

Floatel #1 and Floatel #2 Noise Monitoring Survey – Q3 2026 (July 28 – 30, 2026)

Woodfibre LNG Project

September 14, 2026

123222939EN-RPT0080

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 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. The Project is also operating within the traditional, ancestral, and unceded territory of the səliwətał (Tsleil-Waututh) Nation, and to other Indigenous groups as defined in the Project's Environmental Assessment Certificates. Woodfibre LNG General Partner Inc. (Woodfibre LNG) recognizes the importance of these areas to the Skwxwú7mesh stélmexw (Squamish People), and other Indigenous groups. Woodfibre LNG General Partner Inc., as general partner on behalf of Woodfibre LNG Limited Partnership seeks to construct and operate the Project in a manner that is respectful of Indigenous values. This Floatel Noise Monitoring and Mitigation Plan is primarily written in English with important place names, phrases, and passages provided in Skwxwú7mesh sníchim (the Squamish language).

Temíxwiýikw chet wa naantem chet ti temíxw Swiyát
Chet wa sméñhemswit 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.

LIMITATIONS AND SIGN-OFF

This document entitled Floatel #1 and Floatel #2 Noise Monitoring Survey – Q3 2026 was prepared by Stantec Consulting Ltd. (“Stantec”) for the account of Woodfibre LNG General Partner Inc. (the “Client”). Any reliance on this document by any third party 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 and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by: Yong Ma, P.Eng. Digitally signed by Yong Ma, P.Eng.
Date: 2026.09.16 13:13:30 -06'00'
Signature

Yong Ma, P.Eng.
Printed Name

Reviewed by: Jonathan Chun Wan Chui -- P.Eng. - EGBC Digitally signed by Jonathan Chun Wan Chui -- P.Eng. - EGBC
Signature

Jonathan Chui, P.Eng., INCE.
Printed Name

Approved by: Adriana MacLeod Digitally signed by Adriana MacLeod
Date: 2026.09.16 14:55:48 -07'00'
Signature

Adriana MacLeod, B.Sc.
Printed Name

EXECUTIVE SUMMARY

Woodfibre LNG General Partner Inc. (Woodfibre LNG) is constructing the Woodfibre Liquefied Natural Gas Project (the Project), a liquefied natural gas export facility located on the former Woodfibre Pulp Mill site approximately seven kilometres (km) southwest of Sk̓w̓x̓wú7mesh (Squamish), British Columbia (BC).

In accordance with the Floatel Noise Monitoring and Mitigation Plan (FNMMP), Stantec Consulting Ltd. (Stantec) commenced quarterly noise monitoring program following the deployment of the floating worker accommodations (Floatel #1 and Floatel #2).

To satisfy Condition 36 of Amendment #4 of the Environmental Assessment Certificate (EAC) #E15-02, the Quarter 3 (Q3) 2026 monitoring program for Floatel #1 and Floatel #2, was conducted from July 28 to July 30, 2026. Continuous sound level monitoring was conducted at five cabins located on different decks on Floatel #1: Cabin 5645, Cabin 6637, Cabin 7032, Cabin 9215, and Cabin 0108; and three cabins on Floatel #2: Cabin 4477, Cabin 514, and Cabin 614.

Sound level targets are set forth based on the Health Canada's Guidance for Evaluating Human Health Effects in Impact Assessment: Noise, 2023 (Health Canada thresholds), and the American National Standards Institute (ANSI) ANSI S12.2-2026 Criteria for Evaluating Room Noise (ANSI S12.2). Measured sound levels were compared against the Health Canada sleep disturbance thresholds and the ANSI S12.2 indoor sound level criteria to assess compliance. Occupant interviews were also conducted to identify potential noise related concerns.

On Floatel #1, Cabin 7032 met the Health Canada sleep disturbance threshold of 30 dBA during the daytime periods of July 28. Results from all other measured cabins were above the Health Canada thresholds. The measurement results at the cabins, i.e., 5645, 6637, 7032, 9215 met the ANSI S12.2 room sound level criteria of 40 dBA. At Cabin 0108, measured sound levels were marginally above 40 dBA (i.e., by 0.3 dB).

On Floatel #2, the measurement results at all cabins complied with the ANSI S12.2 room sound level criteria of 40 dBA, furthermore, the sound levels of Cabin 614 met the Health Canada sleep disturbance threshold of 30 dBA, however, sound levels of Cabin 4477 and Cabin 514 were above the Health Canada threshold.

No sleep disturbances, complaints, or occupant concerns related to construction noise were reported during the survey period. Noise generated by Project construction activities did not affect the interior acoustic environment within Floatel #1 and Floatel #2. The Communication Protocol and Complaint Response Procedure outlined in the FNMMP will be maintained to address and manage any future noise concerns raised by the occupants.

Table of Contents

PREAMBLE	I
LIMITATIONS AND SIGN-OFF	II
EXECUTIVE SUMMARY	III
ABBREVIATIONS	VI
GLOSSARY	VII
1.0 INTRODUCTION.....	1
2.0 CABIN SOUND LEVEL TARGETS.....	2
2.1 HEALTH CANADA SLEEP DISTURBANCE THRESHOLD	2
2.2 ANSI S12.2 SOUND LEVEL CRITERIA FOR ROOM	2
3.0 NOISE MONITORING PROGRAM.....	4
3.1 CABIN LOCATIONS	4
3.2 MEASUREMENT INSTRUMENTATION	5
3.3 MEASUREMENT SETUP	6
3.4 PROJECT CONSTRUCTION ACTIVITIES.....	7
3.5 DATA ISOLATION ANALYSIS.....	7
4.0 MEASUREMENT RESULTS ON FLOATEL #1.....	9
4.1 MEASUREMENT RESULTS AT CABINS	9
4.2 CABIN 5645	9
4.3 CABIN 6637	10
4.4 CABIN 7032	11
4.5 CABIN 9215	11
4.6 CABIN 0108	12
5.0 MEASUREMENT RESULTS ON FLOATEL #2.....	14
5.1 MEASUREMENT RESULTS AT CABINS	14
5.2 CABIN 4477	14
5.3 CABIN 514	15
5.4 CABIN 614	15
6.0 NOISE INTERVIEWS.....	17
7.0 DISCUSSION.....	18
7.1 HEALTH CANADA	18
7.2 ANSI S12.2 SOUND LEVEL CRITERIA	19
7.3 NOISE INTERVIEWS.....	19
8.0 CONCLUSIONS.....	20
9.0 REFERENCES.....	21

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

LIST OF TABLES

Table 2.1 A-weighted Sound Level Criteria for Rooms – Hotels and Motels.....	3
Table 3.1 Selected Cabins, Descriptions, and Observations.....	5
Table 3.2 Details of Measurement Instrumentation	6
Table 3.3 Noise Monitoring Duration at Cabins	7
Table 4.1 Summary of Measurement Results	9
Table 4.2 Summary of Daily L_d and L_n at Cabin 5645	10
Table 4.3 Summary of Daily L_d and L_n at Cabin 6637	10
Table 4.4 Summary of Daily L_d and L_n at Cabin 7032	11
Table 4.5 Summary of Daily L_d and L_n at Cabin 9215	12
Table 4.6 Summary of Daily L_d and L_n at Cabin 0108	12
Table 5.1 Summary of Measurement Results	14
Table 5.2 Summary of Daily L_d and L_n at Cabin 4477	14
Table 5.3 Summary of Daily L_d and L_n at Cabin 514	15
Table 5.4 Summary of Daily L_d and L_n at Cabin 614	16
Table 7.1 Summary of Results.....	18

LIST OF FIGURES

Figure 1 Site Plan with Floatel #1 and Floatel #2 Locations.....	2
Figure 2 Measurement Location at Cabin 5645 (Deck 5) – Floatel #1	3
Figure 3 Measurement Location at Cabin 6637 and Cabin 7032 (Deck 6 and Deck 7) – Floatel #1	4
Figure 4 Measurement Location at Cabin 9215 and Cabin 0108 (Deck 9 and Deck 10) – Floatel #1	5
Figure 5 Measurement Location at Cabin 4477 and Cabin 514 (Deck 4 and Deck 5) – Floatel #2	6
Figure 6 Measurement Location at Cabin 614 (Deck 6) – Floatel #2	7
Figure 7 Sound Level Meter Setup at Cabin 5645 – Floatel #1.....	8
Figure 8 Sound Level Meter Setup at Cabin 6637 – Floatel #1.....	8
Figure 9 Sound Level Meter Setup at Cabin 7032 – Floatel #1.....	9
Figure 10 Sound Level Meter Setup at Cabin 9215 – Floatel #1.....	9
Figure 11 Sound Level Meter Setup at Cabin 0108 – Floatel #1.....	10
Figure 12 Sound Level Meter Setup at Cabin 4477 – Floatel #2.....	10
Figure 13 Sound Level Meter Setup at Cabin 514 – Floatel #2.....	11
Figure 14 Sound Level Meter Setup at Cabin 614 – Floatel #2.....	11
Figure 15 Construction Areas Onsite	12

LIST OF APPENDICES

APPENDIX A	FIGURES
APPENDIX B	INSTRUMENTATION CALIBRATION CERTIFICATION
APPENDIX C	NOISE INTERVIEW RECORDS

ABBREVIATIONS

ANSI	American National Standards Institute
BC	British Columbia
BCER	British Columbia Energy Regulator
dB	Decibel level
dBA	A-weighted decibel level
EAC	Environmental Assessment Certificate
EAO	Environmental Assessment Office
FDS	Federal Decision Statement
FNMMP	Floatel Noise Monitoring and Mitigation Plan
HVAC	Heating, ventilation, and air-conditioning
Hz	Hertz
L_{Amax}	Maximum A-weighted equivalent sound level
L_d	Daytime equivalent sound level
L_{eq}	Energy equivalent sound level
L_n	Nighttime equivalent sound level
LNG	Liquefied natural gas
MOH	Ministry of Health
the Project	Woodfibre Liquefied Natural Gas Project
SPL	Sound pressure level
VCH	Vancouver Coastal Health
WHO	World Health Organization
Woodfibre LNG	Woodfibre LNG General Partner Inc.

GLOSSARY

Adaptive Management	A systematic process for continually improving management policies and practices by learning from the outcomes of operational programs.
Bands (octave, 1/3 octave)	A series of electronic filters separate sound into discrete frequency bands, making it possible to know how sound energy is distributed as a function of frequency. Each octave band has a centre frequency that is double the centre frequency of the octave band preceding it.
daytime	The hours from 07:00 to 22:00.
dB - Decibel	A logarithmic unit associated with sound pressure levels and sound power levels.
dBA - decibel, A-weighted	A logarithmic unit where the recorded sound has been filtered using the A frequency weighting scale. A-weighting somewhat mimics the response of the human ear to sounds at different frequencies. A weighted sound pressure levels are denoted by the suffix 'A' (i.e., dBA), and the term pressure is normally omitted from the description (i.e., sound level or noise level).
energy equivalent sound level (L _{eq})	An energy-average sound level taken over a specified period of time. It represents the average sound pressure encountered for the period. The time period is often added as a suffix to the label (e.g., L _{eq} (24) for the 24-hour equivalent sound level). L _{eq} is usually A-weighted. A L _{eq} value expressed in dBA is a good, single value descriptor of the annoyance of noise.
frequency	Number of cycles per unit of time. In acoustics frequency is expressed in hertz (Hz), i.e., cycles per second.
Floatel(s)	Marine-based work camp, associated facilities and mooring infrastructure dedicated to housing up to 705 and 735 workers (including crew), in Floatel #1 and Floatel #2, respectively, during the Construction and Commissioning of the Project.
hertz (Hz)	Unit of measurement of frequency, numerically equal to cycles per second.
L _d	Daytime sound level, an equivalent continuous sound level taken over 15 hours from 07:00 to 22:00.

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

L_{Amax}	The maximum value of the A-weighted sound pressure level during a measurement duration.
L_n	Nighttime sound level, an equivalent continuous sound level taken over 9 hours from 22:00 to 07:00.
nighttime	The hours from 22:00 to 07:00.
noise	Unwanted sound.
noise level	Same as sound level, except applied to unwanted sounds.
sound	A dynamic (fluctuating) pressure.
sound pressure level (SPL)	The logarithmic ratio of the root mean square (RMS) sound pressure to the sound pressure at the threshold of hearing. The sound pressure level is defined by the equation below where P is the RMS pressure due to a sound and P_0 is the reference pressure. P_0 is usually taken as 2.0×10^{-5} Pascals. $SPL \text{ (dB)} = 20 \log (P_{RMS}/P_0)$

1.0 INTRODUCTION

In accordance with the Floatel Noise Monitoring and Mitigation Plan (FNMMP), Stantec conducted Quarter 3 (Q3) subsequent noise monitoring survey on Floatel #1 and Floatel #2 from July 28 to July 30, 2026, to satisfy Condition 36 of Amendment #4 of the Environmental Assessment Certificate (EAC) #E15-02. Figure 1 shows the locations of Floatel #1 and Floatel #2.

The objectives of the noise monitoring programs include the following:

- Measure sound levels at the selected cabins on Floatel #1 and Floatel #2.
- Analyze data gathered and evaluate noise effects on the floatel cabin occupants from construction activities.
- Compare the measured sound levels with applicable sleep disturbance thresholds and assess compliance for sleep disturbance effect for sleeping quarter occupants.
- Conduct interviews about construction noise with occupants of both floatels.
- Recommend mitigation or adaptive management plan if required.

