Appendix H-5

Noise Monitoring Report

AGNICO EAGLE

**MELIADINE GOLD PROJECT**

# 2019 Noise Monitoring Report

In Accordance with NIRB Project Certificate No. 006

Prepared by:
Agnico Eagle Mines Limited – Meliadine Division

**MARCH 2020**

## EXECUTIVE SUMMARY

In accordance with NIRB Project Certificate No. 006, and as described in the Noise Abatement and Monitoring Plan (Version 3; March, 2020), Agnico Eagle Mines Ltd. (Agnico Eagle) monitors outdoor ambient noise at the Meliadine site. The objective of the noise monitoring program is to measure noise levels at four previously determined monitoring locations over at least two 24 h periods. Results are compared to FEIS predictions for the 24-h $L_{eq}$, the $L_{eq\text{-}nighttime}$ design target, and the site's noise monitoring criteria.

Since high winds in the area tend to significantly reduce the amount of available data, technicians aim to conduct two or more monitoring events for each station, lasting two to four days each. In 2019, two or more monitoring events were conducted for all stations (NPOR005, NPOR006, NPOR008 and NPOR017). According to conditions of the Project Certificate, NPOR014 was not required to be monitored in 2019, since activities related to the Discovery Pit were not occurring. Monitoring was conducted for the first time at NPOR005 (alternate to NPOR006), since previously high occupancy rates at the seasonal cabin adjacent to NPOR006 have impeded data interpretation for that location. However, the cabin at NPOR006 did not appear to be occupied during monitoring in 2019, so results for both stations are presented.

Following processing of the data in accordance with standard methods (Alberta Energy Resource Conservation Board Directive 038), sufficient valid data was available for the calculation of at least two 24-h $L_{eq}$ values for each monitoring station in 2019. Final values are shown in Table 1.

No exceedances of the site's noise monitoring criterion (45 dBA, 24-h $L_{eq}$) or night-time design target (40 dBA) occurred.

For NPOR005 and NPOR008, no measured values exceeded the FEIS predictions for those locations. For NPOR006, one of two 24-h $L_{eq}$ measurements marginally exceeded the FEIS prediction of 39.8 dBA, at 40.2 dBA. Review of sound recordings indicated this was generally due to an elevated baseline environment (wind noise), mixed with intermittent but frequent backup alarms. For NPOR017, one of three 24-h $L_{eq}$ measurements marginally exceeded the FEIS prediction of 43.4 dBA, at 45.0 dBA. This exceedance was generally caused by traffic noises and aircraft flyovers, occasionally compounded by simultaneous bird calls. For both of these cases, since the exceedance was marginal (<3 dBA), occurred during a single monitoring event, and the noise monitoring criterion was not exceeded, the events were not investigated further.

To date, no noise-related complaints have been received for the Meliadine site.

**Table 1. Summary of noise monitoring results in 2019. "NM" indicates not required to be measured. Values exceeding the FEIS prediction are in bold. No values exceeded site noise monitoring criteria.**

| Location | Monitoring Start | Monitoring End | *Noise Monitoring Criterion* $L_{eq(24\ h)}$ *(dBA)* | *FEIS Prediction* $L_{eq(24\ h)}$ *(dBA)* | Measured $L_{eq(24\ h)}$ (dBA) | *Design Target* $L_{eq\ (nighttime)}$ *(dBA)* | Measured $L_{eq\ (nighttime)}$ (dBA) |
|---|---|---|---|---|---|---|---|
| NPOR005 | 09/05/2019 3:22 PM | 09/07/2019 7:38 AM | *45* | *36.3* | 35.6 | *40* | 34.0 |
| | 09/12/2019 9:02 AM | 09/15/2019 4:31 PM | | | 35.1 | | 33.0 |
| NPOR006 | 09/12/2019 8:42 AM | 09/15/2019 16:19 PM | *45* | *39.8* | **40.2** | - | - |
| | 09/20/2019 12:56 PM | 09/22/2019 13:40 PM | | | 39.6 | | - |
| NPOR008 | 09/08/2019 2:55 PM | 09/11/2019 2:17 PM | *45* | *41.7* | 39.5 | *40* | 36.3 |
| | 09/22/2019 3:09 PM | 09/24/2019 6:59 PM | | | 34.9 | | 38.5 |
| | 10/03/2019 11:19 AM | 10/06/2019 3:07 PM | | | 36.9 | | 34.6 |
| NPOR014 | NM | NM | *45* | *44.7* | NM | - | - |
| NPOR017 | 09/08/2019 9:03 AM | 09/10/2019 4:06 PM | *45* | *43.4* | **45.0** | - | - |
| | 09/22/2019 10:07 AM | 09/25/2019 2:16 PM | | | 38.6 | | - |
| | 10/03/2019 3:51 PM | 10/06/2019 2:32 PM | | | 42.5 | | - |

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# 1 INTRODUCTION

In February, 2015, Agnico Eagle Mines Ltd. (Agnico Eagle) was issued NIRB Project Certificate No. 006 for the Meliadine Gold Project, near Rankin Inlet, NU. In accordance with this Project Certificate, and as described in the Noise Abatement and Monitoring Plan (Version 3; March, 2020), Agnico Eagle began conducting outdoor noise monitoring at the Meliadine site in 2016. The objective of the Noise Abatement and Monitoring Plan is to validate predictions of noise levels made in the FEIS, confirm the findings of the noise impact assessment (Vol. 5 – Atmospheric Environment and Impact Assessment, April, 2014), and inform the implementation of noise mitigation measures. If noise monitoring confirms excessive Project-associated noise levels exist, the monitoring data will be used to determine where noise abatement requires improvement.

A summary of the noise monitoring program is shown in Table 2, according to the Noise Abatement and Monitoring Plan.

**Table 2. Noise monitoring objectives, frequency, duration, and locations.**

| Project Phase | Project Objectives | Frequency and Duration of Monitoring | Monitoring Locations |
|---|---|---|---|
| Construction and Operations | To verify that the noise emissions used in the FEIS noise assessment were reasonable, yet conservative.<br><br>To verify that the mitigation measures considered integral to the Project are incorporated as planned, and are effective. | Yearly monitoring programs, twice per year.<br><br>A duration of 24+ hours per station. | FEIS receptors<br>NPOR06<br>NPOR08<br>NPOR14<br>NPOR17<br><br>Possibility to add NPOR05 |

# 2 METHODS

## 2.1 MONITORING LOCATIONS

In 2019, noise monitoring was conducted at four locations, as identified in the Noise Abatement and Monitoring Plan. Since activities were not ongoing at the Discovery Pit location, NPOR014 was not monitored in 2019. To determine the feasibility of replacing NPOR006 with NPOR005 (as described in the Plan, and indicated in the 2018 Noise Monitoring Report), monitoring was conducted at NPOR005 for the first time. All of these locations coincide with the identified points of reception (PORs) with the greatest predicted changes in noise levels from existing conditions, as determined through the noise impact assessment (FEIS Vol. 5, Section 5.5). The monitoring locations are identified in Figure 1, and summarized

in Table 3. Photos of the noise monitoring locations are provided in Section 3. These monitoring locations will be reviewed and may be adapted throughout the construction and/or operations phases of the Project, as necessary.

**Table 3. Noise monitoring locations and conditions for monitoring.**

| Location ID | UTM (Zone 15V) | Project Area | Monitoring Conditions | Monitored in 2019 |
|---|---|---|---|---|
| NPOR 006 | 538286E 6991299N | Mine | Monitor during the entire Construction and Operations Phases, and initial stages of Closure when extensive activities are occurring. | Yes |
| NPOR 008 | 543707E 6987276N | Mine | Monitor during the entire Construction and Operations Phases, and initial stages of Closure when extensive activities are occurring. | Yes |
| NPOR 014 | 549401E 6982060N | Mine | Monitor only if activities associated with the Discovery Pit are occurring. | No |
| NPOR 017 | 544203E 6970537N | AWAR | Monitor during the entire Construction and Operations Phases, and initial stages of Closure when extensive activities are occurring. | Yes |
| (NPOR 005) | 537978 E 6991742 N | Mine | Alternate to NPOR006 if monitoring at that location is not feasible due to high occupancy rates of the adjacent cabin. | Yes |

All noise monitoring stations are located in close proximity to seasonally occupied cabins, which were identified as being the most sensitive receptors in the noise impact assessment (FEIS Vol. 5, Section 5.5.4.4). However, the frequent use of some of these cabins (especially NPOR006) impedes efficient collection of valid noise data that is representative of mine activities.

NPOR006 is located approximately 1 km north of the mine site disturbance area, and approximately 200 m outside the FEIS site study area (SSA). The adjacent cabin was in use at the time of the 2017 and 2018 noise surveys, but did not appear to be in use in 2019. The surrounding terrain is a mix of small rock and lichen. The slope is very minimal towards the SW. Meliadine Lake is ~150 m NE and an unnamed small lake is ~120 m SSW.

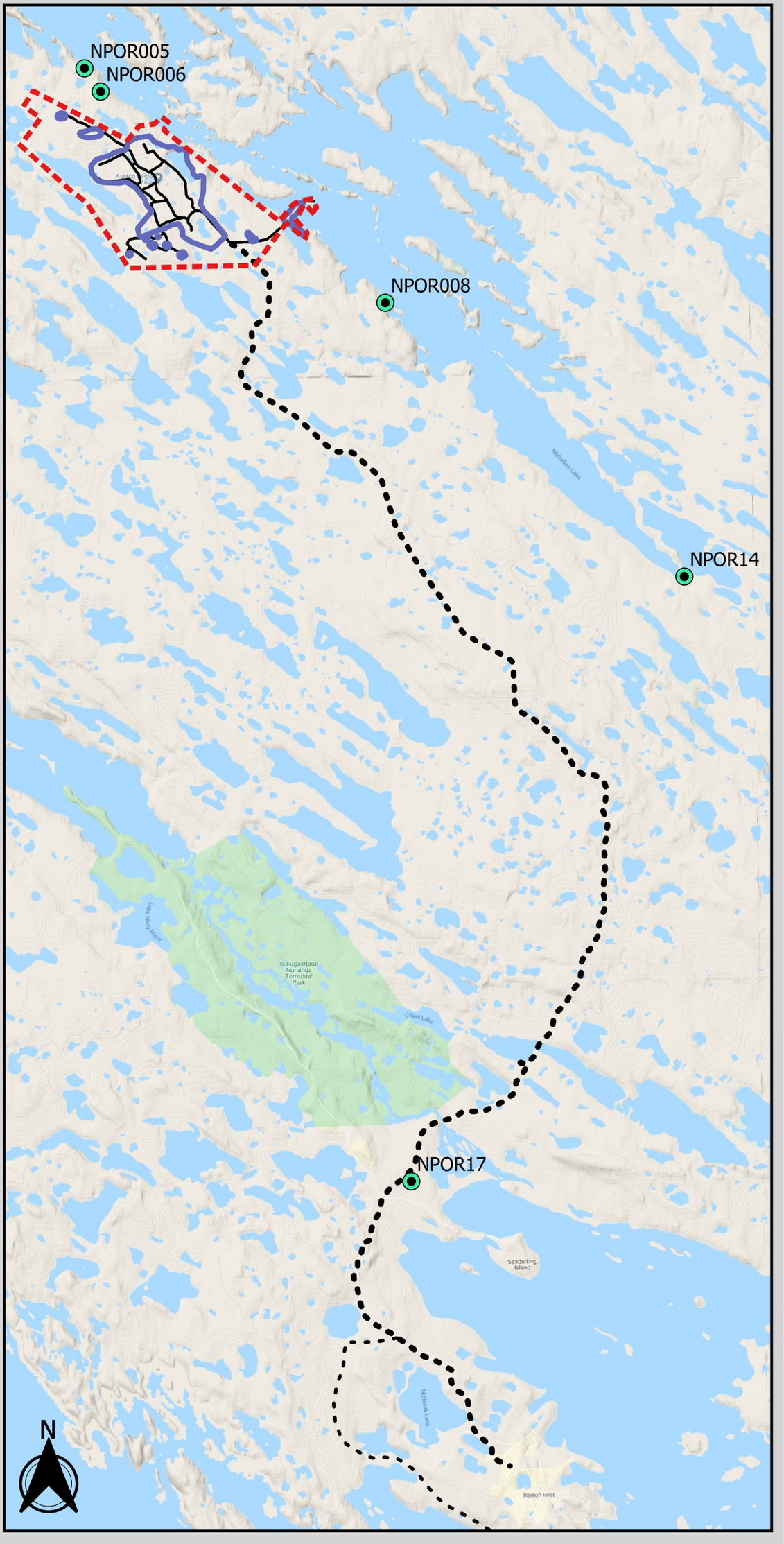
Alternate location NPOR005 is located approximately 1 km northwest of NPOR006, adjacent to a seasonally occupied cabin (usage rate unknown). It is approximately 1.2 km outside of the SSA, on the southwest side of Meliadine lake.

