4.02		
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	3.24		163.47
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	3.02		135.67
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	2.32		171.13
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	2.64		99.40
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	2.57		199.00
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	2.18		145.40
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	2.59		178.20

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		6.75		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		7.08		0
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	7.19	6.18		0.01
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	6.88	6.46		0
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	6.82	7.05		0
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	6.70	6.82		0
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	6.52	8.5		0
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	6.60	6.65		0
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	7.20	6.79		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	10.20	
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	10.00	
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	4.60	
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	3.30	
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	3.90	4
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	3.80	6
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M		
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	4.60	5
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	4.10	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		<2.0	3.46
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		2.8	3.05
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	22	<2.0	2.89
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	5	<2.0	2.71
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	6	<2.0	2.53
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		<2.5	2.56
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		<2.5	7.59
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		<2.1	2.34
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		<2.5	2.54

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				1
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			0.62	79
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			0.29	3
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			0.79	<1
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			1.31	1
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		0.37		<1.8
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		0.25		<1
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		0.38		<1
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		0.327		<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		<0.050	
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		<0.050	
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		<0.050	
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M		<0.050	
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		<0.050	
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		<0.050	
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		<0.050	<0.10
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		<0.050	<0.10
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		<0.050	<0.10

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			0.044
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			0.075
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			0.029
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			0.027
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			0.031
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			0.032
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0.56	<0.10	0.035
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	0.56	<0.10	0.032
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0.58	<0.10	0.03

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.010		
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.010		
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO ₄)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		0.0868	<0.000050	0.000081
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		0.215	0.000052	0.000116
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		0.154	<0.00020	<0.00050
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M		0.174	<0.00020	<0.00050
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		0.0814	<0.00020	<0.00050
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		0.179	<0.00020	<0.00050
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<1.0	0.132	0.00024	<0.00050
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<1.0	0.129	<0.00020	<0.00050
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<1.0	0.143	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	0.0019	<0.000010	<0.000010	0.0121
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0.00396	<0.000010	<0.000010	0.0128
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.0050	<0.00010	<0.00010	<0.0500

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	0.0000031	1.13		0.00014
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0.0000057	1.02		0.0002
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000010	0.98		<0.00050
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000010	0.89		<0.00050
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000010	0.79		<0.00050
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000010	0.87		<0.00050
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000010	0.97		<0.00050
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000010	0.78		<0.00050
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000010	0.95		<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			0.0000115
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			0.000069
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			<0.00010
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			<0.00010
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			<0.00010
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			<0.00010
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			<0.00010
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			<0.00010
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	0.00024		0.0155	0.000056
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0.00037		0.0693	0.000139
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	0.00041		0.051	<0.00020
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	0.00042		0.057	<0.00020
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.00040		0.031	<0.00020
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.00040		0.041	<0.00020
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.00040		0.033	<0.00020
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.00040		0.027	<0.00020
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.00040		0.03	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	0.000621	0.155	0.000527	<0.000010
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0.000327	0.121	0.00373	<0.000010
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	0.00046	0.105	0.00127	<0.000040
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	0.00037	0.12	0.00112	<0.000010
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	0.00039	0.133	0.00061	<0.000010
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0.00036	0.094	0.00149	<0.000010
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0.00047	0.116	0.00058	<0.000010
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	0.00043	0.118	0.00072	<0.000010
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0.0004	0.125	0.00061	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	0.000369	0.000084	<0.01	0.153	
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0.000147	0.00016	<0.01	0.135	
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	0.00026	0.00082	<0.050	0.12	
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	0.00024	<0.00040	<0.050	0.11	
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	0.00025	<0.00040	<0.050	0.14	
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0.00016	<0.00040	<0.050	<0.10	
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0.00024	<0.00040	<0.050	0.11	
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M					
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	0.00027	<0.00040	<0.050	<0.10	
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0.00032	<0.00040	<0.050	0.15	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		<0.00010	1.33	<0.000010
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		<0.00010	1.58	<0.000010
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		<0.00050	1.4	<0.000050
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M		<0.00050	1.6	<0.000050
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		<0.00050	1.7	<0.000050
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		<0.00050	1.3	<0.000050
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		<0.00050	1.4	<0.000050
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		<0.00050	1.4	<0.000050
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		<0.00050	1.3	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	1.06	0.00431	<1	<0.000050
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0.53	0.00391	<1	<0.000050
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	0.7	0.0078	<3.0	<0.00050
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	0.66	0.0033	<3.0	<0.00050
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	1.02	0.0037	<3.0	<0.00050
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0.39	0.0033	<3.0	<0.00050
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0.63	0.0038	<3.0	<0.00050
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	0.56	0.0036	<3.0	<0.00050
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0.7	0.0042	<3.0	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.0000040	0.000011	<0.000050	0.00073
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.0000040	0.000022	0.000078	0.00369
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000020	<0.00010	0.00061	<0.0050
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000020	<0.00010	<0.00020	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.00020	0.000367	0.00033	
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.00020	0.000471	0.00057	
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.0010	0.00051	<0.0010	
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.0010	0.000502	<0.0010	
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.0010	0.00032	<0.0010	
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.0010	0.000432	<0.0010	
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.0010	0.000464	<0.0010	
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.0010	0.000381	0.0014	
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.0010	0.00053	<0.0050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.0010	<0.000020		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0.0011	0.000041		
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.0040	<0.00010		
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.0040	<0.00010		
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.0040	<0.00010		
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.0040	<0.00010		
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.0040	<0.00010	0.113	<0.00020
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.0040	<0.00010	0.123	<0.00020
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.0040	<0.00010	0.116	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0.00054	<0.0050	<0.00010	<0.00010
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.00050	<0.0050	<0.00010	<0.00010
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.00050	<0.0050	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.0500	<0.000010	2.52	
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.0500	<0.000010	0.76	
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.0500	<0.000010	0.83	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.00050		
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.00050		
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.00010	<0.00040		0.028
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.00010	<0.00040		0.02
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.00010	<0.00040		0.02

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.00020	0.00295	0.31	0.00051
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.00020	0.00045	0.11	0.0004
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.00020	0.00032	0.111	0.00036

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000010	0.00023	<0.00040	<0.050
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000010	0.00022	<0.00040	<0.050
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000010	0.00027	<0.00040	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M					
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M					
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M					
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M					
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M					
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M					
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0.24			<0.00050	1.3
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M					
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.10			<0.00050	1.4
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0.13			<0.00050	1.2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000050	4.34	0.0629	<3.0
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000050	0.54	0.003	<3.0
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000050	0.65	0.0039	<3.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.00050	<0.000020	<0.00010	<0.00020
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.00050	<0.000020	<0.00010	<0.00020
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.00050	<0.000020	<0.00010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.0050	<0.0010	0.000422	<0.0010
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.0050	<0.0010	0.000381	<0.0010
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.0050	<0.0010	0.000481	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		<0.0040	<0.00010
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		<0.0040	<0.00010
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		<0.0040	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.000000050	
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0.000000025	
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	0.000000025	
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	0.00000003	
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000000024	
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	<0.000000023	
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000000023	
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M		<0.0005	<0.0010
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		<0.0005	<0.0010
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		<0.0005	<0.0010
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		<0.0005	<0.0010
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		<0.0005	<0.0010
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		<0.0005	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.0010	<0.0010	<0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			<0.0020	<0.00100
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			<0.0020	<0.00100
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			<0.0020	<0.00100
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			<0.0020	<0.00100
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			<0.0020	<0.00100
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			<0.0020	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichlorobenzene	1-3-Dichlorobenzene	1-4-Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M		
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M		
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M		
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M		
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M		
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M		
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M		
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M		
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M		
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M		
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M		
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000050	<0.000200	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000050	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.000100	<0.000050	0.000014
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000100	<0.000050	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000030	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000100	<0.000100
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000100	<0.000100
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000100	<0.000100
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000100	<0.000100
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M		
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000100	<0.000100
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000100	<0.000100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000200	<0.000100	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.000050	<0.000200
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.000050	<0.000200
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.000050	<0.000200
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.000050	<0.000200
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M		
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.000050	<0.000200
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.000050	<0.000200

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			<0.51
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			<1.8
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			<0.65
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			<0.67
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			<0.40
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			<0.18

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.44	<0.51	<0.51
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<1.7	<1.4	<1.4
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.49	<0.57	<0.56
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.60	<0.45	<0.39
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	<0.36	<0.38	<0.38
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.28	<0.30	<0.29

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.49	<1.2	<2.4	<0.50
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<1.4	<1.5	<3.5	<1.8
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.56	1.4	17.6	<0.62
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.41	0.95	10	<0.86
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	<0.36	<0.71	8	<0.45
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M				
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.27	<0.38	3.98	<0.30

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.30	<0.28	<0.25
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.93	<0.84	<0.59
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.37	0.31	<0.28
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.34	<0.28	<0.32
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	<0.35	<0.28	<0.30
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.31	<0.26	<0.23

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.24	<0.33	<0.25
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.62	<0.99	<0.62
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0.32	<0.46	<0.30
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.32	<0.42	<0.30
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	<0.28	<0.39	<0.29
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.22	<0.28	<0.23

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.36	<0.54	<1.7
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<2.3	<3.5	<3.3
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0.89	<0.68	2
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.93	<1.4	1.7
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	<0.39	<0.54	<0.84
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.31	<0.42	1.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0	0
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	0	0
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0	1
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0	0
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	0	0
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0	0
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	0	0
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0	0
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0	0
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	0	0
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M		
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0	0
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M		
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	0	0
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M		
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0	0
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0	0
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	0	0
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M		
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0	0	<1.2
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	0	0	<1.5
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0	0	<0.62
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0	0	<0.44
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	0	0	<0.71
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0	0	<0.38

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.54	<0.51	<0.33	<0.44
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<3.5	<1.4	<0.99	<1.7
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0.89	<0.57	<0.46	<0.49
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<1.4	<0.45	<0.42	<0.60
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	<0.54	<0.38	<0.39	<0.36
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M				
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.42	<0.30	<0.28	<0.28

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	<0.30	<0.51	<0.50	
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	<0.93	<1.8	<1.8	
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	<0.37	<0.65	<0.62	
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.34	<0.67	<0.86	
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	<0.35	<0.40	<0.45	
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M				
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	<0.31	<0.18	<0.30	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			0
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			0
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			0.0464
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			0.00352
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			0.00239
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			0.00119

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	0.687	1.37	53
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	2.37	4.74	60
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	0.9	1.65	85
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	0.88	1.75	71
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	0.579	1.16	73
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	0.387	0.772	62

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	55	55	57
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	61	61	66
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	74	75	82
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	60	56	77
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	64	61	77
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	58	55	72

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	60	59	62
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	72	61	65
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	79	73	70
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	69	101	70
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	71	78	73
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	67	72	68

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	59	41	42
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	65	60	61
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	79	74	64
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	71	70	58
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	71	69	59
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	65	56	50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	61	42	38
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	66	60	57
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	78	73	71
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	76	64	75
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	74	67	71
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	67	53	63

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M	41	35	39
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M	60	38	64
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M	68	69	81
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	74	52	84
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M	67	52	0
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M	57	42	70

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M				<0.25
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M				<0.25
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M				<0.25
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M				<0.25
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M				<0.25
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<0.25		109
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<0.25		98
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<0.25		116
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M	<0.25		117
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M	<0.25		126
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M			<5.0
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M			
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M			<5.0
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M			
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M			<5.0
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M			
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M			
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M			
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M			
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	21H3040-13	2021/08/25	Water	M	<5.0	<5.0	<10	<5.0
SW-01	SW21-1	21I3814-13	2021/09/28	Water	M				
SW-01	SW21-1	21J2995-01	2021/10/21	Water	M	<5.0	<5.0	<10	<5.0
SW-01	SW21-1	21K3046-13	2021/11/23	Water	M				
SW-01	SW21-1	21L2125-13	2021/12/14	Water	M	<5.0	<5.0	<10	<5.0
SW-01	SW21-01	22A2312-13	2022/01/20	Water	M				
SW-01	SW21-1	22B2487-13	2022/02/17	Water	M				
SW-01	SW21-1	22B3076-01	2022/02/22	Water	M				
SW-01	SW21-1	22C3145-13	2022/03/22	Water	M				
SW-01	SW21-01	22D2212-08	2022/04/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	4.3	7.00
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	2.8	4.40
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	4.4	6.10
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	6.6	8.40
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	6.8	9.20
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	12.3	16.90
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	6.6	12.00
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	8.8	16.70
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	4.8	9.00

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		0.20	101.7
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		0.04	101.5
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		0.24	102.7
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		0.00	100.7
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		0.05	101.2
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		0.33	102.5
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		0.00	102.8
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		0.44	102.1
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		0.20	99.9
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		0.95	102.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	13.12	10.2
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	12.60	10.7
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	11.32	9.7
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	10.52	10.3
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	11.03	10.1
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	11.47	9.6
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	14.53	8.6
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	14.83	9.9
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	13.30	12.5
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	14.41	11.3

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	3.59		1224.00
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	2.22		253.40
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	2.15		60.60
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	2.08		110.00
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	1.82		127.30
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	1.82		87.80
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	1.74		80.70
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	1.15		194.40
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	2.08		166.80
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	2.31		201.40

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		6.72		
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	5.74	6.42		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	6.27	6.51		
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	6.68	6.27		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	6.53	6.1		
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	7.45	6.5	0.01	
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	6.33	6.55		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	6.51	6.85	0.01	
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	6.36	8.03		
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	5.75	6.18		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	4.60	
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	6.10	
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	11.10	
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	13.30	
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	11.60	
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	10.70	
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	1.40	
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.23	
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	3.41	
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	1.00	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		<3.3	2.1
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		<2.5	1.49
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		<2.6	1.73
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		<2.9	2.4
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		<2.0	2.41
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		<2.9	4.32
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		<2.0	3.42
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		<2.0	4.59
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		<2.0	3.02
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		<4.0	2.81

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		2.3		4
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		0.45	0.45	<1
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	1.81	0.47		<1
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	2.42	0		10
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	2.48	0		4
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	4.32	0		1
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	3.49	0.13		3
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	4.63	0.14		<1
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	3.03	0.23		3
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	2.75	0.17		<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		<0.050	<0.10
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		0.112	<0.10
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		<0.050	<0.10
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		<0.050	<0.10
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		<0.050	<0.10
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		<0.050	<0.10
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		<0.050	<0.10
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		<0.050	<0.10
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		<0.050	<0.10
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		<0.050	<0.10

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.33	<0.10	0.023
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	0.18	<0.10	<0.010
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.33	<0.10	0.013
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.51	<0.10	0.035
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.6	<0.10	0.039
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	1.17	<0.10	0.097
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.83	<0.10	0.047
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	1.21	<0.10	0.0828
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.66	<0.10	0.0755
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.63	<0.10	0.036

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.010		
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.010		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.010		
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.010		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.010		
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.010		
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.010		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.0050	0.0828	
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.0050	0.0755	
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO ₄)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<1.0	0.294	<0.00020	<0.00050
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<1.0	0.145	<0.000050	0.000066
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<1.0	0.128	<0.000050	0.000071
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<1.0	0.103	<0.000050	0.000074
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<1.0	0.0946	<0.000050	0.000073
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<1.0	0.0576	<0.000050	0.000084
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	1.1	0.0816	<0.000050	0.000069
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	1.2	0.0571	<0.000050	0.000065
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<1.0	0.116	<0.000050	0.000079
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<1.0	0.143	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	0.00116	<0.000010	<0.000010	0.0022
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.00134	<0.000010	<0.000010	0.0038
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.00156	<0.000010	<0.000010	0.0083
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.00159	<0.000010	<0.000010	0.0089
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.00268	<0.000010	<0.000010	0.0175
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.00246	<0.000010	<0.000010	0.0091
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.00281	<0.000010	<0.000010	0.0128
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.00199	<0.000010	<0.000010	0.0085
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.0050	<0.00010	<0.00010	<0.0500

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000010	0.73		<0.00050
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	0.0000021	0.487		0.0002
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.0000024	0.569		<0.00010
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.0000033	0.795		0.00022
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.0000021	0.787		0.00019
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.0000023	1.4		0.00022
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.000004	1.11		0.0002
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.0000031	1.47		0.00013
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.0000045	0.995		0.00019
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000010	0.92		<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			<0.00010
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			0.0000248
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			0.0000197
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			0.0000146
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			0.0000153
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			0.0000122
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			0.0000162
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			0.000014
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			0.0000222
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.0008		0.126	<0.00020
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.00020		0.0339	0.000063
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.00020		0.0272	0.000061
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.00022		0.0215	0.000084
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.00020		0.021	<0.000050
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.00025		0.01	<0.000050
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.00024		0.0245	<0.000050
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.00021		0.0121	<0.000050
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.00026		0.0344	0.000061
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.00040		0.043	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.00039	0.112	0.00303	<0.000010
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	0.000213	0.0546	0.00116	<0.000010
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.000305	0.0756	0.000985	<0.000010
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.000539	0.0993	0.000807	<0.000010
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.000535	0.109	0.000926	<0.000010
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.000624	0.198	0.00039	<0.000010
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.000503	0.158	0.000644	<0.000010
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.000633	0.222	0.000339	<0.000010
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.000536	0.129	0.000567	<0.000010
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.00044	0.125	0.00075	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.00016	<0.00040	<0.050	0.13	
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	0.0001	0.000071	<0.01	0.057	
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.000178	0.000049	<0.010	0.087	
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.000228	0.000056	<0.01	0.112	
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.000267	0.000081	<0.010	0.121	
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.000565	0.000078	<0.01	0.228	
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.000359	0.000146	<0.02	0.169	
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.000538	0.000101	<0.02	0.207	
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.000283	0.000104	<0.01	0.162	
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.00028	<0.00040	<0.050	0.15	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		<0.00050	1.2	<0.000050
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		<0.00010	0.61	<0.000010
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		<0.00010	0.86	<0.000010
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		<0.00010	0.89	<0.000010
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		<0.00010	0.85	<0.000010
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		<0.00010	1.61	<0.000010
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		<0.00010	1.7	<0.000010
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		<0.00010	2.17	<0.000010
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		<0.00010	1.56	<0.000010
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		<0.00050	1.4	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.45	0.0032	<3.0	<0.00050
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	0.29	0.00237	<1	<0.000050
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.468	0.00258	<1.0	<0.000050
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.631	0.00316	<1	<0.000050
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.706	0.00338	<1.0	<0.000050
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	1.4	0.00566	<1	<0.000050
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.858	0.00492	<1	<0.000050
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	1.39	0.00633	<1	<0.000050
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.818	0.00423	<1	<0.000050
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.78	0.0038	<3.0	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000020	<0.00010	<0.00020	0.0084
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.0000040	0.000013	<0.000050	0.00118
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.0000040	0.000012	<0.000050	0.00101
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.0000040	<0.000010	<0.000050	0.00066
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.0000040	<0.000010	<0.000050	0.00071
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.0000040	<0.000010	<0.000050	0.00025
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.0000040	<0.000010	<0.000050	0.0005
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.0000040	<0.000010	<0.000050	<0.00020
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.0000040	0.000012	<0.000050	0.00088
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000020	<0.00010	<0.00020	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.0002	0.000475	<0.0050	
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.00020	0.000416	<0.00100	
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.00020	0.000423	<0.00100	
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.00020	0.000357	<0.00100	
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.00020	0.000368	<0.00100	
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.00020	0.000274	<0.00100	
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.00020	0.000313	<0.00100	
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.00020	0.00021	<0.00100	
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.00020	0.000473	<0.00100	
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.0010	0.000598	<0.0050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.0040	<0.00010	0.156	<0.00020
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.0010	0.000027	0.137	<0.00020
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.0010	<0.000020	0.112	<0.000050
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.0010	<0.000020	0.093	<0.000050
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.0010	<0.000020	0.0889	<0.000050
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.0010	<0.000020	0.0555	<0.000050
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.0010	0.000026	0.0733	<0.000050
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.0010	<0.000020	0.0567	<0.000050
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.0010	0.00003	0.112	<0.000050
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.0040	<0.00010	0.122	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.00050	<0.0050	<0.00010	<0.00010
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.00050	<0.0050	<0.00010	<0.00010
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.000058	0.00121	<0.000010	<0.000010
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.000058	0.00159	<0.000010	<0.000010
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.000075	0.00174	<0.000010	<0.000010
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.000083	0.00278	<0.000010	<0.000010
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.000052	0.0021	<0.000010	<0.000010
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000050	0.00271	<0.000010	<0.000010
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000050	0.00205	<0.000010	<0.000010
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.000065	0.00163	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.0500	<0.000010	0.7	
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.0500	<0.000010	0.51	
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.0051	<0.0000020	0.606	
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.0092	<0.0000020	0.794	
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.0086	0.0000031	0.806	
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.017	0.0000023	1.39	
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.0094	0.0000042	1.14	
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.0141	0.0000037	1.46	
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.008	0.0000033	0.992	
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.0077	0.0000027	0.901	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L		
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.00050		
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.00050		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.00018		
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.00016		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.00017		
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.00013		
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.00015		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.00016		
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.0002		
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.0002		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.00010	<0.00040		0.028
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.00010	<0.00040		0.018
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.0000111	0.00017		0.013
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.0000095	0.00021		0.015
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.0000097	0.00022		0.0127
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.0000089	0.00023		0.0075
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.0000136	0.00023		0.0169
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.0000134	0.00022		0.0095
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.000017	0.00025		0.0234
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.000014	0.00031		0.0268

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.00020	0.00024	0.083	0.00068
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.00020	0.0002	0.055	0.00056
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.000056	0.000417	0.0718	0.000337
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000050	0.000604	0.106	0.000265
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000050	0.000544	0.113	0.000364
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000050	0.000618	0.204	0.000233
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000050	0.000535	0.158	0.000409
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000050	0.000711	0.237	0.000216
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.000051	0.000484	0.134	0.000288
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.000073	0.000466	0.12	0.000351

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000010	0.00015	<0.00040	<0.050
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000010	<0.00010	<0.00040	<0.050
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000010	0.000155	<0.000070	<0.010
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000010	0.000214	0.000041	<0.01
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000010	0.00025	0.000078	<0.010
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000010	0.000503	0.000088	<0.01
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000010	0.000335	0.000129	<0.01
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000010	0.000519	0.000095	<0.01
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000010	0.000278	0.000082	<0.01
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000010	0.000252	0.000065	<0.01

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.11			<0.00050	1
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.10			<0.00050	<1.0
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.077			<0.00010	0.8
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.109			<0.00010	0.94
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.135			<0.00010	0.95
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.232			<0.00010	1.62
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.175			<0.00010	1.74
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.215			<0.00010	2.15
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.155			<0.00010	1.55
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.14			<0.00010	1.28

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000050	0.48	0.0029	<3.0
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000050	0.32	0.0019	<3.0
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000010	0.427	0.00242	<1.00
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000010	0.657	0.00327	<1
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000010	0.742	0.00368	<1.00
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000010	1.44	0.00569	<1
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000010	0.906	0.00463	<1
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000010	1.48	0.00658	<1
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000010	0.796	0.00456	<1
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000010	0.749	0.00374	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.00050	<0.000020	<0.00010	<0.00020
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.00050	<0.000020	<0.00010	<0.00020
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000050	<0.0000040	0.000012	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.0050	<0.0010	0.000413	<0.0050
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.0050	<0.0010	0.000401	<0.0050
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.00051	<0.00020	0.000516	<0.00100
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.0004	<0.00020	0.000379	<0.00100
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.00038	<0.00020	0.000384	<0.00100
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.00021	<0.00020	0.000257	<0.00100
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.00033	<0.00020	0.000303	<0.00100
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.00020	<0.00020	0.000227	<0.00100
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.00047	<0.00020	0.000442	<0.00100
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.00068	<0.00020	0.000555	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		<0.0040	<0.00010
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		<0.0040	<0.00010
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		<0.0010	<0.000020
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		<0.0010	<0.000020
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		<0.0010	<0.000020
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		<0.0010	<0.000020
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		<0.0010	0.000024
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		<0.0010	<0.000020
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		<0.0010	0.000033
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		<0.0010	0.000032

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000000024	
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	0.000000086	
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.000000347	
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.000000445	
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.000000508	
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000000050	
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	0.000000057	
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000000023	
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000000060	
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		<0.0005	<0.0010
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		<0.0005	<0.0010
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		<0.0005	<0.0010
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		<0.0005	<0.0010
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		<0.0005	<0.0010
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		<0.0005	<0.0010
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		<0.0005	<0.0010
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		<0.0005	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.0010	<0.0010	<0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			<0.0020	<0.00100
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			<0.0020	<0.00100
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			<0.0020	<0.00100
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			<0.0020	<0.00100
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			<0.0020	<0.00100
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			<0.0020	<0.00100
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			<0.0020	<0.00100
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			<0.0020	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M		
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M		
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M		
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M		
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M		
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M		
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	0.000055	<0.000200	<0.000165
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000050	<0.000200	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000050	<0.000050	0.000071
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000050	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000100	<0.000050	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000030	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000100	<0.000100
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000100	<0.000100
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000100	<0.000100
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000100	<0.000100
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000100	<0.000100
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000100	<0.000100
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000100	<0.000100
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000100	<0.000100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000200	<0.000100	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.000050	<0.000200
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.000050	<0.000200
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.000050	<0.000200
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.000050	<0.000200
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.000050	<0.000200
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.000050	<0.000200
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.000050	<0.000200
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.000050	<0.000200

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			<0.30
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			<0.21
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			<0.48
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			<0.46
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			<0.23
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			<0.33
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			<0.44

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.62	<0.33	<0.34
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	<0.17	<0.24	<0.25
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.35	<0.38	<0.37
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.65	<0.41	<0.41
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.17	<0.21	<0.20
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.25	<0.18	<0.18
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	1.4	0.66	<0.66

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.33	0.31	<0.58	<0.28
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M				
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.28	0.6	1.83	<0.31
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M				
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.37	0.84	3	<0.41
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.40	0.87	1.7	<0.38
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M				
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.20	<0.22	1	<0.21
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.18	0.46	2.69	<0.27
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.77	<2.4	3.4	<0.42

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.49	<0.24	0.17
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.47	<0.18	0.18
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.56	<0.26	<0.32
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.33	<0.27	<0.21
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.41	<0.13	<0.12
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.21	<0.17	<0.12
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.97	0.66	0.55

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	<0.16	0.35	<0.14
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.22	0.2	<0.14
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.32	<0.47	<0.32
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.20	<0.25	<0.21
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.12	<0.15	<0.12
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.12	0.31	<0.13
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0.85	1.37	0.48

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.36	<0.35	0.43
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.34	0.22	0.93
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.45	<0.77	<1.4
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.20	<0.27	<0.73
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.15	<0.20	0.42
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.28	0.46	1.2
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.54	<0.91	<1.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0	1
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0	1
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	1	0
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	1	0
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0	0
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0	0
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0	0
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0	0
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0	0
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0	0
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0	0
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0	1
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0	2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0	1
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M		
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0	1
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M		
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0	1
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0	0
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M		
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0	1
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0	0
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0	0	<0.30
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0	0	<0.25
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0	0	0.84
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0	0	0.87
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0	0	<0.22
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0	0	<0.27
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	0	0	<2.4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.36	<0.34	<0.23	<0.62
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M				
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.34	<0.25	<0.18	<0.17
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M				
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	<0.77	<0.38	<0.47	<0.35
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.27	<0.41	<0.25	<0.65
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M				
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	<0.20	<0.21	<0.15	<0.17
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.25	<0.18	0.31	<0.25
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.91	<0.66	2.22	<0.83

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.49	<0.30	<0.28	
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M				
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.47	<0.21	<0.31	
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M				
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.56	<0.48	<0.41	
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	<0.33	<0.46	<0.38	
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M				
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.41	<0.23	<0.21	
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	<0.21	<0.33	<0.27	
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	<0.34	<0.44	<0.42	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			0.0184
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			0.018
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			0.026
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			0.0092
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			0.0123
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			0.0318
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			0.222

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	0.65	1.23	82
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	0.378	0.642	82
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	0.634	1.24	96
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	0.736	1.46	83
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	0.302	0.59	88
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	0.422	0.799	82
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	2.39	2.68	78

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	68	61	69
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	80	69	86
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	107	94	83
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	69	66	75
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	78	73	88
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	73	70	84
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	70	57	87

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	61	73	66
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	82	83	85
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	101	91	99
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	69	73	69
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	85	87	85
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	84	84	88
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	89	85	83

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	66	68	58
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	84	82	70
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	100	78	79
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	72	70	60
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	86	89	76
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	84	82	72
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	79	70	64

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	67	66	65
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	84	81	75
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	102	87	76
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	71	69	69
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	87	86	86
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	84	84	78
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	84	69	81

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M	59	86	81
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M	70	81	79
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M	79	85	82
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M	67	68	80
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M	82	71	87
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M	75	64	87
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M	81	53	83

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M				
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M				<0.25
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M				
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M				<0.25
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M				
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M				
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M				<0.25
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M				
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M				
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M	<0.25		108
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M	<0.25		91.9
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M	<0.25		83.8
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M			
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M			
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M			
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M			
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M			
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M			
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M			
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M			
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M			
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	22E2480-13	2022/05/18	Water	M				
SW-01	SW21-01	22F3538-01	2022/06/22	Water	M				
SW-01	SW21-1	22G1944-01	2022/07/14	Water	M				
SW-01	SW21-1	22H2790-01	2022/08/18	Water	M				
SW-01	SW21-1	22I2095-01	2022/09/15	Water	M				
SW-01	SW21-1	22J1763-01	2022/10/13	Water	M				
SW-01	SW21-1	22K1308-01	2022/11/09	Water	M				
SW-01	SW21-1	22L0650-01	2022/12/06	Water	M				
SW-01	SW21-1	23A2725-01	2023/01/26	Water	M				
SW-01	SW21-1	23B2818-01	2023/02/27	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	1.9	1.9	<1.0
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	3.9	3.9	<1.0
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	2.9	2.9	<1.0
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	1.6	1.6	<1.0
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	3.6	3.6	<1.0
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	3.1	3.1	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<1.0	<1.0	12
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<1.0	<1.0	11
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<1.0	<1.0	10
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<1.0	<1.0	
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<1.0	<1.0	
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<1.0	<1.0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	5.8	10.20
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	5.6	8.90
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	3.3	4.90
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	5.7	7.60
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	6.4	8.40
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	6.6	8.80
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	7.7	10.30
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	6	8.20
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	5.9	9.70
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	6	9.90

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		0.36	103.2
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	8.8	0.28	99.6
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		0.18	101.7
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	146	0.20	99.2
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	7	0.10	94.2
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	10.6	0.09	99.0
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	10.5	0.10	100.5
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	7.7	0.45	104.4
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	10.4	0.08	100.9
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	11.9	0.81	102.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	14.19	11
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	12.61	
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	12.26	9.6
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	10.75	
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	10.02	
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	10.72	
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	10.93	
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	11.57	
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	12.96	
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	13.29	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	2.63		196.20
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	2.63		241.30
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	2.71		
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	1.6		274.40
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	3.34	2.03	202.70
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	1.84	1.99	203.90
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	1.62	1.83	110.50
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	3.42		161.40
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	2.45		120.30
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	2.64		160.20

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	6.06	6.03		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	5.91	6.14	0.01	
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	5.41	6.25	0.01	
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	5.91	7.82		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	6.51	6.24		
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	6.71	7.63	0	
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	7.31	5.99	0	
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	5.85	5.9	0	
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	6.45	6.31	0	
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	6.72	5.68	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	2.20	
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	5.40	
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	7.30	
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	11.80	
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	12.60	
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	11.80	
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	22.00	
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	10.80	
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	4.80	
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	4.20	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		<3.3	3.08
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M		<4.0	2.64
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		<5.0	1.59
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		<2.0	79.4
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	3	<2.0	2.39
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<15	<5.0	2.55
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M		<2.0	2.96
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		<2.0	2.71
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M		<2.0	2.81
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M		2	3.36

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	2.96	0		2
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	2.7	0.48	0.25	<1
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	1.54	0.43	0.25	<1
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	77.4	0.43	0.54	6
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	2.36	0	0.23	1
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	2.38	0.04	0.22	6
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	2.8	0.1	0.70	2
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	2.59	0.45	0.32	5
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	2.75	0.03	0.26	3
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	3.1	0.51	0.31	2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		<0.050	<0.10
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M		<0.050	<0.10
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		0.054	<0.10
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		<0.050	<0.10
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M		<0.050	<0.10
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M		<0.050	<0.10
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M		<0.050	<0.10
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		<0.050	<0.10
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M		<0.050	<0.10
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M		<0.050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.68	<0.10	0.033
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.45	<0.10	0.042
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.24	<0.050	0.0392
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.55	<0.050	
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.58	<0.050	
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.59	<0.050	0.0265
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.58	<0.10	0.015
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.47	<0.10	
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.62	<0.10	0.036
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.67	<0.050	0.053

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.010		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.010		
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.0050	0.0392	
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.010		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.0050	<0.0100	0.095
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.0050	0.0265	<0.050
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.010	0.0151	0.066
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.010		
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.010		
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<1.0	0.14	<0.00020	<0.00050
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<1.0	0.142	<0.000050	0.00008
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<1.0	0.166	<0.000050	0.00006
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	2.6	0.0379	0.000108	0.000094
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<1.0	0.106	<0.000050	0.000083
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<1.0	0.104	<0.000050	0.000081
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<1.0	0.0851	<0.000050	0.000127
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<1.0	0.209	<0.000050	0.000091
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<1.0	0.141	<0.000050	0.000093
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<1.0	0.15	<0.000050	0.000081

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.00164	<0.000010	<0.000010	0.0049
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.00117	<0.000010	<0.000010	<0.0020
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.0136	<0.000010	<0.000010	0.0148
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.00151	<0.000010	<0.000010	0.0083
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.00169	<0.000010	<0.000010	0.0096
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.00183	<0.000010	<0.000010	0.0115
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.00239	<0.000010	<0.000010	0.0036
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.00206	<0.000010	<0.000010	0.0069
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.00178	<0.000010	<0.000010	0.0082

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000010	1.02		0.00107
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.000002	0.891		0.00048
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.0000020	0.532		<0.00050
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.0000099	30		<0.00050
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.0000020	0.795		<0.00050
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.0000034	0.862		<0.00010
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.0000020	0.989		0.00024
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.000006	0.91		0.00022
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.0000031	0.926		0.00015
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.0000036	1.13		0.00015

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			<0.00010
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			0.0000232
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			0.0000199
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			0.0000286
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			0.0000202
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			0.0000165
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			0.0000227
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			0.0000449
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			0.0000219
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			0.0000235

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.00040		0.04	<0.00020
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.00031		0.0306	0.000058
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.00027		0.0307	0.000069
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.00082		0.0762	0.000069
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.00035		0.0328	0.000077
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.00031		0.0261	0.000082
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.00034		0.0344	0.000085
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.0003		0.0431	0.000082
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.00027		0.0319	0.000063
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.00026		0.0446	0.000067

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.00067	0.128	0.00062	<0.000010
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.000325	0.101	0.000695	<0.000010
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.000303	0.0637	0.000858	<0.000010
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.000279	1.05	0.00705	<0.000010
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.000534	0.0968	0.000972	<0.000010
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.000509	0.0963	0.000937	<0.000010
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.00052	0.118	0.00123	<0.000010
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.000378	0.106	0.00236	<0.000010
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.000463	0.12	0.00102	<0.000010
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.000539	0.13	0.000931	0.000012

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.00055	<0.00040	<0.050	0.14	
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.00027	0.000272	<0.01	0.146	
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.000138	0.000085	<0.01	0.086	
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.000781	0.00033	0.013	0.447	
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.000289	0.00007	<0.01	0.111	
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.000293	0.000059	<0.01	0.099	
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.000471	0.000137	0.016	0.153	
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.000162	0.000146	<0.01	0.145	
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.00026	0.000179	<0.01	0.134	
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.000273	0.000128	<0.01	0.059	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		<0.00050	1.5	<0.000050
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M		<0.00010	1.43	<0.000010
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		<0.00010	0.76	<0.000010
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		<0.00010	5.24	<0.000010
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M		<0.00010	0.97	<0.000010
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M		<0.00010	0.95	<0.000010
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M		<0.00010	1.28	<0.000010
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		<0.00010	1.72	<0.000010
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M		<0.00010	1.56	<0.000010
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M		<0.00010	1.69	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.78	0.0039	<3.0	<0.00050
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.608	0.00346	<1	<0.000050
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.394	0.00214	<1	<0.000050
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	2.18	0.0752	<1	<0.000050
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.634	0.00335	<1	<0.000050
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.72	0.00332	<1	<0.000050
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.827	0.00344	<1	<0.000050
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.562	0.00396	<1	<0.000050
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.713	0.00416	<1	<0.000050
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.874	0.00404	<1	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.0000040	0.000019	<0.000050	0.00077
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.0000040	0.000021	<0.000050	0.00101
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.0000040	<0.000010	0.000053	0.00052
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.0000040	0.000014	<0.000050	0.00075
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.0000052	0.000018	<0.000050	0.00073
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.0000040	0.00001	<0.000050	0.00162
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.0000040	0.000019	<0.000050	0.00167
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.0000040	0.000016	<0.000050	0.00271
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0000040	0.000013	<0.000050	0.0011

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.0010	0.000574	<0.0050	
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.00020	0.000621	<0.00100	
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.00020	0.000505	<0.00100	
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.00020	0.000107	<0.00100	
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.00020	0.000439	<0.00100	
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.00020	0.000458	<0.00100	
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.00020	0.000422	<0.00100	
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.00020	0.000542	<0.00100	
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.00020	0.000562	<0.00100	
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.00002	0.000597	<0.00040	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.0040	<0.00010	0.122	<0.000050
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.001	0.000027	0.133	<0.000050
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.0013	0.000032	0.162	<0.000050
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.0024	0.000023	0.019	0.000101
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.0010	0.000028	0.0918	<0.000050
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.0010	0.000021	0.0821	<0.000050
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.0010	<0.000020	0.0629	<0.000050
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.0022	0.000046	0.185	<0.000050
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.0011	0.000038	0.124	<0.000050
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0010	0.000042	0.124	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.00006	0.00182	<0.000010	<0.000010
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.000074	0.00152	<0.000010	<0.000010
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.000074	0.00109	<0.000010	<0.000010
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000050	0.0131	<0.000010	<0.000010
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.000068	0.00158	<0.000010	<0.000010
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.000077	0.00157	<0.000010	<0.000010
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.000104	0.00176	<0.000010	<0.000010
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.000073	0.0021	<0.000010	<0.000010
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.000091	0.00186	<0.000010	<0.000010
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.000094	0.00192	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.0082	0.0000031	0.973	
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.0047	0.0000028	0.919	
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.0020	0.0000025	0.511	
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.011	0.0000084	29.2	
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.0077	<0.0000020	0.791	
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.0088	<0.0000020	0.787	
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.0104	0.0000041	0.936	
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.0027	0.0000036	0.872	
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.0051	0.0000026	0.92	
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.0075	<0.0000020	1.04	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L		
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.00014		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.00050		
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.00050		
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.00050		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.00050		
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.00050		
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.00050		
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.00050		
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.00050		
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.0000158	0.00029		0.023
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.0000163	0.00022		0.0191
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.0000147	0.00027		0.0209
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.000013	0.00062		0.0129
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.0000103	0.00029		0.0157
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.0000069	0.00025		0.0135
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.0000089	0.00026		0.0158
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.0000338	0.00024		0.0243
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.0000169	0.00026		0.0193
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.000019	0.00024		0.0288

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.000068	0.000492	0.128	0.000305
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.000064	0.000332	0.0989	0.00034
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.000072	0.000274	0.0644	0.000508
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000050	0.000261	1.06	0.00525
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.000055	0.000519	0.0941	0.000325
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000050	0.000499	0.1	0.000259
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.000053	0.000544	0.112	0.000346
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.000055	0.000312	0.0985	0.00133
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000050	0.000395	0.109	0.000445
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.000064	0.000488	0.124	0.000505

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000010	0.000305	0.000098	<0.01
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000010	0.000235	0.000064	<0.01
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000010	0.00013	0.000059	<0.01
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000010	0.000579	0.000304	<0.01
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000010	0.000197	<0.000040	<0.01
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000010	0.000244	<0.000040	<0.01
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000010	0.000416	0.000063	<0.01
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000010	0.000145	0.000076	<0.01
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000010	0.000224	0.000113	<0.01
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000010	0.00025	0.000131	<0.01

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.143			<0.00010	1.4
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.129			<0.00010	1.4
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.095			<0.00010	0.75
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.436			<0.00010	5.2
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.114			<0.00010	0.96
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.114			<0.00010	0.91
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.137			<0.00010	1.24
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.143			<0.00010	1.56
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.127			<0.00010	1.57
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.117			<0.00010	1.63

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000010	0.785	0.00404	<1
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000010	0.597	0.0035	<1
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000010	0.393	0.00222	<1
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000010	2.33	0.0718	<1
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000010	0.622	0.00328	<1
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000010	0.69	0.00315	<1
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000010	0.804	0.00361	<1
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000010	0.575	0.00398	<1
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000010	0.648	0.00408	<1
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000010	0.746	0.00394	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000050	<0.0000040	0.000011	<0.000050
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000050	<0.0000040	0.00002	<0.000050
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000050	<0.0000040	0.00002	<0.000050
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000050	<0.0000040	0.000015	<0.000050
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000050	<0.0000040	0.000015	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	0.00054	<0.00020	0.000531	<0.00100
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.00043	<0.00020	0.000576	<0.00100
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.00066	<0.00020	0.000483	<0.00100
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.00020	<0.00020	0.0001	<0.00100
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.00035	<0.00020	0.00033	<0.00100
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.00026	<0.00020	0.000418	<0.00100
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.00031	<0.00020	0.000403	<0.00100
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.00078	<0.00020	0.000511	<0.00100
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.00053	<0.00020	0.000522	<0.00100
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	0.00057	0.00001	0.000549	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		<0.0010	0.000033
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M		<0.0010	0.00003
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		0.0019	0.000035
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		0.0022	0.000024
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M		<0.0010	0.000026
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M		<0.0010	<0.000020
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M		<0.0010	<0.000020
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		<0.0010	0.000051
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M		<0.0010	0.00004
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M		0.0025	0.000036

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000000050	
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000000050	
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	0.00000007	
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	0.000000089	
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.000000109	
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.000000078	
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000000050	
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	0.000000043	
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.000000069	
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M		<0.0005	<0.0010
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.1	<0.0005	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.0010	<0.0010	<0.0005
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			<0.0020	<0.00100
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			<0.0020	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0010	<0.0010	<0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0020	<0.0010	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0005	<0.0010	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0010	<0.0010	<0.0030

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0010	<0.0010	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M		
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M		
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M		
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M		
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M		
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M		
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M		
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M		
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M		
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M		
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0005	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M		
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M		
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M		
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M		
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M		
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.0010	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M		
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M		
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M		
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M		
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M		
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000050	<0.000200	<0.000050
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000050	<0.000200	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000050	<0.000050	<0.000050
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000050	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000100	<0.000050	<0.000010
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000100	<0.000050	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000030	<0.000050	<0.000050
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000030	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000100	<0.000100
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000100	<0.000100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000200	<0.000100	<0.000020
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000200	<0.000100	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.000156	<0.000200
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.000050	<0.000200
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.000050	<0.000200

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			<0.30
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			<0.21
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			<1.1
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			<0.43
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			<0.50
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.30	<0.36	<0.36
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.28	<0.22	<0.22
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.24	<0.26	<0.26
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.55	<0.24	<0.26
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.22	<0.25	<0.24
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M				
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.35	<0.41	2.9	<0.50
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M				
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M				
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.21	<0.30	0.9	<0.24
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.25	<0.34	1.3	<0.25
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.24	1.99	39.9	<0.24
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M				
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.23	<0.35	1.4	<0.36
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.35	<0.31	<0.19
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.42	<0.22	<0.082
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.21	0.15	<0.19
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.32	<0.18	0.17
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.25	<0.18	<0.13
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.19	<0.25	<0.17
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.084	<0.12	<0.083
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.19	<0.25	<0.19
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.24	<0.19	0.2
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.14	0.19	<0.14
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.25	<0.34	0.6
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.19	<0.25	<0.41
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.54	<0.59	<1.0
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.37	<0.25	3
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.16	<0.20	<0.53
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0	0
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0	0
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0	0
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	2	0
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0	0
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0	0
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0	0
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0	0
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0	3
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0	0
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M		
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0	0
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M		
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M		
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0	1
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0	0
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0	0
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M		
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0	0
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0	0	<0.41
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0	0	<0.30
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0	0	<0.34
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0	0	4
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0	0	<0.35
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M				
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.34	<0.36	<0.25	<0.30
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M				
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M				
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	<0.25	<0.22	<0.12	<0.28
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.59	<0.26	<0.25	<0.24
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.25	<0.26	0.57	<0.55
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M				
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.20	<0.25	<0.18	<0.22
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M				
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	<0.35	<0.30	<0.50	
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M				
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M				
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.42	<0.21	<0.24	
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	<0.13	<1.1	<0.25	
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	<0.18	<0.43	<0.24	
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M				
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	<0.18	<0.50	<0.36	
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			0
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			0.0127
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			0
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			0.0773
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			0
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	0.476	0.952	92
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	0.364	0.702	79
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	0.821	1.59	82
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	0.684	1.26	78
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	0.492	0.957	85
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	95	84	87
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	84	80	84
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	70	84	90
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	69	69	75
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	77	82	85
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	96	94	96
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	92	87	96
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	86	90	87
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	71	82	77
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	86	87	83
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	96	68	73
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	84	70	81
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	83	82	85
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	73	70	73
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	82	76	80
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	105	78	78
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	95	74	77
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	83	76	86
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	75	64	71
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	84	74	81
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M	81	63	80
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M	78	56	80
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M	85	52	86
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M	69	55	80
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M	76	63	81
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M				<0.25
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M				
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M				<0.25
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M				<0.25
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M				
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M				
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M				
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M				<0.25
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M				
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M	<0.25		89.8
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M	<0.25		90.3
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M	<0.25		85.9
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M	<0.25		91.3
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<0.25		97.4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M			
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M			
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M			
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M			
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M			
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M			
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M			
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M			
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M			
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M			<5.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	23C1944-01	2023/03/16	Water	M				
SW-01	SW21-1	23D3227-01	2023/04/27	Water	M				
SW-01	SW21-1	23E2501-01	2023/05/18	Water	M				
SW-01	SW21-1	23F3813-01	2023/06/28	Water	M				
SW-01	SW21-1	23G2576-01	2023/07/20	Water	M				
SW-01	SW21-1	23H3444-01	2023/08/25	Water	M				
SW-01	SW21-1	23I2541-01	2023/09/20	Water	M				
SW-01	SW21-1	23J2428-01	2023/10/19	Water	M				
SW-01	SW21-1	23K2005-01	2023/11/16	Water	M				
SW-01	SW21-1	23L1794-01	2023/12/13	Water	M	<5.0	<5.0	<10	<5.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	1.5		
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	2.4		
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	2.1		
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	2		
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	2.4		
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M			18.2
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			19
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01		VA24A1299-001	2024/01/23	Water	M	4.4	7.30
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	4.7	8.20
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M		7.30
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	9	14.70
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	33	
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01		VA24A1299-001	2024/01/23	Water	M		0.23	103.5
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M		0.04	101.9
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	7.6	0.00	102.9
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	7	0.05	100.9
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	13.66	
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	13.90	
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	13.40	
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	12.96	
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	14.50	
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01		VA24A1299-001	2024/01/23	Water	M	3.48	2.9	207.50
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	2.59	2.93	149.30
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	2.78	2.91	153.50
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	2.9	3.01	187.80
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	3.87	3.15	
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01		VA24A1299-001	2024/01/23	Water	M	5.53	6.21	0	
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	6.49	6.27	0	
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	6.16	6.44		<1.0
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	6.24	6.44		<1.0
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	6.10	6.45	0.02	
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	3.70	
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	2.50	
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	4.30	
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	4.80	
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	5.10	
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	13	<3.0	2.22
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	12	<3.0	2.42
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<10	<3.0	2.26
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	10	<3.0	2.34
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<10	<3.0	2.21
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01		VA24A1299-001	2024/01/23	Water	M	2.11	0.79666667	0.26	<1
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	2.39	0.46	0.17	1
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	2.25	0.51	0.14	1
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	2.25	2.97	0.30	1
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	2.17	0.08	0.15	
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M		<0.0050	<0.050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M		<0.0050	<0.050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M		<0.0050	<0.050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M		<0.0050	<0.050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M		<0.0050	<0.050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.50	<0.020	0.036
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	0.62	<0.020	0.0305
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.50	<0.020	0.0278
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.50	<0.020	0.0201
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.50	<0.020	0.0261
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.0010		
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.0010		
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.0010		
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.0010		
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.0010		
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M			
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	0.51	0.193	<0.00010	<0.00010
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	0.49	0.146	<0.00010	<0.00010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0.46	0.162	<0.00010	0.00011
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	0.37	0.159	<0.00010	0.00011
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	0.46	0.148	<0.00010	<0.00010
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	0.00174	<0.000100	<0.000050	<0.010
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	0.00173	<0.000100	<0.000050	<0.010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0.00156	<0.000100	<0.000050	<0.010
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	0.00148	<0.000100	<0.000050	<0.010
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	0.0016	<0.000100	<0.000050	<0.010
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.0000050	0.734	0.000011	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.0000050	0.802	0.000012	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.0000050	0.754	0.000012	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.0000050	0.791	0.00001	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.0000050	0.74	0.00001	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00050	<0.00010
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050	<0.00010
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050	<0.00010
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050		<0.00010
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050		0.046	0.00006
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050		0.033	0.000066
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050		0.03	0.000054
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050		0.034	0.000061
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050		0.028	0.000053
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.0010	0.094	0.00149	<0.0000050
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.0010	0.101	0.00082	<0.0000050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.0010	0.0928	0.00094	<0.0000050
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.0010	0.0881	0.00089	<0.0000050
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.0010	0.089	0.00088	<0.0000050
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	0.000189	<0.00050	<0.050	0.105	
SW-01		L2754353-1	2024/01/23	Water	M					
SW-01		L2754615-1	2024/02/15	Water	M					
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	0.000227	<0.00050	<0.050	0.094	
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0.000184	<0.00050	<0.050	0.096	
SW-01		L2755012-1	2024/03/19	Water	M					
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	0.000215	<0.00050	<0.050	0.106	
SW-01		L2755503-1	2024/04/25	Water	M					
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	0.000182	<0.00050	<0.050	0.088	
SW-01		L2755523-1	2024/04/29	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	0.00032	<0.000050	1.47	<0.000010
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	0.00025	<0.000050	1.35	<0.000010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0.00029	0.00005	1.4	<0.000010
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	0.00026	<0.000050	1.18	<0.000010
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	0.00028	<0.000050	1.28	<0.000010
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	0.513	0.00312	<0.50	<0.00020
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	0.617	0.0036	<0.50	<0.00020
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0.52	0.00319	<0.50	<0.00020
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	0.536	0.00306	<0.50	<0.00020
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	0.489	0.00299	<0.50	<0.00020
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.000010	<0.00010	<0.00010	0.00223
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.000010	<0.00020	<0.00010	0.00106
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000010	<0.00010	<0.00010	0.00105
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000010	<0.00010	<0.00010	0.00108
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000010	<0.00010	<0.00010	0.00101
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00010	0.00047	<0.00050	
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00010	0.00063	<0.00050	
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00010	0.000566	<0.00050	
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00010	0.000617	<0.00050	
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00010	0.000532	<0.00050	
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.0030	<0.00020	0.147	<0.00010
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.0030	<0.00020	0.13	<0.00010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.0030	<0.00020	0.153	<0.00010
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.0030	<0.00020	0.141	<0.00010
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.0030	<0.00020	0.137	<0.00010
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00010	0.0015	<0.000100	<0.000050
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00010	0.00158	<0.000100	<0.000050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00010	0.00157	<0.000100	<0.000050
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00010	0.0014	<0.000100	<0.000050
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00010	0.00156	<0.000100	<0.000050
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.010	<0.0000050	0.703	<0.000010
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.010	<0.0000050	0.794	<0.000010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.010	<0.0000050	0.752	0.00001
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.010	<0.0000050	0.765	0.000011
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.010	<0.0000050	0.731	<0.000010
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L		
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050		
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00050	
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00010	0.0002		0.019
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00010	0.00023		0.022
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00010	<0.00020		0.02
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00010	<0.00020		0.023
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00010	0.00023		0.018
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.000050	<0.0010	0.0873	0.00081
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	0.000051	<0.0010	0.0992	0.00041
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000050	<0.0010	0.0902	0.00044
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000050	<0.0010	0.0826	0.0004
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000050	<0.0010	0.0849	0.00044
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.0000050	0.000173	<0.00050	<0.050
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.0000050	0.000207	<0.00050	<0.050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.0000050	0.000191	<0.00050	<0.050
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.0000050	0.000212	<0.00050	<0.050
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.0000050	0.000174	<0.00050	<0.050
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	0.101		0.00024	<0.000050	1.38
SW-01		L2754353-1	2024/01/23	Water	M					
SW-01		L2754615-1	2024/02/15	Water	M					
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	0.1		0.00023	<0.000050	1.22
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0.109		0.00029	<0.000050	1.38
SW-01		L2755012-1	2024/03/19	Water	M					
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	0.102		0.00025	<0.000050	1.14
SW-01		L2755503-1	2024/04/25	Water	M					
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	0.088		<0.00020	<0.000050	1.18
SW-01		L2755523-1	2024/04/29	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.000010	0.505	0.00308	<0.50
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.000010	0.598	0.00323	<0.50
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000010	0.535	0.00325	<0.50
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000010	0.548	0.00299	<0.50
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000010	0.497	0.00287	<0.50
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	0.00068	<0.00010	0.000484	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	0.00059	<0.00010	0.000538	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0.00075	<0.00010	0.000544	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	0.0006	<0.00010	0.000638	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	0.00067	<0.00010	0.000489	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M		<0.0010	<0.00020
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M		<0.0010	<0.00020
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M		<0.0010	<0.00020
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M		<0.0010	<0.00020
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M		<0.0010	<0.00020
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	0.000000043	
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.000000020	
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000000020	
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000000020	
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000000020	<0.000000020
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M			
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.25	<0.25	<0.1
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.25	<0.25	<0.1
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.25	<0.25	<0.1
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.25	<0.25	<0.1
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050		
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050		
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050		
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050		
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050		
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00020	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00020	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00020	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00020	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00020	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.00050	<0.00040
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.00050	<0.00040
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.00050	<0.00040
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.00050	<0.00040
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.00050	<0.00040
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01		VA24A1299-001	2024/01/23	Water	M	86.9	97.1
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	96	100
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	88.6	98.1
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	76.7	96.1
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	84.8	97.7
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M		<0.000010	<0.0000050
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M		<0.000010	<0.0000050
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M		<0.000010	<0.0000050
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M		<0.000010	<0.0000050
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.000010	<0.000010
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.000010	<0.000010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000010	<0.000010
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000010	<0.000010
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000010	<0.000010
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M		<0.000050
SW-01		L2754353-1	2024/01/23	Water	M		
SW-01		L2754615-1	2024/02/15	Water	M		
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M		<0.000050
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M		<0.000050
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M		<0.000050
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M		<0.000050
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M	106	105	
SW-01		L2754353-1	2024/01/23	Water	M			<0.21
SW-01		L2754615-1	2024/02/15	Water	M			<0.31
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	111	101	
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	99.8	97.8	<0.18
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M	107	108	
SW-01		L2755503-1	2024/04/25	Water	M			<1
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	105	113	<1
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	<0.26	<0.29	<0.27
SW-01		L2754615-1	2024/02/15	Water	M	<0.39	<0.32	<0.33
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.31	<0.18	<0.16
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M	<2	<2	<2
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<2	<2	<2
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M				
SW-01		L2754353-1	2024/01/23	Water	M	<0.28	0.56	3.9	<0.23
SW-01		L2754615-1	2024/02/15	Water	M	<0.31	<0.35	<1.0	<0.27
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M				
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.16	<0.36	1.2	<0.23
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M				
SW-01		L2755503-1	2024/04/25	Water	M	<2	<3	<4	<1
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<2	<3	<4	<1
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	<0.23	<0.24	<0.15
SW-01		L2754615-1	2024/02/15	Water	M	0.36	<0.24	<0.21
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0.29	<0.14	<0.096
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M	<2	<2	<2
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<2	<2	<2
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	<0.13	<0.22	0.17
SW-01		L2754615-1	2024/02/15	Water	M	<0.18	<0.25	<0.21
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.10	<0.14	<0.10
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M	<2	<2	<2
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<2	<2	<2
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	0.47	<0.30	<0.82
SW-01		L2754615-1	2024/02/15	Water	M	<0.26	<0.31	4.34
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.16	<0.22	0.4
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M	<3	<3	<4
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	<3	<3	<4
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01		VA24A1299-001	2024/01/23	Water	M		
SW-01		L2754353-1	2024/01/23	Water	M	0	1
SW-01		L2754615-1	2024/02/15	Water	M	0	0
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M		
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0	0
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M		
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M		
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01		VA24A1299-001	2024/01/23	Water	M		
SW-01		L2754353-1	2024/01/23	Water	M	0	0
SW-01		L2754615-1	2024/02/15	Water	M	0	0
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M		
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0	0
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M		
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M		
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01		VA24A1299-001	2024/01/23	Water	M		
SW-01		L2754353-1	2024/01/23	Water	M	0	0
SW-01		L2754615-1	2024/02/15	Water	M	0	1
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M		
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0	0
SW-01		L2755012-1	2024/03/19	Water	M		
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M		
SW-01		L2755503-1	2024/04/25	Water	M		
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M		
SW-01		L2755523-1	2024/04/29	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	0	1	<0.41
SW-01		L2754615-1	2024/02/15	Water	M	0	2	<0.35
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	1	0	<0.36
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M				
SW-01		L2754353-1	2024/01/23	Water	M	0.31	<0.29	<0.22	<0.26
SW-01		L2754615-1	2024/02/15	Water	M	<0.31	<0.33	<0.25	<0.39
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M				
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.22	<0.18	<0.14	<0.31
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M				
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M				
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M				
SW-01		L2754353-1	2024/01/23	Water	M	<0.24	<0.21	0.38	
SW-01		L2754615-1	2024/02/15	Water	M	0.36	<0.31	0.45	
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M				
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	<0.14	0.45	<0.23	
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M				
SW-01		L2755503-1	2024/04/25	Water	M				0
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M				0
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M			0.00118
SW-01		L2754615-1	2024/02/15	Water	M			0.012
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M			0.000119
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M	0	0	
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M	0	0	
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	0.383	0.738	72
SW-01		L2754615-1	2024/02/15	Water	M	0.507	1	80
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	0.337	0.665	91
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	65	76	64
SW-01		L2754615-1	2024/02/15	Water	M	74	85	83
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	86	86	87
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	65	66	69
SW-01		L2754615-1	2024/02/15	Water	M	85	82	93
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	95	91	91
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	68	55	61
SW-01		L2754615-1	2024/02/15	Water	M	86	68	84
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	89	90	98
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	70	56	60
SW-01		L2754615-1	2024/02/15	Water	M	87	73	75
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	93	88	83
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M	57	47	65
SW-01		L2754615-1	2024/02/15	Water	M	73	50	87
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M	79	88	83
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M				<0.25
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M				<0.25
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M				
SW-01		L2755012-1	2024/03/19	Water	M				<0.25
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M				
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M				
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01		VA24A1299-001	2024/01/23	Water	M	<0.25		113
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M	<0.25		95.6
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M			
SW-01		L2755012-1	2024/03/19	Water	M	<0.25		124
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M			
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M			
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M			
SW-01		L2754353-1	2024/01/23	Water	M			
SW-01		L2754615-1	2024/02/15	Water	M			
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M			
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M			
SW-01		L2755012-1	2024/03/19	Water	M			
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M			
SW-01		L2755503-1	2024/04/25	Water	M			
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M			
SW-01		L2755523-1	2024/04/29	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24A1299-001	2024/01/23	Water	M				
SW-01		L2754353-1	2024/01/23	Water	M				
SW-01		L2754615-1	2024/02/15	Water	M				
SW-01	SW21-1	VA24A3090-001	2024/02/15	Water	M				
SW-01	SW21-1	VA24A5796-001	2024/03/19	Water	M				
SW-01		L2755012-1	2024/03/19	Water	M				
SW-01	SW21-1	VA24A9057-001	2024/04/25	Water	M				
SW-01		L2755503-1	2024/04/25	Water	M				
SW-01	SW-01	VA24A9285-001	2024/04/29	Water	M				
SW-01		L2755523-1	2024/04/29	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	1.7		
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	1.2		
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	1.4		
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	1.5		
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	1.2		
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			16.8
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			18.8
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	3.3	5.10
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	30	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	2.8	4.40
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	3.9	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	2.6	4.00
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	8.6	0.02	100.0
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	6.2	0.00	99.3
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	6.3	0.00	101.5
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	12.43	
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	14.66	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	12.30	
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M		
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	12.26	
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	3.03	2.93	125.60
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	3.15	3.17	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	3.29	3.55	171.20
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	2.66	2.68	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	3.23	2.96	155.50
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	6.53	6.36	0	<1.0
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	7.30	6.3	0.02	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	5.88	6.28	0	<1.0
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	7.20	6.32	0	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	6.07	6.29	0	<1.0
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	6.10	
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	8.00	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	6.20	
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	7.30	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	7.20	
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	12	<3.0	2.46
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<10	<3.0	1.97
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	11	<3.0	2.01
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<10	<3.0	1.92
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<10	<3.0	1.95
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	2.42	4.44	0.22	<1
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	2.06	0.57	0.14	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	2.04	0	0.16	<1
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	1.82	0.17	0.30	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	1.8	0.17	0.16	<1
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M		<0.0050	<0.050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M		<0.0050	<0.050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M		<0.0050	<0.050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M		<0.0050	<0.050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M		<0.0050	<0.050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.50	<0.020	0.0259
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.50	<0.020	0.0135
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.50	<0.020	0.0127
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.50	<0.020	0.0131
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.50	<0.020	0.0121
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.0010		
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.0010		
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.0010		
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.0010		
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.0010		
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	0.44	0.143	<0.00010	<0.00010
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	0.35	0.153	<0.00010	<0.00010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	0.33	0.164	<0.00010	0.00012
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.30	0.18	<0.00010	<0.00010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	0.33	0.15	<0.00010	0.0001
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	0.00162	<0.000100	<0.000050	<0.010
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	0.00133	<0.000100	<0.000050	<0.010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	0.00144	<0.000100	<0.000050	<0.010
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	0.00132	<0.000100	<0.000050	<0.010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	0.00136	<0.000100	<0.000050	<0.010
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.0000050	0.819	0.000011	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.0000050	0.66	<0.000010	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.0000050	0.682	<0.000010	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.0000050	0.647	<0.000010	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.0000050	0.66	0.000012	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050	<0.00010
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050		<0.00010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00010
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050		<0.00010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00010
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050		0.025	<0.000050
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050		0.028	0.000058
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050		0.03	0.000059
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050		0.029	0.000056
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050		0.031	0.000058
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.0010	0.101	0.0008	<0.0000050
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.0010	0.0775	0.00096	<0.0000050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.0010	0.0748	0.0009	<0.0000050
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.0010	0.0737	0.00093	<0.0000050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.0010	0.074	0.00091	<0.0000050
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	0.000235	<0.00050	<0.050	0.113	
SW-01		L2755588-1	2024/05/02	Water	M					
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	0.000192	<0.00050	<0.050	0.094	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	0.000183	<0.00050	<0.050	0.069	
SW-01		L2755694-1	2024/05/10	Water	M					
SW-01		L2755695-1	2024/05/10	Water	M					
SW-01		L2755788-1	2024/05/15	Water	M					
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	0.000177	<0.00050	<0.050	0.076	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	0.000195	<0.00050	<0.050	0.077	
SW-01		L2755820-1	2024/05/16	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	0.00028	<0.000050	1.3	<0.000010
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	0.00024	<0.000050	1.2	<0.000010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	0.00021	<0.000050	1.09	<0.000010
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	0.00024	<0.000050	0.94	<0.000010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	0.00023	<0.000050	1.05	<0.000010
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	0.6	0.00324	<0.50	<0.00020
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	0.47	0.00274	<0.50	<0.00020
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	0.444	0.00257	<0.50	<0.00020
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	0.445	0.00257	<0.50	<0.00020
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	0.455	0.0026	<0.50	<0.00020
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000010	<0.00010	<0.00010	0.00078
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000010	<0.00010	<0.00010	0.00123
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000010	<0.00010	<0.00010	0.00109
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000010	<0.00010	<0.00010	0.00106
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000010	<0.00010	<0.00010	0.00094
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00010	0.000609	<0.00050	
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00010	0.000593	<0.00050	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00010	0.000566	<0.00050	
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00010	0.000587	<0.00050	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00010	0.0006	<0.00050	
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.0030	<0.00020	0.133	<0.00010
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.0030	<0.00020	0.148	<0.00010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.0030	<0.00020	0.151	<0.00010
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.0030	<0.00020	0.136	<0.00010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.0030	<0.00020	0.136	<0.00010
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00010	0.00153	<0.000100	<0.000050
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00010	0.00132	<0.000100	<0.000050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00010	0.00127	<0.000100	<0.000050
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00010	0.00124	<0.000100	<0.000050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00010	0.00124	<0.000100	<0.000050
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.010	<0.0000050	0.803	0.00001
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.010	<0.0000050	0.702	0.00001
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.010	<0.0000050	0.671	<0.000010
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.010	<0.0000050	0.617	<0.000010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.010	<0.0000050	0.601	<0.000010
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00050	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00050	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00010	<0.00020		0.017
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00010	0.00021		0.02
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00010	<0.00020		0.021
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00010	<0.00020		0.02
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00010	<0.00020		0.02
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000050	<0.0010	0.1	0.00035
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000050	<0.0010	0.0752	0.00039
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000050	<0.0010	0.0874	0.00036
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000050	<0.0010	0.0678	0.00037
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000050	<0.0010	0.0729	0.0004
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.0000050	0.000235	<0.00050	<0.050
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.0000050	0.000194	<0.00050	<0.050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.0000050	0.000191	<0.00050	<0.050
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.0000050	0.00018	<0.00050	<0.050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.0000050	0.000177	<0.00050	<0.050
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	0.109		0.00025	<0.000050	1.27
SW-01		L2755588-1	2024/05/02	Water	M					
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	0.095		0.00023	<0.000050	1.09
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	0.084		0.00022	<0.000050	1.08
SW-01		L2755694-1	2024/05/10	Water	M					
SW-01		L2755695-1	2024/05/10	Water	M					
SW-01		L2755788-1	2024/05/15	Water	M					
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	0.077		<0.00020	<0.000050	0.917
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	0.074		0.00021	<0.000050	0.903
SW-01		L2755820-1	2024/05/16	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000010	0.611	0.00326	<0.50
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000010	0.493	0.00274	<0.50
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000010	0.467	0.0027	<0.50
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000010	0.442	0.00241	<0.50
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000010	0.481	0.00242	<0.50
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	0.00052	<0.00010	0.000562	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	0.00061	<0.00010	0.000578	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	0.00069	<0.00010	0.000587	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	0.00061	<0.00010	0.00052	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	0.00074	<0.00010	0.000507	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M		<0.0010	<0.00020
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M		<0.0010	<0.00020
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M		<0.0010	<0.00020
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M		<0.0010	<0.00020
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M		<0.0010	<0.00020
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000000020	
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000000020	<0.000000020
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000000020	
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000000020	<0.000000020
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000000020	
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.25	<0.25	0.1
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.25	<0.25	<0.1
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.25	<0.25	<0.1
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	0.1	<0.00050	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl- ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050		
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050		
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050		
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050		
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050		
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00020	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00020	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00020	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00020	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00020	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.00050	<0.00040
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.00050	<0.00040
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.00050	<0.00040
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.00050	<0.00040
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.00050	<0.00040
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	98.3	95.3
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	86.3	103
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	84.9	102
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	84.5	94.4
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	85	94.4
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M		<0.000010	<0.0000050
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M		<0.000010	<0.0000050
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M		<0.000010	<0.0000050
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000010	<0.000010
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000010	<0.000010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000010	<0.000010
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000010	<0.000010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000010	<0.000010
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M		<0.000050
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M		<0.000050
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M		<0.000050
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M		<0.000050
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M		<0.000050
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M	80.2	109	
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	93.1	107	<1
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M	90.3	106	
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M	104	114	
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M	102	105	
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<2	<2	<2
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M				
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<2	<3	<4	<1
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M				
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M				
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M				
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<2	<2	<2
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<2	<2	<2
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	<3	<3	<4
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M		
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M		
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M		
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M		
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M		
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M		
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M		
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M		
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M		
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M		
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M		
SW-01		L2755588-1	2024/05/02	Water	M		
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M		
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M		
SW-01		L2755694-1	2024/05/10	Water	M		
SW-01		L2755695-1	2024/05/10	Water	M		
SW-01		L2755788-1	2024/05/15	Water	M		
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M		
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M		
SW-01		L2755820-1	2024/05/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M				
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M				
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M				
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M				
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M				
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M				
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M				0
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M				
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M				
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M				
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M	0	0	
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M				
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M				
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M				
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M				
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M				
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M			
SW-01		L2755588-1	2024/05/02	Water	M			
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M			
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M			
SW-01		L2755694-1	2024/05/10	Water	M			
SW-01		L2755695-1	2024/05/10	Water	M			
SW-01		L2755788-1	2024/05/15	Water	M			
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M			
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M			
SW-01		L2755820-1	2024/05/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24A9687-001	2024/05/02	Water	M				
SW-01		L2755588-1	2024/05/02	Water	M				
SW-01	SW-01	VA24B0452-001	2024/05/10	Water	M				
SW-01	SW21-1	VA24B0401-001	2024/05/10	Water	M				
SW-01		L2755694-1	2024/05/10	Water	M				
SW-01		L2755695-1	2024/05/10	Water	M				
SW-01		L2755788-1	2024/05/15	Water	M				
SW-01	SW-01	VA24B1054-001	2024/05/16	Water	M				
SW-01	SW21-1	VA24B1087-001	2024/05/16	Water	M				
SW-01		L2755820-1	2024/05/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	1.9		
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	1.8		
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	1.3		
SW-01		VA24B4655-001	2024/06/20	Water	M	2.4		
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	2.3		
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	2		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			17.9
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			17
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			12.8

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01		VA24B1628-001	2024/05/22	Water	M	29	
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	9.1	13.60
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	21	
SW-01		VA24B4655-001	2024/06/20	Water	M	3.9	5.60
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M	11	
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M	5.3	7.00

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	6.2	0.10	97.3
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M	7	0.90	94.7
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	8.6	0.10	100.9

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M		
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	11.65	
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	15.77	
SW-01		VA24B4655-001	2024/06/20	Water	M	10.90	
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M	11.72	
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M	10.78	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01		VA24B1628-001	2024/05/22	Water	M	3.4	3.13	
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	2.6	2.3	117.90
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	3.19	3.36	
SW-01		VA24B4655-001	2024/06/20	Water	M	3.11	2.65	170.80
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	2.48	2.3	
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	2.98	2.61	171.20

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01		VA24B1628-001	2024/05/22	Water	M	8.30	6.39	0.02	
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	6.26	6.15	0.01	<1.0
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	6.10	6.1	0.01	
SW-01		VA24B4655-001	2024/06/20	Water	M	6.60	6.5	0	<1.0
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	6.40	6.48	0.01	
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	6.46	6.56	0	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	7.90	
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	7.60	
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	7.00	
SW-01		VA24B4655-001	2024/06/20	Water	M	9.40	
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M	10.30	
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M	12.40	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	12	<3.0	2.13
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<10	<3.0	2.14
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	19	<3.0	1.89
SW-01		VA24B4655-001	2024/06/20	Water	M	<10	3.3	2.13
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	13	<3.0	2.29
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	22	<3.0	2.38

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01		VA24B1628-001	2024/05/22	Water	M	2.17	0.7	0.16	
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	2.09	0.23	0.18	<1
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	1.88	0	0.21	
SW-01		VA24B4655-001	2024/06/20	Water	M	2.2	4.7	0.20	2
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	2.15	0	0.17	
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	2.49	0	0.27	4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M		<0.0050	<0.050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M		<0.0050	<0.050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M		<0.0050	<0.050
SW-01		VA24B4655-001	2024/06/20	Water	M		<0.0050	<0.050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M		<0.0050	<0.050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.50	<0.020	0.013
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.50	<0.020	0.0134
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.50	<0.020	0.0166
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.50	<0.020	0.0243
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	0.5	<0.020	0.0222
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	0.58	<0.020	0.0336

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.0010		
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.0010		
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.0010		
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.0010		
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.0010		
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	0.32	0.154	<0.00010	<0.00010
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	0.33	0.141	<0.00010	<0.00010
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.30	0.188	<0.00010	<0.00010
SW-01		VA24B4655-001	2024/06/20	Water	M	0.36	0.126	<0.00010	<0.00010
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	0.36	0.126	<0.00010	0.00013
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	0.36	0.12	<0.00010	0.0001

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	0.0014	<0.000100	<0.000050	<0.010
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	0.00142	<0.000100	<0.000050	<0.010
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	0.00149	<0.000100	<0.000050	<0.010
SW-01		VA24B4655-001	2024/06/20	Water	M	0.00155	<0.000100	<0.000050	<0.010
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	0.0019	<0.000100	<0.000050	<0.010
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	0.00166	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.0000050	0.731	0.00001	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.0000050	0.728	0.00001	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.0000050	0.636	0.00001	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.0000050	0.713	0.000011	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.0000050	0.764	0.000011	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.0000050	0.793	0.000014	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050		<0.00010
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00010
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050		<0.00010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050	<0.00010
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050		<0.00010
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050		0.028	0.000058
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050		0.027	0.000052
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050		0.043	0.000076
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050		0.036	0.000056
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050		0.041	0.000069
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050		0.039	0.000066

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.0010	0.0751	0.00099	<0.0000050
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.0010	0.0774	0.0009	<0.0000050
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.0010	0.073	0.00118	<0.0000050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.0010	0.0861	0.00103	<0.0000050
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.0010	0.0923	0.001	<0.0000050
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.0010	0.0978	0.001	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	0.00019	<0.00050	<0.050	0.068	
SW-01		L2755902-1	2024/05/22	Water	M					
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	0.000213	<0.00050	<0.050	0.068	
SW-01		L2755916-1	2024/05/23	Water	M					
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	0.000166	<0.00050	<0.050	0.085	
SW-01		VA24B4655-001	2024/06/20	Water	M	0.000195	<0.00050	<0.050	0.094	
SW-01		L2756326-1	2024/06/20	Water	M					
SW-01		VA24B5289-001	2024/06/26	Water	M	0.000242	<0.00050	<0.050	0.101	
SW-01		L2756419-1	2024/06/26	Water	M					
SW-01		VA24B7579-001	2024/07/18	Water	M	0.000247	<0.00050	<0.050	0.096	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	0.00021	<0.000050	1.08	<0.000010
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	0.00021	<0.000050	1.08	<0.000010
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	0.00024	<0.000050	1	<0.000010
SW-01		VA24B4655-001	2024/06/20	Water	M	0.00029	<0.000050	1.1	<0.000010
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	0.00026	<0.000050	1.14	<0.000010
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	0.00023	<0.000050	1.1	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	0.467	0.00267	<0.50	<0.00020
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	0.497	0.00273	<0.50	<0.00020
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	0.425	0.00253	<0.50	<0.00020
SW-01		VA24B4655-001	2024/06/20	Water	M	0.576	0.00291	<0.50	<0.00020
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	0.826	0.00306	<0.50	<0.00020
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	0.607	0.00334	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000010	<0.00010	<0.00010	0.001
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000010	<0.00010	<0.00010	0.00089
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.000010	<0.00010	<0.00010	0.00134
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000010	<0.00010	<0.00010	0.00086
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000010	<0.00010	<0.00010	0.00084
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.000010	<0.00010	<0.00010	0.00076