This report summarizes the measurement results and findings during the Q3 noise monitoring surveys for Floatel #1 and Floatel #2.

2.0 CABIN SOUND LEVEL TARGETS

Construction noise may cause sleep disturbance for the occupants on Floatel #1 and Floatel #2 during the Project construction phase. This section focuses on the sleep disturbance threshold recommendations by Health Canada and room sound level criteria from ANSI S12.2. The noise descriptors, including energy equivalent sound level (L_{eq}), daytime equivalent A-weighted sound level (L_d), nighttime equivalent A-weighted sound level (L_n), and maximum A-weighted sound level (L_{Amax}) are used to quantify noise levels.

2.1 HEALTH CANADA SLEEP DISTURBANCE THRESHOLD

The Project construction activities may be scheduled 24 hours per day, meaning that the floatel occupants could be off-duty and sleeping during both daytime and nighttime while construction is ongoing. In accordance with the Health Canada thresholds for sleep disturbances, the recommended indoor noise thresholds for Floatel #1 and Floatel #2 are:

- 30 dBA (L_{eq}) for continuous noise level during sleep periods.
- Maximum 15 times of occurrence of $L_{Amax} > 45$ dBA during both daytime (07:00 to 22:00) and nighttime (22:00 to 07:00).

Although the Health Canada sleep disturbance threshold of 30 dBA is used in this assessment, it is better suited for private residential bedrooms with very low background noise. However, in spaces with higher occupant density, such as apartment buildings and hotel or motel rooms, background noise from central heating, ventilation and air-conditioning (HVAC) systems, as well as local people activities, a sound level of 30 dBA may not be feasible.

Therefore, in addition to the Health Canada's thresholds, the ANSI S12.2-2026 standard for hotel and motel room sound level criteria is used as an achievable target for evaluating interior noise on the floatels.

2.2 ANSI S12.2 SOUND LEVEL CRITERIA FOR ROOM

The ANSI S12.2-2026 (Revision of ANSI S12.2-2019 (R2023)) Criteria for Evaluating for Room Noise is commonly used as a reference guide for assessment of sound level criteria for occupants in various interior environments. The ANSI standard specifies sound level criteria when evaluating the room noise by using the survey method that employs the A-weighted sound level. Table 2.1 lists the A-weighted sound level criteria for individual rooms or suite in hotels and motels, based on ANSI sound level criteria for rooms of various uses (ANSI S12.2-2026).

Table 2.1 A-weighted Sound Level Criteria for Rooms – Hotels and Motels

Occupancy	A-weighted Sound Level dBA
Hotels/motels	
Individual rooms or suites	40
Meeting/banquet rooms	35
Service support areas	45
Source: Table C.1 of ANSI S12.2-2026	

As the floatel worker accommodation is similar to the hotel/motel classification, the A-weighted sound level criteria of 40 dBA for individual rooms or suites will be included in the noise evaluation for Floatel #1 and Floatel #2, and will be set as the achievable target for the sleep disturbance thresholds during both daytime and nighttime periods.

3.0 NOISE MONITORING PROGRAM

In accordance with the FNMMP, Stantec Qualified Professionals conducted the Q3 noise monitoring survey on Floatel #1 and Floatel #2 from July 28 to July 30, 2026. The following sections outline the monitoring program details, including cabin locations, measurement instrumentation, measurement setup, Project construction activities occurring during the measurement period, and data analysis methods.

3.1 CABIN LOCATIONS

The sound level meters were set up inside the representative cabins on different decks of Floatel #1 and Floatel #2. A representative cabin is an unoccupied cabin that is available for occupancy and is selected based on the highest potential noise impact. Key factors in cabin selection included proximity to construction activities, line of sight to noise sources, and availability during the survey period.

Depending on availability, five cabins were selected for the Q3 noise monitoring survey on Floatel #1: Cabin 5645, Cabin 6637, Cabin 7032, Cabin 9215, and Cabin 0108. Each cabin is located on a different deck, indicated by the first digit of the cabin number (e.g., Cabin 5645 on Deck 5 and Cabin 0108 on Deck 10). Because Deck 2 is under the vessel waterline and is unlikely to be affected by construction noise, Deck 2 was excluded in the Q3 noise monitoring survey.

Three cabins were selected on Floatel #2: Cabin 4477, Cabin 514, and Cabin 614 located on Deck 4, Deck 5 and Deck 6, respectively.

Table 3.1 summarizes the selected cabins, general descriptions, and field observations. Figure 2 through Figure 6, and Figure 7 through Figure 14 illustrate these cabin locations on each deck of Floatel #1 and Floatel #2.

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Table 3.1 Selected Cabins, Descriptions, and Observations

Cabin	Deck	Description and Observations during Monitoring Period	Reference Figures
Floatel #1			
5645	5	- Total of 219 cabins. - There are Vent Stores (i.e., ventilation rooms) and Service Workshop located at the stern of Deck 5. - Cabin 5645 is located at the inner side of Deck 5.	Figure 2 Figure 7
6637	6	- Total of 248 cabins. - Cabin 6637 is located at the inner side of Deck 6.	Figure 3 Figure 8
7032	7	- Total of 58 cabins. - Ancillary service facilities on Deck 7 including Reception, Gym, Games Lounge, and other facility rooms. - Cabin 7032 is located on the stern of the floatel and facing the 4100 Area.	Figure 3 Figure 9
9215	9	- Total of 88 cabins. - There is an outdoor area at the stern and a smoking area on the starboard side of Deck 9. - Some cabins are located underneath the Fan Rooms (rooms with ventilation fans) on Deck 10. Higher noise from Fan Rooms ventilation openings was observed at the smoke area. - Cabin 9215 is located at the inner side of Deck 9.	Figure 4 Figure 10
0108	10	- Total of 17 cabins with office areas. - There are several Fan Rooms on Deck 10. - Cabin 0108 is located on the starboard side of the floatel and facing the 4100 Area.	Figure 4 Figure 11
Floatel #2			
4477	4	- Total of 195 cabins. - The deck is above the floatel operating equipment on Deck 3 and Deck 2, including heat pumps, and auxiliary equipment on Deck 3, and Engine Stores with power generators, and workshops on Deck 2. - Cabin 4477 is located at the inner side of Deck 4.	Figure 5 Figure 12
514	5	- Total of 200 cabins. - Cabin 514 is located at the inner side of Deck 5.	Figure 5 Figure 13
614	6	- Total of 215 cabins. - Cabin 614 is located on the stern of the floatel and facing the 4100 Area.	Figure 6 Figure 14

3.2 MEASUREMENT INSTRUMENTATION

Noise monitoring was conducted with four Brüel & Kjær Model 2250 and 2270 sound level meters fitted with Brüel & Kjær 4189 and 4966 type microphones. The sound level meters meet the ANSI S1.4-2006 Type 1 and IEC 61672-1 Class 1 specifications. The sound level meters were field calibrated before and after each measurement period and have valid laboratory certificates. Laboratory certificates are considered valid for two years after the last recalibration for the sound level meters and within one year period for the calibrator.

Table 3.2 summarizes details of the measurement instrumentation. Corresponding calibration certificates for the sound level meters and calibrator are attached in Appendix B.

Table 3.2 Details of Measurement Instrumentation

Item	Description
Sound Level Meter	Brüel & Kjær Model 2250 s/n 2809183 Brüel & Kjær Model 2250 s/n 3003408 Brüel & Kjær Model 2250 s/n 3008995 Brüel & Kjær Model 2270 s/n 3002024
Microphone	Brüel & Kjær Model 4189 s/n 2799510 Brüel & Kjær Model 4189 s/n 2866566 Brüel & Kjær Model 4966 s/n 3391835 Brüel & Kjær Model 4189 s/n 3060527
Calibrator	Brüel & Kjær Model 4231 s/n 2053018
Bandwidth	1/3 Octave Band
Frequency Range	6.3 Hz – 20 kHz
Frequency Weightings	Z (Linear), A & C
Calibration Level	94 dB at 1 kHz

3.3 MEASUREMENT SETUP

Dayshift workers sleep during nighttime and nightshift workers sleep during daytime on Floatel #1 and Floatel #2. Therefore, continuous sound levels over 24 hours on Floatel #1 and Floatel #2 were measured at the selected cabins, respectively.

Four sound level meters were deployed for continuous noise monitoring. The sound level meters were set to 1-minute logging intervals measuring L_{Amax} and L_{eq} sound levels in one-third octave band L_{eq} sound levels from 6.3 Hz to 20 kHz frequency range.

Sound level meters also recorded the continuous digital audio signal simultaneously for further data analysis and post-processing to remove (isolate) extraneous noise events from the dataset.

The microphones were set up at bed height (i.e., 1 meter above the room floor) in each cabin. Figure 7 through Figure 14 in Appendix A illustrate the sound level meter setup at each cabin.

The monitoring procedures are described as below:

- On Floatel #1, four sound level meters were set up at Cabin 5645, Cabin 6637, Cabin 7032 and Cabin 9215, respectively, to collect continuous noise data from July 28 to July 29.
- One sound level meter was relocated to Cabin 0108 on Floatel #1, to collect continuous noise data from July 29 to July 30.
- On Floatel #2, three sound level meters were set up at Cabin 4477, Cabin 514 and Cabin 614, respectively, to collect continuous noise data from July 29 to July 30.

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Table 3.3 summarizes the measurement duration at each cabin on Floatel #1 and Floatel #2 during the noise monitoring periods.

Table 3.3 Noise Monitoring Duration at Cabins

Cabin	Measurement Start		Measurement End		Measurement Duration (hrs mm))
	Date (mm/dd/yyyy)	Time (hh:mm)	Date (mm/dd/yyyy)	Time (hh:mm)	
Floatel #1					
5645	07/28/2026	15:41	07/29/2026	16:43	25 hrs 2 mins
6637	07/28/2026	15:27	07/29/2026	15:48	24 hrs 21 mins
7032	07/28/2026	15:06	07/29/2026	15:34	24 hrs 28 mins
9215	07/28/2026	16:21	07/29/2026	16:35	24 hrs 14 mins
0108	07/29/2026	17:03	07/30/2026	17:07	24 hrs 5 mins
Floatel #2					
4477	07/29/2026	17:23	07/30/2026	18:15	24 hrs 52 mins
514	07/29/2026	17:34	07/30/2026	18:19	24 hrs 45 mins
614	07/29/2026	17:54	07/30/2026	18:29	24 hrs 35 mins

3.4 PROJECT CONSTRUCTION ACTIVITIES

There were dayshift and nightshift construction activities during the noise monitoring period from July 28 to July 30. The dayshift was from 07:00 to 17:00 and the nightshift was from 19:00 to 07:00. Figure 15 illustrates the construction areas onsite with Area ID #.

Based on the Construction Log of the Project, major construction activities during the noise monitoring period included the following:

- Areas 1100, 1200, and 1300: Ongoing P20 and STR pedestals preparation and P21 concrete pour; excavate foundations west of 6403 sump.
- Area 4100 and 4200: Ongoing low purity nitrogen area UG installation; U-ditch backfilling and maintenance road backfilling.

3.5 DATA ISOLATION ANALYSIS

The FNMMP prescribes that measured noise data that are not representative of the existing acoustic environment, and non-representative weather conditions can be isolated from the data set prior to the calculation of any average values.

Weather during this monitoring period was generally representative most of the time, there were no high winds and rain observed outside to influence the indoor measurements. Therefore, isolation was not applied to weather conditions.

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Noise events isolated from the data set included:

- Qualified Professional activities (e.g., equipment setup and disassembly, daily regular checkups).
- Door knocking or opening at the monitored cabin.
- Noise from nearby neighboring occupants, such as door open/close, talking in the corridor.

These noise events were identified using audio recordings and also based on the Qualified Professional's field notes and then removed from the valid measurement data.

After the data isolation, L_{eq} , L_d , L_n , and L_{Amax} values were determined for the different measurement periods. Once the data isolation analysis was completed, the resulting valid noise data set (i.e., with invalid data removed) was logarithmically averaged over the corresponding time periods using the following formula:

$$L_{Aeq}(isolated, ave) = 10 \lg_{10} \left[\frac{1}{N_V} \sum_{i=1}^{N_V} 10^{(0.1 L_{Aeq})} \right] dBA$$

where:

N_V = number of valid 1-minute logging periods in the measurement data set.

4.0 MEASUREMENT RESULTS ON FLOATEL #1

This section summarizes the analysis results on Floatel #1. The L_d , L_n , occurrence of L_{Amax} higher than 45 dBA (i.e., Health Canada thresholds) are analyzed and presented in tables herein. In total, there are approximately 7,330 minutes logged measurement values from the five cabins during the monitoring period on Floatel #1.

4.1 MEASUREMENT RESULTS AT CABINS

Table 4.1 provides an overall summary of the noise monitoring results from each cabin. In all tables below, the nighttime period was designated as spanning from 22:00 until 07:00 of the following day, e.g., nighttime of July 28 was from 22:00 of July 28 to 07:00 of July 29.