NPOR008 is located approximately 1.25 km from the SSA, on the east side of the site. The surrounding terrain is on the summit of a small vegetated hill with very little apparent rock. Meliadine Lake is ~ 51 m to the NNE. The mine camp is approximately 2 km to the northwest, and the all weather road is approximately 2.5 km to the southwest.

NPOR014 is located approximately 130 m from the traditionally used ATV trail. This station is at the southern end of Meliadine Lake and is approximately 10 km away from the Meliadine exploration camp and

5 km from the Discovery area. It is located within the SSA. Currently there is no development in this area, so any measurements at NPOR014 at this time are expected to be indicative of background values.

NPOR017 is located at the southern end of the all-weather access road (AWAR). It is approximately 150 m SW of the road. No SSA was assessed for the AWAR.




Haul and Service Road

Rankin Inlet Bypass Road

All-Weather Access Road

Production Lease Outline

Meliadine Infastructure

Noise Monitoring Location

**Noise Abatement and Monitoring Plan**

Figure 1

Meliadine Noise Monitoring Locations

0 1 2 3 4 km

Date: 2019-09-13

Created By: BH

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MELIADINE

## 2.2 MONITORING DATES

In accordance with the Noise Abatement and Monitoring Plan, two or more 24-h+ noise surveys were conducted for each location. Surveys were planned to last a minimum of 48 h, since a significant portion of data is filtered out due to sub-optimal weather conditions (see Section 2.4). Monitoring dates and times for each survey are provided in Table 3.

After the noise meter began malfunctioning early in the summer season, it was sent for repairs and was returned to site in late August. As a result, all monitoring events occurred between September 5 and October 6. A second Bruel and Kjaer Model 2250 integrating sound level meter was also obtained at that point, which will facilitate future field monitoring programs and reduce any monitoring delays when maintenance is required for one instrument.

**Table 4. Noise monitoring dates in 2019.**

| Location | Monitoring Start | Monitoring End | Duration (h) |
|---|---|---|---|
| NPOR005 | 09/05/2019 3:22 PM | 09/07/2019 7:38 AM | 41 |
| | 09/12/2019 9:02 AM | 09/15/2019 4:31 PM | 63 |
| NPOR006 | 09/12/2019 8:42 AM | 09/15/2019 16:19 PM | 81 |
| | 09/20/2019 12:56 PM | 09/22/2019 13:40 PM | 50 |
| NPOR008 | 09/08/2019 2:55 PM | 09/11/2019 2:17 PM | 73 |
| | 09/22/2019 3:09 PM | 09/24/2019 6:59 PM | 52 |
| | 10/03/2019 11:19 AM | 10/06/2019 3:07 PM | 77 |
| NPOR014 | NM | NM | NM |
| NPOR017 | 09/08/2019 9:03 AM | 09/10/2019 4:06 PM | 56 |
| | 09/22/2019 10:07 AM | 09/25/2019 2:16 PM | 77 |
| | 10/03/2019 3:51 PM | 10/06/2019 2:32 PM | 72 |

## 2.3 SOUND LEVEL METER

For all stations a Bruel and Kjaer Model 2250 integrating sound level meter with secondary wind screen was used to conduct the noise survey. The noise logging rate was set at one-minute intervals, and according to the Noise Abatement and Monitoring Plan, logged parameters included:

- Integrated equivalent A-weighted sound level ($L_{Aeq}$)
- 1/3 octave band sound levels in decibels (dB)
- Statistical data ($L_{10}$, $L_{90}$)
- Maximum sound level ($L_{max}$) in dBA
- Minimum sound level ($L_{min}$) in dBA

Calibration of the instrument was performed before and after each monitoring event using a Bruel and Kjaer Type 4231 Calibrator, to ensure variance was within 0.5 dB (see field notes, Appendix A). Estimated uncertainty, over a yearly time period for the calibrator is better than 0.05 dB at a 96% confidence level.

## 2.4 Weather Data

Weather data for the noise monitoring periods was collected using the mine site's permanent weather station. Hourly data for wind, temperature, and relative humidity were available from this station.

In the case of noise monitoring for complaint situations, the Alberta Energy Resource Conservation Board Directive 038 (Directive 038) requires noise data to be collected under appropriate weather conditions, which are represented by an absence of steady precipitation, snow, water, or ice ground cover, as well as restrictions on wind speed. To adhere as much as possible to these conditions, noise data was filtered out from analyses when wind speed exceeded 15 km/hr. Average wind speed values were used, since filtering based on maximum values has historically resulted in exclusion of nearly the entire noise dataset. This approach is considered conservative, since higher winds are likely to result in increased noise levels due to wind effects. Data was not filtered on the basis of recorded precipitation, since hourly precipitation measurements were not available from the onsite weather station in 2019, and filtering of data based on elevated relative humidity (>90 or 100%, as in past years) resulted in significant data elimination. This approach was considered acceptable since no noise-related complaints were under investigation (none have been received to date). Hourly precipitation is planned to be recorded at the onsite weather station beginning in 2020. Weather data (wind speed, wind direction, temperature, and humidity) are provided in Appendix B.

## 2.5 Field Notes

A pocket weather meter (WeatherHawk® WindMate™, WM-300) was used by field staff to record wind speed, direction, and temperature at the beginning and end of each monitoring period. Other observations included precipitation, cloud cover, and observed noises during instrument set-up and takedown. All field notes are provided in Appendix A.

## 2.6 Data Analysis

Data recorded at the four monitoring sites were downloaded for assessment using the Bruel and Kjaer 5503 Measurement Suite software, with some calculations performed using Microsoft Excel. Recorded one-minute $L_{Aeq}$ values were used to calculate hourly equivalent energy noise levels ($L_{eq, 1h}$).

### 2.6.1 Data Filtering

#### *2.6.1.1 Initial Filtering*

All datapoints associated with the first hour of measurement (and where necessary, last hour) were filtered out to remove noise from technician activity, and to ensure more than 30 min of data contributed to hourly averages. Data was also filtered on the basis of hourly recorded weather conditions to comply with Directive 038 (see Section 2.4). After this initial data filtering, valid hourly $L_{eq}$ values for each monitoring period were

used to calculate average 24-h equivalent energy noise levels ($L_{eq,\ 24\ h}$). When a data point ($L_{eq,\ 1\ h}$) was available from more than one day within a monitoring period, values were energy-averaged across calendar days to ensure time points contributed equally to 24-h $L_{eq}$ values.

#### *2.6.1.2 Review of Sound Recordings*

When calculated 24-h $L_{eq}$ values exceeded FEIS predictions or noise criteria (see Section 3.6.2, below), sound recordings were reviewed to identify and if appropriate, remove noise data dominated by background noise sources unrelated to mine activity, and causing recorded 1-min $L_{eq}$ values in excess of FEIS predictions or noise criteria (e.g. wind, ongoing animal disturbance in close proximity to the microphone, human interference). These noise sources were assumed to be minimal in the FEIS process, since a background sound level of 35 dBA was used. After this second data filtering, hourly Leq values with less than 30 min of valid data were excluded from 24-h $L_{eq}$ calculations, in accordance with Directive 038. Similarly, 24-h $L_{eq}$ values were only calculated when more than 180 valid minutes were available from each of the daytime and nighttime periods. In 2019, sufficient valid data was available for all monitoring periods to conform to this guideline, and final $L_{eq}$ values were calculated for each monitoring period, for each site.

### 2.6.2 Noise Monitoring Criteria

Final $L_{eq}$ values were compared to FEIS predictions and the site's noise monitoring criteria (see Table 4).

As indicated in the Noise Abatement and Monitoring Plan, night-time (11 pm – 7 am) $L_{eq}$ values were also calculated, and are compared with the design target of 40 dBA for sites NPOR005 and NPOR008, for reference only. It should be noted that this target was designed to apply at a distance of 1.5 km from the site study area (SSA) in remote areas. NPOR005 and NPOR008 are located approximately 1.2 km from the SSA, so exceedances of this target value may occur at the monitoring stations without exceeding the design target at the 1.5 km distance. If concerns arise regarding nighttime sound levels around the minesite, one or more stations may be added or moved in future monitoring events to coincide with this design target location to more precisely assess FEIS predictions.

**Table 5. FEIS predictions for 24-h equivalent sound levels, FEIS design targets for 1.5 km from the site study area perimeter, and noise monitoring criteria from the Noise Abatement and Monitoring Plan.**

| Location | FEIS Prediction $L_{eq\text{-}24h}$ (dBA) | Design Target (1.5 km from SSA) $L_{eq\text{-}nighttime}$ (dBA) | Noise Monitoring Criteria $L_{eq\text{-}24h}$ (dBA) |
|---|---|---|---|
| NPOR005 | 36.3 | 40 | 45 |
| NPOR006 | 39.8 | - | 45 |
| NPOR008 | 41.7 | 40 | 45 |
| NPOR014 | 44.7 | - | 45 |
| NPOR017 | 43.4 | - | 45 |

# 3 RESULTS

24-h and night-time $L_{eq}$ values are presented and reviewed below, for comparison to criteria in Section 2.6.2. All 1-h $L_{eq}$ values are provided in Appendix B.

## 3.1 NPOR005

In previous years (2016, 2017, 2018), significant and ongoing activity at the seasonally occupied cabin located adjancent to NPOR006 caused difficulty in noise data interpretation. Since occupancy of the cabin appeared frequent, it was not feasible to conduct monitoring during an unoccupied period. Agnico planned to conduct reconnaissance in 2019 to determine the feasibility of monitoring at NPOR005, as described in the Noise Abatement and Monitoring Plan. This station is in a similar location relative to site development, but may have lower occupancy rates. Two monitoring events were recorded at NPOR005, and are reported here along with those from NPOR006, because activities at the cabin there did not appear to be ongoing in 2019 (see Section 4.2).