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00010	0.000557	<0.00050	
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00010	0.00057	<0.00050	
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00010	0.000566	<0.00050	
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00010	0.000609	<0.00050	
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00010	0.000586	<0.00050	
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00010	0.000526	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.0030	<0.00020	0.15	<0.00010
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.0030	<0.00020	0.134	<0.00010
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.0030	<0.00020	0.17	<0.00010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.0030	<0.00020	0.113	<0.00010
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.0030	<0.00020	0.114	<0.00010
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.0030	<0.00020	0.111	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00010	0.00134	<0.000100	<0.000050
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00010	0.00135	<0.000100	<0.000050
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00010	0.00144	<0.000100	<0.000050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00010	0.0015	<0.000100	<0.000050
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00010	0.00151	<0.000100	<0.000050
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00010	0.00159	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.010	<0.0000050	0.745	<0.000010
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.010	<0.0000050	0.716	<0.000010
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.010	<0.0000050	0.636	<0.000010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.010	<0.0000050	0.746	0.000011
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.010	<0.0000050	0.724	0.000011
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.010	<0.0000050	0.835	0.000012

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00050	
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00050	
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00050	
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00010	<0.00020		0.018
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00010	0.0002		0.016
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00010	0.00021		0.029
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00010	<0.00020		0.021
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00010	0.0003		0.023
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00010	<0.00020		0.024

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000050	<0.0010	0.0744	0.00051
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000050	<0.0010	0.0744	0.00038
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	0.000059	<0.0010	0.0703	0.00055
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000050	<0.0010	0.0833	0.00037
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000050	<0.0010	0.0838	0.00037
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.000050	<0.0010	0.0979	0.00035

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.0000050	0.000186	<0.00050	<0.050
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.0000050	0.000195	<0.00050	<0.050
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.0000050	0.000133	<0.00050	<0.050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.0000050	0.000238	<0.00050	<0.050
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.0000050	0.000218	<0.00050	<0.050
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.0000050	0.000215	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	0.07		0.00024	<0.000050	1.02
SW-01		L2755902-1	2024/05/22	Water	M					
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	0.068		0.00026	<0.000050	1.07
SW-01		L2755916-1	2024/05/23	Water	M					
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	0.074		0.00022	<0.000050	0.922
SW-01		VA24B4655-001	2024/06/20	Water	M	0.092		0.00025	<0.000050	1.03
SW-01		L2756326-1	2024/06/20	Water	M					
SW-01		VA24B5289-001	2024/06/26	Water	M	0.108		0.00029	<0.000050	1.05
SW-01		L2756419-1	2024/06/26	Water	M					
SW-01		VA24B7579-001	2024/07/18	Water	M	0.12		0.00024	<0.000050	1.05

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000010	0.467	0.00268	<0.50
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000010	0.482	0.00265	<0.50
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.000010	0.406	0.00244	<0.50
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000010	0.554	0.00288	<0.50
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000010	0.56	0.00306	<0.50
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.000010	0.658	0.00332	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00020	<0.000010	<0.00010	0.00011
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	0.00067	<0.00010	0.000524	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	0.00066	<0.00010	0.00054	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	0.00084	<0.00010	0.000535	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	0.00056	<0.00010	0.000542	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	0.00047	<0.00010	0.00056	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	0.00063	<0.00010	0.000504	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M		<0.0010	<0.00020
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M		<0.0010	<0.00020
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M		<0.0010	<0.00020
SW-01		VA24B4655-001	2024/06/20	Water	M		<0.0010	<0.00020
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M		<0.0010	<0.00020
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000000020	<0.000000020
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000000020	
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.000000020	0.00000003
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000000030	
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000000020	<0.000000180
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M	0.000000022	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.25	<0.25	<0.1
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.25	<0.25	<0.1
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.25	<0.25	<0.1
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.25	<0.25	<0.1
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.25	<0.25	<0.1
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.1	<0.00050	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00050	<0.00040
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050		
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050		
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050		
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050		
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050		
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00050	<0.0050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00050	<0.0010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00075	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00020	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00020	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00020	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00020	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00020	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.00050	<0.00040
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.00050	<0.00040
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.00050	<0.00040
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.00050	<0.00040
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.00050	<0.00040
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01		VA24B1628-001	2024/05/22	Water	M	86.8	98.3
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	85.2	96.8
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	90.4	100
SW-01		VA24B4655-001	2024/06/20	Water	M	76.8	99.9
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M	87.7	97.9
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M	84.4	100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M		<0.000010	<0.0000050
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M		<0.000010	<0.0000050
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M		<0.000010	<0.0000050
SW-01		VA24B4655-001	2024/06/20	Water	M		<0.000010	<0.0000050
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M		<0.000010	<0.0000050
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000010	<0.000010
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000010	<0.000010
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.000010	<0.000010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000010	<0.000010
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000010	<0.000010
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	<0.000050	<0.000020	<0.000010
SW-01		VA24B4655-001	2024/06/20	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M		<0.000050
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M		<0.000050
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M		<0.000050
SW-01		VA24B4655-001	2024/06/20	Water	M		<0.000050
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M		<0.000050
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M		<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M	82.6	104	
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M	94.5	115	
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M	75.5	90.4	
SW-01		VA24B4655-001	2024/06/20	Water	M	105	106	<1
SW-01		L2756326-1	2024/06/20	Water	M			<1
SW-01		VA24B5289-001	2024/06/26	Water	M	79.6	100	<1
SW-01		L2756419-1	2024/06/26	Water	M			<1
SW-01		VA24B7579-001	2024/07/18	Water	M	100	112	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M	<2	<2	<2
SW-01		L2756326-1	2024/06/20	Water	M	<2	<2	<2
SW-01		VA24B5289-001	2024/06/26	Water	M	<2	<2	<2
SW-01		L2756419-1	2024/06/26	Water	M	<2	<2	<2
SW-01		VA24B7579-001	2024/07/18	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M				
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M				
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M				
SW-01		VA24B4655-001	2024/06/20	Water	M	<2	<3	<4	<1
SW-01		L2756326-1	2024/06/20	Water	M	<2	<3	<4	<1
SW-01		VA24B5289-001	2024/06/26	Water	M	<2	<3	<4	<1
SW-01		L2756419-1	2024/06/26	Water	M	<2	<3	<4	<1
SW-01		VA24B7579-001	2024/07/18	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M	<2	<2	<2
SW-01		L2756326-1	2024/06/20	Water	M	<2	<2	<2
SW-01		VA24B5289-001	2024/06/26	Water	M	<2	<2	<2
SW-01		L2756419-1	2024/06/26	Water	M	<2	<2	<2
SW-01		VA24B7579-001	2024/07/18	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M	<2	<2	<2
SW-01		L2756326-1	2024/06/20	Water	M	<2	<2	<2
SW-01		VA24B5289-001	2024/06/26	Water	M	<2	<2	<2
SW-01		L2756419-1	2024/06/26	Water	M	<2	<2	<2
SW-01		VA24B7579-001	2024/07/18	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M	<3	<3	<4
SW-01		L2756326-1	2024/06/20	Water	M	<3	<3	<4
SW-01		VA24B5289-001	2024/06/26	Water	M	<3	<3	<4
SW-01		L2756419-1	2024/06/26	Water	M	<3	<3	<4
SW-01		VA24B7579-001	2024/07/18	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01		VA24B1628-001	2024/05/22	Water	M		
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M		
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M		
SW-01		VA24B4655-001	2024/06/20	Water	M		
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M		
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01		VA24B1628-001	2024/05/22	Water	M		
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M		
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M		
SW-01		VA24B4655-001	2024/06/20	Water	M		
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M		
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01		VA24B1628-001	2024/05/22	Water	M		
SW-01		L2755902-1	2024/05/22	Water	M		
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M		
SW-01		L2755916-1	2024/05/23	Water	M		
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M		
SW-01		VA24B4655-001	2024/06/20	Water	M		
SW-01		L2756326-1	2024/06/20	Water	M		
SW-01		VA24B5289-001	2024/06/26	Water	M		
SW-01		L2756419-1	2024/06/26	Water	M		
SW-01		VA24B7579-001	2024/07/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M				
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M				
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M				
SW-01		VA24B4655-001	2024/06/20	Water	M				
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M				
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M				
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M				
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M				
SW-01		VA24B4655-001	2024/06/20	Water	M				0
SW-01		L2756326-1	2024/06/20	Water	M				0
SW-01		VA24B5289-001	2024/06/26	Water	M				0
SW-01		L2756419-1	2024/06/26	Water	M				0
SW-01		VA24B7579-001	2024/07/18	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M	0	0	
SW-01		L2756326-1	2024/06/20	Water	M	0	0	
SW-01		VA24B5289-001	2024/06/26	Water	M	0	0	
SW-01		L2756419-1	2024/06/26	Water	M	0	0	
SW-01		VA24B7579-001	2024/07/18	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M				
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M				
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M				
SW-01		VA24B4655-001	2024/06/20	Water	M				
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M				
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M			
SW-01		L2755902-1	2024/05/22	Water	M			
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M			
SW-01		L2755916-1	2024/05/23	Water	M			
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M			
SW-01		VA24B4655-001	2024/06/20	Water	M			
SW-01		L2756326-1	2024/06/20	Water	M			
SW-01		VA24B5289-001	2024/06/26	Water	M			
SW-01		L2756419-1	2024/06/26	Water	M			
SW-01		VA24B7579-001	2024/07/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01		VA24B1628-001	2024/05/22	Water	M				
SW-01		L2755902-1	2024/05/22	Water	M				
SW-01	SW21-1	VA24B1693-001	2024/05/23	Water	M				
SW-01		L2755916-1	2024/05/23	Water	M				
SW-01	SW-01	VA24B1929-001	2024/05/27	Water	M				
SW-01		VA24B4655-001	2024/06/20	Water	M				
SW-01		L2756326-1	2024/06/20	Water	M				
SW-01		VA24B5289-001	2024/06/26	Water	M				
SW-01		L2756419-1	2024/06/26	Water	M				
SW-01		VA24B7579-001	2024/07/18	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	2.4		
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	2.2		
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	1.9		
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	2.3		
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	3.1		
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M	22	
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	7	9.50
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	92	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	7	9.40
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	8	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	9.2	0.10	101.0
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	11.4	0.04	102.4
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M	9.50	
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	11.09	
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M		
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	11.11	
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	11.06	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	2.64	2.46	
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	2.33	2.13	190.20
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	3.55	3.4	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	2.3	2.17	130.50
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	2.76	2.68	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	6.50	6.5	0.02	
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	6.38	6.44	0	<1.0
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	6.80	6.48	0.05	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	6.46	6.57	0	<1.0
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	5.50	6.63	0	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M	12.20	
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	11.20	
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	12.10	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	11.69	
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	11.70	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<10	<3.0	2.29
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	12	<3.0	2.46
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<10	<3.0	2.88
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	15	<3.0	2.67
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	24	<3.0	3.06
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	2.36	0.49	0.28	
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	2.49	0.12	0.15	3
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	2.7	0	0.33	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	2.57	1.57	0.17	<1
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	2.72	0	0.25	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M		<0.0050	<0.050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M		<0.0050	<0.050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M		<0.0050	<0.050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M		<0.0050	<0.050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M		<0.0050	<0.050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	0.56	<0.020	0.0276
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	0.65	<0.020	0.0441
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.50	<0.020	0.0552
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0.66	<0.020	0.0406
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.59	<0.020	0.046
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.0010		
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.0010		
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.0010		
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.0010		
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.0010		
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	0.31	0.115	<0.00010	0.0001
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	0.43	0.114	<0.00010	<0.00010
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0.38	0.162	<0.00010	0.00013
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0.36	0.1	<0.00010	<0.00010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.38	0.126	<0.00010	0.00014
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	0.00171	<0.000100	<0.000050	<0.010
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	0.00166	<0.000100	<0.000050	<0.010
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0.00207	<0.000100	<0.000050	<0.010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0.00173	<0.000100	<0.000050	<0.010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.00201	<0.000100	<0.000050	<0.010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.0000050	0.762	0.000012	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.0000050	0.816	0.000013	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.0000050	0.972	0.000013	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.0000050	0.902	0.000013	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.0000050	1.05	0.000017	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050		<0.00010
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050	<0.00010
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050		<0.00010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050		<0.00010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050		0.033	0.000051
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050		0.032	0.000062
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050		0.037	0.000074
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050		0.033	0.000058
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.00062		0.038	0.00007
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.0010	0.0948	0.0009	<0.0000050
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.0010	0.103	0.00102	<0.0000050
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.0010	0.109	0.00138	<0.0000050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.0010	0.102	0.00101	<0.0000050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.0010	0.106	0.00122	<0.0000050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M					
SW-01		VA24B8974-001	2024/07/31	Water	M	0.000261	<0.00050	<0.050	0.101	
SW-01		L2756871-1	2024/07/31	Water	M					
SW-01		VA24C1546-001	2024/08/22	Water	M	0.000259	<0.00050	<0.050	0.118	
SW-01		L2757144-1	2024/08/22	Water	M					
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0.000309	<0.00050	<0.050	0.122	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M					
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0.000287	<0.00050	<0.050	0.113	
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.000372	<0.00050	<0.050	0.127	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	0.00029	<0.000050	1.17	<0.000010
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	0.00027	<0.000050	1.1	<0.000010
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0.00028	<0.000050	1.51	<0.000010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0.00026	<0.000050	1.17	<0.000010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.0003	<0.000050	1.61	<0.000010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	0.657	0.00319	<0.50	<0.00020
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	0.671	0.00334	<0.50	<0.00020
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0.694	0.00354	<0.50	<0.00020
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0.702	0.00326	<0.50	<0.00020
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.762	0.00362	<0.50	<0.00020
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000010	<0.00010	<0.00010	0.00074
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000010	<0.00010	<0.00010	0.00078
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000010	<0.00010	<0.00010	0.00111
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000010	<0.00010	<0.00010	0.00068
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000010	<0.00010	<0.00010	0.00092
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00010	0.000535	<0.00050	
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00010	0.000485	<0.00050	
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00010	0.000686	<0.00050	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00010	0.000515	<0.00050	
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00010	0.000648	<0.00050	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.0030	<0.00020	0.102	<0.00010
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.0030	<0.00020	0.0971	<0.00010
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.0030	<0.00020	0.143	<0.00010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.0030	<0.00020	0.1	<0.00010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.0030	<0.00020	0.113	<0.00010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00010	0.00165	<0.000100	<0.000050
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00010	0.00162	<0.000100	<0.000050
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00010	0.00176	<0.000100	<0.000050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0.0001	0.00186	<0.000100	<0.000050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.00011	0.00182	<0.000100	<0.000050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.010	<0.0000050	0.792	0.00001
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	0.02	<0.0000050	0.839	0.000012
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.010	<0.0000050	0.912	0.000011
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.010	<0.0000050	0.854	0.000014
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.010	<0.0000050	0.916	0.000014
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00050	
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00050	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00050	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00010	0.00023		0.21
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00010	<0.00020		0.019
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00010	0.00032		0.022
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00010	0.00024		0.022
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00010	0.0003		0.024
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000050	<0.0010	0.0942	0.00108
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000050	<0.0010	0.0958	0.00037
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000050	<0.0010	0.103	0.00072
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000050	<0.0010	0.106	0.00033
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000050	<0.0010	0.104	0.00053
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.0000050	0.00026	<0.00050	<0.050
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.0000050	0.00025	<0.00050	<0.050
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.0000050	0.000296	<0.00050	<0.050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.0000050	0.000305	<0.00050	<0.050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.0000050	0.000346	<0.00050	<0.050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M					
SW-01		VA24B8974-001	2024/07/31	Water	M	0.074		0.00028	<0.000050	1.13
SW-01		L2756871-1	2024/07/31	Water	M					
SW-01		VA24C1546-001	2024/08/22	Water	M	0.11		0.00025	<0.000050	1.1
SW-01		L2757144-1	2024/08/22	Water	M					
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0.13		0.00029	<0.000050	1.44
SW-01	SW-01	L2757209-1	2024/08/27	Water	M					
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0.14		0.00032	<0.000050	1.14
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.128		0.00031	<0.000050	1.55
SW-01	SW-01	L2757584-1	2024/09/28	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000010	0.623	0.00313	<0.50
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000010	0.659	0.00311	<0.50
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000010	0.686	0.00342	<0.50
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000010	0.748	0.0037	<0.50
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000010	0.696	0.00357	<0.50
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00020	<0.000010	<0.00010	0.00014
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	0.00038	<0.00010	0.000492	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	0.00041	<0.00010	0.000464	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0.00068	<0.00010	0.000645	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0.00043	<0.00010	0.000464	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.00043	<0.00010	0.000584	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M		<0.0010	<0.00020
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M		<0.0010	<0.00020
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M		<0.0010	<0.00020
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M		<0.0010	<0.00020
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M		<0.0010	<0.00020
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000000020	0.000000032
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	0.000000028	
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000000020	0.000000026
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000000020	
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.000000023	0.000000039
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.25	<0.25	<0.1
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.25	<0.25	<0.1
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.1	<0.00050	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050	<0.00040
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050		
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050		
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050		
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050		
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050		
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050	<0.0050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050	<0.0010
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00075	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethyle ne
						mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00020	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00020	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.00050	<0.00040
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.00050	<0.00040
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M	91.5	94.8
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	91	101
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	90	101
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	88.6	101
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	95.3	99.7
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M		<0.000010	<0.0000050
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M		<0.000010	<0.0000050
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000010	<0.000010
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000010	<0.000010
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000050	<0.000020	<0.000010
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M		<0.000050
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.000050	
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M		<0.000050
SW-01	SW-01	L2757209-1	2024/08/27	Water	M		
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.000050	
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.000050	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01		L2756717-1	2024/07/18	Water	M			<1
SW-01		VA24B8974-001	2024/07/31	Water	M	106	113	<1
SW-01		L2756871-1	2024/07/31	Water	M			<1
SW-01		VA24C1546-001	2024/08/22	Water	M	99.8	111	<0.32
SW-01		L2757144-1	2024/08/22	Water	M			<1
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	91.6	102	<0.31
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			<0.28
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	88.9	95.8	1.4
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	73.8	98	<0.35
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01		L2756717-1	2024/07/18	Water	M	<2	<2	<2
SW-01		VA24B8974-001	2024/07/31	Water	M	<2	<2	<2
SW-01		L2756871-1	2024/07/31	Water	M	<2	<2	<2
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.34	<0.16	<0.16
SW-01		L2757144-1	2024/08/22	Water	M	<2	<2	<2
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.23	<0.33	<0.32
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	<0.21	<0.25	<0.24
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.25	<0.14	<0.14
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.39	<0.39	<0.38
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01		L2756717-1	2024/07/18	Water	M	<2	<3	<4	<1
SW-01		VA24B8974-001	2024/07/31	Water	M	<2	<3	<4	<1
SW-01		L2756871-1	2024/07/31	Water	M	<2	<3	<4	<1
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.15	0.544	<5.0	<0.24
SW-01		L2757144-1	2024/08/22	Water	M	<2	<3	<4	<1
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.31	<0.39	11.7	<0.25
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	<0.24	0.387	<1.4	<0.29
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.13	<0.52	3.36	<0.56
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.386	<0.37	<1.6	<0.40
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01		L2756717-1	2024/07/18	Water	M	<2	<2	<2
SW-01		VA24B8974-001	2024/07/31	Water	M	<2	<2	<2
SW-01		L2756871-1	2024/07/31	Water	M	<2	<2	<2
SW-01		VA24C1546-001	2024/08/22	Water	M	0.322	<0.23	<0.14
SW-01		L2757144-1	2024/08/22	Water	M	<2	<2	<2
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.48	<0.44	<0.17
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	<0.27	<0.23	<0.22
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.30	<0.25	<0.40
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.61	<0.36	<0.27
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01		L2756717-1	2024/07/18	Water	M	<2	<2	<2
SW-01		VA24B8974-001	2024/07/31	Water	M	<2	<2	<2
SW-01		L2756871-1	2024/07/31	Water	M	<2	<2	<2
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.13	<0.18	<0.16
SW-01		L2757144-1	2024/08/22	Water	M	<2	<2	<2
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.16	<0.21	<0.17
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	<0.20	<0.26	<0.23
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.36	<0.48	<0.40
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.25	<0.34	<0.29
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01		L2756717-1	2024/07/18	Water	M	<3	<3	<4
SW-01		VA24B8974-001	2024/07/31	Water	M	<3	<3	<4
SW-01		L2756871-1	2024/07/31	Water	M	<3	<3	<4
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.22	<0.22	<1.6
SW-01		L2757144-1	2024/08/22	Water	M	<3	<3	<4
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<1.1	<1.1	<1.6
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	<0.21	<0.21	<0.89
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.19	<0.25	<1.1
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.22	<0.30	<0.91
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M		
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	1	0
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0	0
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	1	0
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	1	0
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0	0
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M		
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	0	0
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0	0
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	0	0
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0	0
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	2	0
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01		L2756717-1	2024/07/18	Water	M		
SW-01		VA24B8974-001	2024/07/31	Water	M		
SW-01		L2756871-1	2024/07/31	Water	M		
SW-01		VA24C1546-001	2024/08/22	Water	M	0	1
SW-01		L2757144-1	2024/08/22	Water	M		
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0	0
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	0	0
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	0	0
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0	0
SW-01	SW-01	L2757584-1	2024/09/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	0	0	0.544
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0	0	<0.39
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	0	0	0.387
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	1	0	0.265
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0	0	<0.21
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M				
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.22	<0.16	<0.18	<0.34
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<1.1	<0.33	<0.21	<0.23
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	<0.21	<0.25	<0.26	<0.21
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.25	<0.14	<0.48	<0.25
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.30	0.663	<0.34	<0.39
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01		L2756717-1	2024/07/18	Water	M				0
SW-01		VA24B8974-001	2024/07/31	Water	M				0
SW-01		L2756871-1	2024/07/31	Water	M				0
SW-01		VA24C1546-001	2024/08/22	Water	M	0.322	<0.32	<0.24	
SW-01		L2757144-1	2024/08/22	Water	M				0
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.48	<0.31	<0.25	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	<0.27	<0.28	<0.29	
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.30	1.4	<0.56	
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.40	<0.35	<0.40	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01		L2756717-1	2024/07/18	Water	M	0	0	
SW-01		VA24B8974-001	2024/07/31	Water	M	0	0	
SW-01		L2756871-1	2024/07/31	Water	M	0	0	
SW-01		VA24C1546-001	2024/08/22	Water	M			0.0151
SW-01		L2757144-1	2024/08/22	Water	M	0	0	
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			0.00351
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			0.00387
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			1.4
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			0.0386
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	0.456	0.882	
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	0.456	0.908	
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	0.386	0.769	
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	1.71	2.01	
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	0.604	1.15	
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M				
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M				<0.25
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M				<0.25
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				<0.25
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M				<0.25
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M				<0.25
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	<0.25		97.9
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M	<0.25		99.3
SW-01	SW-01	L2757209-1	2024/08/27	Water	M	<0.25		94
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M	<0.25		92.2
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M	<0.25		78.6
SW-01	SW-01	L2757584-1	2024/09/28	Water	M	<0.25		99.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M	46	100	
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M			
SW-01		VA24B8974-001	2024/07/31	Water	M			
SW-01		L2756871-1	2024/07/31	Water	M			
SW-01		VA24C1546-001	2024/08/22	Water	M			
SW-01		L2757144-1	2024/08/22	Water	M			
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M			
SW-01	SW-01	L2757209-1	2024/08/27	Water	M			
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M			
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M			
SW-01	SW-01	L2757584-1	2024/09/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01		L2756717-1	2024/07/18	Water	M				
SW-01		VA24B8974-001	2024/07/31	Water	M				
SW-01		L2756871-1	2024/07/31	Water	M				
SW-01		VA24C1546-001	2024/08/22	Water	M				
SW-01		L2757144-1	2024/08/22	Water	M				
SW-01	SW-01	VA24C2197-001	2024/08/27	Water	M				
SW-01	SW-01	L2757209-1	2024/08/27	Water	M				
SW-01	SW21-1	VA24C4878-001	2024/09/19	Water	M				
SW-01	SW-01	VA24C5909-001	2024/09/28	Water	M				
SW-01	SW-01	L2757584-1	2024/09/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	2.7		
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	3		
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	2		
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	2.4		
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	2.4		
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	1.9		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	8	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	8.9	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	310.1	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	5.8	8.80
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	6.3	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	5.4	8.30

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	9.6	0.12	102.9
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	9.3	0.23	103.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	11.10	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	10.82	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	11.87	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	12.52	
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	11.98	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	12.61	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	1.81	1.84	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	2.83	2.46	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	2.96	3.48	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	3.59	3.7	162.50
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	3.88	4.19	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	3.93	3.79	150.90

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	7.60	6.51	0	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	6.98	6.63	0	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	9.10	6.4	0.21	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	6.45	6.46	0	<1.0
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	5.42	6.52	0	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	6.48	6.34	0	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	10.90	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	11.50	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	10.60	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	6.89	
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	8.60	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	6.84	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	16	<3.0	2.86
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	13	<3.0	2.72
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	16	<3.0	2.93
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	17	<3.0	2.72
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	16	<3.0	2.94
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	17	<3.0	2.74

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	2.78	1.84	0.29	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	2.94	0.82	0.30	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	2.74	0.21	0.36	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	2.89	0.61	0.47	5
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	2.98	0.32	0.34	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	2.67	1.69	0.24	5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M		<0.0050	<0.050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M		<0.0050	<0.050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M		0.0055	<0.050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M		<0.0050	<0.050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M		0.0052	<0.050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	0.7	<0.020	0.0238
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0.75	<0.020	0.0297
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.64	<0.020	0.0545
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	0.66	<0.020	0.0412
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.59	<0.020	0.0365
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0.63	<0.020	0.039

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.0010		
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.0010		
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.0010		
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.0010		
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.0010		
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	0.41	0.0966	<0.00010	0.00013
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0.4	0.0898	<0.00010	0.00012
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.56	0.145	<0.00010	0.00015
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	0.46	0.123	<0.00010	0.0001
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.48	0.181	<0.00010	0.00012
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0.56	0.158	<0.00010	0.00016

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	0.00213	<0.000100	<0.000050	0.01
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0.00195	<0.000100	<0.000050	<0.010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.00201	<0.000100	<0.000050	<0.010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	0.00198	<0.000100	<0.000050	<0.010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.00214	<0.000100	<0.000050	<0.010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0.00205	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.0000050	0.969	0.000016	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.0000050	0.895	0.000016	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.0000050	0.99	0.000015	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.0000050	0.906	0.000013	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.0000050	0.989	0.000013	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.0000050	0.918	0.000013	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050		<0.00010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050		<0.00010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050		<0.00010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050		<0.00010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050		0.047	0.000068
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050		0.038	0.000056
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050		0.035	0.000061
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	0.00184		0.039	0.00011
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050		0.044	0.000074
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050		0.042	0.000061

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.0010	0.108	0.0012	<0.0000050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.0010	0.118	0.00095	<0.0000050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.0010	0.112	0.00119	<0.0000050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.0010	0.112	0.00092	<0.0000050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.0010	0.114	0.0013	<0.0000050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.0010	0.108	0.00102	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	0.000396	<0.00050	<0.050	0.133	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M					
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0.000394	<0.00050	<0.050	0.143	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M					
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.000254	<0.00050	<0.050	0.133	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M					
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	0.000294	<0.00050	<0.050	0.129	
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.000272	<0.00050	<0.050	0.129	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M					
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0.000244	<0.00050	<0.050	0.123	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	0.00032	<0.000050	1.36	<0.000010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0.00036	<0.000050	1.52	<0.000010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.00038	<0.000050	1.83	<0.000010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	0.00037	<0.000050	1.56	<0.000010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.00037	<0.000050	1.66	<0.000010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0.00032	<0.000050	1.7	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	0.763	0.00369	<0.50	<0.00020
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0.841	0.00368	<0.50	<0.00020
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.691	0.00381	<0.50	<0.00020
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	0.663	0.00399	<0.50	<0.00020
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.662	0.00381	<0.50	<0.00020
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0.634	0.00386	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000010	<0.00010	<0.00010	0.00118
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000010	<0.00010	<0.00010	0.00073
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000010	<0.00010	<0.00010	0.00124
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000010	<0.00010	<0.00010	0.00092
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000010	<0.00010	<0.00010	0.00143
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000010	<0.00010	<0.00010	0.00111

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00010	0.000462	<0.00050	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00010	0.000486	<0.00050	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00010	0.000596	<0.00050	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00010	0.000584	<0.00050	
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00010	0.000719	<0.00050	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00010	0.000591	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.0030	<0.00020	0.0745	<0.00010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.0030	<0.00020	0.0753	<0.00010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.0030	<0.00020	0.125	<0.00010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.0030	<0.00020	0.12	<0.00010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.0030	<0.00020	0.172	<0.00010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.0030	<0.00020	0.143	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00010	0.00183	<0.000100	<0.000050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00010	0.00184	<0.000100	<0.000050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00010	0.00197	<0.000100	<0.000050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00010	0.00198	<0.000100	<0.000050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.0001	0.00206	<0.000100	<0.000050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00010	0.00189	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.010	<0.0000050	0.932	0.000013
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.010	<0.0000050	0.988	0.000013
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.010	<0.0000050	0.913	0.000013
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.010	<0.0000050	0.966	0.000013
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.010	<0.0000050	1.01	0.000013
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.010	<0.0000050	0.897	0.000013

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00050	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00050	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00050	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00050	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00010	0.00024		0.025
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00010	0.00023		0.024
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00010	0.00024		0.02
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00010	0.00022		0.029
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00010	0.00028		0.03
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00010	0.00024		0.028

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000050	<0.0010	0.109	0.00044
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000050	<0.0010	0.116	0.00047
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000050	<0.0010	0.113	0.00068
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000050	<0.0010	0.117	0.00039
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.000056	<0.0010	0.111	0.00101
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000050	<0.0010	0.105	0.00045

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.0000050	0.0004	<0.00050	<0.050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.0000050	0.000386	<0.00050	<0.050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.0000050	0.00025	<0.00050	<0.050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.0000050	0.000269	<0.00050	<0.050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.0000050	0.000269	<0.00050	<0.050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.0000050	0.000248	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	0.143		0.00034	<0.000050	1.33
SW-01	SW-01	L2757664-2	2024/10/03	Water	M					
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0.14		0.00031	<0.000050	1.4
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M					
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.135		0.00036	<0.000050	1.77
SW-01	SW-01	L2757873-1	2024/10/22	Water	M					
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	0.139		0.00035	<0.000050	1.59
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.137		0.0004	<0.000050	1.6
SW-01	SW-01	L2757942-2	2024/10/26	Water	M					
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0.112		0.00032	<0.000050	1.62

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000010	0.768	0.00369	<0.50
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000010	0.82	0.00379	<0.50
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000010	0.641	0.00384	<0.50
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000010	0.75	0.00402	<0.50
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000010	0.628	0.00374	<0.50
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000010	0.647	0.00409	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	0.00036	<0.00010	0.000437	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0.00036	<0.00010	0.000473	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.00057	<0.00010	0.000519	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	0.00062	<0.00010	0.000614	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	0.00088	<0.00010	0.000712	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0.00074	<0.00010	0.000604	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M		<0.0010	<0.00020
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M		<0.0010	<0.00020
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M		<0.0010	<0.00020
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M		<0.0010	<0.00020
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M		<0.0010	<0.00020
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000000020	0.000000034
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000000020	0.000000025
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000000020	0.000000021
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000000020	
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000000020	<0.000000020
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000000020	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050		
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050		
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050		
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050		
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050		
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethylene
						mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00020	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.00050	<0.00040
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	96.1	99.2
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	89.6	100
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	80.7	97.6
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	92.4	99.8
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	96.2	99.2
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	93.7	102

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M		<0.000010	<0.0000050
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000010	<0.000010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.000050	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M		
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.000050	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M		
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.000050	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.000050	
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.000050	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M		
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	101	98.1	
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			<0.64
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	72.4	76.3	<0.48
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			<0.68
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	106	97.5	<0.41
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	95.4	98.3	
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	91.8	93.7	
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			<0.66
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	91.8	95.6	<0.52

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	<0.51	<0.55	<0.53
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.29	<0.43	<0.42
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	<0.49	<0.45	<0.44
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.43	<0.51	<0.53
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	<0.90	<0.78	<0.78
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.48	<0.48	<0.46

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M				
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	<0.53	<0.80	<3.3	<0.87
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.42	<0.61	<3.0	<0.68
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	<0.44	<0.56	<2.4	<0.89
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.50	0.91	10.9	<0.33
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M				
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M				
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	<0.77	<0.73	<2.7	<0.74
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.46	<0.53	1.19	<0.70

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	<0.38	<0.34	<0.39
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.24	<0.22	<0.29
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	<0.44	<0.35	<0.28
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.22	<0.21	<0.23
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	<0.74	<0.67	<0.39
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.37	<0.31	<0.21

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	<0.36	<0.54	<0.41
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.29	<0.38	<0.31
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	<0.27	<0.40	<0.30
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.284	<0.27	<0.24
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	<0.40	<0.47	<0.42
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.21	<0.27	<0.22

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	<0.46	<0.37	<1.7
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.36	<0.42	1.14
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	<0.37	<0.46	<1.0
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.36	<0.49	<0.86
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	<0.53	<0.67	<1.0
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.23	<0.30	<0.68

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M		
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	0	0
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0	0
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	0	0
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	2	0
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M		
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M		
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	0	0
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M		
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	0	0
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0	0
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	0	0
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0	1
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M		
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M		
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	0	0
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M		
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	0	0
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0	0
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	0	0
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0	0
SW-01	SW-01	L2757873-1	2024/10/22	Water	M		
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M		
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M		
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	0	0
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	0	0	<0.59
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0	0	<0.61
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	0	0	<0.56
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0	0	1.83
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	0	0	<0.73
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0	0	<0.53

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M				
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	<0.37	<0.55	<0.54	<0.51
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.42	<0.43	<0.38	<0.29
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	<0.46	<0.45	<0.40	<0.49
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.49	<0.53	0.284	<0.43
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M				
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M				
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	<0.67	<0.78	<0.47	<0.90
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.30	<0.48	<0.27	<0.48

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M				
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	<0.38	<0.64	<0.87	
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	<0.24	<0.48	<0.68	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	<0.39	<0.68	<0.89	
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	<0.22	<0.41	<0.33	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M				
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M				
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	<0.74	<0.66	<0.74	
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	<0.37	<0.52	<0.70	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			0
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			0.000342
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			0
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			0.0408
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			0
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M			0.000357

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M	0.857	1.7	
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M	0.593	1.18	
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M	0.832	1.65	
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M	0.63	1.22	
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	1.14	2.28	
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	0.708	1.42	72

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	73	74	68

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	73	71	79

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	75	63	68

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	73	70	60

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M	64	64	65

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M				<0.25
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M				
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M				
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				<0.25
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M				<0.25
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M				<0.25
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				<0.25
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M	<0.25		105
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M	<0.25		104
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M	<0.25		107
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M	<0.25		97.4
SW-01	SW-01	L2757942-2	2024/10/26	Water	M	<0.25		105
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M			
SW-01	SW-01	L2757664-2	2024/10/03	Water	M			
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M			
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M			
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M			
SW-01	SW-01	L2757873-1	2024/10/22	Water	M			
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M			
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M			
SW-01	SW-01	L2757942-2	2024/10/26	Water	M			
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA24C6390-002	2024/10/03	Water	M				
SW-01	SW-01	L2757664-2	2024/10/03	Water	M				
SW-01	SW21-01	VA24C7381-001	2024/10/12	Water	M				
SW-01	SW21-01	L2757756-1	2024/10/12	Water	M				
SW-01	SW-01	VA24C8331-001	2024/10/22	Water	M				
SW-01	SW-01	L2757873-1	2024/10/22	Water	M				
SW-01	SW21-1	VA24C8719-001	2024/10/24	Water	M				
SW-01	SW-01	VA24C8965-002	2024/10/26	Water	M				
SW-01	SW-01	L2757942-2	2024/10/26	Water	M				
SW-01	SW21-1	VA24C9586-001	2024/10/31	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	2.2		
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	1.7		
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	1.3		
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	2.6		
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	2.5		
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	1.9		
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M			
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M			
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M			
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M			
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	5.7	8.70
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	6	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	4	6.20
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	5.4	9.00
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	8	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	19	
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	5	8.00
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	9.8	0.17	103.2
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M			
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	7.2	0.21	102.5
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	9.8	0.00	101.6
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	7.5	0.23	102.0
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	12.57	
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	12.47	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	12.58	
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	13.28	
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	12.84	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	13.53	
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	13.06	
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	3.29	2.79	140.10
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	3.61	3.67	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	4.22	3.53	169.80
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	2.64	2.31	168.30
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	3.1	3.02	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	2.62	2.75	169.80
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	6.46	6.51	0	<1.0
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	6.40	6.25	0	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	6.11	6.09	0	<1.0
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	6.20	6.66	0	<1.0
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	7.10	6.46	0.01	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	5.80		0.01	
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	6.19	6.47	0	<1.0
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	6.88	
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	7.20	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	6.55	
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	4.09	
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	5.40	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	4.40	
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	4.91	
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	16	<3.0	2.95
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	14	<3.0	2.51
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	20	<3.0	2.15
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	17	<3.0	2.59
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	14	<3.0	2.67
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<10	<3.0	2.51
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	2.82	3.7	0.18	<1
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	2.49	0.02	0.23	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	2.22	0.88	0.31	4
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	2.58	0	0.20	<1
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M		1.6	0.21	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M		1.11		
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	2.36	0.27	0.30	<1
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M		<0.0050	<0.050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M		<0.0050	<0.050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M		<0.0050	<0.050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M		<0.0050	<0.050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M		0.0067	<0.050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M		<0.0050	<0.050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0.64	<0.020	0.0414
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.50	<0.020	0.0389
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.50	<0.020	0.0358
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	0.59	<0.020	0.0372
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.58	<0.020	0.035
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.95	<0.020	0.0382
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.0010		
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.0010		
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.0010		
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.0010		
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.0010		
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.0010		0.055
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M			
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M			
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M			
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.055		
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0.5	0.141	<0.00010	0.00011
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.55	0.167	<0.00010	0.00014
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0.49	0.192	<0.00010	<0.00010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	0.56	0.132	<0.00010	<0.00010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.5	0.15	<0.00010	0.00011
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.53	0.149	<0.00010	<0.00010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0.00209	<0.000100	<0.000050	<0.010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.00207	<0.000020	<0.000050	<0.010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0.00187	<0.000100	<0.000050	<0.010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	0.0018	<0.000100	<0.000050	<0.010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.00163	<0.000020	<0.000050	<0.010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.00186	<0.000100	<0.000050	<0.010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.0000050	0.997	0.000014	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.0000050	0.84	0.000014	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.0000050	0.719	0.000015	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.0000050	0.87	0.000012	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.0000050	0.907	0.000012	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.0000050	0.836	0.000012	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050		<0.00010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050		<0.00010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M			<0.00010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050		0.036	0.00006
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.00097		0.04	0.000065
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050		0.043	0.000058
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050		0.037	0.000052
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050		0.042	0.000058
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050		0.038	0.000055
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.0010	0.111	0.00093	<0.0000050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.0010	0.101	0.00144	0.00000184
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.0010	0.0865	0.0018	<0.0000050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.0010	0.102	0.00096	<0.0000050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.001	0.0995	0.00093	0.00000168
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.0010	0.102	0.00104	<0.0000050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0.000282	<0.00050	<0.050	0.132	
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.000171	<0.00050	<0.050	0.11	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M					
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0.000152	<0.00050	<0.050	0.106	
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	0.000228	<0.00050	<0.050	0.111	
SW-01	SW-01	L2758350-1	2024/12/06	Water	M					
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.000252	<0.00050	<0.050	0.105	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M					
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.000212	<0.00050	<0.050	0.118	
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0.00033	<0.000050	1.74	<0.000010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.00031	<0.000050	1.64	<0.000010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0.00035	<0.000050	1.45	<0.000010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	0.0003	<0.000050	1.56	<0.000010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.00032	<0.000050	1.51	<0.000010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.00035	<0.000050	1.51	<0.000010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0.703	0.00424	<0.50	<0.00020
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.575	0.0037	<0.50	<0.00020
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0.441	0.0035	<0.50	<0.00020
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	0.638	0.00389	<0.50	<0.00020
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.618	0.00348	<0.50	<0.00020
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.598	0.00367	<0.50	<0.00020
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000010	<0.00010	<0.00010	0.00096
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000010	<0.00010	<0.00010	0.00116
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000010	<0.00010	<0.00010	0.00178
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000010	<0.00010	<0.00010	0.00096
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000010	<0.00010	<0.00010	0.00093
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000010	<0.00010	<0.00010	0.00095
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00010	0.000565	<0.00050	
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00010	0.000572	<0.00050	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00010	0.000438	<0.00050	
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00010	0.00054	<0.00050	
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00010	0.000692	<0.00050	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00010	0.000521	<0.00050	
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.0030	<0.00020	0.131	<0.00010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.0030	<0.00020	0.151	<0.00010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.0030	<0.00020	0.171	<0.00010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.0030	<0.00020	0.124	<0.00010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.0030	<0.00020	0.144	<0.00010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.0030	<0.00020	0.132	<0.00010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00010	0.00197	<0.000100	<0.000050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00010	0.00186	<0.000020	<0.000050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00010	0.00177	<0.000100	<0.000050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00010	0.00185	<0.000100	<0.000050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00010	0.00168	<0.000020	<0.000050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00010	0.00173	<0.000100	<0.000050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.010	<0.0000050	0.941	0.000013
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.010	<0.0000050	0.84	0.000012
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.010	<0.0000050	0.747	0.000013
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.010	<0.0000050	0.861	0.000012
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.010	<0.0000050	0.848	0.00001
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.010	<0.0000050	0.787	0.00001
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00050	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00050	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00010	0.00025		0.025
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00010	0.00022		0.022
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00010	0.00021		0.023
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00010	0.0002		0.026
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00010	0.00024		0.03
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00010	<0.00020		0.023
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000050	<0.0010	0.115	0.00037
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000050	<0.0010	0.0961	0.00078
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000050	<0.0010	0.0869	0.00098
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000050	<0.0010	0.104	0.00045
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000050	<0.0010	0.103	0.00053
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000050	<0.0010	0.0958	0.00055
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.0000050	0.000263	<0.00050	<0.050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.00000158	0.000169	<0.00050	<0.050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.0000050	0.000133	<0.00050	<0.050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.0000050	0.000232	<0.00050	<0.050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.00000155	0.000249	<0.00050	<0.050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.0000050	0.0002	<0.00050	<0.050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0.133		0.00033	<0.000050	1.72
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.11		0.00034	<0.000050	1.61
SW-01	SW-01	L2758119-1	2024/11/12	Water	M					
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0.109		0.00032	<0.000050	1.32
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	0.114		0.0003	<0.000050	1.48
SW-01	SW-01	L2758350-1	2024/12/06	Water	M					
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.117		0.00025	<0.000050	1.52
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M					
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.109		0.00028	<0.000050	1.48
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000010	0.693	0.00414	<0.50
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000010	0.512	0.00335	<0.50
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000010	0.483	0.00344	<0.50
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000010	0.63	0.00385	<0.50
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000010	0.634	0.00351	<0.50
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000010	0.559	0.00343	<0.50
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0.00061	<0.00010	0.000576	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.00063	<0.00010	0.000475	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0.00074	<0.00010	0.000401	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	0.00057	<0.00010	0.000505	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	0.00078	<0.00010	0.000658	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.00052	<0.00010	0.000486	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M		<0.0010	<0.00020
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M		<0.0010	<0.00030
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M		<0.0010	<0.00020
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M		<0.0010	<0.00020
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M		<0.0010	<0.00030
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M		<0.0010	<0.00020
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000000020	
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000000020	0.000000037
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0.000000071	
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000000020	
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M		<0.000000020
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	<0.000000020	0.000000052
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000000020	
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M			
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M			
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M			
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M			
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050		
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050		
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050		
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050		
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050		
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050		
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M		
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00020	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M		
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00020	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.00050	<0.00040
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M		
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.00050	<0.00040
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	91	99.2
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	95.2	104
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	95.3	101
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	96.4	102
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	93.4	101
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M		
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	93.7	102
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000010	<0.000010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M		
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000010	<0.000010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.000050	
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.000050	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.000050	
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.000050	
SW-01	SW-01	L2758350-1	2024/12/06	Water	M		
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.000050	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M		
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.000050	
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	75	71.2	<0.47
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	87.6	83.6	<0.54
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	86.9	97.1	<0.40
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	109	106	
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			<0.21
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	88.6	89.9	
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			<0.18
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	79.8	80.7	<0.36
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			<0.51

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.51	<0.45	<0.46
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.59	<0.49	<0.51
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.37	<0.32	<0.30
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	<0.24	<0.30	<0.30
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	<0.22	<0.15	<0.17
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.32	<0.40	<0.40
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	<0.42	<0.50	<0.49

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.45	<0.55	1.31	<0.40
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.49	<0.57	<1.8	<0.74
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.30	<0.45	1.3	<0.37
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M				
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	<0.29	<0.14	1.3	<0.15
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M				
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	<0.16	0.37	1.7	<0.18
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.38	<0.47	3.2	<0.49
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	<0.49	<0.52	<1.1	<0.41

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.35	<0.33	<0.26
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.38	<0.33	<0.23
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.26	0.26	<0.17
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	<0.22	<0.21	<0.17
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	0.4	<0.18	<0.096
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.39	<0.23	<0.15
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	<0.38	<0.34	<0.28

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.26	<0.34	<0.27
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.23	<0.31	<0.24
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.17	<0.24	<0.18
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	<0.17	<0.22	<0.18
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	<0.097	0.12	<0.092
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.21	<0.21	<0.15
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	<0.27	<0.33	<0.27

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.40	<0.56	1.5
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.31	<0.46	<1.3
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.29	<0.44	<0.94
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	<0.16	<0.21	<0.60
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	<0.25	<0.30	0.24
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.27	<0.37	<0.78
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	<0.38	<0.49	<0.97

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0	0
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0	0
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0	0
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M		
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	0	0
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M		
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	0	0
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0	0
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0	0
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0	0
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0	0
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M		
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	0	0
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M		
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	0	0
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0	0
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0	0
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0	0
SW-01	SW-01	L2758119-1	2024/11/12	Water	M		
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0	0
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M		
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	0	0
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M		
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	0	1
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0	1
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0	0	<0.55
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0	0	<0.57
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0	0	<0.45
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	0	0	<0.14
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	0	0	<0.20
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0	1	<0.47
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	0	0	<0.52

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.56	<0.46	<0.34	<0.51
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.46	<0.51	<0.31	<0.59
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.44	<0.32	<0.24	<0.37
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M				
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	<0.21	<0.30	<0.22	<0.24
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M				
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	<0.30	<0.17	<0.12	<0.22
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.37	<0.40	<0.21	<0.32
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	<0.49	<0.50	<0.33	<0.42

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	<0.35	<0.47	<0.40	
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	<0.38	<0.54	<0.74	
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	<0.26	<0.40	<0.37	
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M				
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	<0.22	<0.21	<0.15	
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M				
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	0.4	<0.18	<0.18	
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.39	<0.36	0.63	
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	<0.38	<0.51	<0.41	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M			0.000831
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M			0
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M			0
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			0
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			0.012
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M			0.0117
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	0.698	1.39	73
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	0.789	1.58	65
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	0.576	1.07	65
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	0.352	0.703	73
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	0.305	0.582	76
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	0.523	1.01	88
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	0.681	1.36	59

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	85	82	76
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	74	67	74
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	75	71	77
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	72	77	68
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	71	73	77
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	86	91	84
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	65	66	68

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	87	75	91
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	79	75	82
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	89	81	89
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	73	71	74
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	70	75	69
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	81	84	91
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	69	66	70

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	85	62	72
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	79	70	71
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	80	73	74
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	74	59	63
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	71	75	71
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	84	94	92
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	70	78	70

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	89	69	70
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	82	71	68
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	85	74	68
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	73	61	60
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	72	72	77
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	84	94	73
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	72	72	68

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M	71	55	71
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M	66	39	73
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M	71	45	65
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M	63	59	73
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M	70	72	71
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	75	69	76
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	68	40	63

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M				
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M				
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				<0.25
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M				
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M				<0.25
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M				<0.25
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M				<0.25
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M			
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M			
SW-01	SW-01	L2758119-1	2024/11/12	Water	M	<0.25		96.6
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M			
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M	<0.25		74
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M	<0.25		91.1
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M	<0.25		95.7
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M	<0.25		106

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M			
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M			
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M			
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M			
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M			
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M			
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M			
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M			
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M			
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M			
SW-01	SW-01	L2758119-1	2024/11/12	Water	M			
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M			
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M			
SW-01	SW-01	L2758350-1	2024/12/06	Water	M			
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M			
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M			
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M			
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA24D0326-001	2024/11/07	Water	M				
SW-01	SW-01	VA24D0618-003	2024/11/12	Water	M				
SW-01	SW-01	L2758119-1	2024/11/12	Water	M				
SW-01	SW21-1	VA24D0970-001	2024/11/14	Water	M				
SW-01	SW21-1	VA24D1404-001	2024/11/19	Water	M				
SW-01	SW-01	L2758350-1	2024/12/06	Water	M				
SW-01	SW-01	VA24D3006-001	2024/12/06	Water	M				
SW-01	SW-01	VA24D3920-001	2024/12/18	Water	M				
SW-01	SW21-1	VA24D4023-006	2024/12/19	Water	M				
SW-01	SW21-1	L2758504-5	2024/12/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	2.5		
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	2.4		
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	2.6		
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	2.5		
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	2.4		
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M			
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M			
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M			
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	5.3	9.50
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	5	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	4.3	7.40
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	5	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	6	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	8.8	-0.04	104.3
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	9.3	0.38	103.2
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M			
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M			
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	14.42	
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	14.41	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	13.91	
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	13.62	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	13.60	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	2.58	2.72	107.30
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	2.56	2.51	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	3.05	3.36	162.00
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	3.55	2.97	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	3.91	4.39	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M		6.44	0	<1.0
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	6.60	6.42	0	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	6.31	6.54	0	<1.0
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	6.20	6.55	0	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	6.60	6.54	0	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	1.99	
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	1.90	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	2.97	
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	2.90	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	3.20	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	16	<3.0	2.86
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	25	<3.0	3.56
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	28	<3.0	2.95
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	16	<3.0	3.53
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	10	<3.0	2.85
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	2.84	0	0.16	<1
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	3.54	0	0.24	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	2.9	0	0.30	<1
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	2.74	1.84	0.34	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	2.81	0.26	0.16	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M		<0.0050	<0.050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M		<0.0050	<0.050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M		<0.0050	<0.050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M		<0.0050	<0.050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M		0.0053	<0.050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.7	<0.020	0.0353
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	10.4	<0.020	0.038
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	0.53	<0.020	0.0575
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.72	<0.020	0.0539
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.7	<0.020	0.036
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.0010		
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.0010		
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.0010		0.069
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.0010		
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.0010		
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M			
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	0.069		
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M			
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M			
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.43	0.136	<0.00010	0.00011
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	1.81	0.13	<0.00010	<0.00010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	0.58	0.167	<0.00010	<0.00010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.65	0.166	<0.00010	0.0001
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.64	0.132	<0.00010	<0.00010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.00181	<0.000100	<0.000050	<0.010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	0.0018	<0.000020	<0.000050	<0.010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	0.00206	<0.000100	<0.000050	<0.010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.00257	<0.000020	<0.000050	<0.010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.0018	<0.000020	<0.000050	<0.010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.000005	0.953	0.000012	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.0000050	1.01	0.00001	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.0000050	0.986	0.000012	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.0000050	1.2	0.000011	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.0000050	0.944	<0.000010	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M			<0.00010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050		<0.00010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050		<0.00010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050		<0.00010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050		0.039	0.000057
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050		0.04	<0.000050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050		0.039	0.000065
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050		0.05	0.000079
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050		0.0316	<0.000050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.0010	0.116	0.00092	<0.0000050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.0010	0.253	0.00081	0.00000189
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.0010	0.119	0.0015	<0.0000050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.0010	0.13	0.00202	0.0000019
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.0010	0.12	0.000758	0.00000133
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.000306	<0.00050	<0.050	0.105	
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M					
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	0.000276	<0.00050	<0.050	0.153	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M					
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	0.000283	<0.00050	<0.050	0.125	
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M					
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.000258	<0.00050	<0.050	0.125	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M					
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.000279	<0.00050	<0.050	0.109	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.00032	<0.000050	1.5	<0.000010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	0.00028	<0.000050	1.46	<0.000010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	0.0003	<0.000050	1.69	<0.000010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.00029	<0.000050	1.6	<0.000010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.000292	<0.000050	1.58	<0.000010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.706	0.00418	<0.50	<0.00020
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	2.03	0.0045	<0.50	<0.00020
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	0.839	0.0039	<0.50	<0.00020
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.794	0.0056	<0.50	<0.00020
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.763	0.0039	<0.50	<0.00020
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000010	<0.00010	<0.00010	0.00075
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000010	<0.00010	<0.00010	0.00087
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000010	<0.00010	<0.00010	0.00108
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000010	<0.00010	<0.00010	0.00166
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000010	<0.00010	<0.00010	0.000925
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00010	0.000637	<0.00050	
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00010	0.000576	<0.00050	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00010	0.000591	<0.00050	
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00010	0.000546	<0.00050	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00010	0.000623	<0.00050	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.0030	<0.00020	0.121	<0.00010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.0030	<0.00020	0.123	<0.00010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.0030	<0.00020	0.138	<0.00010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.0030	<0.00020	0.15	<0.00010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.00333	<0.00020	0.12	<0.00010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00010	0.00167	<0.000100	<0.000050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00010	0.00181	<0.000020	<0.000050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00010	0.00189	<0.000100	<0.000050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.0001	0.00194	<0.000020	<0.000050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00010	0.0018	<0.000020	<0.000050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.010	<0.0000050	0.96	0.00001
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.010	<0.0000050	1.01	0.00001
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.010	<0.0000050	0.974	<0.000010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.010	<0.0000050	0.9	<0.000010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.010	<0.0000050	0.936	<0.000010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L		
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050		
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00050	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00050	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00050	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00010	0.00022		0.028
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00010	0.00023		0.031
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00010	0.00024		0.025
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00010	0.00034		0.026
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00010	0.000274		0.0247
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000050	<0.0010	0.108	0.00032
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000050	<0.0010	0.248	0.00048
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000050	<0.0010	0.113	0.00069
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000050	<0.0010	0.121	0.00088
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000050	<0.0010	0.115	0.000703
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.0000050	0.000282	<0.00050	<0.050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	0.00000146	0.000252	<0.00050	<0.050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.0000050	0.000271	<0.00050	<0.050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.00000184	0.000265	<0.00050	<0.050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.00000125	0.000268	<0.00050	<0.050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.105		0.00027	<0.000050	1.36
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M					
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	0.164		0.00027	<0.000050	1.29
SW-01	SW-01	L2758769-1	2025/01/24	Water	M					
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	0.116		0.00025	<0.000050	1.54
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M					
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.119		0.00032	<0.000050	1.54
SW-01	SW-01	L2759042-1	2025/02/21	Water	M					
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.116		0.000306	<0.000050	1.5
SW-01	SW-01	L2759255-1	2025/03/19	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000010	0.66	0.00377	<0.50
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000010	1.83	0.00458	<0.50
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000010	0.732	0.00386	<0.50
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000010	0.734	0.0039	<0.50
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000010	0.737	0.00387	<0.50
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.00058	<0.00010	0.000604	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	0.0005	0.00011	0.00055	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	0.00058	<0.00010	0.000548	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.00066	<0.00010	0.000528	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.000618	<0.00010	0.000575	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M		<0.0010	<0.00020
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M		<0.0010	<0.00030
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M		0.001	<0.00020
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M		<0.0010	<0.00030
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M		<0.0010	<0.00030
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000000020	
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	0.000000023	0.000000025
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000000020	
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000000020	<0.000000020
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000000020	0.000000024
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M			
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M			
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M			
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050		
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050		
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050		
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050		
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050		
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00020	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00020	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00020	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.00050	<0.00040
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.00050	<0.00040
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.00050	<0.00040
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	88.5	99.9
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	91.4	99.5
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	103	102
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	92.5	99.2
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	102	104
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M		<0.000010	<0.0000050
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000010	<0.000010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000010	<0.000010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000010	<0.000010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.000050	
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.000050	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M		
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.000050	
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<0.000050	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M		
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.000050	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	74.8	86.5	<0.31
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	74	83.6	
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			<0.24
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	76.6	86.2	
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	83	101	<1.5
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			<0.24
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	110	107	<0.35
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.30	<0.29	<0.28
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	<0.24	<0.31	<0.30
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<1.2	<1.4	<1.4
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	<0.23	<0.28	<0.27
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.31	<0.38	<0.38
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.27	<0.48	3.5	<0.36
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M				
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	<0.29	<0.67	5.1	<0.17
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M				
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<1.4	<2.2	4.5	<2.0
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	<0.26	<0.45	<1.7	<0.20
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.37	0.48	2.2	<0.40
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.19	<0.16	0.22
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	0.26	<0.20	<0.14
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<1.1	<0.98	<0.43
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	0.28	<0.24	<0.20
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.31	<0.24	0.39
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.18	0.33	<0.19
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	<0.14	<0.19	<0.14
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0.6	<0.81	<0.51
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	<0.19	<0.28	<0.20
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.37	<0.48	<0.38
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.28	<0.28	1.3
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	<0.24	<0.35	<1.0
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<1.5	<2.1	<3.2
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	<0.27	<0.38	<1.2
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.58	<0.48	1.2
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0	0
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M		
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	0	0
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M		
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0	0
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	0	0
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0	1
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0	0
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M		
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	0	0
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M		
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0	0
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	0	0
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0	0
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0	0
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M		
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M		
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	0	0
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M		
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M		
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0	0
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	0	0
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0	0
SW-01	SW-01	L2759255-1	2025/03/19	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0	0	<0.48
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	0	0	<0.67
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	0	0	<2.2
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	0	0	<0.45
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0	0	<0.41
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.28	<0.29	<0.25	<0.30
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M				
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	<0.35	<0.31	<0.19	<0.24
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M				
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<2.1	<1.4	<0.81	<1.2
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	<0.38	<0.28	<0.28	<0.23
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.58	<0.38	<0.48	<0.31
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	<0.17	<0.31	<0.36	
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M				
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	<0.22	<0.24	<0.17	
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M				
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	<1.1	<1.5	<2.0	
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	<0.26	<0.24	<0.20	
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	<0.26	<0.35	<0.40	
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M			0.0227
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			0.00152
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M			0
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			0
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M			0.00576
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	0.476	0.887	82
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	0.37	0.73	71
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	2	3.94	71
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	0.379	0.75	54
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	0.566	1.07	77
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	81	85	79
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	71	72	70
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	72	76	78
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	59	57	63
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	77	82	82
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	80	83	83
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	74	73	75
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	94	79	90
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	68	69	73
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	83	82	82
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	81	94	90
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	75	65	67
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	80	73	74
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	66	51	55
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	82	83	83
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	83	94	77
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	76	67	63
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	81	74	70
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	70	54	57
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	83	87	79
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M	78	65	80
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	69	53	66
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M	72	46	72
SW-01	SW-01	L2759042-1	2025/02/21	Water	M	61	32	63
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M	80	53	79
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M				
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M				<0.25
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M				<0.25
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				<0.25
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M				<0.25
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M				<0.25
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M				
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M				
SW-01	SW-01	L2759255-1	2025/03/19	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M			
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M	<0.25		89.6
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<0.25		110
SW-01	SW-01	L2758769-1	2025/01/24	Water	M	<0.25		90.2
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<0.25		122
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M	<0.25		105
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M			
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M			
SW-01	SW-01	L2759255-1	2025/03/19	Water	M	<0.25		118

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M			
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M			
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M			
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M			
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M			
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M			
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M			
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M			<5.0
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M			<5.0
SW-01	SW-01	L2758769-1	2025/01/24	Water	M			
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M			<5.0
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M			<5.0
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M			
SW-01	SW-01	L2759042-1	2025/02/21	Water	M			
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M			
SW-01	SW-01	L2759255-1	2025/03/19	Water	M			<5.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A1591-006	2025/01/23	Water	M				
SW-01	SW21-1	L2758768-5	2025/01/23	Water	M	<5.0	<5.0	<10	<5.0
SW-01	SW-01	VA25A1730-001	2025/01/24	Water	M	<5.0	<5.0	<10	<5.0
SW-01	SW-01	L2758769-1	2025/01/24	Water	M				
SW-01	SW21-1	VA25A3665-005	2025/02/20	Water	M	<5.0	<5.0	<10	<5.0
SW-01	SW21-1	L2759041-4	2025/02/20	Water	M	<5.0	<5.0	<10	<5.0
SW-01	SW-01	VA25A3804-001	2025/02/21	Water	M				
SW-01	SW-01	L2759042-1	2025/02/21	Water	M				
SW-01	SW-01	VA25A6069-001	2025/03/19	Water	M				
SW-01	SW-01	L2759255-1	2025/03/19	Water	M	<5.0	<5.0	<10	<5.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	1.3	1.3	<1.0
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	3.3		
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	1.8		
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	2.3		
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	1.9		
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	2		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<1.0	<1.0	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M			
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	3.3	5.60
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	5	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	4	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	4	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M	4	
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	58	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	4.6	7.40

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M		0.18	102.6
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M			
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	6.7	0.01	98.6

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	13.37	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	12.59	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	13.21	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	13.68	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M	13.68	
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	11.75	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	12.41	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	3.76	4.1	224.70
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	2.98	3.02	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	3.31	3.3	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	2.78	2.72	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	2.9	2.95	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	2.98	2.97	176.20

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	5.98	6.08	0	<1.0
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	6.40	6.52	0	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	6.90	6.32	0	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	6.50	6.44	0	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M	6.50		0	
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	7.20	6.57	0.04	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	6.01	6.37	0	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	4.20	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	4.20	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	4.50	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	3.50	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M	3.50	
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	8.50	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	5.55	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<10	<3.0	1.92
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	14	<3.0	2.55
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<10	<3.0	2.14
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	13	<3.0	2.43
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	14	3.3	2.35
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<10	<3.0	2.39

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	1.75	0.48	0.83	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	2.47	0.26	0.35	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	2.12	0.48	0.34	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	2.41	0.49	0.11	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		0.49		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	2.28	0.8	0.25	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	2.31	0	0.13	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M		<0.0050	<0.050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M		<0.0050	<0.050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M		<0.0050	<0.050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M		0.0068	<0.050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M		<0.0050	<0.050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.50	<0.020	0.0262
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.50	<0.020	0.03
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.50	<0.020	0.0239
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.50	<0.020	0.0257
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.50	<0.020	0.023
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.50	<0.020	0.0185

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.0010		0.069
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.0010		
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.0010		
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.0010		
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.0010		
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.0010		<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.069		
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M			
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.46	0.205	<0.00010	<0.00010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	0.51	0.149	<0.00010	<0.00010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	0.43	0.163	<0.00010	<0.00010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.54	0.149	<0.00010	<0.00010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.41	0.158	<0.00010	0.00011
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	0.38	0.15	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.00154	<0.000100	<0.000050	<0.010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	0.00165	<0.000020	<0.000050	<0.010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	0.00168	<0.000020	<0.000050	<0.010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.00165	<0.000020	<0.000050	<0.010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.00162	<0.000020	<0.000050	<0.010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	0.00152	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.0000050	0.639	0.000016	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.0000050	0.864	0.00001	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.0000050	0.72	0.000012	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.0000050	0.809	0.00001	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.0000050	0.786	<0.000010	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.0000050	0.811	0.000011	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050		<0.00010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050		<0.00010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050		<0.00010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050		<0.00010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050		0.052	0.000076
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050		0.033	0.000057
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050		0.033	0.00005
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050		0.03	<0.000050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050		0.03	0.000058
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050		0.03	0.000054

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.0010	0.0796	0.00217	<0.0000050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.0010	0.0965	0.00099	0.00000127
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.0010	0.0826	0.00104	0.0000019
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.0010	0.0991	0.00066	0.00000144
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.0010	0.0952	0.00091	0.00000166
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.0010	0.0885	0.00073	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.000138	<0.00050	<0.050	0.083	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	0.000236	<0.00050	<0.050	0.107	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M					
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	0.000159	<0.00050	<0.050	0.083	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M					
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.000222	<0.00050	<0.050	0.096	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M					
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.000196	<0.00050	<0.050	0.083	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M					
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	0.000239	<0.00050	<0.050	0.088	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.00032	<0.000050	1.11	<0.000010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	0.00028	<0.000050	1.4	<0.000010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	0.00028	<0.000050	1.21	<0.000010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.00025	<0.000050	1.44	<0.000010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.00025	<0.000050	1.24	<0.000010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	0.00022	<0.000050	1.24	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.433	0.00289	<0.50	<0.00020
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	0.645	0.00341	<0.50	<0.00020
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	0.491	0.0031	<0.50	<0.00020
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.665	0.00349	<0.50	<0.00020
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.57	0.00305	<0.50	<0.00020
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	0.59	0.00298	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000010	<0.00010	<0.00010	0.00239
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000010	<0.00010	<0.00010	0.00083
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000010	<0.00010	<0.00010	0.00123
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000010	<0.00010	0.00015	0.00092
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000010	<0.00010	<0.00010	0.00106
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000010	<0.00010	<0.00010	0.00099

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00010	0.000422	<0.00050	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00010	0.000651	<0.00050	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00010	0.000533	<0.00050	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00010	0.000662	<0.00050	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00010	0.000647	<0.00050	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00010	0.000692	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.0030	<0.00020	0.177	<0.00010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.0030	<0.00020	0.126	<0.00010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.0030	<0.00020	0.151	<0.00010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.0030	<0.00020	0.135	<0.00010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.0030	<0.00020	0.137	<0.00010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.0030	<0.00020	0.148	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00010	0.00144	<0.000100	<0.000050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00010	0.00151	<0.000020	<0.000050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00010	0.00143	<0.000020	<0.000050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00010	0.00158	<0.000020	<0.000050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00010	0.00144	<0.000020	<0.000050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00010	0.00136	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.010	<0.0000050	0.578	<0.000010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.010	<0.0000050	0.835	<0.000010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.010	<0.0000050	0.718	0.00001
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.010	<0.0000050	0.8	0.00001
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.010	<0.0000050	0.763	<0.000010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.010	<0.0000050	0.782	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00050	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00050	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00050	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00050	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00010	0.00022		0.022
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00010	<0.00020		0.025
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00010	0.00027		0.021
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00010	<0.00020		0.025
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00010	<0.00020		0.021
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00010	<0.00020		0.019

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000050	<0.0010	0.075	0.00073
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000050	<0.0010	0.0944	0.00043
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000050	<0.0010	0.0797	0.0007
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000050	<0.0010	0.0996	0.00065
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000050	<0.0010	0.0899	0.00121
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000050	<0.0010	0.0877	0.00029

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.0000050	0.000122	<0.00050	<0.050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	0.00000102	0.000244	<0.00050	<0.050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	0.00000159	0.000174	<0.00050	<0.050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.00000163	0.000236	<0.00050	<0.050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.00000164	0.000186	<0.00050	<0.050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.0000050	0.00023	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.089		0.00029	<0.000050	1.08
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	0.079		0.00024	<0.000050	1.28
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M					
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	0.103		0.00026	<0.000050	1.19
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M					
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.091		0.00023	<0.000050	1.31
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M					
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.081		0.00021	<0.000050	1.14
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M					
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	0.097		0.00021	<0.000050	1.26

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000010	0.47	0.00277	<0.50
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000010	0.558	0.00349	<0.50
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000010	0.486	0.0029	<0.50
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000010	0.588	0.00334	<0.50
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000010	0.546	0.00298	<0.50
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000010	0.53	0.00299	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.00083	<0.00010	0.000391	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	0.00053	<0.00010	0.000625	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	0.00072	<0.00010	0.000473	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.00058	<0.00010	0.00061	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.00064	<0.00010	0.000614	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	0.00065	<0.00010	0.000664	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M		<0.0010	<0.00020
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M		<0.0010	<0.00030
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M		<0.0010	<0.00030
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M		<0.0010	<0.00030
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M		<0.0010	<0.00030
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000000020	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000000020	0.00000002
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000000020	<0.000000020
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000000020	<0.000000020
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000000020	<0.000000020
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000000080	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M			
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M			
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050		
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050		
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050		
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050		
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050		
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	86.3	102
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	96.4	103
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	87.7	104
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	88.5	102
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	95.5	102
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	86	97.4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.000050	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.000050	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.000050	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.000050	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.000050	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M		
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	93.1	97.8	<0.41
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	104	97.9	
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	109	103	
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			<0.38
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	105	108	<0.27
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	108	104	<0.17
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			<0.26
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	107	101	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.38	<0.71	<0.66
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	<0.47	<0.37	<0.37
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.21	<0.17	<0.16
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.2	0.12	0.161
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	0.44	0.22	0.26
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.70	1.4	12.2	<0.44
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	<0.36	0.35	<0.74	<0.28
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.16	0.48	1.33	<0.30
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.259	0.41	2.03	0.37
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	0.42	0.98	2.96	<0.29
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.32	<0.23	<0.26
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	<0.38	<0.28	<0.12
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.28	<0.16	<0.15
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.42	0.18	0.16
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	0.37	<0.18	<0.19
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.31	0.47	<0.31
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	<0.12	<0.17	<0.11
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.13	<0.19	<0.15
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.11	0.24	0.18
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	<0.19	0.25	0.2
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.85	<0.63	<1.7
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	<0.19	<0.31	<0.34
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.12	<0.17	0.36
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.2	0.2	0.69
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	<0.13	0.45	1.51
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	1	0
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	0	0
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0	0
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0	0
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	2	0
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0	0
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	0	0
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0	0
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	2	0
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	4	0
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0	0
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M		
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M		
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	0	0
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0	0
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M		
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0	0
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	0	0
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0	0	1.23
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	0	0	<0.25
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0	0	<0.24
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0	0	<0.11
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	0	0	1.63
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.63	<0.71	<0.45	<0.38
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	<0.31	<0.37	<0.17	<0.47
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.17	<0.17	<0.19	<0.21
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.15	0.42	<0.14	<0.15
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	<0.19	1.18	<0.23	<0.27
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.23	<0.41	<0.44	
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	<0.38	<0.38	<0.28	
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	<0.20	<0.27	<0.30	
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	<0.11	<0.17	<0.19	
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	<0.21	<0.26	<0.29	
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M			0.00366
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			0
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M			0.000399
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M			0.0426
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			0.101
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	0.685	1.29	63
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	0.574	1.14	82
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	0.35	0.686	84
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	0.515	0.606	83
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	0.793	0.984	80
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	61	65	73
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	70	62	75
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	75	67	82
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	78	71	75
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	85	76	76
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	90	70	75
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	65	74	71
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	75	81	80
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	75	77	73
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	81	74	81
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	76	55	57
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	69	70	56
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	78	79	65
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	78	67	59
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	83	76	71
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	70	54	60
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	72	66	65
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	78	76	74
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	78	68	61
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	83	82	68
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	62	39	63
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M	62	82	78
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M	68	79	84
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M	60	81	67
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M	74	75	78
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M				<0.25
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M				<0.25
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M				<0.25
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M				<0.25
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				<0.25
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M				
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M	<0.25		115
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M	<0.25		111
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M	<0.25		114
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M	<0.25		78.3
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M	<0.25		110
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M			
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M	<0.25		111

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M			
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M			
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M			
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			80.2
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M			
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M			
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M			
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M			<5.0
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M			
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M			
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M			
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M			
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW21-1	VA25A6812-005	2025/03/27	Water	M				
SW-01	SW-01	VA25A7260-001	2025/04/02	Water	M				
SW-01	SW-01	VA25A7262-001	2025/04/02	Water	M	<5.0	<5.0	<10	<5.0
SW-01	SW-01	VA25A7741-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A7742-001	2025/04/08	Water	M				
SW-01	SW-01	VA25A8192-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8193-004	2025/04/13	Water	M				
SW-01	SW-01	VA25A8975-002	2025/04/22	Water	M				
SW-01	SW-01	VA25A8977-002	2025/04/22	Water	M				
SW-01	SW21-1	VA25A9265-005	2025/04/24	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	1.8		
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<1.0		
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	1.7		
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	1		
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<1.0		
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	1.6	1.6	<1.0
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M			
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M			
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M			
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<1.0	<1.0	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	4	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	25.7	41.00
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	4.2	6.50
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	4.4	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	4.1	6.10
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	8.7	13.40
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		17.97

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M			
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	6.4	0.00	100.7
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	5.8	0.21	99.4
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M			
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	5.6	0.09	100.9
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M		0.19	101.7
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	22.9		
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		0.32	101.2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	12.97	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	12.73	
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	12.31	
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	13.52	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	12.13	
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	12.44	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	13.00	11.8
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		12
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	13.02	11.6

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	3.51	3.39	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	3.03	3.11	188.00
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	2.87	2.98	218.30
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	2.62	2.94	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	2.87	2.97	220.10
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	2.59	3.05	204.00
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	2.5		148.67

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	6.60	6.18	0	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	5.84	6.02	0.02	<1.0
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	5.84	6.36	0	<1.0
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	7.20	6.03	0	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	5.76	5.96	0	<1.0
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	6.24	6.44	0.01	<1.0
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		6.16		0.02
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		6.85		
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	6.03	6		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	5.50	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	5.39	
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	6.20	
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	6.20	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	7.40	
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	6.70	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	2.40	
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	4.68	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	20	<3.0	2
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<10	<3.0	2.05
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<10	<3.0	1.94
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<10	<3.0	2.06
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	16	<3.0	2.01
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	11	<3.0	2.18
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		<4	6.55
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		3	7.25
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		<2	5.22

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M		0.36	0.27	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	2.02	0	0.15	<1
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	2.04	0.48	0.16	<1
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	2.09	0.11	0.15	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	1.97	0	0.14	<1
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	2.05	0	0.19	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			1.60	<1
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				<1.8
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			0.24	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M		<0.0050	<0.050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M		<0.0050	<0.050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M		<0.0050	<0.050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M		<0.0050	<0.050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M		0.0077	<0.050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M		<0.0050	<0.050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		<0.05	
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		<0.05	
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		<0.05	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.50	<0.020	0.0145
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.50	<0.020	0.0146
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.50	<0.020	0.0127
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.50	<0.020	0.0161
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.50	<0.020	0.0123
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.50	<0.020	0.0213
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			0.083
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			0.082
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			0.071

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.0010		
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.0010		0.064
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.0010		0.06
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.0010		
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.0010		
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.0010		0.056
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M			
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	0.064		
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0.06		
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M			
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	0.056		
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.31	0.154	<0.00010	0.0001
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.30	0.155	<0.00010	<0.00010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0.31	0.157	<0.00010	<0.00010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.32	0.136	<0.00010	0.00011
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	0.32	0.155	<0.00010	<0.00010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	0.38	0.136	<0.00010	<0.00010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		0.0565	0.000274	0.000053
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		0.0635	0.00023	<0.000050
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		0.0879	0.000136	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.00139	<0.000020	<0.000050	<0.010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	0.00134	<0.000100	<0.000050	<0.010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0.00124	<0.000100	<0.000050	<0.010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.00138	<0.000020	<0.000050	<0.010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	0.00132	<0.000100	<0.000050	<0.010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	0.00137	<0.000100	<0.000050	<0.010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0.00351	<0.000010	<0.000010	0.0165
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0.00338	<0.000010	<0.000010	0.0118
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0.00321	<0.000010	<0.000010	0.0136

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.0000050	0.674	<0.000010	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.0000050	0.692	<0.000010	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.0000050	0.65	<0.000010	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.0000050	0.688	<0.000010	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.0000050	0.678	0.00001	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.0000050	0.746	0.000012	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0.0000069	1.81		0.00012
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0.0000081	1.73		0.00011
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0.0000091	1.76		0.00014

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050		<0.00010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050		<0.00010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050	<0.00010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			0.0000445
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			0.0000508
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			0.0000549

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050		0.029	0.000063
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050		0.03	0.000057
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050		0.026	<0.000050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.0007		0.027	0.000051
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050		0.026	0.000052
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050		0.028	0.000053
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0.00052		0.0168	<0.000050
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0.00052		0.017	0.000063
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0.00038		0.013	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.0010	0.0774	0.00094	0.0000018
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.0010	0.0775	0.00075	<0.0000050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.0010	0.0766	0.00076	<0.0000050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.0010	0.0829	0.00086	0.00000182
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.0010	0.0767	0.00091	<0.0000050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.0010	0.0768	0.00084	<0.0000050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0.000915	0.215	0.000504	<0.00001
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0.000816	0.226	0.000765	<0.00001
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0.000866	0.2	0.000586	<0.00001