Table 4.1 Summary of Measurement Results

Cabin	Deck	Overall Average Daytime L_d , dBA	Overall Average Nighttime L_n , dBA	Highest Occurrences of $L_{Amax} > 45$ dBA	
				Daytime	Nighttime
5645	5	37.5	37.5	45	22
6637	6	37.9	37.9	140	36
7032	7	29.9	31.6	12	7
9215	9	38.3	38.2	19	3
0108	10	40.1	40.3	39	6

The overall average daytime L_d and L_n sound levels are the logarithmic average of the daytime and nighttime measurement results at each cabin. Details of daily measurement results at each cabin are described in the following sections. The daily results are compared to the Health Canada sleep disturbance thresholds and ANSI room sound level criteria.

4.2 CABIN 5645

Table 4.2 summarizes the daily L_d and L_n sound levels, and occurrences with $L_{Amax} > 45$ dBA at Cabin 5645.

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Table 4.2 Summary of Daily L_d and L_n at Cabin 5645

Date (mm/dd/yyyy)	Average Daytime L_d , dBA	Average Nighttime L_n , dBA	Daytime Occurrences of $L_{Amax} > 45$ dBA	Nighttime Occurrences of $L_{Amax} > 45$ dBA	Health Canada		ANSI S12.2
					L_{eq} , dBA	Qty. of $L_{Amax} > 45$ dBA	L_{eq} , dBA
07/28/2026 ¹	37.5	37.5	45	22	30	15	40
07/29/2026	37.6	- ²	15	- ²	30	15	40

Notes:

¹ The measurements started at 15:41.

² "-" indicates no data was measured. The measurements ended at 16:43.

Monitoring results for Cabin 5645 are summarized as follows:

- L_d and L_n are higher than the Health Canada noise threshold of 30 dBA.
- L_d and L_n are lower than the recommended ANSI S12.2 room sound level criteria of 40 dBA.
- Occurrences with $L_{Amax} > 45$ dBA are more than 15 times during daytime and nighttime periods of July 28.
- Occurrences with $L_{Amax} > 45$ dBA are 15 times during daytime period of July 29.

4.3 CABIN 6637

Table 4.3 summarizes the daily L_d and L_n sound levels, and occurrences with $L_{Amax} > 45$ dBA at Cabin 6637.

Table 4.3 Summary of Daily L_d and L_n at Cabin 6637

Date (mm/dd/yyyy)	Average Daytime L_d , dBA	Average Nighttime L_n , dBA	Daytime Occurrences of $L_{Amax} > 45$ dBA	Nighttime Occurrences of $L_{Amax} > 45$ dBA	Health Canada		ANSI S12.2
					L_{eq} , dBA	Qty. of $L_{Amax} > 45$ dBA	L_{eq} , dBA
07/28/2026 ¹	37.8	37.9	140	36	30	15	40
07/29/2026	38.0	- ²	33	- ²	30	15	40

Notes:

¹ The measurements started at 15:27.

² "-" indicates no data was measured. The measurements ended at 15:48.

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Monitoring results for Cabin 6637 are summarized as follows:

- L_d and L_n sound levels are higher than the Health Canada noise threshold of 30 dBA.
- L_d and L_n sound levels are lower than the ANSI S12.2 room sound level criteria of 40 dBA.
- Occurrences with $L_{Amax} > 45$ dBA are more than 15 times during daytime and nighttime periods of July 28 and daytime period of July 29.

4.4 CABIN 7032

Table 4.4 summarizes the daily L_d and L_n sound levels, and occurrences with $L_{Amax} > 45$ dBA at Cabin 7032.

Table 4.4 Summary of Daily L_d and L_n at Cabin 7032

Date (mm/dd/yyyy)	Average Daytime L_d , dBA	Average Nighttime L_n , dBA	Daytime Occurrences of $L_{Amax} > 45$ dBA	Nighttime Occurrences of $L_{Amax} > 45$ dBA	Health Canada		ANSI S12.2
					L_{eq} , dBA	Qty. of $L_{Amax} > 45$ dBA	L_{eq} , dBA
07/28/2026 ¹	29.8	31.6	4	7	30	15	40
07/29/2026	30.0	- ²	12	- ²	30	15	40

Notes:

¹ The measurements started at 15:06.

² “-” indicates no data was measured. The measurements ended at 15:34.

Monitoring results for Cabin 7032 are summarized as follows:

- L_d sound levels are lower than the Health Canada noise threshold of 30 dBA during daytime period of July 28 and equal to 30 dBA during daytime period of July 29.
- L_n sound levels are higher than the Health Canada noise threshold of 30 dBA during nighttime period of July 28.
- L_d and L_n sound levels are lower than the ANSI S12.2 room sound level criteria of 40 dBA.
- Occurrences with $L_{Amax} > 45$ dBA are less than 15 times during all daytime and nighttime periods from July 28 to July 29.

4.5 CABIN 9215

Table 4.5 summarizes the daily L_d and L_n sound levels, and occurrences with $L_{Amax} > 45$ dBA at Cabin 9215.

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Table 4.5 Summary of Daily L_d and L_n at Cabin 9215

Date (mm/dd/yyyy)	Average Daytime L_d , dBA	Average Nighttime L_n , dBA	Daytime Occurrences of $L_{Amax} > 45$ dBA	Nighttime Occurrences of $L_{Amax} > 45$ dBA	Health Canada		ANSI S12.2
					L_{eq} , dBA	Qty. of $L_{Amax} > 45$ dBA	L_{eq} , dBA
07/28/2026 ¹	38.5	38.2	8	3	30	15	40
07/29/2026	38.1	- ²	19	- ²	30	15	40

Notes:

¹ The measurements started at 16:21.

² "-" indicates no data was measured. The survey ended at 16:35.

Monitoring results for Cabin 9215 are summarized as follows:

- L_d and L_n sound levels are higher than the Health Canada noise threshold of 30 dBA.
- L_d and L_n sound levels are lower than the ANSI S12.2 room sound level criteria of 40 dBA.
- Occurrences with $L_{Amax} > 45$ dBA are less than 15 times during daytime and nighttime periods of July 28.
- Occurrences with $L_{Amax} > 45$ dBA are more than 15 times during daytime period of July 29.

4.6 CABIN 0108

Table 4.6 summarizes the daily L_d and L_n sound levels, and occurrences with $L_{Amax} > 45$ dBA at Cabin 0108.

Table 4.6 Summary of Daily L_d and L_n at Cabin 0108

Date (mm/dd/yyyy)	Average Daytime L_d , dBA	Average Nighttime L_n , dBA	Daytime Occurrences of $L_{Amax} > 45$ dBA	Nighttime Occurrences of $L_{Amax} > 45$ dBA	Health Canada		ANSI S12.2
					L_{eq} , dBA	Qty. of $L_{Amax} > 45$ dBA	L_{eq} , dBA
07/29/2026 ¹	39.8	40.3	23	6	30	15	40
07/30/2026	40.3	- ²	39	- ²	30	15	40

Notes:

¹ The measurements started at 17:03.

² "-" indicates no data was measured. The measurements ended at 17:07.

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Monitoring results for Cabin 0108 are summarized as follows:

- L_d and L_n sound levels are higher than the Health Canada noise threshold of 30 dBA.
- The L_d sound levels are lower than the ANSI S12.2 room sound level criteria of 40 dBA during daytime period of July 29.
- The sound levels are slightly higher than the ANSI S12.2 room sound level criteria of 40 dBA by 0.3 dB during nighttime period of July 29 and daytime period of July 30, i.e., 40.3 dBA vs. 40 dBA.
- Occurrences with $L_{Amax} > 45$ dBA are more than 15 times during daytime periods of July 29 and July 30.
- Occurrences with $L_{Amax} > 45$ dBA are less than 15 times during nighttime period of July 29.

5.0 MEASUREMENT RESULTS ON FLOATTEL #2

This section summarizes the analysis results for Floattel #2. The L_d , L_n , occurrence of L_{Amax} higher than 45 dBA (i.e., Health Canada thresholds) are analyzed and presented in tables herein. In total, there are approximately 4,600 minutes logged measurement values from the three cabins during the monitoring period on Floattel #2.

5.1 MEASUREMENT RESULTS AT CABINS

Table 5.1 provides an overall summary of the noise monitoring results from each cabin. In all tables below, the nighttime period was designated as spanning from 22:00 until 07:00 of the following day, e.g., nighttime of July 29 was from 22:00 of July 29 to 07:00 of July 30.

Table 5.1 Summary of Measurement Results

Cabin	Deck	Overall Average Daytime L_d , dBA	Overall Average Nighttime L_n , dBA	Highest Occurrences of $L_{Amax} > 45$ dBA	
				Daytime	Nighttime
4477	4	37.0	36.9	41	30
514	5	31.2	30.5	39	45
614	6	27.7	26.8	30	17

The overall average daytime L_d sound levels are the logarithmic average of two daytime measurement results at each cabin. Details of daily measurement results at each cabin are described in the following sections. The daily results are compared to the Health Canada sleep disturbance thresholds and ANSI room sound level criteria.

5.2 CABIN 4477

Table 5.2 summarizes the daily L_d and L_n sound levels, and occurrences with $L_{Amax} > 45$ dBA at Cabin 4477.

Table 5.2 Summary of Daily L_d and L_n at Cabin 4477

Date (mm/dd/yyyy)	Average Daytime L_d , dBA	Average Nighttime L_n , dBA	Daytime Occurrences of $L_{Amax} > 45$ dBA	Nighttime Occurrences of $L_{Amax} > 45$ dBA	Health Canada		ANSI S12.2
					L_{eq} , dBA	Qty. of $L_{Amax} > 45$ dBA	L_{eq} , dBA
07/29/2026 ¹	37.0	36.9	41	30	30	15	40
07/30/2026	37.0	- ²	22	- ²	30	15	40

Notes:

¹ The measurements started at 17:23.

² "-" indicates no data was measured. The measurements ended at 18:15.

Monitoring results for Cabin 4477 are summarized as follows:

- L_d and L_n are higher than the Health Canada noise threshold of 30 dBA.
- L_d and L_n are lower than the ANSI S12.2 room sound level criteria of 40 dBA.
- Occurrences with $L_{Amax} > 45$ dBA are more than 15 times during both daytime and nighttime periods from July 29 to July 30.

5.3 CABIN 514

Table 5.3 summarizes the daily L_d and L_n sound levels, and occurrences with $L_{Amax} > 45$ dBA at Cabin 514.

Table 5.3 Summary of Daily L_d and L_n at Cabin 514

Date (mm/dd/yyyy)	Average Daytime L_d , dBA	Average Nighttime L_n , dBA	Daytime Occurrences of $L_{Amax} > 45$ dBA	Nighttime Occurrences of $L_{Amax} > 45$ dBA	Health Canada		ANSI S12.2
					L_{eq} , dBA	Qty. of $L_{Amax} > 45$ dBA	L_{eq} , dBA
07/29/2026 ¹	31.6	30.5	39	45	30	15	40
07/30/2026	30.6	- ²	8	- ²	30	15	40

Notes:

¹ The measurements started at 17:34.

² “-” indicates no data was measured. The measurements ended at 18:19.

Monitoring results for Cabin 514 are summarized as follows:

- L_d and L_n sound levels are higher than the Health Canada noise threshold of 30 dBA.
- L_d and L_n sound levels are lower than the ANSI S12.2 room sound level criteria of 40 dBA.
- Occurrences with $L_{Amax} > 45$ dBA are more than 15 times during daytime and nighttime periods of July 29.
- Occurrences with $L_{Amax} > 45$ dBA are less than 15 times during daytime period of July 30.

5.4 CABIN 614

Table 5.4 summarizes the daily L_d and L_n sound levels, and occurrences with $L_{Amax} > 45$ dBA at Cabin 614.

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Table 5.4 Summary of Daily L_d and L_n at Cabin 614

Date (mm/dd/yyyy)	Average Daytime L_d , dBA	Average Nighttime L_n , dBA	Daytime Occurrences of $L_{Amax} > 45$ dBA	Nighttime Occurrences of $L_{Amax} > 45$ dBA	Health Canada		ANSI S12.2
					L_{eq} , dBA	Qty. of $L_{Amax} > 45$ dBA	L_{eq} , dBA
07/29/2026 ¹	28.1	26.8	21	17	30	15	40
07/30/2026	27.3	- ²	30	- ²	30	15	40

Notes:

¹ The measurements started at 17:54.

² "-" indicates no data was measured. The measurements ended at 18:29.

Monitoring results for Cabin 614 are summarized as follows:

- L_d and L_n sound levels are lower than the Health Canada noise threshold of 30 dBA.
- L_d and L_n sound levels are lower than the ANSI S12.2 room sound level criteria of 40 dBA.
- Occurrences with $L_{Amax} > 45$ dBA are more than 15 times during both daytime and nighttime periods of July 29 and July 30.

6.0 NOISE INTERVIEWS

During the noise monitoring periods on Floatel #1 and Floatel #2, the Qualified Professional interviewed various cabin occupants. The purpose of the interviews is to obtain an understanding of the noise effects of interest to the occupants; and perform an investigation if there are any potential noise issues identified on both floatels and inform the floatel management for further mitigation plans.

During the Q3 noise monitoring survey, there were approximately 570 total construction worker occupants on Floatel #1, and 590 occupants on Floatel #2, respectively.