$L_{eq}$ values calculated from 1-min measurements over monitoring events 1 and 2 at NPOR005 are shown in Figures 3 and 4. Invalid data points removed from analyses due to assumed technician interference and sub-optimal weather conditions (as described in Section 2.4) are indicated ($LA_{eq}$-unfiltered). For event 1 at station NPOR005 (Sept. 5 - 7), 41 h of monitoring were conducted, and 39 h of valid data were available after filtering. For event 2 at NPOR005 (Sept. 12 - 15), 80 h of monitoring were conducted, and 43 h of valid data were available after filtering.

After data filtering, the calculated 24-h $L_{eq}$ values were 35.6 dBA and 35.1 dBA for events 1 and 2, respectively. These values did not exceed the FEIS prediction of 36.3 dBA, or the noise monitoring criterion for “non-significant impacts” (45 dBA).

Night-time $L_{eq}$ values for each event were 34.0 dBA and 33.0 dBA, which do not exceed the design target of 40 dBA for 1.5 km from the mine SSA.

Noise sources noted in the field log for this location include possible boat traffic, ATV traffic (nearby cabin), and birds. Sound recordings were not required to be reviewed because recorded $L_{eq}$ values did not exceed FEIS predictions or noise monitoring criteria after the initial data filtering.

To date, no noise-related complaints have been received in this area.

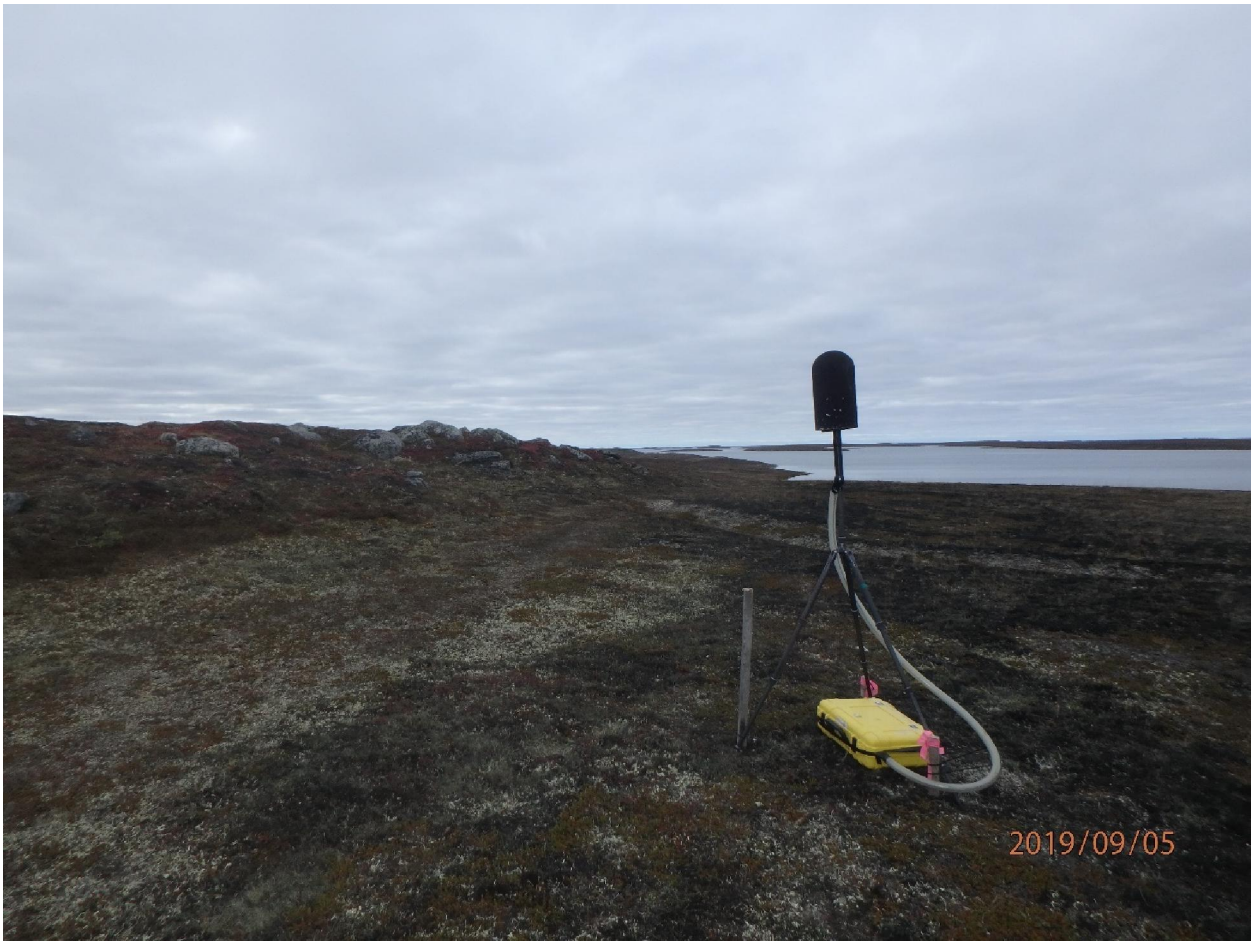



**Figure 2. Noise monitoring location NPOR005 (September 5, 2019). Meliadine Lake in the background.**

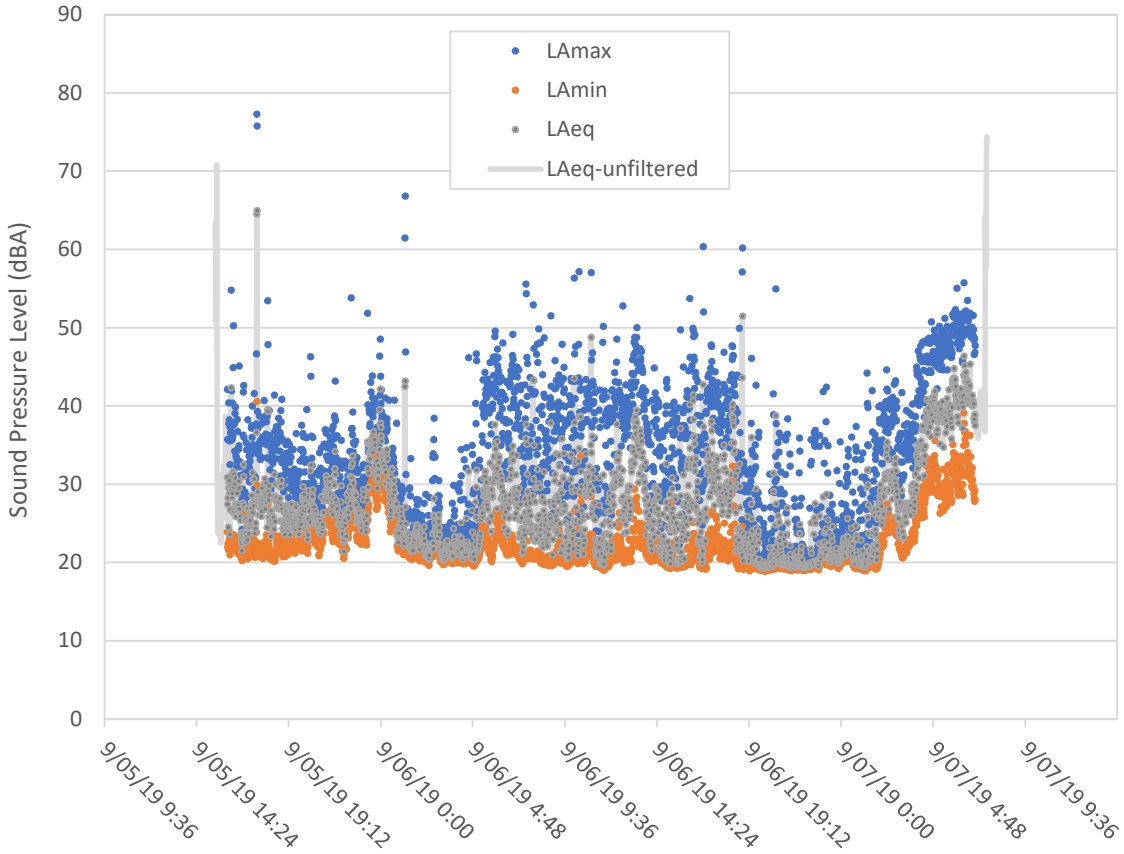



**Figure 3. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR005 during monitoring event 1.**

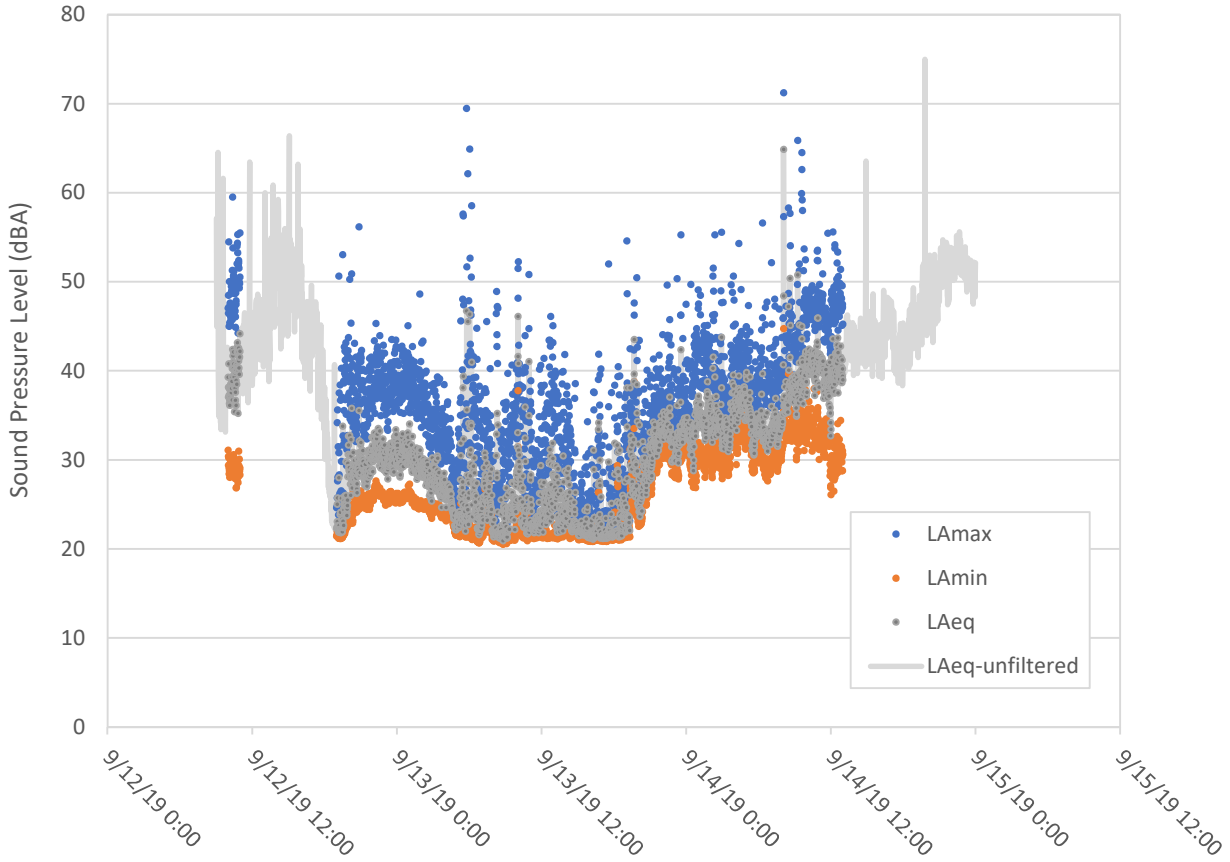



**Figure 4. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR005 during monitoring event 2.**

## 3.2 NPOR006

$L_{eq}$ values calculated from 1-min measurements over monitoring events 1 and 2 at NPOR006 are shown in Figures 6 and 7. Invalid data points removed from analyses due to assumed technician interference and sub-optimal weather conditions (as described in Section 2.4) are indicated ($LA_{eq}$-unfiltered). For event 1 at station NPOR006 (Sept. 12 – 15), 81 h of monitoring were conducted, and 42 h of valid data were available after filtering. For event 2 at NPOR006 (Sept. 20 – 22), 50 h of monitoring were conducted, and 18 h of valid data were available after filtering.