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.000186	<0.00050	<0.050	0.086	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M					
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	0.000204	0.0022	<0.050	0.075	
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0.000189	<0.00050	<0.050	0.066	
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.000204	<0.00050	<0.050	0.073	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	0.000183	<0.00050	<0.050	0.055	
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	0.000214	<0.00050	<0.050	0.074	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0.000597	0.000201	<0.01	0.24	
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0.00061	0.000248	<0.01	0.253	
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0.000463	<0.00300	0.012	0.199	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.00021	<0.000050	1.06	<0.000010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00020	<0.000050	1.08	<0.000010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00020	<0.000050	1.06	<0.000010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.00022	<0.000050	1.07	<0.000010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00020	<0.000050	1.02	<0.000010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	0.00025	<0.000050	1.15	<0.000010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		<0.00010	2.98	<0.000010
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		<0.00010	2.52	<0.000010
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		<0.00010	3.26	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.556	0.00265	<0.50	<0.00020
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	0.546	0.00264	<0.50	<0.00020
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0.473	0.00239	<0.50	<0.00020
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.531	0.00267	<0.50	<0.00020
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	0.476	0.0026	<0.50	<0.00020
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	0.519	0.0029	<0.50	<0.00020
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	1.39	0.00956	1.2	<0.000050
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	1.38	0.0085	<1	0.000097
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	1.2	0.00893	1.4	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000010	<0.00010	<0.00010	0.0012
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000010	<0.00010	<0.00010	0.00102
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000010	<0.00010	<0.00010	0.00095
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000010	<0.00010	<0.00010	0.00095
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000010	<0.00010	<0.00010	0.00098
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000010	<0.00010	<0.00010	0.00095
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.0000040	0.000012	<0.000050	0.00041
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.0000040	0.00001	0.00009	0.00057
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.0000040	0.000012	<0.000050	0.00061

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00010	0.000624	<0.00050	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00010	0.000591	<0.00050	
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00010	0.000575	<0.00050	
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00010	0.000579	<0.00050	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00010	0.000599	<0.00050	
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00010	0.000576	<0.00050	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.00020	0.000147	0.00049	
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.00020	0.000139	0.00044	
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.00020	0.000163	0.00036	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.0030	<0.00020	0.153	<0.00010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.0030	<0.00020	0.149	<0.00010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.0030	<0.00020	0.142	<0.00010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.0030	<0.00020	0.131	<0.00010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.0030	<0.00020	0.143	<0.00010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	0.0032	<0.00020	0.131	<0.00010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0.0019	<0.000020		
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0.0027	<0.000020		
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0.002	<0.000020		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00010	0.00138	<0.000020	<0.000050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00010	0.00137	<0.000100	<0.000050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00010	0.00129	<0.000100	<0.000050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00010	0.00128	<0.000020	<0.000050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00010	0.00132	<0.000100	<0.000050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00010	0.00135	<0.000100	<0.000050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.010	<0.0000050	0.723	<0.000010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.010	<0.0000050	0.687	<0.000010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.010	<0.0000050	0.696	<0.000010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.010	<0.0000050	0.704	<0.000010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.010	<0.0000050	0.646	<0.000010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.010	<0.0000050	0.69	<0.000010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00050	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00050	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.00011	<0.00020		0.023
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00010	0.00025		0.02
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00010	<0.00020		0.018
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00010	<0.00020		0.019
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00010	<0.00020		0.017
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00010	<0.00020		0.017
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000050	<0.0010	0.0738	0.00078
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000050	<0.0010	0.0754	0.00033
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000050	<0.0010	0.0747	0.00036
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000050	<0.0010	0.0803	0.00048
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000050	<0.0010	0.0859	0.00034
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000050	<0.0010	0.079	0.00034
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.00000138	0.000188	<0.00050	<0.050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.0000050	0.000168	<0.00050	<0.050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.0000050	0.000174	<0.00050	<0.050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.00000129	0.000209	<0.00050	<0.050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.0000050	0.000195	<0.00050	<0.050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.0000050	0.000174	<0.00050	<0.050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.071		<0.00020	<0.000050	1.02
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M					
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	0.095		<0.00020	<0.000050	0.996
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0.081		0.00024	<0.000050	0.988
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.084		<0.00020	<0.000050	1.01
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	0.066		<0.00020	<0.000050	0.959
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	0.085		<0.00020	<0.000050	1.14
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M					
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M					
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000010	0.5	0.0027	<0.50
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000010	0.52	0.00257	<0.50
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000010	0.492	0.00255	<0.50
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000010	0.519	0.00265	<0.50
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000010	0.558	0.00266	<0.50
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000010	0.522	0.00273	<0.50
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.00074	0.00012	0.000592	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	0.00066	<0.00010	0.000598	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0.00066	<0.00010	0.000584	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.00059	<0.00010	0.000568	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	0.00062	<0.00010	0.000565	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	0.00046	<0.00010	0.000541	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M		<0.0010	<0.00030
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M		<0.0010	<0.00020
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M		<0.0010	<0.00020
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M		<0.0010	<0.00030
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M		<0.0010	<0.00020
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M		<0.0010	<0.00020
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000000020	<0.000000020
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000000020	
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000000020	
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.000000051	<0.000000020
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000000080	
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000000020	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.000000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M			
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M			
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M			
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.25	<0.25	<0.1
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.25	<0.25	<0.1
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.25	<0.25	<0.1
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.1	<0.00050	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		<0.0005	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050	<0.00040
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.0010	<0.0010	<0.0010
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.0010	<0.0010	<0.0010
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.0010	<0.0010	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00040	<0.00030	<0.00050	
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			<0.0020	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050		
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050		
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050		
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050		
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050		
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050		
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050	<0.0050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050	<0.0010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00075	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00020	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00020	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00020	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00020	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00020	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.00050	<0.00040
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.00050	<0.00040
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.00050	<0.00040
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.00050	<0.00040
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.00050	<0.00040
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	84.1	97.6
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	91.2	101
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	95.8	100
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	81.6	98.3
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	104	101
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	93.3	98.7
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M		
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M		
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.000050	<0.000200	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000010	<0.000010	<0.0000050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.000050	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M		<0.000010	<0.0000050
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M		<0.000010	<0.0000050
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M		<0.000010	<0.0000050
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.000100	<0.000050	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.000030	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000010	<0.000010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000010	<0.000010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000010	<0.000010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000010	<0.000010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000010	<0.000010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.000100	<0.000100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000050	<0.000020	<0.000010
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.000200	<0.000100	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.000050	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M		
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.000050	
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.000050	
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.000050	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.000050	
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.000050	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.000050	<0.000200

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	102	102	<0.76
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			<0.76
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	106	101	
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	125	104	<0.56
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	116	104	<0.57
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	110	102	
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	130	106	
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			<0.29
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			<0.55
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			<0.27

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.41	<0.29	<0.30
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	<0.69	<0.80	<0.84
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.82	<0.33	<0.34
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.44	<0.61	<0.60
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.25	<0.22	<0.21
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.70	<0.29	<0.29
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.25	<0.18	<0.18

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.28	1.02	<1.4	<0.31
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	<0.79	<0.43	<2.3	<0.76
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M				
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.32	0.49	2.4	<0.77
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.58	0.44	2	<0.30
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M				
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M				
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.21	<0.42	<1.3	<0.47
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.29	0.93	9.3	<0.46
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.17	<0.29	13.3	<0.28

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.47	<0.42	<0.24
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	0.41	<0.27	<0.25
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.78	<0.72	<0.30
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.38	<0.26	<0.25
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.30	<0.26	<0.18
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0.73	<0.33	<0.24
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0.404	<0.26	<0.15

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.23	<0.37	<0.23
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	<0.26	<0.42	<0.25
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.33	<0.49	<0.30
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.26	<0.37	<0.25
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.18	<0.23	<0.20
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.23	<0.32	<0.25
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.11	<0.15	<0.12

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.27	<0.51	<1.3
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	<0.83	<1.5	<0.82
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.56	<0.90	<1.8
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.27	<0.42	<0.74
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.35	<0.34	<1.3
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.34	<0.40	<1.2
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.49	<0.23	<2.2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	1	0
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	0	0
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M		
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0	0
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0	0
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M		
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M		
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0	0
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0	0
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0	0
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	0	0
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M		
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0	0
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0	0
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M		
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M		
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0	0
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0	0
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0	0
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	0	0
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M		
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0	0
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0	0
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M		
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M		
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0	0
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0	1
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0	0	1.02
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	0	0	<0.43
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0	0	<0.39
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0	0	<0.42
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0	0	<0.42
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	1	0	<0.69
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0	0	<0.29

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.51	<0.30	<0.37	<0.41
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	<1.5	<0.84	<0.42	<0.69
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M				
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.90	<0.34	<0.49	<0.82
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.42	<0.61	<0.37	<0.44
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M				
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M				
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.35	<0.22	<0.23	<0.25
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	<0.40	<0.29	<0.32	<0.70
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.24	<0.18	<0.15	<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	<0.47	<0.76	<0.31	
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	<0.33	<0.76	<0.76	
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M				
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	<0.78	<0.56	<0.77	
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	<0.30	<0.57	<0.30	
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M				
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M				
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.30	<0.29	<0.47	
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0.73	0.64	<0.46	
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0.404	<0.27	<0.28	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M			0.0102
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			0
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M			0
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M			0
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			0
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			0.0218
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			0.0161

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	0.782	1.55	71
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	1.01	2.01	73
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	0.982	1.96	77
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	0.725	1.43	80
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	0.414	0.829	
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	0.831	1.63	76
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	0.398	0.759	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	65	42	82
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	71	54	82
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	68	58	83
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	71	62	89
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	69	68	84
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	75	79	76
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	88	90	93
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	86	88	86
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	88	88	85
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	77	79	79
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	58	78	75
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	77	73	73
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	79	69	67
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	79	74	71
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	75	73	66
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	80	78	74
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	88	77	79
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	87	68	79
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	87	73	85
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	79	69	75
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M	79	49	81
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M	84	45	85
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M	82	51	86
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M	85	52	86
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M	70	50	61
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M				
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M				<0.25
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M				
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M				
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M				<0.25
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M				<0.25
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				<0.25
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M			
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M	<0.25		85.2
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M			
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M			
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M	<0.25		97.9
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M	<0.25		90.7
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M	<0.25		104
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M	<0.25		105

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M			
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M			
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M			
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M			
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			76.6
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M			
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M			
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M			
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M			
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M			
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M			
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M			
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M			
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M			
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M			
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M			
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-01	SW-01	VA25A9703-002	2025/04/29	Water	M				
SW-01	SW-01	VA25A9710-002	2025/04/29	Water	M				
SW-01	SW21-1	VA25A9648-005	2025/04/29	Water	M				
SW-01	SW21-1	VA25B0655-005	2025/05/08	Water	M				
SW-01	SW-01	VA25B0930-001	2025/05/12	Water	M				
SW-01	SW21-1	VA25B1182-005	2025/05/14	Water	M				
SW-01	SW21-1	VA25B1920-005	2025/05/22	Water	M				
SW-02	SW21-2	21A2594-02	2021/01/27	Water	M				
SW-02	SW21-2	21B2778-18	2021/02/25	Water	M				
SW-02	SW21-2	21C3502-02	2021/03/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		9.50
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		7.80
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M		6.57
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		9.70
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M		7.57
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		260.50
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		11.63

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	5.8	0.83	104.0
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	4.8	1.37	102.2
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	8.1		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	4.5	1.76	103.7
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	6.466666667	1.97	101.4
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	5.1	0.46	101.2
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	223.7333333	1.44	102.2
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	8.1	0.18	106.0
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		0.25	98.6

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	13.43	12.3
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	13.12	11.4
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	12.17	9.9
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	12.08	11.4
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	12.20	11.2
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	12.04	10.3
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	9.74	10.3
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		11
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	11.98	10.7
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	11.62	11

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	2.02		221.70
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			276.90
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	1.6		218.07
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	1.59		194.63
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	1.46		162.67
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	1.76		169.23
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	1.01		207.07
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0.77		
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	2.74		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	1.9		242.10

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	6.09	6.36		0
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		6.65		0
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		6.3		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	6.37	6.27		0
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	5.29	6.23		0
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	5.25	6.32		0
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		6.67		0.1266667
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		6.54		
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		7.32		0
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	6.06	6.2		0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	4.60	
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	4.80	
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	6.30	
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	8.70	
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	7.40	
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	7.80	
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	17.60	
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	10.00	
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	8.20	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	6	<2.0	3.88
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		<2.0	2.29
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		<3.3	2.5
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	4	<2.0	2.22
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	6	<2.0	3.3
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	5	<2.0	2.72
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		<2.0	3.76
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		<2.0	7.34
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		7.4	3.71
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	8	<2.0	3.97

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			0.18	<1
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			0.26	<1
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			0.17	12
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			0.25	<1
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			1.97	<1
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			3.36	6
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			0.77	2
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				8
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			1.38	79
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			-0.08	2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		<0.050	
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		<0.050	
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		<0.050	
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M		0.063	
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		0.069	
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M		<0.050	
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		<0.050	
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		<0.050	
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		<0.050	
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		<0.050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			0.048
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			0.029
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			0.03
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			0.022
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			0.034
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			0.032
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			0.062
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			0.151
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			0.082
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			0.043

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO ₄)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		0.127	0.000056	0.000051
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		0.127	<0.00020	<0.00050
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		0.0877	<0.000050	<0.000050
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M		0.098	<0.000050	<0.000050
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		0.114	<0.000050	0.000075
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M		0.215	<0.000050	0.000209
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		0.0291	<0.000050	<0.000050
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		0.0223	<0.000050	0.000066
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		0.245	<0.000050	0.000109
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		0.1	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.00196	<0.000010	<0.000010	0.0214
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	0.00152	<0.000010	<0.000010	0.0031
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0.00191	<0.000010	<0.000010	0.0038
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	0.00248	<0.000010	<0.000010	0.0096
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0.00234	<0.000010	<0.000010	0.0046
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	0.00298	<0.000010	<0.000010	0.0156
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0.00533	0.000011	<0.000010	0.0392
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	0.0169	<0.000010	<0.000010	0.0103
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.0050	<0.00010	<0.00010	<0.0500

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.0000057	1.3		0.00015
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000010	0.77		<0.00050
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	0.0000023	0.86		0.00016
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0.0000025	0.763		0.00017
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	0.0000104	1.12		0.00022
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0.0000068	0.916		0.00023
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	0.000006	1.24		0.00012
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0.0000073	2.4		0.00014
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	0.0000113	1.24		0.00092
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000010	1.38		<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			0.0000458
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			<0.00010
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			0.000025
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			0.0000274
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			0.000055
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			0.0000675
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			0.0000168
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			0.0000135
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			0.000188
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.00056		0.0241	<0.000050
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.00040		0.019	<0.00020
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.00020		0.0162	<0.000050
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0.00021		0.0183	<0.000050
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	0.00044		0.0423	0.000063
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0.00062		0.106	0.000115
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.00020		0.0064	<0.000050
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0.00023		0.0053	0.000065
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	0.00058		0.429	0.000794
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.00040		0.021	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.000585	0.153	0.000805	<0.000010
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	0.00031	0.088	0.00073	<0.000010
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	0.000313	0.0847	0.000483	<0.000010
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0.000303	0.0762	0.000621	<0.000010
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	0.000437	0.119	0.00155	<0.0000050
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0.000267	0.103	0.00173	<0.000010
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	0.000894	0.162	0.000349	<0.000010
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0.00157	0.329	0.000297	<0.000010
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	0.000302	0.149	0.00578	<0.000010
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	0.00034	0.126	0.00109	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.000388	0.00017	<0.01	0.245	
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	0.00035	<0.00040	<0.050	<0.10	
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	0.000281	0.000085	<0.01	0.103	
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0.000281	0.000081	<0.01	0.1	
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	0.000718	0.000246	<0.01	0.163	
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0.000291	0.000298	<0.01	0.139	
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	0.00067	0.000124	<0.01	0.26	
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0.000935	0.000135	<0.01	0.469	
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	0.000244	0.000603	<0.01	0.207	
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	0.00029	<0.00040	<0.050	0.17	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		0.00027	1.69	<0.000010
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		<0.00050	<1.0	<0.000050
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		<0.00010	1.27	<0.000010
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M		<0.00010	1.19	<0.000010
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		<0.00010	1.72	<0.000010
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M		<0.00010	1.39	0.000013
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		<0.00010	1.8	<0.000010
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		<0.00010	2.89	<0.000010
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		<0.00010	1.82	<0.000010
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		<0.00050	2	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.911	0.00504	<1	<0.000050
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	0.66	0.0035	<3.0	<0.00050
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	0.504	0.00366	<1	<0.000050
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0.473	0.00346	<1	<0.000050
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	0.755	0.00453	<1	0.000059
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0.551	0.00356	<1	<0.000050
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	1.3	0.00658	<1	<0.000050
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	3.16	0.0129	1.1	<0.000050
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	0.677	0.00575	<1	<0.000050
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	0.71	0.0053	<3.0	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	<0.0000040	0.000011	0.000062	0.00098
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.0000040	<0.000010	0.000055	0.00087
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.0000040	0.000011	<0.000050	0.00078
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	0.0000044	0.000016	<0.000050	0.00199
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.0000040	0.00001	0.000055	0.00311
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.0000040	<0.000010	<0.000050	0.00024
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0.0000128	0.000011	<0.000050	0.00045
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	0.0000049	0.000017	<0.000050	0.00507
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000020	<0.00010	<0.00020	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	<0.00020	0.000185	<0.00020	
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.0010	0.000167	0.0012	
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.00020	0.000152	0.00034	
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.00020	0.000142	<0.00020	
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.00020	0.000182	<0.00020	
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.00020	0.000159	0.00044	
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.00020	0.000104	0.00021	
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.00020	0.000116	0.00049	
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.00020	0.000175	0.00047	
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.0010	0.000171	<0.0010	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.0023	0.000034		
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.0040	<0.00010		
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	0.001	<0.000020		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0.0017	<0.000020		
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	0.0037	0.000021		
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0.0035	<0.000020		
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.0010	<0.000020		
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0.0021	<0.000020		
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	0.0036	0.000029		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.0040	<0.00010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M					
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M					
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M					
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M					
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M					
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M					
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M					
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M					
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M					
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.000000024	
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.000000024	
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.000000023	
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.000000023	
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.000000025	
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.000000050	
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	0.000000032	
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		<0.0005	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	<0.0010	<0.0010	<0.0010
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.0010	<0.0010	<0.0010
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.0010	<0.0010	<0.0010
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.0010	<0.0010	<0.0010
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.0010	<0.0010	<0.0010
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.0010	<0.0010	<0.0010
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.0010	<0.0010	<0.0010
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.0010	<0.0010	<0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			<0.0020	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichloromethane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M		
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M		
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M		
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M		
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M		
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M		
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M		
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M		
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M		
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M		
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000050	<0.000200	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.000054	0.000054	0.000023
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.000059	<0.000050	<0.000050
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000050	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000100	<0.000050	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	0.00013	<0.000050	<0.000050
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000030	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000100	<0.000100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	<0.000200	<0.000100	<0.000100
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000200	<0.000100	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	<0.000050	0.00026
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.000050	<0.000200

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			<0.45
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			<0.54
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			<0.65
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			<0.52
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			<0.21

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.45	<0.47	<0.45
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.50	<0.44	<0.44
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.51	<0.78	<0.79
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.64	<0.46	<0.45
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.19	<0.29	<0.28

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.45	0.661	<1.6	<0.80
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0.523	<0.54	<1.8	<0.66
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.77	<1.1	6.4	<0.67
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.45	<0.60	<2.0	<0.36
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.28	0.517	<1.0	<0.22

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.33	<0.29	<0.22
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.47	<0.38	<0.27
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.32	<0.29	<0.36
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.34	<0.29	<0.30
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.62	<0.098	<0.15

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.21	<0.38	<0.24
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.25	<0.34	<0.29
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.34	<0.46	<0.36
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.30	<0.41	<0.30
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.13	<0.19	<0.16

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.30	<0.35	1.08
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	1.41	<0.46	<1.3
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.43	<0.56	<1.3
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.28	<0.44	<1.2
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.24	<0.29	<0.60

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	1	0
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0	1
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	0	0
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0	0
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	1	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0	0
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	1	0
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	0	0
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0	0
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M		
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M		
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M		
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0	0
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M		
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0	0
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	0	0
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0	0
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M		
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0	0	0.661
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	0	0	<0.54
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	0	0	<1.1
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0	0	<0.60
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	0	2	0.517

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.35	<0.47	<0.27	<0.31
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	1.41	0.523	<0.34	<0.41
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.56	<0.79	<0.46	<0.51
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.44	<0.46	<0.41	<0.64
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.29	<0.29	<0.19	<0.19

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.33	<0.45	<0.80	
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	<0.45	<0.54	<0.66	
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	<0.32	<0.65	<0.67	
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	<0.34	<0.52	<0.36	
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	<0.10	<0.21	0.62	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			0.00693
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			0.0664
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			0.00192
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			0
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			0.00517

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	0.914	1.33	
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M	1.05	1.51	
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	0.867	1.73	57
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	0.787	1.57	69
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M	0.327	0.629	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	68	66	60
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	83	75	83
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	69	58	72
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	89	86	92
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	69	59	64
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	86	77	77
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	70	65	53
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	91	78	78
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M	58	42	56
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M	74	47	70
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				<0.25
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				<0.25
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				<0.25
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				<0.25
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				<0.25
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				<0.25
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M	<0.25		89.2
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M	<0.25		76.4
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M	<0.25		90.2
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M	<0.25		83
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M	<0.25		90.6
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M	<0.25		95.7
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M			
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M			
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M			
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M			
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M			
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M			
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M			
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M			
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M			
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21D2478-14	2021/04/22	Water	M				
SW-02	SW21-2	21E1990-16	2021/05/18	Water	M				
SW-02	SW21-2	21E2917-16	2021/05/26	Water	M				
SW-02	SW21-2	21F0167-16	2021/06/01	Water	M				
SW-02	SW21-2	21F1056-16	2021/06/08	Water	M				
SW-02	SW21-2	21F2014-14	2021/06/15	Water	M				
SW-02	SW21-2	21G2414-14	2021/07/20	Water	M				
SW-02	SW21-2	21H3040-14	2021/08/25	Water	M				
SW-02	SW21-2	21I3814-14	2021/09/28	Water	M				
SW-02	SW21-2	21J2995-02	2021/10/21	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M		14.60
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		18.70
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	6.3	10.70
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	10.1	16.10
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	9.4	15.60
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	9.8	16.60
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	19.9	29.60
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	3.8	5.70
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	5.2	7.40

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	9	0.03	105.4
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	11	0.43	104.5
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		0.40	107.7
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		0.10	103.8
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		0.30	106.7
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		0.30	101.2
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		0.30	100.0
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		0.14	102.6
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		0.14	103.4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	13.44	10.9
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	13.86	12
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	14.30	12.4
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	13.70	11
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	13.89	11.9
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	13.48	11.1
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	11.93	10.2
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	12.26	10.4
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	11.84	9.6

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	2.52		46.17
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	1.39		145.40
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	2.1		51.70
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	1.58		182.60
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	1.71		52.30
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	1.64		276.10
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	2.3		1224.00
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	1.3		158.80
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.94		66.40

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	7.54	6.53		0.01
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	5.17	6.75		0.01
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	7.40	6.88		0
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	7.20	7.57	0.01	0
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	8.40	6.53	0.01	0
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	6.10	7.05	0.01	
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		6.66	0.01	
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	6.17	6.37		
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	6.45	6.42		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	5.10	
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	3.60	
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	3.60	7
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	3.60	11
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	4.20	10
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	3.40	
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	7.70	
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	7.60	
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	9.50	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	9	<2.0	5.13
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	12	<2.0	5.34
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		2.4	3.9
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		<2.5	5.67
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		<2.6	4.08
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		<3.3	4.38
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		<3.3	3.09
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		<4.0	1.77
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		<2.5	2.05

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			0.87	<1
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			0.10	2
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		1.54		<1.8
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		0.07		<1
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		0.22		<1
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		0.303		<1
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		3.2		4
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		0.53	0.53	1
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	2.17	0		<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M		<0.050	
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		<0.050	
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		<0.050	
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		<0.050	<0.10
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		<0.050	<0.10
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		<0.050	<0.10
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		<0.050	<0.10
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		0.108	<0.10
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		<0.050	<0.10

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			0.046
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			0.054
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			0.04
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0.82	<0.10	0.061
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	0.6	<0.10	0.055
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	0.87	<0.10	0.058
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	0.55	<0.10	0.049
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0.18	<0.10	0.012
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.27	<0.10	0.013

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.010		
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.010		
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.010		
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.010		
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.010		
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M		0.103	<0.00020	<0.00050
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		0.0179	<0.00020	<0.00050
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		0.211	<0.00020	<0.00050
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	2.9	0.0705	<0.00020	<0.00050
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	2.4	0.0998	<0.00020	<0.00050
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	2.5	0.124	<0.00020	<0.00050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	1.5	0.145	<0.00020	<0.00050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<1.0	0.12	<0.000050	0.000052
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<1.0	0.0556	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.0050	<0.00010	<0.00010	<0.0500
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0.00146	<0.000010	<0.000010	0.002
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.0013	<0.000010	<0.000010	0.0034

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000010	1.74		<0.00050
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000010	1.82		<0.00050
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000010	1.34		<0.00050
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000010	1.83		<0.00050
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000010	1.44		<0.00050
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000010	1.63		<0.00050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000010	1.1		<0.00050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0.0000036	0.558		0.00015
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.0000037	0.7		<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			<0.00010
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			<0.00010
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			<0.00010
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			<0.00010
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			<0.00010
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			<0.00010
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			<0.00010
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			0.0000362
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			0.0000241

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	0.00078		0.019	<0.00020
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	0.00045		0.011	<0.00020
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	0.00056		0.072	<0.00020
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.00040		0.011	<0.00020
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.00040		0.015	<0.00020
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.00040		0.037	<0.00020
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	0.00046		0.056	<0.00020
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.00020		0.0318	<0.000050
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.00020		0.0102	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	0.00052	0.189	0.00111	<0.000010
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	0.00066	0.191	0.00088	<0.000010
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	0.0004	0.135	0.00276	<0.000010
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0.00074	0.178	0.00042	<0.000010
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	0.00054	0.166	0.00091	<0.000010
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	0.00069	0.185	0.00137	<0.000010
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	0.00035	0.115	0.00226	<0.000010
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0.000223	0.0624	0.00108	<0.000010
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.000299	0.0737	0.000497	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	0.00041	<0.00040	<0.050	0.24	
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	0.00039	<0.00040	<0.050	0.24	
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	0.00028	<0.00040	<0.050	0.14	
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0.0005	<0.00040	<0.050	0.22	
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M					
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	0.00043	<0.00040	<0.050	0.11	
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	0.00052	<0.00040	<0.050	0.25	
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	0.00026	<0.00040	<0.050	0.15	
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0.000181	0.000084	<0.01	0.093	
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.000284	0.000076	<0.010	0.118	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M		<0.00050	2.5	<0.000050
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		<0.00050	2.6	<0.000050
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		<0.00050	1.9	<0.000050
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		<0.00050	2.5	<0.000050
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		<0.00050	2.2	<0.000050
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		<0.00050	2	<0.000050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		<0.00050	1.6	<0.000050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		<0.00010	0.8	<0.000010
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		<0.00010	1.05	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	1.12	0.0068	<3.0	<0.00050
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	1.41	0.0079	<3.0	<0.00050
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	0.57	0.0056	<3.0	<0.00050
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	1.09	0.0077	8.9	<0.00050
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	0.9	0.0074	<3.0	<0.00050
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	1.1	0.0086	<3.0	<0.00050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	0.59	0.0047	<3.0	<0.00050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0.35	0.00277	<1	<0.000050
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.513	0.00336	<1.0	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.0000040	0.00001	<0.000050	0.00185
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.0000040	<0.000010	<0.000050	0.00044

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.0010	0.000182	<0.0010	
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.0010	0.000104	<0.0010	
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.0010	0.00026	<0.0010	
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.0010	0.000165	<0.0010	
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.0010	0.000141	0.0015	
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.0010	0.00019	<0.0050	
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.0002	0.000178	<0.0050	
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.00020	0.000127	<0.00100	
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.00020	0.000119	<0.00100	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.0040	<0.00010		
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.0040	<0.00010		
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.0040	<0.00010		
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.0040	<0.00010	0.0628	<0.00020
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	0.0047	<0.00010	0.0862	<0.00020
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.0040	<0.00010	0.0787	<0.00020
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.0040	<0.00010	0.0935	<0.00020
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.0010	<0.000020	0.0777	<0.00020
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.0010	<0.000020	0.0467	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.00050	<0.0050	<0.00010	<0.00010
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.00050	<0.0050	<0.00010	<0.00010
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.00050	<0.0050	<0.00010	<0.00010
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.00050	<0.0050	<0.00010	<0.00010
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.00050	<0.0050	<0.00010	<0.00050
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000050	0.00129	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.0500	<0.000010	1.94	
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.0500	0.000014	1.38	
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.0500	<0.000010	1.47	
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.0500	<0.000010	1.07	
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.0500	<0.000010	0.61	
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.0042	0.0000037	0.747	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.00050		
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.00050		
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.00050		
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.00050		
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.00050		
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.00016		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.00010	<0.00040		<0.010
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.00010	<0.00040		<0.010
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.00010	<0.00040		<0.010
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.00010	<0.00040		0.012
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.00010	<0.00040		<0.010
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.0000169	0.00012		0.0033

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.00020	0.00104	0.199	0.00039
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.00020	0.00053	0.153	0.00067
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.00020	0.00063	0.175	0.00037
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.00020	0.00032	0.101	0.00078
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.00020	0.00019	0.058	0.00035
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000050	0.000412	0.073	0.000207

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000010	0.00053	<0.00040	<0.050
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000010	0.00041	0.00064	<0.050
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000010	0.00046	<0.00040	<0.050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000010	0.00027	<0.00040	<0.050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000010	0.00011	<0.00040	<0.050
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000010	0.000243	<0.000160	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M					
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M					
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M					
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0.23			<0.00050	2.4
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M					
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	0.1			<0.00050	2.1
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	0.23			<0.00050	2
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	0.15			<0.00050	1.4
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.10			<0.00050	<1.0
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.111			<0.00010	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000050	1.63	0.0157	11.5
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000050	0.84	0.0074	<3.0
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000050	1.03	0.0078	<3.0
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000050	0.59	0.0048	<3.0
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000050	0.37	0.0026	<3.0
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000010	0.472	0.00317	<1.00

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.00050	<0.000020	<0.00010	<0.00020
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.00050	<0.000020	<0.00010	<0.00020
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.00050	<0.000020	<0.00010	<0.00020
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.00050	<0.000020	<0.00010	<0.00020
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.00050	<0.000020	<0.00010	<0.00020
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.0050	<0.0010	0.000159	<0.0010
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.0050	<0.0010	0.00014	<0.0010
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.0050	<0.0010	0.000162	<0.0050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.0050	<0.0010	0.000162	<0.0050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.0050	<0.0010	0.000126	<0.0050
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.00020	<0.00020	0.000144	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		<0.0040	<0.00010
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		<0.0040	<0.00010
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		0.0048	<0.00010
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		<0.0040	<0.00010
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		<0.0040	<0.00010
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		0.0011	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000000023	
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000000023	
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000000024	
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M	<0.000000023	
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000000023	
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000000050	
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000000024	
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0.000000125	
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.000000143	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M		<0.0005	<0.0010
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		<0.0005	<0.0010
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		<0.0005	<0.0010
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		<0.0005	<0.0010
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		<0.0005	<0.0010
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		<0.0005	<0.0010
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		<0.0005	<0.0010
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		<0.0005	<0.0010
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		<0.0005	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.0010	<0.0010	<0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			<0.0020	<0.00100
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			<0.0020	<0.00100
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			<0.0020	<0.00100
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			<0.0020	<0.00100
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			<0.0020	<0.00100
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			<0.0020	<0.00100
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			<0.0020	<0.00100
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			<0.0020	<0.00100
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			<0.0020	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M		
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M		
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M		
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M		
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M		
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M		
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M		
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000050	<0.000200	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000050	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000100	<0.000050	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000030	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000100	<0.000100
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000100	<0.000100
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000100	<0.000100
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000100	<0.000100
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000100	<0.000100
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000100	<0.000100
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000100	<0.000100
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000100	<0.000100
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000100	<0.000100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000200	<0.000100	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.000050	<0.000200
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.000050	<0.000200
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.000050	<0.000200
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.000050	<0.000200
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.000050	<0.000200
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.000050	<0.000200
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.000050	<0.000200
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.000050	<0.000200
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.000050	<0.000200

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			<0.15
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			<0.66
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			<1
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			<0.45
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			<1.4
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			<0.19

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.18	<0.17	<0.16
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.60	<0.61	<0.57
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M	<2	<2	<2
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.32	<0.30	<0.29
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<1.1	<0.83	<0.72
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.19	<0.16	<0.16

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.16	0.53	8.25	<0.16
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.56	<0.65	3.9	<0.57
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M	<2	<3	<4	<1
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M				
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.29	0.95	7.05	<0.27
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M				
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.76	0.92	10.2	<3.1
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.15	<0.43	2.3	<0.23

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	1.29	<0.12	<0.11
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.32	<0.28	<0.34
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M	<2	<2	<2
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.26	<0.24	<0.18
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.67	<0.60	<0.31
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.25	<0.12	<0.11

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	<0.099	<0.14	<0.12
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.32	<0.44	<0.33
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M	<2	<2	<2
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.16	<0.20	<0.17
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.27	<0.34	<0.30
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.093	<0.16	<0.12

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	0.62	<0.19	0.72
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0.56	<0.51	25.5
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M	<3	<3	<4
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.26	<0.32	<0.77
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0.52	<0.46	1.1
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.16	<0.23	<0.60

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	1	1
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0	0
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	0	0
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	1	1
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	0	0
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0	0
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	0	1
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0	0
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	0	1
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M		
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M		
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0	0
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M		
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M		
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	0	0
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M		
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0	0
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	0	0	0.77
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0	0	<0.65
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	0	0	<0.23
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0	0	1.02
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0	0	<0.43

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	0.62	<0.17	<0.14	<0.18
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.51	<0.61	<0.44	<0.60
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M				
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.32	<0.30	0.26	<0.32
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M				
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	0.52	<0.83	<0.34	<1.1
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.23	<0.16	<0.16	<0.19

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	1.29	<0.15	<0.16	
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	<0.32	<0.66	<0.57	
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				0
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M				
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	<0.26	<0.45	<0.27	
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M				
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	<0.67	<1.4	<3.1	
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	<0.13	<0.19	<0.23	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			0.0474
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			0.00883
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M	0	0	
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			0.00212
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			0.00822
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	0.293	0.533	73
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	0.884	1.75	79
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	0.533	1.05	74
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	1.7	3.39	87
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	0.28	0.551	67

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	73	79	73
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	80	83	78
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	71	71	76
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	91	91	68
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	71	74	71

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	75	76	83
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	81	82	83
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	73	73	73
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	79	73	89
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	78	75	89

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	77	63	67
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	80	102	92
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	73	72	68
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	87	54	57
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	77	59	63

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	72	65	63
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	81	99	78
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	74	71	73
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	86	58	37
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	74	64	65

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M	69	57	61
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M	78	64	79
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M	70	64	78
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M	25	78	38
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M	72	54	64

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				<0.25
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				<0.25
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M				
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M				<0.25
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M				
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M				<0.25
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M				
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M	<0.25		129
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M	<0.25		107
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M	<0.25		104
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M	<0.25		81.9
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M			
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M			
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M			
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M			
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M			
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M			
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M			
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M			
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M			
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	21K3046-14	2021/11/23	Water	M				
SW-02	SW21-2	21L2125-14	2021/12/14	Water	M				
SW-02	SW21-02	22A2312-14	2022/01/20	Water	M				
SW-02	SW21-2	22B2487-14	2022/02/17	Water	M				
SW-02	SW21-2	22B3076-02	2022/02/22	Water	M				
SW-02	SW21-2	22C3145-14	2022/03/22	Water	M				
SW-02	SW21-02	22D2212-16	2022/04/20	Water	M				
SW-02	SW21-2	22E2480-14	2022/05/18	Water	M				
SW-02	SW21-02	22F3538-02	2022/06/22	Water	M				
SW-02	SW21-2	22G1944-02	2022/07/14	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	15.7	19.20
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	28.3	36.00
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	32.8	44.80
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	12.3	21.40
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	14.5	26.10
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	12.2	22.10
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	13.9	24.20
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	7.4	12.20
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	3.9	5.90

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		0.10	100.7
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		0.22	100.9
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		0.17	102.7
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		0.16	103.6
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		0.93	102.6
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		0.67	100.4
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		1.10	102.2
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		0.22	103.2
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	11.6	0.55	100.3
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		0.37	102.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	10.06	10.1
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	10.49	9.8
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	11.45	10.3
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	14.07	8.3
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	14.31	11.8
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	12.86	11.6
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	14.05	11.5
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	14.00	11.1
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	12.97	
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	12.31	9.6

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	1.06		120.40
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.65		105.30
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	1.05		62.60
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	1		70.60
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.56		126.60
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	1.39		184.70
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	1		122.90
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	1.62		210.40
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	1.67		201.60
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	1.58		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	6.98	6.33	0.01	
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	7.37	6.55	0.02	
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	7.69	6.42	0.02	
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	7.04	6.35	0.01	
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	7.20	6.54	0.01	
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	6.11	7.29		
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	7.75	6.18	0.01	
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	5.95	6.08	0.01	
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	5.53	5.98	0.01	
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	5.74	5.51	0.01	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	15.40	
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	13.70	
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	10.90	
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	2.90	
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	1.70	
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	3.91	
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	1.60	
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	2.70	
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	4.50	
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	7.50	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		<2.9	4.65
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		<2.7	7.64
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		<2.9	9.62
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		<2.0	6.03
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		<2.0	7
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		<2.0	5.41
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		<4.0	6.33
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		<3.3	6.63
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		<4.0	3.55
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		<4.0	1.87

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	4.67	0		14
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	7.95	0		1
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	9.64	0		2
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	6.08	0		1
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	6.97	0.16		1
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	5.47	0		<1
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	6.35	0.04		<1
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	6.57	0		3
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	3.61	0.05	0.24	<1
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	1.67	0.56	0.49	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		<0.050	<0.10
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		<0.050	<0.10
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		<0.050	<0.10
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		<0.050	<0.10
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		0.051	<0.10
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		<0.050	<0.10
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		<0.050	<0.10
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		<0.050	<0.10
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		<0.050	<0.10
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		<0.050	<0.10

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	1.21	<0.10	0.083
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	3.17	<0.10	0.155
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	4.22	<0.10	0.201
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	1.22	<0.10	0.108
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	1.77	<0.10	0.131
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.95	<0.10	0.106
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	1.27	<0.10	0.078
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	1.34	<0.10	0.076
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.44	<0.10	0.072
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.9	<0.050	0.0286

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.010		
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.010		
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.010		
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.010		
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.0050	0.131	
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.0050	0.106	
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.010		
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.010		
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.010		
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.0067	0.0353	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	2.4	0.0266	<0.000050	<0.000050
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	4.7	0.0196	<0.000050	0.00006
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	5.8	0.019	<0.000050	0.000055
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	3	0.0427	<0.000050	<0.000050
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	3.8	0.0366	<0.000050	0.000051
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	3.5	0.0497	<0.000050	<0.000050
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	3.5	0.0505	<0.00020	<0.00050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	3.3	0.0585	<0.00020	<0.00050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	1.6	0.0898	<0.000050	0.000053
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<1.0	0.114	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	0.00321	<0.000010	<0.000010	0.0207
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.00577	<0.000010	<0.000010	0.0443
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.00706	<0.000010	<0.000010	0.0604
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.00347	<0.000010	<0.000010	0.0147
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.004	<0.000010	<0.000010	0.021
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.00288	<0.000010	<0.000010	0.0127
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.0050	<0.000010	<0.000010	<0.0500
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.0050	<0.000010	<0.000010	<0.0500
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.00199	<0.000010	<0.000010	0.0042
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.00138	<0.000010	<0.000010	<0.0020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	0.0000073	1.58		0.00019
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.0000068	2.54		0.00019
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.0000089	3.16		0.00018
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.000009	2.05		0.00016
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.0000075	2.36		0.00013
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.0000077	1.84		0.00019
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000010	2.13		<0.00050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000010	2.25		<0.00050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.0000074	1.23		0.00014
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.000004	0.636		<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			0.0000145
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			0.0000126
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			0.0000135
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			0.0000317
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			0.0000249
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			0.0000428
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			<0.00010
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			<0.00010
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			0.0000495
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			0.0000332

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.00020		0.0046	<0.000050
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.00020		0.0035	<0.000050
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.00021		0.0034	<0.000050
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.00028		0.0062	<0.000050
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.00024		0.0084	<0.000050
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.00024		0.008	<0.000050
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.00040		0.013	<0.000020
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.00040		0.012	<0.000020
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.00025		0.0131	<0.000050
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.00020		0.0255	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	0.00112	0.167	<0.000350	<0.000010
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.00168	0.315	0.000228	<0.000010
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.00208	0.415	0.000194	<0.000010
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.000946	0.221	0.000542	<0.000010
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.0013	0.264	0.000397	<0.000010
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.00088	0.195	0.000445	<0.000010
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0.00113	0.243	0.00056	<0.000010
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0.00137	0.242	0.00055	<0.000010
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.000383	0.119	0.000516	<0.000010
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.000252	0.0683	0.000888	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	0.000682	0.000096	<0.01	0.299	
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.000824	0.000138	<0.010	0.472	
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.00101	0.000129	<0.01	0.543	
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.000605	0.000211	<0.025	0.269	
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.000746	0.000194	<0.02	0.288	
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.000486	0.000134	<0.01	0.265	
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0.00061	<0.00040	<0.050	0.29	
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0.00077	<0.00040	<0.050	0.29	
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.000361	0.000158	<0.01	0.177	
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.000176	0.000069	<0.01	0.117	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		<0.00010	1.84	<0.000010
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		<0.00010	2.8	<0.000010
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		<0.00010	3.15	<0.000010
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		<0.00010	2.54	<0.000010
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		<0.00010	2.73	<0.000010
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		<0.00010	2.61	<0.000010
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		<0.00050	2.7	<0.000050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		<0.00050	2.8	<0.000050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		<0.00010	1.67	<0.000010
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		<0.00010	0.95	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	1.53	0.00786	<1	<0.000050
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	2.87	0.0139	1.6	<0.000050
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	3.85	0.0177	1.9	<0.000050
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	1.38	0.00938	<1	<0.000050
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	1.89	0.0114	1.2	<0.000050
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	1.34	0.00868	1.1	<0.000050
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	1.66	0.0102	<3.0	<0.000050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	1.68	0.0107	<3.0	<0.000050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.701	0.00517	<1	<0.000050
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.43	0.00277	<1	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.0000040	<0.000010	<0.000050	<0.00020
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.0000043	<0.000010	<0.000050	<0.00020
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.000005	<0.000010	<0.000050	<0.00020
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.0000040	<0.000010	<0.000050	<0.00020
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.0000040	<0.000010	<0.000050	0.00032
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.0000040	<0.000010	<0.000050	0.00028
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000020	<0.00010	<0.00020	<0.0050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.0000040	0.00001	<0.000050	0.00054
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.0000040	0.000012	<0.000050	0.00118

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.00020	0.0000975	<0.00100	
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.00020	0.000102	<0.00100	
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.00020	0.000109	<0.00100	
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.00020	0.000122	<0.00100	
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.00020	0.000116	<0.00100	
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.00020	0.00013	<0.00100	
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.0010	0.000123	<0.0050	
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.0010	0.000121	<0.0050	
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.00020	0.00017	<0.00100	
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.00020	0.00015	<0.00100	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.0010	<0.000020	0.0246	<0.000050
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.0010	<0.000020	0.0201	<0.000050
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.0010	<0.000020	0.0169	<0.000050
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.0011	<0.000020	0.0425	<0.000050
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.001	<0.000020	0.0363	<0.000050
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.0028	<0.000020	0.0499	<0.000050
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.0040	<0.00010	0.0389	<0.000050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.0040	<0.00010	0.0479	<0.000050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.0013	<0.000020	0.0838	<0.000050
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.0012	<0.000020	0.0874	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000050	0.00337	<0.000010	<0.000010
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.000052	0.00592	<0.000010	<0.000010
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.000056	0.00669	<0.000010	<0.000010
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000050	0.00346	<0.000010	<0.000010
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000050	0.00405	<0.000010	<0.000010
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000050	0.00315	<0.000010	<0.000010
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000050	0.00337	<0.000010	<0.000010
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000050	0.00358	<0.000010	<0.000010
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000050	0.00203	<0.000010	<0.000010
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000050	0.00111	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	0.0219	0.0000061	1.58	
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.0449	0.0000068	2.63	
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.0592	0.0000078	3.17	
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.0146	0.0000079	2.06	
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.0222	0.0000085	2.32	
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.0121	0.0000097	1.86	
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0.0157	0.0000076	2.16	
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0.0168	0.0000082	2.22	
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.004	0.0000077	1.24	
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.0020	0.0000037	0.566	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L		
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	0.0002		
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.00015		
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.0001		
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.00011		
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.00016		
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.00013		
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0.00016		
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.00010		
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.00050		
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	0.0000119	0.00017		0.0033
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.0000109	0.00019		0.0024
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.000011	0.00019		0.0022
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.0000311	0.00024		0.0045
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.0000231	0.00024		0.0039
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.0000445	0.00026		0.0054
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0.0000373	0.00028		0.0038
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0.000033	0.00031		0.0049
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.0000438	0.00023		0.0066
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.0000226	0.00017		0.007

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000050	0.00126	0.177	0.000166
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000050	0.00182	0.333	0.000157
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000050	0.00211	0.415	0.000116
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000050	0.000991	0.226	0.000413
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000050	0.00156	0.282	0.000268
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000050	0.000835	0.197	0.000362
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000050	0.00106	0.23	0.00036
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000050	0.00128	0.247	0.000385
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000050	0.000396	0.122	0.000352
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000050	0.000213	0.063	0.000384

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000010	0.000653	0.000114	<0.01
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000010	0.000855	0.000137	<0.010
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000010	0.000894	0.000116	<0.01
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000010	0.000589	0.000178	<0.01
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000010	0.000782	0.000182	<0.01
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000010	0.000459	0.000187	<0.01
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000010	0.000549	0.000183	<0.01
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000010	0.000634	0.000211	<0.01
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000010	0.000307	0.000116	<0.01
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000010	0.000169	0.000072	<0.01

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	0.309			<0.00010	1.98
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.517			<0.00010	3
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	0.56			<0.00010	3.24
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.27			<0.00010	2.56
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	0.305			<0.00010	2.73
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.263			<0.00010	2.64
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0.272			<0.00010	2.62
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0.291			<0.00010	2.75
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.181			<0.00010	1.66
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.109			<0.00010	0.92

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000010	1.59	0.00781	<1
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000010	3.08	0.0152	1.44
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000010	3.88	0.0174	1.8
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000010	1.42	0.00951	<1
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000010	2.11	0.0116	<1
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000010	1.3	0.00925	<1
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000010	1.6	0.0104	<1
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000010	1.76	0.011	1.06
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000010	0.719	0.00526	<1
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000010	0.406	0.00292	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000050	0.0000048	<0.000010	<0.000050
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.00020	<0.00020	0.000109	<0.00100
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.00020	<0.00020	0.000105	<0.00100
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.00020	<0.00020	0.000104	<0.00100
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.00020	<0.00020	0.000123	<0.00100
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.00020	<0.00020	0.000126	<0.00100
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.00020	<0.00020	0.000127	<0.00100
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.00020	<0.00020	0.0000962	<0.00100
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.00020	<0.00020	0.000105	<0.00100
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.00029	<0.00020	0.000151	<0.00100
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.00034	<0.00020	0.000143	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		<0.0010	<0.000020
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		<0.0010	<0.000020
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		<0.0010	<0.000020
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		<0.0010	<0.000020
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		<0.0010	<0.000020
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		<0.0010	<0.000020
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		0.0017	<0.000020
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		0.0011	<0.000020
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		<0.0010	0.000021
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		0.0013	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	0.000000321	
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.000000499	
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000000050	
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000000050	
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000000023	
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000000060	
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000000050	
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000000050	
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0.00000008	
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0.000000056	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		<0.0005	<0.0010
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		<0.0005	<0.0010
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		<0.0005	<0.0010
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		<0.0005	<0.0010
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		<0.0005	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.0010	<0.0010	<0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			<0.0020	<0.00100
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			<0.0020	<0.00100
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			<0.0020	<0.00100
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			<0.0020	<0.00100
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			<0.0020	<0.00100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M		
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M		
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M		
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M		
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M		
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000050	<0.000200	<0.000124
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000050	<0.000200	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000050	<0.000050	0.000052
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000050	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000100	<0.000050	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000030	<0.000050	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000100	<0.000100
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000100	<0.000100
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000100	<0.000100
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000100	<0.000100
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000100	<0.000100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000200	<0.000100	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.000050	<0.000200
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.000050	<0.000200
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.000050	<0.000200
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.000050	<0.000200
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.000050	<0.000200
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.000050	<0.000200
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.000050	<0.000200
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.000050	<0.000200
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<0.000050	<0.000200
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<0.000050	<0.000200

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			<0.42
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			<0.39
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			<0.40
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			<0.51
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			<0.42
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			<1
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.33	<0.57	<0.53
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.29	<0.21	<0.20
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.29	<0.36	<0.35
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.18	<0.19	<0.21
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.74	<0.28	<0.27
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<2	<2	<2
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M				
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.54	<0.84	2.1	<0.41
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M				
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.20	0.861	5.08	0.303
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M				
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.41	0.5	4.6	<0.42
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.19	<0.32	1.58	<0.16
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.26	<0.70	<8.2	<0.35
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<2	<3	<4	<1
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.34	<0.31	<0.26
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.26	<0.25	<0.22
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.56	0.29	0.35
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.31	<0.28	<0.072
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.26	<0.24	<0.25
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<2	<2	<2
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.27	<0.34	<0.27
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.21	<0.28	<0.24
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.28	0.27	0.31
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.067	<0.093	<0.077
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.22	<0.28	<0.25
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<2	<2	<2
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.43	<0.65	<0.95
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.19	<0.24	<0.63
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.47	<0.22	1.5
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.13	<0.12	0.701
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.40	<0.40	<2.1
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	<3	<3	<4
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0	0
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	2	0
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0	1
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0	0
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0	0
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0	0
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0	0
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	1	1
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0	0
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0	0
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M		
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0	0
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M		
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0	0
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M		
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0	1
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0	0
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0	0
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M		
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0	0	<0.84
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0	2	1.78
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0	0	<0.42
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0	0	<0.12
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0	0	<0.70
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M				
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.65	<0.57	<0.34	<0.33
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M				
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.24	<0.21	<0.28	<0.29
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M				
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.47	0.41	0.35	<0.29
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.12	<0.21	<0.093	<0.18
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.40	<0.28	<0.28	<0.74
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M				
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M				
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	<0.34	<0.42	<0.41	
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M				
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	<0.26	<0.39	0.479	
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M				
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.56	<0.40	<0.42	
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.31	<0.51	<0.16	
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	<0.26	<0.42	<0.35	
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M				0
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			0
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			0.0404
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			0.098
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			0.000684
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			0
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M	0	0	
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	0.596	1.19	65
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M	0.503	0.964	
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	0.68	1.08	85
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	0.45	0.896	
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M	0.751	1.47	
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	75	68	75
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	83	91	79
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	81	82	82
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	76	80	84
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	79	70	73
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	79	84	82
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	80	72	73
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	79	81	64
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M	71	43	67
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	64	72	74
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M				<0.25
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M				
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M				<0.25
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M				
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M				<0.25
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M				<0.25
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M				<0.25
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M				
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M				
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M	<0.25		113
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M	<0.25		105
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M	<0.25		97.9
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M	<0.25		123
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M	<0.25		52.7
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M			
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M			
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M			
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M			
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M			
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M			
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M			
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M			
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M			
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	22H2790-02	2022/08/18	Water	M				
SW-02	SW21-2	22I2095-02	2022/09/15	Water	M				
SW-02	SW21-2	22J1763-02	2022/10/13	Water	M				
SW-02	SW21-2	22K1308-02	2022/11/09	Water	M				
SW-02	SW21-2	22L0650-02	2022/12/06	Water	M				
SW-02	SW21-2	23A2725-02	2023/01/26	Water	M				
SW-02	SW21-2	23B2818-02	2023/02/27	Water	M				
SW-02	SW21-2	23C1944-02	2023/03/16	Water	M				
SW-02	SW21-2	23D3227-02	2023/04/27	Water	M				
SW-02	SW21-2	23E2501-02	2023/05/18	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	1.5	1.5	<1.0
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	1.8	1.8	<1.0
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	3.4	3.4	<1.0
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	3.2	3.2	<1.0
SW-02		VA24A1299-002	2024/01/23	Water	M	2.2		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<1.0	<1.0	
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<1.0	<1.0	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<1.0	<1.0	
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<1.0	<1.0	
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	7.8	10.10
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	18.4	22.70
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	30.8	39.10
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	7.8	10.80
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	11.5	18.60
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	10.6	17.60
SW-02		VA24A1299-002	2024/01/23	Water	M	6.7	11.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	8.4		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	10.1	0.87	100.5
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	21.4	0.12	94.8
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	37.8	0.05	98.8
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	10.5	0.13	106.3
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	17.6	0.20	101.2
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	18.6	0.97	102.5
SW-02		VA24A1299-002	2024/01/23	Water	M		0.51	104.2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	10.60	
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	9.52	
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	10.21	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	11.85	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	12.89	
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	13.37	
SW-02		VA24A1299-002	2024/01/23	Water	M	13.91	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	1.25		249.60
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	1.76		190.00
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	1.72		194.80
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	2.17		184.00
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	1.37		76.50
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	1.47		179.00
SW-02		VA24A1299-002	2024/01/23	Water	M	2.06	2.16	173.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		5.65		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	6.26	6.29		
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	7.00	6.35	0.01	
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	7.26	6.35	0.02	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	6.03	5.84	0	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	7.32	5.91	0.01	
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	6.40	5.31	0.01	
SW-02		VA24A1299-002	2024/01/23	Water	M	6.08	6.45	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	13.00	
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	15.20	
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	13.90	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	10.60	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	5.10	
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	4.20	
SW-02		VA24A1299-002	2024/01/23	Water	M	3.30	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			2.46
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M		<2.0	2.78
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		<2.0	5.34
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M		<2.0	8.79
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		4	4.23
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		<2.0	5.04
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M		2.4	5.89
SW-02		VA24A1299-002	2024/01/23	Water	M	14	<3.0	3.48

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	2.8	0.27	0.30	8
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	5.46	0	<0.10	<1
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	8.82	0.04	<0.10	2
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	3.44	1.11	1.27	8
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	5.49	0	0.14	<1
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	5.25	0.78	0.56	2
SW-02		VA24A1299-002	2024/01/23	Water	M	3.36	3.50666667	0.79	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<0.00400		<0.10
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M		<0.050	<0.10
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		<0.050	<0.10
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M		<0.050	<0.10
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		<0.050	<0.10
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		<0.050	<0.10
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M		<0.050	
SW-02		VA24A1299-002	2024/01/23	Water	M		0.0063	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	0.38	<0.10	0.019
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.45	<0.050	
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	1.67	<0.050	
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	3.59	<0.050	0.15
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.43	<0.10	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.74	<0.10	0.082
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.83	<0.050	0.079
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.50	<0.020	0.0506

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<0.010		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.010		
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.0101		
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.0050	0.15	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.010		
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.010		
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.010		
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			<0.0050
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	1.1	0.0584	<0.000050	<0.000050
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	1.1	0.04	<0.000050	<0.000050
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	2.9	0.0246	<0.000050	0.000065
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	5.4	0.0191	<0.000050	<0.000050
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	1.3	0.277	<0.000050	0.0001
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	2.8	0.0598	<0.000050	<0.000050
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	2.4	0.104	<0.000050	<0.000050
SW-02		VA24A1299-002	2024/01/23	Water	M	1.72	0.197	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	0.00148	<0.000010	<0.000010	0.0035
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.00188	<0.000010	<0.000010	0.0084
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.00375	<0.000010	<0.000010	0.0248
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.00629	<0.000010	<0.000010	0.0549
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.0041	0.000013	<0.000010	0.0035
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.00314	<0.000010	<0.000010	0.0071
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.00307	<0.000010	<0.000010	0.0102
SW-02		VA24A1299-002	2024/01/23	Water	M	0.00317	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	0.0000047	0.846		<0.00050
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.000003	0.961		<0.00050
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.0000056	1.8		<0.00050
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.000007	2.92		0.00015
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.0000091	1.39		0.00018
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.0000103	1.72		<0.00010
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.0000109	2		0.00012
SW-02		VA24A1299-002	2024/01/23	Water	M	0.0000082	1.17	0.000013	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			0.0000224
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			0.0000209
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			0.0000141
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			0.0000105
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			0.000134
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			0.0000509
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			0.0000562
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<0.00020		0.0067	<0.000050
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.00028		0.0053	<0.000050
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.00020		0.004	<0.000050
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.00028		0.0029	<0.000050
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.00047		0.12	0.00008
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.00028		0.009	<0.000050
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.00035		0.0305	0.000232
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050		0.065	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	0.000421	0.0838	0.000311	
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.000587	0.0921	0.000258	<0.000010
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.00128	0.206	0.00024	<0.000010
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.00194	0.363	0.000189	<0.000010
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.000463	0.183	0.00461	<0.000010
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.00059	0.18	0.000513	<0.000010
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.0008	0.215	0.00109	<0.000010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.0010	0.137	0.00255	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	0.000361	0.000087	<0.01	0.124	
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.000473	0.000075	<0.01	0.173	
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.000733	0.000101	0.01	0.345	
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.000957	0.0001	0.011	0.516	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.000242	0.000198	<0.01	0.233	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M					
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M					
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.000442	0.000193	<0.01	0.241	
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.000461	0.000217	0.011	0.168	
SW-02		VA24A1299-002	2024/01/23	Water	M	0.00032	<0.00050	<0.050	0.167	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		<0.00010	1.2	<0.000010
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M		<0.00010	1.15	<0.000010
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		<0.00010	2.23	<0.000010
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M		<0.00010	3.09	<0.000010
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		<0.00010	2.01	<0.000010
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		<0.00010	2.68	<0.000010
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M		<0.00010	2.76	<0.000010
SW-02		VA24A1299-002	2024/01/23	Water	M	0.00047	<0.000050	2.04	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	0.589	0.0037	<1	<0.000050
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.722	0.00449	<1	<0.000050
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	1.81	0.00949	<1	<0.000050
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	3.33	0.0154	2.2	<0.000050
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.779	0.00685	<1	<0.000050
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	1.13	0.00859	1.2	<0.000050
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	1.34	0.00805	<1	<0.000050
SW-02		VA24A1299-002	2024/01/23	Water	M	0.698	0.00534	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<0.0000040	<0.000010	<0.000050	0.00029
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.0000040	<0.000010	<0.000050	<0.00020
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.0000040	<0.000010	<0.000050	<0.00020
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.0000064	0.00001	<0.000050	<0.00020
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.0000045	0.00002	<0.000050	0.00548
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.0000040	<0.000010	<0.000050	0.0005
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0000040	<0.000010	<0.000050	0.00143
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000010	<0.00010	<0.00010	0.00337

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<0.00040	0.000125	<0.00100	
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.00020	0.000104	<0.00100	
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.00020	0.000105	<0.00100	
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.00020	0.000104	<0.00100	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.00020	0.000199	<0.00100	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.00020	0.000135	<0.00100	
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.00001	0.000157	<0.00040	
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00010	0.000209	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<0.0010	<0.000020		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.0010	<0.000020	0.0329	<0.000050
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.0010	<0.000020	0.0242	<0.000050
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.0010	<0.000020	0.0293	<0.000050
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.0018	0.000038	0.133	<0.000050
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.0010	<0.000020	0.0623	<0.000050
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.0013	0.000021	0.0649	<0.000050
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.0030	<0.00020	0.108	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000050	0.00181	<0.000010	<0.000010
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.000055	0.00422	<0.000010	<0.000010
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.000071	0.00661	<0.000010	<0.000010
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.000066	0.00261	<0.000010	<0.000010
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000050	0.00333	<0.000010	<0.000010
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000050	0.00305	<0.000010	<0.000010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00010	0.00192	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.0063	0.0000045	0.952	
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.0245	0.0000062	1.85	
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.053	0.0000064	2.92	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.0024	0.000007	1.19	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.0062	0.0000076	1.88	
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.0087	0.0000064	1.79	
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.010	0.0000051	1.15	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.00050		
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.00050		
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.00050		
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.00050		
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.00050		
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.00050		
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.000014	0.00012		0.0022
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.0000109	0.00018		0.0023
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.0000105	0.00024		<0.0020
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.0000793	0.00035		0.0135
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		0.00038		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		0.00038		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.0000492	0.00037		0.0049
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.000049	0.00028		0.0067
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00010	0.0003		0.01

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000050	0.000671	0.102	0.000157
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000050	0.0014	0.205	0.000158
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000050	0.00198	0.37	0.000151
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000050	0.000284	0.115	0.00177
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.000051	0.000622	0.188	0.000441
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000050	0.000728	0.185	0.000473
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000050	<0.0010	0.12	0.00099

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000010	0.000403	0.000096	<0.01
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000010	0.000602	0.000075	<0.01
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000010	0.000933	0.000101	<0.01
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000010	0.000199	0.000174	<0.01
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000010	0.000314	0.00021	<0.01
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000010	0.000426	0.000167	<0.01
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.0000050	0.000302	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M					
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0.191			<0.00010	1.13
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.365			<0.00010	2.26
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.535			<0.00010	3.01
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.194			<0.00010	1.69
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M					
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M					
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.239			<0.00010	2.76
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.212			<0.00010	2.63
SW-02		VA24A1299-002	2024/01/23	Water	M	0.154		0.00035	<0.000050	1.75

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000010	0.792	0.00442	<1
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000010	1.8	0.00966	<1
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000010	3.56	0.0154	1.53
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000010	0.65	0.00527	<1
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000010	1.23	0.00894	<1
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000010	1.13	0.00834	<1
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000010	0.693	0.00526	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000050	0.000005	<0.000010	<0.000050
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000050	<0.0000040	0.000014	<0.000050
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.00020	<0.00020	0.000107	<0.00100
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.00020	<0.00020	0.0000797	<0.00100
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.00020	<0.00020	0.000104	<0.00100
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.0006	<0.00020	0.000172	<0.00100
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.00020	<0.00020	0.000109	<0.00100
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	0.00026	0.00002	0.000151	<0.00040
SW-02		VA24A1299-002	2024/01/23	Water	M	0.00037	<0.00010	0.00019	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M		0.0016	<0.000020
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		0.001	<0.000020
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M		<0.0010	<0.000020
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		0.0017	0.000028
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		0.0013	<0.000020
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M		0.0012	<0.000020
SW-02		VA24A1299-002	2024/01/23	Water	M		0.001	<0.000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000000050	
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	0.000000066	
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000000050	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0.000000059	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	0.000000111	
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000000050	
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000000020	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			<0.1
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		<0.0005	<0.0010
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.1	<0.0005	<0.0010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.0010	<0.0010	<0.0005
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			<0.0020	<0.00100
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			<0.0020	
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00040	<0.00030	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0010	<0.0010	<0.0005
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0020	<0.0010	
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0005	<0.0010	<0.0010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0010	<0.0010	<0.0030
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0010	<0.0010	
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M		
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M		
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M		
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M		
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M		
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0005	<0.0010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M		
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M		
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.0010	<0.0010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M		
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M		
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M		
SW-02		VA24A1299-002	2024/01/23	Water	M	86.7	97.8

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000050	<0.000200	<0.000050
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000050	<0.000200	<0.000050
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000010	<0.000010	<0.000010
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000050	<0.000050	<0.000050
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000050	<0.000050	<0.000050
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000100	<0.000050	<0.000010
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000100	<0.000050	<0.000010
SW-02		VA24A1299-002	2024/01/23	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000030	<0.000050	<0.000050
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000030	<0.000050	<0.000050
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000100	<0.000100
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000100	<0.000100
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000200	<0.000100	<0.000020
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000200	<0.000100	<0.000020
SW-02		VA24A1299-002	2024/01/23	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.000050	<0.000200
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.000050	<0.000200
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.000050	<0.000200
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<0.000124	<0.000200
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M	<0.000050	<0.000200
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M	<0.000050	<0.000200
SW-02		VA24A1299-002	2024/01/23	Water	M		<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			<1
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			<0.53
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			<0.62
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			<1
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			<1
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M	109	108	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<2	<2	<2
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<1.1	<0.58	<0.59
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.81	<0.65	<0.62
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<2	<2	<2
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M	<2	<2	<2
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<2	<3	<4	<1
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.58	<1.2	<3.0	<0.81
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M				
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.63	<0.86	6.88	<0.60
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<2	<3	<4	<1
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M	<2	<3	<4	<1
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M				
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M				
SW-02		VA24A1299-002	2024/01/23	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<2	<2	<2
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.77	<0.38	<0.34
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.54	<0.47	<0.29
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<2	<2	<2
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M	<2	<2	<2
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<2	<2	<2
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.33	<0.49	<0.37
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.27	<0.36	<0.31
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<2	<2	<2
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M	<2	<2	<2
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	<3	<3	<4
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.44	<0.59	<1.1
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.38	<0.49	<0.80
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	<3	<3	<4
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M	<3	<3	<4
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0	0
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	1	0
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M		
SW-02		VA24A1299-002	2024/01/23	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0	0
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0	0
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M		
SW-02		VA24A1299-002	2024/01/23	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW-02	23F0370-03	2023/06/02	Water	M		
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0	0
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M		
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0	0
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M		
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M		
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M		
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M		
SW-02		VA24A1299-002	2024/01/23	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	0	0	<0.98
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0	0	1.74
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.59	<0.59	<0.49	<1.1
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M				
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.49	<0.65	<0.36	<0.81
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M				
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M				
SW-02		VA24A1299-002	2024/01/23	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				0
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	<0.44	<0.53	<0.81	
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M				
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.54	<0.62	<0.60	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M				0
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				0
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M				
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M				
SW-02		VA24A1299-002	2024/01/23	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M	0	0	
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			0
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			0.00206
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M	0	0	
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M	0	0	
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M	1.12	2.2	
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	0.995	1.98	
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M				
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M				<0.25
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M				<0.25
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M				
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M				
SW-02		VA24A1299-002	2024/01/23	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M	<0.25		100
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M	<0.25		115
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M			
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M			
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M			
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M			
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M			
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M			
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M			
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M			
SW-02		VA24A1299-002	2024/01/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	23F0370-03	2023/06/02	Water	M				
SW-02	SW21-2	23F3813-02	2023/06/28	Water	M				
SW-02	SW21-2	23G2576-02	2023/07/20	Water	M				
SW-02	SW21-2	23H3444-02	2023/08/25	Water	M				
SW-02	SW21-2	23J2428-02	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE1	2023/10/19	Water	M				
SW-02	SW21-2	23J2428-02RE2	2023/10/19	Water	M				
SW-02	SW21-2	23K2005-02	2023/11/16	Water	M				
SW-02	SW21-2	23L1794-02	2023/12/13	Water	M				
SW-02		VA24A1299-002	2024/01/23	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	3.8		
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	2.3		
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	3.4		
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	2.9		
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	2.2		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	11.1	19.20
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M		11.30
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M		
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	15.7	24.80
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M		0.03	102.4
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	10.9	0.09	103.6
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	12.6	0.01	100.5
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	13.85	
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	13.38	
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M		
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	12.55	
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0.97	1.16	176.80
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	2.02	1.8	149.80
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	2.13	2	
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	2.28	2.09	175.90
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	2.98	2.42	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	6.63	6.58	0.01	
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	6.39	6.56		<1.0
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M		6.71		
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	6.39	6.67		<1.0
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		6.56		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	2.80	
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	4.50	
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M		
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	5.90	
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	16	<3.0	5.33
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<10	<3.0	3.37
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	17	<3.0	4.39
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	18	<3.0	3.71
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	11	<3.0	3.17

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	5.32	0.3	<0.10	<1
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	3.33	0.46	<0.10	1
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	4.08		0.86	
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	3.64	0.32	0.12	1
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	3.02		0.28	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M		<0.0050	<0.050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M		<0.0050	<0.050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M		<0.0050	<0.050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M		0.007	<0.050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	1.05	<0.020	0.0654
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.50	<0.020	0.0512
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0.58	<0.020	0.0419
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.50	<0.020	0.0339
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.50	<0.020	0.037

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.0010		
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.0010		
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.0010		
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.0010		
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	3.4	0.0577	<0.00010	<0.00010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	1.79	0.108	<0.00010	<0.00010
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	2.26	0.142	<0.00010	<0.00010
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	1.6	0.0911	<0.00010	<0.00010
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	1.35	0.133	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0.00303	<0.000100	<0.000050	0.012
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	0.00206	<0.000100	<0.000050	<0.010
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0.00296	<0.000100	<0.000050	<0.010
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	0.00195	<0.000100	<0.000050	<0.010
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	0.00194	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0.0000089	1.81	<0.000010	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	0.0000057	1.15	<0.000010	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0.0000072	1.49	0.000011	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	0.0000073	1.28	<0.000010	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	0.000005	1.09	<0.000010	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050	<0.00010
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050		<0.00010
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050	<0.00010
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050		<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050		<0.010	<0.000050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050		0.015	<0.000050
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0.00071		0.058	0.000176
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050		0.013	<0.000050
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050		0.024	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.0010	0.197	0.00048	<0.0000050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.0010	0.121	0.00066	<0.0000050
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.0010	0.162	0.00206	<0.0000050
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.0010	0.125	0.00038	<0.0000050
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.0010	0.11	0.00086	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M					
SW-02		L2754615-2	2024/02/15	Water	M					
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0.000506	<0.00050	<0.050	0.232	
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	0.000329	<0.00050	<0.050	0.163	
SW-02		L2755012-2	2024/03/19	Water	M					
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0.000502	<0.00050	<0.050	0.209	
SW-02		L2755316-6	2024/04/12	Water	M					
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	0.000419	<0.00050	<0.050	0.178	
SW-02		L2755504-1	2024/04/26	Water	M					
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	0.000301	<0.00050	<0.050	0.145	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0.00056	<0.000050	2.73	<0.000010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	0.00042	<0.000050	1.96	<0.000010
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0.00055	<0.000050	2.28	<0.000010
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	0.00042	<0.000050	1.77	<0.000010
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	0.00036	<0.000050	1.59	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	1.3	0.00926	0.97	<0.00020
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	0.732	0.00533	<0.50	<0.00020
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	1.1	0.00704	<0.50	<0.00020
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	0.802	0.00564	<0.50	<0.00020
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	0.61	0.00448	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.000010	<0.00020	<0.00010	0.00042
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.000010	<0.00010	<0.00010	<0.00090
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.000010	<0.00010	<0.00010	0.00226
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000010	<0.00010	<0.00010	<0.00090
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000010	<0.00010	<0.00010	0.00119

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00010	0.000151	<0.00050	
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00010	0.000197	<0.00050	
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00010	0.000186	<0.00050	
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00010	0.000207	<0.00050	
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00010	0.000208	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0.0039	<0.00020	0.0492	<0.00010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.0030	<0.00020	0.087	<0.00010
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.0030	<0.00020	0.0852	<0.00010
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.0030	<0.00020	0.0867	<0.00010
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.0030	<0.00020	0.105	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00010	0.0029	<0.000100	<0.000050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00010	0.00189	<0.000100	<0.000050
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00010	0.0024	<0.000100	<0.000050
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00010	0.0018	<0.000100	<0.000050
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00010	0.0018	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0.011	0.0000063	1.82	<0.000010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.010	0.0000066	1.14	<0.000010
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.010	0.00001	1.4	<0.000010
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.010	0.0000062	1.26	<0.000010
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.010	<0.0000050	1.04	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00050	
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00010	0.00025		<0.010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00010	0.00021		<0.010
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00010	0.00107		0.012
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00010	0.00021		<0.010
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00010	0.00024		0.011

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.000050	<0.0010	0.188	0.00035
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.000050	<0.0010	0.117	0.00041
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.000050	<0.0010	0.142	0.00051
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000050	<0.0010	0.119	0.00022
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000050	<0.0010	0.104	0.00046

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.0000050	0.000451	<0.00050	<0.050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.0000050	0.000313	<0.00050	<0.050
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.0000050	0.000383	<0.00050	<0.050
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.0000050	0.000416	<0.00050	<0.050
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.0000050	0.000292	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M					
SW-02		L2754615-2	2024/02/15	Water	M					
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0.232		0.00045	<0.000050	2.56
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	0.17		0.00039	<0.000050	1.86
SW-02		L2755012-2	2024/03/19	Water	M					
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0.19		0.00046	<0.000050	2.11
SW-02		L2755316-6	2024/04/12	Water	M					
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	0.157		0.00037	<0.000050	1.86
SW-02		L2755504-1	2024/04/26	Water	M					
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	0.143		0.00037	<0.000050	1.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.000010	1.25	0.00846	0.79
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.000010	0.704	0.00531	<0.50
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.000010	0.906	0.00634	<0.50
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000010	0.765	0.00528	<0.50
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000010	0.581	0.0042	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00020	<0.000010	<0.00010	0.00014
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00030	<0.00010	0.000136	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	0.00031	<0.00010	0.000179	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0.00032	<0.00010	0.000168	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00030	<0.00010	0.000203	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	0.00046	<0.00010	0.000187	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M		<0.0010	<0.00020
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M		<0.0010	<0.00020
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M		0.0021	<0.00020
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M		<0.0010	<0.00020
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0.000000024	
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	0.000000045	
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M		
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000000020	
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000000020	<0.000000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.25	<0.25	<0.1
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.25	<0.25	<0.1
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.25	<0.25	<0.1
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.25	<0.25	<0.1
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochlorome thane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050		
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050		
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050		
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050		
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-Dichloroethane	1-2-Dichloroethane	1-1-Dichloroethylene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00020	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00020	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00020	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00020	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.00050	<0.00040
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.00050	<0.00040
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.00050	<0.00040
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.00050	<0.00040
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	94.1	99.6
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	88.1	93.2
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	79.3	96.5
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	76.1	94
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	93.7	101