25 occupants and 30 occupants were randomly selected for the interviews on Floatel #1 and Floatel #2, respectively, which represents approximately 5% of the total occupants at the time.

Four questions were asked regarding noise issues:

1. General evaluation for your sleeping quality at the floatel.
2. How long have you stayed overall?
3. Can you hear outside construction noise?
4. Any noise concern/complaints.

Details of the interviews, including interviewee ID #, interview date, cabin location, and work shift; and answers for the questions are included in Appendix C.

Feedback from the interviewees of both floatels is summarized below:

- No interviewees had noise concerns or complaints regarding construction noise.
- All interviewees did not experience sleep disturbance issues during their stay on both floatels, including sleeping during the daytime period.
- A few night shift construction workers mentioned noise events during the daytime such as cabin cleaning noise, food cart, and people speaking in the corridor.
- Occasionally perceptible noise events raised by some interviewee living on Deck 6 of Floatel #1, the events were due to activities in the Gym on Deck 7, such as weights dropping on the floor.

7.0 DISCUSSION

Table 7.1 summarizes the measurement results when compared to the Health Canada noise threshold and ANSI S12.2 room sound level criteria.

Table 7.1 Summary of Results

Cabin	Deck	Meet Health Canada Indoor L_{eq} Threshold of 30 dBA		Meet Health Canada $L_{Amax} > 45$ dBA Occurrences Less Than 15 Times		Meet ANSI S12.2 Room Sound Level Criteria of 40 dBA	
		Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
Floatel #1							
5645	5	No	No	No	No	Yes	Yes
6637	6	No	No	No	No	Yes	Yes
7032	7	Yes	No	Yes	Yes	Yes	Yes
9215	9	No	No	Yes/No ¹	Yes	Yes	Yes
0108	10	No	No	No	Yes	Yes/No ²	No ³
Floatel #2							
4477	4	No	No	No	No	Yes	Yes
514	5	No	No	Yes/No ⁴	No	Yes	Yes
614	6	Yes	Yes	No	No	Yes	Yes

Notes:

¹ Below threshold on July 28 but above threshold on July 29.

² Below threshold on July 29 but marginally above threshold on July 30, i.e., 40.3 dBA vs 40 dBA.

³ Marginally above threshold, i.e., 40.3 dBA vs 40 dBA.

⁴ Below threshold on July 30 but above threshold on July 29.

7.1 HEALTH CANADA

On Floatel #1, sound levels at Cabins 5645, 6637, 9215 and 0108 were above the Health Canada sleep disturbance threshold of 30 dBA; at Cabin 7032, sound levels during daytime periods of July 28 and 29 were lower than threshold, but above threshold during nighttime period of July 28.

On Floatel #2, sound levels at Cabins 4477 and 514 were above the Health Canada sleep disturbance threshold; sound levels at Cabin 614 fell below the Health Canada threshold during both daytime and nighttime periods.

In terms of the threshold of 45 dBA L_{Amax} or above occurrence less than 15 times, Cabin 6637 of Floatel #1 had the highest occurrence of L_{Amax} above the threshold during both daytime and nighttime periods. Cabin 7032 of Floatel #1 met the threshold during both daytime and nighttime periods; Cabins 9215 and 0108 met the threshold during the nighttime periods.

The cabin ceiling ventilation is essential for maintaining comfortable conditions for cabin occupants and turning off the ventilation would compromise air circulation and temperature. However, the ceiling ventilation outlets are the dominant background noise contributors in most cabins; with the ventilation outlets operating, the sound levels in the cabins exceeded the Health Canada sleep disturbance threshold of 30 dBA. Therefore, the ANSI S12.2 room sound level criteria was included as an alternative and achievable target for the sleep disturbance thresholds in the floatel cabins during both daytime and nighttime periods.

7.2 ANSI S12.2 SOUND LEVEL CRITERIA

The measurement results were compared to the ANSI S12.2 room sound level criteria for hotel/motel rooms. On Floatel #1, L_d and L_n sound levels at four cabins (i.e., 5645, 6637, 7032 and 9215) met the ANSI S12.2 criteria of 40 dBA. At Cabin 0108, L_d and L_n sound levels were only marginally above the criteria by 0.3 dB during July 29 and July 30, respectively.

On Floatel #2, L_d and L_n sound levels of all three cabins (i.e., 4477, 514 and 614) met the ANSI S12.2 criteria of 40 dBA.

7.3 NOISE INTERVIEWS

On both floatels, noise from the construction activities does not affect the floatel interior acoustic environment. The interview results also indicated no sleep disturbance issues and no noise concerns or complaints due to construction noise during the noise monitoring survey periods. The Communication Protocol and Complaint Response Procedure will be maintained to address and manage any noise concerns or complaints from the occupants on Floatel #1 and Floatel #2.

8.0 CONCLUSIONS

The Quarter 3 2026 noise monitoring survey for Floatel #1 and Floatel #2 was conducted from July 28 to July 30, 2026, to fulfill the requirements of Condition 36 of Amendment #4 in EAC #E15-02.

On Floatel #1, Cabin 7032 met the Health Canada sleep disturbance threshold of 30 dBA during the daytime periods of July 28. Results from all other measured cabins are above the Health Canada threshold of 30 dBA. The measurement results at (i.e., 5645, 6637, 7032, 9215) cabins met the ANSI S12.2 room sound level criteria of 40 dBA. At Cabin 0108, measured sound levels were marginally above 40 dBA (i.e., by 0.3 dB).

On Floatel #2, the measurement results at all cabins complied with the ANSI S12.2 room sound level criteria of 40 dBA, furthermore, the sound levels of Cabin 614 met the Health Canada sleep disturbance threshold of 30 dBA, however, sound levels of Cabin 4477 and Cabin 514 were above the Health Canada threshold.

Noise from the Project construction activities did not affect the interior acoustic environment on both floatels. Noise from the vessel ventilation system was the predominant contributor to the interior acoustic environment. In addition, the Communication Protocol and Complaint Response Procedure will be maintained to address and manage any noise concerns or complaints from the occupants on Floatel #1 and Floatel #2.

9.0 REFERENCES

- ANSI (American National Standard) 2005. ANSI S12.9 – 2005/Part 4, Quantities and Procedures for Description and Measurement of Environmental Sound – Part 4: Noise Assessment and Prediction of Long-term Community Response. New York, 2005.
- ANSI (American National Standard) 2023. ANSI S12.2 – 2026, Criteria for Evaluating Room Noise. New York, 2026.
- British Columbia Energy Regulator (BCER) 2024. British Columbia Noise Control Best Practices Guideline. June 2024.
- David A. Bies and Colin H. Hansen 2009. Engineering Noise Control: Theory and Practice (Forth edition). Spon Press. London and New York, 2009.
- District of Squamish 2014. Noise Regulation Bylaw No.2312. Available at: <https://squamish.ca/our-services/bylaws-and-enforcement/noise-bylaw/>.
- District of Squamish 2017. Noise Regulation Bylaw No.2541. Available at: <https://squamish.ca/business-and-development/home-land-and-property-development/builders-corner-blog/new-noise-regulation-bylaw-hours/>.
- Health Canada 2023. Guidance for Evaluating Human Health Impacts in Impact Assessment: NOISE, published by Health Canada. December 2023.
- Stantec 2022. Construction Phase Noise Assessment Technical Report – Woodfibre LNG. September 2022.
- Stantec FNMMP 2024. Floatel Noise Monitoring and Mitigation Plan – Woodfibre LNG Project. April 2024.
- Stantec 2024a. Floatel Noise Monitoring Survey - 1 (July 10 -14, 2024) – Woodfibre LNG Project. 123222160EN-RPT0052 Revision 1, September 16, 2024.
- Stantec 2024b. Floatel Noise Monitoring Survey - 2 (September 4 - 7, 2024) – Woodfibre LNG Project. 123222160EN-RPT0053 Revision 1, November 2024.
- Stantec 2024c. Floatel Noise Monitoring Survey - 3 (October 8 - 11, 2024) – Woodfibre LNG Project. 123222160EN-RPT0054, November 2024.
- Stantec 2025a. Floatel Noise Monitoring Survey - 4 (January 31 - 2, 2025) – Woodfibre LNG Project. 123222160EN-RPT0059, March 2025.
- Stantec 2025b. Floatel Noise Monitoring Survey - 5 (May 14 –17, 2025) – Woodfibre LNG Project. 123222160EN-RPT0060, July 2025
- Stantec 2025c. Floatel Noise Monitoring Survey - 6 (July 23 –28, 2025) – Woodfibre LNG Project. 123222160EN-RPT0060, September 2025
- Stantec 2025d. Floatel Noise Monitoring Survey - 7 (October 2 – 5, 2025) – Woodfibre LNG Project. 123222160EN-RPT0060, November 2025

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Stantec 2026. Floatel Noise Monitoring and Mitigation Plan – Floatel #1 and Floatel #2 – Woodfibre LNG Project. 123221624EN-RPT0049-Rev6, January 2026

Stantec 2026a. Floatel #1 Noise Monitoring Survey - 8 (December 15 – 17, 2025) – Woodfibre LNG Project. 123222160EN-RPT0060, March 2026

Stantec 2026b. Floatel #2 Noise Monitoring Survey - 1 (December 15 – 17, 2025) – Woodfibre LNG Project. 123222160EN-RPT0060, March 2026

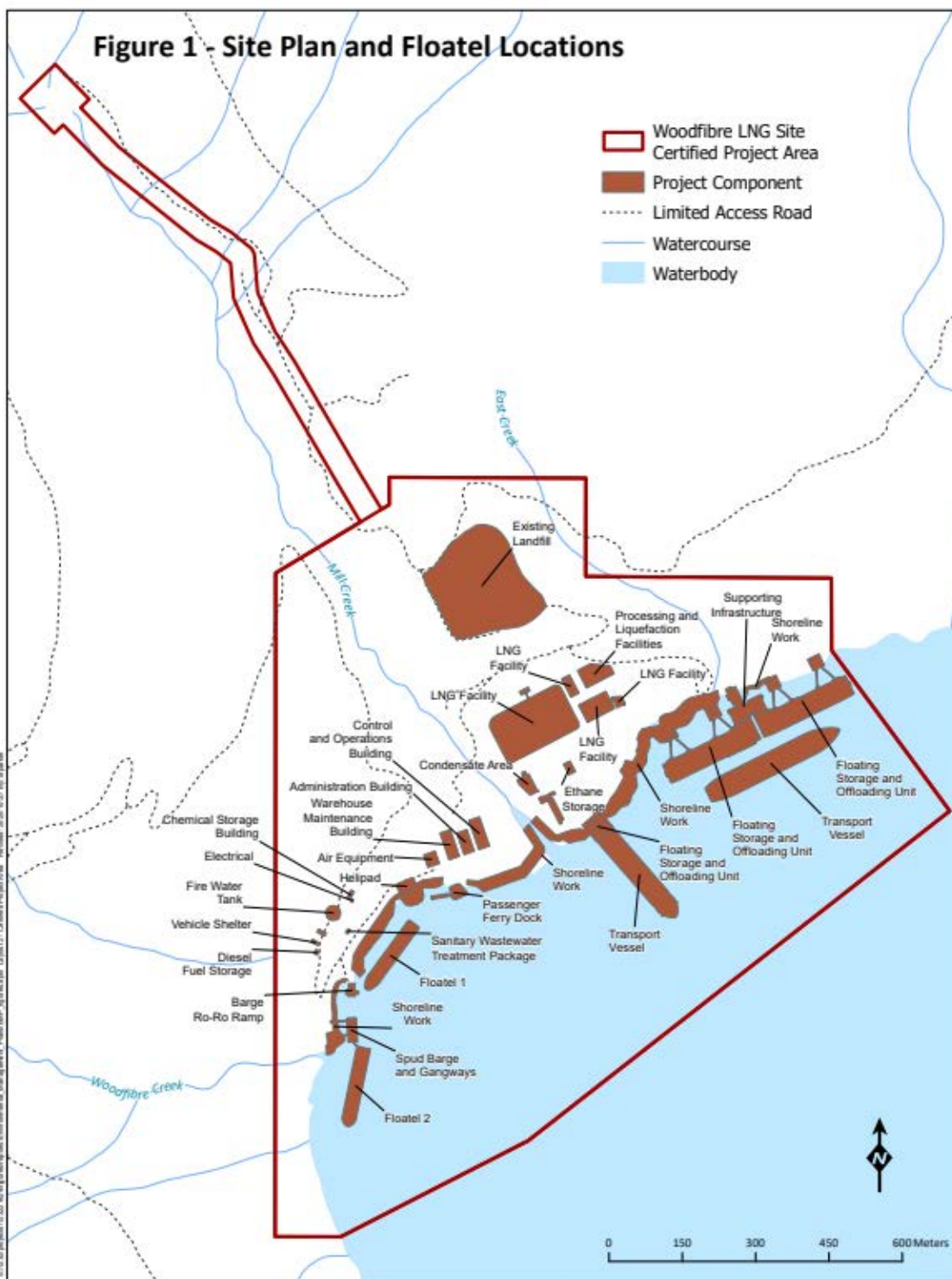
Stantec 2026c. Floatel #1 and Floatel #2 Noise Monitoring Survey – Q2 2026 (March 16 – 20, 2026) – Woodfibre LNG Project. 123222160EN-RPT0071, May 2026

Woodfibre LNG 2023. Application for a Temporary Use Permit for the District of Squamish – Floatel. August 2023.