Noise sources noted in the field log for this location include possibility for human activities from the nearby cabin, associated ATV traffic, and birds. Audible noises noted on sound recordings included birds, wind, and backup alarms. The field technician noted that general mine traffic was also audible, and nearby site activities ongoing during the noise surveys included:

- Reclamation at the nearby quarry site (approx. 750 m away); and
- Regular operations at the nearby laydown pad (approx. 750 m away); and
- Regular operations at the nearby emulsion plant (approx. 900 m away).

The regular ATV traffic, human activity, small mechanical equipment, and construction works associated with the nearby cabin that were prominent in sound recordings in previous years (2017, 2018) were not observed in 2019.

After data filtering, the calculated 24-h $L_{eq}$ value for event 1 was 40.2 dBA, which marginally exceeded the FEIS prediction of 39.8 dBA, but did not exceed the noise monitoring criterion for “non-significant impacts” (45 dBA). For event 2, the 24-h $L_{eq}$ value was 39.6 dBA, which is below the FEIS prediction and noise monitoring criterion.

The elevated 24-h $L_{eq}$ measured in event 1 in 2019 (as compared to FEIS predictions) occurred for 15 of the 42 valid hours, and appeared generally due to a frequently elevated baseline environment (wind), mixed with intermittent but frequent backup alarms. Since the exceedance was marginal, only occurred during event 1, and the noise monitoring criterion was not exceeded, the event was not investigated further.

To date, no noise-related complaints have been received in this area.