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M		<0.000010	<0.0000050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M		<0.000010	<0.0000050
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M		<0.000010	<0.0000050
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M		<0.000010	<0.0000050
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.000010	<0.000010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.000010	<0.000010
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.000010	<0.000010
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000010	<0.000010
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M		
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M		<0.000050
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M		<0.000050
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M		<0.000050
SW-02		L2755316-6	2024/04/12	Water	M		
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M		<0.000050
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			<0.22
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	101	98.2	<1
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	90.8	104	<1
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	96.4	104	<0.28
SW-02		L2755316-6	2024/04/12	Water	M			<0.50
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M	97.2	104	
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	106	101	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	<0.20	<0.17	<0.15
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<2	<2	<2
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<2	<2	<2
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.28	<0.30	<0.30
SW-02		L2755316-6	2024/04/12	Water	M	<0.37	<0.33	<0.35
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M	<0.15	<0.37	1	<0.12
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<2	<3	<4	<1
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<2	<3	<4	<1
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.29	<0.62	<3.2	<0.28
SW-02		L2755316-6	2024/04/12	Water	M	<0.32	1.5	5.2	4.1
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M				
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	0.29	<0.13	<0.18
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<2	<2	<2
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<2	<2	<2
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.29	<0.24	<0.18
SW-02		L2755316-6	2024/04/12	Water	M	1.2	<0.27	<0.17
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	<0.18	<0.24	<0.19
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<2	<2	<2
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<2	<2	<2
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.18	<0.23	<0.19
SW-02		L2755316-6	2024/04/12	Water	M	<0.16	<0.22	<0.16
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	<0.12	<0.16	0.25
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	<3	<3	<4
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	<3	<3	<4
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.33	<0.32	<2.1
SW-02		L2755316-6	2024/04/12	Water	M	0.74	<0.30	<0.70
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M	0	0
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M		
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M		
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0	0
SW-02		L2755316-6	2024/04/12	Water	M	0	0
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M		
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M	0	0
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M		
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M		
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0	0
SW-02		L2755316-6	2024/04/12	Water	M	0	0
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M		
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02		L2754353-2	2024/01/23	Water	M		
SW-02		L2754615-2	2024/02/15	Water	M	0	1
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M		
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M		
SW-02		L2755012-2	2024/03/19	Water	M		
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0	0
SW-02		L2755316-6	2024/04/12	Water	M	0	0
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M		
SW-02		L2755504-1	2024/04/26	Water	M		
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	0	0	<0.37
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0	0	<0.23
SW-02		L2755316-6	2024/04/12	Water	M	0	1	<0.51
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M	<0.16	<0.17	<0.24	<0.20
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M				
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M				
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.33	<0.30	<0.23	<0.28
SW-02		L2755316-6	2024/04/12	Water	M	<0.30	<0.35	<0.22	<0.37
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M				
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M	0.29	<0.22	<0.12	
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M				0
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M				0
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.29	<0.28	<0.28	
SW-02		L2755316-6	2024/04/12	Water	M	<0.27	<0.50	4.1	
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M				
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			0.00864
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M	0	0	
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M	0	0	
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			0
SW-02		L2755316-6	2024/04/12	Water	M			0.41
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	0.311	0.613	94
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	0.429	0.85	
SW-02		L2755316-6	2024/04/12	Water	M	1.03	1.6	93
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	91	93	91
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M	79	90	96
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	94	103	93
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M	95	95	97
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	92	95	103
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M	97	80	101
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	95	93	89
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M	99	87	82
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M	86	94	83
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M	91	57	87
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M				
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M				
SW-02		L2755012-2	2024/03/19	Water	M				<0.25
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M				<0.25
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M				
SW-02		L2755504-1	2024/04/26	Water	M				<0.25
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M	<0.25		124
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M	<0.25		105
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M		<0.005	
SW-02		L2755504-1	2024/04/26	Water	M	<0.25		95.9
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M			
SW-02		L2754615-2	2024/02/15	Water	M			
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M			
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M			
SW-02		L2755012-2	2024/03/19	Water	M			
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M			
SW-02		L2755316-6	2024/04/12	Water	M			
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M			
SW-02		L2755504-1	2024/04/26	Water	M			
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02		L2754353-2	2024/01/23	Water	M				
SW-02		L2754615-2	2024/02/15	Water	M				
SW-02	SW21-2	VA24A3090-002	2024/02/15	Water	M				
SW-02	SW21-2	VA24A5796-002	2024/03/19	Water	M				
SW-02		L2755012-2	2024/03/19	Water	M				
SW-02	SW-02	VA24A7873-AA-007	2024/04/12	Water	M				
SW-02		L2755316-6	2024/04/12	Water	M				
SW-02	SW21-2	VA24A9134-001	2024/04/26	Water	M				
SW-02		L2755504-1	2024/04/26	Water	M				
SW-02	SW-02	VA24A9263-002	2024/04/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	2.8		
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	2.5		
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	2.5		
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	2		
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	2.2		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	5.6	8.90
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	4.6	7.30
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	14	
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	29	
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	3.4	5.30

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	15	0.32	101.5
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	11.7	0.19	102.7
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	8.2	0.00	102.8

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	12.74	
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	12.75	
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	14.46	
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	13.74	
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	12.90	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	1.3	1.42	112.90
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	1.98	2.35	117.80
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	1.43	1.73	
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	1.33	1.27	
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	1.5	1.6	143.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	6.64	6.65	0	<1.0
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	6.70	6.71	0	<1.0
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	6.70	6.66	0.01	
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	6.90	6.52	0.02	
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	6.32	6.55	0	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	5.70	
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	6.10	
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	8.00	
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	8.30	
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	5.70	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	14	<3.0	4.02
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	16	<3.0	3.19
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	14	<3.0	3.25
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<10	<3.0	2.71
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<10	<3.0	2.43

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	4.02	0	<0.10	<1
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	3.05	0.62	0.23	1
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	3.11	0.41	0.12	
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	2.52	0.69	0.14	
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	2.35	0	0.13	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M		<0.0050	<0.050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M		<0.0050	<0.050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M		<0.0050	<0.050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M		<0.0050	<0.050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	0.56	<0.020	0.0405
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.50	<0.020	0.0319
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.50	<0.020	0.0292
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.50	<0.020	0.0229
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.50	<0.020	0.0174

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.0010		
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.0010		
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.0010		
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.0010		
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	2	0.0746	<0.00010	<0.00010
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	1.3	0.098	<0.00010	<0.00010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	1.38	0.0901	<0.00010	<0.00010
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	1.03	0.0851	<0.00010	<0.00010
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	0.81	0.0891	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	0.00214	<0.000100	<0.000050	<0.010
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	0.00194	<0.000100	<0.000050	<0.010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	0.0019	<0.000100	<0.000050	<0.010
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	0.00157	<0.000100	<0.000050	<0.010
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	0.00144	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.0000050	1.38	<0.000010	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.0000050	1.1	<0.000010	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.0000050	1.12	<0.000010	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	0.0000051	0.914	<0.000010	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.0000050	0.839	<0.000010	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050	<0.00010
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050		<0.00010
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050		<0.00010
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050		<0.010	<0.000050
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050		0.025	<0.000050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	0.00055		0.016	<0.000050
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	0.0006		0.016	<0.000050
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050		0.02	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.0010	0.139	0.00031	<0.0000050
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.0010	0.108	0.00066	<0.0000050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.0010	0.111	0.0006	<0.0000050
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.0010	0.103	0.00059	<0.0000050
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.0010	0.0822	0.00062	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M					
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	0.000463	<0.00050	<0.050	0.184	
SW-02		L2755598-1	2024/05/03	Water	M					
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	0.000378	<0.00050	<0.050	0.15	
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	0.000358	<0.00050	<0.050	0.16	
SW-02		L2755677-1	2024/05/09	Water	M					
SW-02		L2755687-1	2024/05/09	Water	M					
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	0.000304	<0.00050	<0.050	0.132	
SW-02		L2755770-1	2024/05/14	Water	M					
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	0.000309	<0.00050	<0.050	0.117	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	0.00045	<0.000050	1.99	<0.000010
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	0.00036	<0.000050	1.6	<0.000010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	0.00043	<0.000050	1.61	<0.000010
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	0.0003	<0.000050	1.27	<0.000010
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	0.00034	<0.000050	1.29	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	0.849	0.00576	<0.50	<0.00020
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	0.68	0.00469	<0.50	<0.00020
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	0.872	0.00472	<0.50	<0.00020
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	0.596	0.00372	<0.50	<0.00020
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	0.712	0.00358	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000010	<0.00010	<0.00010	0.00033
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000010	<0.00010	<0.00010	0.00139
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.000010	<0.00010	0.00011	0.00101
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000010	<0.00010	<0.00010	0.00081
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000010	<0.00010	<0.00010	0.00119

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00010	0.000179	<0.00050	
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00010	0.000199	<0.00050	
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00010	0.000181	<0.00050	
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00010	0.000158	<0.00050	
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00010	0.000171	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.0030	<0.00020	0.0683	<0.00010
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.0030	<0.00020	0.0676	<0.00010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.0030	<0.00020	0.07	<0.00010
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.0030	<0.00020	0.0685	<0.00010
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.0030	<0.00020	0.0685	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00010	0.00219	<0.000100	<0.000050
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00010	0.00175	<0.000100	<0.000050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00010	0.00163	<0.000100	<0.000050
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00010	0.00139	<0.000100	<0.000050
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00010	0.00132	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.010	0.0000064	1.38	<0.000010
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.010	<0.0000050	1.05	<0.000010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.010	<0.0000050	1.08	<0.000010
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.010	<0.0000050	0.875	<0.000010
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.010	<0.0000050	0.807	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00050	
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00050	
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00010	0.00021		<0.010
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00010	<0.00020		<0.010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00010	0.00022		<0.010
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00010	<0.00020		<0.010
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00010	<0.00020		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000050	<0.0010	0.139	0.00023
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000050	<0.0010	0.104	0.00026
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.000050	<0.0010	0.101	0.00034
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000050	<0.0010	0.0822	0.00025
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000050	<0.0010	0.0806	0.00025

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.0000050	0.00044	<0.00050	<0.050
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.0000050	0.000372	<0.00050	<0.050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.0000050	0.000358	<0.00050	<0.050
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.0000050	0.000294	<0.00050	<0.050
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.0000050	0.000277	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M					
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	0.189		0.00045	<0.000050	1.98
SW-02		L2755598-1	2024/05/03	Water	M					
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	0.163		0.00034	<0.000050	1.6
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	0.15		0.00037	<0.000050	1.5
SW-02		L2755677-1	2024/05/09	Water	M					
SW-02		L2755687-1	2024/05/09	Water	M					
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	0.127		0.00027	<0.000050	1.19
SW-02		L2755770-1	2024/05/14	Water	M					
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	0.124		0.00031	<0.000050	1.16

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000010	0.93	0.00631	<0.50
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000010	0.705	0.00462	<0.50
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.000010	0.655	0.00428	<0.50
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000010	0.537	0.00368	<0.50
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000010	0.557	0.00353	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00020	<0.000010	<0.00010	0.00018
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00030	<0.00010	0.000199	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00030	<0.00010	0.000179	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	0.00046	<0.00010	0.000152	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00030	<0.00010	0.000149	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	0.00031	<0.00010	0.000165	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M		<0.0010	<0.00020
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M		<0.0010	<0.00020
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M		<0.0010	<0.00020
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M		<0.0010	<0.00020
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000000020	
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000000020	
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M		
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000000020	0.000000022
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000000020	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.25	<0.25	<0.1
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.25	<0.25	<0.1
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.25	<0.25	<0.1
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00040	<0.00030	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050		
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050		
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050		
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050		
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00020	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00020	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00020	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1-Trichloroethane	1-1-2-Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.00050	<0.00040
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.00050	<0.00040
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.00050	<0.00040
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	98.4	92.9
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	85.7	100
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	86.1	99.9
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	89.5	98.9
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	84.3	94.9

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M		<0.000010	<0.0000050
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M		<0.000010	<0.0000050
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M		<0.000010	<0.0000050
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000010	<0.000010
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.000010	<0.000010
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000010	<0.000010
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M		<0.000050
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M		<0.000050
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M		<0.000050
SW-02		L2755677-1	2024/05/09	Water	M		
SW-02		L2755687-1	2024/05/09	Water	M		
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M		<0.000050
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M		<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M	71.1	108	
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	92.5	109	<0.44
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M	95.4	109	
SW-02		L2755677-1	2024/05/09	Water	M			<0.62
SW-02		L2755687-1	2024/05/09	Water	M			<0.17
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M	96.6	117	
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M	96.8	101	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.15	<0.14	<0.15
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	<0.28	<0.32	<0.31
SW-02		L2755687-1	2024/05/09	Water	M	0.21	<0.20	<0.21
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M				
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.14	0.358	1.57	<0.32
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M				
SW-02		L2755677-1	2024/05/09	Water	M	<0.30	<0.56	2.1	<0.85
SW-02		L2755687-1	2024/05/09	Water	M	<0.20	0.41	2.4	<0.27
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M				
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.26	<0.23	<0.085
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	<0.17	<0.18	<0.13
SW-02		L2755687-1	2024/05/09	Water	M	0.28	<0.13	<0.083
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.076	<0.14	<0.11
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	<0.14	<0.18	<0.13
SW-02		L2755687-1	2024/05/09	Water	M	<0.087	<0.12	0.129
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.43	<0.059	0.672
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	<0.36	<0.44	<0.68
SW-02		L2755687-1	2024/05/09	Water	M	<0.15	<0.20	0.45
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M		
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	1	0
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M		
SW-02		L2755677-1	2024/05/09	Water	M	0	0
SW-02		L2755687-1	2024/05/09	Water	M	0	0
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M		
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M		
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	0	0
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M		
SW-02		L2755677-1	2024/05/09	Water	M	0	0
SW-02		L2755687-1	2024/05/09	Water	M	0	2
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M		
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02		L2755521-2	2024/04/28	Water	M		
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M		
SW-02		L2755598-1	2024/05/03	Water	M		
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	0	0
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M		
SW-02		L2755677-1	2024/05/09	Water	M	0	0
SW-02		L2755687-1	2024/05/09	Water	M	0	1
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M		
SW-02		L2755770-1	2024/05/14	Water	M		
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	0	0	0.358
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	0	0	<0.56
SW-02		L2755687-1	2024/05/09	Water	M	0	1	<0.23
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M				
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.059	<0.15	<0.11	<0.15
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M				
SW-02		L2755677-1	2024/05/09	Water	M	<0.44	<0.32	<0.18	<0.28
SW-02		L2755687-1	2024/05/09	Water	M	<0.20	<0.21	0.2	<0.19
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M				
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M				
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.26	<0.44	<0.32	
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M				
SW-02		L2755677-1	2024/05/09	Water	M	<0.18	<0.62	<0.85	
SW-02		L2755687-1	2024/05/09	Water	M	0.28	<0.17	0.33	
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M				
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			0.00425
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M			0
SW-02		L2755687-1	2024/05/09	Water	M			0.0212
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	0.413	0.792	
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	0.605	1.21	88
SW-02		L2755687-1	2024/05/09	Water	M	0.401	0.566	76
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	79	87	90
SW-02		L2755687-1	2024/05/09	Water	M	81	77	82
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	87	93	87
SW-02		L2755687-1	2024/05/09	Water	M	92	85	95
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	85	81	86
SW-02		L2755687-1	2024/05/09	Water	M	82	70	81
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	84	75	89
SW-02		L2755687-1	2024/05/09	Water	M	93	72	78
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M	86	69	86
SW-02		L2755687-1	2024/05/09	Water	M	78	58	75
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				<0.25
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M				
SW-02		L2755598-1	2024/05/03	Water	M				<0.25
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M				<0.25
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M				
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M				
SW-02		L2755770-1	2024/05/14	Water	M				<0.25
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02		L2755521-2	2024/04/28	Water	M	<0.25		108
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M		<0.005	
SW-02		L2755598-1	2024/05/03	Water	M	<0.25		95.5
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M	<0.25		86.4
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M		<0.005	
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M	<0.25		92.3
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M			
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M			
SW-02		L2755598-1	2024/05/03	Water	M			
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M			
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M			
SW-02		L2755677-1	2024/05/09	Water	M			
SW-02		L2755687-1	2024/05/09	Water	M			
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M			
SW-02		L2755770-1	2024/05/14	Water	M			
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755521-2	2024/04/28	Water	M				
SW-02	SW21-2	VA24A9747-001	2024/05/03	Water	M				
SW-02		L2755598-1	2024/05/03	Water	M				
SW-02	SW21-2	VA24B0355-001	2024/05/09	Water	M				
SW-02	SW-02	VA24B0330-001	2024/05/09	Water	M				
SW-02		L2755677-1	2024/05/09	Water	M				
SW-02		L2755687-1	2024/05/09	Water	M				
SW-02	SW-02	VA24B0795-001	2024/05/14	Water	M				
SW-02		L2755770-1	2024/05/14	Water	M				
SW-02	SW21-2	VA24B1168-001	2024/05/17	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	2.6		
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	2.1		
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	1.9		
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	2.3		
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	2.1		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M	8	
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	12.9	19.50
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	42	
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M	5.7	8.20
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M	1430	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	9.7	0.50	96.9
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	8.9	0.10	102.3
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M	15.22	
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	11.67	
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M		
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M	11.80	
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M	6.83	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	1.49	1.47	
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	1.4	1.38	188.80
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	1.24	1.16	
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	0.94	0.82	178.20
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	1.6	1.62	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	6.30	6.53	0	
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	6.30	6.58	0.01	<1.0
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	7.30	6.45	0.03	
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	6.50	6.61	0	<1.0
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	7.40	6.51	0.81	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M	7.60	
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	7.30	
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	7.50	
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M	9.40	
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M	19.30	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<10	<3.0	2.84
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	16	<3.0	2.79
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	13	<3.0	2.8
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	12	<3.0	2.54
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	10	<3.0	2.39

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	2.78	0.8	0.22	
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	2.78	0.07	<0.10	<1
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	2.62	0	0.11	
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	2.44	2.8	<0.10	<1
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	2.12	32.3	0.24	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M		<0.0050	<0.050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M		<0.0050	<0.050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M		<0.0050	<0.050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M		<0.0050	<0.050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.50	<0.020	0.0205
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.50	<0.020	0.023
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.50	<0.020	0.0222
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.50	<0.020	0.0182
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.50	<0.020	0.0181

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.0010		
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.0010		
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.0010		
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.0010		
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	1.23	0.0896	<0.00010	<0.00010
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	1.21	0.0715	<0.00010	<0.00010
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	1.15	0.077	<0.00010	<0.00010
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	1.02	0.0523	<0.00010	<0.00010
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	0.72	0.0902	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	0.00166	<0.000100	<0.000050	<0.010
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	0.00158	<0.000100	<0.000050	<0.010
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	0.00158	<0.000100	<0.000050	<0.010
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	0.00146	<0.000100	<0.000050	<0.010
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	0.00136	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.0000050	0.98	0.00001	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	0.0000056	0.959	<0.000010	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	0.0000051	0.958	<0.000010	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	0.0000067	0.88	<0.000010	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.0000050	0.815	<0.000010	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050		<0.00010
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00050	<0.00010
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050		<0.00010
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050	<0.00010
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050		<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050		0.018	<0.000050
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050		<0.010	<0.000050
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050		0.011	<0.000050
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050		<0.010	<0.000050
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050		0.015	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.0010	0.0964	0.00064	<0.0000050
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.0010	0.0957	0.00035	<0.0000050
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.0010	0.0979	0.00047	<0.0000050
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.0010	0.0845	0.00032	<0.0000050
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.0010	0.0857	0.00053	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M					
SW-02		VA24B1636-001	2024/05/23	Water	M	0.000317	<0.00050	<0.050	0.146	
SW-02		L2755903-1	2024/05/23	Water	M					
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	0.000341	<0.00050	<0.050	0.138	
SW-02		L2755933-1	2024/05/24	Water	M					
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	0.000318	<0.00050	<0.050	0.133	
SW-02		L2755961-1	2024/05/26	Water	M					
SW-02		VA24B4698-001	2024/06/21	Water	M	0.000327	<0.00050	<0.050	0.125	
SW-02		L2756349-1	2024/06/21	Water	M					
SW-02		VA24B5540-001	2024/06/27	Water	M	0.000267	<0.00050	<0.050	0.109	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	0.00032	<0.000050	1.46	<0.000010
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	0.00037	<0.000050	1.43	<0.000010
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	0.0003	<0.000050	1.36	<0.000010
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	0.00034	<0.000050	1.27	<0.000010
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	0.00031	<0.000050	1.08	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	0.641	0.00435	<0.50	<0.00020
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	0.647	0.00428	<0.50	<0.00020
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	0.622	0.00413	<0.50	<0.00020
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	0.561	0.00374	<0.50	<0.00020
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	0.54	0.00322	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000010	<0.00010	<0.00010	0.00103
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000010	<0.00010	<0.00010	0.00036
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000010	<0.00010	<0.00010	0.00054
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000010	<0.00010	<0.00010	0.00066

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00010	0.00017	<0.00050	
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00010	0.00017	<0.00050	
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00010	0.000174	<0.00050	
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00010	0.000141	<0.00050	
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00010	0.000182	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.0030	<0.00020	0.0661	<0.00010
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.0030	<0.00020	0.0607	<0.00010
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.0030	<0.00020	0.0665	<0.00010
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.0030	<0.00020	0.0978	<0.00010
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.0030	<0.00020	0.077	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00010	0.00152	<0.000100	<0.000050
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00010	0.0016	<0.000100	<0.000050
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00010	0.00154	<0.000100	<0.000050
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00010	0.00146	<0.000100	<0.000050
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00010	0.00136	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.010	0.0000054	0.967	<0.000010
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.010	<0.0000050	0.969	<0.000010
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.010	<0.0000050	0.895	<0.000010
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.010	<0.0000050	0.833	<0.000010
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.010	0.0000079	0.733	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00050	
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	0.00062	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00050	
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00010	0.00035		0.011
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00010	<0.00020		<0.010
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00010	0.00022		<0.010
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00010	0.00027		<0.010
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00010	<0.00020		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000050	<0.0010	0.0885	0.00031
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000050	<0.0010	0.0871	0.00021
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000050	<0.0010	0.0938	0.00024
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.000050	<0.0010	0.088	0.00026
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000050	<0.0010	0.0694	0.00021

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.0000050	0.000335	<0.00050	<0.050
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.0000050	0.000324	<0.00050	<0.050
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.0000050	0.000302	<0.00050	<0.050
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.0000050	0.000344	<0.00050	<0.050
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.0000050	0.000292	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M					
SW-02		VA24B1636-001	2024/05/23	Water	M	0.126		0.00033	<0.000050	1.34
SW-02		L2755903-1	2024/05/23	Water	M					
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	0.108		0.00033	<0.000050	1.31
SW-02		L2755933-1	2024/05/24	Water	M					
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	0.141		0.00034	<0.000050	1.31
SW-02		L2755961-1	2024/05/26	Water	M					
SW-02		VA24B4698-001	2024/06/21	Water	M	0.126		0.00032	<0.000050	1.18
SW-02		L2756349-1	2024/06/21	Water	M					
SW-02		VA24B5540-001	2024/06/27	Water	M	0.123		0.00033	<0.000050	1.04

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000010	0.561	0.00393	<0.50
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000010	0.581	0.004	<0.50
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000010	0.604	0.00409	<0.50
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.000010	0.566	0.00384	<0.50
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000010	0.465	0.00313	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00030	<0.00010	0.000144	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00030	<0.00010	0.000155	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00030	<0.00010	0.000162	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00030	0.00014	0.000132	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00030	<0.00010	0.000165	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M		0.0031	<0.00020
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M		<0.0010	<0.00020
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M		<0.0010	<0.00020
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M		<0.0010	<0.00020
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000000020	<0.000000020
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000000020	
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000000020	<0.000000020
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M	0.000000021	
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000000050	0.000000039

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.25	<0.25	<0.1
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.25	<0.25	<0.1
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.25	<0.25	<0.1
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.25	<0.25	<0.1
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochlorome thane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050		
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050		
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050		
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050		
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00020	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00020	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00020	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00020	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.00050	<0.00040
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.00050	<0.00040
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.00050	<0.00040
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.00050	<0.00040
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M	94.2	101
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	89.1	97.4
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	92.4	100
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M	76.1	98.3
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M	85.3	96.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M		<0.000010	<0.0000050
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M		<0.000010	<0.0000050
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M		<0.000010	<0.0000050
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M		<0.000010	<0.0000050
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000010	<0.000010
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000010	<0.000010
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000010	<0.000010
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.000010	<0.000010
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M		
SW-02		VA24B1636-001	2024/05/23	Water	M		<0.000050
SW-02		L2755903-1	2024/05/23	Water	M		
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M		<0.000050
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M		<0.000050
SW-02		L2755961-1	2024/05/26	Water	M		
SW-02		VA24B4698-001	2024/06/21	Water	M		<0.000050
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M		<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02		L2755819-1	2024/05/17	Water	M			<0.43
SW-02		VA24B1636-001	2024/05/23	Water	M	98.2	103	
SW-02		L2755903-1	2024/05/23	Water	M			<1.5
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	94	92.9	<1
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M	102	109	
SW-02		L2755961-1	2024/05/26	Water	M			0.24
SW-02		VA24B4698-001	2024/06/21	Water	M	122	106	<1
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	100	102	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02		L2755819-1	2024/05/17	Water	M	<0.36	<0.35	<0.33
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	<0.35	<0.29	<0.29
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<2	<2	<2
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	<0.22	<0.18	<0.18
SW-02		VA24B4698-001	2024/06/21	Water	M	<2	<2	<2
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02		L2755819-1	2024/05/17	Water	M	<0.33	<0.39	2.8	<0.49
SW-02		VA24B1636-001	2024/05/23	Water	M				
SW-02		L2755903-1	2024/05/23	Water	M	<0.28	<0.28	3.04	<0.87
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<2	<3	<4	<1
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M				
SW-02		L2755961-1	2024/05/26	Water	M	<0.17	<0.23	1	<0.19
SW-02		VA24B4698-001	2024/06/21	Water	M	<2	<3	<4	<1
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02		L2755819-1	2024/05/17	Water	M	<0.40	<0.36	<0.19
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	0.37	<0.29	<0.21
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<2	<2	<2
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	0.3	<0.13	<0.11
SW-02		VA24B4698-001	2024/06/21	Water	M	<2	<2	<2
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02		L2755819-1	2024/05/17	Water	M	<0.18	<0.25	<0.18
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	<0.23	<0.33	<0.23
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<2	<2	<2
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	<0.11	0.22	<0.12
SW-02		VA24B4698-001	2024/06/21	Water	M	<2	<2	<2
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02		L2755819-1	2024/05/17	Water	M	<0.27	<0.35	1.18
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	<1.6	<2.3	<0.53
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	<3	<3	<4
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	<0.13	<0.19	<0.39
SW-02		VA24B4698-001	2024/06/21	Water	M	<3	<3	<4
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02		L2755819-1	2024/05/17	Water	M	0	0
SW-02		VA24B1636-001	2024/05/23	Water	M		
SW-02		L2755903-1	2024/05/23	Water	M	0	0
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M		
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M		
SW-02		L2755961-1	2024/05/26	Water	M	0	0
SW-02		VA24B4698-001	2024/06/21	Water	M		
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02		L2755819-1	2024/05/17	Water	M	0	0
SW-02		VA24B1636-001	2024/05/23	Water	M		
SW-02		L2755903-1	2024/05/23	Water	M	0	0
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M		
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M		
SW-02		L2755961-1	2024/05/26	Water	M	0	0
SW-02		VA24B4698-001	2024/06/21	Water	M		
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02		L2755819-1	2024/05/17	Water	M	0	0
SW-02		VA24B1636-001	2024/05/23	Water	M		
SW-02		L2755903-1	2024/05/23	Water	M	0	0
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M		
SW-02		L2755933-1	2024/05/24	Water	M		
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M		
SW-02		L2755961-1	2024/05/26	Water	M	0	0
SW-02		VA24B4698-001	2024/06/21	Water	M		
SW-02		L2756349-1	2024/06/21	Water	M		
SW-02		VA24B5540-001	2024/06/27	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02		L2755819-1	2024/05/17	Water	M	0	0	<0.39
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	0	0	<0.28
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	2	0	<0.23
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02		L2755819-1	2024/05/17	Water	M	<0.35	<0.35	<0.25	<0.36
SW-02		VA24B1636-001	2024/05/23	Water	M				
SW-02		L2755903-1	2024/05/23	Water	M	<2.3	<0.29	<0.33	<0.35
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M				
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M				
SW-02		L2755961-1	2024/05/26	Water	M	<0.19	<0.18	<0.15	<0.22
SW-02		VA24B4698-001	2024/06/21	Water	M				
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02		L2755819-1	2024/05/17	Water	M	<0.40	<0.43	<0.49	
SW-02		VA24B1636-001	2024/05/23	Water	M				
SW-02		L2755903-1	2024/05/23	Water	M	<0.35	<1.5	<0.87	
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M				0
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M				
SW-02		L2755961-1	2024/05/26	Water	M	<0.17	0.43	<0.19	
SW-02		VA24B4698-001	2024/06/21	Water	M				0
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02		L2755819-1	2024/05/17	Water	M			0.000354
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M			0.000912
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M	0	0	
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M			0.24
SW-02		VA24B4698-001	2024/06/21	Water	M	0	0	
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02		L2755819-1	2024/05/17	Water	M	0.576	1.15	80
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	1.14	2.26	84
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	0.457	0.642	86
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-02		L2755819-1	2024/05/17	Water	M	77	73	83
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	76	63	95
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	74	70	86
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02		L2755819-1	2024/05/17	Water	M	95	87	95
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	98	93	92
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	83	82	82
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02		L2755819-1	2024/05/17	Water	M	89	65	71
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	87	75	68
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	84	84	73
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02		L2755819-1	2024/05/17	Water	M	97	73	73
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	93	72	88
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	83	84	80
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02		L2755819-1	2024/05/17	Water	M	76	41	71
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M	89	56	95
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M	75	66	87
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M				
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M				
SW-02		L2755933-1	2024/05/24	Water	M				<0.25
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M				
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M				
SW-02		L2756349-1	2024/06/21	Water	M				<0.25
SW-02		VA24B5540-001	2024/06/27	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M	<0.25		90.1
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M	<0.25		94.1
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M			
SW-02		VA24B1636-001	2024/05/23	Water	M			
SW-02		L2755903-1	2024/05/23	Water	M			
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M			
SW-02		L2755933-1	2024/05/24	Water	M			
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M			
SW-02		L2755961-1	2024/05/26	Water	M			
SW-02		VA24B4698-001	2024/06/21	Water	M			
SW-02		L2756349-1	2024/06/21	Water	M			
SW-02		VA24B5540-001	2024/06/27	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02		L2755819-1	2024/05/17	Water	M				
SW-02		VA24B1636-001	2024/05/23	Water	M				
SW-02		L2755903-1	2024/05/23	Water	M				
SW-02	SW21-2	VA24B1780-001	2024/05/24	Water	M				
SW-02		L2755933-1	2024/05/24	Water	M				
SW-02	SW-02	VA24B1914-001	2024/05/26	Water	M				
SW-02		L2755961-1	2024/05/26	Water	M				
SW-02		VA24B4698-001	2024/06/21	Water	M				
SW-02		L2756349-1	2024/06/21	Water	M				
SW-02		VA24B5540-001	2024/06/27	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	3.1		
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	3.8		
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	4.4		
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	2.8		
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	5.4		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M	10.7	13.00
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	16	
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	23.2	29.10
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	59	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	26.4	34.70

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	14.8	0.40	102.5
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	26.4	0.30	101.3
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	32.8	0.29	101.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M	10.16	
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	9.65	
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	10.36	
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	8.56	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	10.84	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	0.84	0.8	172.10
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	0.81	0.93	
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	0.89	0.96	193.70
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	2.13	2.04	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	0.85	1.34	134.80

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	6.85	6.81	0	<1.0
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	7.00	6.79	0.01	
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	6.70	6.95	0.01	<1.0
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	6.60	6.67	0.04	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	7.03	7.05	0	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M	15.80	
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	15.30	
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	14.30	
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	13.60	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	12.42	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	17	<3.0	3.77
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<10	<3.0	3.76
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	23	<3.0	6.27
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	20	<3.0	4.21
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	24	<3.0	7.64

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	3.56	0	<0.10	6
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	4	1.18	0.13	
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	6.14	0	<0.10	2
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	3.98	1.82	0.16	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	7.97	0.11	<0.10	5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M		<0.0050	<0.050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M		<0.0050	<0.050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M		<0.0050	<0.050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M		<0.0050	<0.050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	0.85	<0.020	0.0505
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	0.93	<0.020	0.0434
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	2.03	<0.020	0.133
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	0.56	<0.020	0.135
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	2.94	<0.020	0.156

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.0010		
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.0010		
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.0010		
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.0010		
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	1.61	0.0301	<0.00010	<0.00010
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	1.79	0.0372	<0.00010	<0.00010
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	3.3	0.0252	<0.00010	<0.00010
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	1.67	0.0771	<0.00010	<0.00010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	4.4	0.0233	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	0.00242	<0.000100	<0.000050	0.013
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	0.00268	<0.000100	<0.000050	0.013
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	0.0042	<0.000100	<0.000050	0.031
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	0.00264	<0.000100	<0.000050	<0.010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	0.00499	<0.000100	<0.000050	0.037

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.0000050	1.29	0.000016	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.0000050	1.27	0.000013	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	0.0000077	2.11	0.00002	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	0.0000059	1.42	0.000012	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	0.000006	2.56	0.000023	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050	<0.00010
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050		<0.00010
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050	<0.00010
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050		<0.00010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050		<0.010	<0.000050
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	0.00052		<0.010	<0.000050
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050		<0.010	<0.000050
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050		0.012	<0.000050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050		<0.010	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.0010	0.134	0.00032	<0.0000050
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.0010	0.144	0.00043	<0.0000050
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	0.0015	0.243	0.00023	<0.0000050
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.0010	0.162	0.0006	<0.0000050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	0.0017	0.303	0.00019	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M					
SW-02		VA24B7689-001	2024/07/19	Water	M	0.000575	<0.00050	<0.050	0.23	
SW-02		L2756726-1	2024/07/19	Water	M					
SW-02		VA24B8974-002	2024/07/31	Water	M	0.000595	<0.00050	<0.050	0.247	
SW-02		L2756871-2	2024/07/31	Water	M					
SW-02		VA24C1605-001	2024/08/23	Water	M	0.000819	<0.00050	<0.050	0.399	
SW-02		L2757153-1	2024/08/23	Water	M					
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	0.000479	<0.00050	<0.050	0.208	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M					
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	0.00096	<0.00050	<0.050	0.426	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	0.00072	<0.000050	1.63	<0.000010
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	0.00066	<0.000050	1.84	<0.000010
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	0.00098	<0.000050	2.61	<0.000010
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	0.0006	<0.000050	1.92	<0.000010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	0.00121	<0.000050	2.9	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	1.09	0.00605	0.63	<0.00020
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	1.51	0.00653	<0.50	<0.00020
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	2.23	0.011	0.98	<0.00020
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	0.986	0.00613	<0.50	<0.00020
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	2.82	0.0147	1.22	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000010	<0.00010	<0.00010	0.00046
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000010	<0.00010	<0.00010	<0.00030

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00010	0.00011	<0.00050	
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00010	0.000126	<0.00050	
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00010	0.000113	<0.00050	
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00010	0.000196	<0.00050	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00010	0.000114	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.0030	<0.00020	0.0263	<0.00010
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.0030	<0.00020	0.0277	<0.00010
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.0030	<0.00020	0.0236	<0.00010
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.0030	<0.00020	0.0694	<0.00010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.0030	<0.00020	0.0218	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00010	0.00246	<0.000100	<0.000050
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00010	0.00259	<0.000100	<0.000050
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00010	0.004	<0.000100	<0.000050
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00010	0.00238	<0.000100	<0.000050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00010	0.00506	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	0.012	<0.0000050	1.21	0.000014
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	0.013	<0.0000050	1.38	0.000016
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	0.031	0.0000051	2.06	0.000021
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.010	0.0000095	1.34	0.00001
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	0.039	<0.0000050	2.57	0.000021

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00050	
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00050	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00010	<0.00020		<0.010
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00010	<0.00020		<0.010
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00010	<0.00020		<0.010
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00010	0.00032		<0.010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00010	<0.00020		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000050	<0.0010	0.131	0.00013
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.000050	<0.0010	0.136	0.00025
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000050	0.0014	0.242	0.00016
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000050	<0.0010	0.154	0.00048
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000050	0.0018	0.378	0.00012

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.0000050	0.000549	<0.00050	<0.050
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.0000050	0.000587	<0.00050	<0.050
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.0000050	0.000854	<0.00050	<0.050
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.0000050	0.000436	<0.00050	<0.050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.0000050	0.000893	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M					
SW-02		VA24B7689-001	2024/07/19	Water	M	0.237		0.00064	<0.000050	1.59
SW-02		L2756726-1	2024/07/19	Water	M					
SW-02		VA24B8974-002	2024/07/31	Water	M	0.214		0.0007	<0.000050	1.83
SW-02		L2756871-2	2024/07/31	Water	M					
SW-02		VA24C1605-001	2024/08/23	Water	M	0.372		0.00101	<0.000050	2.6
SW-02		L2757153-1	2024/08/23	Water	M					
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	0.227		0.00052	<0.000050	1.86
SW-02	SW-02	L2757209-2	2024/08/27	Water	M					
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	0.482		0.00115	<0.000050	3.04

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000010	1.05	0.00608	<0.50
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.000010	1.2	0.00641	<0.50
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000010	2.26	0.0108	0.88
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000010	0.994	0.00577	0.6
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000010	3.37	0.0138	1.24

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00030	<0.00010	0.00011	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00030	<0.00010	0.000107	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00030	<0.00010	0.00011	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00030	<0.00010	0.000188	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00030	<0.00010	0.000109	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M		<0.0010	<0.00020
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M		<0.0010	<0.00020
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M		<0.0010	<0.00020
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M		<0.0010	<0.00020
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000000020	
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	0.000000022	<0.000000020
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	0.000000027	
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000000020	0.000000021
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000000020	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.25	<0.25	<0.1
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.25	<0.25	<0.1
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.25	<0.25	<0.1
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.1	<0.00050	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050	<0.00040
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00040	<0.00030	<0.00050	
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050		
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050		
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050		
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050		
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050	<0.0050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050	<0.0010
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00075	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00020	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00020	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00020	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00020	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.00050	<0.00040
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.00050	<0.00040
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.00050	<0.00040
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.00050	<0.00040
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M	86.2	100
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	91.9	94.6
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	90.8	100
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	91.6	101
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	82.8	95.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M		<0.000010	<0.0000050
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M		<0.000010	<0.0000050
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M		<0.000010	<0.0000050
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M		<0.000010	<0.0000050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000010	<0.000010
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.000010	<0.000010
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000010	<0.000010
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000010	<0.000010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000050	<0.000020	<0.000010
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M		
SW-02		VA24B7689-001	2024/07/19	Water	M		<0.000050
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M		<0.000050
SW-02		L2756871-2	2024/07/31	Water	M		
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.000050	
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M		<0.000050
SW-02	SW-02	L2757209-2	2024/08/27	Water	M		
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02		L2756458-1	2024/06/27	Water	M			<0.22
SW-02		VA24B7689-001	2024/07/19	Water	M	109	97.9	
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	96.5	103	<0.51
SW-02		L2756871-2	2024/07/31	Water	M			<0.39
SW-02		VA24C1605-001	2024/08/23	Water	M	87.8	98	
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M	94.2	104	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			<0.48
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	110	108	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02		L2756458-1	2024/06/27	Water	M	<0.25	<0.21	<0.21
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.33	<0.43	<0.40
SW-02		L2756871-2	2024/07/31	Water	M	<0.56	<0.24	<0.23
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	<0.28	<0.33	<0.31
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02		L2756458-1	2024/06/27	Water	M	<0.21	<0.30	1.2	<0.24
SW-02		VA24B7689-001	2024/07/19	Water	M				
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.41	<0.52	<1.6	<0.71
SW-02		L2756871-2	2024/07/31	Water	M	<0.23	0.5	2	<0.36
SW-02		VA24C1605-001	2024/08/23	Water	M				
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M				
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	<0.31	<0.48	3.5	<0.39
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02		L2756458-1	2024/06/27	Water	M	0.37	<0.11	0.18
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.33	<0.28	<0.30
SW-02		L2756871-2	2024/07/31	Water	M	<0.34	<0.27	<0.14
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	0.6	<0.22	<0.25
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02		L2756458-1	2024/06/27	Water	M	<0.14	0.18	0.27
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.28	<0.40	<0.33
SW-02		L2756871-2	2024/07/31	Water	M	<0.14	<0.18	<0.14
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	<0.25	<0.40	<0.27
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02		L2756458-1	2024/06/27	Water	M	0.3	<0.20	0.67
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.59	<0.41	<0.89
SW-02		L2756871-2	2024/07/31	Water	M	<0.30	<0.43	<0.57
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	<0.44	<0.73	<1.3
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02		L2756458-1	2024/06/27	Water	M	0	0
SW-02		VA24B7689-001	2024/07/19	Water	M		
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	0	0
SW-02		L2756871-2	2024/07/31	Water	M	0	0
SW-02		VA24C1605-001	2024/08/23	Water	M		
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M		
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	0	0
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02		L2756458-1	2024/06/27	Water	M	0	2
SW-02		VA24B7689-001	2024/07/19	Water	M		
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	0	0
SW-02		L2756871-2	2024/07/31	Water	M	0	0
SW-02		VA24C1605-001	2024/08/23	Water	M		
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M		
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	0	0
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02		L2756458-1	2024/06/27	Water	M	0	1
SW-02		VA24B7689-001	2024/07/19	Water	M		
SW-02		L2756726-1	2024/07/19	Water	M		
SW-02		VA24B8974-002	2024/07/31	Water	M	0	0
SW-02		L2756871-2	2024/07/31	Water	M	0	0
SW-02		VA24C1605-001	2024/08/23	Water	M		
SW-02		L2757153-1	2024/08/23	Water	M		
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M		
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	0	1
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02		L2756458-1	2024/06/27	Water	M	0	0	<0.30
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	0	0	<0.52
SW-02		L2756871-2	2024/07/31	Water	M	0	0	<0.42
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	0	0	<0.48
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02		L2756458-1	2024/06/27	Water	M	<0.20	<0.21	0.46	<0.25
SW-02		VA24B7689-001	2024/07/19	Water	M				
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.41	<0.43	<0.40	<0.33
SW-02		L2756871-2	2024/07/31	Water	M	<0.43	<0.24	<0.18	<0.56
SW-02		VA24C1605-001	2024/08/23	Water	M				
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M				
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	<0.73	<0.33	<0.40	<0.28
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02		L2756458-1	2024/06/27	Water	M	0.37	<0.22	<0.24	
SW-02		VA24B7689-001	2024/07/19	Water	M				
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M	<0.33	<0.51	<0.71	
SW-02		L2756871-2	2024/07/31	Water	M	<0.34	<0.39	<0.36	
SW-02		VA24C1605-001	2024/08/23	Water	M				
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M				
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	0.6	<0.48	<0.39	
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02		L2756458-1	2024/06/27	Water	M			0.0568
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			0
SW-02		L2756871-2	2024/07/31	Water	M			0
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			0.0179
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02		L2756458-1	2024/06/27	Water	M	0.383	0.687	86
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M	0.641	1.28	
SW-02		L2756871-2	2024/07/31	Water	M	0.613	1.22	82
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	0.566	1.11	91
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-02		L2756458-1	2024/06/27	Water	M	74	72	84
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M	69	66	72
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	101	89	79
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02		L2756458-1	2024/06/27	Water	M	80	85	80
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M	66	72	69
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	95	86	96
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02		L2756458-1	2024/06/27	Water	M	84	83	74
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M	71	68	60
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	93	74	75
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02		L2756458-1	2024/06/27	Water	M	84	83	82
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M	70	68	68
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	96	84	71
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02		L2756458-1	2024/06/27	Water	M	78	69	87
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M	65	72	80
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M	75	80	85
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M				<0.25
SW-02		L2756726-1	2024/07/19	Water	M				<0.25
SW-02		VA24B8974-002	2024/07/31	Water	M				
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M				<0.25
SW-02		L2757153-1	2024/08/23	Water	M				<0.25
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M				
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M	<0.25		127
SW-02		L2756726-1	2024/07/19	Water	M	<0.25		85.1
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M	<0.25		109
SW-02		L2757153-1	2024/08/23	Water	M	<0.25		94.5
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M		<0.005	
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M	<0.25		74.4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M			
SW-02		VA24B7689-001	2024/07/19	Water	M			
SW-02		L2756726-1	2024/07/19	Water	M			
SW-02		VA24B8974-002	2024/07/31	Water	M			
SW-02		L2756871-2	2024/07/31	Water	M			
SW-02		VA24C1605-001	2024/08/23	Water	M			
SW-02		L2757153-1	2024/08/23	Water	M			
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M			
SW-02	SW-02	L2757209-2	2024/08/27	Water	M			
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02		L2756458-1	2024/06/27	Water	M				
SW-02		VA24B7689-001	2024/07/19	Water	M				
SW-02		L2756726-1	2024/07/19	Water	M				
SW-02		VA24B8974-002	2024/07/31	Water	M				
SW-02		L2756871-2	2024/07/31	Water	M				
SW-02		VA24C1605-001	2024/08/23	Water	M				
SW-02		L2757153-1	2024/08/23	Water	M				
SW-02	SW-02	VA24C2197-002	2024/08/27	Water	M				
SW-02	SW-02	L2757209-2	2024/08/27	Water	M				
SW-02	SW21-2	VA24C5009-001	2024/09/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	4.2		
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	3.5		
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	5		
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	3		
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	3.7		
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	3.7		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	15	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	14	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	19.1	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	10.8	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	11.3	17.30
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	73.6	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	20.2	0.26	103.5
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	11.34	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	11.87	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	10.29	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	12.26	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	12.64	
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	11.81	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	1.83	1.72	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	3.67	3.6	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0.84	1.17	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	1.92	1.83	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	1.3	1.21	134.80
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	1.45	1.56	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	6.80	6.69	0.01	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	6.30	6.68	0.01	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	7.18	6.81	0.01	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	6.70	6.57	0.01	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	6.88	6.6	0.01	<1.0
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	6.42	6.7	0.05	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	10.80	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	9.60	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	12.10	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	8.50	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	6.73	
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	10.70	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	29	<3.0	5.55
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	16	3.7	6.06
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	24	<3.0	6.71
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	19	<3.0	4.74
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	16	<3.0	5.36
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	14	<3.0	5.54

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	5.45	0	<0.10	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	5.74	1.01	0.35	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	6.75	0.19	0.10	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	4.43	0.06	0.30	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	5.25	1.61	0.15	1
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	5.59	0.23	0.23	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M		<0.0050	<0.050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M		<0.0050	<0.050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M		<0.0050	<0.050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M		<0.0050	<0.050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M		<0.0050	<0.050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	1.12	<0.020	0.119
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0.79	<0.020	0.108
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	1.75	<0.020	0.106
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	0.66	<0.020	0.12
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	1	<0.020	0.105
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	1.03	<0.020	0.104

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.0010		
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.0010		
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.0010		
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.0010		
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.0010		0.086
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	0.086		
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	2.48	0.0501	<0.00010	<0.00010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	2.84	0.136	<0.00010	0.00012
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	3.19	0.0344	<0.00010	<0.00010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	2.33	0.0852	<0.00010	<0.00010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	3.16	0.0556	<0.00010	<0.00010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	3.57	0.0533	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0.00313	<0.000100	<0.000050	0.014
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0.0032	<0.000100	<0.000050	<0.010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0.00363	<0.000100	<0.000050	0.02
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	0.00286	<0.000100	<0.000050	<0.010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	0.00336	<0.000100	<0.000050	0.011
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	0.00328	<0.000100	<0.000050	0.011

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0.0000055	1.87	0.000014	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0.0000083	1.95	0.000011	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0.000007	2.02	0.000016	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	0.0000075	1.63	<0.000010	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	0.0000058	1.82	0.00001	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	0.0000064	1.88	0.000011	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050		<0.00010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050		<0.00010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050		<0.00010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050		<0.00010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050		<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050		<0.010	<0.000050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0.00064		0.031	0.000052
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050		<0.010	<0.000050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050		0.016	0.000052
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050		0.011	<0.000050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050		0.01	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.0010	0.215	0.00027	<0.0000050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.0010	0.289	0.00146	<0.0000050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0.0012	0.405	0.00029	<0.0000050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.0010	0.163	0.00129	<0.0000050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.0010	0.197	0.00056	<0.0000050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.0010	0.205	0.00057	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0.000689	<0.00050	<0.050	0.258	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M					
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0.000568	<0.00050	<0.050	0.269	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M					
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0.000783	<0.00050	<0.050	0.373	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M					
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	0.000358	<0.00050	<0.050	0.227	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M					
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	0.0005	<0.00050	<0.050	0.265	
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	0.000512	<0.00050	<0.050	0.272	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0.00065	<0.000050	2.46	<0.000010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0.00058	<0.000050	2.16	<0.000010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0.00077	<0.000050	2.64	<0.000010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	0.00058	<0.000050	2.48	<0.000010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	0.0007	<0.000050	2.84	<0.000010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	0.00075	<0.000050	2.82	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	1.37	0.00822	0.62	<0.00020
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	1.31	0.00746	0.93	<0.00020
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	3.3	0.0108	0.81	<0.00020
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	0.895	0.00653	0.7	<0.00020
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	1.14	0.00968	0.96	<0.00020
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	1.17	0.00928	0.98	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000010	<0.00010	<0.00010	0.00119
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000010	<0.00010	<0.00010	0.00076
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000010	<0.00010	<0.00010	0.00037
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000010	<0.00010	<0.00010	0.00043

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00010	0.000154	<0.00050	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00010	0.000264	<0.00050	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00010	0.000134	<0.00050	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00010	0.000156	<0.00050	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00010	0.000147	<0.00050	
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00010	0.000146	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.0030	<0.00020	0.0448	<0.00010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.0030	<0.00020	0.115	<0.00010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.0030	<0.00020	0.0334	<0.00010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.0030	<0.00020	0.0668	<0.00010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.0030	<0.00020	0.053	<0.00010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.0030	<0.00020	0.049	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00010	0.00317	<0.000100	<0.000050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00010	0.00281	<0.000100	<0.000050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00010	0.00384	<0.000100	<0.000050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00010	0.00281	<0.000100	<0.000050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00010	0.00328	<0.000100	<0.000050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00010	0.00311	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0.013	0.0000072	1.82	0.000013
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.010	<0.0000050	1.86	<0.000010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0.021	0.0000081	2.27	0.000015
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.010	0.0000062	1.52	<0.000010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.010	0.0000064	1.79	<0.000010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	0.011	<0.0000050	1.91	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00050	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00050	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00050	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00050	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00010	0.00024		<0.010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00010	0.00036		0.018
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00010	0.00021		<0.010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00010	0.00035		<0.010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00010	0.00027		<0.010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00010	0.00044		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000050	<0.0010	0.219	0.00016
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000050	<0.0010	0.267	0.00088
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000050	0.0013	0.263	0.0002
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000050	<0.0010	0.154	0.00092
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000050	<0.0010	0.189	0.00036
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000050	<0.0010	0.2	0.0005

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.0000050	0.000692	<0.00050	<0.050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.0000050	0.000495	<0.00050	<0.050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.0000050	0.000773	<0.00050	<0.050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.0000050	0.000343	<0.00050	<0.050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.0000050	0.000501	<0.00050	<0.050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.0000050	0.0005	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0.268		0.0007	<0.000050	2.27
SW-02	SW-02	L2757587-1	2024/09/29	Water	M					
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0.248		0.0005	<0.000050	2.04
SW-02	SW-02	L2757661-1	2024/10/04	Water	M					
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0.311		0.00081	<0.000050	2.51
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M					
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	0.228		0.00057	<0.000050	2.27
SW-02	SW-02	L2757873-2	2024/10/22	Water	M					
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	0.276		0.00068	<0.000050	2.75
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	0.282		0.00065	<0.000050	2.64

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000010	1.39	0.00811	0.58
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000010	1.05	0.00692	0.91
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000010	1.81	0.0104	0.69
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000010	0.863	0.00678	0.72
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000010	1.2	0.00791	0.89
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000010	1.2	0.0081	0.82

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00030	<0.00010	0.000145	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0.00044	<0.00010	0.000254	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00030	<0.00010	0.000136	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00030	<0.00010	0.000138	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00030	<0.00010	0.00013	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00030	<0.00010	0.000141	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M		<0.0010	<0.00020
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M		<0.0010	<0.00020
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M		<0.0010	<0.00020
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M		<0.0010	<0.00020
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M		<0.0010	<0.00020
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M		0.0011	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000000020	0.000000026
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000000020	<0.000000020
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000000020	
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000000020	<0.000000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.25	<0.25	<0.1
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00040	<0.00030	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochlorome thane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050		
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050		
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050		
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050		
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050		
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00020	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00020	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00020	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00020	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1-Trichloroethane	1-1-2-Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.00050	<0.00040
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.00050	<0.00040
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.00050	<0.00040
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.00050	<0.00040
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	90.7	99.2
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	90.2	100
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	87.7	99.5
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	81.2	96.8
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	94.2	102
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	97.7	97.9

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M		<0.000010	<0.0000050
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M		<0.000010	<0.0000050
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M		<0.000010	<0.0000050
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M		<0.000010	<0.0000050
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000010	<0.000010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000010	<0.000010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000010	<0.000010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000010	<0.000010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.000050	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.000050	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.000050	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M		
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<0.000050	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<0.000050	
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	93	111	<0.44
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	88.1	76.7	<0.21
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	82.6	74.3	<0.80
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			<0.24
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	105	98.3	<1
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	96	98.6	<1
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	95	97.9	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.55	<0.20	<0.20
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.13	<0.20	<0.21
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.54	<0.79	<0.80
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	<0.17	<0.19	<0.20
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<2	<2	<2
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<2	<2	<2
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.19	<0.77	<5.9	<0.29
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.20	<0.53	<4.3	<0.23
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.78	<0.69	<3.2	<0.75
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	0.2	0.45	2.1	<0.29
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<2	<3	<4	<1
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<2	<3	<4	<1
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.26	<0.25	<0.17
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.40	<0.18	<0.23
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.39	<0.36	<0.24
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	0.36	<0.13	<0.16
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<2	<2	<2
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<2	<2	<2
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.18	<0.21	<0.18
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.23	<0.31	<0.25
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.26	<0.30	<0.25
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	<0.15	<0.20	0.21
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<2	<2	<2
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<2	<2	<2
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.21	<0.21	0.914
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.35	<0.34	<2.6
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.35	<0.39	1.35
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	<0.17	<0.24	0.68
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	<3	<3	<4
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	<3	<3	<4
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0	0
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0	0
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0	0
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	1	0
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M		
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M		
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0	0
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0	0
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0	0
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	0	1
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M		
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M		
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0	0
SW-02	SW-02	L2757587-1	2024/09/29	Water	M		
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0	0
SW-02	SW-02	L2757661-1	2024/10/04	Water	M		
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0	0
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	0	0
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M		
SW-02	SW-02	L2757873-2	2024/10/22	Water	M		
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M		
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0	0	<0.77
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0	0	<0.53
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0	0	<0.69
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	0	0	0.45
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.21	<0.20	<0.21	<0.55
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.35	<0.21	<0.31	<0.13
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.39	<0.80	<0.30	<0.54
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	<0.24	<0.20	0.21	<0.17
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M				
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M				
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	<0.26	<0.44	<0.29	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.21	<0.21	<0.23	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	<0.39	<0.80	<0.75	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	<0.16	<0.24	<0.29	
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M				0
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M				0
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			0.000274
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			0
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			0.000405
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			0.0264
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M	0	0	
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M	0	0	
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M	0.634	1.25	
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	0.31	0.606	
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M	0.96	1.89	
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	0.343	0.63	83
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	79	73	86
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	86	86	87
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	83	83	73
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	87	84	80
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M	77	83	81
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M				
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				<0.25
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M				<0.25
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				<0.25
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M				
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M				
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				<0.25
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M				
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M	<0.25		81.2
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M	<0.25		108
SW-02	SW-02	L2757661-1	2024/10/04	Water	M	<0.25		79.8
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M	<0.25		114
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M	<0.25		96.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M			
SW-02	SW-02	L2757587-1	2024/09/29	Water	M			
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M			
SW-02	SW-02	L2757661-1	2024/10/04	Water	M			
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M			
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M			
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M			
SW-02	SW-02	L2757873-2	2024/10/22	Water	M			
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M			
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA24C5953-001	2024/09/29	Water	M				
SW-02	SW-02	L2757587-1	2024/09/29	Water	M				
SW-02	SW-02	VA24C6562-001	2024/10/04	Water	M				
SW-02	SW-02	L2757661-1	2024/10/04	Water	M				
SW-02	SW21-02	VA24C7381-002	2024/10/12	Water	M				
SW-02	SW21-02	L2757756-2	2024/10/12	Water	M				
SW-02	SW-02	VA24C8331-002	2024/10/22	Water	M				
SW-02	SW-02	L2757873-2	2024/10/22	Water	M				
SW-02	SW21-2	VA24C8780-001	2024/10/25	Water	M				
SW-02	SW-02	VA24C8832-001	2024/10/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	3.2		
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	2.8		
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	2.8		
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	3.6		
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	3.9		
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	2.6		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	10	15.20
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	7.3	11.10
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	7.6	11.90
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	13	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	11.3	18.50
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	16	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	16.9	0.46	101.3
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	12.4	0.42	103.6
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	13.8	0.24	104.6
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	18.2	0.50	99.9
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	12.29	
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	12.54	
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	13.04	
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	13.05	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	12.84	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	12.97	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	1.75	1.84	149.90
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	1.47	1.62	140.10
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	1.62	1.18	186.50
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	1.61	1.66	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	1.55	1.53	148.10
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	1.72	1.67	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	6.75	6.62	0.01	<1.0
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	6.98	6.63	0	<1.0
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	6.18	6.6	0	<1.0
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	7.00	6.68	0.01	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	6.70	6.72	0.01	<1.0
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	6.70	6.61	0.01	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	7.04	
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	7.10	
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	5.96	
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	5.60	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	4.77	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	6.20	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	19	<3.0	4.72
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	13	<3.0	3.7
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	23	<3.0	4
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	24	<3.0	5.12
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	19	<3.0	5.81
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	13	<3.0	3.7

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	4.71	1.05	0.21	<1
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	3.46	0.15	0.12	5
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	4.03	1.36	0.30	2
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	4.75	2.11	2.84	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	6.99	0.04	2.56	2
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	3.7	1.89	0.21	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M		<0.0050	<0.050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M		0.0052	<0.050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M		<0.0050	<0.050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M		<0.0050	<0.050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M		<0.0050	<0.050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M		0.0051	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	1.03	<0.020	0.079
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	0.5	<0.020	0.0499
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.50	<0.020	0.0761
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.57	<0.020	0.0775
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	0.72	<0.020	0.0718
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0.57	<0.020	0.0624

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.0010		<0.050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.0010		<0.050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.0010		<0.050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.0010		
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.0010		
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.050		
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.050		
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.050		
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M		0.103	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	2.69	0.0876	<0.00010	<0.00010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	1.56	0.0957	<0.00010	<0.00010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	2.2	0.102	<0.00010	<0.00010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	2.63	0.207	<0.00010	0.0001
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	3.01	0.185	<0.00010	<0.00010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	1.9	0.115	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	0.00293	<0.000100	<0.000050	<0.010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	0.00224	<0.000100	<0.000050	<0.010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	0.00264	<0.000100	<0.000050	<0.010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.00412	<0.000020	<0.000050	<0.010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	0.00443	<0.000100	<0.000050	<0.010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0.00241	<0.000020	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	0.0000076	1.59	<0.000010	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	0.0000074	1.27	<0.000010	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	0.0000078	1.37	<0.000010	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.0000088	1.72	0.00002	0.00065
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	0.000009	1.92	0.000018	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0.0000056	1.27	<0.000010	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050		0.00011
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00050	0.0001
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050		<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050		0.017	<0.000050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050		0.016	<0.000050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050		0.024	<0.000050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.00098		0.124	0.000156
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	0.00053		0.094	0.000116
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050		0.026	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.0010	0.182	0.00081	<0.0000050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.0010	0.129	0.00066	<0.0000050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.0010	0.142	0.00123	<0.0000050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.0010	0.2	0.00363	0.00000095
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.0010	0.246	0.00285	<0.0000050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.0010	0.128	0.00129	0.00000129

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M					
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	0.000435	<0.00050	<0.050	0.225	
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	0.000432	<0.00050	<0.050	0.188	
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M					
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	0.000305	<0.00050	<0.050	0.177	
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.000381	<0.00050	<0.050	0.256	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M					
SW-02		VA24D1587-001	2024/11/20	Water	M	0.000429	<0.00050	<0.050	0.276	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M					
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0.000337	<0.00050	<0.050	0.178	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	0.00059	<0.000050	2.72	<0.000010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	0.00047	<0.000050	2.04	<0.000010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	0.00046	<0.000050	2.21	<0.000010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.00064	<0.000050	2.59	<0.000010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	0.00071	<0.000050	2.92	<0.000010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0.0004	<0.000050	1.88	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	1.02	0.00814	0.74	<0.00020
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	0.84	0.0055	<0.50	<0.00020
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	0.755	0.00671	0.5	<0.00020
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	1.02	0.00837	0.81	<0.00020
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	1.08	0.0087	0.88	<0.00020
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0.776	0.00598	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000010	<0.00010	<0.00010	0.00076
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000010	<0.00010	<0.00010	0.00083
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000010	<0.00010	<0.00010	0.00082
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000010	<0.00010	<0.00010	0.00703
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000010	<0.00010	<0.00010	0.0057
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000010	<0.00010	<0.00010	0.00117

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00010	0.000183	<0.00050	
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00010	0.000202	<0.00050	
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00010	0.000167	<0.00050	
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00010	0.000155	<0.00050	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00010	0.000158	<0.00050	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00010	0.000174	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.0030	<0.00020	0.0773	<0.00010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.0030	<0.00020	0.08	<0.00010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.0030	<0.00020	0.0849	<0.00010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.0030	<0.00020	0.0762	<0.00010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.0030	<0.00020	0.0918	<0.00010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.0030	<0.00020	0.0932	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00010	0.0028	<0.000100	<0.000050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00010	0.0021	<0.000100	<0.000050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00010	0.00268	<0.000100	<0.000050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00010	0.00283	<0.000020	<0.000050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00010	0.00385	<0.000100	<0.000050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00010	0.00223	<0.000020	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.010	0.0000058	1.59	<0.000010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.010	0.0000076	1.19	<0.000010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.010	0.0000087	1.38	<0.000010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.010	0.0000065	1.61	<0.000010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.010	0.0000102	2.08	0.00001
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.010	0.0000095	1.27	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00050	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00010	0.00036		<0.010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00010	0.0002		<0.010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00010	0.00031		<0.010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00010	0.00034		0.016
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00010	0.00076		0.028
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00010	0.00035		0.011

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000050	<0.0010	0.179	0.00053
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000050	<0.0010	0.119	0.00029
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000050	<0.0010	0.141	0.00095
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000050	<0.0010	0.178	0.0011
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	0.000079	<0.0010	0.437	0.00123
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000050	<0.0010	0.128	0.00279

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.0000050	0.000422	<0.00050	<0.050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.0000050	0.000402	<0.00050	<0.050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.0000050	0.000285	<0.00050	<0.050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.00000076	0.000365	<0.00050	<0.050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.0000050	0.000417	<0.00050	<0.050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0.00000101	0.000343	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M					
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	0.233		0.0006	<0.000050	2.55
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	0.181		0.00052	0.000056	1.87
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M					
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	0.194		0.00042	<0.000050	2.18
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.225		0.00053	<0.000050	2.56
SW-02	SW-02	L2758155-3	2024/11/16	Water	M					
SW-02		VA24D1587-001	2024/11/20	Water	M	0.345		0.00052	<0.000050	2.47
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M					
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0.166		0.00033	<0.000050	1.95

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000010	1.02	0.00795	0.75
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000010	0.806	0.00543	<0.50
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000010	0.778	0.00703	0.6
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000010	0.895	0.00776	0.94
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000010	3.14	0.0104	0.86
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000010	0.72	0.00574	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	0.00033	<0.00010	0.000191	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	0.00032	<0.00010	0.000182	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00030	<0.00010	0.000162	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.00064	<0.00010	0.000151	<0.00050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	0.00136	<0.00010	0.000142	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0.00034	<0.00010	0.000177	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M		0.0011	<0.00020
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M		<0.0010	<0.00020
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M		0.0011	<0.00020
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M		<0.0010	<0.00030
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M		0.0084	<0.00020
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M		0.001	<0.00030

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000000020	
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000000020	
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000000020	
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000000020	0.000000029
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000000080	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000000020	<0.000000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.25	<0.25	<0.1
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.25	<0.25	<0.1
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.25	<0.25	<0.1
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050		
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050		
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050		
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050		
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050		
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	0.001	<0.0050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichlorobenzene	1-3-Dichlorobenzene	1-4-Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00020	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00020	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00020	<0.00050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00020	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.00050	<0.00040
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.00050	<0.00040
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.00050	<0.00040
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.00050	<0.00040
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	93.8	102
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	99.9	102
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	90.9	101
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	95.1	102
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	98.4	103
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	98	101

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M		<0.000010	<0.0000050
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M		<0.000010	<0.0000050
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M		<0.000010	<0.0000050
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M		<0.000010	<0.0000050
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000010	<0.000010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000010	<0.000010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000010	<0.000010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000010	<0.000010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M		
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<0.000050	
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	<0.000050	
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<0.000050	
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.000050	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M		
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.000050	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			<0.38
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	96.2	102	<1
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M	83.3	76.6	
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	83.3	97.9	<1
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	94.8	96.4	<0.23
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			<0.19
SW-02		VA24D1587-001	2024/11/20	Water	M	106	104	<0.27
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	94.4	90.6	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	<0.35	<0.20	<0.20
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<2	<2	<2
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<2	<2	<2
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.20	<0.33	<0.33
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	<0.19	<0.21	<0.21
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.20	<0.19	<0.19
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	<0.20	<0.35	0.94	<0.20
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<2	<3	<4	<1
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M				
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<2	<3	<4	<1
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.31	<0.28	4.23	<0.25
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	<0.19	0.65	3.3	<0.25
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.19	<0.37	2.19	<0.23
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	<0.34	<0.25	<0.11
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<2	<2	<2
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<2	<2	<2
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.31	<0.21	<0.26
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	0.3	<0.16	0.15
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.22	<0.21	<0.14
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	<0.12	<0.17	<0.11
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<2	<2	<2
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<2	<2	<2
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.24	<0.34	<0.28
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	<0.14	0.2	<0.13
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.14	<0.19	<0.15
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	<0.17	<0.31	<0.26
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	<3	<3	<4
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	<3	<3	<4
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.36	<0.25	<1.6
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	<0.26	<0.35	0.85
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.22	<0.25	<1.2
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	0	0
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M		
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M		
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M		
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0	0
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	1	0
SW-02		VA24D1587-001	2024/11/20	Water	M	0	0
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	0	0
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M		
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M		
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M		
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0	0
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	0	0
SW-02		VA24D1587-001	2024/11/20	Water	M	0	0
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	0	0
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M		
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M		
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M		
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M		
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0	0
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	0	0
SW-02		VA24D1587-001	2024/11/20	Water	M	0	0
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M		
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	0	0	<0.35
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0	0	<0.26
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	0	0	0.65
SW-02		VA24D1587-001	2024/11/20	Water	M	0	0	<0.27
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	<0.31	<0.20	<0.17	<0.35
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M				
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M				
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M				
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.27	<0.33	<0.34	<0.20
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	<0.35	<0.21	<0.16	<0.19
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.25	<0.19	<0.19	<0.20
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	<0.34	<0.38	<0.20	
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M				0
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M				
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M				0
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.22	<0.23	<0.25	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	<0.20	<0.19	<0.25	
SW-02		VA24D1587-001	2024/11/20	Water	M	<0.22	<0.27	<0.23	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			0.000281
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M	0	0	
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M	0	0	
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			0.00127
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			0.00651
SW-02		VA24D1587-001	2024/11/20	Water	M			0.000657
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	0.478	0.955	82
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	0.382	0.747	
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	0.325	0.599	69
SW-02		VA24D1587-001	2024/11/20	Water	M	0.357	0.691	
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	68	60	71
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	60	58	73
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	61	74	69
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	66	72	66
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	66	69	58
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	65	59	52
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	67	65	62
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	68	56	69
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M	61	90	75
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M	63	51	71
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M				
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M				
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				<0.25
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M				
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M				<0.25
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M				
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M				<0.25
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M		<0.005	
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M	<0.25		82.6
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M	<0.25		108
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M	<0.25		105
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M			
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M			
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M			
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M			
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M			
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M			
SW-02	SW-02	L2758155-3	2024/11/16	Water	M			
SW-02		VA24D1587-001	2024/11/20	Water	M			
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M			<5.0
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2757913-1	2024/10/25	Water	M				
SW-02	SW21-2	VA24C9642-001	2024/11/01	Water	M				
SW-02	SW21-2	VA24D0423-001	2024/11/08	Water	M				
SW-02	SW21-2	L2758092-1	2024/11/08	Water	M				
SW-02	SW21-2	VA24D1013-001	2024/11/15	Water	M				
SW-02	SW-02	VA24D1148-003	2024/11/16	Water	M				
SW-02	SW-02	L2758155-3	2024/11/16	Water	M				
SW-02		VA24D1587-001	2024/11/20	Water	M				
SW-02	SW21-2	L2758201-1	2024/11/20	Water	M	<5.0	<5.0	<10	<5.0
SW-02	SW-02	VA24D3099-001	2024/12/08	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	3.2		
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	4.3		
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	4		
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	4.4		
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	4.3		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	8.6	13.90
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	13.6	24.40
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	25	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	42.4	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	7.8	13.70

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	14.8	0.52	102.8
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	23.9	0.33	104.5
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	17.2	0.69	103.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	13.11	
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	14.55	
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	14.22	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	14.53	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	14.10	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	1.55	2.03	163.50
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	0.98	1	68.40
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	1	0.89	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	1.37	1.66	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	2.07	2.15	138.70

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	6.60	6.63	0.01	<1.0
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M		6.77	0	<1.0
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	7.60	6.72	0.02	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	7.97	6.81	0.03	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	7.01	6.83	0	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	5.10	
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	1.75	
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	2.60	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	2.30	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	2.55	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	12	<3.0	4.35
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	26	<3.0	6.47
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	16	<3.0	6.63
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	28	4.7	8
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	26	<3.0	5.21

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	4.04	0	0.20	<1
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	6.38	0	<0.10	<1
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	6.53	0.02	<0.10	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	7.05	6.6	8.00	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	5.17	0	0.47	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M		<0.0050	<0.050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M		<0.0050	<0.050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M		<0.0050	<0.050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M		<0.0050	<0.050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.50	<0.020	0.0716
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	1.6	<0.020	0.0792
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	1.66	<0.020	0.0807
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	1.45	<0.020	0.107
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0.74	<0.020	0.108

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.0010		<0.050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.0010		
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.0010		
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.0010		
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.0010		0.05

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.050		
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0.05		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	2.09	0.101	<0.00010	<0.00010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	3.86	0.0425	<0.00010	<0.00010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	3.97	0.0389	<0.00010	<0.00010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	3.66	0.668	<0.00010	0.00014
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	2.28	0.126	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	0.00267	<0.000100	<0.000050	<0.010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	0.00375	<0.000100	<0.000050	0.019
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	0.00379	<0.000020	<0.000050	0.021
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	0.0098	<0.000020	<0.000050	0.018
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0.00323	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	0.0000079	1.5	<0.000010	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	0.000008	2.16	0.000011	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.0000050	2.25	<0.000010	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	0.0000101	2.5	0.000054	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0.0000068	1.76	<0.000010	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050		<0.00010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050		0.00023
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050		0.019	<0.000050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050		<0.010	<0.000050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050		<0.010	<0.000050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	0.00151		0.523	0.000215
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050		0.034	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.0010	0.148	0.00109	<0.0000050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	0.0011	0.261	0.00042	<0.0000050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	0.0012	0.245	0.00029	0.00000055
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	0.0014	0.428	0.0116	0.00000126
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.0010	0.198	0.00148	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M					
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	0.000354	<0.00050	<0.050	0.196	
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M					
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	0.000722	<0.00050	<0.050	0.276	
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M					
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	0.000622	<0.00050	<0.050	0.248	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M					
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	0.000841	<0.00050	<0.050	0.414	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M					
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0.00058	<0.00050	<0.050	0.218	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	0.00047	<0.000050	2.12	<0.000010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	0.00068	<0.000050	3.18	<0.000010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	0.00058	<0.000050	3.02	<0.000010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	0.00114	<0.000050	3.68	<0.000010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0.00045	<0.000050	2.46	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	0.844	0.00702	0.55	<0.00020
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	1.84	0.0124	1.2	<0.00020
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	1.92	0.0109	1.13	<0.00020
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	1.9	0.0128	1.14	<0.00020
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	1.18	0.00845	0.53	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000010	<0.00010	<0.00010	0.00062
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000010	<0.00010	<0.00010	0.0225
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000010	<0.00010	<0.00010	0.00144

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00010	0.000165	<0.00050	
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00010	0.000137	<0.00050	
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00010	0.000126	<0.00050	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00010	0.000191	0.00116	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00010	0.000194	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.0030	<0.00020	0.0841	<0.00010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.0030	<0.00020	0.0376	<0.00010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.0030	<0.00020	0.0358	<0.00010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.0030	<0.00020	0.0492	<0.00010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.0030	<0.00020	0.0954	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00010	0.00252	<0.000100	<0.000050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00010	0.00342	<0.000100	<0.000050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00010	0.00402	<0.000020	<0.000050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00010	0.003	<0.000020	<0.000050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00010	0.00289	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.010	0.0000088	1.38	<0.000010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	0.019	<0.0000050	2.18	<0.000010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	0.019	0.000011	2.19	0.00001
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	0.017	0.0000089	2.38	<0.000010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.010	0.0000055	1.76	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00050	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00050	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00010	0.00025		<0.010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00010	<0.00020		<0.010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00010	0.00021		<0.010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00010	0.00041		0.011
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00010	0.00038		0.013

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000050	<0.0010	0.145	0.00075
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000050	0.0011	0.227	0.00022
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000050	0.0011	0.257	0.00035
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000050	0.0012	0.27	0.00114
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000050	<0.0010	0.189	0.00091

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.0000050	0.000334	<0.00050	<0.050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.0000050	0.000619	<0.00050	<0.050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00000050	0.00062	<0.00050	<0.050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	0.00000097	0.000755	<0.00050	<0.050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.0000050	0.000523	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M					
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	0.184		0.0004	<0.000050	2.13
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M					
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	0.247		0.00057	<0.000050	2.88
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M					
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	0.283		0.00074	<0.000050	2.93
SW-02	SW-02	L2758769-2	2025/01/24	Water	M					
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	0.275		0.00054	<0.000050	2.84
SW-02	SW-02	L2759009-1	2025/02/19	Water	M					
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0.225		0.00049	<0.000050	2.3

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000010	0.786	0.00649	<0.50
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000010	1.58	0.0102	1.13
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000010	1.72	0.011	1.28
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000010	1.7	0.0108	1.09
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000010	1.22	0.00798	0.7

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00030	<0.00010	0.000154	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00030	<0.00010	0.000124	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00030	<0.00010	0.000124	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00030	<0.00010	0.000114	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0.00037	<0.00010	0.000181	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M		<0.0010	<0.00020
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M		<0.0010	<0.00020
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M		<0.0010	<0.00030
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M		0.001	<0.00030
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M		0.0015	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000000020	
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	0.000000029	
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000000020	0.000000036
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000000020	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.25	<0.25	<0.1
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.25	<0.25	<0.1
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050		
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050		
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050		
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050		
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00020	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00020	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00020	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00020	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.00050	<0.00040
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.00050	<0.00040
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.00050	<0.00040
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.00050	<0.00040
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	96.6	102
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	88.8	98.8
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	88.3	101
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	111	105
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	104	102

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M		<0.000010	<0.0000050
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M		<0.000010	<0.0000050
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M		<0.000010	<0.0000050
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M		<0.000010	<0.0000050
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000010	<0.000010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000010	<0.000010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000010	<0.000010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000010	<0.000010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M		
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	<0.000050	
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M		
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.000050	
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M		
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.000050	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M		
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.000050	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			<0.33
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M	85.6	86	
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			<0.69
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	84.3	88	
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			<0.59
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	79.6	92	
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			<1.5
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	85.8	94	
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	77.6	85.5	<0.46

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	<0.25	<0.35	<0.33
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	<0.35	<0.69	0.7
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	<0.59	<0.78	<0.77
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	<0.97	<0.98	<1.0
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.37	<0.36	<0.35

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	<0.32	1	5.7	<0.37
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M				
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	<0.65	8.2	38	<0.50
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M				
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	<0.77	5	78	<0.55
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M				
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	<1.0	<1.9	4.3	<1.8
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M				
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.34	<0.83	7.76	<0.26

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	0.68	<0.29	<0.23
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	3.4	<0.39	<0.45
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	0.97	<0.25	0.44
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	<0.83	<0.75	<0.59
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.29	<0.28	<0.16

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	<0.23	0.33	<0.23
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	<0.49	<0.63	<0.47
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	<0.42	<0.68	<0.43
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	<0.62	<1.0	<0.66
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.14	<0.21	<0.17

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	<0.43	<0.58	<0.84
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	<0.99	<1.4	1.3
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	4.1	<1.0	9
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	<0.83	<1.2	<3.7
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.40	<0.54	<0.61