Appendix A Figures

(JULY 28 – 30, 2026)

Site Plan with Floatel #1 and Floatel #2 Locations



**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Figure 2 Measurement Location at Cabin 5645 (Deck 5) – Floatel #1



Legend

Noise monitoring cabin

Quantity of cabins per deck (unless otherwise indicated, applies to all figures with cabins on Floatel #1)

	TYPE 1A-1	TYPE 1A-2	TYPE 1A-3	TYPE 1B-1	TYPE 1B-2	TYPE 1B-3	TYPE 1B-4	TYPE 1B-5	TYPE 1B-6	TYPE 1B-7	TYPE 1B-8	TYPE 1C-1	TYPE 1C-2	TYPE 1D	TYPE 1E-1	TYPE 1E-2	TYPE 1F-1	TYPE 1F-2	TYPE 2A	TYPE 2B	TYPE 2C	TYPE 3A	TYPE 3B	TYPE 4A	TYPE 4B	QUANTITY OF CABINS PER DECK
DECK 10				9																				8		17
DECK 9	18			8								30							7	1	17	4	2		1	88
DECK 7	24											30				2		2								58
DECK 6	208											8			2		2		24	1					3	248
DECK 5	102	6	44		15	5	9	10	7	1	1			4					14						1	219
DECK 2	34																							52		86
CABINS PER TYPE	386	6	44	17	15	5	9	10	7	1	1	60	8	4	2	2	2	2	45	2	17	4	2	8	57	716

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Figure 3 Measurement Location at Cabin 6637 and Cabin 7032 (Deck 6 and Deck 7) – Floatel #1

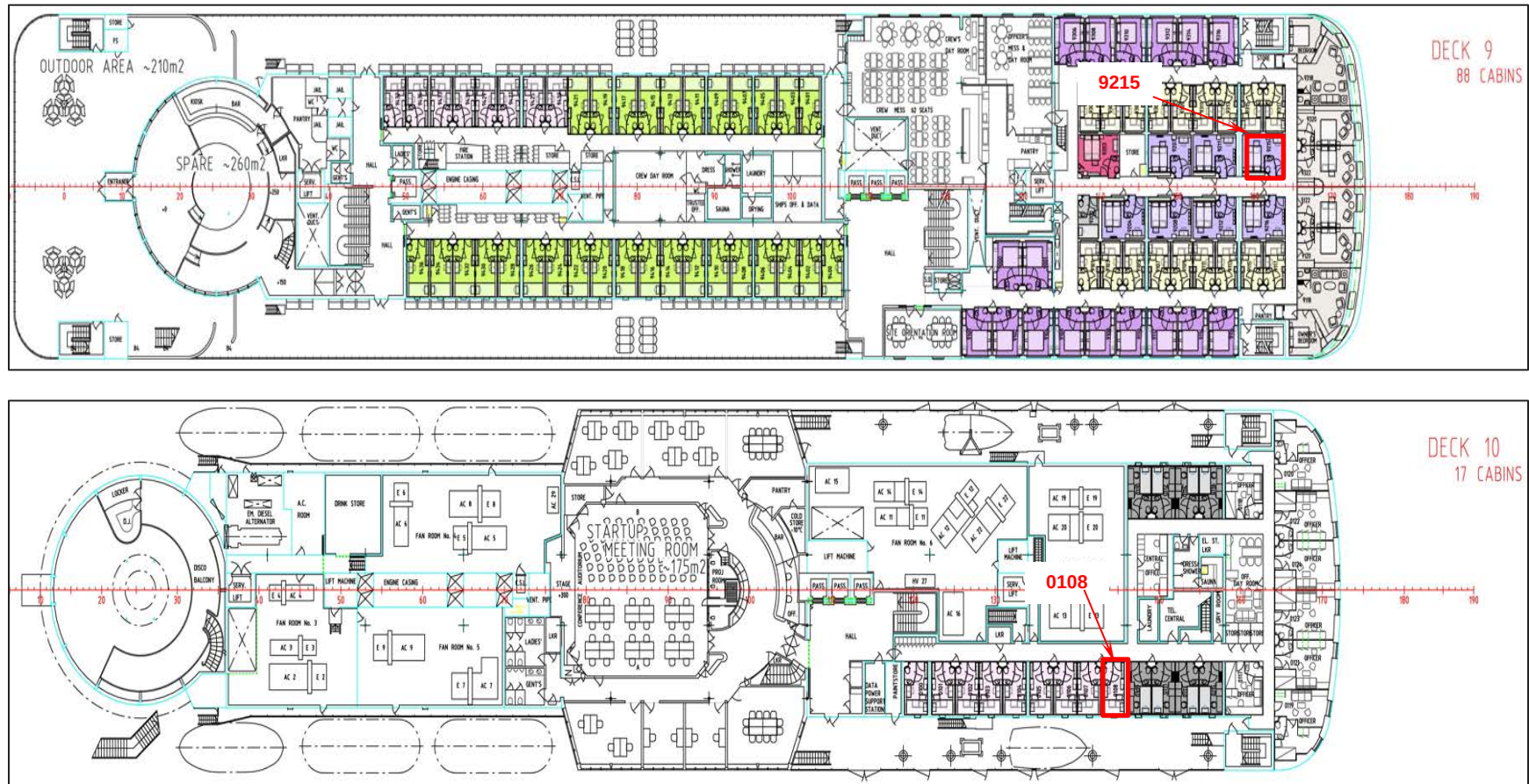


Legend

Noise monitoring cabin

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Figure 4 Measurement Location at Cabin 9215 and Cabin 0108 (Deck 9 and Deck 10) – Floatel #1

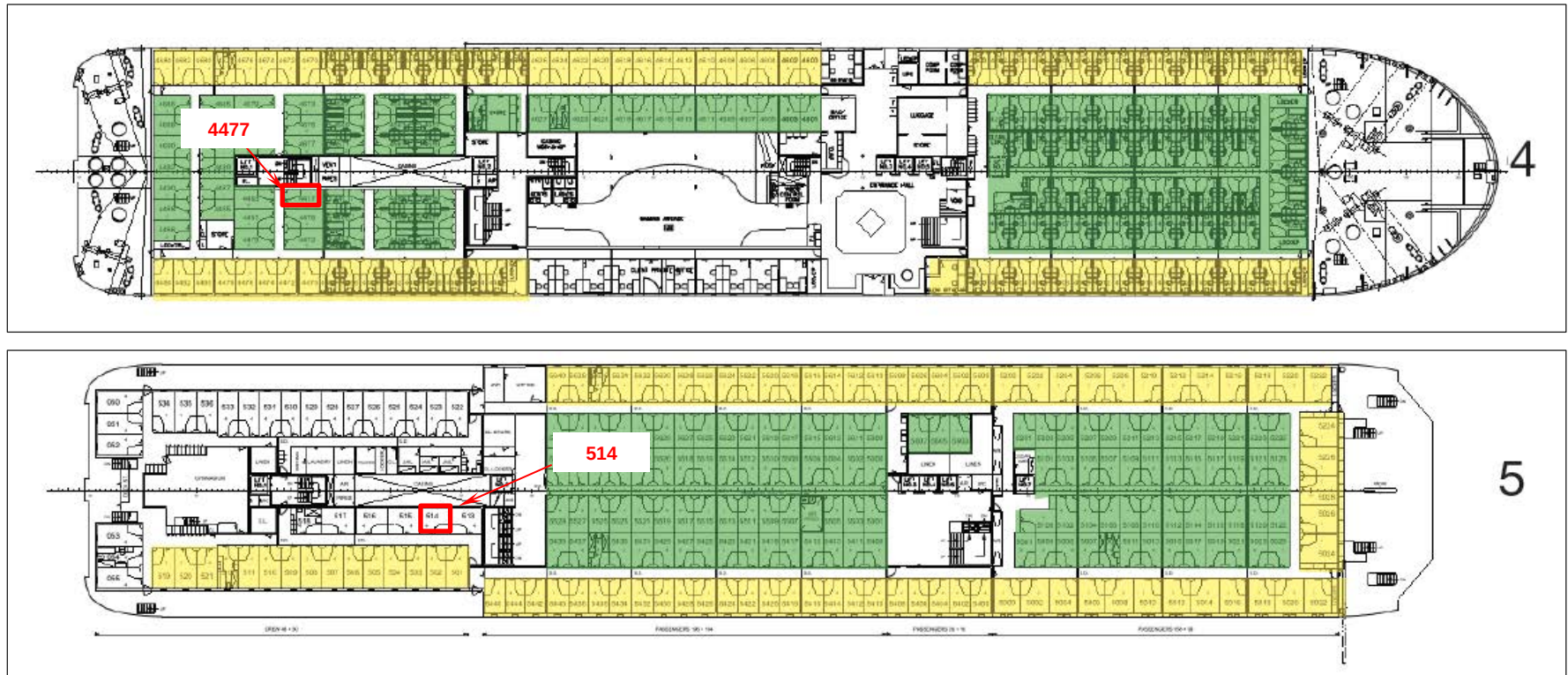


Legend

Noise monitoring cabin

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Figure 5 Measurement Location at Cabin 4477 and Cabin 514 (Deck 4 and Deck 5) – Floatel #2



Legend

Noise monitoring cabin

	INTERIOR	EXTERIOR	SUITE	TOTAL
DECK 6	112	95	8	215
DECK 5	115	85	0	200
DECK 4	108	87	0	195
DECK 2	30	0	0	30
				640

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Figure 6 Measurement Location at Cabin 614 (Deck 6) – Floatel #2



Legend

Noise monitoring cabin

	INTERIOR	EXTERIOR	SUITE	TOTAL
DECK 6	112	95	8	215
DECK 5	115	85	0	200
DECK 4	108	87	0	195
DECK 2	30	0	0	30
				640

**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Figure 7 Sound Level Meter Setup at Cabin 5645 – Floatel #1



Figure 8 Sound Level Meter Setup at Cabin 6637 – Floatel #1



**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Figure 9 Sound Level Meter Setup at Cabin 7032 – Floatel #1



Figure 10 Sound Level Meter Setup at Cabin 9215 – Floatel #1



**WOODFIBRE LNG PROJECT:
FLOATEL #1 AND FLOATEL #2 NOISE MONITORING SURVEY – Q3 2026
(JULY 28 – 30, 2026)**

Figure 11 Sound Level Meter Setup at Cabin 0108 – Floatel #1



Figure 12 Sound Level Meter Setup at Cabin 4477 – Floatel #2



Figure 13 **Sound Level Meter Setup at Cabin 514 – Floatel #2**

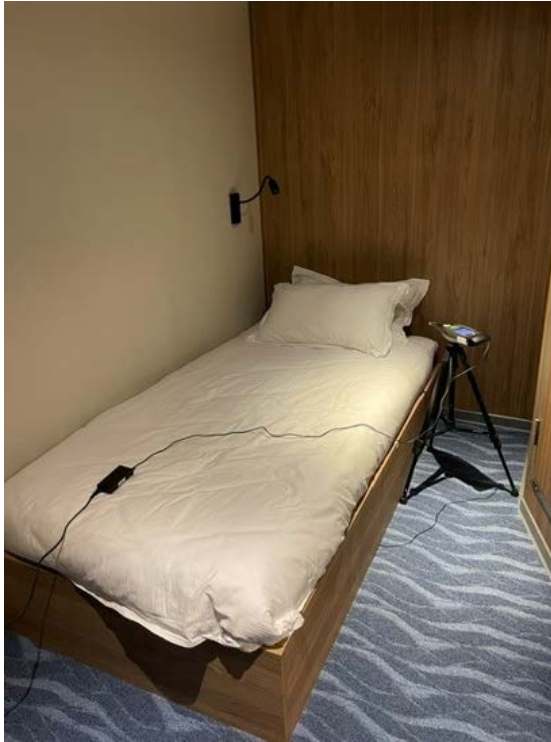
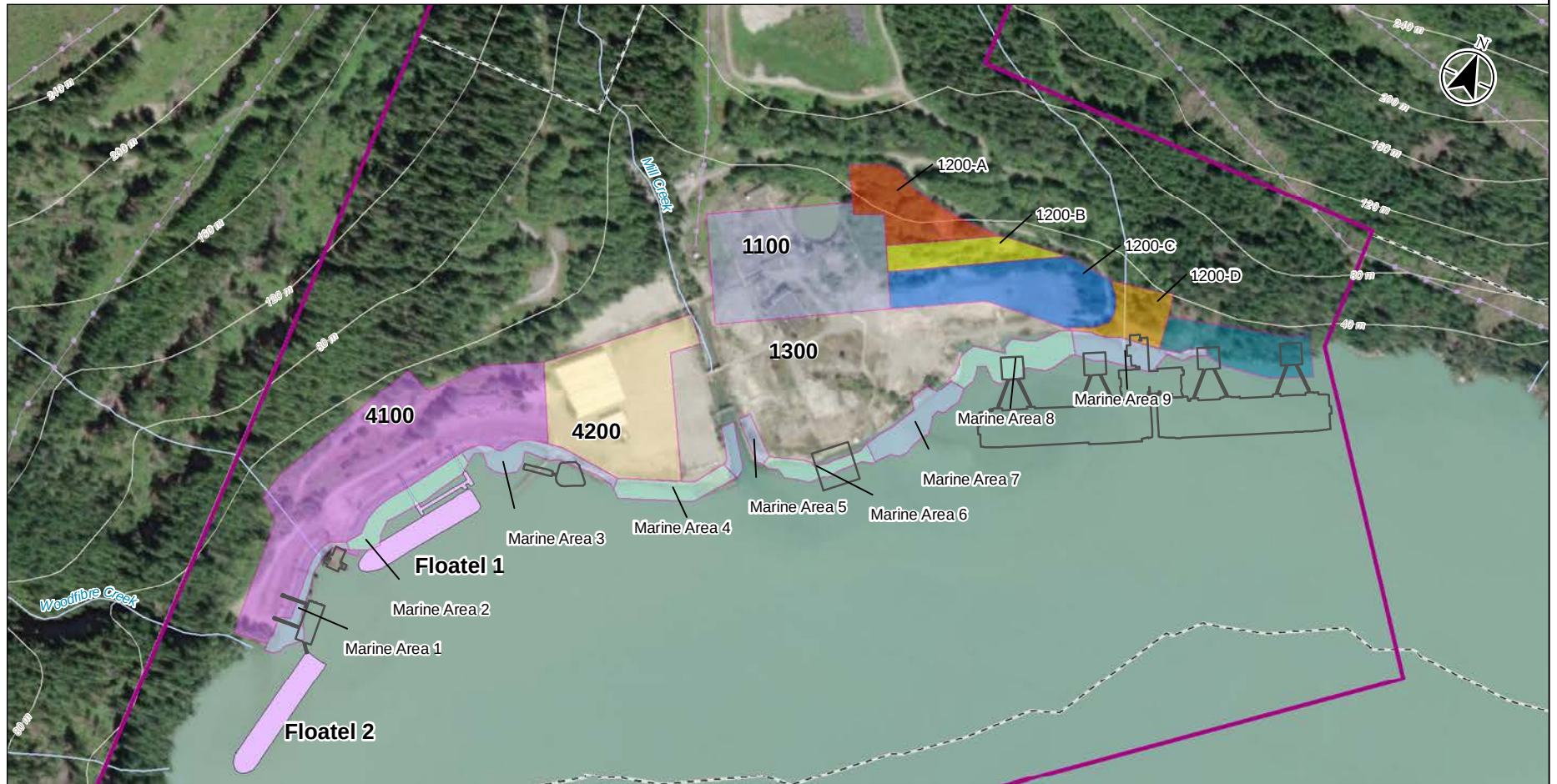