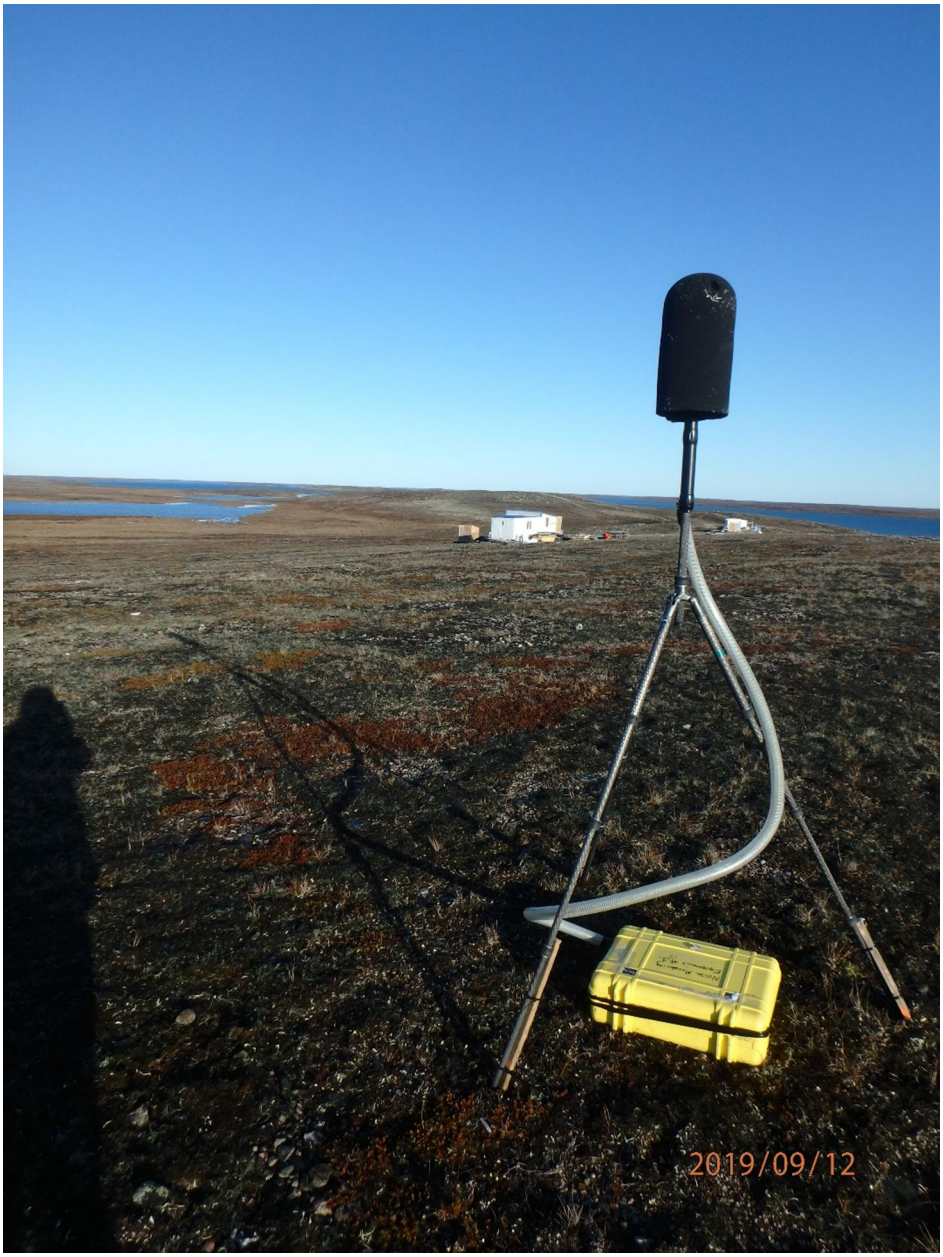



**Figure 5. Noise monitoring location NPOR006 (September 12, 2019). Seasonally occupied cabin in the background.**

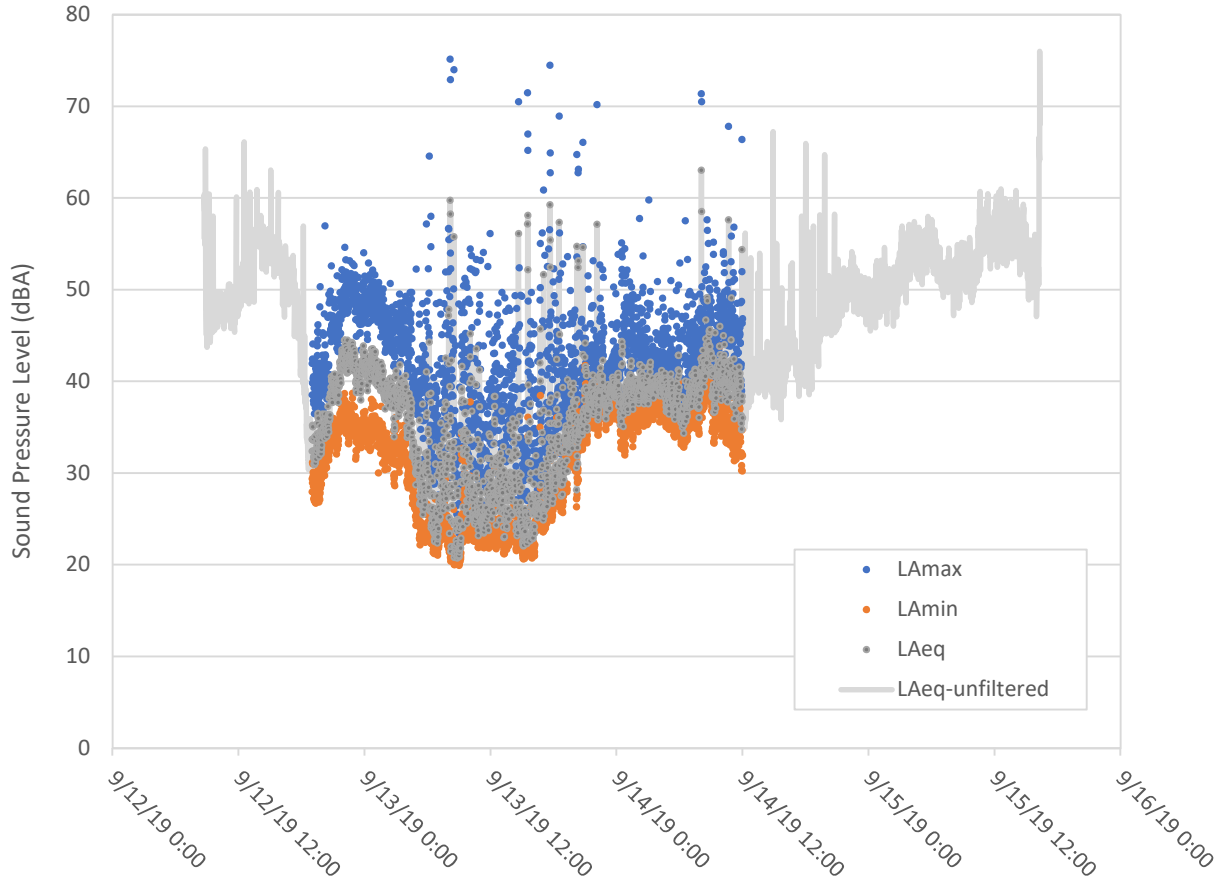



**Figure 6. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR006 during monitoring event 1.**

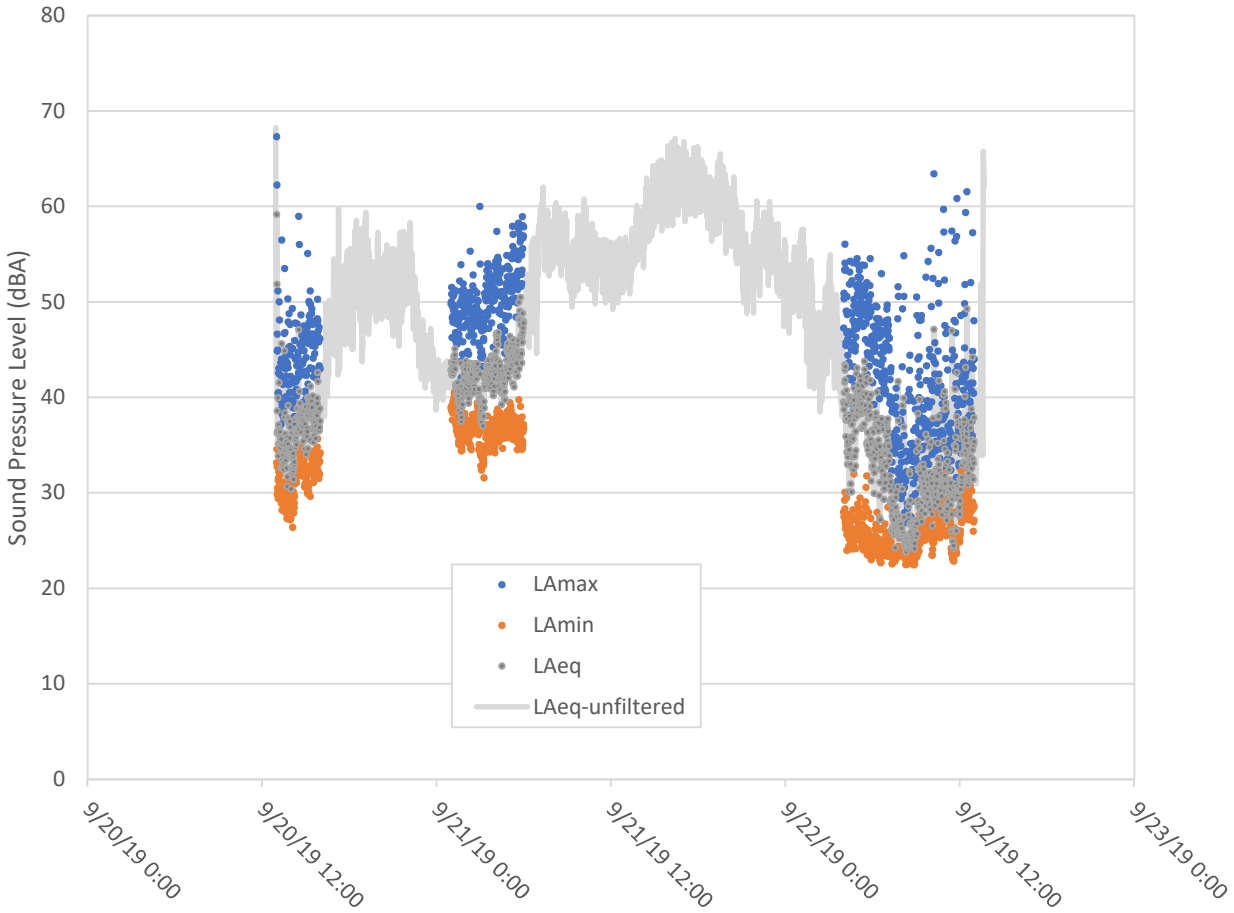



**Figure 7. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR006 during monitoring event 2.**

## 3.3 NPOR008

$L_{eq}$ values calculated from 1-min $L_{eq}$ measurements over monitoring events 1, 2, and 3 at NPOR008 are shown in Figure 9, 10, and 11. Invalid data points removed from the analysis due to technician interference and sub-optimal weather conditions (as described in Section 2.4) are indicated ($L_{eq}$-unfiltered). For monitoring event 1 at this station (Sept. 8 - 11), 73 h of monitoring were successfully conducted, and 44 h of valid data were available after filtering. For monitoring event 2 (Sept. 22 – 24), 52 h of monitoring were conducted, and 11 h of valid data were available after filtering. For monitoring event 3 (Oct. 3 - 6), 77 h of monitoring were conducted, and 55 h of valid data were available after filtering.

Currently, no mine-related activity is ongoing in this area. Possible noise sources noted in the field log at this location include occasional boats, helicopters, and wildlife (birds). Audible sounds on the recordings included wind and waves. As noted in 2018, this location is adjacent to Meliadine Lake, and the combination of greater wind speeds and the nearby shoreline appears to result in an elevated background sound level which should continue to be considered in data interpretation for this site.

After data filtering, the calculated 24-h $L_{eq}$ values for events 1, 2 and 3 were 39.5 dBA, 34.9 dBA, and 36.9 dBA, respectively. These measured values do not exceed the FEIS prediction of 41.7 dBA, or the noise monitoring criterion for “non-significant impacts” (45 dBA).

Night-time $L_{eq}$ values for each event were 36.3 dBA, 38.5 dBA, and 34.6 dBA, which do not exceed the design target of 40 dBA for 1.5 km from the mine SSA.