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	0	0
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M		
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	1	0
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M		
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	1	1
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M		
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	0	0
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M		
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	0	1
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M		
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	2	1
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M		
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	0	1
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M		
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	0	0
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M		
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	0	0
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M		
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	0	0
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M		
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	0	1
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M		
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	0	0
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M		
SW-02	SW-02	L2759009-1	2025/02/19	Water	M		
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	0	0	<0.68
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	0	1	8.2
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	0	2	9.91
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	0	0	<1.9
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0	0	<0.36

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	<0.58	<0.35	0.33	<0.25
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M				
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	<1.4	6.12	1.13	<0.35
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M				
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	3	<0.78	0.72	<0.59
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M				
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	<1.2	<1.0	<1.0	<0.97
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M				
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.54	<0.36	<0.21	<0.37

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	<0.34	<0.33	<0.37	
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M				
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	<0.46	<0.69	1.05	
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M				
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	0.32	<0.59	1.97	
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M				
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	<0.83	<1.5	<1.8	
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M				
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	<0.29	<0.46	<0.26	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			0.0343
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			0.0824
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			0.0027
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			0
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			0.00233

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	0.506	0.948	75
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	1.05	1.84	81
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	1.04	1.9	79
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	1.76	3.53	59
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M	0.576	1.14	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	63	61	83
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	72	69	93
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	72	70	87
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	61	61	69
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	77	89	78
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	89	92	88
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	87	75	74
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	78	66	74
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	75	70	61
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	84	77	64
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	80	71	63
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	66	62	63
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	80	67	81
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	89	72	81
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	81	70	69
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	69	63	60
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M	75	50	85
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	82	58	74
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M	67	58	77
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M	62	40	67
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M				
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				<0.25
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M				<0.25
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M				<0.25
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M				<0.25
SW-02	SW-02	L2759009-1	2025/02/19	Water	M				<0.25
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M	<0.25		118
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M	<0.25		90.1
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M	<0.25		87
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M	<0.25		95.2
SW-02	SW-02	L2759009-1	2025/02/19	Water	M	<0.25		107
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M			
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M			
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M			
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M			
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M			
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M			
SW-02	SW-02	L2758769-2	2025/01/24	Water	M			
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M			
SW-02	SW-02	L2759009-1	2025/02/19	Water	M			<5.0
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	L2758371-1	2024/12/08	Water	M				
SW-02	SW21-2	VA24D4023-001	2024/12/19	Water	M				
SW-02	SW21-2	L2758504-1	2024/12/19	Water	M				
SW-02	SW21-2	VA25A1591-001	2025/01/23	Water	M				
SW-02	SW21-2	L2758768-1	2025/01/23	Water	M				
SW-02	SW-02	VA25A1730-002	2025/01/24	Water	M				
SW-02	SW-02	L2758769-2	2025/01/24	Water	M				
SW-02	SW-02	VA25A3569-001	2025/02/19	Water	M				
SW-02	SW-02	L2759009-1	2025/02/19	Water	M	<5.0	<5.0	<10	<5.0
SW-02	SW21-2	VA25A3665-001	2025/02/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	3.6		
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	2.4		
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	3		
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	1.8		
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	2.7		
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	13	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	4.6	7.60
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	9	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	6	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	7	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M	7	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	8.8	0.10	105.1
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	13.43	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	13.73	
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	13.40	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	13.09	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	13.15	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M	13.15	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	1.34	1.39	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	2.51	2.67	218.50
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	1.66	2	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	2.29	2.56	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	1.63	1.5	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	7.05	6.75	0.01	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	6.20	6.35	0	<1.0
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	7.20	6.61	0.01	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	7.10	6.27	0	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	7.00	6.57	0	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M	7.00		0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	4.80	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	4.12	
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	4.80	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	5.50	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	5.10	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M	5.10	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	27	<3.0	5.6
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	13	6.1	2.71
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	16	<3.0	4.66
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	16	<3.0	2.79
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	17	<3.0	3.56
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	5.52	0.22	<0.10	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	2.43	1.35	2.48	
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	4.26	0.45	0.54	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	2.56	0.96	0.67	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	3.59	0.48	0.11	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		0.48		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M		<0.0050	<0.050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M		<0.0050	<0.050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M		<0.0050	<0.050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M		<0.0050	<0.050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M		<0.0050	<0.050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	1.02	<0.020	0.0645
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.50	<0.020	0.0425
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	0.58	<0.020	0.0527
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.50	<0.020	0.0381
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.50	<0.020	0.043
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.0010		
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.0010		0.065
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.0010		
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.0010		
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.0010		
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	0.065		
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	3.38	0.0618	<0.00010	<0.00010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	1.17	0.277	<0.00010	<0.00010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	2.3	0.148	<0.00010	<0.00010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	1.18	0.166	<0.00010	<0.00010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	1.98	0.0864	<0.00010	<0.00010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0.00307	<0.000020	<0.000050	0.0111
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	0.00279	<0.000100	<0.000050	<0.010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	0.00288	<0.000020	<0.000050	<0.010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	0.00207	<0.000020	<0.000050	<0.010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	0.00211	<0.000020	<0.000050	<0.010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0.00000864	1.91	<0.000010	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.0000050	0.899	0.000016	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	0.0000085	1.59	0.000014	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.0000050	0.949	<0.000010	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	0.0000071	1.22	<0.000010	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050		<0.00010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050	0.00011
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050		<0.00010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050		<0.00010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050		<0.00010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050		<0.010	<0.000050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050		0.105	0.000073
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	0.00052		0.062	0.000083
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050		0.047	<0.000050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050		0.012	<0.000050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.0010	0.202	0.000697	0.00000067
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.0010	0.113	0.00388	<0.0000050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.0010	0.167	0.00236	0.00000102
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.0010	0.102	0.00187	0.00000013
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.0010	0.125	0.00066	0.0000001
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M					
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0.000533	<0.00050	<0.050	0.207	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M					
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	0.0002	<0.00050	<0.050	0.129	
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	0.000388	<0.00050	<0.050	0.199	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M					
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	0.000229	<0.00050	<0.050	0.14	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M					
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	0.000318	<0.00050	<0.050	0.148	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0.000468	<0.000050	2.6	<0.000010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	0.00038	<0.000050	1.5	<0.000010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	0.00048	<0.000050	2.29	<0.000010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	0.00033	<0.000050	1.35	<0.000010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	0.00037	<0.000050	1.92	<0.000010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	1.32	0.00934	0.766	<0.00020
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	0.52	0.00446	<0.50	<0.00020
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	1.15	0.00729	0.59	<0.00020
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	0.586	0.004	<0.50	<0.00020
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	0.795	0.00594	<0.50	<0.00020
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000010	<0.00010	<0.00010	0.000432
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000010	<0.00010	<0.00010	0.00477
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000010	<0.00010	<0.00010	0.0027
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000010	<0.00010	<0.00010	0.00259
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000010	<0.00010	<0.00010	0.00047
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00010	0.000132	<0.00050	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00010	0.000204	<0.00050	
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00010	0.000204	<0.00050	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00010	0.000177	<0.00050	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00010	0.000172	<0.00050	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.0030	<0.00020	0.0531	<0.00010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.0030	<0.00020	0.132	<0.00010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.0030	<0.00020	0.08	<0.00010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.0030	<0.00020	0.105	<0.00010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.0030	<0.00020	0.0793	<0.00010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00010	0.00304	<0.000020	<0.000050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00010	0.0017	<0.000100	<0.000050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00010	0.00225	<0.000020	<0.000050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00010	0.00167	<0.000020	<0.000050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00010	0.00199	<0.000020	<0.000050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0.0106	0.00000601	1.89	<0.000010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.010	<0.0000050	0.828	<0.000010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.010	0.0000095	1.46	<0.000010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.010	0.0000063	0.882	<0.000010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.010	<0.0000050	1.23	<0.000010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00050	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00050	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00050	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00050	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0.000174	0.000287		<0.010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00010	0.00029		0.013
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00010	0.00024		<0.010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00010	0.00024		0.012
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00010	0.00023		<0.010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000050	<0.0010	0.195	0.000521
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000050	<0.0010	0.0891	0.00093
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000050	<0.0010	0.15	0.00051
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000050	<0.0010	0.0859	0.00082
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000050	<0.0010	0.127	0.00054
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0.000000564	0.000509	<0.00050	<0.050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.0000050	0.000181	<0.00050	<0.050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	0.00000055	0.00034	<0.00050	<0.050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	0.00000099	0.000218	<0.00050	<0.050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	0.00000112	0.000325	<0.00050	<0.050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M					
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0.213		0.000529	<0.000050	2.54
SW-02	SW-02	L2759254-1	2025/03/18	Water	M					
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	0.121		0.00026	<0.000050	1.19
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	0.164		0.00047	<0.000050	1.94
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M					
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	0.102		0.00025	<0.000050	1.24
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M					
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	0.148		0.00035	<0.000050	1.79
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000010	1.32	0.00905	0.718
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000010	0.496	0.00406	<0.50
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000010	0.849	0.00648	<0.50
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000010	0.485	0.00402	<0.50
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000010	0.744	0.00566	0.56
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00030	<0.00010	0.000128	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	0.00052	<0.00010	0.000165	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00030	<0.00010	0.000179	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	0.00037	<0.00010	0.000149	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	0.0003	<0.00010	0.000158	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M		<0.0010	<0.00030
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M		<0.0010	<0.00020
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M		<0.0010	<0.00030
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M		0.001	<0.00030
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M		<0.0010	<0.00030
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000000020	
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050		
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050		
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050		
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050		
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050		
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00020	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.00050	<0.00040
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	90.2	102
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	88.3	102
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	94.6	103
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	87.5	102
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	90.8	106
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M		<0.000010	<0.0000050
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000010	<0.000010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M		
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.000050	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	<0.000050	
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<0.000050	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<0.000050	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<0.000050	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			<0.23
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	71.3	82.4	<0.49
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M	101	101	
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	115	108	<1
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			<0.62
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	99.9	94.4	<1
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	102	104	<1
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	<0.24	<0.35	<0.35
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.48	<0.39	<0.37
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<2	<2	<2
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	<0.49	<1.1	<1.0
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<2	<2	<2
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<2	<2	<2
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	<0.34	<0.53	<1.4	<0.30
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.37	<0.55	<2.1	<0.61
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M				
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<2	<3	<4	<1
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	<1.0	1.7	<4.7	<0.48
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<2	<3	<4	<1
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<2	<3	<4	<1
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	<0.21	<0.19	<0.20
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.39	<0.33	<0.26
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<2	<2	<2
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	<0.50	<0.44	<0.36
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<2	<2	<2
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<2	<2	<2
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	<0.19	<0.27	<0.20
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.27	<0.32	<0.28
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<2	<2	<2
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	<0.39	<0.64	0.58
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	<2	<2	<2
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<2	<2	<2
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	<0.29	<0.42	<1.2
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.28	<0.33	<0.94
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	<3	<3	<4
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	2.1	<1.1	9.5
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	8	<3	<4
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	<3	<3	<4
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	0	0
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0	0
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M		
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	0	0
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M		
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	0	0
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0	0
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M		
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	0	0
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M		
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	0	0
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0	0
SW-02	SW-02	L2759254-1	2025/03/18	Water	M		
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M		
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M		
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	0	0
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M		
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M		
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	0	0	<0.53
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0	0	<0.36
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	0	0	<1.2
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	<0.42	<0.35	<0.27	<0.24
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.33	<0.39	<0.32	<0.48
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M				
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	<1.1	<1.1	<0.64	<0.49
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M				
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	<0.21	<0.23	<0.30	
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.39	<0.49	<0.61	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M				
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M				0
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	<0.50	<0.62	<0.48	
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M				0.08
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M				0
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			0
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			0
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M	0	0	
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			0.0612
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M	0.08	0	
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M	0	0	
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	0.383	0.766	66
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	0.707	1.38	
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	0.982	1.87	68
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	69	68	72
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	75	67	79
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	77	76	82
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	99	89	107
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	75	56	59
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	84	78	82
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	78	59	60
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	96	83	72
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M	65	43	66
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M	76	32	73
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M				<0.25
SW-02	SW-02	L2759254-1	2025/03/18	Water	M				<0.25
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M				
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M				<0.25
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M				
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M	<0.25		94.4
SW-02	SW-02	L2759254-1	2025/03/18	Water	M	<0.25		106
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M	<0.25		104
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M			
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M			
SW-02	SW-02	L2759254-1	2025/03/18	Water	M			<5.0
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M			
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M			
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M			
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M			<5.0
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M			
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	L2759041-1	2025/02/20	Water	M				
SW-02	SW-02	VA25A5938-001	2025/03/18	Water	M				
SW-02	SW-02	L2759254-1	2025/03/18	Water	M	<5.0	<5.0	<10	<5.0
SW-02	SW21-2	VA25A6812-001	2025/03/27	Water	M				
SW-02	SW-02	VA25A7260-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7262-002	2025/04/02	Water	M				
SW-02	SW-02	VA25A7638-001	2025/04/07	Water	M				
SW-02	SW-02	VA25A7640-001	2025/04/07	Water	M	<5.0	<5.0	<10	<5.0
SW-02	SW-02	VA25A8192-001	2025/04/12	Water	M				
SW-02	SW-02	VA25A8193-001	2025/04/12	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	2.2		
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	2.7		
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	2.1		
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	1.6		
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	1.9		
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	2.2		
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	1.2		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	7	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	7.1	11.30
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	5	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	34.9	55.40
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	5.4	8.30
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	6.2	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	5.6	8.40

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	11.4	0.03	99.2
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	9.3	0.35	101.5
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	8.3	0.65	100.3
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	8.6	0.37	101.6

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	12.64	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	12.40	
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	13.01	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	12.75	
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	12.33	
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	12.33	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	12.14	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	1.48	1.48	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	1.37	1.41	154.70
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	1.53	1.61	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	1.64	1.61	146.60
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	1.27	1.4	234.00
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	1.16	1.08	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	1.42	1.24	208.40

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	7.20	6.47	0	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	6.51	6.61	0	<1.0
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	6.90	6.42	0	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	6.53	6.32	0.03	<1.0
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	5.67	6.53	0	<1.0
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	6.90	6.56	0	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	6.49	6.19	0	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	7.20	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	5.82	
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	5.70	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	5.64	
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	6.51	
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	8.20	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	7.63	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	14	<3.0	3.06
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	14	<3.0	3.44
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	13	<3.0	2.92
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	13	<3.0	2.62
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<10	<3.0	2.49
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	14	<3.0	2.9
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	16	<3.0	2.67

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	2.98	0.12	0.16	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	3.3	0	<0.10	<1
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	2.48	0.34	<0.10	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	2.65	0	<0.10	<1
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	2.55	0.31	<0.10	<1
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	2.83	0.54	<0.10	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	2.54	0	<0.10	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M		<0.0050	<0.050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M		<0.0050	<0.050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M		<0.0050	<0.050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M		<0.0050	<0.050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M		<0.0050	<0.050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M		<0.0050	<0.050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.50	<0.020	0.0336
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	0.52	<0.020	0.0296
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.50	<0.020	0.0262
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.50	<0.020	0.022
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.50	<0.020	0.0192
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.50	<0.020	0.0212
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.50	<0.020	0.0185

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.0010		
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.0010		<0.050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.0010		
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.0010		<0.050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.0010		<0.050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.0010		
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.050		
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.050		
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.050		
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	1.45	0.0782	<0.00010	<0.00010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	1.56	0.0726	<0.00010	<0.00010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	1.08	0.078	<0.00010	<0.00010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	1.01	0.0872	<0.00010	<0.00010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	1.02	0.0747	<0.00010	<0.00010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	1.23	0.0709	<0.00010	<0.00010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	1.11	0.0743	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	0.00177	<0.000020	<0.000050	<0.010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	0.00178	<0.000100	<0.000050	<0.010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	0.00154	<0.000020	<0.000050	<0.010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	0.00142	<0.000100	<0.000050	<0.010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	0.00131	<0.000100	<0.000050	<0.010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	0.00163	<0.000020	<0.000050	<0.010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	0.00152	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	0.0000062	1.05	<0.000010	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.0000050	1.19	<0.000010	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	0.0000056	0.94	<0.000010	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.0000050	0.896	<0.000010	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.0000050	0.864	<0.000010	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.0000050	1	<0.000010	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.0000050	0.912	<0.000010	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050		<0.00010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050		<0.00010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050	<0.00010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050		<0.00010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050		0.012	<0.000050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050		<0.010	<0.000050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050		0.011	<0.000050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	0.00052		0.012	<0.000050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050		<0.010	<0.000050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050		0.012	<0.000050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	0.00053		<0.010	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.0010	0.106	0.00047	0.0000006
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.0010	0.114	0.00035	<0.0000050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.0010	0.138	0.00039	0.00000082
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.0010	0.0927	0.00047	<0.0000050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.0010	0.0816	0.00037	<0.0000050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.0010	0.098	0.00047	0.00000068
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.0010	0.0946	0.00041	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	0.000352	<0.00050	<0.050	0.135	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M					
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	0.000396	<0.00050	<0.050	0.153	
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	0.000316	<0.00050	<0.050	0.132	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M					
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	0.000328	<0.00050	<0.050	0.116	
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	0.000315	<0.00050	<0.050	0.102	
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	0.000369	<0.00050	<0.050	0.127	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M					
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	0.000347	<0.00050	<0.050	0.11	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	0.00033	<0.000050	1.65	<0.000010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	0.00035	<0.000050	1.64	<0.000010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	0.00033	<0.000050	1.39	<0.000010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	0.00029	<0.000050	1.32	<0.000010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	0.00028	<0.000050	1.25	<0.000010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	0.00032	<0.000050	1.4	<0.000010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	0.00028	<0.000050	1.34	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	0.742	0.00487	<0.50	<0.00020
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	0.792	0.00502	<0.50	<0.00020
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	0.972	0.00427	<0.50	<0.00020
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	0.637	0.00386	<0.50	<0.00020
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	0.54	0.00369	<0.50	<0.00020
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	0.681	0.0042	<0.50	<0.00020
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	0.659	0.0041	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000010	<0.00010	<0.00010	0.00055
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000010	<0.00010	<0.00010	0.00044
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000010	<0.00010	<0.00010	0.0004
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000010	<0.00010	<0.00010	0.00062
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000010	<0.00010	<0.00010	0.0005
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000010	<0.00010	<0.00010	0.00062
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000010	<0.00010	<0.00010	0.00042

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00010	0.000172	0.00055	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00010	0.000179	<0.00050	
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00010	0.000165	<0.00050	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00010	0.000174	<0.00050	
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00010	0.000158	<0.00050	
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00010	0.000161	<0.00050	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00010	0.000166	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.0030	<0.00020	0.0739	<0.00010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.0030	<0.00020	0.0709	<0.00010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.0030	<0.00020	0.0744	<0.00010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.0030	<0.00020	0.0828	<0.00010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.0030	<0.00020	0.0651	<0.00010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.0030	<0.00020	0.0646	<0.00010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.0030	<0.00020	0.063	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00010	0.00167	<0.000020	<0.000050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00010	0.00178	<0.000100	<0.000050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00010	0.00155	<0.000020	<0.000050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00010	0.00148	<0.000100	<0.000050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00010	0.00135	<0.000100	<0.000050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00010	0.00157	<0.000020	<0.000050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00010	0.00146	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.010	<0.0000050	1.01	<0.000010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.010	<0.0000050	1.13	<0.000010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.010	<0.0000050	0.852	<0.000010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.010	<0.0000050	0.92	<0.000010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.010	<0.0000050	0.889	<0.000010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.010	<0.0000050	0.975	<0.000010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.010	<0.0000050	0.859	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00050	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00050	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00050	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00010	<0.00020		<0.010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00010	0.00027		<0.010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00010	<0.00020		<0.010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00010	0.00028		<0.010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00010	<0.00020		<0.010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00010	<0.00020		<0.010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00010	<0.00020		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000050	<0.0010	0.111	0.0003
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000050	<0.0010	0.115	0.00033
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000050	<0.0010	0.085	0.00042
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000050	<0.0010	0.0858	0.00028
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000050	<0.0010	0.0796	0.00024
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000050	<0.0010	0.0965	0.00059
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000050	<0.0010	0.0967	0.00025

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	0.00000085	0.000324	<0.00050	<0.050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.0000050	0.000379	<0.00050	<0.050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	0.00000075	0.000283	<0.00050	<0.050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.0000050	0.000294	<0.00050	<0.050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.0000050	0.000301	<0.00050	<0.050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	0.00000075	0.000341	<0.00050	<0.050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.0000050	0.000333	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	0.145		0.00032	<0.000050	1.63
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M					
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	0.145		0.00031	<0.000050	1.66
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	0.114		0.00026	<0.000050	1.25
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M					
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	0.124		0.00029	<0.000050	1.23
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	0.113		0.00027	<0.000050	1.17
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	0.128		0.00036	<0.000050	1.37
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M					
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	0.112		0.00032	<0.000050	1.2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000010	0.734	0.00452	<0.50
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000010	0.795	0.00516	<0.50
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000010	0.589	0.00378	<0.50
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000010	0.625	0.0039	<0.50
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000010	0.555	0.00369	<0.50
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000010	0.679	0.00422	<0.50
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000010	0.67	0.00398	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00030	<0.00010	0.000157	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00030	<0.00010	0.000178	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00030	<0.00010	0.000158	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	0.00035	<0.00010	0.000178	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00030	<0.00010	0.000148	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00030	<0.00010	0.00015	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00030	<0.00010	0.00016	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M		<0.0010	<0.00030
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M		<0.0010	<0.00020
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M		<0.0010	<0.00030
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M		<0.0010	<0.00020
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M		<0.0010	<0.00020
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M		0.0011	<0.00030
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000000020	
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000000020	
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000000020	
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000000020	<0.000000020
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	0.000000051	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.25	<0.25	<0.1
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.25	<0.25	<0.1
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.1	<0.00050	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00050	<0.00040
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00040	<0.00030	<0.00050	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050		
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050		
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050		
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050		
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050		
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050		
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00050	<0.0050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00050	<0.0010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00075	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethylene
						mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00020	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00020	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00050	<0.00050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.00050	<0.00040
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.00050	<0.00040
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	84.7	94.6
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	82	97.3
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	90.2	102
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	89.2	101
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	96.5	98.5
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	111	102
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	103	102

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000010	<0.000010	<0.0000050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M		<0.000010	<0.0000050
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M		<0.000010	<0.0000050
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000010	<0.000010	<0.000010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000010	<0.000010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000010	<0.000010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000050	<0.000020	<0.000010
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	<0.000050	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M		
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<0.000050	
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	<0.000050	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M		
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<0.000050	
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	<0.000050	
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<0.000050	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M		
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M	106	104	
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			<0.26
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	115	108	<1
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M	110	106	
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			<0.32
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	106	102	<1
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M	124	103	
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	125	98.8	<1
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			<0.24
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M	122	104	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	<0.40	<0.72	<0.68
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<2	<2	<2
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	0.74	<0.29	<0.28
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<2	<2	<2
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<2	<2	<2
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	<0.19	<0.40	<0.36
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M				
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	<0.66	<0.55	2.4	<0.29
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<2	<3	<4	<1
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M				
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	<0.27	0.68	2.15	<0.38
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<2	<3	<4	<1
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M				
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<2	<3	<4	<1
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	<0.37	<0.49	2.95	<0.30
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	0.74	<0.30	<0.31
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<2	<2	<2
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	0.45	<0.29	<0.18
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<2	<2	<2
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<2	<2	<2
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	0.24	<0.12	<0.10
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	<0.26	<0.43	<0.33
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<2	<2	<2
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	<0.16	<0.21	<0.17
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<2	<2	<2
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<2	<2	<2
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	<0.11	<0.15	<0.11
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	0.41	<0.38	1.2
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	<3	<3	<4
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	0.34	<0.27	<0.55
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	<3	<3	<4
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	<3	<3	<4
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	<0.17	<0.21	<0.30
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M		
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	0	0
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M		
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M		
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	0	0
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M		
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M		
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M		
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	0	0
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M		
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	0	0
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M		
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M		
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	0	0
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M		
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M		
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M		
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	0	0
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M		
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	0	1
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M		
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M		
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	0	0
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M		
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M		
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M		
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	0	0
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	0	0	<0.55
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	0	0	<0.37
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	0	0	<0.49
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M				
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	<0.38	<0.72	<0.43	<0.40
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M				
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M				
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	<0.27	<0.29	<0.21	<0.34
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M				
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M				
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M				
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	<0.21	<0.40	<0.15	<0.19
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M				
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	0.74	<0.26	<0.29	
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M				0
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M				
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	<0.33	<0.32	<0.38	
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M				0
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M				
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M				0
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	<0.14	<0.24	<0.30	
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			0.0221
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M	0	0	
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			0.000645
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M	0	0	
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M	0	0	
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			0.000885
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	0.591	1.15	80
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	1.07	1.37	86
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	0.34	0.673	83
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	76	82	90
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	79	88	83
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	82	82	88
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	87	88	98
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	80	83	80
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	89	89	83
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	82	109	99
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	82	93	86
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	85	88	83
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	82	103	86
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	82	90	78
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	84	85	84
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	85	54	82
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M	77	62	78
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	87	73	78
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M				
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				<0.25
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M				
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M				
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M				
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M				
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M				
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				<0.25
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M	<0.25		116
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M	<0.25		115
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M			
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M			
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M			
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M			
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M			
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M			
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M			
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M			
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M			
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW-02	VA25A8840-001	2025/04/20	Water	M				
SW-02	SW-02	VA25A8841-001	2025/04/20	Water	M				
SW-02	SW21-2	VA25A9265-001	2025/04/24	Water	M				
SW-02	SW-02	VA25A9553-002	2025/04/28	Water	M				
SW-02	SW-02	VA25A9554-002	2025/04/28	Water	M				
SW-02	SW21-2	VA25A9648-001	2025/04/29	Water	M				
SW-02	SW21-2	VA25B0655-001	2025/05/08	Water	M				
SW-02	SW-02	VA25B1050-001	2025/05/13	Water	M				
SW-02	SW-02	VA25B1052-001	2025/05/13	Water	M				
SW-02	SW21-2	VA25B1182-001	2025/05/14	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	2		
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	1.8	1.8	<1.0
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	4.5	4.5	<1.0
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	2.9	2.9	<1.0
SW-07		VA24A1299-005	2024/01/23	Water	M	2.3		
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<1.0	<1.0	
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<1.0	<1.0	
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<1.0	<1.0	
SW-07		VA24A1299-005	2024/01/23	Water	M			
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	13.1	20.40
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	28.8	37.30
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	15.9	21.80
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	6.7	9.40
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	10.4	16.90
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	9.7	16.30
SW-07		VA24A1299-005	2024/01/23	Water	M	6.3	10.90
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	10.8	0.12	102.2
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	36.4	0.00	96.2
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	23.3	0.00	98.3
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	31.6	0.21	102.5
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	18.9	0.01	98.1
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	17.3	0.79	99.3
SW-07		VA24A1299-005	2024/01/23	Water	M		0.10	101.1
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	12.60	
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	10.11	
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	10.86	
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	11.57	
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	12.59	
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	13.07	
SW-07		VA24A1299-005	2024/01/23	Water	M	13.56	
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	1.52	1.91	186.10
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.98		224.50
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	1.59		188.80
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	2.47		206.60
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	1.55		186.60
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	1.42		173.60
SW-07		VA24A1299-005	2024/01/23	Water	M	2.01	1.96	200.83
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	6.79	6.63	0.01	<1.0
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	6.63	6.49	0.02	
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	6.62	5.8	0.01	
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	5.25	5.88	0	
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	5.71	6.03	0.01	
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	6.07	5.77	0.01	
SW-07		VA24A1299-005	2024/01/23	Water	M	5.72	6.37	0	
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	6.40	
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	13.10	
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	10.90	
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	10.00	
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	4.80	
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	3.80	
SW-07		VA24A1299-005	2024/01/23	Water	M	3.10	
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<10	<3.0	3.05
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M		<5.0	8.18
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		<2.0	5.61
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		2	2.92
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		<2.5	4.54
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M		<2.0	4.84
SW-07		VA24A1299-005	2024/01/23	Water	M	16	<3.0	3.13
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	3	0	<0.10	<1
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	8.27	0.06	0.11	2
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	5.56		0.30	2
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	2.84	0.65	0.51	3
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	4.57	0	0.11	<1
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	4.34	0.67	<0.10	<1.8
SW-07		VA24A1299-005	2024/01/23	Water	M	3.23	1.76	1.14	<1
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M		<0.0050	<0.050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M		<0.050	<0.10
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		<0.050	<0.10
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		<0.050	<0.10
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		<0.050	<0.10
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M		<0.050	
SW-07		VA24A1299-005	2024/01/23	Water	M		<0.0050	<0.050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.50	<0.020	0.0294
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	3.56	<0.050	0.155
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	1.52	<0.10	0.162
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.38	<0.10	
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.69	<0.10	0.074
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.82	<0.050	0.077
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.50	<0.020	0.0509
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.0010		<0.050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.0050	0.155	
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.010		
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.010		
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.010		
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.010		
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.0010		
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.050		
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M			
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	1.43	0.0733	<0.00010	<0.00010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	5	0.021	<0.000050	<0.000050
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	2.9	0.0362	<0.000050	0.000086
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	1.2	0.211	<0.000050	0.000082
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	2.8	0.0679	<0.000050	<0.000050
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	2.4	0.0735	<0.000050	0.000051
SW-07		VA24A1299-005	2024/01/23	Water	M	1.76	0.194	<0.00010	<0.00010
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	0.0017	<0.000100	<0.000050	<0.010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.00559	<0.000010	<0.000010	0.0521
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	0.00348	<0.000010	<0.000010	0.0242
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.00298	<0.000010	<0.000010	0.0025
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.00295	<0.000010	<0.000010	0.0079
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.0025	<0.000010	<0.000010	0.0072
SW-07		VA24A1299-005	2024/01/23	Water	M	0.00296	<0.000100	<0.000050	<0.010
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.0000050	1.05	<0.000010	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.0000113	2.69		<0.00010
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	0.0000062	1.88		0.0001
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.0000063	0.981		0.00019
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.0000093	1.54		0.00013
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.0000105	1.63		0.0001
SW-07		VA24A1299-005	2024/01/23	Water	M	0.0000085	1.04	0.000012	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			0.0000154
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			0.000022
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			0.000132
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			0.0000673
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			0.0000524
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00050	<0.00010
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050		<0.010	<0.000050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.0002		<0.0020	<0.000050
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	0.00031		0.0052	<0.000050
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.00041		0.0625	<0.000050
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.00027		0.013	<0.000050
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.00024		0.0088	<0.000050
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050		0.068	<0.000050
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.0010	0.104	0.0004	<0.0000050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.00272	0.352	0.000254	<0.000010
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	0.0014	0.222	0.000342	<0.000010
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.000289	0.113	0.00307	<0.000010
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.000688	0.17	0.000732	<0.000010
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.000762	0.185	0.000529	<0.000010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.0010	0.129	0.00237	<0.0000050
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	0.000376	<0.00050	<0.050	0.133	
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.000659	0.000125	<0.01	0.499	
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	0.000857	0.000192	0.018	0.351	
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.000172	0.000198	<0.01	0.177	
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.000365	0.000331	<0.01	0.221	
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.000362	0.000192	<0.01	0.155	
SW-07		VA24A1299-005	2024/01/23	Water	M	0.000295	<0.00050	<0.050	0.162	
SW-07		L2754353-5	2024/01/23	Water	M					
SW-07		L2754615-5	2024/02/15	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	0.00036	<0.000050	1.6	<0.000010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M		<0.00010	3	<0.000010
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		<0.00010	2.56	<0.000010
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		<0.00010	1.8	<0.000010
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		<0.00010	2.62	<0.000010
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M		<0.00010	2.62	<0.000010
SW-07		VA24A1299-005	2024/01/23	Water	M	0.0004	<0.000050	2.05	<0.000010
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	0.721	0.00493	<0.50	<0.00020
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	3.35	0.0163	1.6	<0.000050
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	1.92	0.00961	1.2	<0.000050
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.682	0.00482	<1	<0.000050
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	1.08	0.00762	<1	<0.000050
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	1.24	0.00726	<1	<0.000050
SW-07		VA24A1299-005	2024/01/23	Water	M	0.69	0.0049	<0.50	<0.00020
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000010	<0.00010	<0.00010	0.00033
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.0000040	<0.000010	<0.000050	<0.00020
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.0000040	<0.000010	<0.000050	0.00025
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.0000040	0.000017	<0.000050	0.00318
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.0000040	<0.000010	<0.000050	0.0003
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0000040	<0.000010	<0.000050	0.00032
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000010	<0.00010	<0.00010	0.00358
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00010	0.000183	<0.00050	
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.00020	0.0000653	<0.00100	
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.00020	0.000116	<0.00100	
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.00020	0.000189	<0.00100	
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.00020	0.000135	<0.00100	
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.00002	0.000146	<0.00040	
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00010	0.000212	<0.00050	
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.0030	<0.00020	0.0697	<0.00010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.0010	<0.000020	0.0206	<0.000050
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.0010	<0.000020	0.0326	<0.000050
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.0015	0.000028	0.136	<0.000050
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.0013	<0.000020	0.0596	<0.000050
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.0017	<0.000020	0.0637	<0.000050
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.0030	<0.00020	0.109	<0.00010
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00010	0.00168	<0.000100	<0.000050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.000053	0.00575	<0.000010	<0.000010
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	0.000059	0.00345	<0.000010	<0.000010
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.000053	0.00242	<0.000010	<0.000010
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000050	0.00291	<0.000010	<0.000010
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000050	0.00258	<0.000010	<0.000010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00010	0.00179	<0.000100	<0.000050
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.010	<0.0000050	1.03	<0.000010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.0556	0.0000094	2.73	
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	0.0233	0.0000078	1.86	
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.0022	0.0000059	0.974	
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.0062	0.00001	1.56	
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.0084	0.0000066	1.47	
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.010	0.000006	1.1	<0.000010
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.00050		
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.00050		
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.00050		
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.00050		
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.00050		
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050		
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.0000145	0.00016		<0.0020
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	0.0000172	0.00023		0.0032
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.000087	0.00029		0.0142
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.000061	0.00027		0.0057
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.0000542	0.00026		0.0064
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00010	0.00027		0.01
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000050	<0.0010	0.105	0.00022
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000050	0.00278	0.349	0.00021
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000050	0.00149	0.22	0.000249
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000050	0.000255	0.0972	0.0017
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000050	0.000627	0.161	0.00059
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000050	0.000673	0.163	0.000507
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000050	<0.0010	0.117	0.00094
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.0000050	0.000343	<0.00050	<0.050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000010	0.000645	0.000094	<0.01
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000010	0.000801	0.000101	<0.01
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000010	0.000146	0.00011	<0.01
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000010	0.00034	0.000184	<0.01
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000010	0.000365	0.00024	<0.01
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.0000050	0.000269	<0.00050	<0.050
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	0.138		0.00035	<0.000050	1.52
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.479			<0.00010	3.08
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	0.353			<0.00010	2.52
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.177			<0.00010	1.65
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.215			<0.00010	2.65
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	0.206			<0.00010	2.5
SW-07		VA24A1299-005	2024/01/23	Water	M	0.162		0.00034	<0.000050	1.8
SW-07		L2754353-5	2024/01/23	Water	M					
SW-07		L2754615-5	2024/02/15	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000010	0.719	0.00457	<0.50
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000010	3.4	0.0154	1.56
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000010	1.89	0.00955	<1
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000010	0.601	0.00471	<1
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000010	1.03	0.00769	<1
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000010	1.07	0.00728	<1
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000010	0.702	0.00483	<0.50
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000050	0.0000042	<0.000010	<0.000050
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000050	<0.0000040	0.000011	<0.000050
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000050	<0.0000040	<0.000010	<0.000050
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00030	<0.00010	0.000166	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.00020	<0.00020	0.0000638	<0.00100
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.00020	<0.00020	0.000111	<0.00100
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.00051	<0.00020	0.000169	<0.00100
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.00020	<0.00020	0.000119	<0.00100
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.00020	0.00001	0.000137	<0.00040
SW-07		VA24A1299-005	2024/01/23	Water	M	0.00044	<0.00010	0.000193	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M		<0.0010	<0.00020
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M		<0.0010	<0.000020
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		<0.0010	<0.000020
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		0.0013	0.000029
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		<0.0010	<0.000020
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M		0.0012	<0.000020
SW-07		VA24A1299-005	2024/01/23	Water	M		0.0015	<0.00020
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000000020	
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000000050	
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000000050	
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	0.000000149	
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	0.000000074	
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000000050	
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000000020	
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M			
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			<0.1
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.25	<0.25	<0.1
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M		<0.0005	<0.0010
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		<0.0005	<0.0010
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		<0.0005	<0.0010
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		<0.0005	<0.0010
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.1	<0.0005	<0.0010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.0010	<0.0010	<0.0005
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.0010	<0.0010	<0.0005
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.0010	<0.0010	<0.0005
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.0010	<0.0010	<0.0005
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			<0.0020	<0.00100
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			<0.0020	<0.00100
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			<0.0020	<0.00100
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			<0.0020	<0.00100
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			<0.0020	
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0010	<0.0010	<0.0005
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochlorome thane	Dibromomethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050		
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050		
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0020	<0.0010	
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0005	<0.0010	<0.0010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0010	<0.0010	<0.0030
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0010	<0.0010	
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M		
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M		
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00020	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M		
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0005	<0.0010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00020	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0010	<0.0010	<0.0010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.00050	<0.00040
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M		
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.0010	<0.0010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.00050	<0.00040
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	95.3	99.6
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M		
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M		
SW-07		VA24A1299-005	2024/01/23	Water	M	85.3	97.5
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000050	<0.000200	<0.000050
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000050	<0.000200	<0.000050
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000050	<0.000200	<0.000050
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000050	<0.000200	<0.000050
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000050	<0.000200	<0.000050
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000010	<0.000010	<0.000010
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000050	<0.000050	<0.000050
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000050	<0.000050	<0.000050
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000050	<0.000050	<0.000050
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000050	<0.000050	<0.000050
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000050	<0.000050	<0.000050
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000100	<0.000050	<0.000010
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000100	<0.000050	<0.000010
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000100	<0.000050	<0.000010
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000100	<0.000050	<0.000010
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000100	<0.000050	<0.000010
SW-07		VA24A1299-005	2024/01/23	Water	M		<0.000010	<0.0000050
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000030	<0.000050	<0.000050
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000030	<0.000050	<0.000050
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000030	<0.000050	<0.000050
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000030	<0.000050	<0.000050
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000030	<0.000050	<0.000050
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000010	<0.000010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000100	<0.000100
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000100	<0.000100
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000100	<0.000100
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000100	<0.000100
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000100	<0.000100
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000010	<0.000010
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000200	<0.000100	<0.000020
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000200	<0.000100	<0.000020
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000200	<0.000100	<0.000020
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000200	<0.000100	<0.000020
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000200	<0.000100	<0.000020
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	<0.000050	
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.000050	<0.000200
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M	<0.000050	<0.000200
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.000072	<0.000200
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.000050	<0.000200
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.000050	<0.000200
SW-07		VA24A1299-005	2024/01/23	Water	M		<0.000050
SW-07		L2754353-5	2024/01/23	Water	M		
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M	129	106	
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			<0.32
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	100	101	<0.52
SW-07		L2754353-5	2024/01/23	Water	M			<0.28
SW-07		L2754615-5	2024/02/15	Water	M			<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.45	<0.31	<0.30
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	0.6	<0.29	<0.31
SW-07		L2754353-5	2024/01/23	Water	M	<0.18	<0.24	<0.25
SW-07		L2754615-5	2024/02/15	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M				
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.32	0.92	10.9	<0.29
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M				
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M				
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M				
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M				
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.29	0.81	5.4	<0.33
SW-07		L2754353-5	2024/01/23	Water	M	<0.23	<0.35	6.75	<0.17
SW-07		L2754615-5	2024/02/15	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.57	0.3	<0.16
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	0.58	<0.28	<0.33
SW-07		L2754353-5	2024/01/23	Water	M	0.508	<0.21	<0.099
SW-07		L2754615-5	2024/02/15	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.15	0.31	<0.16
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.32	<0.45	<0.32
SW-07		L2754353-5	2024/01/23	Water	M	<0.090	<0.13	<0.10
SW-07		L2754615-5	2024/02/15	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.91	<0.44	4.59
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.36	<0.45	<1.1
SW-07		L2754353-5	2024/01/23	Water	M	<0.99	<0.98	<3.1
SW-07		L2754615-5	2024/02/15	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M		
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	1	0
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M		
SW-07		VA24A1299-005	2024/01/23	Water	M	0	0
SW-07		L2754353-5	2024/01/23	Water	M	0	0
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M		
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0	0
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M		
SW-07		VA24A1299-005	2024/01/23	Water	M	0	0
SW-07		L2754353-5	2024/01/23	Water	M	0	0
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M		
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0	1
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M		
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M		
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M		
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M		
SW-07		VA24A1299-005	2024/01/23	Water	M	2	0
SW-07		L2754353-5	2024/01/23	Water	M	0	1
SW-07		L2754615-5	2024/02/15	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0	0	0.92
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	0	0	<0.20
SW-07		L2754353-5	2024/01/23	Water	M	0	0	<0.32
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M				
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	<0.44	<0.31	<0.20	<0.45
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M				
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M				
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M				
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M				
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.45	<0.31	<0.45	0.89
SW-07		L2754353-5	2024/01/23	Water	M	<0.99	<0.25	<0.13	<0.18
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M				
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.3	<0.32	<0.29	
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M				
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M				
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M				
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M				
SW-07		VA24A1299-005	2024/01/23	Water	M	<0.29	<0.52	<0.33	
SW-07		L2754353-5	2024/01/23	Water	M	0.508	<0.28	<0.17	
SW-07		L2754615-5	2024/02/15	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			0.103
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M			0.597
SW-07		L2754353-5	2024/01/23	Water	M			0.0173
SW-07		L2754615-5	2024/02/15	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	0.648	1.1	76
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	1.06	1.5	80
SW-07		L2754353-5	2024/01/23	Water	M	0.358	0.695	
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	71	73	81
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	72	78	80
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	76	75	76
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	79	85	81
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	74	75	69
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	78	72	78
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	77	72	72
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	80	70	76
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M	68	59	63
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M	74	61	77
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			<2.6	
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M				
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M				
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M				<0.25
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M				<0.25
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M				<0.25
SW-07		VA24A1299-005	2024/01/23	Water	M				
SW-07		L2754353-5	2024/01/23	Water	M				<0.25
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M	<0.25		101
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<0.25		104
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M	<0.25		103
SW-07		VA24A1299-005	2024/01/23	Water	M			
SW-07		L2754353-5	2024/01/23	Water	M	<0.25		102
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M			
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M			
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M			
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M			
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M			
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M			
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M			<5.0
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M			
SW-07		VA24A1299-005	2024/01/23	Water	M			
SW-07		L2754353-5	2024/01/23	Water	M			
SW-07		L2754615-5	2024/02/15	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-02	SW21-2	VA25B1920-001	2025/05/22	Water	M				
SW-07	SW21-7	23H3444-05	2023/08/25	Water	M				
SW-07	SW21-7	23I2541-04	2023/09/20	Water	M				
SW-07	SW21-7	23J2428-07	2023/10/19	Water	M				
SW-07	SW21-7	23K2005-07	2023/11/16	Water	M	<5.0	<5.0	<10	<5.0
SW-07	SW21-7	23L1794-07	2023/12/13	Water	M				
SW-07		VA24A1299-005	2024/01/23	Water	M				
SW-07		L2754353-5	2024/01/23	Water	M				
SW-07		L2754615-5	2024/02/15	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	2.9		
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	2.5		
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	2.6		
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	1.8		
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	2.6		
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M			
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	10.3	18.00
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M		10.80
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	14.6	23.60
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	5.3	8.50
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M		0.00	99.1
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	10.5	0.15	100.4
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	12.5	0.19	97.2
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	14.3	0.00	98.5
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	13.50	
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	13.30	
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	12.37	
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	12.51	
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	0.95	1.24	190.30
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	1.72	1.8	193.80
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	2.01	2.31	188.00
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	2.26	2.25	
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	1.49	1.81	143.30
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	6.13	6.5	0.01	
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	5.53	6.57		<1.0
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	6.15	6.64		<1.0
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		6.49		
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	6.36	6.66	0	<1.0
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	2.50	
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	3.50	
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	5.10	
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	5.20	
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	18	<3.0	4.68
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	11	<3.0	3.2
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	17	<3.0	3.65
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	15	<3.0	2.86
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	17	<3.0	3.84
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	4.79	3.38	<0.10	<1
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	3.12	0.34	<0.10	1
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	3.5	0.44	<0.10	<1
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	2.81		25.30	
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	3.87	0.06	0.44	1
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M		<0.0050	<0.050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M		<0.0050	<0.050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M		<0.0050	<0.050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		<0.0050	<0.050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M		<0.0050	<0.050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	1.08	<0.020	0.0656
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.50	<0.020	0.0533
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.50	<0.020	0.035
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.50	<0.020	0.0354
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.55	<0.020	0.0398
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.0010		
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.0010		
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.0010		
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.0010		
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.0010		
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M			
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	3.58	0.057	<0.00010	<0.00010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	1.75	0.105	<0.00010	<0.00010
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	1.72	0.09	<0.00010	<0.00010
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	1.32	0.135	<0.00010	<0.00010
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	2	0.0814	<0.00010	<0.00010
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	0.00271	<0.000100	<0.000050	0.012
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	0.00192	<0.000100	<0.000050	<0.010
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	0.0021	<0.000100	<0.000050	<0.010
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	0.00174	<0.000100	<0.000050	<0.010
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.00214	<0.000100	<0.000050	<0.010
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	0.0000114	1.57	<0.000010	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.0000050	1.09	<0.000010	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	0.0000061	1.25	<0.000010	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.0000050	0.981	<0.000010	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.0000065	1.32	<0.000010	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050	<0.00010
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050	<0.00010
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050		<0.00010
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050	<0.00010
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050		<0.010	<0.000050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050		0.014	<0.000050
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050		0.012	<0.000050
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050		0.023	<0.000050
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050		0.014	<0.000050
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.0010	0.185	0.00052	<0.0000050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.0010	0.116	0.00063	<0.0000050
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.0010	0.129	0.00038	<0.0000050
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.0010	0.101	0.00082	<0.0000050
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.0010	0.131	0.00053	<0.0000050
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	0.000378	<0.00050	<0.050	0.22	
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	0.000308	<0.00050	<0.050	0.148	
SW-07		L2755012-5	2024/03/19	Water	M					
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	0.000491	<0.00050	<0.050	0.183	
SW-07		L2755504-3	2024/04/26	Water	M					
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	0.000268	<0.00050	<0.050	0.14	
SW-07		L2755521-1	2024/04/28	Water	M					
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.000466	<0.00050	<0.050	0.179	
SW-07		L2755598-3	2024/05/03	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	0.00052	<0.000050	2.74	<0.000010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	0.00035	<0.000050	1.87	<0.000010
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	0.00039	<0.000050	1.88	<0.000010
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	0.00037	<0.000050	1.6	<0.000010
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.00043	<0.000050	1.94	<0.000010
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	1.28	0.00853	1.02	<0.00020
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	0.692	0.00499	<0.50	<0.00020
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	0.834	0.00523	0.51	<0.00020
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	0.592	0.00407	<0.50	<0.00020
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.835	0.00559	<0.50	<0.00020
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.000010	<0.00010	<0.00010	0.00034
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000010	<0.00010	<0.00010	0.00057
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000010	<0.00010	<0.00010	0.00044
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000010	<0.00010	<0.00010	0.0012
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000010	<0.00010	<0.00010	0.00091
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00010	0.000133	<0.00050	
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00010	0.000201	<0.00050	
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00010	0.000186	<0.00050	
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00010	0.000211	<0.00050	
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00010	0.000178	<0.00050	
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.0030	<0.00020	0.0552	<0.00010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.0030	<0.00020	0.0921	<0.00010
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.0030	<0.00020	0.0892	<0.00010
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.0030	<0.00020	0.108	<0.00010
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.0030	<0.00020	0.0696	<0.00010
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00010	0.00257	<0.000100	<0.000050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00010	0.00185	<0.000100	<0.000050
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00010	0.00216	<0.000100	<0.000050
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00010	0.00163	<0.000100	<0.000050
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00010	0.00198	<0.000100	<0.000050
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	0.011	0.0000073	1.62	<0.000010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.010	0.0000078	1.06	<0.000010
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.010	<0.0000050	1.19	0.00001
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.010	<0.0000050	0.967	<0.000010
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.010	0.0000064	1.31	<0.000010
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00050	
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00010	0.00046		<0.010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00010	<0.00020		<0.010
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00010	0.0002		<0.010
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00010	0.00022		0.011
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00010	0.00021		<0.010
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	0.000172	<0.0010	0.182	0.00052
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000050	<0.0010	0.114	0.00045
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000050	<0.0010	0.128	0.00025
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000050	<0.0010	0.0966	0.00049
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000050	<0.0010	0.145	0.00028
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.0000050	0.000339	<0.00050	<0.050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.0000050	0.000284	<0.00050	<0.050
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.0000050	0.000545	<0.00050	<0.050
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.0000050	0.000239	<0.00050	<0.050
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.0000050	0.000411	<0.00050	<0.050
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	0.236		0.0005	<0.000050	2.56
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	0.167		0.00032	<0.000050	1.82
SW-07		L2755012-5	2024/03/19	Water	M					
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	0.153		0.00037	<0.000050	1.98
SW-07		L2755504-3	2024/04/26	Water	M					
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	0.138		0.00034	<0.000050	1.52
SW-07		L2755521-1	2024/04/28	Water	M					
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.193		0.0004	<0.000050	1.92
SW-07		L2755598-3	2024/05/03	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.000010	1.26	0.00765	1.17
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000010	0.691	0.00498	<0.50
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000010	0.812	0.0051	<0.50
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000010	0.577	0.00386	<0.50
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000010	1.06	0.00602	<0.50
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00060	<0.00010	0.000119	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00030	<0.00010	0.000181	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00030	<0.00010	0.000188	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	0.00048	<0.00010	0.000191	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00030	<0.00010	0.000186	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M		0.012	<0.00020
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M		<0.0010	<0.00020
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M		0.0039	<0.00020
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		<0.0010	<0.00020
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M		<0.0010	<0.00020
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.000000020	
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000000020	
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000000020	
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000000020	<0.000000020
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000000020	
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M			
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.25	<0.25	<0.1
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.25	<0.25	<0.1
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.25	<0.25	<0.1
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.25	<0.25	<0.1
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichloromethane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050		
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050		
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050		
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050		
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050		
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00020	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00020	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00020	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00020	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00020	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.00050	<0.00040
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.00050	<0.00040
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.00050	<0.00040
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.00050	<0.00040
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.00050	<0.00040
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	89.5	99.4
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	88.6	95.3
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	89.6	96.1
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	93.9	99
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	98.2	93.4
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M		<0.000010	<0.0000050
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M		<0.000010	<0.0000050
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		<0.000010	<0.0000050
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M		<0.000010	<0.0000050
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.000010	<0.000010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000010	<0.000010
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000010	<0.000010
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000010	<0.000010
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000010	<0.000010
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M		<0.000050
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M		<0.000050
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M		<0.000050
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		<0.000050
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M		<0.000050
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M	104	101	
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	81.4	98.4	
SW-07		L2755012-5	2024/03/19	Water	M			<1
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	97.5	104	
SW-07		L2755504-3	2024/04/26	Water	M			<1
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M	112	102	
SW-07		L2755521-1	2024/04/28	Water	M			<1
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	68.7	108	<0.25
SW-07		L2755598-3	2024/05/03	Water	M			<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M	<2	<2	<2
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M	<2	<2	<2
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M	<2	<2	<2
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.28	<0.26	<0.25
SW-07		L2755598-3	2024/05/03	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M				
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M				
SW-07		L2755012-5	2024/03/19	Water	M	<2	<3	<4	<1
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M				
SW-07		L2755504-3	2024/04/26	Water	M	<2	<3	<4	<1
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M				
SW-07		L2755521-1	2024/04/28	Water	M	<2	<3	<4	<1
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.25	0.6	2.3	<0.28
SW-07		L2755598-3	2024/05/03	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M	<2	<2	<2
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M	<2	<2	<2
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M	<2	<2	<2
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.33	0.25	<0.18
SW-07		L2755598-3	2024/05/03	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M	<2	<2	<2
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M	<2	<2	<2
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M	<2	<2	<2
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.18	<0.25	0.54
SW-07		L2755598-3	2024/05/03	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M	<3	<3	<4
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M	<3	<3	<4
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M	<3	<3	<4
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.48	0.42	1.66
SW-07		L2755598-3	2024/05/03	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M		
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M		
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M		
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	1	0
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M		
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M		
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M		
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0	1
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M		
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M		
SW-07		L2755012-5	2024/03/19	Water	M		
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M		
SW-07		L2755504-3	2024/04/26	Water	M		
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M		
SW-07		L2755521-1	2024/04/28	Water	M		
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0	0
SW-07		L2755598-3	2024/05/03	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0	0	0.6
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M				
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M				
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M				
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M				
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.26	<0.26	0.54	<0.28
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M				
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M				
SW-07		L2755012-5	2024/03/19	Water	M				0
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M				
SW-07		L2755504-3	2024/04/26	Water	M				0
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M				
SW-07		L2755521-1	2024/04/28	Water	M				0
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	<0.20	<0.25	<0.28	
SW-07		L2755598-3	2024/05/03	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M	0	0	
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M	0	0	
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M	0	0	
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M			0.0601
SW-07		L2755598-3	2024/05/03	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	0.502	0.85	83
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	88	94	79
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	91	84	95
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	91	75	90
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	96	82	75
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M	80	56	84
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M				
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M				<0.25
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M				<0.25
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M				
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M				
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M		<0.005	
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<0.25		113
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M	<0.25		99.8
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M			
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M			
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M			
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M			
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M			<5.0
SW-07		L2755012-5	2024/03/19	Water	M			
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M			
SW-07		L2755504-3	2024/04/26	Water	M			
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M			
SW-07		L2755521-1	2024/04/28	Water	M			
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M			
SW-07		L2755598-3	2024/05/03	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24A3090-005	2024/02/15	Water	M				
SW-07	SW21-7	VA24A5796-005	2024/03/19	Water	M	<5.0	<5.0	<10	<5.0
SW-07		L2755012-5	2024/03/19	Water	M				
SW-07	SW21-7	VA24A9134-003	2024/04/26	Water	M				
SW-07		L2755504-3	2024/04/26	Water	M				
SW-07	SW-07	VA24A9263-001	2024/04/28	Water	M				
SW-07		L2755521-1	2024/04/28	Water	M				
SW-07	SW21-7	VA24A9747-003	2024/05/03	Water	M				
SW-07		L2755598-3	2024/05/03	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	2.2		
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	2.1		
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	2.1		
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	2		
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	2.5		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M			
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	4.5	7.00
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	21	
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	29	
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	3.2	5.10
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	8	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	11	0.00	99.3
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M			
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	7.3	0.00	99.5
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	12.18	
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	14.35	
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	13.74	
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	12.69	
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	14.42	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	1.75	1.97	151.00
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	1.53	1.53	
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	1.44	1.1	
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	1.86	1.53	158.80
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	1.63	1.49	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	6.16	6.66	0	<1.0
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	6.60	6.56	0.01	
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	6.90	6.52	0.02	
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	5.96	6.44	0	<1.0
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	6.10	6.42	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	6.60	
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	8.30	
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	8.30	
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	5.00	
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	7.50	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	12	<3.0	3.02
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	16	<3.0	3.02
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<10	<3.0	2.55
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<10	<3.0	2.28
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<10	<3.0	2.68

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	2.85	0.25	<0.10	<1
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	2.88	0.76	0.12	
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	2.45	0.69	0.11	
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	2.39	0.19	0.18	<1
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	2.71	0.91	0.25	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH ₃)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M		<0.0050	<0.050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M		<0.0050	<0.050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M		<0.0050	<0.050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M		<0.0050	<0.050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.50	<0.020	0.0302
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.50	<0.020	0.0302
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.50	<0.020	0.0423
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.50	<0.020	0.0168
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.50	<0.020	0.0219

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.0010		
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.0010		
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.0010		
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.0010		
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M			
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	1.32	0.0846	<0.00010	<0.00010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	1.4	0.0863	<0.00010	<0.00010
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	1.07	0.0749	<0.00010	<0.00010
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	0.8	0.0825	<0.00010	<0.00010
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	1.28	0.0896	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	0.00173	<0.000100	<0.000050	<0.010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	0.00173	<0.000100	<0.000050	<0.010
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0.00144	<0.000100	<0.000050	<0.010
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	0.00132	<0.000100	<0.000050	<0.010
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	0.0016	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.0000050	1.04	<0.000010	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	0.0000061	1.04	<0.000010	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.0000050	0.878	<0.000010	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.0000050	0.784	<0.000010	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.0000050	0.919	<0.000010	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050		<0.00010
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050		<0.00010
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050	<0.00010
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050		<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050		0.013	<0.000050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050		0.011	<0.000050
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050		<0.010	<0.000050
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050		0.013	<0.000050
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050		0.024	0.000051

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.0010	0.102	0.00048	<0.0000050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.0010	0.102	0.00042	<0.0000050
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.0010	0.0862	0.00042	<0.0000050
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.0010	0.0771	0.00049	<0.0000050
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.0010	0.094	0.00075	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	0.00035	<0.00050	<0.050	0.144	
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	0.000337	<0.00050	<0.050	0.142	
SW-07		L2755677-3	2024/05/09	Water	M					
SW-07		L2755687-3	2024/05/09	Water	M					
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0.000311	<0.00050	<0.050	0.128	
SW-07		L2755770-3	2024/05/14	Water	M					
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	0.00025	<0.00050	<0.050	0.114	
SW-07		L2755819-3	2024/05/17	Water	M					
SW-07		VA24B1636-003	2024/05/23	Water	M	0.00031	<0.00050	<0.050	0.136	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	0.00034	<0.000050	1.61	<0.000010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	0.0003	<0.000050	1.56	<0.000010
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0.0003	<0.000050	1.31	<0.000010
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	0.0003	<0.000050	1.24	<0.000010
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	0.00032	<0.000050	1.4	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	0.681	0.0042	<0.50	<0.00020
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	0.687	0.00428	<0.50	<0.00020
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0.639	0.00356	<0.50	<0.00020
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	0.524	0.00338	<0.50	<0.00020
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	0.612	0.0042	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000010	<0.00010	<0.00010	0.00082
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.000010	<0.00010	<0.00010	0.00062
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000010	<0.00010	<0.00010	0.00041
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000010	<0.00010	<0.00010	0.00063
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000010	<0.00010	<0.00010	0.00125

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00010	0.000178	<0.00050	
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00010	0.00018	<0.00050	
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00010	0.000154	<0.00050	
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00010	0.000173	<0.00050	
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00010	0.000161	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.0030	<0.00020	0.0697	<0.00010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.0030	<0.00020	0.0664	<0.00010
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0.0031	<0.00020	0.0649	<0.00010
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.0030	<0.00020	0.0797	0.00013
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.0030	<0.00020	0.0668	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00010	0.00163	<0.000100	<0.000050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00010	0.00152	<0.000100	<0.000050
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00010	0.00135	<0.000100	<0.000050
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00010	0.0014	<0.000100	<0.000050
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00010	0.00142	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.010	<0.0000050	0.976	<0.000010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.010	0.0000063	0.998	<0.000010
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.010	0.0000053	0.846	<0.000010
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.010	<0.0000050	0.813	<0.000010
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.010	<0.0000050	0.945	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00050	
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00050	
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00010	<0.00020		<0.010
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00010	<0.00020		<0.010
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00010	<0.00020		0.014
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00010	0.00021		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000050	<0.0010	0.101	0.00028
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.000050	<0.0010	0.0952	0.00026
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000050	<0.0010	0.0811	0.00028
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000050	<0.0010	0.0878	0.00049
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000050	<0.0010	0.0857	0.00028

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.0000050	0.000348	<0.00050	<0.050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.0000050	0.000337	<0.00050	<0.050
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.0000050	0.00029	<0.00050	<0.050
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.0000050	0.000257	<0.00050	<0.050
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.0000050	0.000299	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	0.146		0.00033	<0.000050	1.55
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	0.142		0.00033	<0.000050	1.45
SW-07		L2755677-3	2024/05/09	Water	M					
SW-07		L2755687-3	2024/05/09	Water	M					
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0.132		0.0003	<0.000050	1.26
SW-07		L2755770-3	2024/05/14	Water	M					
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	0.126		0.00027	<0.000050	1.16
SW-07		L2755819-3	2024/05/17	Water	M					
SW-07		VA24B1636-003	2024/05/23	Water	M	0.124		0.00029	<0.000050	1.31

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000010	0.682	0.0042	<0.50
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.000010	0.638	0.00401	<0.50
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000010	0.525	0.00359	<0.50
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000010	0.586	0.00344	<0.50
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000010	0.537	0.00393	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00020	<0.000010	<0.00010	0.00018
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00030	<0.00010	0.00016	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00030	<0.00010	0.00015	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00030	<0.00010	0.000138	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	0.00071	<0.00010	0.000163	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00030	<0.00010	0.000151	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M		<0.0010	<0.00020
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M		<0.0010	<0.00020
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M		<0.0010	<0.00020
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M		0.0013	<0.00020
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000000020	
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M		
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000000020	0.00000002
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000000020	
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000000020	<0.000000040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M			
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.25	<0.25	<0.1
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.25	<0.25	<0.1
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.25	<0.25	<0.1
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050		
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050		
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050		
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050		
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00020	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00020	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00020	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.00050	<0.00040
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.00050	<0.00040
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.00050	<0.00040
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	86.2	101
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	84.1	103
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	78.7	97
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	82.8	94.5
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	91.9	102

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M		<0.000010	<0.0000050
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M		<0.000010	<0.0000050
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M		<0.000010	<0.0000050
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.000010	<0.000010
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000010	<0.000010
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000010	<0.000010
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M		<0.000050
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M		<0.000050
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M		<0.000050
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M		<0.000050
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M		<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	65	72.9	
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	92.9	106	
SW-07		L2755677-3	2024/05/09	Water	M			<1
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	95.6	113	<0.17
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	93.7	102	
SW-07		L2755819-3	2024/05/17	Water	M			<1
SW-07		VA24B1636-003	2024/05/23	Water	M	98.6	103	<0.18

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M	<2	<2	<2
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.22	<0.21	<0.21
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M	<2	<2	<2
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.22	<0.21	<0.19

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M				
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M				
SW-07		L2755677-3	2024/05/09	Water	M	<2	<3	<4	<1
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.20	0.59	8.82	<0.19
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M				
SW-07		L2755819-3	2024/05/17	Water	M	<2	<3	<4	<1
SW-07		VA24B1636-003	2024/05/23	Water	M	0.21	1.04	5	<0.26

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M	<2	<2	<2
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0.35	<0.15	<0.13
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M	<2	<2	<2
SW-07		VA24B1636-003	2024/05/23	Water	M	0.5	<0.16	<0.16

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M	<2	<2	<2
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.11	<0.17	<0.14
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M	<2	<2	<2
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.14	<0.23	<0.16

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M	<3	<3	<4
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0.27	<0.18	0.91
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M	<3	<3	<4
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.35	<0.52	<0.88

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M		
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M		
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0	0
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M		
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	1	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M		
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M		
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0	0
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M		
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M		
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M		
SW-07		L2755677-3	2024/05/09	Water	M		
SW-07		L2755687-3	2024/05/09	Water	M		
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0	0
SW-07		L2755770-3	2024/05/14	Water	M		
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M		
SW-07		L2755819-3	2024/05/17	Water	M		
SW-07		VA24B1636-003	2024/05/23	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0	0	<0.31
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	0	0	1.04

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M				
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M				
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.18	<0.21	<0.17	<0.22
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M				
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.52	<0.21	<0.23	<0.22

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M				
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M				
SW-07		L2755677-3	2024/05/09	Water	M				0
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	<0.16	<0.17	<0.19	
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M				
SW-07		L2755819-3	2024/05/17	Water	M				0
SW-07		VA24B1636-003	2024/05/23	Water	M	<0.16	<0.18	<0.26	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M	0	0	
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M			0.00265
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M	0	0	
SW-07		VA24B1636-003	2024/05/23	Water	M			0.0119

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	0.308	0.595	63
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	0.344	0.64	80

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	63	68	64
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	71	84	72

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	69	66	73
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	75	76	78

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	67	54	56
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	77	65	71

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	64	55	55
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	79	64	70

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M	61	57	64
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M	66	51	72

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M				<0.25
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M				<0.25
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M				
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M				<0.25
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M	<0.25		92.4
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<0.25		113
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M			
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M	<0.25		91.2
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M			
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M			
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M			
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M			<5.0
SW-07		L2755677-3	2024/05/09	Water	M			
SW-07		L2755687-3	2024/05/09	Water	M			
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M			
SW-07		L2755770-3	2024/05/14	Water	M			
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M			
SW-07		L2755819-3	2024/05/17	Water	M			
SW-07		VA24B1636-003	2024/05/23	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24B0355-003	2024/05/09	Water	M				
SW-07	SW-07	VA24B0330-003	2024/05/09	Water	M	<5.0	<5.0	<10	<5.0
SW-07		L2755677-3	2024/05/09	Water	M				
SW-07		L2755687-3	2024/05/09	Water	M				
SW-07	SW-07	VA24B0795-003	2024/05/14	Water	M				
SW-07		L2755770-3	2024/05/14	Water	M				
SW-07	SW21-7	VA24B1168-003	2024/05/17	Water	M				
SW-07		L2755819-3	2024/05/17	Water	M				
SW-07		VA24B1636-003	2024/05/23	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	1.9		
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	2.1		
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	2.2		
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	2.5		
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M			
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M			
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	12.1	18.60
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	76	
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	5.7	8.20
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	140	
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	9.1	0.00	94.1
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	8.8	0.10	99.4
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M			
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	11.51	
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M		
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	11.60	
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	9.76	
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	1.38	1.33	157.20
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	1.53	1.34	
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	0.77	0.82	150.40
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	0.85	0.78	
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	6.13	6.51	0.01	<1.0
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	7.20	6.41	0.05	
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	6.50	6.6	0	<1.0
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	6.00	6.55	0.08	
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	6.70	
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	8.10	
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	8.70	
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	14.40	
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<10	<3.0	2.63
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	18	<3.0	2.64
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	10	<3.0	2.43
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	14	<3.0	2.51
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	2.55	0.07	<0.10	<1
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	2.54	0	<0.10	
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	2.35	2.4	<0.10	<1
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	2.37	0	<0.10	
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M		<0.0050	<0.050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M		<0.0050	<0.050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M		<0.0050	<0.050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M		<0.0050	<0.050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.50	<0.020	0.0216
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.50	<0.020	0.019
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.50	<0.020	0.0177
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.50	<0.020	0.0159
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.0010		
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.0010		
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.0010		
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.0010		
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M			
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M			
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	1.19	0.0713	<0.00010	<0.00010
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	1.17	0.0794	<0.00010	<0.00010
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	1.04	0.0521	<0.00010	<0.00010
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	1.12	0.0446	<0.00010	<0.00010
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0.00146	<0.000100	<0.000050	<0.010
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	0.00153	<0.000100	<0.000050	<0.010
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	0.00139	<0.000100	<0.000050	<0.010
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	0.00143	<0.000100	<0.000050	<0.010
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0.0000052	0.901	<0.000010	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.0000050	0.908	<0.000010	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.0000050	0.837	<0.000010	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.0000050	0.861	<0.000010	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050	<0.00010
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050		<0.00010
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050	<0.00010
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050		<0.00010
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050		<0.010	<0.000050
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050		<0.010	<0.000050
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050		<0.010	<0.000050
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050		<0.010	<0.000050
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.0010	0.0921	0.0004	<0.0000050
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.0010	0.0895	0.00039	<0.0000050
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.0010	0.0829	0.00031	<0.0000050
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.0010	0.0875	0.00029	<0.0000050
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M					
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0.000296	<0.00050	<0.050	0.143	
SW-07		L2755933-3	2024/05/24	Water	M					
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	0.000305	<0.00050	<0.050	0.136	
SW-07		L2755961-3	2024/05/26	Water	M					
SW-07		VA24B4698-003	2024/06/21	Water	M	0.000342	<0.00050	<0.050	0.13	
SW-07		L2756349-3	2024/06/21	Water	M					
SW-07		VA24B5289-003	2024/06/26	Water	M	0.00034	<0.00050	<0.050	0.141	
SW-07		L2756419-3	2024/06/26	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0.00031	<0.000050	1.45	<0.000010
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	0.00031	<0.000050	1.42	<0.000010
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	0.00036	<0.000050	1.21	<0.000010
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	0.00037	<0.000050	1.27	<0.000010
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0.626	0.00413	<0.50	<0.00020
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	0.608	0.00403	<0.50	<0.00020
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	0.614	0.0037	<0.50	<0.00020
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	0.636	0.00389	<0.50	<0.00020
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000010	<0.00010	<0.00010	0.00035
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000010	<0.00010	<0.00010	0.00043
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00010	0.000171	<0.00050	
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00010	0.000171	<0.00050	
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00010	0.00014	<0.00050	
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00010	0.000129	<0.00050	
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.0030	<0.00020	0.0626	<0.00010
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.0030	<0.00020	0.0739	<0.00010
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.0030	<0.00020	0.0431	<0.00010
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.0030	<0.00020	0.0423	<0.00010
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00010	0.00143	<0.000100	<0.000050
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00010	0.00167	<0.000100	<0.000050
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00010	0.00133	<0.000100	<0.000050
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00010	0.0015	<0.000100	<0.000050
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.010	<0.0000050	0.884	<0.000010
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.010	<0.0000050	0.871	<0.000010
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.010	<0.0000050	0.808	<0.000010
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.010	<0.0000050	0.817	<0.000010
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00050	
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00050	
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00010	<0.00020		<0.010
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00010	0.0002		<0.010
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00010	<0.00020		<0.010
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00010	0.00022		<0.010
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000050	<0.0010	0.0828	0.00026
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000050	<0.0010	0.0897	0.0003
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000050	<0.0010	0.08	0.00017
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000050	<0.0010	0.0809	0.00026
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.0000050	0.000302	<0.00050	<0.050
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.0000050	0.000289	<0.00050	<0.050
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.0000050	0.000325	<0.00050	<0.050
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.0000050	0.000341	<0.00050	<0.050
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M					
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0.098		0.0003	<0.000050	1.28
SW-07		L2755933-3	2024/05/24	Water	M					
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	0.134		0.00027	<0.000050	1.39
SW-07		L2755961-3	2024/05/26	Water	M					
SW-07		VA24B4698-003	2024/06/21	Water	M	0.121		0.00029	<0.000050	1.21
SW-07		L2756349-3	2024/06/21	Water	M					
SW-07		VA24B5289-003	2024/06/26	Water	M	0.144		0.00032	<0.000050	1.22
SW-07		L2756419-3	2024/06/26	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000010	0.573	0.00382	<0.50
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000010	0.604	0.00389	<0.50
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000010	0.577	0.00362	<0.50
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000010	0.606	0.00385	<0.50
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00030	<0.00010	0.000145	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00030	<0.00010	0.000164	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00030	<0.00010	0.00012	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00030	<0.00010	0.000126	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M		<0.0010	<0.00020
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M		<0.0010	<0.00020
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M		<0.0010	<0.00020
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M		<0.0010	<0.00020
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000000020	
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000000020	0.000000022
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000000020	
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000000020	0.000000036
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M			
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M			
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.25	<0.25	<0.1
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.25	<0.25	<0.1
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.25	<0.25	<0.1
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.25	<0.25	<0.1
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050		
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050		
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050		
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050		
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00020	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00020	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00020	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00020	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.00050	<0.00040
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.00050	<0.00040
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.00050	<0.00040
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.00050	<0.00040
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	75.7	98.8
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	92.6	99.6
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	80.2	100
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	82.8	101
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M		<0.000010	<0.0000050
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M		<0.000010	<0.0000050
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M		<0.000010	<0.0000050
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M		<0.000010	<0.0000050
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000010	<0.000010
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000010	<0.000010
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000010	<0.000010
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000010	<0.000010
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M		<0.000050
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M		<0.000050
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M		<0.000050
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M		<0.000050
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	83.8	87.4	<0.69
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	93.2	104	
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	114	110	<0.22
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	83.4	100	<0.30
SW-07		L2756419-3	2024/06/26	Water	M			<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.57	<0.64	<0.63
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	0.34	<0.14	0.22
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.29	<0.21	<0.23
SW-07		L2756419-3	2024/06/26	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.62	<0.78	3.41	<0.80
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M				
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	0.25	0.64	2.61	<0.25
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.21	0.26	2.83	<0.20
SW-07		L2756419-3	2024/06/26	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.47	<0.41	<0.37
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.28	<0.21	<0.16
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.22	<0.20	<0.16
SW-07		L2756419-3	2024/06/26	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.34	<0.52	<0.40
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	0.16	0.28	<0.15
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.15	<0.20	<0.16
SW-07		L2756419-3	2024/06/26	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.62	<0.90	2.28
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.22	0.54	0.99
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.24	<0.30	<0.66
SW-07		L2756419-3	2024/06/26	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0	0
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M		
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	0	0
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	0	0
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0	0
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M		
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	1	1
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	0	0
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07		L2755903-3	2024/05/23	Water	M		
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0	0
SW-07		L2755933-3	2024/05/24	Water	M		
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M		
SW-07		L2755961-3	2024/05/26	Water	M		
SW-07		VA24B4698-003	2024/06/21	Water	M	1	0
SW-07		L2756349-3	2024/06/21	Water	M		
SW-07		VA24B5289-003	2024/06/26	Water	M	0	0
SW-07		L2756419-3	2024/06/26	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0	0	<0.78
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	0	0	<0.22
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	0	1	<0.24
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.90	<0.64	<0.52	<0.57
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M				
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.29	0.25	0.28	0.34
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.30	<0.23	<0.20	<0.29
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	<0.47	<0.69	<0.80	
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M				
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M	<0.28	<0.22	<0.25	
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M	<0.22	<0.30	0.34	
SW-07		L2756419-3	2024/06/26	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			0.00171
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M			0.397
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M			0.000849
SW-07		L2756419-3	2024/06/26	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M	0.954	1.85	
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	0.629	0.81	78
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	0.411	0.818	73
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	71	65	74
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	71	76	69
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	72	73	71
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	71	68	73
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	74	64	56
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	72	58	61
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	73	64	67
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	72	60	57
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M	62	75	74
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M	61	60	73
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M				
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M				<0.25
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M				
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M				
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<0.25		92
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M			
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M			
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M			
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M			
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M			
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M			
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M			
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M			
SW-07		L2755933-3	2024/05/24	Water	M			
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M			<5.0
SW-07		L2755961-3	2024/05/26	Water	M			
SW-07		VA24B4698-003	2024/06/21	Water	M			
SW-07		L2756349-3	2024/06/21	Water	M			
SW-07		VA24B5289-003	2024/06/26	Water	M			
SW-07		L2756419-3	2024/06/26	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07		L2755903-3	2024/05/23	Water	M				
SW-07	SW21-7	VA24B1780-003	2024/05/24	Water	M				
SW-07		L2755933-3	2024/05/24	Water	M				
SW-07	SW-07	VA24B1914-003	2024/05/26	Water	M	<5.0	<5.0	<10	<5.0
SW-07		L2755961-3	2024/05/26	Water	M				
SW-07		VA24B4698-003	2024/06/21	Water	M				
SW-07		L2756349-3	2024/06/21	Water	M				
SW-07		VA24B5289-003	2024/06/26	Water	M				
SW-07		L2756419-3	2024/06/26	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	2.8		
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	3.3		
SW-07		VA24C1605-003	2024/08/23	Water	M	4.1		
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	2.8		
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	4.4		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07		VA24B7689-003	2024/07/19	Water	M	10.1	12.50
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M	16	
SW-07		VA24C1605-003	2024/08/23	Water	M	22.4	28.80
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	76	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	24.7	33.10