Figure 14 **Sound Level Meter Setup at Cabin 614 – Floatel #2**



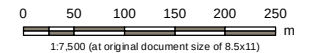
Figure 15 Construction Areas Onsite

S:\12322\project\123222160\figure\discipline\human_healthing_07_123222160_kanell_noise.mxd Revised: 2026-02-26 By: aparker



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 10N
 2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
 3. Orthoimagery: ESRI World Imagery

- Transmission Line
- Topographic Contour
- Watercourse
- Municipal Boundary
- Supporting Infrastructure
- Floatel
- Certified Project Area



Project Location: Woodfibre, British Columbia
Project Number: 123222160
Prepared by PKASIANCHUK on 20241004
Requested by ACAL DERON on 20240822
Checked by YMA on 20240828

Client/Project/Report

Woodfibre LNG
Floatel Noise Monitoring Survey

Figure No.

15

Title

Construction Areas Onsite

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.

Appendix B instrumentation calibration certification

CERTIFICATE OF CALIBRATION

No.: 458875-701

Page 1 of 2

CALIBRATION OF:

Calibrator:	Brüel & Kjær	Type	4231	Serial No.:	2053018
Identification:	B	IEC Class:	1		

CUSTOMER:Stantec Consulting Ltd.
325 25 Street SE - Unit 200
Calgary AB T2A 7H8
Emma.Xiong@stantec.com**CALIBRATION CONDITIONS:**

Environment conditions:	Air temperature:	22.8	°C
	Air pressure:	99.06	kPa
	Relative Humidity:	30.4	%RH

SPECIFICATIONS: This document certifies that the acoustic calibrator as listed under "Type" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. Hottinger Brüel & Kjær Inc. utilizes a simple acceptance decision rule as defined by ILAC G8 with measurement uncertainty value which will not exceed 50% of the tolerance. The calibration of the listed transducer was accomplished using a test system which conforms to the requirements of ISO/IEC 17025, ANSI/NCSL Z540-1, and guidelines of ISO 10012-1. For "as received" and "final" data, see the attached page(s). Items marked with one asterisk (*) are not covered by the scope of the current A2LA accreditation. This Certificate and attached data pages shall not be reproduced, except in full, without written approval of the Hottinger Brüel & Kjær Inc. Calibration Laboratory-Duluth, GA. Results relate only to the items tested. The transducer has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants. The acoustic calibrator has been calibrated in accordance with the requirements as specified in IEC60942.

PROCEDURE: The measurements have been performed with the assistance of Hottinger Brüel & Kjær Inc. acoustic calibrator calibration application Software version 2.3.4 Type 7794 using calibration procedure 4231 Complete

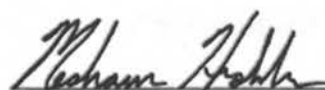
RESULTS:

☒ "As Received" Data: Within Acceptance Criteria	☐ "As Received" Data: Outside Acceptance Criteria
☒ "Final" Data : Within Acceptance Criteria	☐ "Final" Data : Outside Acceptance Criteria

The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with EA-4/02 from elements originating from the standards, calibration method, effect of environmental conditions and any short time contribution from the calibrator under calibration.

Date of Calibration: 12 January, 2026

Certificate issued: 12 January, 2026

Can Phan
Calibration TechnicianMeshawn Hobbs
Quality Representative

CERTIFICATE OF CALIBRATION

No.: 458875-701

Type: 4231

Serial No.: 2053018

Page 2 of 2

Sound Pressure Levels

All stated values are valid at environmental reference conditions

Nominal Level [dB]	Accept Limit Lower [dB]	Accept Limit Upper [dB]	Measured Level [dB]	Measurement Uncertainty [dB]
94	93.80	94.20	94.01	0.12
114	113.80	114.20	114.02	0.12

Frequency

Nominal Frequency [Hz]	Accept Limit Lower [Hz]	Accept Limit Upper [Hz]	Measured Frequency [Hz]	Measurement Uncertainty [Hz]
1000	999.00	1001.00	999.80	0.10

Total Distortion*

Distortion mode: ☒ TD* ☐ THD*

Calibration Level [dB]*	Accept Limit [%]*	Measured Distortion [%]*	Measurement Uncertainty [%]*
94	1.00	0.61	0.13
114	1.00	0.14	0.13

Environmental Reference Conditions:

Pressure: 101.3 kPa, Temperature: 23 °C, Relative Humidity: 50%

Instrument List

Type	Description	Serial no	Cal. date	Due date	Calibrated by	Trace number
3560	PULSE Analyzer	2723320	2025-10-30	2026-10-31	GK	448348-802
9545	Transfer Microphone	3	2024-10-18	2026-01-30	MH	401410-401
4228	Reference Sound Source	1618502	2025-04-29	2027-04-30	MH	423668-401

During the calibration the calibrator has been loaded by the load volume of the Transfer Microphone. The load volumes for a number of different types of Transfer Microphones are listed in the table below.

For Brüel & Kjær Pistonphones types 4220 and 4228 the result of the SPL calibration has been corrected to be valid for a load volume of 1333 mm³. For all other types the result is valid with the actual load volume.

Transfer Microphone Type	Fulfil standard IEC 61094-1 LS	Fulfil standard IEC 61094-4 WS	Load Volume 1" (1/2" mic including DP-0776)	Load Volume 1/2"
4180	yes	yes	1126 mm ³	43 mm ³
4192	-	yes	1273 mm ³	190 mm ³
9545	-	-	1333 mm ³	-

Condition "As Received":

Good

**CERTIFICATE OF CALIBRATION**

No.: 424477-701

Page 1 of 4

CALIBRATION OF:

Microphone:	Brüel & Kjær	Type	4189	Serial No.	2799510
Identification:	#2				

CUSTOMER:Stantec Consulting Ltd.
325 25 Street SE - Unit 200
Calgary, AB T2A 7H8**CALIBRATION CONDITIONS:**

Environment conditions:	Air temperature:	22.6	°C
	Air pressure:	98.622	kPa
	Relative Humidity:	50.6	%RH
Applied polarization voltage:	0 Vdc		

SPECIFICATIONS: This document certifies that the instrument as listed under "Type" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. Hottinger Brüel & Kjær Inc. utilizes a simple acceptance decision rule as defined by ILAC G8 with measurement uncertainty value which will not exceed 50% of the tolerance. The calibration of the listed transducer was accomplished using a test system which conforms to the requirements of ISO/IEC 17025, ANSI/NC SL Z540-1, and guidelines of ISO 10012-1. For "as received" and "final" data, see the attached page(s). Items marked with one asterisk (*) are not covered by the scope of the current A2LA accreditation. This Certificate and attached data pages shall not be reproduced, except in full, without written approval of the Hottinger Brüel & Kjær Calibration Laboratory-Duluth, GA. Results relate only to the items tested. The transducer has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants.

PROCEDURE:

The measurements have been performed with the assistance of the Hottinger Brüel & Kjær Inc. Microphone Calibration System B&K 9721 with application software WT9649 and WT9650 version 5.3.0.11 using calibration procedure: 4189-S251-FF-01

RESULTS:

☒ "As Received" Data: Within Acceptance Criteria	☐ "As Received" Data: Outside Acceptance Criteria
☒ "Final" Data : Within Acceptance Criteria	☐ "Final" Data : Outside Acceptance Criteria

The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k=2$ providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with EA-4/02 from elements originating from standards, calibration method, effect of environmental conditions and any short-term contribution from the device under calibration.

Date of Calibration: 9 April, 2025

Certificate issued: 9 April, 2025

Can Phan
Calibration Technician

Grant Kennedy

Quality Representative

CERTIFICATE OF CALIBRATION

No.: 424477-701

Type: 4189

Serial No.: 2799510

Page 2 of 4

Sensitivity

Nominal sensitivity:	-26 dB re. 1V/Pa	+/-	1.5 dB
Sensitivity at calibration conditions:	-26.45 dB re. 1V/Pa	or	47.59 mV/Pa
Sensitivity at reference conditions:	-26.48 dB re. 1V/Pa	or	47.45 mV/Pa
Uncertainty:	+/- 0.11 dB		
Correction factor K at reference conditions:	0.48 dB		
Calibration Frequency:	251.19 Hz		

Reference Conditions:

Pressure: 101.3 kPa

Temperature: 23 °C

Relative Humidity: 50%

Traceable references

Type	Serial no	Cal. date	Due date	Calibrated by	Trace number
4180	2602440	2024-04-23	2026-04-30	DPLA	M2. 10-1646-3.1

Condition "As Received":

Good

The Hottinger Brüel & Kjær Calibration Laboratory
3079 Premiere Parkway Suite 120
Duluth, GA 30097
Telephone: 770/209-6907
Fax: 770/447-4033
Web site address: <http://www.hbkworld.com>

CERTIFICATE OF CALIBRATION

Certificate No: 424477-803

Page 1 of 10

CALIBRATION OF:

Sound Level Meter:	Brüel & Kjær	2250	Serial No: 2809183
Microphone:	Brüel & Kjær	4189	Serial No: 2799510
Preamplifier:	Brüel & Kjær	ZC-0032	Serial No: 17456
Supplied Calibrator:	Brüel & Kjær	4231	Serial No: 3009303
Software version:	BZ7222	Version 4.7.7	

CLIENT: Stantec Consulting Ltd.
325 25 Street SE
Unit 200
Calgary, AB T2A 7H8

CALIBRATION CONDITIONS:

Preconditioning: 4 hours at 23 ± 3 °C
Environment conditions See actual values in Environmental Condition sections

SPECIFICATIONS: This document certifies that the instrument as listed under "Model/Serial Number" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$ providing a level of confidence of approximately 95%. Statements of compliance, where applicable, are based on calibration results falling within specified criteria with no reduction by the uncertainty of the measurement. The calibration of the listed instrumentation was accomplished using a test system which conforms with the requirements of ISO/IEC 17025, ANSI/NCSL Z540-1, and ISO 10012-1. For "as received" and/or "final" data, see the attached page(s). Items marked with one asterisk (*) are not covered by the scope of the current A2LA accreditation. This Certificate and attached data pages shall not be reproduced, except in full, without the written approval of the Hottinger Brüel & Kjær Calibration Laboratory-Duluth, GA. Results relate only to the items tested. This instrument has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants.

PROCEDURE: Hottinger Brüel & Kjær Model 3630 Sound Level Meter Calibration System Software 7763 Version 8.6 - DB: 8.60 Test Collection 2250-4189.