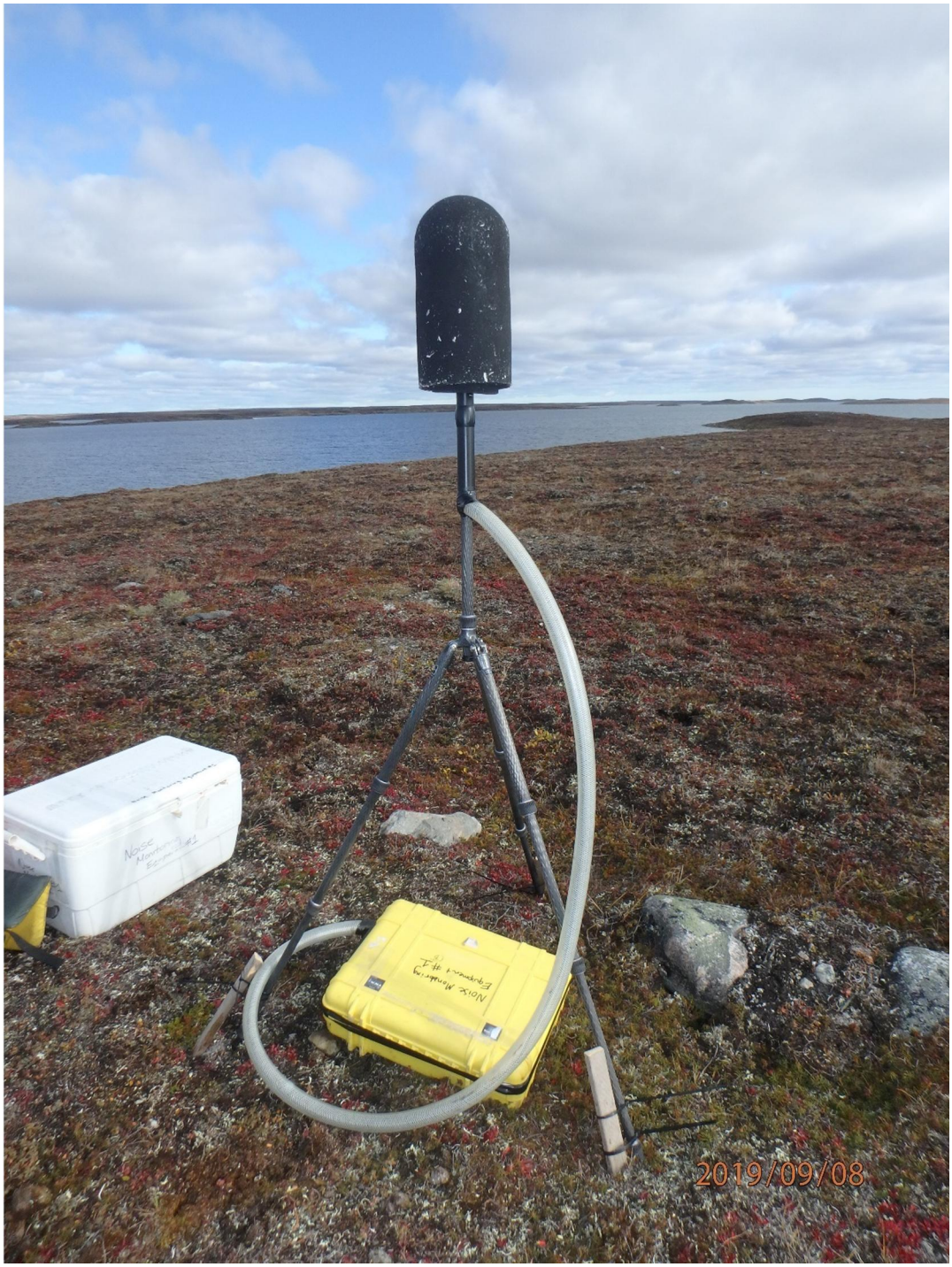



**Figure 8. Noise monitoring location NPOR008 (September 8, 2019). Meliadine Lake in the background.**

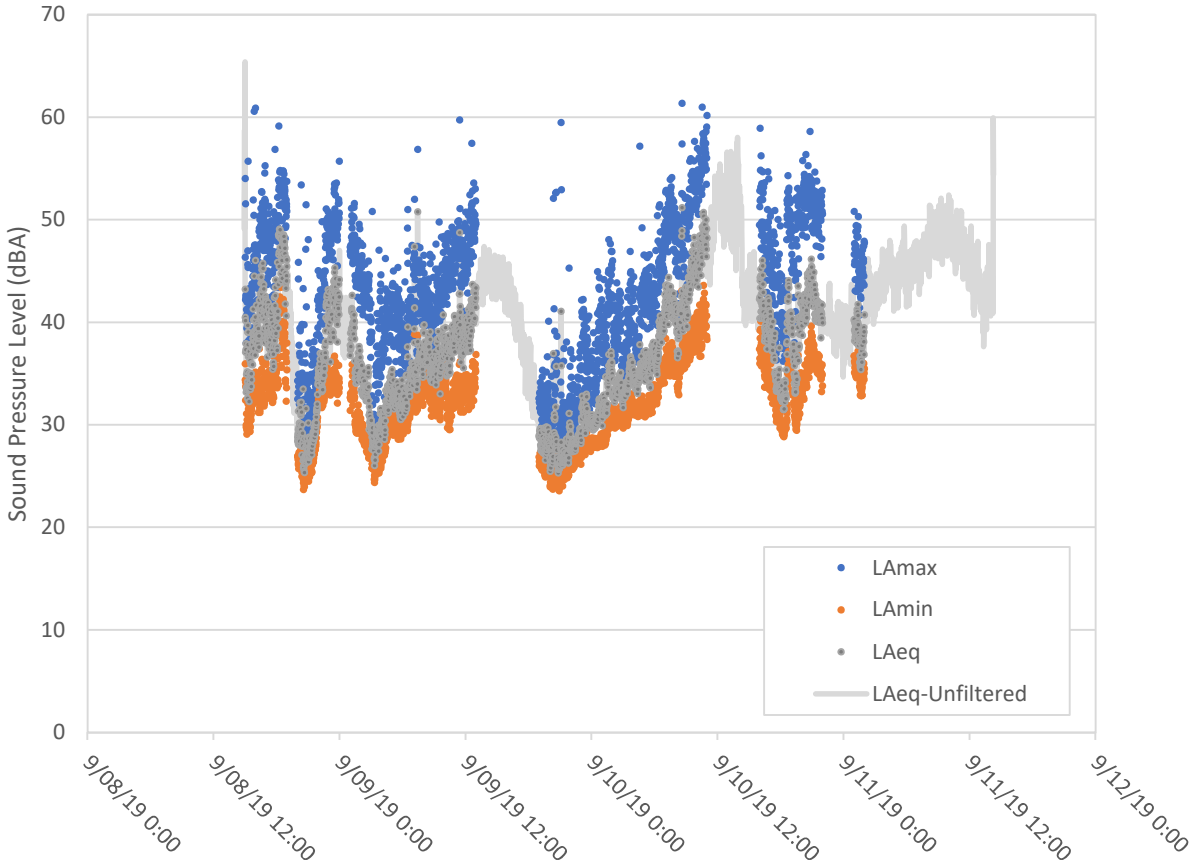



**Figure 9. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR008 during monitoring event 1.**

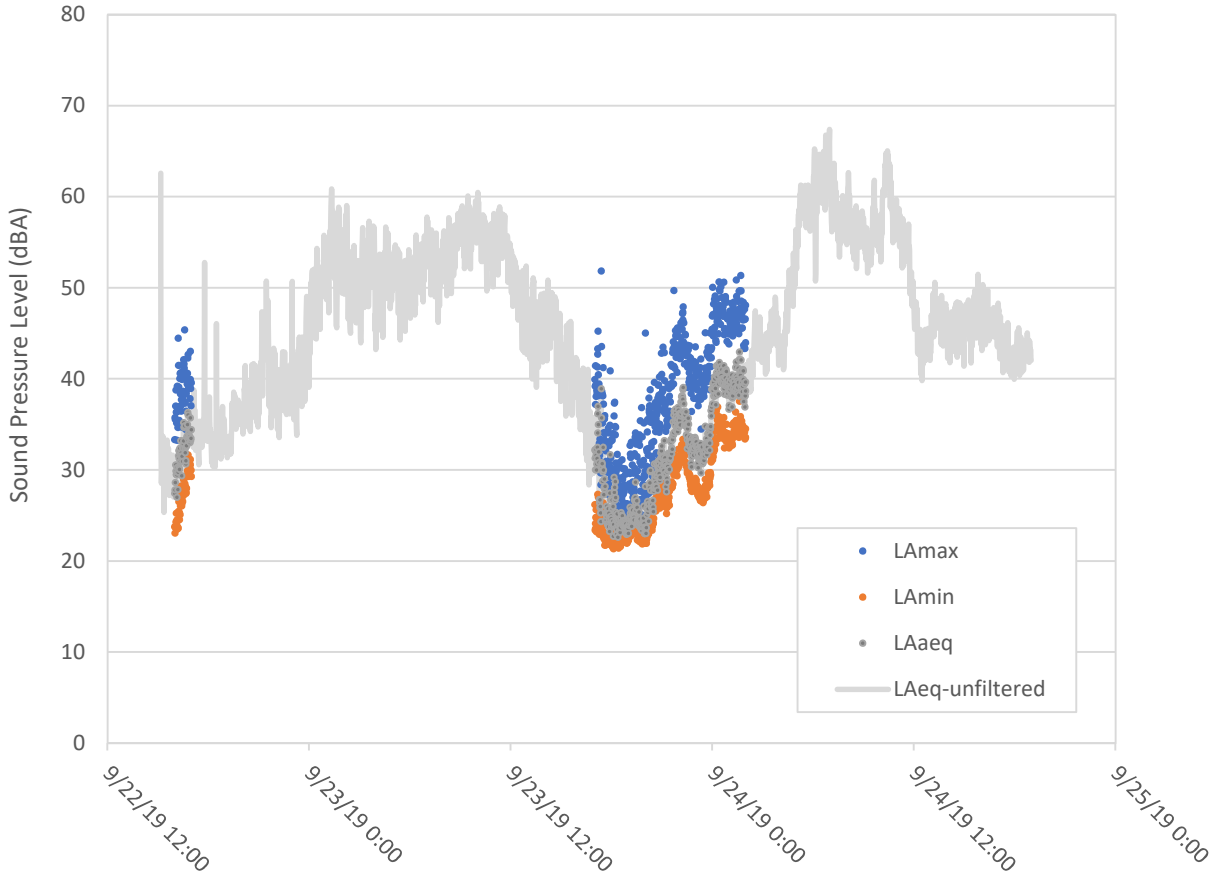



**Figure 10. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR008 during monitoring event 2.**

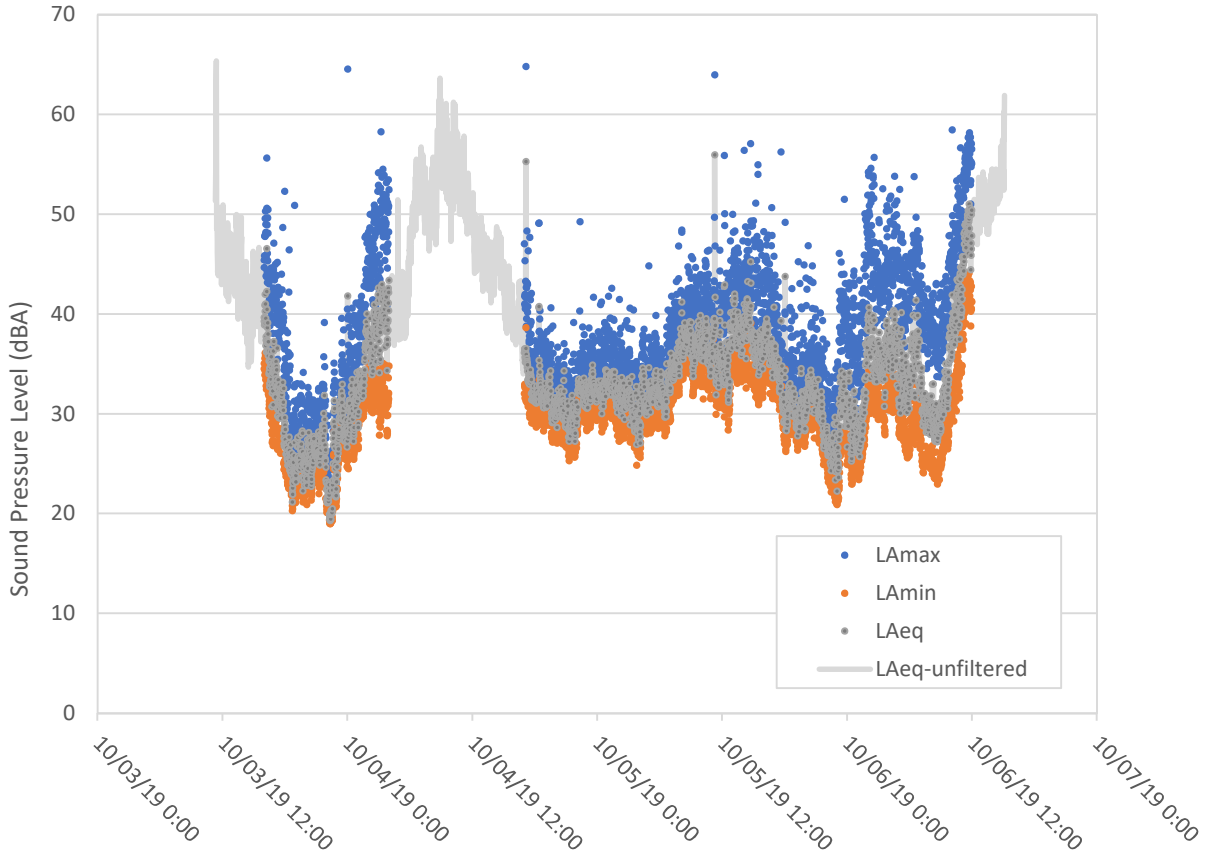



**Figure 11. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR008 during monitoring event 3.**

## 3.4 NPOR014

No development activity is currently occurring in the area of NPOR014, so monitoring was not conducted in 2019, in accordance with the Noise Abatement and Monitoring Plan.

## 3.5 NPOR017

$L_{eq}$ values calculated from 1-min measurements over monitoring events 1, 2, and 3 at NPOR017 are shown in Figures 13, 14, and 15. Invalid data points removed from analyses due to assumed technician interference and sub-optimal weather conditions (as described in Section 2.4) are indicated ($LA_{eq}$-unfiltered). For event 1 at station NPOR017 (Sept. 8 - 10), 56 h of monitoring were conducted, and 40 h of valid data were available after filtering. For event 2 at NPOR017 (Sept. 22 - 25), 77 h of monitoring were conducted, and 16 h of valid data were available after filtering. For event 3 at NPOR017 (Oct. 3 - 6), 72 h of monitoring were conducted, and 55 h of valid data were available after filtering.

This station is located 140 m from the all weather road and 200 m from a seasonally occupied cabin. It is also in the vicity of a community work area (equipment staging, possible gravel excavation ongoing). Noise sources noted in the field log include light vehicles, transport trucks, ATVs, sounds from the nearby hunting cabin/work area, and bird noises. Audible noises noted on sound recordings included traffic, aircraft flyovers, and birds. Human interference (yelling into the microphone) was noted on one occasion and removed.

After data filtering, the calculated 24-h $L_{eq}$ value for events 1, 2, and 3 were 45.0 dBA, 38.6 dBA, and 42.5 dBA, respectively. Only the recorded noise level during event 1 exceeded the FEIS prediction of 43.4 dBA, but none exceeded the noise monitoring criterion for “non-significant impacts” (45 dBA).

The elevated 24-h $L_{eq}$ measured in event 1 (as compared to FEIS predictions) occurred for 18 of the 56 valid hours, and appeared generally due to regular traffic, aircraft flyovers, and nearby community construction activity. Since the exceedance was marginal, only occurred during one monitoring period, and the noise monitoring criterion was not exceeded, the event was not investigated further. If community construction works are persistent in this area moving forward, consideration may be given to moving this station to a location that will allow AWAR-related noise to be more easily distinguished from background.

To date, no noise-related complaints have been received in this area.