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07		VA24B7689-003	2024/07/19	Water	M	14.4	0.10	99.2
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M	25.9	0.00	98.4
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	30.8	0.02	98.4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	10.00	
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M	9.52	
SW-07		VA24C1605-003	2024/08/23	Water	M	10.25	
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	9.91	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	10.66	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07		VA24B7689-003	2024/07/19	Water	M	0.63	0.72	145.50
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	0.86	1.19	
SW-07		VA24C1605-003	2024/08/23	Water	M	0.95	0.85	212.40
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	1.76	1.9	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	1.31	1.03	133.40

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07		VA24B7689-003	2024/07/19	Water	M	6.77	6.75	0	<1.0
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	7.00	6.78	0.01	
SW-07		VA24C1605-003	2024/08/23	Water	M	6.23	6.89	0.01	<1.0
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	6.40	6.69	0.05	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	6.78	6.98	0.01	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	15.00	
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M	15.00	
SW-07		VA24C1605-003	2024/08/23	Water	M	13.50	
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	15.00	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	11.78	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	18	<3.0	3.66
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	11	<3.0	3.61
SW-07		VA24C1605-003	2024/08/23	Water	M	23	<3.0	5.91
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	18	<3.0	3.52
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	23	<3.0	6.94

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07		VA24B7689-003	2024/07/19	Water	M	3.48	0	<0.10	1
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	3.77	0.07	<0.10	
SW-07		VA24C1605-003	2024/08/23	Water	M	5.92	0	<0.10	<1
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	3.44	1.66	<0.10	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	7.22	0	<0.10	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M		<0.0050	<0.050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M		<0.0050	<0.050
SW-07		VA24C1605-003	2024/08/23	Water	M		<0.0050	<0.050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M		<0.0050	<0.050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	0.87	<0.020	0.0506
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	0.91	<0.020	0.0457
SW-07		VA24C1605-003	2024/08/23	Water	M	2.12	<0.020	0.135
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	0.55	<0.020	0.104
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	2.92	<0.020	0.159

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.0010		
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.0010		
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.0010		
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.0010		
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	1.65	0.0311	<0.00010	<0.00010
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	1.79	0.0344	<0.00010	<0.00010
SW-07		VA24C1605-003	2024/08/23	Water	M	3.4	0.0255	<0.00010	<0.00010
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	1.39	0.0711	<0.00010	<0.00010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	4.44	0.0255	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	0.00227	<0.000100	<0.000050	0.014
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	0.00235	<0.000100	<0.000050	0.013
SW-07		VA24C1605-003	2024/08/23	Water	M	0.00373	<0.000100	<0.000050	0.033
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	0.00227	<0.000100	<0.000050	<0.010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	0.00434	<0.000100	<0.000050	0.037

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	0.0000061	1.25	0.000015	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	0.0000059	1.23	0.000011	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	0.000008	1.97	0.00002	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	0.0000072	1.2	<0.000010	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	0.000007	2.3	0.000022	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050	<0.00010
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050		<0.00010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050	<0.00010
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050		<0.00010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050		<0.010	<0.000050
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050		<0.010	<0.000050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050		<0.010	<0.000050
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	0.0006		<0.010	<0.000050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050		<0.010	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.0010	0.13	0.00032	<0.0000050
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.0010	0.132	0.00026	<0.0000050
SW-07		VA24C1605-003	2024/08/23	Water	M	0.0018	0.24	0.00027	<0.0000050
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.0010	0.127	0.00051	<0.0000050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	0.0021	0.291	0.00024	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	0.000471	<0.00050	<0.050	0.226	
SW-07		L2756726-3	2024/07/19	Water	M					
SW-07		L2756871-5	2024/07/31	Water	M					
SW-07		VA24B8974-005	2024/07/31	Water	M	0.000548	<0.00050	<0.050	0.224	
SW-07		VA24C1605-003	2024/08/23	Water	M	0.000672	<0.00050	<0.050	0.375	
SW-07		L2757153-3	2024/08/23	Water	M					
SW-07	SW-07	L2757209-5	2024/08/27	Water	M					
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	0.000447	<0.00050	<0.050	0.206	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	0.00068	<0.00050	<0.050	0.394	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	0.00056	<0.000050	1.67	<0.000010
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	0.00056	<0.000050	1.8	<0.000010
SW-07		VA24C1605-003	2024/08/23	Water	M	0.00083	<0.000050	2.55	<0.000010
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	0.00056	<0.000050	1.78	<0.000010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	0.00099	<0.000050	2.85	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	1.07	0.00588	0.62	<0.00020
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	1.29	0.00616	<0.50	<0.00020
SW-07		VA24C1605-003	2024/08/23	Water	M	2.19	0.0115	1.1	<0.00020
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	1	0.00544	<0.50	<0.00020
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	2.74	0.0136	1.3	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000010	<0.00010	<0.00010	0.00038
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000010	<0.00010	<0.00010	<0.00030

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00010	0.000093	<0.00050	
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00010	0.00011	<0.00050	
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00010	0.000091	<0.00050	
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00010	0.000177	<0.00050	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00010	0.000081	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.0030	<0.00020	0.0263	<0.00010
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.0030	<0.00020	0.0325	<0.00010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.0030	<0.00020	0.027	<0.00010
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.0030	<0.00020	0.0652	<0.00010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.0030	<0.00020	0.022	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00010	0.00234	<0.000100	<0.000050
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00010	0.00237	<0.000100	<0.000050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00010	0.00376	<0.000100	<0.000050
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00010	0.00213	<0.000100	<0.000050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00010	0.00444	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	0.013	<0.0000050	1.18	0.000014
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	0.013	<0.0000050	1.29	0.000011
SW-07		VA24C1605-003	2024/08/23	Water	M	0.03	0.0000081	1.97	0.00002
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.010	0.0000074	1.18	<0.000010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	0.04	0.0000082	2.4	0.00002

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00050	
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00050	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00010	<0.00020		<0.010
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00010	<0.00020		<0.010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00010	0.00021		<0.010
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00010	0.00054		<0.010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00010	<0.00020		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.000050	<0.0010	0.129	0.00019
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000050	<0.0010	0.134	0.00031
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000050	0.0017	0.242	0.00025
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000050	<0.0010	0.121	0.00048
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000050	0.0023	0.298	0.00016

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.0000050	0.000511	<0.00050	<0.050
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.0000050	0.000504	<0.00050	<0.050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.0000050	0.000662	<0.00050	<0.050
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.0000050	0.000413	<0.00050	<0.050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.0000050	0.000655	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	0.22		0.00068	<0.000050	1.59
SW-07		L2756726-3	2024/07/19	Water	M					
SW-07		L2756871-5	2024/07/31	Water	M					
SW-07		VA24B8974-005	2024/07/31	Water	M	0.214		0.0006	<0.000050	1.79
SW-07		VA24C1605-003	2024/08/23	Water	M	0.356		0.00095	<0.000050	2.7
SW-07		L2757153-3	2024/08/23	Water	M					
SW-07	SW-07	L2757209-5	2024/08/27	Water	M					
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	0.23		0.0005	<0.000050	1.76
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	0.416		0.00099	<0.000050	3.07

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.000010	1.04	0.00621	<0.50
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000010	1.15	0.00616	<0.50
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000010	2.23	0.0109	0.96
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000010	0.987	0.00512	<0.50
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000010	2.71	0.0134	1.34

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00030	<0.00010	0.000098	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00030	<0.00010	0.000102	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00030	<0.00010	0.000086	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00030	<0.00010	0.000174	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00030	<0.00010	0.000077	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M		<0.0010	<0.00020
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M		<0.0010	<0.00020
SW-07		VA24C1605-003	2024/08/23	Water	M		<0.0010	<0.00020
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M		<0.0010	<0.00020
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	0.000000025	
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000000020	<0.000000020
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000000020	
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000000020	<0.000000020
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000000020	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.25	<0.25	<0.1
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.25	<0.25	<0.1
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.25	<0.25	<0.1
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.1	<0.00050	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.1	<0.00050	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00050	<0.00040
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050	<0.00040
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00040	<0.00030	<0.00050	
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050		
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050		
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050		
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050		
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00050	<0.0050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050	<0.0050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00050	<0.0010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050	<0.0010
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00075	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00075	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00020	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00020	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00020	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00020	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00050	<0.00050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.00050	<0.00040
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.00050	<0.00040
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.00050	<0.00040
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.00050	<0.00040
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07		VA24B7689-003	2024/07/19	Water	M	85.8	99.4
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M	89.9	95.2
SW-07		VA24C1605-003	2024/08/23	Water	M	89	99.9
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	89.5	101
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	79.3	94.9

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000010	<0.000010	<0.000010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000010	<0.000010	<0.000010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M		<0.000010	<0.0000050
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M		<0.000010	<0.0000050
SW-07		VA24C1605-003	2024/08/23	Water	M		<0.000010	<0.0000050
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000010	<0.000010	<0.000010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000010	<0.000010	<0.000010
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.000010	<0.000010
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000010	<0.000010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000010	<0.000010
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000010	<0.000010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M	<0.000050	<0.000020	<0.000010
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000050	<0.000020	<0.000010
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M		<0.000050
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M		<0.000050
SW-07		VA24C1605-003	2024/08/23	Water	M	<0.000050	
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M		<0.000050
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	109	102	<1
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			<1
SW-07		VA24B8974-005	2024/07/31	Water	M	98.5	108	<1
SW-07		VA24C1605-003	2024/08/23	Water	M	91.6	102	<1
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	90.2	99.8	
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	103	102	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<2	<2	<2
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M	<2	<2	<2
SW-07		VA24B8974-005	2024/07/31	Water	M	<2	<2	<2
SW-07		VA24C1605-003	2024/08/23	Water	M	<2	<2	<2
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<2	<3	<4	<1
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M	<2	<3	<4	<1
SW-07		VA24B8974-005	2024/07/31	Water	M	<2	<3	<4	<1
SW-07		VA24C1605-003	2024/08/23	Water	M	<2	<3	<4	<1
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M				
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<2	<3	<4	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<2	<2	<2
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M	<2	<2	<2
SW-07		VA24B8974-005	2024/07/31	Water	M	<2	<2	<2
SW-07		VA24C1605-003	2024/08/23	Water	M	<2	<2	<2
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<2	<2	<2
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M	<2	<2	<2
SW-07		VA24B8974-005	2024/07/31	Water	M	<2	<2	<2
SW-07		VA24C1605-003	2024/08/23	Water	M	<2	<2	<2
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<2	<2	<2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	<3	<3	<4
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M	<3	<3	<4
SW-07		VA24B8974-005	2024/07/31	Water	M	<3	<3	<4
SW-07		VA24C1605-003	2024/08/23	Water	M	<3	<3	<4
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	<3	<3	<4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07		VA24B7689-003	2024/07/19	Water	M		
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M		
SW-07		VA24C1605-003	2024/08/23	Water	M		
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M		
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07		VA24B7689-003	2024/07/19	Water	M		
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M		
SW-07		VA24C1605-003	2024/08/23	Water	M		
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M		
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07		VA24B7689-003	2024/07/19	Water	M		
SW-07		L2756726-3	2024/07/19	Water	M		
SW-07		L2756871-5	2024/07/31	Water	M		
SW-07		VA24B8974-005	2024/07/31	Water	M		
SW-07		VA24C1605-003	2024/08/23	Water	M		
SW-07		L2757153-3	2024/08/23	Water	M		
SW-07	SW-07	L2757209-5	2024/08/27	Water	M		
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M		
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M				
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M				
SW-07		VA24C1605-003	2024/08/23	Water	M				
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M				
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M				0
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				0
SW-07		VA24B8974-005	2024/07/31	Water	M				0
SW-07		VA24C1605-003	2024/08/23	Water	M				0
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M				
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M				0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07		VA24B7689-003	2024/07/19	Water	M	0	0	
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M	0	0	
SW-07		VA24B8974-005	2024/07/31	Water	M	0	0	
SW-07		VA24C1605-003	2024/08/23	Water	M	0	0	
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M	0	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 2-3-4-6-7-8- HxCDF	Surrogate-13C12- 2-3-4-7-8-PeCDF	Surrogate-13C12- 2-3-7-8-TCDD
						%	%	%
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M				
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M				
SW-07		VA24C1605-003	2024/08/23	Water	M				
SW-07		L2757153-3	2024/08/23	Water	M	<0.0003			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				<0.25
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M	<0.0003			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M	<0.25		114
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M			
SW-07		L2756726-3	2024/07/19	Water	M			
SW-07		L2756871-5	2024/07/31	Water	M			
SW-07		VA24B8974-005	2024/07/31	Water	M			
SW-07		VA24C1605-003	2024/08/23	Water	M			
SW-07		L2757153-3	2024/08/23	Water	M			
SW-07	SW-07	L2757209-5	2024/08/27	Water	M			
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M			
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24B7689-003	2024/07/19	Water	M				
SW-07		L2756726-3	2024/07/19	Water	M				
SW-07		L2756871-5	2024/07/31	Water	M				
SW-07		VA24B8974-005	2024/07/31	Water	M				
SW-07		VA24C1605-003	2024/08/23	Water	M				
SW-07		L2757153-3	2024/08/23	Water	M				
SW-07	SW-07	L2757209-5	2024/08/27	Water	M				
SW-07	SW-07	VA24C2197-005	2024/08/27	Water	M				
SW-07	SW21-7	VA24C5009-003	2024/09/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	3.3		
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	3.8		
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	4.1		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	1.6		
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	13	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	18	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F	17	
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	10.7	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	11.09	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	11.26	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F	11.55	
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	11.93	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	1.47	1.26	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	0.8	0.81	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	1.09	1.61	
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	1.88	2.7	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	5.90	6.67	0.01	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	8.40	6.65	0.01	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		6.81		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F	6.50		0.01	
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	6.59	6.19	0.01	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	10.50	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	9.20	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F	8.80	
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	8.30	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	25	<3.0	4.68
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	21	3	5.68
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	24	<3.0	5.12
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	20	<3.0	3.2
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	4.51	0	0.33	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	5.44	0.32	<0.10	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	5.73		<0.10	
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F		0.06		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	3.77	0.08	0.15	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M		0.0093	<0.050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M		0.0187	<0.050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		<0.0050	<0.050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M		0.0106	<0.050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	1.03	<0.020	0.105
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	1.62	<0.020	0.109
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	1.7	<0.020	0.102
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	0.68	0.023	0.0548
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.0010		
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.0010		
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.0010		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.0010		
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	2.14	0.0506	<0.00010	<0.00010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	3.04	0.0349	<0.00010	<0.00010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	3.02	0.0354	<0.00010	<0.00010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	2.27	0.119	<0.00010	<0.00010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	0.00284	<0.000100	<0.000050	0.014
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	0.00332	<0.000100	<0.000050	0.022
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	0.00321	<0.000100	<0.000050	0.019
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	0.00493	<0.000100	<0.000050	<0.010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	0.0000089	1.6	0.000013	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	0.0000082	1.93	0.000014	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	0.0000067	1.69	0.000013	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.0000050	1.01	<0.000010	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050		<0.00010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050		<0.00010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050		<0.00010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050		<0.00010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	0.00054		<0.010	<0.000050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050		<0.010	<0.000050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050		<0.010	<0.000050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	0.00055		0.02	<0.000050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.0010	0.166	0.00038	<0.0000050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	0.0013	0.209	0.00025	<0.0000050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	0.0013	0.218	0.00023	<0.0000050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.0010	0.164	0.0026	<0.0000050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	0.000589	<0.00050	<0.050	0.242	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M					
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	0.000647	<0.00050	<0.050	0.294	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M					
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	0.000629	<0.00050	<0.050	0.289	
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M					
SW-07		492-455781017-0	2024/10/13	Water	F					
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	0.000609	<0.00050	<0.050	0.12	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	0.00057	<0.000050	2.52	<0.000010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	0.00072	<0.000050	2.56	<0.000010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	0.0007	<0.000050	2.57	<0.000010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	0.00028	<0.000050	3.16	<0.000010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	1.32	0.00755	0.56	<0.00020
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	1.67	0.00943	1	<0.00020
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	2.08	0.00924	0.78	<0.00020
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	0.962	0.00503	0.7	<0.00020
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000010	<0.00010	<0.00010	0.00042
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00010	0.000136	<0.00050	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00010	0.00011	<0.00050	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00010	0.000108	<0.00050	
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00010	0.00004	<0.00050	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.0030	<0.00020	0.0438	<0.00010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.0030	<0.00020	0.0342	<0.00010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.0030	<0.00020	0.0337	<0.00010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.0030	<0.00020	0.0734	<0.00010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00010	0.00266	<0.000100	<0.000050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00010	0.00328	<0.000100	<0.000050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00010	0.00339	<0.000100	<0.000050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00010	0.0027	<0.000100	<0.000050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	0.013	0.0000059	1.54	0.000013
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	0.02	0.0000059	1.83	0.000012
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	0.021	0.0000064	1.93	0.000013
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.010	0.0000083	1.28	<0.000010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00050	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00050	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00050	
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00050	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00010	0.00029		<0.010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00010	0.00021		<0.010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00010	0.00041		0.01
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000050	<0.0010	0.161	0.00036
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000050	0.0014	0.211	0.0003
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000050	0.0014	0.222	0.00024
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000050	<0.0010	0.14	0.00156
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.0000050	0.000557	<0.00050	<0.050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.0000050	0.000624	<0.00050	<0.050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.0000050	0.000627	<0.00050	<0.050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.0000050	0.000319	<0.00050	<0.050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	0.234		0.00063	<0.000050	2.28
SW-07	SW-07	L2757587-4	2024/09/29	Water	M					
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	0.299		0.00074	<0.000050	2.56
SW-07	SW-07	L2757664-1	2024/10/03	Water	M					
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	0.289		0.00074	<0.000050	2.51
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M					
SW-07		492-455781017-0	2024/10/13	Water	F					
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	0.23		0.00051	<0.000050	2.37
SW-07	SW-07	L2757873-5	2024/10/22	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000010	1.24	0.00715	<0.50
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000010	1.68	0.00959	0.82
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000010	1.72	0.00957	0.8
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000010	0.843	0.00582	0.69
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00030	<0.00010	0.000127	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00030	<0.00010	0.00011	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00030	<0.00010	0.000111	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00030	<0.00010	0.00014	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M		<0.0010	<0.00020
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M		<0.0010	<0.00020
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		<0.0010	<0.00020
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M		0.0017	<0.00020
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000000020	<0.000000020
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000000020	0.000000026
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000000020	<0.000000020
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000000020	<0.000000080
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050		
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050		
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050		
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00020	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00020	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00020	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00020	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1-Trichloroethane	1-1-2-Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.00050	<0.00040
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.00050	<0.00040
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.00050	<0.00040
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.00050	<0.00040
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	92.6	101
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	97.8	99
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	87.8	100
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	79.1	97.1
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M		<0.000010	<0.0000050
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M		<0.000010	<0.0000050
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		<0.000010	<0.0000050
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M		<0.000010	<0.0000050
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000010	<0.000010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000010	<0.000010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000010	<0.000010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000010	<0.000010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.000050	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.000050	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M		
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<0.000050	
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.000050	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	88.8	110	
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	101	101	
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			<0.30
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	72.1	80.6	<1
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	100	92.8	
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			<0.37

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	<0.27	<0.36	<0.37
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<2	<2	<2
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	<0.25	0.3	<0.18

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M				
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M				
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	<0.34	0.52	1.3	<0.26
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<2	<3	<4	<1
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M				
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	<0.16	1.5	20.6	<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	<0.22	<0.23	<0.17
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<2	<2	<2
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	0.41	<0.18	0.26

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	<0.17	<0.21	<0.17
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<2	<2	<2
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	<0.14	<0.20	0.2

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	0.25	<0.20	<0.56
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	<3	<3	<4
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	<0.47	<0.60	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M		
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M		
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	0	0
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M		
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M		
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M		
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	0	0
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M		
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	1	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M		
SW-07	SW-07	L2757587-4	2024/09/29	Water	M		
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M		
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	0	0
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M		
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M		
SW-07		492-455781017-0	2024/10/13	Water	F		
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M		
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	0	0	<0.37
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	0	0	<0.47

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M				
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M				
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	<0.20	<0.37	<0.21	<0.27
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M				
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M				
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	<0.60	0.3	0.26	<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M				
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M				
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	<0.23	<0.30	<0.26	
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M				0
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M				
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	<0.18	<0.37	<0.25	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			0
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M	0	0	
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			0.0617

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	0.434	0.861	87
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	0.498	0.887	75

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	85	93	88
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	68	74	78

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	91	88	93
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	80	82	81

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	91	72	87
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	76	71	74

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	94	78	79
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	78	67	68

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M	75	62	86
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M	68	57	71

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M				<0.25
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				<0.25
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M				<0.25
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M				
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				<0.25
SW-07		492-455781017-0	2024/10/13	Water	F				<0.25
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M				<0.25
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M	<0.25		104
SW-07	SW-07	L2757587-4	2024/09/29	Water	M	<0.25		92.3
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M	<0.25		82
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M	<0.25		120
SW-07		492-455781017-0	2024/10/13	Water	F	<0.25		106
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M	<0.25		88.1
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M			
SW-07	SW-07	L2757587-4	2024/09/29	Water	M			
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M			
SW-07	SW-07	L2757664-1	2024/10/03	Water	M			
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M			
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M			
SW-07		492-455781017-0	2024/10/13	Water	F			
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M			
SW-07	SW-07	L2757873-5	2024/10/22	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA24C5953-004	2024/09/29	Water	M				
SW-07	SW-07	L2757587-4	2024/09/29	Water	M				
SW-07	SW-07	VA24C6390-001	2024/10/03	Water	M				
SW-07	SW-07	L2757664-1	2024/10/03	Water	M				
SW-07	SW21-07	VA24C7381-005	2024/10/12	Water	M				
SW-07	SW21-07	L2757756-5	2024/10/12	Water	M				
SW-07		492-455781017-0	2024/10/13	Water	F				
SW-07	SW-07	VA24C8331-005	2024/10/22	Water	M				
SW-07	SW-07	L2757873-5	2024/10/22	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	2.8	2.8	<1.0
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	2.9		
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	2.3		
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	2.5		
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	1.7		
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	2.5		
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<1.0	<1.0	5
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M			
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M			
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	10.3	15.90
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	12	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	8.7	13.40
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	6.9	10.60
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	6.7	10.70
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	12	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	18.8	-0.13	99.9
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	15.1	0.00	98.2
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	12.3	0.00	99.8
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	11.8	0.33	100.9
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	12.29	
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	12.01	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	12.05	
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	12.25	
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	12.72	
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	12.77	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	1.45	1.11	138.70
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	1.45	1.37	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	1.98	1.82	153.70
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	1.95	2.01	156.70
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	1.88	1.92	163.30
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	2.05	1.87	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	6.56	6.49	0.01	<1.0
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	6.11	6.56	0.01	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	6.15	6.48	0.01	<1.0
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	6.36	6.56	0	<1.0
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	6.28	6.36	0	<1.0
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	6.90	6.49	0.01	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	6.44	
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	7.20	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	6.59	
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	6.60	
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	5.49	
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	5.20	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	19	<3.0	4.85
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	17	<3.0	4.63
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	12	<3.0	3.92
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	14	<3.0	3.52
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	21	<3.0	3.12
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	14	<3.0	3.37
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	4.75	1.4	<0.10	1
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	5.01	1.95	<0.10	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	3.87	0.82	<0.10	10
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	3.28	0.65	<0.10	5
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	3.07	1.41	0.18	1
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	3.09	1.66	0.22	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M		<0.0050	<0.050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M		<0.0050	<0.050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M		<0.0050	<0.050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M		<0.0050	<0.050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M		<0.0050	<0.050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M		<0.0050	<0.050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	0.98	<0.020	0.102
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	1.01	<0.020	0.0997
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	0.7	<0.020	0.073
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0.51	<0.020	0.0462
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.50	<0.020	0.0566
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	0.55	<0.020	0.0716
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.0010		<0.050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.0010		
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.0010		<0.050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.0010		<0.050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.0010		<0.050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.0010		
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.050		
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.050		
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.050		
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.050		
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	3.13	0.0528	<0.00010	<0.00010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	4.17	0.0541	<0.00010	<0.00010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	2.53	0.113	<0.00010	<0.00010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	1.76	0.0844	<0.00010	<0.00010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	2.15	0.115	<0.00010	<0.00010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	2.5	0.0942	<0.00010	<0.00010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	0.00299	<0.000100	<0.000050	0.011
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	0.00297	<0.000100	<0.000050	0.011
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	0.00333	<0.000100	<0.000050	<0.010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0.00277	<0.000100	<0.000050	<0.010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0.00323	<0.000100	<0.000050	<0.010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	0.00346	<0.000020	<0.000050	<0.010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	0.0000078	1.64	0.00001	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	0.0000072	1.55	0.00001	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	0.0000076	1.3	0.00001	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0.0000054	1.2	<0.000010	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0.0000071	1.03	<0.000010	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	0.0000058	1.12	<0.000010	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050		<0.00010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050		<0.00010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050		<0.010	<0.000050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050		<0.010	<0.000050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050		0.034	<0.000050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050		0.013	<0.000050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050		0.02	<0.000050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	0.00051		0.021	<0.000050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.0010	0.183	0.00058	<0.0000050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.0010	0.185	0.00055	<0.0000050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.0010	0.164	0.00135	<0.0000050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.0010	0.127	0.00063	<0.0000050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.0010	0.133	0.00161	<0.0000050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.0010	0.139	0.00154	0.00000086
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	0.000442	<0.00050	<0.050	0.254	
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	0.000413	<0.00050	<0.050	0.253	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M					
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	0.000456	<0.00050	<0.050	0.206	
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0.000527	<0.00050	<0.050	0.159	
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M					
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0.000279	<0.00050	<0.050	0.147	
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	0.000392	<0.00050	<0.050	0.163	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	0.00068	<0.000050	2.81	<0.000010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	0.00061	<0.000050	2.75	<0.000010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	0.00052	<0.000050	2.83	<0.000010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0.00037	<0.000050	2.26	<0.000010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0.00041	<0.000050	2.51	<0.000010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	0.00034	<0.000050	2.6	<0.000010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	1.13	0.00847	0.87	<0.00020
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	1.21	0.00799	0.82	<0.00020
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	0.994	0.00685	0.67	<0.00020
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0.807	0.00518	<0.50	<0.00020
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0.768	0.00561	0.78	<0.00020
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	0.9	0.00606	0.51	<0.00020
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000010	<0.00010	<0.00010	0.00166
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000010	<0.00010	<0.00010	0.00039
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000010	<0.00010	<0.00010	0.0007
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000010	<0.00010	<0.00010	0.0007
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00010	0.000132	<0.00050	
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00010	0.000116	<0.00050	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00010	0.000149	<0.00050	
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00010	0.000159	<0.00050	
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00010	0.000124	<0.00050	
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00010	0.0001	<0.00050	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.0030	<0.00020	0.0539	<0.00010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.0030	<0.00020	0.0493	<0.00010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.0030	<0.00020	0.0784	<0.00010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.0030	<0.00020	0.0796	<0.00010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.0030	<0.00020	0.0922	<0.00010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.0030	<0.00020	0.0886	<0.00010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00010	0.00289	<0.000100	<0.000050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00010	0.00285	<0.000100	<0.000050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00010	0.00278	<0.000100	<0.000050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00010	0.00337	<0.000100	<0.000050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00010	0.00311	<0.000100	<0.000050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00010	0.00396	<0.000020	<0.000050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	0.01	0.0000062	1.62	0.00001
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	0.012	0.0000075	1.7	<0.000010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.010	0.0000069	1.3	<0.000010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.010	0.0000054	1.09	<0.000010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.010	0.0000078	1.02	<0.000010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.010	0.0000006	1	<0.000010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00050	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00050	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00010	0.00021		<0.010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00010	0.00025		<0.010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00010	0.00028		<0.010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00010	0.00023		0.01
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00010	0.00027		0.01
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00010	0.00037		0.012
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000050	<0.0010	0.172	0.00044
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000050	<0.0010	0.186	0.00054
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000050	<0.0010	0.152	0.00064
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000050	<0.0010	0.136	0.00051
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000050	<0.0010	0.127	0.00128
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000050	<0.0010	0.144	0.00149
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.0000050	0.000439	<0.00050	<0.050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.0000050	0.000446	<0.00050	<0.050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.0000050	0.00042	<0.00050	<0.050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.0000050	0.000593	<0.00050	<0.050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.0000050	0.000254	<0.00050	<0.050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	0.00000088	0.000412	<0.00050	<0.050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	0.258		0.00062	<0.000050	2.78
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	0.273		0.00068	<0.000050	2.68
SW-07	SW-07	L2757913-4	2024/10/25	Water	M					
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	0.207		0.00054	<0.000050	2.63
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0.149		0.00034	<0.000050	2.36
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M					
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0.159		0.00036	<0.000050	2.29
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	0.149		0.00029	<0.000050	2.53
SW-07	SW-07	L2758155-1	2024/11/16	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000010	1.16	0.00687	0.99
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000010	1.22	0.00757	0.75
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000010	0.982	0.00686	0.59
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000010	0.894	0.00506	0.56
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000010	0.773	0.00554	0.68
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000010	0.886	0.00549	0.61
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00030	<0.00010	0.000116	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00030	<0.00010	0.000122	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00030	<0.00010	0.000163	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00030	<0.00010	0.000122	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00030	<0.00010	0.000117	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00030	<0.00010	0.000071	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M		<0.0010	<0.00020
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M		<0.0010	<0.00020
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M		0.0013	<0.00020
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M		<0.0010	<0.00020
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M		0.001	<0.00020
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M		0.0012	<0.00030
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000000020	
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000000080	<0.000000020
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000000020	
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000000020	
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000000020	
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000000020	<0.000000020
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M			
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M			
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochlorome thane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050		
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050		
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050		
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050		
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050		
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050		
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00020	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00020	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00020	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00020	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.00050	<0.00040
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.00050	<0.00040
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.00050	<0.00040
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.00050	<0.00040
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	89.6	99.2
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	97.2	99.4
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	95.5	102
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	98.9	104
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	95.8	102
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	96.2	100
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M		<0.000010	<0.0000050
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M		<0.000010	<0.0000050
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000010	<0.000010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000010	<0.000010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000010	<0.000010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000010	<0.000010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<0.000050	
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.000050	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.000050	
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.000050	
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M		
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.000050	
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	<0.000050	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	82.1	90.6	<1
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	91.6	98.6	
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	98.1	105	
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	77.5	75	<0.25
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			<0.43
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	86.3	100	<0.43
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M	93.3	97	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			<0.48

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<2	<2	<2
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.23	<0.26	<0.27
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	<0.34	<0.30	<0.29
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.33	<0.24	<0.24
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	0.5	<0.39	<0.42

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<2	<3	<4	<1
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M				
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M				
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.26	0.33	7.7	<0.27
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	<0.28	<0.43	2	<0.47
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.24	0.94	6	<0.28
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M				
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	<0.39	0.67	4.8	<0.26

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<2	<2	<2
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0.21	<0.19	<0.13
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	0.47	<0.22	<0.20
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.31	<0.31	0.23
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	<0.23	<0.18	<0.27

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<2	<2	<2
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.13	<0.16	<0.13
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	<0.21	<0.28	<0.20
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.18	<0.26	<0.19
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	<0.27	<0.37	<0.27

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	<3	<3	<4
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.19	<0.23	<0.39
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	<0.23	<0.34	<0.66
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0.83	<0.57	<1.1
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	<0.51	<0.78	<0.72

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M		
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M		
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M		
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0	0
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	0	0
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0	0
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M		
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	1	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M		
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M		
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M		
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0	0
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	0	0
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0	0
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M		
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M		
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M		
SW-07	SW-07	L2757913-4	2024/10/25	Water	M		
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M		
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0	0
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	0	0
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0	0
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M		
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0	1	<0.25
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	0	0	<0.43
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0	0	<0.31
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	0	0	0.67

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M				
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M				
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M				
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.23	<0.27	<0.16	<0.23
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	<0.34	<0.30	<0.28	<0.34
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.57	<0.24	<0.26	<0.33
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M				
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	<0.78	<0.42	<0.37	<0.44

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M				0
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M				
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M				
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	<0.19	<0.25	0.31	
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	<0.26	<0.43	<0.47	
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	<0.31	<0.43	<0.28	
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M				
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	<0.23	<0.48	<0.26	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M	0	0	
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M			0.00231
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			0.000594
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M			0.00181
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			0.00812

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	0.363	0.714	74
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	0.549	1.08	85
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	0.558	1.07	76
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	0.917	1.33	79

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	63	69	80
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	86	76	87
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	81	87	74
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	71	62	84

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	72	78	70
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	94	90	98
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	83	78	93
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	83	89	84

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	69	71	66
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	89	71	73
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	85	71	85
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	81	69	66

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	72	63	70
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	100	76	76
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	89	78	69
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	85	71	80

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M	65	52	64
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M	78	52	83
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M	73	53	74
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M	81	54	85

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M				
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M				<0.25
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				<0.25
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M	<0.0003			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M				
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M				
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M				
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M	<0.25		83.7
SW-07	SW-07	L2757913-4	2024/10/25	Water	M	<0.25		92.8
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M			
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M			
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M		<0.005	
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M			
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M			
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M			
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M			
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M			
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M			
SW-07	SW-07	L2757913-4	2024/10/25	Water	M			
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M			
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M			
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M			
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M			
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M			
SW-07	SW-07	L2758155-1	2024/11/16	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07	SW21-7	VA24C8780-003	2024/10/25	Water	M				
SW-07	SW-07	VA24C8832-004	2024/10/25	Water	M				
SW-07	SW-07	L2757913-4	2024/10/25	Water	M				
SW-07	SW21-7	VA24C9642-003	2024/11/01	Water	M				
SW-07	SW21-7	VA24D0423-003	2024/11/08	Water	M				
SW-07	SW21-7	L2758092-3	2024/11/08	Water	M				
SW-07	SW21-7	VA24D1013-003	2024/11/15	Water	M				
SW-07	SW-07	VA24D1148-001	2024/11/16	Water	M				
SW-07	SW-07	L2758155-1	2024/11/16	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<2.0	<2.0	<2.0
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	2.2		
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	1.2		
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	3.4		
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	3.3		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07		VA24D1587-003	2024/11/20	Water	M	<2.0	<2.0	13.7
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			5.4
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M			
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07		VA24D1587-003	2024/11/20	Water	M	9.3	15.40
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	9	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	7.4	12.10
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	12.7	22.90
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	10	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07		VA24D1587-003	2024/11/20	Water	M	11.6	0.10	96.8
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	10.9	0.36	99.4
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	21.9	-0.06	101.4
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	12.57	
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	12.86	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	12.85	
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	14.16	
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	14.23	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07		VA24D1587-003	2024/11/20	Water	M	2.64	2.66	125.10
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	1.84	1.73	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	1.92	2.04	184.20
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	1.22	0.98	134.20
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	1.13	1.06	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07		VA24D1587-003	2024/11/20	Water	M	6.40	6.2	0.01	<1.0
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	6.90	6.48	0.01	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	5.93	6.09	0	<1.0
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M		6.69	0	<1.0
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	6.80	6.72	0.01	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	4.36	
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	4.60	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	4.53	
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	1.65	
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	1.40	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	21	<3.0	2.86
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	14	<3.0	3.36
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<10	<3.0	2.5
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	20	<3.0	5.74
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	14	<3.0	6.08

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07		VA24D1587-003	2024/11/20	Water	M	2.76	0	0.15	1
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	3.23	1.14	0.22	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	2.49	0	0.21	<1
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	5.57	0	<0.10	<1
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	6.08	0.69	0.31	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M		<0.0050	<0.050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M		<0.0050	<0.050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M		<0.0050	<0.050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M		<0.0050	<0.050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.57	<0.020	0.031
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.50	<0.020	0.0598
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	0.58	<0.020	0.0302
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	1.52	<0.020	0.0774
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	1.69	<0.020	0.0857

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.0010		0.07
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.0010		
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.0010		<0.050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.0010		
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.07	0.093	
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.050		
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M			
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	2.19	0.132	<0.00010	<0.00010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	1.7	0.17	<0.00010	<0.00010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	2.07	0.128	<0.00010	<0.00010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	3.86	0.0467	<0.00010	<0.00010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	4.02	0.0383	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.00562	<0.000100	<0.000050	<0.010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0.00318	<0.000020	<0.000050	<0.010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	0.00476	<0.000100	<0.000050	<0.010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0.0035	<0.000100	<0.000050	0.018
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	0.00343	<0.000020	<0.000050	0.02

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.0000050	0.869	<0.000010	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0.0000051	1.13	0.000015	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.0000050	0.779	<0.000010	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0.0000077	1.88	<0.000010	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	0.0000078	2.03	0.00001	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050		0.00016
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00150	<0.00050	<0.00010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050		<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050		0.026	<0.000050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0.00062		0.112	<0.000050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050		0.028	<0.000050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050		<0.010	<0.000050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050		<0.010	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.0010	0.169	0.00224	<0.0000050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.0010	0.132	0.00236	0.00000123
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.0010	0.135	0.00281	<0.0000050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0.0011	0.254	0.00052	<0.0000050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	0.0016	0.246	0.00038	0.00000055

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.000566	<0.00050	<0.050	0.12	
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M					
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0.000302	<0.00050	<0.050	0.185	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M					
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	0.000358	<0.00050	<0.050	0.107	
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M					
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0.000698	<0.00050	<0.050	0.259	
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M					
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	0.000516	<0.00050	<0.050	0.248	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.0002	<0.000050	2.89	<0.000010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0.00039	<0.000050	1.88	<0.000010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	0.00026	<0.000050	2.34	<0.000010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0.00061	<0.000050	3.19	<0.000010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	0.00055	<0.000050	3.06	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.916	0.00506	0.68	<0.00020
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0.992	0.00532	0.5	<0.00020
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	0.833	0.00452	<0.50	<0.00020
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	1.8	0.011	1.1	<0.00020
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	1.83	0.011	1.14	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000010	<0.00010	<0.00010	0.00054
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000010	<0.00010	0.00011	0.00375
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000010	<0.00010	<0.00010	0.00083
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000010	<0.00010	<0.00010	<0.00030
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000010	<0.00010	<0.00010	<0.00030

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00010	0.000025	<0.00050	
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00010	0.000183	<0.00050	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00010	0.000042	<0.00050	
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00010	0.000105	<0.00050	
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00010	0.000102	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.0030	<0.00020	0.124	<0.00010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.0030	<0.00020	0.0932	<0.00010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.0030	<0.00020	0.107	<0.00010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.0030	<0.00020	0.038	<0.00010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.0030	<0.00020	0.0367	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00010	0.00539	<0.000100	<0.000050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00010	0.00197	<0.000020	<0.000050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00010	0.00463	<0.000100	<0.000050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00010	0.00325	<0.000100	<0.000050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00010	0.00336	<0.000020	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.010	<0.0000050	0.841	<0.000010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.010	0.0000071	1.11	<0.000010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.010	<0.0000050	0.755	<0.000010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0.018	0.0000084	1.88	<0.000010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	0.02	0.000011	2.03	0.00001

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00050	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00010	0.00026		0.022
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00010	0.0005		<0.010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00010	<0.00020		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000050	<0.0010	0.161	0.00169
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000050	<0.0010	0.111	0.00098
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000050	<0.0010	0.148	0.00186
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000050	0.0012	0.213	0.00035
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000050	0.0013	0.245	0.00042

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.0000050	0.000532	<0.00050	<0.050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0.00000095	0.000286	<0.00050	<0.050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.0000050	0.000365	<0.00050	<0.050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.0000050	0.000594	<0.00050	<0.050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00000050	0.000538	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.118		0.0002	<0.000050	2.66
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M					
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0.161		0.00034	<0.000050	1.91
SW-07	SW-07	L2758371-4	2024/12/08	Water	M					
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	0.108		0.00028	<0.000050	2.44
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M					
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0.232		0.00053	<0.000050	2.98
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M					
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	0.273		0.00065	<0.000050	2.83

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000010	0.944	0.00512	<0.50
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000010	0.727	0.00498	<0.50
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000010	0.869	0.0043	<0.50
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000010	1.55	0.00931	1.19
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000010	1.72	0.0105	1.48

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.00034	<0.00010	0.000021	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0.00039	<0.00010	0.00017	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00030	<0.00010	0.000027	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00030	<0.00010	0.000103	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00030	<0.00010	0.000092	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M		0.0013	<0.00020
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M		<0.0010	<0.00030
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M		0.0017	<0.00020
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M		<0.0010	<0.00020
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M		<0.0010	<0.00030

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.000000025	
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000000020	<0.000000020
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000000020	
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000000020	
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000000020	<0.000000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M			
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M			
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochlorome thane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050		
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050		
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050		
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050		
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00020	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00020	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00020	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00020	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.00050	<0.00040
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.00050	<0.00040
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.00050	<0.00040
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.00050	<0.00040
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07		VA24D1587-003	2024/11/20	Water	M	102	103
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	95.2	102
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	97	102
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	92.5	99.1
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	91	100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M		<0.000010	<0.0000050
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000010	<0.000010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000010	<0.000010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000010	<0.000010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000010	<0.000010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.000050	
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<0.000050	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M		
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.000050	
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.000050	
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M		
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	94.6	104	<0.60
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	106	99.1	<1
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			<0.68
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	84.1	83.8	
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	79.4	87.9	<0.32
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			<0.16
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M	75.8	90.5	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.52	<0.29	<0.28
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<2	<2	<2
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	<0.62	<0.37	<0.38
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.44	<0.39	<0.39
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	0.49	0.17	<0.11
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.27	0.85	8.7	<0.51
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<2	<3	<4	<1
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	<0.36	<0.72	3.4	<0.70
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M				
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.36	0.71	3.6	<0.34
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	0.17	0.48	1.85	<0.22
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.7	<0.15	<0.11
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<2	<2	<2
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	<0.36	<0.30	<0.40
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.22	<0.23	<0.14
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	0.43	<0.15	<0.15
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.12	<0.18	<0.12
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<2	<2	<2
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	<0.42	<0.60	<0.40
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.14	<0.19	<0.14
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	<0.15	0.23	<0.15
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.60	<0.84	<0.61
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	<3	<3	<4
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	<0.43	<0.66	<3.6
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.25	<0.29	<0.88
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	0.28	0.3	0.58
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07		VA24D1587-003	2024/11/20	Water	M	1	0
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M		
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	0	0
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M		
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	1	0
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	1	0
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07		VA24D1587-003	2024/11/20	Water	M	0	0
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M		
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	0	0
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M		
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0	0
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	0	0
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07		VA24D1587-003	2024/11/20	Water	M	0	1
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M		
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M		
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	0	0
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M		
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M		
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0	0
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	0	0
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0	0	0.85
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	0	0	<0.72
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0	0	0.71
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	0	0	0.26
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	<0.84	<0.29	<0.18	<0.52
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M				
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	<0.66	<0.38	<0.60	<0.62
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M				
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.29	<0.39	<0.19	<0.44
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	<0.20	<0.11	<0.18	<0.22
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M	0.7	<0.60	<0.51	
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M				0
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	<0.36	<0.68	<0.70	
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M				
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	<0.23	<0.32	<0.34	
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	<0.19	<0.16	<0.22	
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07		VA24D1587-003	2024/11/20	Water	M			0.0295
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M	0	0	
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			0.00101
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M			0.00817
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			0.00073
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07		VA24D1587-003	2024/11/20	Water	M	0.716	1.4	66
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	0.892	1.78	76
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	0.533	1.06	99
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	0.713	0.854	88
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07		VA24D1587-003	2024/11/20	Water	M	62	65	69
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	74	63	82
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	81	101	97
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	83	77	84
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07		VA24D1587-003	2024/11/20	Water	M	70	70	69
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	84	89	90
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	98	96	99
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	83	82	83
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07		VA24D1587-003	2024/11/20	Water	M	66	61	66
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	81	77	76
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	98	82	104
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	86	76	69
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-07		VA24D1587-003	2024/11/20	Water	M	67	58	69
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	89	78	81
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	98	86	87
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	86	80	78
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07		VA24D1587-003	2024/11/20	Water	M	64	51	71
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M	85	49	92
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M	89	65	99
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M	78	86	80
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M				
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M				<0.25
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M				
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M				<0.25
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M				<0.25
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M				
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07		VA24D1587-003	2024/11/20	Water	M			
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M	<0.25		66.1
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M	<0.25		120
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M	<0.25		114
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M			
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07		VA24D1587-003	2024/11/20	Water	M			
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M			
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07		VA24D1587-003	2024/11/20	Water	M			
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M			
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M			
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M			<5.0
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M			
SW-07	SW-07	L2758371-4	2024/12/08	Water	M			
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M			
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M			<5.0
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M			
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M			
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07		VA24D1587-003	2024/11/20	Water	M				
SW-07	SW21-7	L2758201-3	2024/11/20	Water	M	<5.0	<5.0	<10	<5.0
SW-07	SW-07	VA24D3099-004	2024/12/08	Water	M				
SW-07	SW-07	L2758371-4	2024/12/08	Water	M				
SW-07	SW21-7	VA24D4023-003	2024/12/19	Water	M				
SW-07	SW21-7	L2758504-3	2024/12/19	Water	M	<5.0	<5.0	<10	<5.0
SW-07	SW21-7	VA25A1591-003	2025/01/23	Water	M				
SW-07	SW21-7	L2758768-3	2025/01/23	Water	M				
SW-07	SW-07	VA25A1755-002	2025/01/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	3.4		
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	2.5	2.5	<1.0
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	2.7		
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	1.2	1.2	<1.0
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	2.4		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<1.0	<1.0	6.9
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<1.0	<1.0	13.1
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	15.5	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	7.1	12.60
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	14	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	2.9	5.00
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	8	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	13.1	0.16	100.1
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	7.4	-0.28	99.8
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	13.17	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	13.85	
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	12.85	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	13.35	
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	13.11	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.87	1.41	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	1.8	1.89	184.60
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	1.35	1.42	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	2.51	2.69	218.40
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	1.5	1.51	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	6.61	6.71	0.01	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	6.11	6.46	0	<1.0
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	6.60	6.61	0.01	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	5.85	6.07	0	<1.0
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	7.10	6.49	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	3.40	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	1.99	
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	7.40	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	3.25	
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	4.50	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	34	<3.0	6.97
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	24	<3.0	3.28
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	30	<3.0	5.42
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<10	3.7	2.38
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	18	<3.0	3.74

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	7.64	4.47	4.13	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	3.28	0	0.86	12
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	4.81	0.2	0.15	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	2.07	390.31	1.51	1
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	3.71	0.16	0.16	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M		<0.0050	<0.050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M		<0.0050	<0.050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M		<0.0050	<0.050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M		<0.0050	<0.050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	6.68	<0.020	0.0849
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.56	0.021	0.12
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	1.57	<0.020	0.0658
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.50	<0.020	0.0414
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	0.55	<0.020	0.048

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.0010		
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.0010		0.059
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.0010		
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.0010		0.064
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.059		
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	0.064		
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	4.45	0.337	<0.00010	<0.00010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	2.23	0.121	<0.00010	<0.00010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	3.6	0.0848	<0.00010	<0.00010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	1.1	0.237	<0.00010	<0.00010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	2.22	0.0874	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.00618	<0.000020	<0.000050	0.018
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.00513	<0.000100	<0.000050	<0.010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	0.00271	<0.000020	<0.000050	0.012
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	0.00234	<0.000100	<0.000050	<0.010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	0.00208	<0.000020	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.0000098	2.02	0.00003	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.0000050	1	<0.000010	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	0.0000116	1.73	<0.000010	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.0000050	0.785	0.00002	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	0.0000057	1.28	<0.000010	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050		0.00014
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050		<0.00010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050	0.00011
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050		<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.0007		0.246	0.0001
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050		0.029	<0.000050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050		0.0229	<0.000050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	0.0005		0.098	0.000066
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	0.00061		0.012	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.0012	0.467	0.00575	0.00000075
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.0010	0.191	0.00321	<0.0000050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.0010	0.266	0.00123	0.00000073
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.0010	0.101	0.00339	<0.0000050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.0010	0.131	0.0006	0.00000067

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M					
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.000635	<0.00050	<0.050	0.347	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M					
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.000688	<0.00050	<0.050	0.125	
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M					
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	0.000412	<0.00050	<0.050	0.226	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M					
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	0.000174	<0.00050	<0.050	0.116	
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	0.000331	<0.00050	<0.050	0.174	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.00074	<0.000050	3.2	<0.000010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.00024	<0.000050	2.8	<0.000010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	0.000526	<0.000050	2.64	<0.000010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	0.00037	<0.000050	1.35	<0.000010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	0.00039	<0.000050	2.14	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	3.25	0.0114	1.17	<0.00020
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	1.06	0.00509	<0.50	<0.00020
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	1.9	0.00905	0.893	<0.00020
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	0.51	0.00376	<0.50	<0.00020
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	0.938	0.00607	0.52	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000010	<0.00010	<0.00010	0.0115
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000010	<0.00010	<0.00010	0.00092
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000010	<0.00010	<0.00010	0.00101
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000010	<0.00010	<0.00010	0.00448
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000010	<0.00010	<0.00010	0.00036

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00010	0.000149	0.00057	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00010	0.000022	<0.00050	
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00010	0.000127	<0.00050	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00010	0.000203	<0.00050	
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00010	0.000176	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.0030	<0.00020	0.0425	<0.00010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.0030	<0.00020	0.092	<0.00010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	0.00348	<0.00020	0.0559	<0.00010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.0030	<0.00020	0.128	<0.00010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.0030	<0.00020	0.0751	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00010	0.0029	<0.000020	<0.000050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00010	0.00469	<0.000100	<0.000050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00010	0.00257	<0.000020	<0.000050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00010	0.00153	<0.000100	<0.000050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00010	0.00206	<0.000020	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.018	0.0000087	2.07	<0.000010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.010	<0.0000050	1.01	<0.000010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	0.0112	0.00000608	1.62	<0.000010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.010	<0.0000050	0.698	<0.000010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.010	0.0000051	1.27	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00050	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00050	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.00021	0.00032		<0.010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00010	0.00023		0.011
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00010	0.000261		<0.010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00010	0.00023		0.015
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00010	0.0002		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000050	0.0011	0.601	0.00086
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000050	<0.0010	0.183	0.00186
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000050	<0.0010	0.185	0.00069
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000050	<0.0010	0.0796	0.00081
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000050	<0.0010	0.13	0.00051

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.00000063	0.00063	<0.00050	<0.050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.0000050	0.000645	<0.00050	<0.050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	0.000000563	0.000371	<0.00050	<0.050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.0000050	0.000162	<0.00050	<0.050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	0.00000068	0.00032	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M					
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	0.353		0.00051	<0.000050	2.78
SW-07	SW-07	L2759009-3	2025/02/19	Water	M					
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.124		<0.00020	<0.000050	2.74
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M					
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	0.201		0.000492	<0.000050	2.51
SW-07	SW-07	L2759254-3	2025/03/18	Water	M					
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	0.122		0.00024	<0.000050	1.16
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	0.152		0.00042	<0.000050	1.98

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000010	4.77	0.0117	1.29
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000010	1.07	0.00498	0.57
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000010	1.37	0.00828	0.793
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000010	0.513	0.00331	<0.50
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000010	0.835	0.00584	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00030	0.00017	0.000104	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00030	<0.00010	0.000017	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00030	<0.00010	0.000121	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	0.00052	<0.00010	0.000152	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00030	<0.00010	0.00016	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M		0.0013	<0.00030
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M		0.0017	<0.00020
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M		0.00119	<0.00030
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M		0.001	<0.00020
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M		<0.0010	<0.00030

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000000020	0.000000025
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000000020	
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000000020	<0.000000020
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000000020	
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000000020	<0.000000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M			
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050		
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050		
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050		
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050		
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00020	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00020	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00020	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.00050	<0.00040
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.00050	<0.00040
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.00050	<0.00040
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	108	104
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	103	102
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	90.9	101
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	88.2	102
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	92.7	103

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M		<0.000010	<0.0000050
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M		<0.000010	<0.0000050
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000010	<0.000010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000010	<0.000010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000010	<0.000010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	<0.000050	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.000050	
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.000050	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M		
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.000050	
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M	76.9	112	
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	77.2	86.7	<0.30
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	69.9	85.4	
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			<0.35
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	96.9	99.9	
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M	111	107	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.36	<0.32	<0.32
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	<0.46	<0.35	<0.37
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M				
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.30	0.55	0.98	<0.24
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M				
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	<0.35	1.28	2	<0.33
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M				
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.43	<0.24	<0.15
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	<0.37	0.37	<0.40
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.14	<0.18	<0.14
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	<0.41	<0.52	<0.41
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.41	<0.25	0.62
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	<0.56	<0.73	<1.3
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M		
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0	1
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M		
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	1	0
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M		
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M		
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0	0
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M		
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	0	0
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M		
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07	SW-07	L2758765-2	2025/01/25	Water	M		
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M		
SW-07	SW-07	L2759009-3	2025/02/19	Water	M		
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0	0
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M		
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M		
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	0	0
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M		
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0	1	<0.27
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	0	0	1.28
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M				
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.41	<0.32	<0.18	<0.36
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M				
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	<0.73	<0.37	<0.52	<0.46
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M				
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M				
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	<0.24	<0.30	0.26	
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M				
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	<0.37	<0.35	<0.33	
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M				
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M			0.00439
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			0.0128
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	0.48	0.936	90
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	0.699	1.27	73
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	83	97	90
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	73	76	80
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	94	90	93
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	80	78	79
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	96	75	92
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	79	81	81
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	97	81	83
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	81	85	81
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M	81	52	94
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M	83	49	78
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M				<0.25
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M				
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				<0.25
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M				
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				<0.25
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M				<0.25
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M				<0.25
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M	<0.25		102
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M	<0.25		64.7
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M			
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M	<0.25		117
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M	<0.25		83
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<0.25		132
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M		<0.005	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M			
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M			
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M			<5.0
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M			
SW-07	SW-07	L2759009-3	2025/02/19	Water	M			
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M			
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M			
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M			
SW-07	SW-07	L2759254-3	2025/03/18	Water	M			
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M			<5.0
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	L2758765-2	2025/01/25	Water	M	<5.0	<5.0	<10	<5.0
SW-07	SW-07	VA25A3569-003	2025/02/19	Water	M				
SW-07	SW-07	L2759009-3	2025/02/19	Water	M				
SW-07	SW21-7	VA25A3665-003	2025/02/20	Water	M				
SW-07	SW21-7	L2759041-3	2025/02/20	Water	M				
SW-07	SW-07	VA25A5938-003	2025/03/18	Water	M				
SW-07	SW-07	L2759254-3	2025/03/18	Water	M				
SW-07	SW21-7	VA25A6812-003	2025/03/27	Water	M	<5.0	<5.0	<10	<5.0
SW-07	SW-07	VA25A7260-005	2025/04/02	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	1.3		
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	2.3		
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	2.2		
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	2.6	2.6	<1.0
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	2		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<1.0	<1.0	6.6
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	9	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	6	
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	6	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	6	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	6.6	10.70
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	5	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	11.4	0.08	96.5
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	13.10	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	12.79	
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	12.79	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	12.51	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	12.43	
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	12.71	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	2.25	2.29	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	1.38	1.46	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	1.58	1.65	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	1.47	1.35	190.40
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	1.52	1.57	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	7.60	6.12	0.01	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	6.90		0	
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	6.90	6.54	0	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	6.80	6.49	0	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	5.68	6.58	0	<1.0
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	6.90	6.36	0	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	6.00	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	4.80	
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	4.80	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	5.50	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	4.67	
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	5.50	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	15	<3.0	2.47
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	17	<3.0	3.79
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	15	<3.0	2.9
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	15	<3.0	3.28
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	19	<3.0	3.42

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	2.36	0.86	0.42	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M		0.4		
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	3.33	0.4	0.13	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	2.85	0.25	0.17	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	3.22	0	<0.10	<1
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	2.43	0.47	0.28	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M		0.0103	<0.050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M		<0.0050	<0.050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M		<0.0050	<0.050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M		<0.0050	<0.050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.50	<0.020	0.0369
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	1.84	<0.020	0.0423
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.50	<0.020	0.0318
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	0.5	<0.020	0.0314
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	3.08	<0.020	0.0242

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.0010		
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.0010		
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.0010		
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.0010		<0.050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.050		
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	1.13	0.147	<0.00010	0.0001
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	2.23	0.0847	<0.00010	<0.00010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	1.58	0.0752	<0.00010	<0.00010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	1.64	0.0771	<0.00010	<0.00010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	1.47	0.0764	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.00166	<0.000020	<0.000050	<0.010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	0.00187	<0.000020	<0.000050	<0.010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	0.00198	<0.000020	<0.000050	<0.010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	0.00194	<0.000100	<0.000050	<0.010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	0.00143	<0.000020	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.0000050	0.832	<0.000010	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	0.0000057	1.18	<0.000010	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.0000050	0.979	<0.000010	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.0000050	1.12	<0.000010	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.0000050	0.917	<0.000010	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050		<0.00010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050		<0.00010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050		<0.00010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050		<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050		0.03	<0.000050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050		0.01	<0.000050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050		0.014	<0.000050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050		0.011	<0.000050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050		0.03	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.0010	0.0951	0.0012	0.00000125
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.0010	0.205	0.00072	0.00000089
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.0010	0.112	0.00044	0.00000076
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.0010	0.118	0.0004	<0.0000050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.0010	0.275	0.00078	0.00000072

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M					
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.000182	<0.00050	<0.050	0.127	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M					
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M					
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	0.000301	<0.00050	<0.050	0.171	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	0.000464	<0.00050	<0.050	0.132	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M					
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	0.000487	<0.00050	<0.050	0.153	
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	0.000306	<0.00050	<0.050	0.177	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.00026	<0.000050	1.29	<0.000010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	0.00035	<0.000050	1.9	<0.000010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	0.0003	<0.000050	1.79	<0.000010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	0.00034	<0.000050	1.74	<0.000010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	0.00031	<0.000050	1.37	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.543	0.00363	<0.50	<0.00020
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	1.54	0.00606	<0.50	<0.00020
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	0.787	0.00466	<0.50	<0.00020
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	0.784	0.00487	<0.50	<0.00020
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	2.14	0.00505	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000010	<0.00010	<0.00010	0.00127
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000010	<0.00010	<0.00010	0.00041
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000010	<0.00010	<0.00010	0.00035
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000010	<0.00010	<0.00010	0.00045
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000010	<0.00010	<0.00010	0.00054

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00010	0.000166	<0.00050	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00010	0.000156	<0.00050	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00010	0.000146	<0.00050	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00010	0.000168	<0.00050	
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00010	0.000157	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.0030	<0.00020	0.109	<0.00010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.0030	<0.00020	0.0748	<0.00010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.0030	<0.00020	0.0706	<0.00010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.0030	<0.00020	0.0694	<0.00010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.0030	<0.00020	0.0752	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00010	0.00145	<0.000020	<0.000050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00010	0.00192	<0.000020	<0.000050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00010	0.00158	<0.000020	<0.000050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00010	0.00192	<0.000100	<0.000050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00010	0.00145	<0.000020	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.010	<0.0000050	0.788	<0.000010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.010	<0.0000050	1.12	<0.000010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.010	0.0000058	0.975	<0.000010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.010	<0.0000050	1.09	<0.000010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.010	<0.0000050	0.83	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00050	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00050	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00050	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00010	0.00023		0.012
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00010	0.00023		<0.010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00010	<0.00020		<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000050	<0.0010	0.0957	0.00084
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000050	<0.0010	0.13	0.00058
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000050	<0.0010	0.102	0.00057
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000050	<0.0010	0.12	0.00024
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000050	<0.0010	0.0875	0.00047

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.00000117	0.000189	<0.00050	<0.050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	0.00000084	0.000278	<0.00050	<0.050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	0.00000072	0.000319	<0.00050	<0.050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.0000050	0.000502	<0.00050	<0.050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	0.00000076	0.00028	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M					
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.097		0.00029	<0.000050	1.21
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M					
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M					
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	0.15		0.00034	<0.000050	1.82
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	0.136		0.00027	<0.000050	1.63
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M					
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	0.153		0.00032	<0.000050	1.79
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	0.125		0.0003	<0.000050	1.32

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000010	0.558	0.00375	<0.50
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000010	0.823	0.00538	<0.50
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000010	0.694	0.0044	<0.50
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000010	0.778	0.00509	<0.50
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000010	0.595	0.0037	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.00043	<0.00010	0.000151	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00030	<0.00010	0.000144	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00030	<0.00010	0.000145	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00030	<0.00010	0.000157	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00030	<0.00010	0.000151	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M		<0.0010	<0.00030
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M		0.0012	<0.00030
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M		<0.0010	<0.00030
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M		<0.0010	<0.00020
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M		<0.0010	<0.00030

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000000020	<0.000000020
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000000020	0.000000032
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000000020	<0.000000020
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000000020	
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	0.000000026	<0.000000020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00040	<0.00030	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050		
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050		
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050		
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050		
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	87	102
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	88.5	103
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	76	95.6
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	78.7	95.6
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	89.8	102

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.000050	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.000050	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<0.000050	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M		
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.000050	
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	102	96.4	<0.18
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			<0.75
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	101	104	
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	103	101	<1
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			<0.76
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	108	99	
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	111	107	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.18	<0.14	<0.15
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	<0.59	<0.42	<0.41
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<2	<2	<2
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	<0.52	<0.83	<0.81
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.17	1.02	6.09	<0.20
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	<0.40	<0.95	<4.0	<1.0
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<2	<3	<4	<1
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	<0.78	2	6.4	<0.62
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M				
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.31	<0.15	<0.18
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	<0.33	<0.30	<0.33
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<2	<2	<2
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	<0.42	<0.37	<0.33
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.18	<0.23	<0.18
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	<0.34	<0.42	<0.37
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<2	<2	<2
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	<0.33	<0.51	0.41
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.21	<0.28	0.87
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	<0.72	<0.34	<1.2
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	<3	<3	<4
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	1	<0.90	<4.9
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	1	0
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	0	0
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M		
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	0	0
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M		
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0	0
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	0	0
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M		
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	0	0
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M		
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M		
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0	0
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M		
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	0	0
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M		
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M		
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	0	0
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M		
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0	0	1.02
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	0	0	<0.95
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	0	0	<1.4
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.28	<0.15	<0.23	<0.18
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	<0.34	<0.42	<0.42	<0.59
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M				
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	<0.90	<0.83	<0.51	<0.52
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M				
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	<0.18	<0.18	<0.20	
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	<0.33	<0.75	<1.0	
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M				0
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	<0.42	<0.76	<0.62	
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M				
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M			0.012
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			0
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M	0	0	
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			0.0411
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	0.307	0.574	74
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M	0.92	1.83	
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	0.991	1.91	67
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	69	64	73
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	71	68	78
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	69	69	67
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	87	79	90
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	70	63	55
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	76	76	77
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	70	62	64
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	84	78	64
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M	62	73	75
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	68	31	66
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M				<0.25
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M				<0.25
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M				<0.25
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M				
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				<0.25
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M				<0.25
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M	<0.25		119
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M	<0.25		103
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M	<0.25		87.5
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M	<0.25		115
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M	<0.25		72.4
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M	<0.25		123

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M			<5.0
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M			
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M			<5.0
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M			
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M			
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M			
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M			
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A7262-005	2025/04/02	Water	M	<5.0	<5.0	<10	<5.0
SW-07	SW-07	VA25A7638-003	2025/04/07	Water	M				
SW-07	SW-07	VA25A7640-003	2025/04/07	Water	M	<5.0	<5.0	<10	<5.0
SW-07	SW-07	VA25A8193-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8192-003	2025/04/12	Water	M				
SW-07	SW-07	VA25A8840-003	2025/04/20	Water	M				
SW-07	SW-07	VA25A8841-003	2025/04/20	Water	M				
SW-07	SW21-7	VA25A9265-003	2025/04/24	Water	M				
SW-07	SW-07	VA25A9553-003	2025/04/28	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<1.0	<1.0	
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	1.9	1.9	<1.0
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	2		
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	1	1	<1.0
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	2.4	2.4	<1.0
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	1.9		
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M			7.7
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<1.0	<1.0	7.1
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<1.0	<1.0	5.3
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<1.0	<1.0	6.5
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			19.4
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	33	53.60
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	5	8.00
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	6.3	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	5.2	8.00
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	12.3	19.50
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	8.3	14.20
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	9.2	-0.22	98.5
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	7.3	0.14	97.2
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	8.6	0.19	98.7
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	10.7	-0.15	99.1
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	6.5	0.00	96.4
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	12.63	
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	12.22	
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	13.09	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	12.11	
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	12.45	
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	12.82	
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	1.65	1.78	180.60
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	1.32	1.6	244.60
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	1.51	1.27	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	0.98	1.34	259.20
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	1.24	1.37	242.60
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	3.3	3.62	200.40
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	6.09	5.99	0.02	<1.0
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	5.44	6.49	0	<1.0
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	6.70	6.52	0	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	5.50	6.15	0	<1.0
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	5.54	6.63	0.01	<1.0
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	6.01	6.41		<1.0
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	4.83	
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	5.59	
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	7.50	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	6.58	
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	5.65	
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	3.40	
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<10	<3.0	2.46
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	11	<3.0	2.4
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	16	<3.0	2.96
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	19	<3.0	2.59
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<10	<3.0	3.03
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<10	<3.0	2.29
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	2.57	0	0.10	<1
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	2.4	0.44	0.10	<1
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	3.66	0.63	0.10	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	2.43	0	0.18	<1
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	3	0	<0.10	<1
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	2.19	0.54	0.14	<1
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M		<0.0050	<0.050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M		<0.0050	<0.050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M		<0.0050	<0.050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M		<0.0050	<0.050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M		<0.0050	<0.050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M		<0.0050	<0.050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.50	<0.020	0.0254
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.50	<0.020	0.0193
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0.78	<0.020	0.0195
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.50	<0.020	0.0222
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.50	<0.020	0.0305
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.50	<0.020	0.0196
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.0010		0.06
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.0010		<0.050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.0010		
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.0010		
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.0010		<0.050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.0010		
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0.06		
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.050		
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.050		
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	1.05	0.0882	<0.00010	<0.00010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	1	0.0738	<0.00010	<0.00010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	1.22	0.0875	<0.00010	<0.00010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	1.08	0.0843	<0.00010	<0.00010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	1.5	0.0785	<0.00010	<0.00010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0.32	0.161	<0.00010	0.00011
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0.00143	<0.000100	<0.000050	<0.010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	0.00121	<0.000100	<0.000050	<0.010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0.00167	<0.000020	<0.000050	<0.010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	0.00156	<0.000100	<0.000050	<0.010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	0.00186	<0.000100	<0.000050	<0.010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0.00143	<0.000100	<0.000050	<0.010
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.0000050	0.837	<0.000010	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.0000050	0.83	<0.000010	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.0000050	0.963	<0.000010	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.0000050	0.877	<0.000010	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.0000050	1.03	<0.000010	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.0000050	0.776	0.000011	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050		<0.00010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050	<0.00010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050	<0.00010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050	<0.00010
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050		<0.010	<0.000050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050		<0.010	<0.000050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050		0.021	<0.000050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050		0.015	<0.000050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050		0.012	<0.000050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050		0.038	0.000052
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.0010	0.09	0.0004	<0.0000050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.0010	0.0801	0.00039	<0.0000050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.0010	0.136	0.00096	0.00000097
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.0010	0.0964	0.0007	<0.0000050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.0010	0.111	0.00053	<0.0000050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.0010	0.0846	0.00118	<0.0000050
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M					
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0.000306	<0.00050	<0.050	0.113	
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	0.000266	<0.00050	<0.050	0.099	
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0.000337	<0.00050	<0.050	0.134	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M					
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	0.00032	<0.00050	<0.050	0.11	
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	0.000481	<0.00050	<0.050	0.137	
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0.000245	<0.00050	<0.050	0.095	
SW-08		L2755503-2	2024/04/25	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0.00027	<0.000050	1.29	<0.000010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	0.00025	<0.000050	1.22	<0.000010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0.00032	<0.000050	1.38	<0.000010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	0.00033	<0.000050	1.25	<0.000010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	0.00037	<0.000050	1.76	<0.000010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0.00023	<0.000050	1.16	<0.000010
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0.56	0.00379	<0.50	<0.00020
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	0.522	0.00336	<0.50	<0.00020
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0.9	0.00439	<0.50	<0.00020
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	0.633	0.00386	<0.50	<0.00020
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	0.787	0.00493	<0.50	<0.00020
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0.509	0.00283	<0.50	<0.00020
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000010	<0.00010	<0.00010	0.00043
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000010	<0.00010	<0.00010	0.00038
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000010	<0.00010	<0.00010	0.0026
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000010	<0.00010	<0.00010	0.00079
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000010	<0.00010	<0.00010	0.00054
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000010	<0.00010	<0.00010	0.001
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00010	0.000176	<0.00050	
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00010	0.000154	<0.00050	
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00010	0.000152	<0.00050	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00010	0.000162	<0.00050	
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00010	0.000167	<0.00050	
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00010	0.000636	<0.00050	
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.0030	<0.00020	0.0836	<0.00010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.0030	<0.00020	0.0694	<0.00010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.0030	<0.00020	0.0647	<0.00010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.0030	<0.00020	0.0701	<0.00010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.0030	<0.00020	0.0705	<0.00010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.0030	<0.00020	0.15	<0.00010
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00010	0.00141	<0.000100	<0.000050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00010	0.00128	<0.000100	<0.000050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00010	0.0015	<0.000020	<0.000050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00010	0.0014	<0.000100	<0.000050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00010	0.00185	<0.000100	<0.000050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00010	0.00139	<0.000100	<0.000050
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.010	<0.0000050	0.881	<0.000010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.010	<0.0000050	0.836	<0.000010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.010	<0.0000050	0.98	<0.000010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.010	<0.0000050	0.832	<0.000010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.010	0.0000052	1.02	<0.000010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.010	<0.0000050	0.746	<0.000010
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00050	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00010	<0.00020		<0.010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00010	<0.00020		<0.010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00010	<0.00020		0.026
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000050	<0.0010	0.089	0.00032
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000050	<0.0010	0.0762	0.00026
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000050	<0.0010	0.296	0.00038
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000050	<0.0010	0.0856	0.00026
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000050	<0.0010	0.11	0.00029
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000050	<0.0010	0.0805	0.0005
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.0000050	0.000291	<0.00050	<0.050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.0000050	0.000274	<0.00050	<0.050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0.00000054	0.000348	<0.00050	<0.050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.0000050	0.000293	<0.00050	<0.050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.0000050	0.0005	<0.00050	<0.050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.0000050	0.000202	<0.00050	<0.050
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M					
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0.128		0.00028	<0.000050	1.25
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	0.106		0.00028	<0.000050	1.12
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0.175		0.0003	<0.000050	1.41
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M					
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	0.115		0.00032	<0.000050	1.17
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	0.141		0.0003	<0.000050	1.63
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0.097		0.00022	<0.000050	1.13
SW-08		L2755503-2	2024/04/25	Water	M					

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000010	0.626	0.00378	<0.50
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000010	0.523	0.00347	<0.50
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000010	2.41	0.00531	<0.50
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000010	0.58	0.00372	<0.50
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000010	0.765	0.00453	<0.50
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000010	0.538	0.00282	<0.50
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0.00033	<0.00010	0.000174	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00030	<0.00010	0.000149	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00030	<0.00010	0.000152	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00030	<0.00010	0.000156	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00030	<0.00010	0.000156	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0.00062	<0.00010	0.00066	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M		<0.0010	<0.00020
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M		<0.0010	<0.00020
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M		0.001	<0.00030
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M		<0.0010	<0.00020
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M		<0.0010	<0.00020
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M		<0.0010	<0.00020
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000000020	
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M		
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000000020	<0.000000020
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000000080	
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000000080	
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000000020	
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M			
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.25	<0.25	<0.1
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.25	<0.25	<0.1
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.25	<0.25	<0.1
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.25	<0.25	<0.1
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.1	<0.00050	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.1	<0.00050	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.1	<0.00050	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050	<0.00040
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050	<0.00040
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050	<0.00040
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00040	<0.00030	<0.00050	
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochlorome thane	Dibromomethane
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050		
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050		
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050		
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050		
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050		
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050		
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050	<0.0050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050	<0.0050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050	<0.0050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050	<0.0010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050	<0.0010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050	<0.0010
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00075	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00075	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00075	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethylene
						mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00020	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00020	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00020	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00020	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00020	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00050	<0.00050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.00050	<0.00040
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.00050	<0.00040
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.00050	<0.00040
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.00050	<0.00040
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.00050	<0.00040
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	91.5	101
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	90.7	99.5
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	100	101
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	103	102
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	97	98.8
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	80.6	94.6
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000010	<0.000010	<0.0000050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000010	<0.000010	<0.0000050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M		<0.000010	<0.0000050
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M		<0.000010	<0.0000050
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M		<0.000010	<0.0000050
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M		<0.000010	<0.0000050
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000010	<0.000010	<0.000010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000010	<0.000010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000010	<0.000010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000010	<0.000010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000010	<0.000010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000010	<0.000010
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000050	<0.000020	<0.000010
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000050	<0.000020	<0.000010
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.000050	<0.000020	<0.000010
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.000050	
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	<0.000050	
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.000050	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.000050	
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.000050	
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M		<0.000050
SW-08		L2755503-2	2024/04/25	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	110	105	<0.29
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M	126	107	
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	129	101	<0.70
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	113	100	
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	129	103	
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	111	112	<0.78
SW-08		L2755503-2	2024/04/25	Water	M			<0.55

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.28	<0.27	<0.29
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.74	<0.57	<0.58
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.70	<0.91	<0.91
SW-08		L2755503-2	2024/04/25	Water	M	<0.52	<0.89	<0.95

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.27	0.5	3.9	<0.25
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M				
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.56	<0.63	2.76	<0.79
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M				
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M				
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.89	0.83	2.25	<0.78
SW-08		L2755503-2	2024/04/25	Water	M	<0.88	<1.5	11.6	<0.76

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0.4	<0.22	<0.16
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.54	<0.47	<0.34
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.66	<0.60	<0.39
SW-08		L2755503-2	2024/04/25	Water	M	<0.40	<0.38	<0.37

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.15	<0.20	<0.16
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.32	<0.40	<0.35
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.39	<0.48	<0.42
SW-08		L2755503-2	2024/04/25	Water	M	<0.36	<0.47	<0.41

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.20	<0.25	<0.59
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.28	<0.37	<0.83
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.45	<0.56	<0.63
SW-08		L2755503-2	2024/04/25	Water	M	<0.45	<0.44	<5.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0	0
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M		
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0	0
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M		
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M		
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	1	0
SW-08		L2755503-2	2024/04/25	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0	0
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M		
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0	0
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M		
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M		
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0	0
SW-08		L2755503-2	2024/04/25	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M		
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0	0
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M		
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0	0
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M		
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M		
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M		
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0	0
SW-08		L2755503-2	2024/04/25	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0	0	<0.22
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	0	0	<0.63
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	0	0	0.83
SW-08		L2755503-2	2024/04/25	Water	M	0	0	<1.5

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.25	<0.29	<0.20	<0.28
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M				
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.37	<0.58	<0.40	<0.74
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M				
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M				
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.56	<0.91	<0.48	<0.70
SW-08		L2755503-2	2024/04/25	Water	M	<0.45	<0.95	<0.47	<0.52

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	<0.24	<0.29	<0.25	
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M				
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.54	<0.70	<0.79	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M				
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M				
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.66	<0.78	<0.78	
SW-08		L2755503-2	2024/04/25	Water	M	<0.40	<0.55	<0.76	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M			0
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			0.000828
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			0.00898
SW-08		L2755503-2	2024/04/25	Water	M			0.00348

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	0.426	0.834	71
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	1	2	
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	1.11	2.22	
SW-08		L2755503-2	2024/04/25	Water	M	0.869	1.73	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	70	75	71
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	74	70	74
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	74	63	68
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	74	65	66
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M	70	56	71
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M				<0.25
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M				
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M				
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M				<0.25
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				<0.25
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M				<0.25
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M				<0.25
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M				<0.25
SW-08		L2755503-2	2024/04/25	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M	<0.25		102
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M			
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M	<0.25		110
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M	<0.25		86.2
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M	<0.25		87.6
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M	<0.25		112
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M	<0.25		112
SW-08		L2755503-2	2024/04/25	Water	M	<0.25		73.8