RESULTS:

As Received Condition	As Received Data	Final Data
☒ Received in good condition	☒ Within acceptance criteria	☒ Within acceptance criteria

Date of Calibration: 10 Apr. 2025

Certificate issued: 10 Apr. 2025

Grant Kennedy

Calibration Technician

Can Phan
Quality Representative

Summary

Preliminary inspection	<u>Passed</u>
Environmental conditions, Prior to calibration	<u>Passed</u>
Reference information	<u>Passed</u>
Indication at the calibration check frequency	<u>Passed</u>
Acoustical signal tests of a frequency weighting, C weighting	<u>Passed</u>
Self-generated noise, Microphone installed	<u>Passed</u>
Self-generated noise, Electrical	<u>Passed</u>
Electrical signal tests of frequency weightings, A weighting	<u>Passed</u>
Electrical signal tests of frequency weightings, C weighting	<u>Passed</u>
Electrical signal tests of frequency weightings, Z weighting	<u>Passed</u>
Frequency and time weightings at 1 kHz	<u>Passed</u>
Long-term stability, Reference	<u>Passed</u>
Level linearity on the reference level range, Upper	<u>Passed</u>
Level linearity on the reference level range, Lower	<u>Passed</u>
Toneburst response, Time-weighting Fast	<u>Passed</u>
Toneburst response, Time-weighting Slow	<u>Passed</u>
Toneburst response, LAE	<u>Passed</u>
C-weighted peak sound level, 8 kHz	<u>Passed</u>
C-weighted peak sound level, 500 Hz	<u>Passed</u>
Overload indication	<u>Passed</u>
Long-term stability, 1. relative	<u>Passed</u>
High-level stability	<u>Passed</u>
Long-term stability, 2. relative	<u>Passed</u>
Environmental conditions, Following calibration	<u>Passed</u>

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed.

However, no general statement or conclusion can be made about conformance of the sound level meter to the full specifications of IEC 61672-1:2013 because (a) evidence was not publicly available, from an independent testing organization responsible for pattern approvals, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013 or correction data for acoustical test of frequency weighting were not provided in the Instruction Manual and (b) because the periodic tests of IEC 61672-3:2013 cover only a limited subset of the specifications in IEC 61672-1:2013.

Conformance to a performance specification is demonstrated when the following criteria are both satisfied: (a) a measured deviation from a design goal does not exceed the applicable acceptance limit and (b) the corresponding uncertainty of measurement does not exceed the corresponding maximum-permitted uncertainty of measurement given in IEC 61672-1:2013 for the same coverage probability of 95 %.

CERTIFICATE OF CALIBRATION

No.: 424477-702

Type: 4189

Serial No.: 2866566

Page 2 of 4

Sensitivity

Nominal sensitivity:	-26 dB re. 1V/Pa	+/-	1.5 dB
Sensitivity at calibration conditions:	-25.03 dB re. 1V/Pa	or	56.05 mV/Pa
Sensitivity at reference conditions:	-25.06 dB re. 1V/Pa	or	55.87 mV/Pa
Uncertainty:	+/- 0.11 dB		
Correction factor K at reference conditions:	-0.94 dB		
Calibration Frequency:	251.19 Hz		

Reference Conditions:

Pressure: 101.3 kPa
Temperature: 23 °C
Relative Humidity: 50%

Traceable references

Type	Serial no	Cal. date	Due date	Calibrated by	Trace number
4180	2602440	2024-04-23	2026-04-30	DPLA	M2. 10-1646-3.1

Condition “As Received”:

Good

CERTIFICATE OF CALIBRATION

Certificate No: 424477-801

Page 1 of 10

CALIBRATION OF:

Sound Level Meter:	Brüel & Kjær	2250	Serial No: 3003408
Microphone:	Brüel & Kjær	4189	Serial No: 2866566
Preamplifier:	Brüel & Kjær	ZC-0032	Serial No: 19030
Supplied Calibrator:	Brüel & Kjær	4231	Serial No: 3009070
Software version:	BZ7222 Version 4.7.7		

CLIENT: Stantec Consulting Ltd.
325 25 Street SE
Unit 200
Calgary, AB T2A 7H8

CALIBRATION CONDITIONS:

Preconditioning: 4 hours at 23 ± 3 °C
Environment conditions See actual values in Environmental Condition sections

SPECIFICATIONS:

This document certifies that the instrument as listed under "Model/Serial Number" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$ providing a level of confidence of approximately 95%. Statements of compliance, where applicable, are based on calibration results falling within specified criteria with no reduction by the uncertainty of the measurement. The calibration of the listed instrumentation was accomplished using a test system which conforms with the requirements of ISO/IEC 17025, ANSI/NCSL Z540-1, and ISO 10012-1. For "as received" and/or "final" data, see the attached page(s). Items marked with one asterisk (*) are not covered by the scope of the current A2LA accreditation. This Certificate and attached data pages shall not be reproduced, except in full, without the written approval of the Hottinger Brüel & Kjær Calibration Laboratory-Duluth, GA. Results relate only to the items tested. This instrument has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants.

PROCEDURE: Hottinger Brüel & Kjær Model 3630 Sound Level Meter Calibration System Software 7763 Version 8.6 - DB: 8.60 Test Collection 2250-4189.

RESULTS:

As Received Condition	As Received Data	Final Data
X Received in good condition	_X_ Within acceptance criteria	_X_ Within acceptance criteria

Date of Calibration: 10 Apr. 2025

Certificate issued: 10 Apr. 2025

Grant Kennedy

Calibration Technician

Can Phan
Quality Representative

Summary

Preliminary inspection	<u>Passed</u>
Environmental conditions, Prior to calibration	<u>Passed</u>
Reference information	<u>Passed</u>
Indication at the calibration check frequency	<u>Passed</u>
Acoustical signal tests of a frequency weighting, C weighting	<u>Passed</u>
Self-generated noise, Microphone installed	<u>Passed</u>
Self-generated noise, Electrical	<u>Passed</u>
Electrical signal tests of frequency weightings, A weighting	<u>Passed</u>
Electrical signal tests of frequency weightings, C weighting	<u>Passed</u>
Electrical signal tests of frequency weightings, Z weighting	<u>Passed</u>
Frequency and time weightings at 1 kHz	<u>Passed</u>
Long-term stability, Reference	<u>Passed</u>
Level linearity on the reference level range, Upper	<u>Passed</u>
Level linearity on the reference level range, Lower	<u>Passed</u>
Toneburst response, Time-weighting Fast	<u>Passed</u>
Toneburst response, Time-weighting Slow	<u>Passed</u>
Toneburst response, LAE	<u>Passed</u>
C-weighted peak sound level, 8 kHz	<u>Passed</u>
C-weighted peak sound level, 500 Hz	<u>Passed</u>
Overload indication	<u>Passed</u>
Long-term stability, 1. relative	<u>Passed</u>
High-level stability	<u>Passed</u>
Long-term stability, 2. relative	<u>Passed</u>
Environmental conditions, Following calibration	<u>Passed</u>

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed.

However, no general statement or conclusion can be made about conformance of the sound level meter to the full specifications of IEC 61672-1:2013 because (a) evidence was not publicly available, from an independent testing organization responsible for pattern approvals, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013 or correction data for acoustical test of frequency weighting were not provided in the Instruction Manual and (b) because the periodic tests of IEC 61672-3:2013 cover only a limited subset of the specifications in IEC 61672-1:2013.

Conformance to a performance specification is demonstrated when the following criteria are both satisfied: (a) a measured deviation from a design goal does not exceed the applicable acceptance limit and (b) the corresponding uncertainty of measurement does not exceed the corresponding maximum-permitted uncertainty of measurement given in IEC 61672-1:2013 for the same coverage probability of 95 %.

CERTIFICATE OF CALIBRATION

No.: 458875-702

Page 1 of 4

CALIBRATION OF:

Microphone: Brüel & Kjær Type 4966 Serial No. 3391835

CUSTOMER:

Stantec Consulting Ltd.
325 25 Street SE - Unit 200
Calgary, AB T2A 7H8
Emma.Xiong@stantec.com

CALIBRATION CONDITIONS:

Environment conditions:	Air temperature:	21.9 °C
	Air pressure:	99.04 kPa
	Relative Humidity:	31 %RH
Applied polarization voltage:	0 Vdc	

SPECIFICATIONS: This document certifies that the instrument as listed under "Type" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. Hottinger Brüel & Kjær Inc. utilizes a simple acceptance decision rule as defined by ILAC G8 with measurement uncertainty value which will not exceed 50% of the tolerance. The calibration of the listed transducer was accomplished using a test system which conforms to the requirements of ISO/IEC 17025, ANSI/NCSL Z540-1, and guidelines of ISO 10012-1. For "as received" and "final" data, see the attached page(s). Items marked with one asterisk (*) are not covered by the scope of the current A2LA accreditation. This Certificate and attached data pages shall not be reproduced, except in full, without written approval of the Hottinger Brüel & Kjær Calibration Laboratory-Duluth, GA. Results relate only to the items tested. The transducer has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants.

PROCEDURE: The measurements have been performed with the assistance of the Hottinger Brüel & Kjær Inc. Microphone Calibration System B&K 9721 with application software WT9649 and WT9650 version 5.3.0.11 using calibration procedure: 4966 S251-FR01

RESULTS:

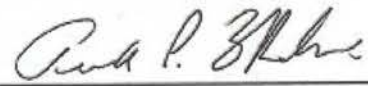
☒ "As Received" Data: Within Acceptance Criteria	☐ "As Received" Data: Outside Acceptance Criteria
☒ "Final" Data : Within Acceptance Criteria	☐ "Final" Data : Outside Acceptance Criteria

The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k=2$ providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with EA-4/02 from elements originating from standards, calibration method, effect of environmental conditions and any short-term contribution from the device under calibration.

Date of Calibration: 12 January, 2026

Certificate issued: 12 January, 2026

Can Phan
Calibration Technician


Aundra Welch
Quality Representative

CERTIFICATE OF CALIBRATION

No.: 458875-702

Type: 4966

Serial No.: 3391835

Page 2 of 4

Sensitivity

Nominal sensitivity:	-26 dB re. 1V/Pa	+/-	1.5 dB
Sensitivity at calibration conditions:	-25.68 dB re. 1V/Pa	or	52.02 mV/Pa
Sensitivity at reference conditions:	-25.70 dB re. 1V/Pa	or	51.90 mV/Pa
Uncertainty:	+/- 0.11 dB		
Correction factor K at reference conditions:	-0.30 dB		
Calibration Frequency:	251.19 Hz		

Reference Conditions:

Pressure: 101.3 kPa

Temperature: 23 °C

Relative Humidity: 50%

Traceable references

Type	Serial no	Cal. date	Due date	Calibrated by	Trace number
4180	2602440	2024-04-23	2026-04-30	DPLA	M2. 10-1646-3.1

Condition "As Received":

Good

CERTIFICATE OF CALIBRATION

Certificate No: 458875-101

Page 1 of 10

CALIBRATION OF:

Sound Level Meter:	Brüel & Kjær	2250	Serial No: 3008995
Microphone:	Brüel & Kjær	4966	Serial No: 3391835
Preamplifier:	Brüel & Kjær	ZC-0032	Serial No: 23441
Supplied Calibrator:	Brüel & Kjær	4231	Serial No: 2053018
Software version:	BZ7222 Version 4.5.2		

CLIENT: Stantec Consulting Ltd.
325 25th Street SE, Unit 200
Calgary, AB T2A 7H8 Emma.Xiong@stantec.com

CALIBRATION CONDITIONS:

Preconditioning: 4 hours at 23 ± 3 °C
Environment conditions See actual values in Environmental Condition sections

SPECIFICATIONS:

This document certifies that the instrument as listed under "Model/Serial Number" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$ providing a level of confidence of approximately 95%. Statements of compliance, where applicable, are based on calibration results falling within specified criteria with no reduction by the uncertainty of the measurement. The calibration of the listed instrumentation, was accomplished using a test system which conforms with the requirements of ISO/IEC 17025, ANSI/NC SL Z540-1, and ISO 10012-1. For "as received" and/or "final" data, see the attached page(s). Items marked with one asterisk (*) are not covered by the scope of the current A2LA accreditation. This Certificate and attached data pages shall not be reproduced, except in full, without the written approval of the Hottinger Brüel & Kjær Calibration Laboratory-Duluth, GA. Results relate only to the items tested. This instrument has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants.

PROCEDURE:

Hottinger Brüel & Kjær Model 3630 Sound Level Meter Calibration System Software 7763 Version 8.6 - DB: 8.60 Test Collection 2250-4966.

RESULTS:

As Received Condition	As Received Data	Final Data
☒ Received in good condition	☒ Within acceptance criteria	☒ Within acceptance criteria

Date of Calibration: 13 January 2026

Certificate issued: 13 January 2026

John Avitabile

Calibration Technician

Grant Kennedy
Quality Representative

CERTIFICATE OF CALIBRATION

Certificate No: 458875-101

Page 2 of 10

Summary

Preliminary inspection	<u>Passed</u>
Environmental conditions, Prior to calibration	<u>Passed</u>
Reference information	<u>Passed</u>
Indication at the calibration check frequency	<u>Passed</u>
Acoustical signal tests of a frequency weighting, C weighting	<u>Passed</u>
Self-generated noise, Microphone installed	<u>Passed</u>
Self-generated noise, Electrical	<u>Passed</u>
Electrical signal tests of frequency weightings, A weighting	<u>Passed</u>
Electrical signal tests of frequency weightings, C weighting	<u>Passed</u>
Electrical signal tests of frequency weightings, Z weighting	<u>Passed</u>
Frequency and time weightings at 1 kHz	<u>Passed</u>
Long-term stability, Reference	<u>Passed</u>
Level linearity on the reference level range, Upper	<u>Passed</u>
Level linearity on the reference level range, Lower	<u>Passed</u>
Toneburst response, Time-weighting Fast	<u>Passed</u>
Toneburst response, Time-weighting Slow	<u>Passed</u>
Toneburst response, LAE	<u>Passed</u>
C-weighted peak sound level, 8 kHz	<u>Passed</u>
C-weighted peak sound level, 500 Hz	<u>Passed</u>
Overload indication	<u>Passed</u>
Long-term stability, 1. relative	<u>Passed</u>
High-level stability	<u>Passed</u>
Long-term stability, 2. relative	<u>Passed</u>
Environmental conditions, Following calibration	<u>Passed</u>

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed.