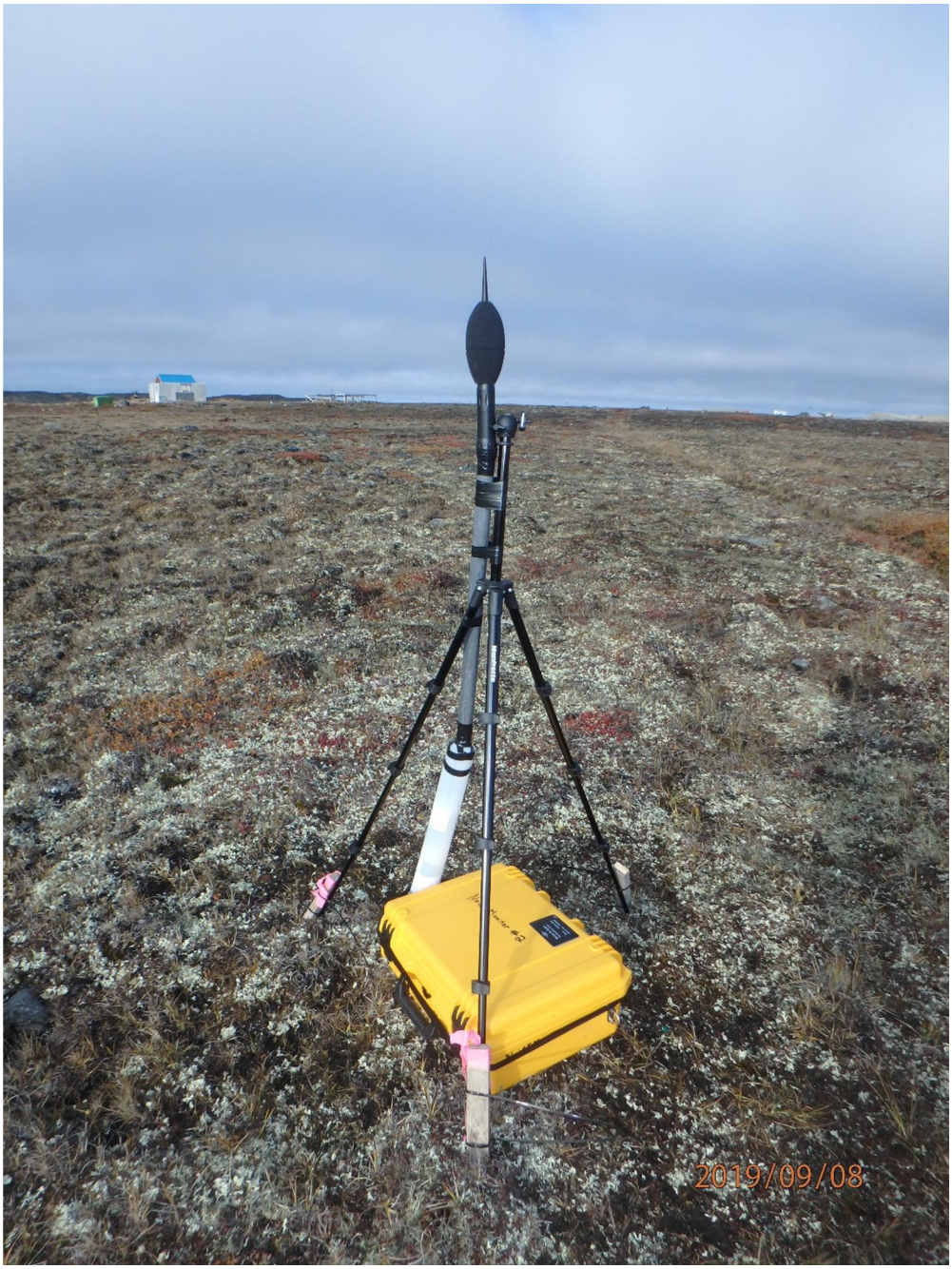



**Figure 12. Noise monitoring location NPOR017 (September 8, 2019).**

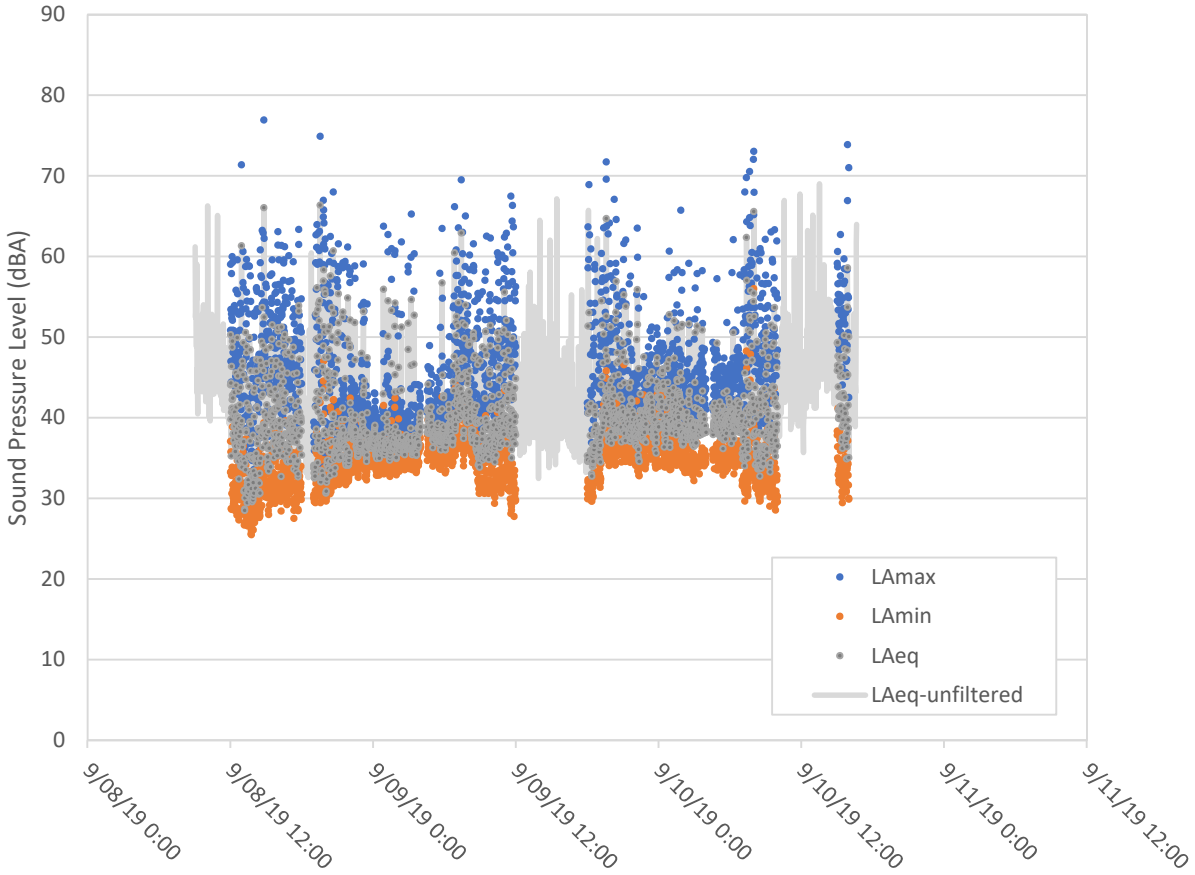



**Figure 13. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR017 during monitoring event 1.**

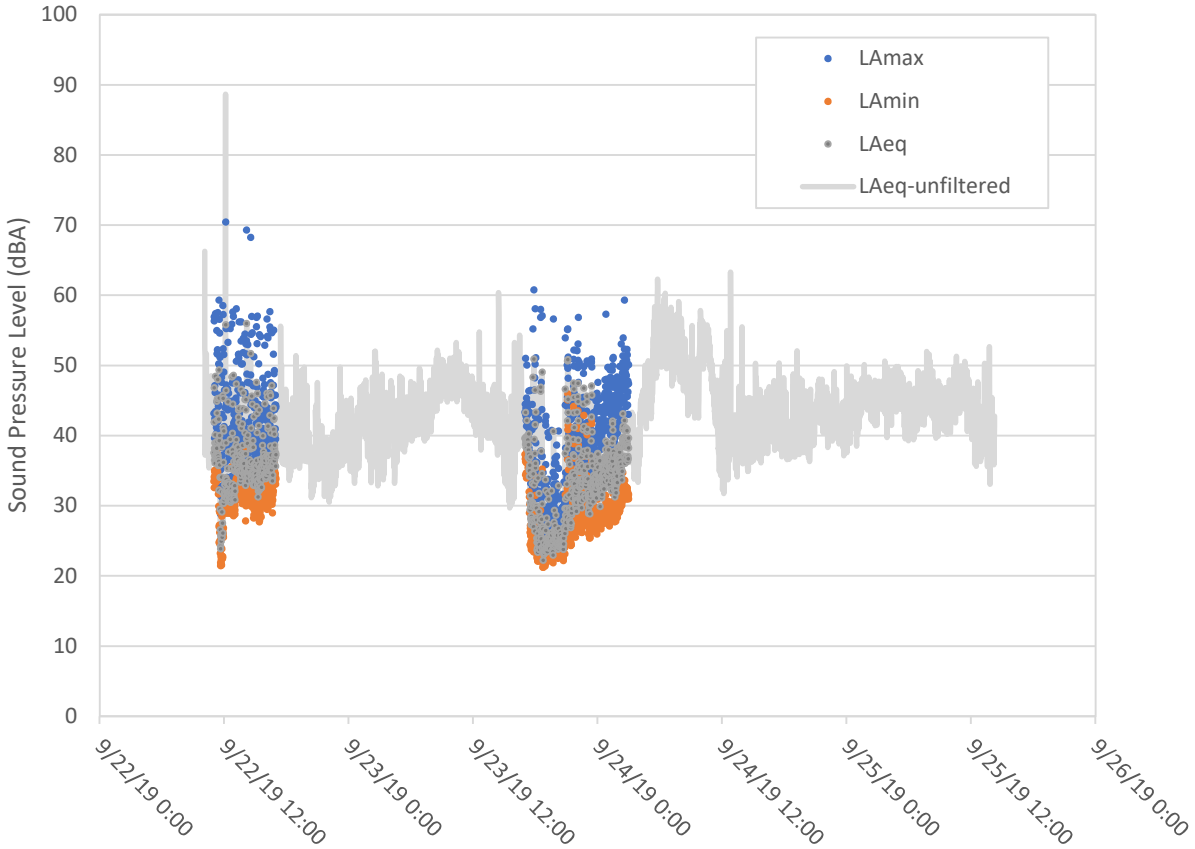



**Figure 14. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR017 during monitoring event 2.**

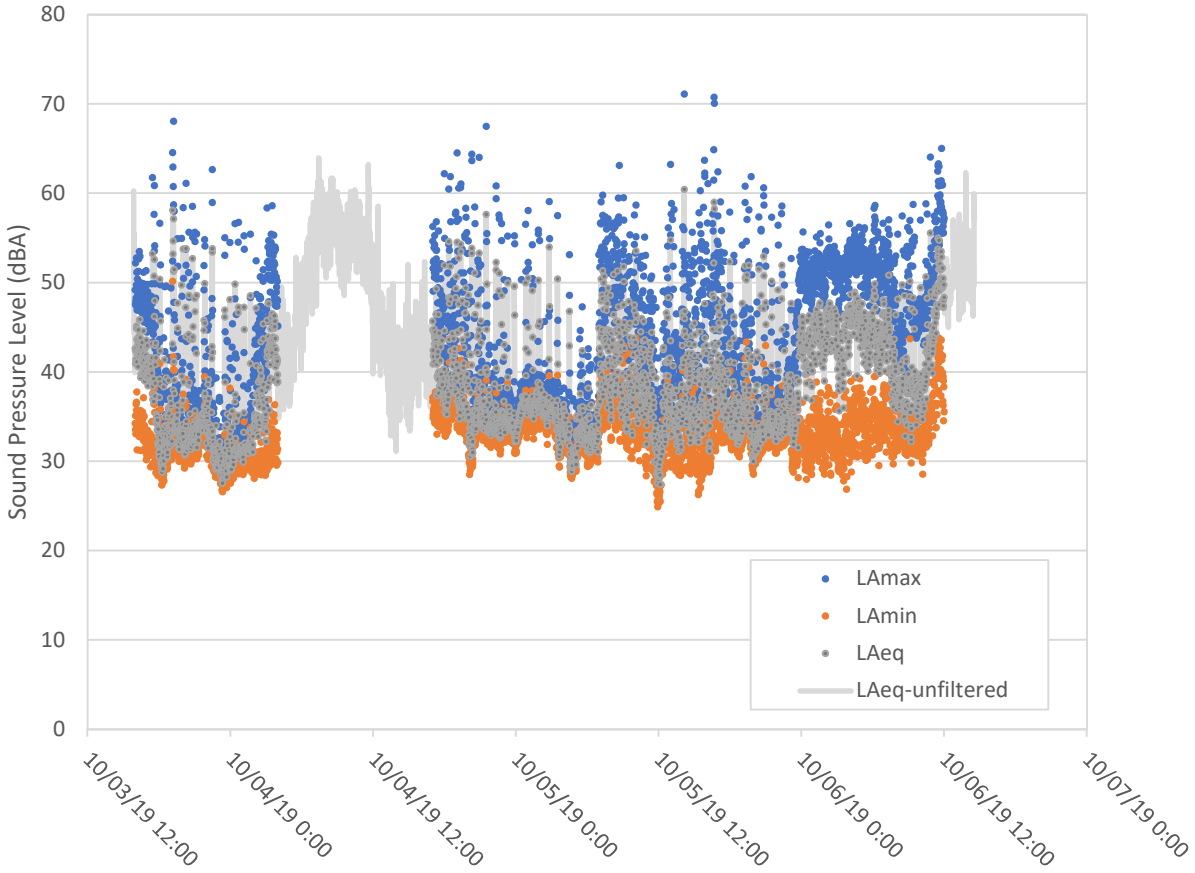



**Figure 15. 1-min $L_{max}$, $L_{min}$, and $L_{eq}$ values recorded at site NPOR017 during monitoring event 3.**

# 4 HISTORICAL COMPARISON

A historical comparison of all available 24-h $L_{eq}$ values for each monitoring site is provided in Figures 16 - 20.