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M			
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M			
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M			<5.0
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M			
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M			
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M			
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M			
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M			
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M			
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M			
SW-08		L2755503-2	2024/04/25	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-07	SW-07	VA25A9554-003	2025/04/28	Water	M	<5.0	<5.0	<10	<5.0
SW-07	SW21-7	VA25A9648-003	2025/04/29	Water	M				
SW-07	SW21-7	VA25B0655-003	2025/05/08	Water	M				
SW-07	SW-07	VA25B1050-003	2025/05/13	Water	M				
SW-07	SW-07	VA25B1052-003	2025/05/13	Water	M				
SW-07	SW21-7	VA25B1182-003	2025/05/14	Water	M				
SW-07	SW21-7	VA25B1920-003	2025/05/22	Water	M				
SW-08	SW21-8	VA24A9057-002	2024/04/25	Water	M				
SW-08		L2755503-2	2024/04/25	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	1.7		
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	1.2		
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	1.3		
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	1.8		
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	2.1		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	2.9	4.90
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	2.5	4.20
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	2.5	3.90
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	8.4	13.20
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M	4.2	6.30

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	7.2	0.00	96.6
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	6	0.00	95.1
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	6.8	0.00	97.3
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	5.9	0.00	93.0
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	6.6	0.00	90.9

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	12.65	
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	12.31	
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	12.25	
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	11.56	
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M	10.80	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	3.08	3.1	165.00
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	3.43	3.58	175.80
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	3.46	3.15	157.40
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	2.39	2.3	157.00
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	2.76	2.88	190.10

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	5.75	6.3	0	<1.0
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	5.68	6.24	0	<1.0
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	5.63	6.15	0	<1.0
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	6.22	6.13	0	<1.0
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	5.70	6.44	0	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	4.00	
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	4.50	
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	5.60	
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	6.10	
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M	7.70	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	12	<3.0	2.39
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	11	<3.0	1.9
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<10	<3.0	1.82
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<10	<3.0	2.03
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	16	<3.0	2.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	2.29	0	0.72	<1
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	2.01	0	0.47	<1
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	2.36	0.01	0.13	<1
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	2.14	0.04	0.25	2
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	2.16	1.8	0.42	<1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M		<0.0050	<0.050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M		<0.0050	<0.050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M		<0.0050	<0.050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M		<0.0050	<0.050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.50	<0.020	0.0226
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.50	<0.020	0.0133
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.50	<0.020	0.012
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.50	<0.020	0.0134
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.50	<0.020	0.0207

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.0010		
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.0010		
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.0010		
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.0010		
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0.39	0.198	<0.00010	0.0001
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.32	0.161	<0.00010	0.00011
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0.31	0.155	<0.00010	<0.00010
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0.3	0.143	<0.00010	<0.00010
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	0.33	0.161	<0.00010	0.00012

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0.00182	<0.000100	<0.000050	<0.010
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.00138	<0.000100	<0.000050	<0.010
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0.00127	<0.000100	<0.000050	<0.010
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0.00133	<0.000100	<0.000050	<0.010
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	0.00159	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.0000050	0.788	0.000016	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.0000050	0.647	0.000012	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.0000050	0.613	0.00001	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0.000005	0.692	0.00001	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.0000050	0.699	0.000015	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050	<0.00010
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050	<0.00010
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			<0.00010
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050	<0.00010
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050		0.07	0.000075
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050		0.03	<0.000050
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050		0.032	<0.000050
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050		0.028	<0.000050
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050		0.065	0.000068

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.0010	0.103	0.00318	<0.0000050
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.0010	0.0691	0.00108	<0.0000050
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.0010	0.0698	0.00118	<0.0000050
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.0010	0.0735	0.00114	<0.0000050
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.0010	0.0849	0.00274	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0.00021	<0.00050	<0.050	0.112	
SW-08		L2755588-2	2024/05/02	Water	M					
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.000178	<0.00050	<0.050	0.07	
SW-08		L2755694-2	2024/05/10	Water	M					
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0.000374	<0.00050	<0.050	0.079	
SW-08		L2755820-2	2024/05/16	Water	M					
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0.000197	<0.00050	<0.050	0.061	
SW-08		L2755916-2	2024/05/23	Water	M					
SW-08		VA24B4655-002	2024/06/20	Water	M	0.000207	<0.00050	<0.050	0.095	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0.00029	<0.000050	1.29	<0.000010
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.00028	<0.000050	1.02	<0.000010
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00020	<0.000050	1.01	<0.000010
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0.00022	<0.000050	1.06	<0.000010
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	0.00025	<0.000050	1.06	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0.568	0.00315	<0.50	<0.00020
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.444	0.0024	<0.50	<0.00020
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0.434	0.00242	<0.50	<0.00020
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0.467	0.00255	<0.50	<0.00020
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	0.541	0.00286	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000010	<0.00010	<0.00010	0.00343
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000010	<0.00010	<0.00010	0.00098
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000010	<0.00010	<0.00010	0.00109
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000010	<0.00010	<0.00010	0.00089
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000010	<0.00010	<0.00010	0.00187

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00010	0.000698	<0.00050	
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00010	0.00057	<0.00050	
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00010	0.000603	<0.00050	
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00010	0.000581	<0.00050	
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00010	0.000661	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.0030	<0.00020	0.14	<0.00010
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.0030	<0.00020	0.153	<0.00010
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.0030	<0.00020	0.141	<0.00010
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.0030	<0.00020	0.142	<0.00010
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.0030	<0.00020	0.121	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00010	0.00145	<0.000100	<0.000050
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00010	0.00127	<0.000100	<0.000050
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00010	0.00124	<0.000100	<0.000050
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00010	0.0014	<0.000100	<0.000050
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00010	0.00142	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.010	<0.0000050	0.769	<0.000010
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.010	<0.0000050	0.664	0.000011
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.010	<0.0000050	0.654	0.00001
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.010	<0.0000050	0.707	0.00001
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.010	<0.0000050	0.731	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050		
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00010	<0.00020		0.021
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00010	<0.00020		0.022
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00010	<0.00020		0.021
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00010	<0.00020		0.017
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00010	<0.00020		0.022

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000050	<0.0010	0.0905	0.00067
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000050	<0.0010	0.0863	0.0005
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000050	<0.0010	0.176	0.00056
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000050	<0.0010	0.091	0.00053
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000050	<0.0010	0.0802	0.00072

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.0000050	0.000198	<0.00050	<0.050
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.0000050	0.000162	<0.00050	<0.050
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.0000050	0.000193	<0.00050	<0.050
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.0000050	0.000189	<0.00050	<0.050
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.0000050	0.000202	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0.102		0.00024	<0.000050	1.21
SW-08		L2755588-2	2024/05/02	Water	M					
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.087		0.00025	<0.000050	1.04
SW-08		L2755694-2	2024/05/10	Water	M					
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0.112		0.0002	<0.000050	0.88
SW-08		L2755820-2	2024/05/16	Water	M					
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0.074		0.00024	<0.000050	1
SW-08		L2755916-2	2024/05/23	Water	M					
SW-08		VA24B4655-002	2024/06/20	Water	M	0.093		<0.00020	<0.000050	0.977

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000010	0.563	0.00297	<0.50
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000010	0.49	0.00261	<0.50
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000010	1.37	0.0029	<0.50
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000010	0.63	0.00257	<0.50
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000010	0.53	0.00275	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0.00061	<0.00010	0.000608	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.00069	<0.00010	0.000604	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0.00069	<0.00010	0.000551	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0.00063	<0.00010	0.000555	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	0.00046	<0.00010	0.000556	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M		<0.0010	<0.00020
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M		<0.0010	<0.00020
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M		0.0012	<0.00020
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M		<0.0010	<0.00020
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000000020	
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000000020	
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000000020	
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000000020	
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000000030	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.25	<0.25	<0.1
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.25	<0.25	<0.1
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.25	<0.25	<0.1
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.25	<0.25	<0.1
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.1	<0.00050	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.1	<0.00050	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.1	<0.00050	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.1	<0.00050	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050	<0.00040
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050	<0.00040
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00050	<0.00040
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050	<0.00040
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00040	<0.00030	<0.00050	<0.0010
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00040	<0.00030	<0.00050	
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00040	<0.00030	<0.00050	
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichloromethane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050		
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050		
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050		
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050		
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050	<0.0050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050	<0.0050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00050	<0.0050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050	<0.0050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050	<0.0010
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050	<0.0010
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00050	<0.0010
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050	<0.0010
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00075	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00075	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00075	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00075	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00020	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00020	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00020	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00020	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.00050	<0.00040
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.00050	<0.00040
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.00050	<0.00040
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.00050	<0.00040
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	100	93.1
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	84.8	100
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	82.6	94.1
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	77.5	96.7
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M	74.7	99.6

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000010	<0.000010	<0.0000050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000010	<0.000010	<0.0000050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000010	<0.000010	<0.0000050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000010	<0.000010	<0.0000050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M		<0.000010	<0.0000050
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M		<0.000010	<0.0000050
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M		<0.000010	<0.0000050
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M		<0.000010	<0.0000050
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000010	<0.000010
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000010	<0.000010
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000010	<0.000010
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000010	<0.000010
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.000050	<0.000020	<0.000010
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.000050	<0.000020	<0.000010
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.000050	<0.000020	<0.000010
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.000050	<0.000020	<0.000010
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M		<0.000050
SW-08		L2755588-2	2024/05/02	Water	M		
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M		<0.000050
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M		<0.000050
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M		<0.000050
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M		<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	77.6	109	<0.50
SW-08		L2755588-2	2024/05/02	Water	M			<0.23
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	90.2	104	<0.54
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	102	104	<0.29
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	94.8	111	<0.31
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	115	113	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.38	<0.34	<0.32
SW-08		L2755588-2	2024/05/02	Water	M	<0.19	<0.16	<0.16
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.41	<0.59	<0.61
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.26	<0.25	<0.26
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.22	<0.15	<0.14
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.33	0.601	<2.1	<0.73
SW-08		L2755588-2	2024/05/02	Water	M	<0.16	0.54	<8.7	<0.39
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.59	<0.98	<3.5	<0.86
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.25	<0.64	<2.9	<0.30
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.14	0.349	2.05	<0.21
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.30	<0.27	<0.26
SW-08		L2755588-2	2024/05/02	Water	M	0.484	<0.10	<0.10
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.78	<0.50	<0.62
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.37	<0.14	<0.15
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.33	<0.16	<0.12
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.26	<0.36	<0.30
SW-08		L2755588-2	2024/05/02	Water	M	<0.096	<0.13	<0.11
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.696	<0.57	<0.61
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.14	<0.20	0.182
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.11	<0.16	<0.12
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.26	<0.34	<0.78
SW-08		L2755588-2	2024/05/02	Water	M	<0.26	<0.26	<1.4
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<2.8	<0.69	<2.8
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.41	<0.49	<1.9
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.34	<0.45	<0.74
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	1	0
SW-08		L2755588-2	2024/05/02	Water	M	0	0
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0	0
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0	0
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	1	0
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0	0
SW-08		L2755588-2	2024/05/02	Water	M	0	0
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0	2
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0	0
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0	0
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0	0
SW-08		L2755588-2	2024/05/02	Water	M	0	0
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0	1
SW-08		L2755694-2	2024/05/10	Water	M		
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0	0
SW-08		L2755820-2	2024/05/16	Water	M		
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0	0
SW-08		L2755916-2	2024/05/23	Water	M		
SW-08		VA24B4655-002	2024/06/20	Water	M		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0	0	0.601
SW-08		L2755588-2	2024/05/02	Water	M	0	0	0.794
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0	0	<0.98
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0	0	<0.64
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0	0	0.349
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.34	<0.34	<0.36	<0.38
SW-08		L2755588-2	2024/05/02	Water	M	<0.26	<0.16	<0.13	<0.19
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	<0.69	<0.61	1.64	<0.41
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.49	<0.26	<0.20	<0.26
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.45	<0.15	<0.16	<0.22
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	<0.30	<0.50	<0.73	
SW-08		L2755588-2	2024/05/02	Water	M	0.484	<0.23	<0.39	
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	0.78	<0.54	<0.86	
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	<0.15	<0.29	<0.30	
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.18	<0.31	<0.21	
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			0.00601
SW-08		L2755588-2	2024/05/02	Water	M			0.0199
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			0.093
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			0.0182
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			0.00411
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M	0.64	1.27	
SW-08		L2755588-2	2024/05/02	Water	M	0.316	0.609	
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M	1.04	1.68	
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M	0.412	0.793	
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	0.365	0.715	
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-6-7-8- HpCDF	Surrogate-13C12- 1-2-3-4-7-8-9- HpCDF	Surrogate-13C12- 1-2-3-4-7-8- HxCDD
						%	%	%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M				
SW-08		L2755588-2	2024/05/02	Water	M				<0.25
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M				
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M				
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M				<0.25
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M				<0.25

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M	<0.25		103
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M	<0.25		85.1
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M	<0.25		87.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M			
SW-08		L2755588-2	2024/05/02	Water	M			
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M			
SW-08		L2755694-2	2024/05/10	Water	M			
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M			
SW-08		L2755820-2	2024/05/16	Water	M			
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M			
SW-08		L2755916-2	2024/05/23	Water	M			
SW-08		VA24B4655-002	2024/06/20	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24A9687-002	2024/05/02	Water	M				
SW-08		L2755588-2	2024/05/02	Water	M				
SW-08	SW21-8	VA24B0401-002	2024/05/10	Water	M				
SW-08		L2755694-2	2024/05/10	Water	M				
SW-08	SW21-8	VA24B1087-002	2024/05/16	Water	M				
SW-08		L2755820-2	2024/05/16	Water	M				
SW-08	SW21-8	VA24B1693-002	2024/05/23	Water	M				
SW-08		L2755916-2	2024/05/23	Water	M				
SW-08		VA24B4655-002	2024/06/20	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	2		
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	2.3		
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	1.9		
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	2.2		
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	1.9		
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	2.1		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M			
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M	4.5	6.40
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	6.2	8.90
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	6.4	8.90
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	5.5	8.40
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	5.1	8.00
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	5.3	8.30

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	7.5	0.00	96.7
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	9.3	0.00	97.4
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	9.8	0.29	97.6
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	9.1	-0.16	98.5
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	9	-0.27	98.3
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	9.4	-0.29	100.4

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M	11.01	
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	11.20	
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	10.85	
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	12.07	
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	12.17	
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	12.39	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	2.39	2.64	179.70
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	2.41	2.28	218.60
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	2.2	2.2	141.00
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	3.88	4.08	182.50
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	3.87	3.95	163.10
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	3.3	3.04	177.70

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	6.49	6.49	0	<1.0
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	5.65	6.35	0	<1.0
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	5.98	6.52	0	<1.0
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	5.70	6.44	0	<1.0
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	6.14	6.32	0	<1.0
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	6.14	6.48	0	<1.0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M	9.60	
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	9.20	
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	10.64	
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	6.63	
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	6.21	
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	6.35	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	15	4.4	2.21
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	10	<3.0	2.3
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	20	<3.0	2.56
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	19	<3.0	2.65
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	15	<3.0	2.66
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	13	<3.0	2.79

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	2.24	0	0.28	2
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	2.3	0.43	0.41	2
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	2.42	0.11	0.35	2
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	2.85	0.66	0.84	4
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	2.66	1.21	0.30	9
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	2.76	0.2	0.27	1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M		<0.0050	<0.050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M		<0.0050	<0.050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M		<0.0050	<0.050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M		<0.0050	<0.050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M		<0.0050	<0.050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M		<0.0050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	0.54	<0.020	0.032
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	0.62	<0.020	0.0409
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0.6	<0.020	0.0308
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	0.64	<0.020	0.0384
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	0.6	<0.020	0.036
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.61	<0.020	0.0377

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.0010		
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.0010		
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.0010		
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.0010		
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.0010		
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.0010		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M			
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	0.32	0.123	<0.00010	0.00011
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	0.41	0.122	<0.00010	<0.00010
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0.33	0.111	<0.00010	0.00012
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	0.44	0.132	<0.00010	<0.00010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	0.48	0.164	<0.00010	0.00016
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.46	0.154	<0.00010	0.00011

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	0.0016	<0.000100	<0.000050	<0.010
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	0.00162	<0.000100	<0.000050	<0.010
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0.00167	<0.000100	<0.000050	<0.010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	0.0019	<0.000100	<0.000050	<0.010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	0.00205	<0.000100	<0.000050	<0.010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.00198	<0.000100	<0.000050	<0.010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.0000050	0.741	0.000012	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.0000050	0.774	0.000013	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.0000050	0.872	0.000011	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.0000050	0.89	0.000014	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.0000050	0.895	0.000015	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.0000050	0.938	0.000016	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050	<0.00010
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050	<0.00010
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050	<0.00010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050	<0.00010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050	<0.00010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050		0.05	0.000053
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050		0.044	0.000054
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050		0.039	<0.000050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050		0.045	<0.000050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050		0.051	0.000061
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050		0.043	0.000051

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.0010	0.0878	0.00222	<0.0000050
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.0010	0.0894	0.0021	<0.0000050
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.0010	0.0942	0.00189	<0.0000050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.0010	0.105	0.00134	<0.0000050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.0010	0.104	0.00131	<0.0000050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.0010	0.108	0.0015	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M					
SW-08		VA24B7579-002	2024/07/18	Water	M	0.000232	<0.00050	<0.050	0.091	
SW-08		L2756717-2	2024/07/18	Water	M					
SW-08		VA24C1546-002	2024/08/22	Water	M	0.000251	<0.00050	<0.050	0.103	
SW-08		L2757144-2	2024/08/22	Water	M					
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0.000274	<0.00050	<0.050	0.104	
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	0.000257	<0.00050	<0.050	0.126	
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	0.000268	<0.00050	<0.050	0.123	
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.000277	<0.00050	<0.050	0.137	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	0.00026	<0.000050	1.12	<0.000010
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	0.00026	<0.000050	1.06	<0.000010
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0.00028	<0.000050	1.12	<0.000010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	0.00037	<0.000050	1.45	<0.000010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	0.00033	<0.000050	1.64	<0.000010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.0003	<0.000050	1.66	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	0.56	0.00312	<0.50	<0.00020
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	0.615	0.00312	<0.50	<0.00020
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0.648	0.00299	<0.50	<0.00020
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	0.645	0.00373	<0.50	<0.00020
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	0.609	0.00365	<0.50	<0.00020
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.683	0.00399	<0.50	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.000010	<0.00010	<0.00010	0.0009
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000010	<0.00010	<0.00010	0.00106
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000010	<0.00010	<0.00010	0.00078
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000010	<0.00010	<0.00010	0.00112
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000010	<0.00010	<0.00010	0.00143
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000010	<0.00010	<0.00010	0.00133

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00010	0.000554	<0.00050	
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00010	0.000521	<0.00050	
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00010	0.000541	<0.00050	
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00010	0.000655	<0.00050	
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00010	0.000659	<0.00050	
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00010	0.000624	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.0030	<0.00020	0.115	<0.00010
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.0030	<0.00020	0.102	<0.00010
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.0030	<0.00020	0.105	<0.00010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.0030	<0.00020	0.125	<0.00010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.0030	<0.00020	0.149	<0.00010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.0030	<0.00020	0.138	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00010	0.00148	<0.000100	<0.000050
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00010	0.00154	<0.000100	<0.000050
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00010	0.00169	<0.000100	<0.000050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00010	0.00181	<0.000100	<0.000050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00010	0.00182	<0.000100	<0.000050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00010	0.00184	<0.000100	<0.000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.010	<0.0000050	0.746	0.000012
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	0.013	<0.0000050	0.776	0.000012
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.010	<0.0000050	0.814	0.000014
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.010	<0.0000050	0.963	0.000012
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.010	<0.0000050	0.896	0.000014
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.010	<0.0000050	0.919	0.000014

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00010	<0.00020		0.027
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00010	<0.00020		0.021
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00010	<0.00020		0.024
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00010	<0.00020		0.032
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00010	0.00051		0.031
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00010	<0.00020		0.026

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.000050	<0.0010	0.0926	0.0007
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000050	<0.0010	0.0881	0.00089
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000050	<0.0010	0.0948	0.00104
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000050	<0.0010	0.108	0.00066
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	0.000056	<0.0010	0.103	0.00058
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000050	<0.0010	0.113	0.00055

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.0000050	0.000209	<0.00050	<0.050
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.0000050	0.000254	<0.00050	<0.050
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.0000050	0.000285	<0.00050	<0.050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.0000050	0.000273	<0.00050	<0.050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.0000050	0.000241	<0.00050	<0.050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.0000050	0.000255	<0.00050	<0.050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M					
SW-08		VA24B7579-002	2024/07/18	Water	M	0.1		0.00026	<0.000050	1.03
SW-08		L2756717-2	2024/07/18	Water	M					
SW-08		VA24C1546-002	2024/08/22	Water	M	0.101		0.00023	<0.000050	1.04
SW-08		L2757144-2	2024/08/22	Water	M					
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0.119		0.00027	<0.000050	1.07
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	0.134		0.00034	<0.000050	1.49
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	0.118		0.00035	<0.000050	1.68
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.135		0.00036	<0.000050	1.7

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.000010	0.633	0.00299	<0.50
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000010	0.606	0.00287	<0.50
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000010	0.683	0.00327	<0.50
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000010	0.719	0.00382	<0.50
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000010	0.624	0.00396	<0.50
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000010	0.725	0.0039	<0.50

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	0.00049	<0.00010	0.000522	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	0.00042	<0.00010	0.000494	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0.00041	<0.00010	0.000521	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	0.00064	<0.00010	0.000657	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	0.00081	<0.00010	0.000658	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.00063	<0.00010	0.000594	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M		<0.0010	<0.00020
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M		<0.0010	<0.00020
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M		<0.0010	<0.00020
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M		<0.0010	<0.00020
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M		<0.0010	<0.00020
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M		<0.0010	<0.00020

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M	0.000000037	
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	0.000000049	
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000000020	
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000000080	
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000000020	
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000000020	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M			
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.25	<0.25	<0.1
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.25	<0.25	<0.1
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.25	<0.25	<0.1
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.25	<0.25	<0.1
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.25	<0.25	<0.1
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.25	<0.25	<0.1

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.1	<0.00050	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.1	<0.00050	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.1	<0.00050	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.1	<0.00050	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.1	<0.00050	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.1	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050	<0.00040
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050	<0.00040
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050	<0.00040
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050	<0.00040
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050	<0.00040
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00040	<0.00030	<0.00050	
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00040	<0.00030	<0.00050	
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00040	<0.00030	<0.00050	
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00040	<0.00030	<0.00050	
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00040	<0.00030	<0.00050	
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00040	<0.00030	<0.00050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochloromethane	Dibromomethane
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050		
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050		
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050		
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050		
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050		
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050		

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050	<0.0050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050	<0.0050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050	<0.0050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050	<0.0050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050	<0.0050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050	<0.0050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050	<0.0010
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050	<0.0010
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050	<0.0010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050	<0.0010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050	<0.0010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050	<0.0010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00075	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00075	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00075	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00075	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00075	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00075	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethane
						mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00020	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00020	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00020	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00020	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00020	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00020	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00050	<0.00050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00050	<0.00050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.00050	<0.00040
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.00050	<0.00040
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.00050	<0.00040
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.00050	<0.00040
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.00050	<0.00040
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.00050	<0.00040

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M	84	98.6
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	91.2	100
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	90	98.9
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	94.5	102
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	96.5	103
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	92.4	100

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.000010	<0.000010	<0.0000050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000010	<0.000010	<0.0000050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000010	<0.000010	<0.0000050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000010	<0.000010	<0.0000050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000010	<0.000010	<0.0000050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000010	<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M		<0.000010	<0.0000050
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M		<0.000010	<0.0000050
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M		<0.000010	<0.0000050
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M		<0.000010	<0.0000050
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M		<0.000010	<0.0000050
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M		<0.000010	<0.0000050

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000010	<0.000010	<0.000010
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000010	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.000010	<0.000010
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000010	<0.000010
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000010	<0.000010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000010	<0.000010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000010	<0.000010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000010	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.000050	<0.000020	<0.000010
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000050	<0.000020	<0.000010
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000050	<0.000020	<0.000010
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000050	<0.000020	<0.000010
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000050	<0.000020	<0.000010
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000050	<0.000020	<0.000010

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M		<0.000050
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.000050	
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.000050	
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.000050	
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.000050	
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.000050	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	91.6	104	
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	96.9	106	
SW-08		L2757144-2	2024/08/22	Water	M			<1
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	100	105	<0.64
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	94.6	95.8	
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	90.9	96.3	
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	75.1	69.5	<0.16

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M	<2	<2	<2
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.59	<0.83	<0.81
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.24	<0.22	<0.22

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M				
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M				
SW-08		L2757144-2	2024/08/22	Water	M	<2	<3	<4	<1
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.81	<0.76	2	<0.60
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M				
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M				
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.21	0.61	4.13	<0.20

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDF	2-3-4-7-8-PeCDF	1-2-3-4-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M	<2	<2	<2
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.41	<0.34	<0.27
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.34	<0.18	<0.10

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M	<2	<2	<2
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.27	<0.36	<0.28
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.090	<0.14	<0.11

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M	<3	<3	<4
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.47	<0.72	<1.4
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.14	<0.20	0.68

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M		
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M		
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0	0
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M		
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M		
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	1	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M		
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M		
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0	0
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M		
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M		
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-08		L2756326-2	2024/06/20	Water	M		
SW-08		VA24B7579-002	2024/07/18	Water	M		
SW-08		L2756717-2	2024/07/18	Water	M		
SW-08		VA24C1546-002	2024/08/22	Water	M		
SW-08		L2757144-2	2024/08/22	Water	M		
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0	0
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M		
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M		
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0	0

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0	0	<0.76
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0	0	0.61

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M				
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M				
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.72	<0.83	<0.36	<0.59
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M				
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M				
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.20	<0.22	<0.14	<0.24

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M				
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M				
SW-08		L2757144-2	2024/08/22	Water	M				0
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	<0.41	<0.64	<0.60	
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M				
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M				
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	<0.19	<0.16	<0.20	

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M	0	0	
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M			0
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M			0.00756

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	0.894	1.79	71
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	0.311	0.604	71

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	81	72	82
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	76	78	74

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12- 1-2-3-4-7-8- HxCDF	Surrogate-13C12- 1-2-3-6-7-8- HxCDD	Surrogate-13C12- 1-2-3-6-7-8- HxCDF
						%	%	%
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	87	82	91
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	82	78	94

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	85	73	73
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	80	62	67

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	88	76	72
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	78	65	67

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M	71	50	73
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M	74	58	76

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M	<0.0003			
SW-08		VA24B7579-002	2024/07/18	Water	M				<0.25
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M				<0.25
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M				
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M				<0.25
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M				<0.25
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M	<0.25		96.3
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M	<0.25		105
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M			
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M	<0.25		98.7
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M	<0.25		104
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M			
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M			
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M			
SW-08		VA24B7579-002	2024/07/18	Water	M			
SW-08		L2756717-2	2024/07/18	Water	M			
SW-08		VA24C1546-002	2024/08/22	Water	M			
SW-08		L2757144-2	2024/08/22	Water	M			
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M			
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M			
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M			
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M			

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-08		L2756326-2	2024/06/20	Water	M				
SW-08		VA24B7579-002	2024/07/18	Water	M				
SW-08		L2756717-2	2024/07/18	Water	M				
SW-08		VA24C1546-002	2024/08/22	Water	M				
SW-08		L2757144-2	2024/08/22	Water	M				
SW-08	SW21-8	VA24C4878-002	2024/09/19	Water	M				
SW-08	SW21-8	VA24C8719-002	2024/10/24	Water	M				
SW-08	SW21-8	VA24C9586-002	2024/10/31	Water	M				
SW-08	SW21-8	VA24D0326-002	2024/11/07	Water	M				

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Alkalinity	Alkalinity-Bicarbonate	Alkalinity-Carbonate
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	1		
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	2.1		

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Alkalinity-Hydroxide	Alkalinity-Phenolphthalein	Colour
						mg/L	mg/L	CU
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M			

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Field	Specific Conductance (SPC)-Field
						uS/cm	uS/cm
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	3.8	6.10
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	5.1	8.60

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Conductivity-Lab	Depth	Dissolved Oxygen (DO)-Field
						uS/cm	m	%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	6.8	-0.29	97.3
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	8.9	-0.20	96.8

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Oxygen (DO)-Field	Dissolved Oxygen (DO)-Lab
						mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	12.24	
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	12.73	

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Organic Carbon (DOC)	Total Organic Carbon (TOC)	ORP-Field
						mg/L	mg/L	mV
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	4.22	3.6	185.20
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	2.65	2.71	183.10

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	pH-Field	pH-Lab	Salinity-Field	Salinity-Lab
						s.u.	s.u.	ppt	ppt
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	5.83	6.06	0	<1.0
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	5.80	6.43	0	<1.0

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Temperature	Total Dissolved Solids (TDS)-Field
						°C	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	5.59	
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	3.88	

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dissolved Solids (TDS)-Lab	Total Suspended Solids (TSS)	Total Hardness
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	18	<3.0	2.09
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	13	<3.0	2.53

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Dissolved Hardness	Turbidity-field	Turbidity-lab	E.coli
						mg/L	NTU	NTU	MPN/100 mL
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	2.12	1.75	0.25	4
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	2.61	0	0.28	1

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorophyll A	Total Ammonia as N (N-NH3)	Bromide (Br)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M		<0.0050	<0.050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M		<0.0050	<0.050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloride (Cl)	Fluoride (F)	Nitrate as N (N-NO3)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.50	<0.020	0.0317
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0.57	<0.020	0.0339

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrite as N (N-NO3)	Nitrate + Nitrite (NO3+NO2)	Total Kjeldahl Nitrogen (TKN)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.0010		
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.0010		

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Nitrogen (T-N)	Dissolved Nitrogen (D-N)	Total Phosphorous (P)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M			

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Sulphate (SO4)	T-Al	T-Sb	T-As
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0.46	0.186	<0.00010	<0.00010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0.53	0.133	<0.00010	<0.00010

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Ba	T-Be	T-Bi	T-B
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0.00177	<0.000100	<0.000050	<0.010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0.00175	<0.000100	<0.000050	<0.010

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cd	T-Ca	T-Cs	T-Cr
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.0000050	0.697	0.000016	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.0000050	0.846	0.000013	<0.00050

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Hexavalent Chromium	Total Trivalent Chromium	T-Co
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050	<0.00010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050	<0.00010

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Cu	T-Ga	T-Fe	T-Pb
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050		0.043	0.00005
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050		0.044	<0.000050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Li	T-Mg	T-Mn	T-Hg
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.0010	0.0846	0.00168	<0.0000050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.0010	0.101	0.00108	<0.0000050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Mo	T-Ni	T-P	T-K	T-Re
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0.00015	<0.00050	<0.050	0.103	
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0.000212	<0.00050	<0.050	0.107	

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Rb	T-Se	T-Si	T-Ag
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0.00039	<0.000050	1.42	<0.000010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0.00033	<0.000050	1.53	<0.000010

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Na	T-Sr	T-S	T-Te
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0.425	0.00343	<0.50	<0.00020
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0.628	0.00385	<0.50	<0.00020

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Tl	T-Th	T-Sn	T-Ti
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000010	<0.00010	<0.00010	0.00159
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000010	<0.00010	<0.00010	0.00108

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-W	T-U	T-V	T-Y
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00010	0.000485	<0.00050	
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00010	0.000589	<0.00050	

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	T-Zn	T-Zr	D-Al	D-Sb
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.0030	<0.00020	0.172	<0.00010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.0030	<0.00020	0.123	<0.00010

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-As	D-Ba	D-Be	D-Bi
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00010	0.00157	<0.000100	<0.000050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00010	0.00176	<0.000100	<0.000050

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-B	D-Cd	D-Ca	D-Cs
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.010	<0.0000050	0.705	0.000014
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.010	<0.0000050	0.827	0.000011

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Cr	Dissolved Hexavalent Chromium	Dissolved Trivalent Chromium
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Co	D-Cu	D-Ga	D-Fe
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00010	<0.00020		0.025
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00010	<0.00020		0.028

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Pb	D-Li	D-Mg	D-Mn
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000050	<0.0010	0.0863	0.00094
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000050	<0.0010	0.132	0.00048

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Hg	D-Mo	D-Ni	D-P
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.0000050	0.000141	<0.00050	<0.050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.0000050	0.00022	<0.00050	<0.050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-K	D-Re	D-Rb	D-Se	D-Si
						mg/L	mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0.105		0.00037	<0.000050	1.31
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0.122		0.00032	<0.000050	1.49

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ag	D-Na	D-Sr	D-S
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000010	0.452	0.00332	<0.50
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000010	0.866	0.00401	<0.50

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Te	D-Tl	D-Th	D-Sn
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00020	<0.000010	<0.00010	<0.00010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00020	<0.000010	<0.00010	<0.00010

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Ti	D-W	D-U	D-V
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0.00075	<0.00010	0.000447	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0.00067	<0.00010	0.000543	<0.00050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	D-Y	D-Zn	D-Zr
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M		<0.0010	<0.00020
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M		<0.0010	<0.00020

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Methylmercury (T-MeHg)	Dissolved Methylmercury (D-MeHg)
						mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000000020	
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000000020	

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Monobutyltin	Dibutyltin	Tributyltin
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M			

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	HEPH	LEPH	Volatile Hydrocarbons (VH6-10)
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.25	<0.25	<0.1
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.25	<0.25	<0.1

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	VPH(C6-C10)	Benzene	Ethylbenzene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.1	<0.00050	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.1	<0.00050	<0.00050

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Methyl-tert-butyl-ether	Styrene	Toluene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050	<0.00040
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050	<0.00040

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	meta-para-Xylene	ortho-Xylene	Total Xylenes	Total BTEX
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00040	<0.00030	<0.00050	
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00040	<0.00030	<0.00050	

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Bromodichlorome thane	Bromoform	Carbon Tetrachloride
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chlorobenzene	Dibromochlorome thane	Dibromomethane
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050		
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050		

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Chloroethane	Chloroform	Chloromethane
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050	<0.0050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050	<0.0050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2- Dichlorobenzene	1-3- Dichlorobenzene	1-4- Dichlorobenzene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1- Dichloroethane	1-2- Dichloroethane	1-1- Dichloroethylene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	cis-1-2-Dichloroethylene	trans-1-2-Dichloroethylene	Dichloromethane
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050	<0.0010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050	<0.0010

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dichloropropane	1-3-Dichloropropene (cis&trans)	cis-1-3-Dichloropropylene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00075	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00075	<0.00050

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	trans-1-3-Dichloropropylene	1-1-1-2-Tetrachloroethane
						mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-2-2-Tetrachloroethane	Tetrachloroethylene
						mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00020	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00020	<0.00050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-1-1- Trichloroethane	1-1-2- Trichloroethane	Trichloroethylene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00050	<0.00050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00050	<0.00050

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Trichlorofluoromethane	Vinyl Chloride
						mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.00050	<0.00040
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.00050	<0.00040

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-4-Bromofluorobenzene(SS)	Surrogate-1-4-Difluorobenzene(SS)
						%	%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	96.7	101
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	93.6	99.3

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Acenaphthene	Acenaphthylene	Acridine
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000010	<0.000010	<0.000010

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000010	<0.000010	<0.0000050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000010	<0.000010	<0.0000050

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Benzo(b+j)fluoranthene	Benzo(g-h-i)perylene	Benzo(k)fluoranthene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000010	<0.000010	<0.000010

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-Chloronaphthalene	Chrysene	Dibenz(a-h)anthracene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M		<0.000010	<0.0000050
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M		<0.000010	<0.0000050

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Fluoranthene	Fluorene	Indeno(1-2-3-cd)pyrene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000010	<0.000010	<0.000010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000010	<0.000010	<0.000010

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-methylnaphthalene	2-methylnaphthalene
						mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000010	<0.000010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000010	<0.000010

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Naphthalene	Phenanthrene	Pyrene
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000050	<0.000020	<0.000010
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000050	<0.000020	<0.000010

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Quinoline	Total PAHs
						mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.000050	
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.000050	

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-Chrysene_d12	Surrogate-Phenanthrene_d10	2-3-7-8-TCDD
						%	%	pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	86.2	98.2	<0.30
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	110	104	<1.1

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-PeCDD	1-2-3-4-7-8-HxCDD	1-2-3-6-7-8-HxCDD
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.29	<0.36	<0.33
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.68	<0.55	<0.53

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8-9-HxCDD	1-2-3-4-6-7-8-HpCDD	OCDD	2-3-7-8-TCDF
						pg/L	pg/L	pg/L	pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.34	<0.77	<1.7	<0.29
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.53	<0.36	1.2	<1.6

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-7-8- PeCDF	2-3-4-7-8- PeCDF	1-2-3-4-7-8- HxCDF
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.40	<0.36	<0.36
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.49	<0.42	<0.24

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-6-7-8-HxCDF	1-2-3-7-8-9-HxCDF	2-3-4-6-7-8-HxCDF
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.41	<0.23	<0.59
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.23	0.3	<0.25

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-3-4-6-7-8- HpCDF	1-2-3-4-7-8-9- HpCDF	OCDF
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	5.32	<0.45	<2.3
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.25	<0.32	<0.58

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HpCDD # of Homologues	Total HpCDF # of Homologues
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0	1
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0	0

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total HxCDD # of Homologues	Total HxCDF # of Homologues
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0	3
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0	0

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total PeCDD # of Homologues	Total PeCDF # of Homologues
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0	0
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0	0

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total TCDD # of Homologues	Total TCDF # of Homologues	Total-HpCDD
								pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0	0	<0.40
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	0	0	<0.36

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-HpCDF	Total-HxCDD	Total-HxCDF	Total-PeCDD
						pg/L	pg/L	pg/L	pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	5.32	<0.36	2.07	<0.29
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.32	<0.55	<0.29	<0.68

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total-PeCDF	Total-TCDD	Total-TCDF	Total Furan TEQ
						pg/L	pg/L	pg/L	pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.40	<0.30	<0.29	
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	<0.49	<1.1	<1.6	

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Dioxin & Furan TEQ	Total Dioxin TEQ	Lower Bound PCDD/F TEQ
						pg/L	pg/L	pg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			0.0532
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M			0

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Mid Point PCDD/F TEQ	Upper Bound PCDD/F TEQ	Surrogate-13C12-1-2-3-4-6-7-8-HpCDD
						pg/L	pg/L	%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	0.633	1.07	
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	1.19	2.35	80

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-6-7-8-HpCDF	Surrogate-13C12-1-2-3-4-7-8-9-HpCDF	Surrogate-13C12-1-2-3-4-7-8-HxCDD
						%	%	%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	80	81	72

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-4-7-8-HxCDF	Surrogate-13C12-1-2-3-6-7-8-HxCDD	Surrogate-13C12-1-2-3-6-7-8-HxCDF
						%	%	%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	78	75	85

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-1-2-3-7-8-9-HxCDF	Surrogate-13C12-1-2-3-7-8-PeCDD	Surrogate-13C12-1-2-3-7-8-PeCDF
						%	%	%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	82	59	60

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-4-6-7-8-HxCDF	Surrogate-13C12-2-3-4-7-8-PeCDF	Surrogate-13C12-2-3-7-8-TCDD
						%	%	%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	81	61	31

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Surrogate-13C12-2-3-7-8-TCDF	Surrogate-13C12-OCDD	Surrogate-37Cl4-2-3-7-8-TCDD(Cleanup)
						%	%	%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M	28	72	32

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	1-2-Dibromoethane	Benzo(b)fluoranthene	BOD5	EPH10-19
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M				<0.25
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M				

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	EPH19-32	Phosphate	Surrogate-3-4-Dichlorotoluene(SS)
						mg/L		%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M	<0.25		92.6
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M			

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Total Coliforms	Heterotrophic Plate Count	Langelier Index
						MPN/100 mL	MPN/100 mL	
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M			

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.

Values with '<' preceding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Nitrogen-Organic	Nitrogen-Total	UV Transmittance
						mg/L	mg/L	%
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M			

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	2-6-Dichlorosyringaldehyde	Total Cyanide	1-2-Propylene Glycol
						mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M			
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M			

Notes:

Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

Appendix D Fresh Water Quality Results from Lorax

Station ID	Extra ID	Sample No.	Sample Date/Time	Sample Matrix	Sample Class	Diethylene Glycol	Ethylene Glycol	Total Glycols	Triethylene Glycol
						mg/L	mg/L	mg/L	mg/L
SW-08	SW21-8	VA24D0970-002	2024/11/14	Water	M				
SW-08	SW21-8	VA24D1404-002	2024/11/19	Water	M				

Notes:
Sample Class 'M' = monitoring, 'F' = field measurements only.
Values with '<' preceeding the result are below the analytical detection limit.

October 16, 2026

APPENDIX D TERRESTRIAL ACIDIFICATION AND EUTROPHICATION ASSESSMENT

Terrestrial Acidification and Eutrophication Assessment

Technical Data Report

October 16, 2026

Prepared by:
Stantec Consulting Ltd.
#500 - 4515 Central Blvd
Burnaby, BC, V5H 0C6

Prepared for:
Woodfibre LNG General Partner Inc.
#900 - 1185 W Georgia Street
Vancouver, BC, V6E 4E6

WLNG-W0001-RE-RP-00358



**Woodfibre
LNG**

Preamble

The Woodfibre Liquefied Natural Gas Project (the Project) is a liquefied natural gas export facility being constructed on the former Woodfibre Pulp and Paper Mill site (the Project) in Átl'ka7tsem (Howe Sound), approximately seven kilometres south of Skwxwú7mesh (Squamish). The Project is on the historical location of a Skwxwú7mesh Úxwumixw (Squamish Nation) village known as Swiyát. Swiyát and Átl'ka7tsem (Howe Sound) are tied to the cultural well-being of Skwxwú7mesh Úxwumixw (Squamish Nation) members, their ancestors, and their descendants, and to other Indigenous groups as defined in the Project's Environmental Assessment Certificates. Woodfibre LNG General Partner Inc. recognizes the importance of these areas to the Skwxwú7mesh stélmexw (Squamish People), and other Indigenous groups. Woodfibre LNG General Partner Inc. seeks to construct and operate the Project in a manner that is respectful of Indigenous values. This Technical Assessment Report is primarily written in English with important place names, species, phrases, and passages provided in the Skwxwú7mesh Sníchim (Squamish language).

Temíxwiḡkw chet wa naantem chet ti temíxw Swiyát
Chet wa sménhemswit kwis ns7éyxnitás chet ti temíxw
We7ú chet kwis t'íchimwit iy íwas chet ek' l tti.

Our ancient ancestors named this place Swiyát
We, as their descendants safeguard these lands
We will continue to swim and fish in these clear waters.

Executive Summary

Woodfibre LNG General Partner Inc. (Woodfibre LNG), as General Partner on behalf of the Woodfibre LNG Limited Partnership will operate the Woodfibre Liquefied Natural Gas (LNG) Project (the Project or Facility), which is located approximately 7 kilometres (km) southwest of Sk̓wx̓wú7mesh (Squamish), British Columbia (BC). The Project will have the capacity to liquefy up to 2.1 million tonnes per year of natural gas and export the LNG via carriers.

Woodfibre LNG is seeking a Waste Discharge Authorization (WDA) permit from the BC Energy Regulator (BCER) to authorize the discharge of air emissions from the Project under the *Environmental Management Act*. Stantec Consulting Ltd. (Stantec) has been retained to complete an acidification and eutrophication assessment of terrestrial ecosystems (vegetation and wetlands) to support the WDA application.

The Project will generate air emissions that have the potential to cause acidification and eutrophication in soils in the vicinity of the Project, which can in turn affect vegetation. The effect pathway of Project air emissions on the terrestrial receiving environment is the deposition of acidifying (sulphur and nitrogen) compounds with the potential to generate changes in soil chemistry and/or the growing substrate of lichens.

The assessment followed the BC Ministry of Environment *Critical Load Screening Guidance for Acidification and Eutrophication of Terrestrial Ecosystems* (BC MOE 2014) and was completed as a desktop-based Level 0 assessment. Air dispersion modelling results for the Project-Alone, Application, and Cumulative Cases were compared with screening thresholds and selected critical loads. Existing soils, terrain, bedrock geology, ecosystem mapping, Vegetation Resources Inventory, and biogeoclimatic ecosystem classification data were used to characterize ecosystems and species sensitive to acid and/or nitrogen deposition and to quantify areas where modelled acid or nitrogen deposition exceeded applicable critical loads.

Key results include the following;

- Screening thresholds for acid deposition, sulphur deposition, and nitrogen deposition were exceeded, confirming that a Level 0 acidification and eutrophication assessment was required.
- The Cumulative Case acid deposition screening isopleth encompassed 3,534.3 hectares (ha) of terrestrial area. Within this area, exposed soils were primarily rated as moderately sensitive to acid deposition, with smaller areas rated as low or high sensitivity.
- No critical loads for acidification or eutrophication were exceeded at baseline or in the Project-alone Case.
- Acidification critical loads for exposed soils were exceeded in the Application Case and Cumulative Case, but not at baseline or in the Project-Alone Case. Exceedance areas totaled 120.1 ha in the Application Case (3.4% of LSA area) and 128.2 ha in the Cumulative Case (3.6% of LSA area).

WOODFIBRE LNG PROJECT: TERRESTRIAL ACIDIFICATION AND EUTROPHICATION ASSESSMENT

October 16, 2026

- Acidification exceedance areas were primarily associated with low elevation coniferous forest near the Project and northward along the Skw̓wú7mesh (Squamish) River valley.
- For eutrophication, the 4 kilograms per hectare per year (kg/ha/yr) empirical critical load for forested upland and wetland ecosystems was exceeded in the Application Case and Cumulative Case in areas immediately adjacent to the Project. Exceedance areas totalled 22.6 ha in the Application Case (0.6% of LSA area) and 25.4 ha in the Cumulative Case (0.7% of LSA area).
- The 2 kg/ha/yr empirical critical load for alpine and subalpine ecosystems and lichens was exceeded in the Application Case and Cumulative Case in the LALSA. Baseline nitrogen deposition (1.8 kg/ha/yr) is already close to the critical load (2 kg/ha/yr). Exceedance area includes 86.4 ha alpine and parkland areas in the Application case (<0.1% of the LALSA). The Application Case exceedance area totalled 10,934.3 ha and the Cumulative Case exceedance totalled 11,314.2 ha. However, predicted nitrogen deposition attenuates rapidly from the area immediately adjacent to the Project to levels between 2 and 2.5 kg/ha/yr throughout the rest of the Squamish River valley (97% of the LALSA), where lichen diversity indices are predicted to experience declines between 1-13% from baseline conditions depending on sensitivity of species groups. The area predicted to experience more elevated nitrogen deposition is constrained to a relatively small area (32 ha) close to Project emission sources (Figure 6) where declines from baseline conditions in excess of 13-39% are predicted.
- The 63 kg/ha/yr empirical critical load for salt marsh was not exceeded in any assessment case; therefore, no eutrophication effects to salt marsh are expected based on the modelled deposition results.

Though modelled acidic deposition does exceed Level 0 critical loads in the Application Case, it does so only in small areas (120.1 ha, approximately 3% of the LSA), and the air dispersion modelling is conservative in its predictions. Based on these factors, Level 0 may be considered an appropriate level of assessment. Predicted exceedances are limited in spatial extent (except for cyanolichens and forage lichens) and are not predicted in the Project-Alone Case; therefore, the assessment indicates a low potential for widespread terrestrial acidification or eutrophication effects within the study areas due to the Project. A monitoring program to refine understanding of nitrogen deposition and potential effects to lichens is recommended.

Limitations

This document entitled Terrestrial Acidification and Eutrophication Assessment was prepared by Stantec Consulting Ltd. (“Stantec”) for the account of Woodfibre LNG Limited Partnership (the “Client”) to support the regulatory review process for its Waste Discharge Authorization (the “Application”) for the Woodfibre LNG (the “Project”). In connection therewith, this document may be reviewed and used by the BC Energy Regulator (BCER) participating in the review process in the normal course of its duties. Except as set forth in the previous sentence, any reliance on this document by any other party or use of it for any other purpose is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document. The information and conclusions in the document are based on the conditions existing at the time the document was published and does not take into account any subsequent changes. Stantec has assumed all information received from the Client and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein. Any use which another party makes of this document is the responsibility and risk of such party. Such party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other party as a result of decisions made or actions taken based on this document.

October 16, 2026

Review and Sign-Off

This document entitled Terrestrial Acidification and Eutrophication Assessment for the Woodfibre LNG Project was prepared by Stantec Consulting Ltd. ("Stantec") for the account of Woodfibre LNG Limited Partnership (the "Client") to support the application to the British Columbia (BC) Energy Regulator (BCER) for a Waste Discharge Authorization (WDA) (the "Application") for air emissions from the Woodfibre LNG Project (the "Project").



Prepared by:

Meghan O'Neill, B.Sc., R.P.Bio.
Associate, Vegetation Ecologist

Zwierink
, Melvin

Digitally signed
by Zwierink,
Melvin
Date: 2026.10.20
16:53:15 -06'00'

Reviewed by:

Mel Zwiernik, P.Ag., CPESC, RPF
Soils and Terrain Specialist

Adriana
MacLeod

Digitally signed
by Adriana
MacLeod
Date: 2026.10.20
12:12:47 -07'00'

Approved by:

Adriana MacLeod, B.Sc.
Project Manager

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**WOODFIBRE LNG PROJECT:
TERRESTRIAL ACIDIFICATION AND EUTROPHICATION ASSESSMENT**

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Squamish-English Translation

Squamish	English
General Terms	
Shk̓weñ	Ocean, saltwater
Stak̓w	Water, river
Locations	
Átl̓k'a7tsem	Howe Sound
Sk̓wx̓wú7mesh	Squamish
Plants	
Sáx̓wi	Grasses/sedges
K̓wáystay	Hemlock tree
Kwl̓l7ay	Red alder tree
X̓ápaʔay	Red cedar tree
Ch'úukw'a	Skunk cabbage
K̓'elhmáy	Yellow cedar tree

Abbreviations

BC	British Columbia
BC MOE	BC Ministry of Environment
CMA	Coastal Mountain-heather Alpine
CWHdm	Coastal Western Hemlock Dry Maritime subzone
CWHvm1	Coastal Western Hemlock Very Wet Maritime subzone, southern submontane variant
CWHvm2	Coastal Western Hemlock Very Wet Maritime subzone, southern montane variant
eq/ha/yr	equivalents per hectare per year
kg/ha/yr	kilograms per hectare per year
km	kilometre
LALSA	Lichen and Alpine LSA
LNG	liquefied natural gas
LSA	local study area
m ³	cubic metres
MHmm1	Mountain Hemlock Moist Maritime subzone, windward variant
MHmmp	Mountain Hemlock Moist Maritime parkland subzone
the Project	Woodfibre Liquefied Natural Gas Project
RSA	regional study area
WDA	Waste Discharge Authorization
Woodfibre LNG	Woodfibre LNG General Partner Inc.

Glossary

soil acidification (acidification)	The process resulting in a decrease in pH levels in soils
soil eutrophication (eutrophication)	The process of an increase of essential plant nutrients in soils or within the growing substrate of lichens

1.0 INTRODUCTION

This report was prepared to provide an assessment of acidification and eutrophication to support the Woodfibre LNG's application for a Waste Discharge Authorization (WDA) for emissions associated with commissioning and operation of the Project.

1.1 PROJECT OVERVIEW

Woodfibre LNG General Partner Inc. (Woodfibre LNG) will operate the Woodfibre Liquefied Natural Gas (LNG) Project (the Project or Facility), which is located on the former Woodfibre Pulp Mill site approximately 7 kilometres (km) southwest of Skw̓xwú7mesh (Squamish), British Columbia (BC).

The Project will have the capacity to liquefy up to 2.1 million tonnes per year of natural gas, have a storage capacity of 250,000 cubic metres (m³), and export the LNG via carriers.

1.2 PURPOSE

Woodfibre LNG is seeking a WDA permit from the BCER to authorize the discharge of air emissions from the Project under the *Environmental Management Act*. The WDA permit application includes emissions from commissioning and operations of the Project. Stantec Consulting Ltd. (Stantec) has been retained to complete a Level 0 terrestrial acidification and eutrophication assessment to support the Technical Assessment Report, required for the WDA application.

This report presents the results of the terrestrial acidification and eutrophication assessment based on the air quality dispersion modelling. It is intended to assist regulatory decision making by providing information about the terrestrial receiving environment and the potential environmental effects of Project emissions on vegetation and soils.

A critical load for acidifying substance input and nutrient input from industrial emissions represents the highest level of sustained deposition of a substance that will not cause long-term harmful change to an ecosystem or species group. The critical load is thus dependent on the inherent characteristics of the ecosystem and is a property of the ecosystem or species group.

The critical load has been defined as: *“a quantitative estimate of an exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge”* (UN/ECE 1992). Nilsson and Grennfelt (1988) specifically defined the critical load for acidic deposition to soils as: *“the highest deposition of acidifying compounds that will not cause chemical changes in the soil which will lead to long-term harmful effects on the structure and function of the ecosystem”*. The purpose of this assessment is to determine if there is the potential for emissions from the Project to cause deleterious effects on sensitive ecosystems. The semi-quantitative assessment considers two effects:

1. Acidification
2. Eutrophication

The *Critical Load Screening Guidance for Acidification and Eutrophication of Terrestrial Ecosystems* (BC MOE 2014) provides direction on assessing critical loads for acidification and eutrophication on terrestrial ecosystems due to deposition of emissions from LNG facilities. This document was followed in developing the methods used in this assessment.

This acidification and eutrophication assessment provides the methods and results of the Level 0 critical loads assessment for the Project.

1.3 POTENTIAL EFFECTS AND EFFECT PATHWAYS

The Project will emit sulphur and nitrogen oxides that have the potential to directly affect soils and directly/indirectly affect vegetation through the process of deposition of acidifying compounds upon soils or the growing substrate of certain types of vegetation and/or lichen. Potential effects on soils due to the deposition of sulphur and/or nitrogen compounds include the subsequent processes of soil acidification (lowering of soil pH) and soil eutrophication (increasing essential plant nutrients in soils). Both of these soil processes can potentially affect vegetation through changes to soil chemistry within the rooting zone of plants. Eutrophication can also occur due to nitrogen deposition upon the growing substrate of lichens, such as rock or wood, and therefore may not be mediated by changes to soil chemistry.

1.3.1 Soil Acidification

Soil acidification can result from the deposition of either sulphur compounds (typically in the form of sulphate, SO_4) alone, or in combination with nitrogen compounds (sulphur plus nitrogen), which is collectively referred to as acid deposition for the purposes of this assessment. Acid forming compounds of sulphate and nitrogen can result in changes to soil nutrient status, aluminum bioavailability, and potentially affect plant species diversity through interspecies competition, declined health, and mortality.

Terrestrial soils that have a low pH, are coarse textured, and/or have low cation exchange capacity are particularly sensitive to acidifying inputs (BC MOE 2014). The rate and extent of soil acidification in response to the deposition of acidifying substances depends on the soil's buffering capacity, which is influenced by base cation content, mineralogy, pH, cation exchange capacity, and organic matter content. In general, sandy acidic soils with very little organic matter in the surface horizon are most sensitive to sulphur and/or acid deposition because they have little capacity to resist (i.e., buffer) acidifying changes in chemical properties and will change in the shortest time in response to deposition of acidifying emissions. Conversely, soils high in organic matter or in clay are generally less sensitive due to high cation exchange capacity resulting from their relatively large surface areas and their negatively charged surfaces, so changes in soil chemistry in response to acidifying emissions will be delayed.

Effects on vegetation due to soil acidification can result from changes in soil pH and related changes to soil chemistry. Plant species vary in terms of their affinity for particular soil pH ranges; therefore, changing soil pH could confer a competitive advantage or disadvantage to some plant species, thereby shifting species composition within a given ecological community over time. As soil pH is lowered due to soil acidification, soil base cations are depleted and this decrease in base saturation contributes to an increase in the movement of aluminum into soil pore water (i.e., solubilization; Blank et al. 1992). Aluminum becomes bioavailable to plants as pH decreases, and therefore, high levels of soil acidification can lead to aluminum toxicity in plants, with subsequent effects on plant health, growth rates, or mortality.

Higher levels of soluble aluminum impair soil nutrient cycling, decomposition by microbial communities, and root growth and function (Holowaychuk and Fessenden 1987).

Coniferous forests, alpine ecosystems and grasslands are all particularly sensitive to acid deposition (BC MOE 2014). Declines in plant health in some species can also result from increased susceptibility to secondary stress factors following soil acidification, such as pathogens, frost, and drought (WHO 2000).

1.3.2 Eutrophication

The deposition of nitrogen compounds results in increased soil eutrophication or the eutrophication of the growing substrate of lichens. Since nitrogen is often a limiting nutrient for plant growth, nitrogen deposition can alter 1) species composition, species richness, and biodiversity, and 2) plant growth, physiology, and productivity and thus potentially affect ecosystem functions (WHO 2000, USEPA 2020). Nitrogen deposition stimulates the growth of most plants, alters plant physiological processes, and broadly increases productivity. Nitrogen deposition affects productivity through alteration of soil microbial physiology and biomass, particularly by decreasing the abundance of symbiotic mycorrhizal fungi, and altered soil arthropod performance and abundance which affects litter decomposition rates (USEPA 2020). Increased concentrations of nitrogen in soils can lower the carbon to nitrogen ratio of soils and alter soil nutrient cycling processes through increased rates of decomposition and mineralization of nitrogen.

Soil eutrophication can adversely affect vegetation health by changing the competitive relationship between species adapted to a low nitrogen environment and can lead to a change in species composition and loss of biodiversity (WHO 2000). A notable example of this shift is a decrease in lichen, moss, and evergreen dwarf shrub species, and an increase of grasses within some ecosystems (WHO 2000). Change in species diversity can be associated with the decrease in species richness and/or particular life forms (e.g., lichen, moss, shrub), and/or an increase in some species or life forms. This shift is caused by decreased competitive advantage of certain species adapted to lower nutrient availability and an increase of species that have higher competitive advantage in sites with higher soil nitrogen. This can decrease species diversity and potentially alter ecosystem functions. Concern about nitrogen deposition and its eutrophic effects has been described as follows:

“The availability of nutrients is one of the most important abiotic factors that determine plant species composition in ecosystems. Nitrogen is the limiting nutrient for plant growth in many natural and semi-natural ecosystems. Most of the plant species from oligotrophic and mesotrophic habitats are adapted to nutrient-poor conditions and can only survive or compete successfully on soils with low nitrogen availability. High nitrogen deposition causes changes in vegetation composition and vegetation structure. These changes in turn affect the fauna composition.” (Bobbink and Hettelingh 2011).

Eutrophication can affect wetland functions, for example, it can decrease the ability of wetlands to retain and store nitrogen, which may diminish the wetland ecosystem service of improving water quality (USEPA 2020). In addition, changes to plant growth rates and productivity in wetlands with nitrogen deposition could alter carbon cycling within the watershed. Wetlands that receive a relatively larger fraction of their total water budget in the form of precipitation are relatively more sensitive to the effects of nitrogen deposition than contrasting wetlands. For example, bogs, which tend to have 70 to 100% of their hydrological input from rainfall, are more sensitive to nitrogen deposition than fens, which have about 55 to 83% of hydrological inputs from rainfall; both bogs and fens are more sensitive than estuarine and marine wetlands (10 to 20% as rainfall; USEPA 2020).

1.4 SCOPE AND APPROACH OF TERRESTRIAL ASSESSMENT

The scope of this technical data report consists of a terrestrial acidification and eutrophication screening and a Level 0 acidification and eutrophication assessment following the BC Ministry of Environment (BC MOE) *Critical Load Screening Guidance for Acidification and Eutrophication of Terrestrial Ecosystems* (BC MOE 2014). This guidance document outlines the screening procedure for determining the appropriate level of critical load analysis required to evaluate the potential effects of acidic and nutrient nitrogen deposition on terrestrial ecosystems.

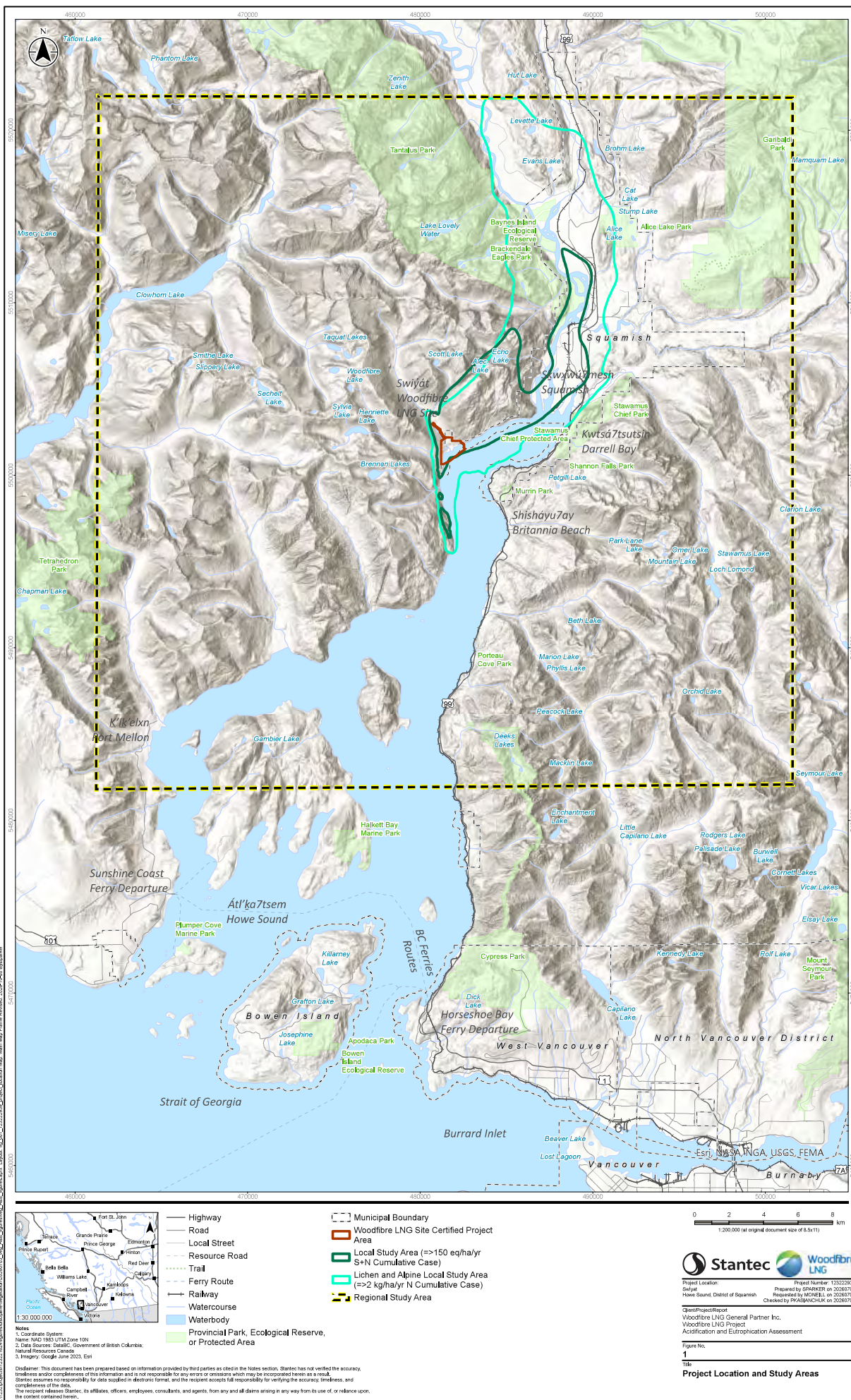
Figure 1 shows the dispersion modelling domain for the air quality assessment (i.e., the regional study area [RSA]), which was defined as a 40 km by 40 km domain centered around the Project, as well as the local study area (LSA). The model domain includes the communities of Skwxwú7mesh (Squamish), located 7 km to the northeast of the Project, and Britannia Beach, located 5.2 km southeast of the Project. Terrain in the modelling domain is complex, ranging from approximately sea level to over 2,500 metres above sea level. Higher elevations are located in the north, northwest, east, and northeast sections of the modelling domain. The lowest elevations (sea level) are in the southern and center sections of the model domain in Nexwnéwu7ts Átlk'a7tsem (Howe Sound).

The LSA was defined as the greater of the isopleths defined in Table 1 for the Cumulative Case scenario, which is the acid deposition (i.e., combined total acid deposition) 150 equivalent (eq)/hectare (ha)/year (yr) isopleth (Figure 1), which totals 3,535.8 ha. The Cumulative Case includes emissions from the Project, associated marine vessels, the FortisBC Energy Inc. Squamish V2 Compressor Station, plus baseline (Section 3.1).

A separate Lichen and Alpine LSA (LALSA) applicable to the eutrophication assessment was defined as the 2 kg/ha/yr isopleth for nitrogen deposition, because these sensitive species and ecosystems are affected at a much lower threshold than forested ecosystems, and the LSA defined for other receptors was not large enough to capture the potential effects on lichens. The LALSA totals 11,314.2 ha.

The scope of this assessment is to determine if the magnitude of acid or nitrogen deposition exceeds screening criteria, and if so, to perform a Level 0 critical load assessment. A Level 0 assessment is a desktop-based assessment that compares modelled deposition rates to critical loads derived from literature review and existing desktop data sources.

A description of the receiving environment, the assessment methods, and results are described in the following sections.



2.0 RECEIVING ENVIRONMENT

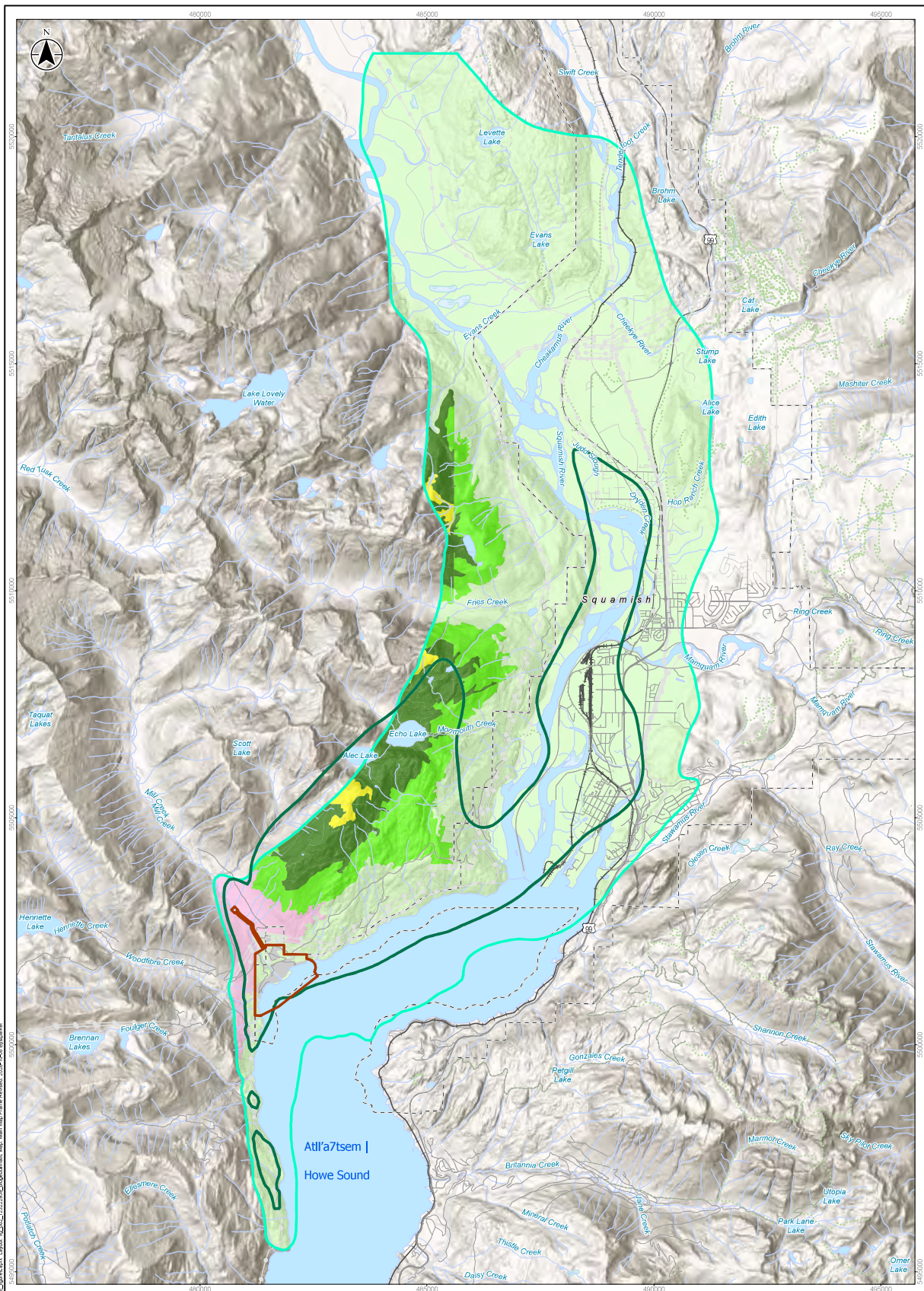
This section characterizes existing conditions for the receiving terrestrial environment to support this acidification and eutrophication assessment. Discussion of baseline acid and nitrogen deposition is described with the air dispersion modelling results in Section 3.1.

The RSA extends north past Skwxwú7mesh (Squamish) and south along Átlk'a7tsem (Howe Sound) to Gambier Island (Figure 1). Areas east and west of Átlk'a7tsem (Howe Sound) within the RSA are primarily uninhabited, mountainous terrain. The LSA primarily extends north-south (Figure 1); the LSA extends north to Brackendale and south along the west side of Átlk'a7tsem (Howe Sound) to approximately 2 km south of the Project site. The LSA includes two discrete areas further south of the Project site associated with deposition isopleths. The LALSA extends to the northern boundary of the RSA and generally follows the Squamish River valley, though it extends upslope to the Coastal Mountain-heather Alpine (CMA) biogeoclimatic zone along the western border.

The LSA is located within the Coastal Western Hemlock Dry Maritime subzone (CWHdm), the southern submontane variant and southern montane variant of the Very Wet Maritime subzone (CWHvm1 and CWHvm2), the Mountain Hemlock windward variant of the Moist Maritime subzone (MHmm1) and a corresponding parkland subzone (MHmmp, Klassen et al. 2026; Figure 2). The biogeoclimatic ecosystem classification of the RSA was revised in 2026, with a new guidebook and new spatial boundaries; changes in biogeoclimatic ecosystem classification units are noted below where applicable. The LALSA is located within the Coastal Mountain-heather Alpine (CMA) biogeoclimatic zone, in addition to the biogeoclimatic units of the LSA.

The CWHdm has been split into several variants and the variant in the LSA is the CWHdm3 (Klassen et al. 2026). The CWHdm3 occurs at low elevations in the Lower Mainland and adjacent valleys, extending north up Átlk'a7tsem (Howe Sound) to just north of Skwxwú7mesh (Squamish). This variant is characterized by warm, dry summers and mild, wet winters with limited snow.

The CWHdm3 is a forested biogeoclimatic unit; however, small areas of open wetland, estuaries, and vegetated rock outcrop/ talus occur. Forests are generally co-dominated by Douglas-fir (*Pseudotsuga menziesii*) and K'wá'ystay (western hemlock - *Tsuga heterophylla*), with a component of X'ápa'yay (western redcedar - *Thuja plicata*). Sitka spruce (*Picea sitchensis*) is frequent on floodplains and in Ch'úukw'a (skunk cabbage - *Lysichiton americanus*) swamps. Black cottonwood (*Populus trichocarpa*) is common on floodplains. Kwlúl7ay (red alder - *Alnus rubra*) and bigleaf maple (*Acer macrophyllum*) are common seral tree species. Shore pine (*Pinus contorta* var. *contorta*) is common on dry sites and bogs (Klassen et al. 2026). Understorey vegetation in the CWHdm3 is moderately to well developed in most ecosystems. Dominant shrubs include salal (*Gaultheria shallon*), dull Oregon-grape (*Mahonia nervosa*), vine maple (*Acer circinatum*), and red huckleberry (*Vaccinium parvifolium*). Vine maple increases in abundance on moist sites. Salmonberry (*Rubus spectabilis*) is common on lower slopes and floodplains. Sword fern (*Polystichum munitum*) is moderately abundant on moist and rich sites. Most sites have a well-developed moss layer, comprised mostly of Oregon beaked moss (*Kindbergia oregana*) and step moss (*Hylocomium splendens*). Flat moss (*Buckiella undulata*) and lanky moss (*Rhytidiadelphus loreus*) are also present, usually with low cover (Klassen et al. 2026).



Notes:
1. Coordinate System:
Name: NAD 1983 UTM Zone 10N
2. Data Sources: DataSBC, Government of British Columbia;
Natural Resources Canada
3. Imagery: Google June 2023, Esri

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- Highway
- Road
- Local Street
- Resource Road
- Trail
- Railway
- Transmission Line
- Watercourse
- Waterbody
- Wetland
- Municipal Boundary

- Woodfibre LNG Site Certified Project Area
- Project Clearing and Grubbing Area
- Local Study Area
- Lichen and Alpine Local Study Area
- Vegetation Resource Inventory (VRI)
- Biogeoclimatic Zone
- CMAup
- CWHdm
- CWHvm1
- CWHvm2
- MHm1



Project Location:
Swilyst
Howe Sound, District of Squamish

Project Number: 12022930
Prepared by: SPARKER on 20200706
Reviewed by: MICHELLE on 20200706
Checked by: PRAJANACHUK on 20200709

Client/Project/Report:
Woodfibre LNG General Partner Inc.
Woodfibre LNG Project
Acidification and Eutrophication Assessment

Figure No.
2

Title:
Biogeoclimatic Units of the Local Study Area and
Lichen and Alpine Local Study Area

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The CWHvm1 occurs at low to mid elevations and on the southern mainland mainly occurs above the CWHdm3. This variant is characterized by a mild, wet, humid climate. Summer temperatures are cool to moderate, while winters are mild with short periods of freezing temperatures (Klassen et al. 2026). The CWHvm1 is primarily a forested variant, although small areas of wetland, cliff, and bluff ecosystems also occur. Forest units are dominated by K̓wáy̓stay (western hemlock), amabilis fir (*Abies amabilis*), and western X̓ápa'yay (redcedar). Douglas-fir is a seral species that may also occur in younger stands or warmer, south-facing sites. Sitka spruce occurs mainly on alluvial floodplains and shore pine occurs on dry, rocky sites and some bogs; both species are uncommon in this variant. Kwlúl7ay (red alder) is common on fluvial sites and disturbed sites. Bigleaf maple is also common on fluvial sites, while black cottonwood occurs in some floodplain areas (Klassen et al. 2026). Understory vegetation is generally lightly to moderate developed. Common understory species include oval-leaved blueberry (*Vaccinium ovalifolium*), red huckleberry, deer fern (*Struthiopteris spicant*), lady fern (*Athyrium filix-femina* var. *cyclosorum*), sword fern, and bunchberry (*Cornus canadensis*). On dry sites salal is common, while on moist, rich sites salmonberry and devil's club (*Oplopanax horridus*) are common (Klassen et al. 2026).

The CWHvm2 occurs at mid elevations above the CWHvm1. This variant has a montane climate characterized by cool temperatures, shorter growing season, and most precipitation occurring as snow (Klassen et al. 2026). The CWHvm2 is primarily a forested unit, with small areas of wetland (bogs, fens, marshes), cliff, bluff, and avalanche. Forests are dominated by K̓wáy̓stay (western hemlock), amabilis fir, and K̓'elhmáy̓ (yellow-cedar; *Callitropsis nootkatensis*). Douglas-fir is uncommon and is restricted to drier, south-facing sites. Similarly, shore pine occurs only on dry, exposed sites and bogs. The main deciduous species occurring on disturbed and open, wet sites is Kwlúl7ay (red alder), but it is less common than in the lower elevation CWHvm1. Understory vegetation is generally lightly to moderate developed and is dominated by regenerating trees, oval-leaved blueberry, and red huckleberry, and salal is common on drier sites. On wetter, rich sites salmonberry, lady fern, oak fern (*Gymnocarpium dryopteris*) and foamflower (*Tiarella trifoliata*) are common. The herb layer is lightly developed and dominated by five-leaved bramble (*Rubus pedatus*) and bunchberry.