As evidence was publicly available, from an independent testing organization responsible for approving the results of pattern-evaluation tests performed in accordance with IEC 61672-2:2013, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013, the sound level meter submitted for testing conforms to the class 1 specifications of IEC 61672-1:2013.

Conformance to a performance specification is demonstrated when the following criteria are both satisfied: (a) a measured deviation from a design goal does not exceed the applicable acceptance limit and (b) the corresponding uncertainty of measurement does not exceed the corresponding maximum-permitted uncertainty of measurement given in IEC 61672-1:2013 for the same coverage probability of 95 %.

CERTIFICATE OF CALIBRATION

No.: 424477-703

Page 1 of 4

CALIBRATION OF:

Microphone:	Brüel & Kjær	Type	4189	Serial No.	3060527
Identification:	4				

CUSTOMER:Stantec Consulting Ltd.
325 25 Street SE - Unit 200
Calgary, AB T2A 7H8**CALIBRATION CONDITIONS:**

Environment conditions:	Air temperature:	22.6	°C
	Air pressure:	98.622	kPa
	Relative Humidity:	50.6	%RH
Applied polarization voltage:	0 Vdc		

SPECIFICATIONS: This document certifies that the instrument as listed under "Type" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. Hottinger Brüel & Kjær Inc. utilizes a simple acceptance decision rule as defined by ILAC G8 with measurement uncertainty value which will not exceed 50% of the tolerance. The calibration of the listed transducer was accomplished using a test system which conforms to the requirements of ISO/IEC 17025, ANSI/NC SL Z540-1, and guidelines of ISO 10012-1. For "as received" and "final" data, see the attached page(s). Items marked with one asterisk (*) are not covered by the scope of the current A2LA accreditation. This Certificate and attached data pages shall not be reproduced, except in full, without written approval of the Hottinger Brüel & Kjær Calibration Laboratory-Duluth, GA. Results relate only to the items tested. The transducer has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants.

PROCEDURE:

The measurements have been performed with the assistance of the Hottinger Brüel & Kjær Inc. Microphone Calibration System B&K 9721 with application software WT9649 and WT9650 version 5.3.0.11 using calibration procedure: 4189-S251-FF-01

RESULTS:

☒ "As Received" Data: Within Acceptance Criteria	☐ "As Received" Data: Outside Acceptance Criteria
☒ "Final" Data : Within Acceptance Criteria	☐ "Final" Data : Outside Acceptance Criteria

The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k=2$ providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with EA-4/02 from elements originating from standards, calibration method, effect of environmental conditions and any short-term contribution from the device under calibration.

Date of Calibration: 9 April, 2025

Certificate issued: 9 April, 2025

Can Phan
Calibration Technician
Grant Kennedy

Quality Representative

CERTIFICATE OF CALIBRATION

No.: 424477-703

Type: 4189

Serial No.: 3060527

Page 2 of 4

Sensitivity

Nominal sensitivity:	-26 dB re. 1V/Pa	+/-	1.5 dB
Sensitivity at calibration conditions:	-25.63 dB re. 1V/Pa	or	52.33 mV/Pa
Sensitivity at reference conditions:	-25.65 dB re. 1V/Pa	or	52.17 mV/Pa
Uncertainty:	+/- 0.11 dB		
Correction factor K at reference conditions:	-0.35 dB		
Calibration Frequency:	251.19 Hz		

Reference Conditions:

Pressure: 101.3 kPa
Temperature: 23 °C
Relative Humidity: 50%

Traceable references

Type	Serial no	Cal. date	Due date	Calibrated by	Trace number
4180	2602440	2024-04-23	2026-04-30	DPLA	M2. 10-1646-3.1

Condition “As Received”:

Good

CERTIFICATE OF CALIBRATION

Certificate No: 424477-802

Page 1 of 10

CALIBRATION OF:

Sound Level Meter:	Brüel & Kjær	2270	Serial No: 3002024
Microphone:	Brüel & Kjær	4189	Serial No: 3060527
Preamplifier:	Brüel & Kjær	ZC-0032	Serial No: 19025
Supplied Calibrator:	Brüel & Kjær	4231	Serial No: 2053018
Software version:	BZ7222 Version 4.7.7		

CLIENT: Stantec Consulting Ltd.
325 25 Street SE
Unit 200
Calgary, AB T2A 7H8

CALIBRATION CONDITIONS:

Preconditioning: 4 hours at 23 ± 3 °C
Environment conditions See actual values in Environmental Condition sections

SPECIFICATIONS: This document certifies that the instrument as listed under "Model/Serial Number" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$ providing a level of confidence of approximately 95%. Statements of compliance, where applicable, are based on calibration results falling within specified criteria with no reduction by the uncertainty of the measurement. The calibration of the listed instrumentation was accomplished using a test system which conforms with the requirements of ISO/IEC 17025, ANSI/NCSL Z540-1, and ISO 10012-1. For "as received" and/or "final" data, see the attached page(s). Items marked with one asterisk (*) are not covered by the scope of the current A2LA accreditation. This Certificate and attached data pages shall not be reproduced, except in full, without the written approval of the Hottinger Brüel & Kjær Calibration Laboratory-Duluth, GA. Results relate only to the items tested. This instrument has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants.

PROCEDURE:

Hottinger Brüel & Kjær Model 3630 Sound Level Meter Calibration System Software 7763 Version 8.6 - DB: 8.60 Test Collection 2270-4189.

RESULTS:

As Received Condition	As Received Data	Final Data
☒ Received in good condition	☒ Within acceptance criteria	☒ Within acceptance criteria

Date of Calibration: 10 Apr. 2025

Certificate issued: 10 Apr. 2025

Grant Kennedy

Calibration Technician

Can Phan
Quality Representative

Summary

Preliminary inspection	<u>Passed</u>
Environmental conditions, Prior to calibration	<u>Passed</u>
Reference information	<u>Passed</u>
Indication at the calibration check frequency	<u>Passed</u>
Acoustical signal tests of a frequency weighting, C weighting	<u>Passed</u>
Self-generated noise, Microphone installed	<u>Passed</u>
Self-generated noise, Electrical	<u>Passed</u>
Electrical signal tests of frequency weightings, A weighting	<u>Passed</u>
Electrical signal tests of frequency weightings, C weighting	<u>Passed</u>
Electrical signal tests of frequency weightings, Z weighting	<u>Passed</u>
Frequency and time weightings at 1 kHz	<u>Passed</u>
Long-term stability, Reference	<u>Passed</u>
Level linearity on the reference level range, Upper	<u>Passed</u>
Level linearity on the reference level range, Lower	<u>Passed</u>
Toneburst response, Time-weighting Fast	<u>Passed</u>
Toneburst response, Time-weighting Slow	<u>Passed</u>
Toneburst response, LAE	<u>Passed</u>
C-weighted peak sound level, 8 kHz	<u>Passed</u>
C-weighted peak sound level, 500 Hz	<u>Passed</u>
Overload indication	<u>Passed</u>
Long-term stability, 1. relative	<u>Passed</u>
High-level stability	<u>Passed</u>
Long-term stability, 2. relative	<u>Passed</u>
Environmental conditions, Following calibration	<u>Passed</u>

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed.

However, no general statement or conclusion can be made about conformance of the sound level meter to the full specifications of IEC 61672-1:2013 because (a) evidence was not publicly available, from an independent testing organization responsible for pattern approvals, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013 or correction data for acoustical test of frequency weighting were not provided in the Instruction Manual and (b) because the periodic tests of IEC 61672-3:2013 cover only a limited subset of the specifications in IEC 61672-1:2013.

Conformance to a performance specification is demonstrated when the following criteria are both satisfied: (a) a measured deviation from a design goal does not exceed the applicable acceptance limit and (b) the corresponding uncertainty of measurement does not exceed the corresponding maximum-permitted uncertainty of measurement given in IEC 61672-1:2013 for the same coverage probability of 95 %.

Appendix C Noise interview records

Table C.1 Interview Questionnaire – Floatel #1

Interviewer: Yong Ma				Interview Questionnaire			
Interviewee Information							
ID # of Interviewee	Interview Date	Living Deck	Work Shift	1.General evaluation for your sleeping at Floatel	2. How long have you stayed?	3. Can you hear outside construction noise?	3. Any noise concerns/ complaints
#1	July 28	5	Day	Good	4 months	No	Nothing
#2	July 28	6	Day	OK	6 months	No	Not bothering
#3	July 28	5	Day	Stay good	2 months	Nothing	None
#4	July 28	5	Day	All right	2 years	No	No
#5	July 28	6	Day	Gym noise sometimes bothering	7 months	No	Some gym noise
#6	July 28	7	Night	OK	8 months	Nothing	All right
#7	July 28	9	Day	No problem	8 months	But no issue	No, only noise from people
#8	July 28	7	Day	No issue	>1 year	Sometimes	Noise from room fan, gym
#9	July 28	5	Day	Deep sleeping	6 months	Not bothering	Gym noise
#10	July 28	6	Day	Once banging noise at 4 am	1.5 years	No	General OK
#11	July 28	5	Day	No problem	1 month	No	No
#12	July 28	9	Day	OK	3 months	No	No
#13	July 28	2	Day	Fine	4 days	No	Nothing
#14	July 28	5	Day	All good	3 months	No	No
#15	July 28	9	Day	No issue	4 days	Minor sometimes	Not yet
#16	July 28	6	Day	Gym noise	6 months	No	Gym noise while staying at Deck 6
#17	July 28	5	Day	Great	8 months	No	Nothing
#18	July 28	5	Day	Good	3 months	No	No
#19	July 28	6	Day	No problem	3 months	Little bit	All good
#20	July 28	9	Day	All good	6 months	No	Nothing
#21	July 28	7	Day	OK	2 years	Not often	NO
#22	July 28	5	Day	Pretty quiet	2 months	No	OK
#23	July 28	6	Day	Great	2 months	Truck noise	All OK
#24	July 28	9	Day	Good enough	8 months	No	Nothing
#25	July 28	5	Day	Not bad	1 year	Not really	No

Table C.2 Interview Questionnaire – Floatel #2

Interviewer: Yong Ma				Interview Questionnaire			
Interviewee Information				1.General evaluation for your sleeping quality at Floatel	2.How long have you stayed?	3. Can you hear outside construction noise?	3. Any noise concerns/ complaints
ID # of Interviewee	Interview Date	Living Deck	Work Shift				
#1	July 29	4	N	Good	8 months	No	Nothing
#2	July 29	4	D	Good	4 months	Not really	No
#3	July 29	4	D	Sleep like rock	1 year	Never	No
#4	July 29	4	D	Great	5 months	No	Not really (other than AC temperature)
#5	July 29	6	D	Normal, but can improve	6 months	No complaint	Kitchen cart activity
#6	July 29	5	D	It's OK	4 months	No	Not really
#7	July 29	2	D	Good sleep	1 week	No	No
#8	July 29	2	N	Great	1 week	No	No
#9	July 29	4	D	Great	8 months	Not at all	No issue
#10	July 29	5	D	Sleep fast	6 months	Never	No
#11	July 29	6	D	Good (tired after work)	10 months	No	No
#12	July 29	4	D	Good	4 months	Never	No
#13	July 29	4	D	No issue	8 months	No	No
#14	July 30	5	D	Sleep fast	6 months	No	No
#15	July 30	4	D	Good	2 months	No	No
#16	July 30	4	D	No problem	10 months	No	Nothing
#17	July 30	5	N	Good	2 years	No	Noise from Deck 3 transport storage activity
#18	July 30	4	D	Good	10 months	Nothing	General OK
#19	July 30	4	D	Temperature issue	5 months	Not often	No
#20	July 30	4	D	Sleep good	4 months	No	No, great camp
#21	July 30	5	D	Quiet, great	6 months	Never	Nothing
#22	July 30	4	D	Pretty good	8 months	No	No (food could be better)
#23	July 30	4	D	Never have issue	2 months	No	No noise concerns
#24	July 30	4	D	OK	3 months	No	No
#25	July 30	4	D	No problem	4 months	No	No
#26	July 30	5	D	So tired, sleep well	5 months	No	No
#27	July 30	4	D	No issue	6 weeks	No	Nothing
#28	July 30	4	D	Sleep always good	2 months	No	Nothing to complaint
#29	July 30	5	D	Very good	3 months	No	No
#30	July 30	4	D	Great	4.5 months	No	No