The MHmm1 occurs at higher elevations above the CWHvm subzone. The climate is characterized by short, cool summers and long, cool, wet winters with heavy snow. The deep snowpack persists for several months resulting in a short growing season (Klassen et al. 2026). Snowpack depth and persistence in combination with topography significantly effects vegetation patterns in the MHmm1. Open-canopy ecosystems occur in areas with bowls, broad ridges, saddles, and cool aspects where snowpack persists. In these areas mountain heathers and heaths (*Phyllodoce* spp. and *Cassiope* spp.), blue-leaved huckleberry (*Vaccinium deliciosum*), and partridgefoot (*Luetkea pectinata*) are common. Forests in the MHmm1 are made up of K̓wáy̓stay (mountain hemlock - *Tsuga mertensiana*), amabilis fir, and K̓'elhmáy̓ (yellow-cedar). The forest understory is dominated by blueberries and huckleberries (*Vaccinium* spp.), with five-leaved bramble also occurring. Non-forested ecosystems, such as avalanche tracks, alpine heath and meadows, and bog and fen wetlands are also common in the MHmm1 (Klassen et al. 2026).

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The MHmmp is a parkland zone occurring above the MHmm1. Trees occur in clumps and patches and along ridge crests where snow melts earlier and form a mosaic with subalpine heath, meadows, and fens (Pojar et al. 1991). Lush, diverse herb meadows occur in seepage areas and along stream edges. Typical species include green false-hellebore (*Veratrum viride* var. *eschschoizianum*), Sitka valerian (*Valeriana sitchensis*), arrow-leaved groundsel (*Senecio triangularis*), sweet coltsfoot (*Petasites frigidus* var. *frigidus*), white marsh-marigold (*Caltha leptosepala*), leatherleaf saxifrage (*Leptarrhena pyrolifolia*), pink monkey-flower (*Mimulus lewisii*), small-flowered paintbrush (*Castilleja parviflora* var. *albida*), and mountain arnica (*Arnica latifolia*) (Pojar et al. 1991).

The CMA is located within the LALSA, outside the LSA, and is an alpine zone characterized by deep snowpack and cool growing season temperatures (BC MOFR 2006). Most of the CMA is occupied by glaciers or recently exposed bare rock. Alpine vegetation is dominated by shrubs (e.g., primarily mountain heathers), herbs, mosses, and lichens, although at lower elevations stunted *Kwáystay* (mountain hemlock) and whitebark pine occur (BC MOFR 2006; Cannings 2016). Herb meadows dominated by broad-leaved forbs are common at lower and middle elevations in sites with deeper soils, seepage areas, or along alpine streams (BC MOFR 2006; Cannings 2016).

Based on the Land Resource Inventory of Mill and Woodfibre Creeks (Agriculture Canada 1988) and the Soil Landscapes of Canada (Centre for Land and Biological Resources Research 1996), the soils in the LSA have developed in a glaciated landscape. The LSA is adjacent to Mill Creek near the Project and generally follows to the Squamish River valley on the northeast side of the LSA. Echo Lake and Alec Lake in the norther portion of the LSA upslope from Átlk'a7tsem (Howe Sound) is a higher elevation area.

The Sayres soil series is composed of well to moderately well drained moderately coarse to coarse colluvium often with high coarse fragment content (Centre for Land and Biological Resources Research 1996). Sayres soils are mapped in the Coastal Western Hemlock zone and are predominantly Orthic Ferro-Humic Podzols in lithic contact with underlying Igneous, acidic bedrock (dominantly granite).

The Golden Ears soil series is composed of moderately well drained moderately coarse to coarse glacial till often with high coarse fragment content (Centre for Land and Biological Resources Research 1996). Golden Ears soils are mapped in the mapped in the Coastal Western Hemlock zone and are predominantly Duric Ferro-Humic Podzols.

Db soils are imperfectly drained, gravelly to very gravelly, coarse loamy till or colluvium derived from till (Agriculture Canada 1988). Lithology is dominantly granitic but may show a significant admixture of other rock types. Db soils are mapped in the Coastal Western Hemlock wet subzone and are generally Orthic Ferro-Humic Podzols or Orthic Humo-Ferric Podzols, in the Mountain Hemlock forested subzone and are generally Orthic Ferro-Humic Podzols, and in the Mountain Hemlock parkland subzone and are generally Orthic Humo-Ferric Podzols (Agriculture Canada 1988).

Me soils are moderately well drained, gravelly to very gravelly, sandy fluvial deposits found in the wet subzones of the Coastal Western Hemlock (Agriculture Canada 1988). They are found on terraces immediately adjacent to active floodplains and range from Regosols to Orthic Humo-Ferric Podzols.

3.0 METHODS

This section provides an overview of the methods used to conduct the screening and Level 0 terrestrial acidification and eutrophication effects assessments for the Project. The methods to complete the acidification and eutrophication assessments are based on the Critical Load Screening Guidance document (BC Ministry of Environment 2014). This assessment has been entirely desktop based; no soils or vegetation field work was conducted to verify existing data sources that were used in the analysis such as surficial geology, soils, or ecosystem mapping.

3.1 AIR DISPERSION MODELLING

The following air quality modelling scenarios were assessed:

1. Baseline: Background deposition rates defined from an Environment and Climate Change Canada air and precipitation monitoring site on Saturna Island. This monitoring data was selected as there are no deposition monitoring locations within the RSA and Saturna Island is considered representative of the RSA based on similar meteorology, terrain, and representative of background deposition rates.
2. Project Alone Case (Normal Operations): Modelled deposition from the Project only, including the heat medium furnace, thermal oxidizer, and routine flaring (i.e., pilot, purge, passing valves).
3. Application Case: Modelled deposition from the Project-Alone Case (Normal Operations), plus associated marine vessels and the addition of Baseline.
4. Cumulative Case: Modelled deposition from the Application Case (Normal Operations), plus the FortisBC Squamish V2 Compressor Station (Annual emissions) and the addition of Baseline.

Details on the air dispersion modelling approach are provided in the Technical Data Report (WLNG-W0001-RE-RP-00285; which is included as an appendix of the Technical Assessment Report).

3.2 SCREENING

The Critical Load Screening Guidance (BC MOE 2014) provides criteria to determine if a level 0 or level 1 critical load analysis is required. The terrestrial acidification and eutrophication screening consists of an examination of:

- whether sensitive ecosystems represent >5% of the LSA and LALSA.
- the magnitude of acid and nitrogen deposition and whether it has potential to cause deleterious impacts to receptor ecosystems.
- the magnitude of acid deposition and whether it exceeds level 0 critical loads based on soil parent materials and factors which modify the sensitivity of soils to acidic deposition.

The first step of the screening involves determining whether the LSA and LALSA coverage is 5% or greater of sensitive ecosystems (i.e., possess characteristics associated with sensitivity to acid deposition). cursory examination of the LSA and LALSA confirms that the sensitive characteristics of coniferous forest, shallow or coarse textured soils, steep slopes, temperate climate, and high rainfall are common within the study areas.

The second step in the screening assessment (BC MOE 2014) pertains to information about the magnitude of deposition and provides threshold values of deposition rates for each element or compound that has the potential to cause deleterious effects to receptor ecosystems (Table 1).

Table 1 Screening Thresholds (BC MOE 2014)

Parameter	Study Area Boundary/ Screening Threshold (units vary)
Acid, Sulphur plus Nitrogen (Acidification)	150 eq/ha/yr
Sulphur (Acidification)	7.5 kg/ha/yr
Nitrogen (Eutrophication)	5 kg/ha/yr
Acid, Sulphur plus Nitrogen (Acidification)	150 eq/ha/yr
Notes: eq/ha/yr = equivalents per hectare per year kg/ha/yr = kilograms per hectare per year	

Based on air dispersion modelling results (see Section 4.1), it was determined that the screening thresholds are exceeded for all three parameters; acid (sulphur plus nitrogen), sulphur, and nitrogen.

These initial screening steps confirmed that Level 0 acidification and eutrophication analyses were required. The Level 0 acidification assessment involves the assessment of soil and ecosystems, while the Level 0 eutrophication assessment involves assessment of ecosystems only.

The third step of screening for acidification is completed as part of the Level 0 assessment and consists of determining whether acidic deposition exceed Level 0 critical loads.

3.3 MAPPING

Existing soil and ecosystem mapping were assembled to support the acidification and eutrophication assessments and gap areas were filled by Stantec mappers.

3.3.1 Soil Mapping

Existing bedrock geology, surficial geology, and soils maps were acquired that covered the LSA, as follows:

- Terrain Inventory Mapping BAPID 4350 FRBC 13, 1:50,000 scale (BC MOE 2009) [includes surficial material, surface texture, surface expression, geomorphological process].
- Bedrock Geology, 1:250,000 scale (BC Geological Society 2018).
- Land Resource Inventory of Mill and Woodfibre Creeks, British Columbia. Report No. 84-01
British Columbia Soil Survey, 1:50,000 scale for general soil associations (Agriculture Canada 1988).

- Soil Landscapes of Canada v2.2, 1:1 million scale (Centre for Land and Biological Resources Research 1996).

Bedrock geology was incorporated into the existing surficial terrain mapping, then overlaid with the partial coverage of soil survey to develop soil map units (SMUs). SMUs were assigned to the LSA to form the soils and terrain mapping that supported the acidification assessment. Water and industrial areas with significant existing soil disturbance were excluded from the spatial data analysis.

3.3.2 Ecosystem Mapping

Ecosystem mapping within the LSA was derived from the 1:20,000 Lower Squamish Landscape Unit TEM (Lower Squamish LU TEM; Timberline 2007). The Lower Squamish LU TEM does not contain structural stage attributes. The Lower Squamish LU TEM does not cover a portion of the LSA (a 1,450 ha gap) in the vicinity of Skwxwú7mesh (Squamish) and along the floodplain of the Squamish River. A portion of the LSA in the direct vicinity of the Project (538 ha) has updated TEM available – minor mapping updates were completed in 2025 – as existing TEM polygons were split and assigned structural stages based on imagery, VRI linework, and additional field surveys.

For the purposes of this assessment, the 2025 Project TEM was used where it existed, and outside this area, the Lower Squamish LU TEM was updated to expand the mapping to cover the gap in the LSA. Dominant units mapped within the LSA are described in the map legend (Appendix A). Structural stage attributes were added where missing, based on Vegetation Resources Inventory (BC MOF 2025).

For the LALSA, analysis was completed based on biogeoclimatic units, which can be used to identify alpine and subalpine parkland.

The dominant ecosystem and structural stage in the TEM was used to describe the ecosystems that could be affected by acidification or eutrophication. Dominant site series were grouped into Major Broad Ecosystem Classes adapted from the *Standards for Broad Terrestrial Ecosystem Classification and Mapping for British Columbia* (RIC 1998a).

3.4 ACIDIFICATION ASSESSMENT

Methods relating to the Level 0 acidification assessment for soils and ecosystems are described in the following subsections. The spatial boundary for the acidification assessment was the LSA (i.e., the area within the Cumulative Case predicted acid deposition 150 eq/ha/yr isopleth).

Spatial data layers from three disciplines (i.e., air quality isopleths, soil and terrain mapping, and ecosystem mapping) were overlaid to quantify and characterize the types and structural stage of ecosystems that occur within the areas of nitrogen and sulphur deposition, and within areas of high, moderate, or low soil sensitivity to acid deposition.

Areas lacking soils (and thus vegetation; principally, the Clearing and Grubbing area of the Project), were excluded from the spatial data analysis, as they are no longer vulnerable to acidification or eutrophication. Urban areas (mostly composed of low-density subdivisions) in Skwxwú7mesh (Squamish) were retained in the analysis, as these areas do contain soils and vegetation (such as in gardens, parks, and boulevards) and may experience effects of acidification or eutrophication.

3.4.1 Soil Assessment

Soil map units were rated in terms of their relative sensitivity to acid deposition and an adjusted critical load was assigned using the information from Tables 3 and 4 in the Critical Load Screening Guidance (BC MOE 2014). The Level 0 assessment is a semi-quantitative approach based on the mineralogy of soils' parent material to determine their relative sensitivity to acid deposition (Table 2). It was assumed that colluvial parent materials had the same mineralogy as the underlying bedrock. Till and fluvial parent materials were assumed to be a mix of class 1 to 4 minerals. Additional factors that modify soils' relative acid sensitivity include elevation, slope, particle class, soil drainage class, and soil depth are reproduced in Table 3.

Table 2 Skokloster Classification: Mineralogical and Petrological Classification of Soil Parent Material

Class	Minerals Controlling Weathering	Usual Parent Material	Critical Load (eq/ha/yr)
1	Quartz, K-feldspar	Granite, quartzite	<200
2	Muscovite, plagioclase, biotite (<5%)	Granite, gneiss	200–500
3	Biotite, amphibole (<5%)	Granodiorite, greywacke, shale, schist, gabbro	500–1,000
4	Pyroxene, epidote olivine (<5%)	Gabbro, basalt	1,000–2,000
5	Calcite, dolomite	Limestones, marlstones	>2,000
Notes: Reproduced Table 3. From the Critical Loads Screening Guidance (BC MOE 2014).			

Table 3 Factors That Modify the Sensitivity of Soils to Acidic Deposition

Modifying Factors	Increasing Sensitivity	Decreasing Sensitivity
Elevation/slope	High/steep	Low/level
Particle size class	Coarse-sandy	Fine
Soil drainage	Free	Impeded
Soil depth	Shallow	Thick
Note: Reproduced Table 4. From the Critical Loads Screening Guidance (BC MOE 2014).		

The relative acid sensitivity (low, medium, and high) for each soil map unit was assigned based on the geologic processes influencing soil parent materials (e.g., fluvial, morainal, or colluvial), the relative degree of calcium carbonate of mapped soils, and the modifying factors of mapped soils listed in Table 3.

3.4.2 Ecosystem Assessment

The ecosystem mapping assembled to support the acidification assessment within the LSA was used along with soils spatial data. Ecosystem data includes the ecosystem name (i.e., the plant community).

Areas where deposition exceeds soil polygon critical loads were summarized for ecosystem attributes in figures and tables as an overlay analysis.

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3.5 EUTROPHICATION ASSESSMENT

The effects of eutrophication on ecosystems were assessed through comparison of predicted nitrogen deposition rates from dispersion modelling for the Cumulative Case with empirical critical loads derived from the recent literature. The candidate empirical critical loads for nitrogen deposition assembled from a literature review are presented in Table 4.

Table 4 **Candidate Empirical Critical Loads for Nitrogen Deposition**

North America Ecoregion (Level 1)	Empirical Critical Load (kg/ha/yr)	Type of Ecosystem	Biological and Chemical Effects	Vegetation Structure	Reference
Marine West Coast Forests	10.4–15.0	Forest	Decreasing species richness	Sáxwi (grasses) and forbs	Simkin et al. 2016 in USEPA 2020
Marine West Coast Forests	5	Forest	Tree growth and survival; other various effects	Tree	Pardo et al. 2011 in USEPA 2020
Northwest Forested Mountains (closest to Marine West Coast Forest, which was not included)	4–10	Forest	Change in plant community composition; other various effects	Herbaceous plants and shrubs	Pardo et al. 2011 in USEPA 2020
Marine West Coast Forests (Kitimat and Prince Rupert)	4–5	Forest	Multiple effects	Coniferous and mixed forests, including lichens	Williston et al. 2016
Eastern Temperate Forests	63*	Salt marsh	Community structure of salt marshes	Herbaceous and graminoid plants	Wigand et al. 2003 in USEPA 2020
North America	2.7–13	Peatlands	Altered peat accumulation and net primary productivity	n/a	Greaver et al. 2011 in USEPA 2020
Northwest Forested Mountains (closest to Marine West Coast Forest, which was not included)	1.9–3	Alpine and subalpine	Biodiversity change of 10%	n/a	McDonnell et al. 2014 in USEPA 2020
Northwest Forested Mountains (closest to Marine West Coast Forest, which was not included)	1–2	Alpine and subalpine	Changes in community composition, but dependent on local precipitation, temperature, soil chemistry	n/a	Sverdrup et al. 2012 in USEPA 2020
Marine West Coast Forests	1.5–2.5	Lichen	Changes in community	Lichen	Root et al. 2015 in USEPA 2020

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North America Ecoregion (Level 1)	Empirical Critical Load (kg/ha/yr)	Type of Ecosystem	Biological and Chemical Effects	Vegetation Structure	Reference
United States of America	1.3 – 3.5	Lichen	Low risk for change to total species richness, sensitive species richness, forage lichen abundance and cyanolichen abundance. Forage lichens provide forage for ungulates and small mammals, nesting material for rodents and birds, and habitat/food for invertebrates. Cyanolichens are nitrogen fixers that can contribute substantial new nitrogen to moist temperate forests, as well as nutrient-rich food, habitat, and cover for invertebrates (Geiser et al. 2019).	n/a	Geiser et al. 2019
Notes: n/a = not applicable kg/ha/yr = kilograms per hectare per year					

Three empirical critical loads for nitrogen were selected to support the assessment (Table 4):

- 4 kg/ha/yr for forested upland and wetland ecosystems
- 2 kg/ha/yr for alpine and subalpine ecosystems and lichen
- 63 kg/ha/yr for salt marsh

The empirical critical load selected for nitrogen deposition for upland and wetland forested ecosystems is 4 kilograms per hectare per year (kg/ha/yr) (Williston et al. 2016; USEPA 2020) and was selected due to Skwxwú7mesh (Squamish) BC having similar average annual precipitation to Kitimat, BC (higher rainfall results in greater acid sensitivity, and similar rainfall should result in a similar sensitivity). According to Williston et al. (2016) and USEPA (2020), this empirical critical load is protective of coniferous and mixedwood upland and wetland forest, tree, Sáxwi (grass), and forb species (Table 4), reflective of the dominant vegetation in the LSA.

Alpine and subalpine communities are known to be more sensitive to nitrogen deposition than lowland forest (USEPA 2020). Therefore, an empirical critical load of 2 kg/ha/yr is selected, which is also protective of lichens (Table 4).

Based on Geiser et al. (2019), lichens are more sensitive to nitrogen deposition than other functional groups of species. This addresses a different effect pathway that is mediated by substrate rather than soil (see Section 1.3.2). The empirical critical load of 2 kg/ha/yr is selected to be protective of cyanolichens and forage lichens, which are particularly sensitive lichen functional groups.

According to Wigand et al. (2003 in USEPA 2020), salt marsh is relatively insensitive to nitrogen deposition compared to other ecosystem types. Accordingly, an empirical critical load of 63 kg/ha/yr is selected for salt marsh, including vegetated estuarine communities (Table 4).

There were two spatial boundaries used for the eutrophication assessment: 1) eutrophication of forest and wetland ecosystems were assessed within the LSA (i.e., the area within the Cumulative Case predicted acid deposition 150 eq/ha/yr isopleth), 2) eutrophication of lichens and alpine were assessed within the LALSA (i.e., the area within the Cumulative Case predicted nitrogen deposition 2 kg/ha/yr isopleth).

Areas where deposition exceeds empirical critical loads were summarized for ecosystem attributes and/or biogeoclimatic units in figures and tables as an overlay analysis.

Quantification of predicted lichen response is made through application of 90% quantile regression models developed by Geiser et al. (2019). This metric is considered more robust and insensitive to observer error than mean responses (Geiser et al. 2019).

3.6 LIMITATIONS OF THE ASSESSMENT

Key uncertainties and limitations of the air dispersion modelling that affect the assessment are:

- Deposition model predictions rely upon not only transport and dispersion processes within a model such as CALPUFF, but also predictions of atmospheric chemistry and predictions for wet and dry deposition rates. These processes associated are highly complex and dependent upon numerous variables, which are often difficult to measure or estimate. Therefore, scientific uncertainty remains, both temporal and spatial, but the model is conservative and expected to overpredict deposition. This conservatism reduces the likelihood that uncertainties in the modelling will result in underprediction of the spatial extent or magnitude of potential acidification and eutrophication effects.
- The Baseline deposition values were based on a representative monitoring station from Saturna Island, however there is uncertainty as Saturna Island has substantially more exposure to the marine environment and influence of sea spray on deposition rates. Saturna Island was chosen for the deposition baseline as there are no deposition monitoring station in the LSA or LALSA, and Saturna Island has similar meteorology, terrain, and representative of background deposition rates.

Key uncertainties and limitations of the soil and ecosystems mapping:

- The terrain mapping is a 1:50,000 scale product originally completed in 1980 and modified in 2009.
- Key uncertainties about the soil sensitivity ratings including the scale of mapping used in the assessment, limited analytical data and the spatial variability of soil chemical parameters such as base cations content, cation exchange capacity, mineralogy and soil organic matter.
- The Lower Squamish LU TEM (Timberline 2007) is a 1:20,000 scale product completed based on out-of-date biogeoclimatic ecosystem classification linework and site series classification. Disturbances and ecological classifications were not updated.
- Desktop-only TEM mapping within the LSA in the gap area not covered by the Lower Squamish LU TEM (2007) was completed with no supporting field data. The reliability level of the mapping in this area can be considered reconnaissance level.
- Results are based on the dominant soil type or ecosystem within each polygon, whereas many polygons are compound, with up to three deciles.

4.0 RESULTS

This section presents the results for the acidification and eutrophication assessments.

4.1 AIR QUALITY MODELLING AND SCREENING

Baseline deposition values determined from the Saturna Island monitoring station are:

- Acid deposition 78.5 eq/ha/yr
- Sulphur deposition 1.39 kg/ha/yr
- Nitrogen deposition 1.8 kg/ha/yr

The baseline for nitrogen deposition is close to the selected nitrogen deposition empirical critical load for alpine and parkland and lichens (2 kg/ha/yr).

Figure 3 shows the isopleths resulting from the air quality dispersion modelling that correspond to each of the screening threshold values shown in Table 1 for the Project Alone Case, Application Case, and Cumulative Case scenarios. The total terrestrial area within each isopleth for each temporal case is summarized in Table 5.

The spatial extent of the screening threshold deposition rate for acid in the Application Case extends approximately 14 km northeast of the Project area, up the Squamish River valley, which coincides with portions of the urbanized areas within Skwxwú7mesh (Squamish), as well as approximately 5 km inland of the coastline to the north of the Project area, and slightly (<1 km) to the south of the Project area. There are also two disjunct areas that are greater than the screening threshold deposition rate for acid in the Application Case located up to approximately 4 km to the south of the Project area.

The spatial extent of the screening threshold deposition rate for sulphur alone in the Application Case extends approximately 5.5 km to the northeast of the Project area and approximately 3.5 km inland from the coastline to the north of the Project area and also includes a disjunct patch that coincides with the south-central, mostly urbanized, portion of Skwxwú7mesh (Squamish).

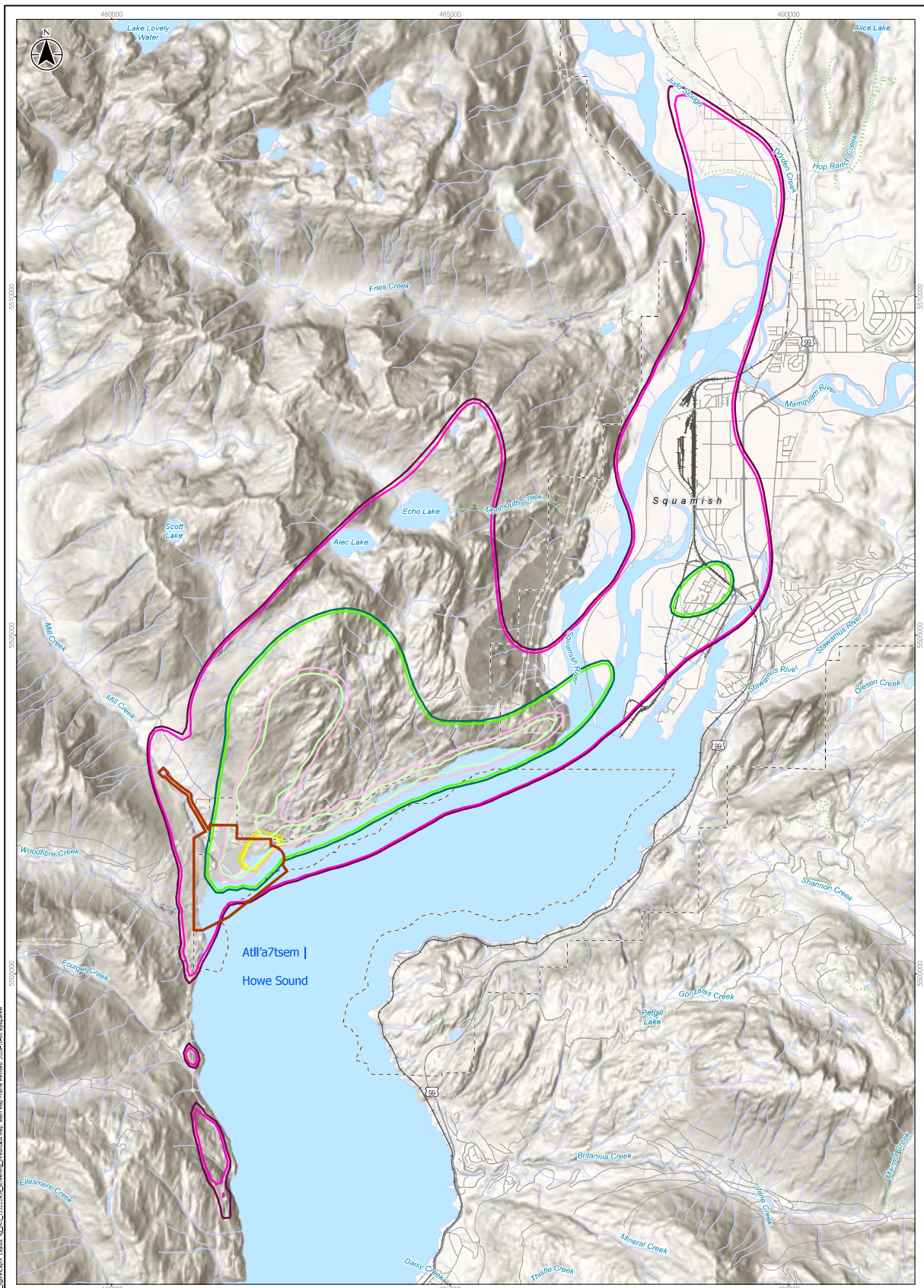
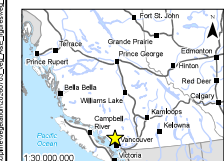
Figure 3 illustrates that the spatial extent of the screening threshold deposition rate for nitrogen alone in the Application Case coincides almost entirely with the Certified Project Area.

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Table 5 Screening Threshold Exceedances

Screening Isopleth	Project-Alone Case (ha)	Application Case (ha)	Cumulative Case (ha)
Acid deposition (combined total sulphur and nitrogen) >150 eq/ha/yr	356.6	3,441.6	3,534.3
Sulphur deposition >7.5 kg/ha/yr	265.1	1,049.6	1,053.2
Nitrogen deposition >5 kg/ha/yr (Eutrophication)	0.0	10.4	11.5
<p>Note:</p> <p>The spatial extent of modelled deposition areas shown here includes all terrestrial area, including disturbed area (e.g., urban/industrial), and excludes non-terrestrial area such as Shkwēh (ocean), Staḱw (river), lakes.</p> <p>The Project's planned clearing and grubbing areas are also excluded, as these areas will no longer contain soil or vegetation that could be affected by acidification or eutrophication.</p>			



Notes:
1. Coordinate System:
Name: NAD 1983 UTM Zone 10N
2. Data Sources: DataSBC, Government of British Columbia;
Natural Resources Canada
3. Imagery: Google June 2023, Esri

Disclaimer: This document has been prepared based on information provided by third parties as cited in the Notes section. Stantec has not verified the accuracy, timeliness, or completeness of this information and is not responsible for any errors or omissions which may be incorporated herein as a result. The user releases Stantec, its affiliates, officers, employees, consultants, and agents, from any and all claims arising in any way from its use of, or reliance upon, the content contained herein.

- Highway
- Road
- Local Street
- - - Resource Road
- Trail
- Railway
- Transmission Line
- Watercourse
- Waterbody
- Municipal Boundary
- Project Clearing and Grubbing Area
- Woodfibre LNG Site Certified Project Area

Acidification Thresholds

Sulphur and Nitrogen Deposition $\Rightarrow$ 150 eq/ha/yr

- Cumulative Case
- Application Case
- Project Alone Case

Sulphur Deposition $\Rightarrow$ 7.5 kg/ha/yr

- Cumulative Case
- Application Case
- Project Alone Case

Eutrophication Thresholds

Nitrogen Deposition $\Rightarrow$ 5 kg/ha/yr

- Cumulative Case
- Application Case

0 0.5 1 1.5 2 km
1:55,000 (at original document size of 6.5x11)



Project Location:
Atli'a7sem, District of Squamish
Project Number: 12022930
Prepared by: SPARKER on 20260706
Reviewed by: MICHELLE on 20260706
Checked by: PRABHACHUK on 20260709

Client/Project/Report:
Woodfibre LNG General Partner Inc.
Woodfibre LNG Project
Acidification and Eutrophication Assessment

Figure No.
3

Screening Isopleths for Acid, Sulphur, and Nitrogen Deposition

4.2 ACIDIFICATION ASSESSMENT

The results of the acidification assessment for soils and ecosystems are described in the following subsections.

4.2.1 Soils

Soil mapping indicates that the LSA contains 3,534.3 ha of exposed soil (Table 6). 'Exposed soil' in this context refers to soil that may be subjected to deposition processes (contrasted with unvegetated open water, which has no exposed soil, for example) and does not mean that the ground is truly bare. Exposed soil could have various cover types (e.g., vegetated, urban development/impervious surface, bare/unvegetated). Most of the exposed soils (64%; 2,273.3 ha) are moderately sensitive to acid deposition. Approximately 35% (1,219 ha) have low sensitivity to acid deposition, and 1% (39.1 ha) are highly sensitive to acid deposition (Table 6). Subsequent overlay mapping analysis provides spatial extent by cover type within critical load exceedance areas (Section 4.2.2).

In the Application and Cumulative Cases, the respective critical loads for various levels of acid sensitivities of exposed soil areas were exceeded in approximately 120.1 ha (3.4% of LSA area) and 128.2 ha (3.6% of LSA area), respectively (Table 7). Most of that extent (85.8 ha in the Application Case, and 89.1 ha in the Cumulative Case) coincides with soil units with moderate acid sensitivity located to the northeast of- and contiguous with-the Project area (Table 7; Figure 4). A total of 34.3 ha in the Application Case and 39.1 ha in the Cumulative Case of that extent coincides with soil units with high acid sensitivity located to the north, upstream, along the Skwxwú7mesh Stákw (Squamish River) valley (Table 7; Figure 4).

Table 6 Area of Exposed Soil Types and Key Properties within the Local Study Area

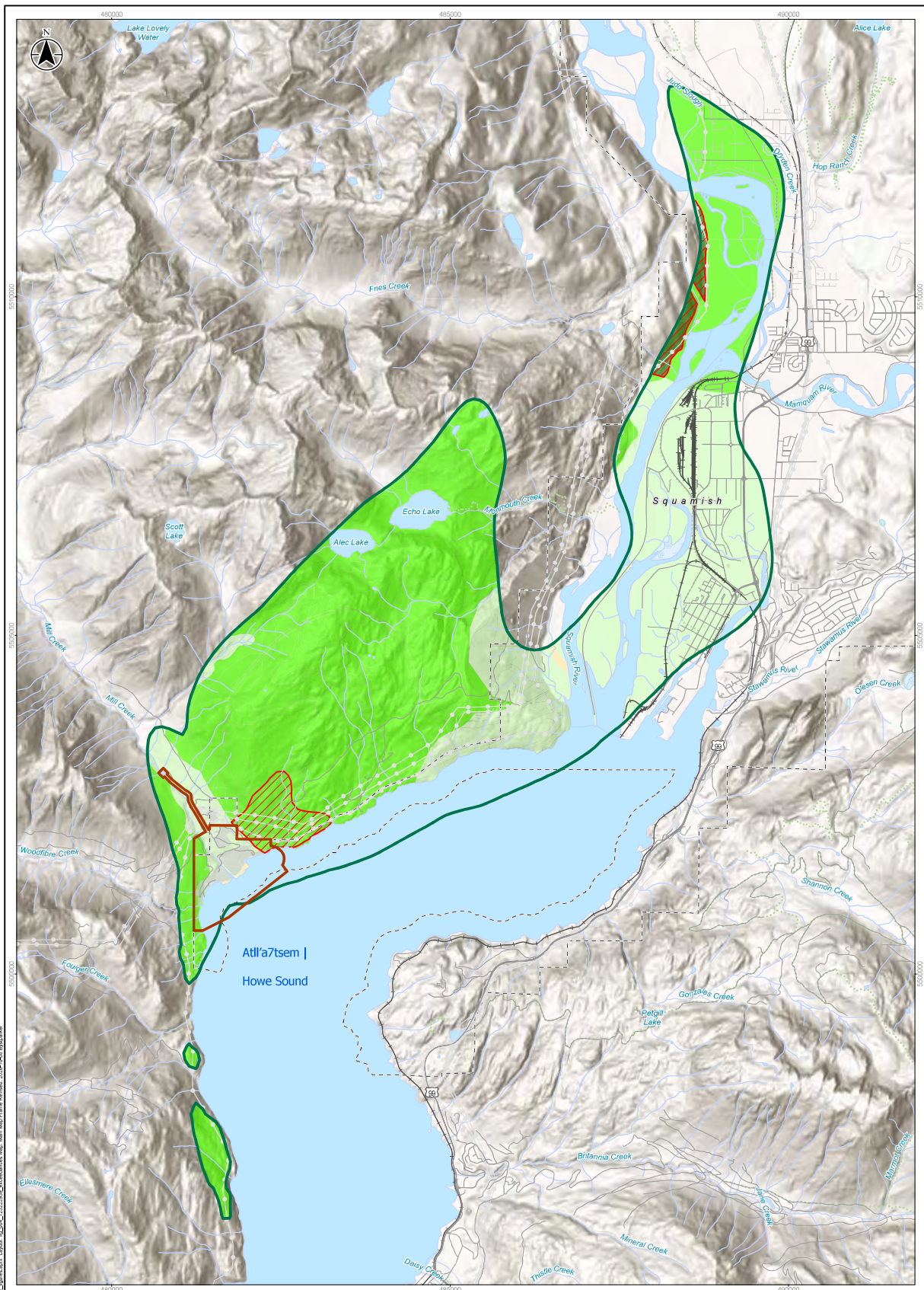
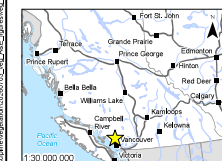
Major Soil Series	Major Soil Subgroup	Bedrock Geology	Surficial Material	Depth	Elevation / Slope	Drainage	Particle Size	Area (ha)	Percent of Exposed Soils Area	Critical Load adjusted based on Factors in Table 2 and 3 herein	Soil Acid Sensitivity based on Factors in Table 2 and 3 herein
DB soil	Orthic Ferro-Humic Podzol	Granodioritic intrusive	Fluvial	Shallow	Low/level	Free	Coarse	927.8	26.3%	1,000	Low
Golden Ears	Duric Ferro-Humic Podzol	Granodioritic intrusive	Morainal	Deep	Low/level	Free	Coarse	78.2	2.2%	1,000	Low
Golden Ears	Duric Ferro-Humic Podzol	Dioritic intrusive	Morainal	Shallow	Low/level	Free	Coarse	4.8	0.1%	1,000	Low
Me soils	Orthic Ferro-Humic Podzol	Quartz dioritic intrusive	Fluvial	Shallow	Low/level	Free	Coarse	405.4	11.5%	200	Moderate
Me soils	Orthic Ferro-Humic Podzol	Dioritic intrusive	Fluvial	Shallow	Low/level	Free	Coarse	12.3	0.3%	1,000	Low
Me soils	Regosols	Basaltic volcanic	Fluvial	Shallow	Low/level	Free	Coarse	58.8	1.7%	2,000	Low
Sayres	Orthic Ferro-Humic Podzol	Quartz dioritic intrusive	Bedrock	Shallow	High/steep	Free	Coarse	39.1	1.1%	150	High
Sayres	Orthic Ferro-Humic Podzol	Granodioritic intrusive	Bedrock	Shallow	High/steep	Free	Coarse	1,669.4	47.2%	500	Moderate
Sayres	Orthic Ferro-Humic Podzol	Granodioritic intrusive	Colluvial	Shallow	High/steep	Free	Coarse	116.2	3.3%	500	Moderate
Sayres	Orthic Ferro-Humic Podzol	Dioritic intrusive	Bedrock	Shallow	High/steep	Free	Coarse	77.1	2.2%	500	Moderate
Sayres	Orthic Ferro-Humic Podzol	Dioritic intrusive	Colluvial	Shallow	High/steep	Free	Coarse	5.2	0.1%	500	Moderate
Sayres	Orthic Ferro-Humic Podzol	Basaltic volcanic	Bedrock	Shallow	Low/level	Free	Coarse	137.1	3.9%	1,000	Low
Unknown								2.8	0.1%	N/A	N/A
Total								3,534.3	100.0		

Notes:

The spatial extents reported here includes terrestrial areas only, including upland and wetland, natural intact and disturbed areas (e.g., urban). These data exclude non-terrestrial areas such as Shikw (ocean), Stakw (river), and lakes. The Project's planned clearing and grubbing areas are also excluded, as these areas will no longer contain soil or vegetation that could be affected by acidification.

Table 7 Areas of Critical Load Exceedance of Exposed Soils by Acidification Sensitivity Rating

Acid Sensitivity	Project-Alone Case (ha)			Application Case (ha)			Cumulative Case (ha)		
	Exceedance	No Exceedance	Total	Exceedance	No Exceedance	Total	Exceedance	No Exceedance	Total
High (150 eq/ha/yr)	0.0	0.0	0.0	34.3	0.0	34.3	39.1	0.0	39.1
Moderate (200 - 500 eq/ha/yr)	0.0	294.8	294.8	85.8	2,115.8	2,201.6	89.1	2,184.2	2,273.3
Low (1,000 - 2,000 eq/ha/yr)	0.0	60.5	60.5	0.0	1,202.9	1,202.9	0.0	1,219.1	1,219.1
Unknown	0.0	1.3	1.3	0.0	2.8	2.8	0.0	2.8	2.8
Total	0.0	356.6	356.6	120.1	3,321.5	3,441.6	128.2	3,405.1	3,534.3
<p>Note: The spatial extents reported here includes terrestrial areas only including upland and wetland, natural intact and disturbed areas (e.g., urban). These data exclude non-terrestrial areas such as Shkweri (ocean), Staḡw (river), and lakes. The Project's planned clearing and grubbing areas are also excluded, as these areas will no longer contain soil or vegetation that could be affected by acidification.</p>									

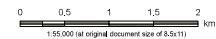
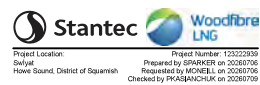


Notes:
 1. Coordinate System:
 Name: NAD 1983 UTM Zone 10N
 2. Data Sources: DataSBC, Government of British Columbia;
 Natural Resources Canada
 3. Imagery: Google June 2023, Esri
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- Highway
- Road
- Local Street
- Resource Road
- Trail
- Railway
- Transmission Line
- Watercourse
- Waterbody
- Wetland
- Municipal Boundary

- Woodfire LNG Site Certified Project Area
 - Project Clearing and Grubbing Area
 - Local Study Area
 - Soil Acid Exceedance (Application Case and Cumulative Case) *
- Soil Acid Sensitivity**
- High
 - Moderate
 - Low
 - Not Rated

* Difference between Application Case and Cumulative Case exceedance is not visually discernable at this scale.



Project Location:
 Swilyst Howe Sound, District of Squamish
 Project Number: 12022930
 Prepared by SPARKER on 2020/07/06
 Reviewed by MICHELLE on 2020/07/06
 Checked by PRABHAKHAR on 2020/07/09

Client/Project/Report:
 Woodfire LNG General Partner Inc.
 Woodfire LNG Project
 Acidification and Eutrophication Assessment

Figure No.
 4

Title
 Soil Acid Sensitivity and Application Case and Cumulative Case Exceedances

4.2.2 Ecosystems

The LSA is predominantly composed of coniferous forest (low elevation, montane, and forested wetland and riparian), that covers approximately 2,103.4 ha; 59.5% of the LSA (Table 8; Figure 5). The portion of the LSA that follows the Sk̓wx̓wú7mesh Stákw (Squamish River) valley includes 456.3 ha (12.9% of the LSA) of urban area composed largely of subdivisions (in Sk̓wx̓wú7mesh (Squamish)), 342.4 ha (9.7% of the LSA) of forested deciduous floodplain, and 25.0 ha (0.7% of the LSA) of non-forested floodplain units (Table 8; Figure 5). Subalpine parkland and krummholz is present in the northwest portion of the LSA; 158 ha (5% of the LSA). Naturally sparsely vegetated ecosystems such as rock outcrops and tidal flats and active floodplain gravel bars are most common near subalpine areas but also occur as tidal flats and gravel bars in the Sk̓wx̓wú7mesh Stákw (Squamish River) and its outlet into Átl̓k'a7tsem (Howe Sound), as well as interspersed in lower lying areas near the Project. Non-forested wetlands were not mapped as a dominant unit within the LSA and likely occur in small pockets.

Acid deposition critical loads are exceeded in the Application Case and Cumulative Case but not at Baseline or in the Project-alone Case (Table 9). The exceedance areas are located immediately to the northeast of the Project, as well as in an area at the base of the slope to the Sk̓wx̓wú7mesh Stákw (Squamish River) floodplain in the northern portion of the LSA (Figure 5). Application Case modelling results indicate that the total area where critical loads for soil acidification are exceeded is 120.1 ha, which is 3.4% of the total LSA.

The Application Case exceedance area is dominated by low elevation coniferous forest (97.6 ha), with some rock outcrop (16.7 ha; Table 9). There is a small area of blue-listed deciduous riparian forest within this exceedance area (5.7 ha), however this is an artifact of the different scales of soil and ecosystem mapping – floodplain soils are not sensitive to acid deposition, therefore, this likely does not represent true exceedance. Of the coniferous forest in the exceedance area, a total of 40.8 ha represents mature or old forest of the blue-listed Hw-flat moss community. A total of 48.1 ha of old and mature forest (structural stage 6 and 7) is within the Application Case exceedance area (Table 9).

An incremental increase of 8.1 ha of exceedance area is predicted in the Cumulative Case from the Application Case (Table 9).

Table 8 Ecosystems within the Local Study Area

Major Broad Ecosystem Class	Biogeoclimatic Unit	Site Series	Map Code	Ecosystem Name	Local Study Area (ha)	% of Local Study Area
Coniferous Forest (Low Elevation)	CWHdm	01	HM	Hw-flat moss	584.1	16.5%
	CWHdm	02	DC	FdPl-cladina	4.5	0.1%
	CWHdm	03	DS	FdHw-salal	100.2	2.8%
	CWHdm	05	RS	Cw-sword fern	87.3	2.5%
	CWHdm	07	RF	Cw-foamflower	41.8	1.2%
	CWHvm1, CWHvm2	01	AB	HwBa-blueberry	742.8	21.0%
	CWHvm1, CWHvm2	03	HS	HwCw-salal	77.9	2.2%
	CWHvm2	02	LC	HwPl-cladina	4.6	0.1%
	CWHvm2	05	AF	BaCw-foamflower	8.0	0.2%
	CWHvm2	07	AS	BaCw-salmonberry	44.1	1.2%
	Coniferous Forest (Low Elevation) Subtotal				1,695.3	48.0%
Coniferous Forest (Montane)	MHmm1	00	AA	Ba-alaskan blueberry	0.6	0.0%
	MHmm1	01	MB	HmBa-blueberry	290.9	8.2%
	MHmm1	02	MM	HmBa-mountain heather	15.0	0.4%
	MHmm1	07	YH	YcHm-hellebore	3.7	0.1%
	Coniferous Forest (Montane) Subtotal				310.3	8.8%
Forested Wetland and Riparian (Coniferous)	CWHdm	08	SS	Ss-salmonberry high bench	79.5	2.2%
	CWHvm2	09	YG	CwYc-goldthread bog	10.7	0.3%
	MHmm1	08	YS	HmYc-sphagnum bog	0.1	0.0%
	MHmm1	09	YC	YcHm-skunk cabbage swamp	7.5	0.2%
	Forested Wetland and Riparian (Coniferous) Subtotal				97.8	2.8%

**WOODFIBRE LNG PROJECT:
TERRESTRIAL ACIDIFICATION AND EUTROPHICATION ASSESSMENT**

October 16, 2026

Major Broad Ecosystem Class	Biogeoclimatic Unit	Site Series	Map Code	Ecosystem Name	Local Study Area (ha)	% of Local Study Area
Forested Wetland and Riparian (Deciduous)	CWHdm	09	CD	Act - Red-osier dogwood mid bench	342.4	9.7%
	Forested Wetland and Riparian (Deciduous) Subtotal					9.7%
	CWHdm	FI	-	Low bench floodplain	25.0	0.7%
Non-Forested Riparian	Non-Forested Riparian Subtotal					0.7%
	CWHdm	Em	-	Estuary marsh/meadow	150.3	4.3%
	Estuarine Marsh/Meadow Subtotal					4.3%
Avalanche Track	MHm1, MHmmp	00	SA	Sitka alder - salmonberry avalanche chute	40.4	1.1%
	Avalanche Track Subtotal					1.1%
Subalpine Parkland and Krummholz	MHm1	00	MH	Hm - Mountain-heather parkland/heath	107.3	3.0%
	MHm1	00	MK	Mountain hemlock krummholz	8.0	0.2%
	MHmmp	00	AK	HmYc - alpine krummholz	9.1	0.3%
	MHmmp	00	MH	Hm-Mountain Heather Parkland Heath	21.6	0.6%
	MHmmp	00	MR	Mountain heather-racomitrium scrub	12.7	0.4%
	Subalpine Parkland and Krummholz Subtotal					4.5%
	CWHdm	Fa	-	Floodplain active channel	29.0	0.8%
Sparsely Vegetated	CWHdm	Et	-	Estuary tidal flat	69.0	2.0%
	CWHdm, CWHvm2, MHm1, MHmmp	00	RO	Rock outcrop	139.6	3.9%
	MHm1	00	TA	Talus	20.3	0.6%
	Sparsely Vegetated Subtotal					7.3%

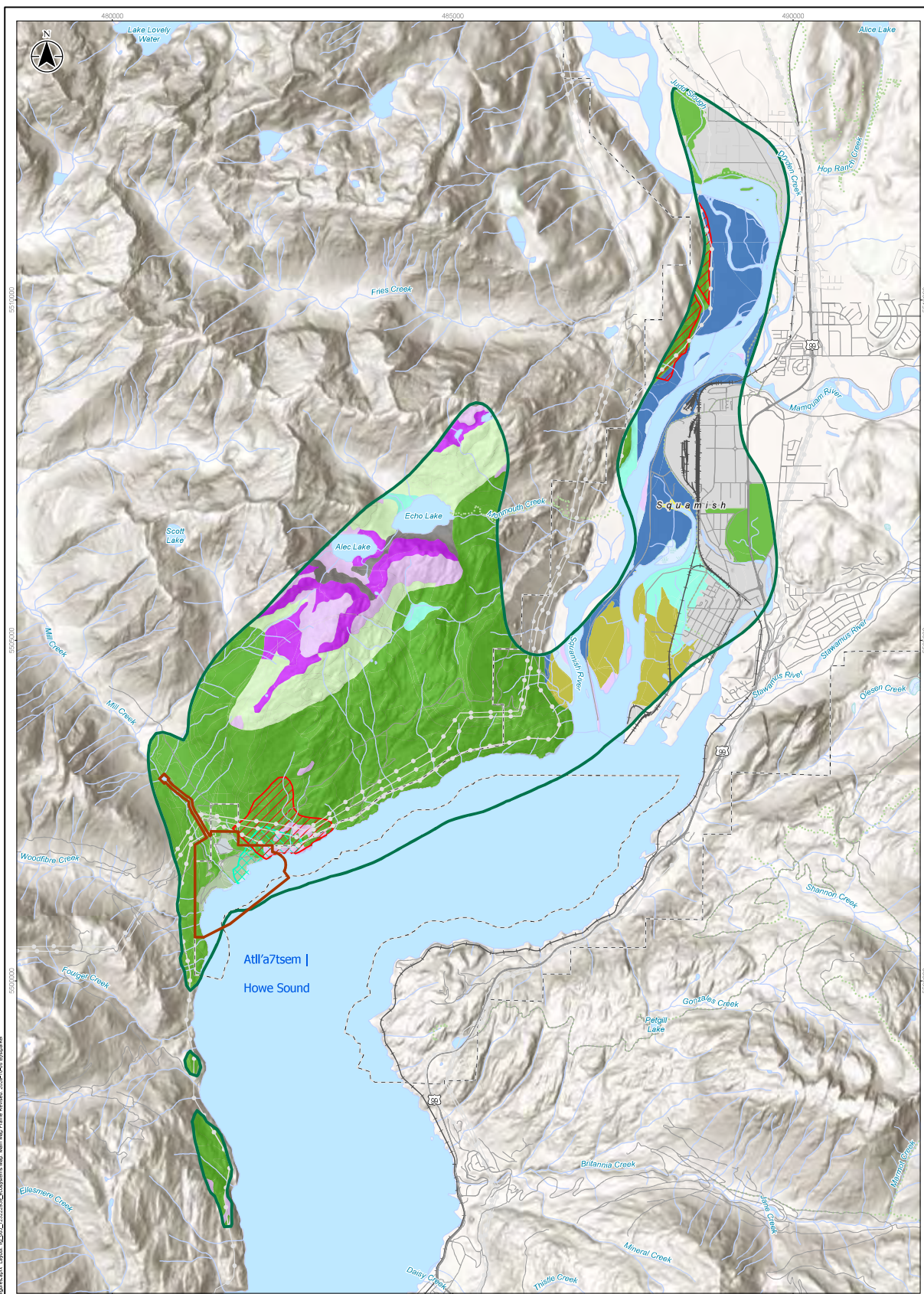
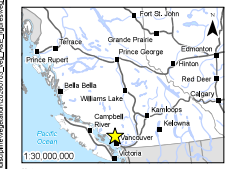
**WOODFIBRE LNG PROJECT:
TERRESTRIAL ACIDIFICATION AND EUTROPHICATION ASSESSMENT**

October 16, 2026

Major Broad Ecosystem Class	Biogeoclimatic Unit	Site Series	Map Code	Ecosystem Name	Local Study Area (ha)	% of Local Study Area
Anthropogenic	CWHdm	0	UR	Urban	456.3	12.9%
	Anthropogenic Subtotal				456.3	12.9%
GRAND TOTAL					3,534.3	100.0%
Notes:						
The spatial extent of modelled deposition areas shown here includes terrestrial area only, and excludes non-terrestrial area such as Shk̓wēh̓ (ocean), Stak̓w (river), lakes. The Project's planned clearing and grubbing areas are also excluded, as these areas will no longer contain soil or vegetation that could be affected by acidification.						
Where the same site series (map code and ecosystem name) occurs in more than one biogeoclimatic unit, the areas have been combined and the contributing biogeoclimatic units are listed together in the biogeoclimatic Unit column						
Tree Codes (BC MOF 2026) – Act (black cottonwood)Ba (amabilis fir), Cw (ᑭᐱᐱᐱᐱᐱᐱ; western redcedar), Fd (Douglas-fir), Hm (ᑭᐱᐱᐱᐱᐱᐱ; mountain hemlock), Hw (ᑭᐱᐱᐱᐱᐱᐱ; western hemlock), Pl (lodgepole pine), Ss (Sitka spruce), Yc (ᑭ'elhmáy; yellow-cedar)						

Table 9 Ecosystems with Acid Deposition Exceedance

Major Broad Ecosystem Class	BEC Unit	Site Series	Map Code	Ecosystem Name	BC CDC Status	Structural Stage	Project-Alone Case Exceedance Area (ha)	Application Case Exceedance Area (ha)	Cumulative Case Exceedance Area (ha)
Coniferous Forest (Low Elevation)	CWHvm2	01	AB	HwBa-blueberry	Yellow	7	0.0	1.6	2.0
	CWHdm	01	HM	Hw-flat moss	–	3	0.0	44.7	46.1
						5	0.0	10.6	11.7
						6	0.0	35.5	39.2
					7	0.0	5.3	6.0	
	Coniferous Forest (Low Elevation) Subtotal						0.0	97.6	105.1
Forested Wetland and Riparian (Deciduous)	CWHdm	09	CD	Act - Red-osier dogwood mid bench	Blue	6	0.0	3.4	4.1
		09	CD	Act - Red-osier dogwood mid bench		7	0.0	2.3	2.3
		Forested Wetland and Riparian (Deciduous) Subtotal						0.0	5.7
Sparsely Vegetated	CWHdm	00	RO	Rock outcrop	Not Ranked	1	0.0	16.7	16.8
		Sparsely Vegetated Subtotal					0.0	16.7	16.8
GRAND TOTAL							0.0	120.1	128.2
Notes:									
The spatial extent of modelled deposition areas shown here includes terrestrial only areas, and excludes non-terrestrial areas such as Shk̓weh̓ (ocean), Stak̓w (river), or lakes. The Project's planned clearing and grubbing areas are also excluded, as these areas will no longer contain soil or vegetation that could be affected by acidification.									
BC CDC Status – conservation status based on the BC Species and Ecosystems Explorer (BC CDC 2026). A status of – indicates that									
Tree Codes (BC MOF) – Act (black cottonwood), Ba (amabilis fir), Hw (Kwáystay; western hemlock)									
Structural stages (RIC 1998b): 1 – sparse; 3 – shrub; 5 – young forest; 6 – mature forest; 7 – old forest									

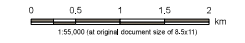


Notes:
 1. Coordinate System:
 Name: NAD 1983 UTM Zone 10N
 2. Data Sources: DataSBC, Government of British Columbia;
 Natural Resources Canada
 3. Imagery: Google June 2023, Esri

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- Project Cleaning and Grubbing Area
- Local Study Area

- Soil Acid Exceedance
- Nitrogen Deposition Exceedance ≥ 4 kg/ha/yr
- Dominant Broad Ecosystem**
- Anthropogenic
- Avalanche Track
- Coniferous Forest (Low Elevation)
- Coniferous Forest (Montane)
- Estuarine Marsh/Meadow
- Forested Wetland and Riparian (Coniferous)
- Forested Wetland and Riparian (Deciduous)
- Non-Forested Riparian
- Sparsely Vegetated
- Subalpine Parkland and Krummholz
- Water



Stantec **Woodfibre LNG**

Project Location:
 Swilyst
 Howe Sound, District of Squamish

Project Number: 12022930
 Prepared by SPARKER on 20200706
 Reviewed by MICHELLE on 20200706
 Checked by PRABHAKAR on 20200709

Client/Project/Report:
 Woodfibre LNG General Partner Inc.
 Woodfibre LNG Project
 Acidification and Eutrophication Assessment

Figure No.
5

Terrestrial Ecosystem Mapping Dominant Ecosystem and Exceedances

4.3 EUTROPHICATION ASSESSMENT

Three empirical critical loads for nitrogen were selected to support the assessment:

- 4 kg/ha/yr for forested upland and wetland ecosystems
- 2 kg/ha/yr for alpine and subalpine ecosystems and lichen
- 63 kg/ha/yr for salt marsh

The eutrophication empirical critical load for forested upland and wetland ecosystems is exceeded in the Application Case and Cumulative Case but not at Baseline or in the Project-alone Case (Table 10; Figure 5). A total of 22.6 ha of area in the LSA (0.6%) is exceeded in the Application Case and 25.4 ha of area in the LSA (0.7%) in the Cumulative Case. The small exceedance area is located immediately adjacent to the Project (Figure 5).

The eutrophication empirical critical load for alpine and subalpine ecosystems and lichen is exceeded in the Application Case and Cumulative Case but not at Baseline or in the Project-alone Case (Table 11; Figure 2). A total of 10,934.3 ha of area is exceeded in the Application Case and 11,314.2 in the Cumulative Case. The large exceedance area associated with the 2 kg/ha/yr critical load is primarily a function of a small project-related incremental increase in deposition from baseline conditions. Baseline nitrogen deposition (1.8 kg/ha/yr) is already close to the selected critical load; therefore, relatively small increases in nitrogen deposition are sufficient to result in exceedance over a large area.

A total of 86.4 ha of alpine and parkland area (CMA and MHmmp) exceeds the empirical critical load in the Application Case (<0.1% of the LALSA); these areas are located along the western edge of the LALSA (Figure 6).

Lichens within the 2 kg/ha/yr isopleth are predicted to experience a decline in richness or abundance, with the magnitude of decline related to the magnitude of deposition. Predicted nitrogen deposition attenuates rapidly from the area immediately adjacent to the Project emission source to levels between 2 and 2.5 kg/ha/yr throughout the rest of the Squamish River valley (Figure 6). The area predicted to experience more elevated nitrogen deposition is constrained to a relatively small area close to the Project (Figure 6).

Quantification of predicted lichen response is made through application of 90% quantile regression models developed by Geiser et al. (2019). Lichens within the overall Squamish River valley (between 2 and 2.5 kg/ha/yr; 97% of the LALSA) are predicted to experience small declines in diversity indices in comparison to baseline conditions; 1-5% for overall lichen species richness, 3-9% for forage lichen abundance and diversity, and 4-13% for cyanolichen abundance (Table 12). Within the smaller area predicted to experience 4 kg/ha/yr of nitrogen deposition or higher (32 ha in the Application Case; representing 0.3% of the LALSA; Figure 6), declines from baseline conditions are predicted of at least 13% in overall lichen species richness, 26% decline in forage lichen abundance and richness, and 39% decline in cyanolichen abundance (Table 12).

There are no known occurrences of lichen species listed by the BC Conservation Data Centre (BC CDC 2026) present within the LALSA; however, there remains potential for lichens of conservation concern to occur.

Nitrogen deposition does not exceed the 63 kg/ha/yr empirical critical load for salt marsh in any case, therefore no effects to salt marsh are expected as a result of the Project.

Table 10 **Ecosystems with Nitrogen Deposition Exceedance for Forested Upland and Wetland (4 kg/ha/yr)**

Major Broad Ecosystem Class	BEC Unit	Site Series	Map Code	Ecosystem Name	Structural Stage	Project-Alone Case (ha)	Application Case (ha)	Cumulative Case (ha)
Coniferous Forest (Low Elevation)	CWHdm	01	HM	Hw-flat moss	3	0.0	14.9	17.1
Coniferous Forest (Low Elevation)	CWHdm	01	HM	Hw-flat moss	5	0.0	0.1	0.2
Sparsely Vegetated	CWHdm	00	RO	Rock outcrop	1	0.0	7.6	8.1
Total						0.0	22.6	25.4
<p>Notes:</p> <p>The spatial extent of modelled deposition exceedance area includes terrestrial areas only, and excludes non-terrestrial areas such as Shkwēn (ocean), Stakw(river), and lakes. The Project's planned clearing and grubbing areas are also excluded, as these areas will no longer contain vegetation that could be affected by eutrophication.</p> <p>Structural stages (RIC 1998b): 1 – sparse; 3 – shrub; 5 – young forest</p>								

**WOODFIBRE LNG PROJECT:
TERRESTRIAL ACIDIFICATION AND EUTROPHICATION ASSESSMENT**

October 16, 2026

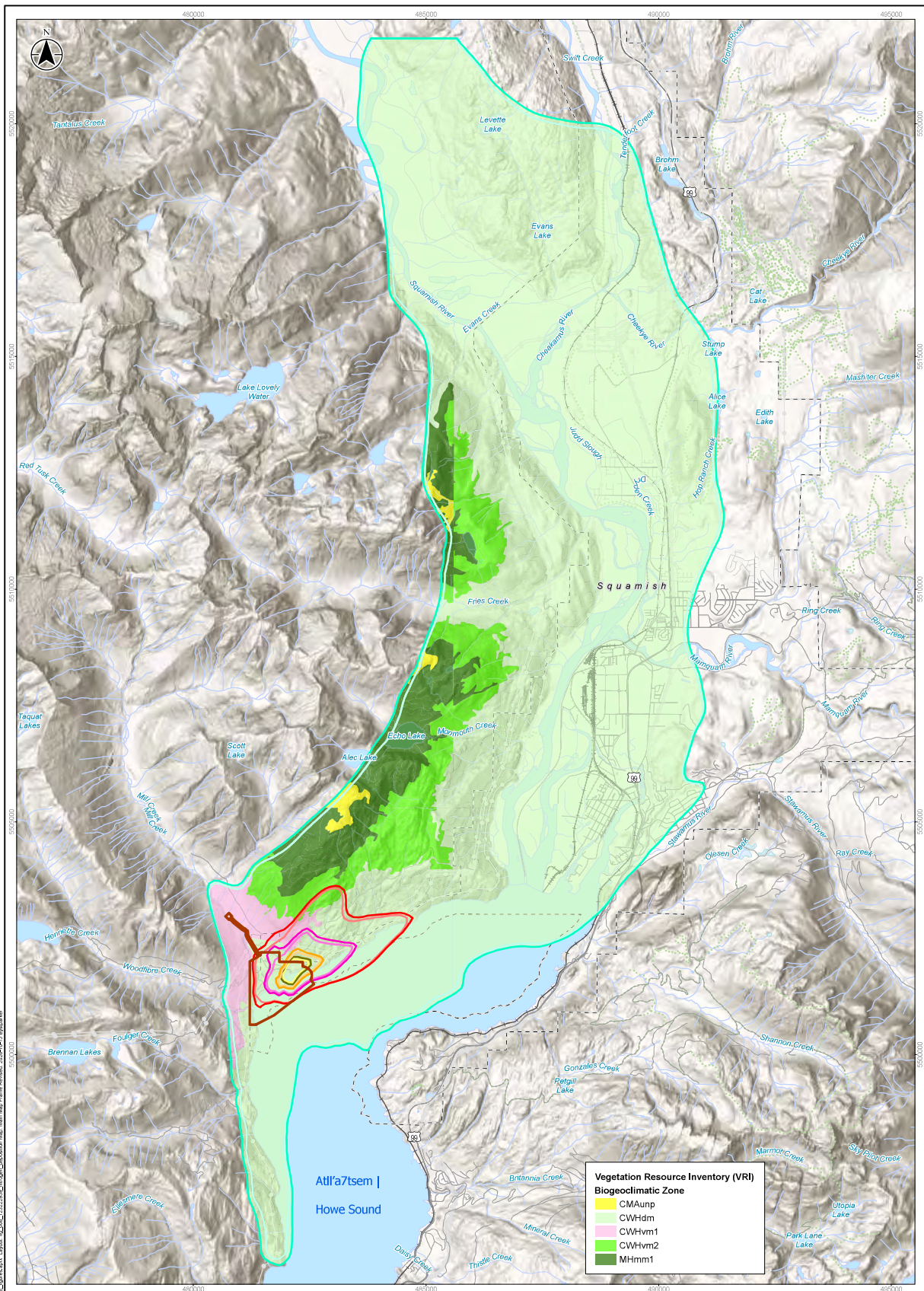
Table 11 Biogeoclimatic Units with Nitrogen Deposition Exceedance for Alpine and Parkland and Lichens (2 kg/ha/yr)

Biogeoclimatic Unit	Project-Alone Case (ha)	Application Case (ha)	Cumulative Case (ha)
CMAunp	0.0	66.7	82.2
CWHdm	0.0	9,028.8	9,286.9
CWHvm1	0.0	271.5	301.1
CWHvm2	0.0	912.6	923.8
MHmm1	0.0	635.1	699.5
MHmmp*	0.0	19.7	20.7
Total	0.0	10,934.3	11,314.2
<p>Notes:</p> <p>BEC units are based on Vegetation Resources Inventory mapping.</p> <p>* Identified as Alpine in Vegetation Resources Inventory mapping in the MHmm1 biogeoclimatic unit.</p> <p>The spatial extent of modelled deposition exceedance area includes terrestrial areas only, and excludes non-terrestrial areas such as Shkwēn (ocean), Stakw (river), and lakes. The Project's planned clearing and grubbing areas are also excluded, as these areas will no longer contain vegetation that could be affected by eutrophication.</p>			

October 16, 2026

Table 12 Predicted Decline in Lichen Diversity Indices from Baseline due to Project-related Nitrogen Deposition

Lichen Functional Group Diversity Indices	Percent Decline in Lichen Diversity Indices From Baseline Based on Deposition Expressed as kg/ha/yr					
	1.8	2.0	2.5	3	4	5
Lichen species richness	0	1	5	8	13	19
Forage lichen abundance and diversity	0	3	9	15	26	36
Cyanolichen abundance	0	4	13	22	39	53
Isopleth Area						
Isopleth Area - Application Case (ha)	N/A	10,813	284	100	32	16
Isopleth Area - Cumulative Case (ha)	N/A	11,187	322	118	35	17
Notes: Richness, abundance, and diversity percent declines calculated from the 90% quantile regression equations in Geiser et al. 2019. Maximum deposition is 11.6 kg/ha/yr in the Application Case and 11.7 kg/ha/yr in the Cumulative Case (which do not have areas associated with them, as they are maximum point estimates located within the fence line). Baseline nitrogen deposition is 1.8 kg/ha/yr. This single value is based on a weather station on Saturna Island and applies to the entire RSA.						

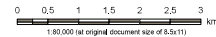


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1. Coordinate System:
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- Woodfibre LNG Site Certified Project Area

- Nitrogen Deposition => 2 kg/ha/yr**
 - Cumulative Case (Lichen and Alpine Local Study Area)
 - Application Case
- Nitrogen Deposition => 2.5 kg/ha/yr**
 - Cumulative Case
 - Application Case
- Nitrogen Deposition => 3 kg/ha/yr**
 - Cumulative Case
 - Application Case
- Nitrogen Deposition => 4 kg/ha/yr**
 - Cumulative Case
 - Application Case
- Nitrogen Deposition => 5 kg/ha/yr**
 - Cumulative Case
 - Application Case



Stantec **Woodfibre LNG**

Project Location: Howe Sound, District of Squamish
Project Number: 12022939
Prepared by: SPARKER on 2020/07/06
Reviewed by: MCHILL on 2020/07/06
Checked by: PRAJANACHUK on 2020/07/09

Client/Project/Report:
Woodfibre LNG General Partner Inc.
Woodfibre LNG Project
Acidification and Eutrophication Assessment

Figure No.
6

Nitrogen Deposition in the Lichen and Alpine Local Study Area

5.0 CONCLUSIONS

The Level 0 terrestrial acidification and eutrophication assessment identified the following key findings:

- Screening:
 - Screening thresholds for acid deposition, sulphur deposition, and nitrogen deposition were exceeded, confirming that a Level 0 acidification and eutrophication assessment was required.
 - The Cumulative Case acid deposition screening isopleth encompassed 3,534.3 ha of terrestrial area, which represents the LSA; 64% of exposed soils within this area were rated as moderately sensitive to acid deposition, 35% as low sensitivity, and 1% as high sensitivity.
- Acidification Assessment:
 - Acidification critical loads for exposed soils were exceeded in the Application Case and Cumulative Case, but not at baseline or in the Project-Alone Case. Exceedance areas totaled 120.1 ha in the Application Case (3.4% of LSA area) and 128.2 ha in the Cumulative Case (3.6% of LSA area).
 - Acidification exceedance areas were primarily associated with low elevation coniferous forest near the Project and northward along the Skwxwú7mesh Stákw (Squamish River) valley.
- Eutrophication Assessment:
 - For eutrophication, the 4 kg/ha/yr empirical critical load for forested upland and wetland ecosystems was exceeded in the Application Case and Cumulative Case but not at baseline, or in the Project-Alone Case. Exceedance areas were limited to areas immediately adjacent to the Project and totaled 22.6 ha in the Application Case (0.6% of LSA area) and 25.4 ha in the Cumulative Case (0.7% of LSA area).
 - The 2 kg/ha/yr empirical critical load for alpine and subalpine ecosystems and lichens was exceeded in the Application Case and Cumulative Case but not at baseline or in the Project-Alone Case. Baseline nitrogen deposition (1.8 kg/ha/yr) is already close to the critical load (2 kg/ha/yr). The Application Case exceedance area totaled 10,934.3 ha and the Cumulative Case exceedance totaled 11,314.2 ha. However, predicted nitrogen deposition attenuates rapidly from the area immediately adjacent to the Project to levels between 2 and 2.5 kg/ha/yr throughout the rest of the Squamish River valley (97% of the LALSA; Figure 6), where lichens are predicted to experience declines between 1-13% from baseline conditions depending on sensitivity of lichen species. The area predicted to experience more elevated nitrogen deposition is constrained to a relatively small area (32 ha) close to the Project emission sources (Figure 6), where declines in lichen diversity indices from baseline conditions in excess of 13-39% are predicted.
 - The 63 kg/ha/yr empirical critical load for salt marsh was not exceeded in any assessment case; therefore, no eutrophication effects to salt marsh are expected based on the modelled deposition results.

**WOODFIBRE LNG PROJECT:
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The last step in the screening process for determining the correct level of analysis for acidification assessment (BC MOE 2014) consists of determining whether acidic deposition exceeds Level 0 critical loads. Though modelled acidic deposition does exceed Level 0 critical loads in the Application Case and Cumulative Case, it does so only in small, isolated areas (120.1 ha, approximately 3% of the LSA), and the air dispersion modelling is conservative in its predictions (i.e., assuming emission sources are operating at the maximum rated capacity, simultaneously and coinciding with worst case meteorology). Based on these factors, Level 0 is considered an appropriate level of assessment.

Predicted exceedances are limited in spatial extent (except for lichens) and are not predicted at Baseline or in the Project-Alone Case; therefore, the assessment indicates a low potential for widespread terrestrial acidification or eutrophication effects within the study areas due to the Project. A monitoring program to refine understanding of nitrogen deposition and potential effects to lichens is recommended.

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APPENDIX A

TEM Map Legend

APPENDIX A TEM MAP LEGEND

Table A.1 TEM Map Legend: Ecological Units

Major Broad Ecosystem Class (Adjusted)	BEC Unit	Map Code	Site Series	Site Series Name	Assumed Modifiers	Typical Situation	Moisture Regime
Coniferous Forest (Low Elevation)	CWHdm	HM	01	Hw-flat moss	d m	gentle mid slopes; deep soils	submes-mes
Coniferous Forest (Low Elevation)	CWHdm	DC	02	FdPl-cladina	j r s	crests of gentle slopes; shallow soils	xeric
Coniferous Forest (Low Elevation)	CWHdm	DS	03	FdHw-salal	d m w	gentle mid to upper slopes; deep soils	xeric-subxer
Coniferous Forest (Low Elevation)	CWHvm1	AB	01	HwBa-blueberry	d j m	gentle mid slope; deep soil	mesic
Coniferous Forest (Low Elevation)	CWHvm1	HS	03	HwCw-salal	j m s	gentle upper slope; shallow soil	xeric-subxer
Coniferous Forest (Low Elevation)	CWHvm2	AB	01	HwBa-blueberry	d j m	gentle mid slope; deep soil	mesic
Coniferous Forest (Low Elevation)	CWHvm2	LC	02	HwPl-cladina	j m r s	gentle crests and ridges; shallow soil	v. xeric
Coniferous Forest (Low Elevation)	CWHvm2	HS	03	HwCw-salal	j m s	gentle upper slope; shallow soil	xeric-subxer
Coniferous Forest (Low Elevation)	CWHvm2	AF	05	BaCw-foamflower	d m	significant slope; deep rich soil	subhyg-hyg
Coniferous Forest (Low Elevation)	CWHvm2	AS	07	BaCw-salmonberry	d j m	gentle lower slope; deep rich moist soil	subhyg-hyg
Coniferous Forest (Montane)	MHmm1	MB	01	HmBa-blueberry	d m	mid slopes >35%; deep soil	subxer-mes
Coniferous Forest (Montane)	MHmm1	YH	07	YcHm-hellebore	d j m	gentle lower slopes; rich soils	hygric
Coniferous Forest (Montane)	MHmm1	AA	00	Ba-alaskan blueberry	s	stunted edaphic forests; shallow soil	submes-mes
Forested Wetland and Riparian (Coniferous)	CWHdm	SS	08	Ss-salmonberry	a d j m	high fluvial benches; deep soils	subhyg-hyg
Forested Wetland and Riparian (Coniferous)	CWHvm2	YG	09	CwYc-goldthread	d j p	lower slope; organic bog forests	subhyg-hyg

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Major Broad Ecosystem Class (Adjusted)	BEC Unit	Map Code	Site Series	Site Series Name	Assumed Modifiers	Typical Situation	Moisture Regime
Forested Wetland and Riparian (Coniferous)	MHmm1	YS	08	HmYc-sphagnum	d j p	organic treed bog	subhydryc
Forested Wetland and Riparian (Coniferous)	MHmm1	YC	09	YcHm-skunk cabbage	d j m	treed swamp	subhydryc
Avalanche Track	MHmm1	SA	00	Sitka alder - salmonberry avalanche chute	-	colluvial slopes subject to periodic snow avalanching	mesic - subhygric
Avalanche Track	MHmmp	SA	00	Sitka alder - salmonberry avalanche chute	-	moderate to steep colluvium; regular snow avalanching	subhygric
Subalpine Parkland and Krummholz	MHmm1	MH	00	Hm - mountain-heather parkland/heath	-	gentle slopes; sandy clays, clay loams	submesic - mesic
Subalpine Parkland and Krummholz	MHmm1	MK	00	Mountain hemlock krummholz	r v	very thin soils over bedrock on rocky wind exposed ridges	v. xeric-submesic
Subalpine Parkland and Krummholz	MHmmp	AK	00	HmYc - alpine krummholz	d j m	mid and upper slopes	xeric
Subalpine Parkland and Krummholz	MHmmp	MH	00	Hm-Mountain Heather Parkland Heath	d j m	deep, medium textured soils on subdued slopes	subxeric - mesic
Subalpine Parkland and Krummholz	MHmmp	MR	00	Mountain heather-racomitrium scrub	m r s	subalpine unit on windswept ridges	xeric-subxer
Subalpine Parkland and Krummholz	MHmmp	AK	00	HmYc - alpine krummholz	d j m	mid and upper slopes	xeric
Subalpine Parkland and Krummholz	MHmmp	MR	00	Mountain heather-racomitrium scrub	c j v	subalpine unit on windswept ridges	xeric-subxer
Subalpine Parkland and Krummholz	MHmm1	MM	02	HmBa-mountain heather	j r s	gentle crests and ridges; shallow soil	v. xeric-xeric

Notes:
 Legend source is Squamish LU TEM (Timberline 2008). Only ecological units mapped in the first decile (dominant) are included.
 Tree Codes (BC MOF 2026) – Act (black cottonwood)Ba (amabilis fir), Cw (Xápayay - western redcedar), Fd (Douglas-fir), Hm (mountain hemlock), Hw (western hemlock), Pl (lodgepole pine), Ss (Sitka spruce), Yc (K'elhmáy; yellow-cedar).
 Assumed Modifiers (RIC 1998b) – a (active), c (coarse textured soil), d (deep soil), j (gentle slope), m (medium textured soil), p (organic soil), r (ridge), s (shallow soil), v (very shallow soil), w (warm aspect, moderate slope)

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Table A.2 TEM Map Legend: Anthropogenic and Sparsely Vegetated Units

Map Code / Site Series*	Name	Major Broad Ecosystem Class
ES	Exposed soil	Sparsely Vegetated
GB	Gravel bar	Sparsely Vegetated
RO	Rock outcrop	Sparsely Vegetated
RU	Rubble	Sparsely Vegetated
TA	Talus	Sparsely Vegetated
RZ	Road surface	Anthropogenic
UR	Urban	Anthropogenic
FI	Low bench floodplain	Non-Forested Riparian
Em	Estuary marsh/meadow	Estuarine Marsh/Meadow
Et	Estuary tidal flat	Sparsely Vegetated
Fa	Floodplain active channel	Sparsely Vegetated
<p>Notes:</p> <p>Non-terrestrial codes excluded from analysis include: LA – Lake; OC – Shḱweñ (Ocean); PD – Pond; PN – Permanent Snow; RE: Reservoir; RI – Staḱw (River)</p> <p>*2026 TEM mapping in the gap area introduced the codes FI, Em, Et, and Fa.</p>		