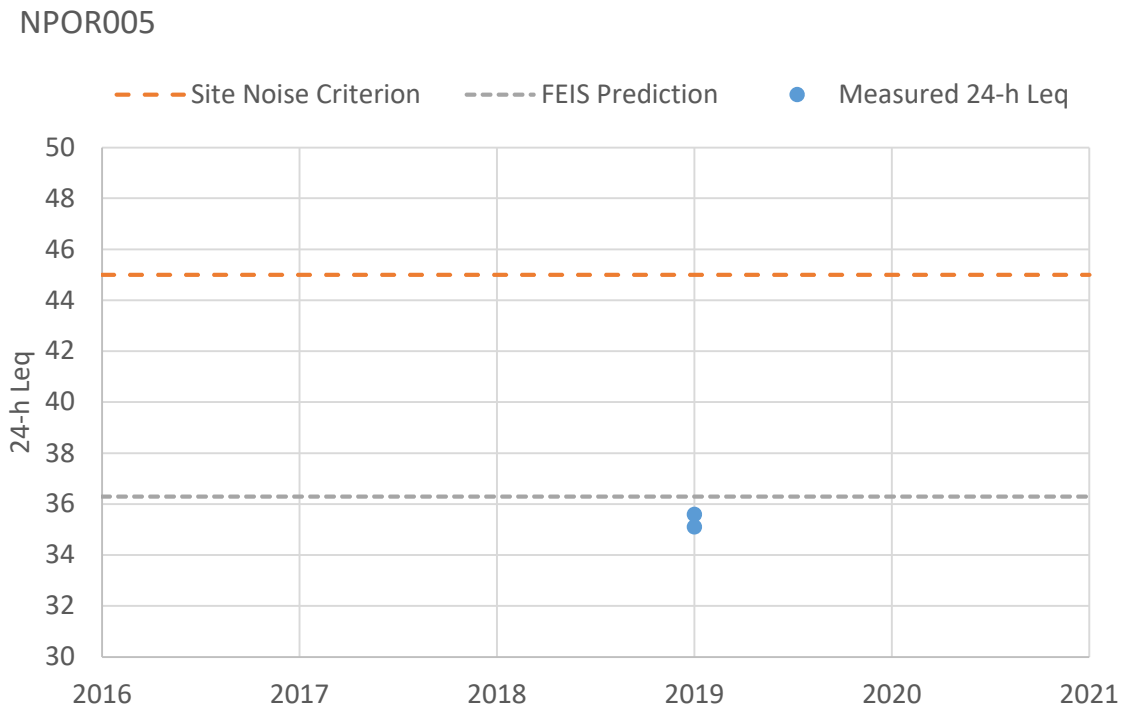



**Figure 16. Historical noise monitoring results (24-h Leq values) for site NPOR005. Monitoring at this site began in 2019.**

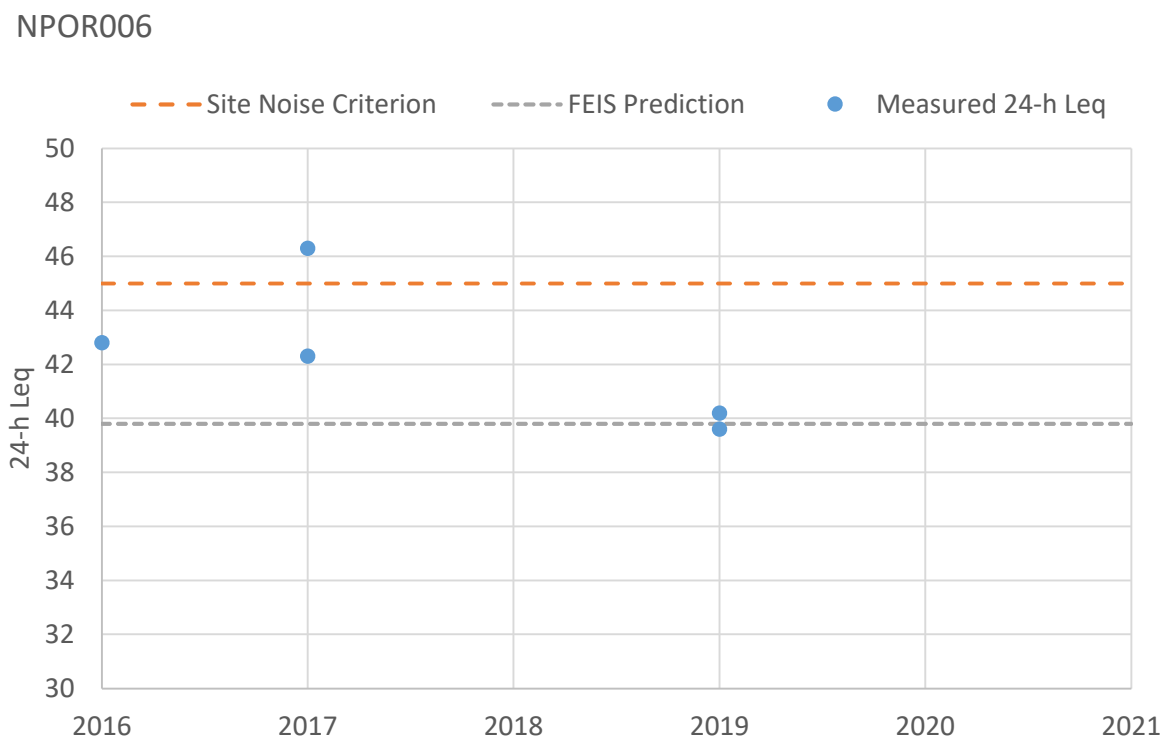



**Figure 17. Historical noise monitoring results (24-h Leq values) for site NPOR006. In 2016 and 2017, ongoing works at the adjacent cabin may have contributed to an elevated background acoustic environment. Insufficient valid data was available in 2018 to calculate Leq values.**

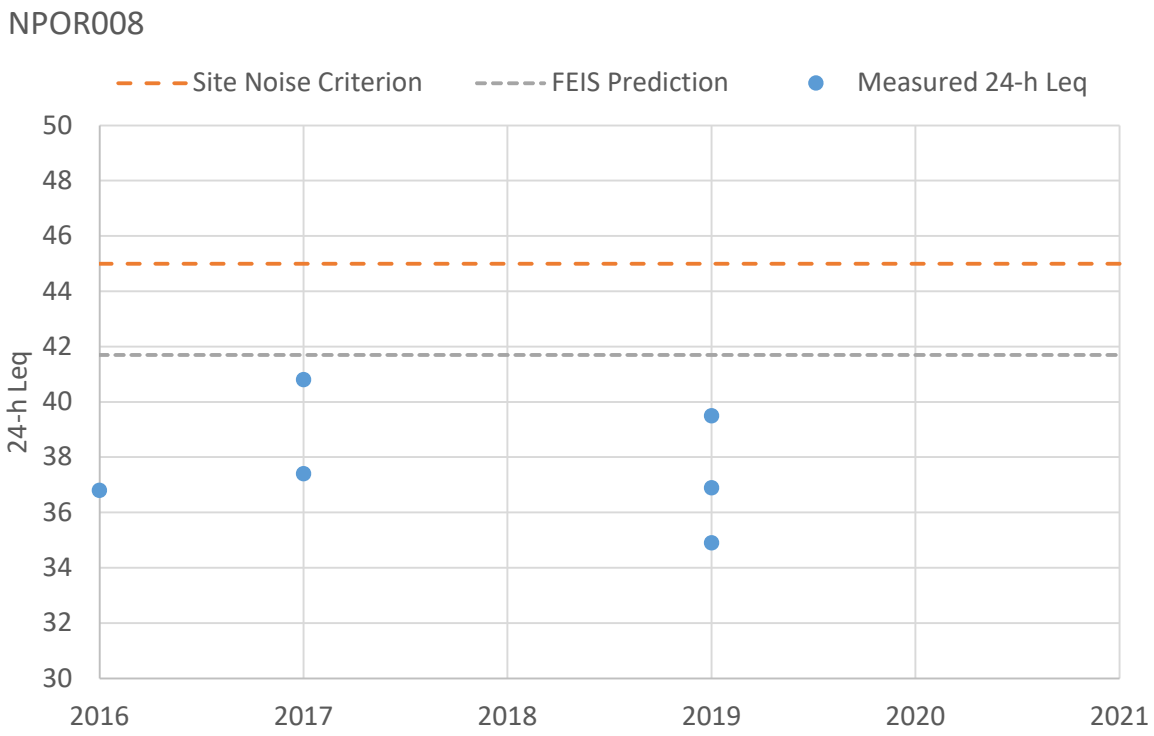



**Figure 18. Historical noise monitoring results (24-h Leq values) for site NPOR008. Insufficient valid data was available in 2018 to calculate Leq values.**

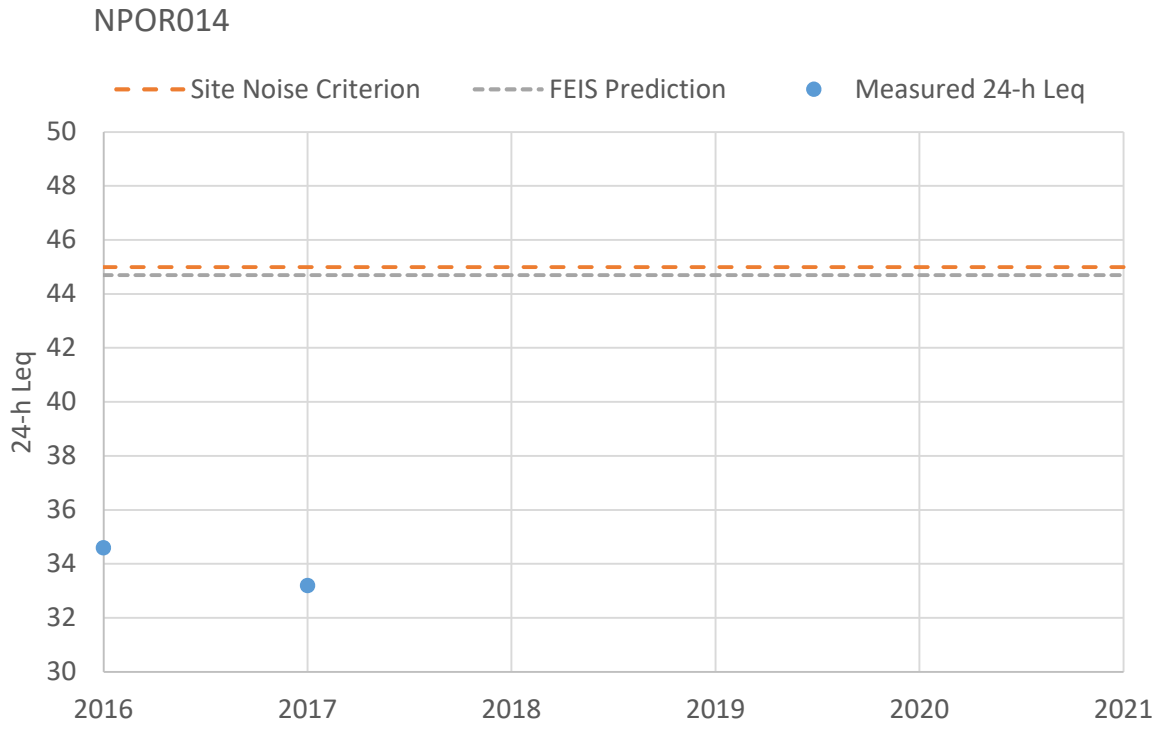



**Figure 19. Historical noise monitoring results (24-h Leq values) for site NPOR014. Near-continuous bird calls resulted in a significantly elevated Leq in 2018 (63.5 dBA, not shown). Monitoring was not conducted in 2019. No mining activity has yet occurred in this area.**

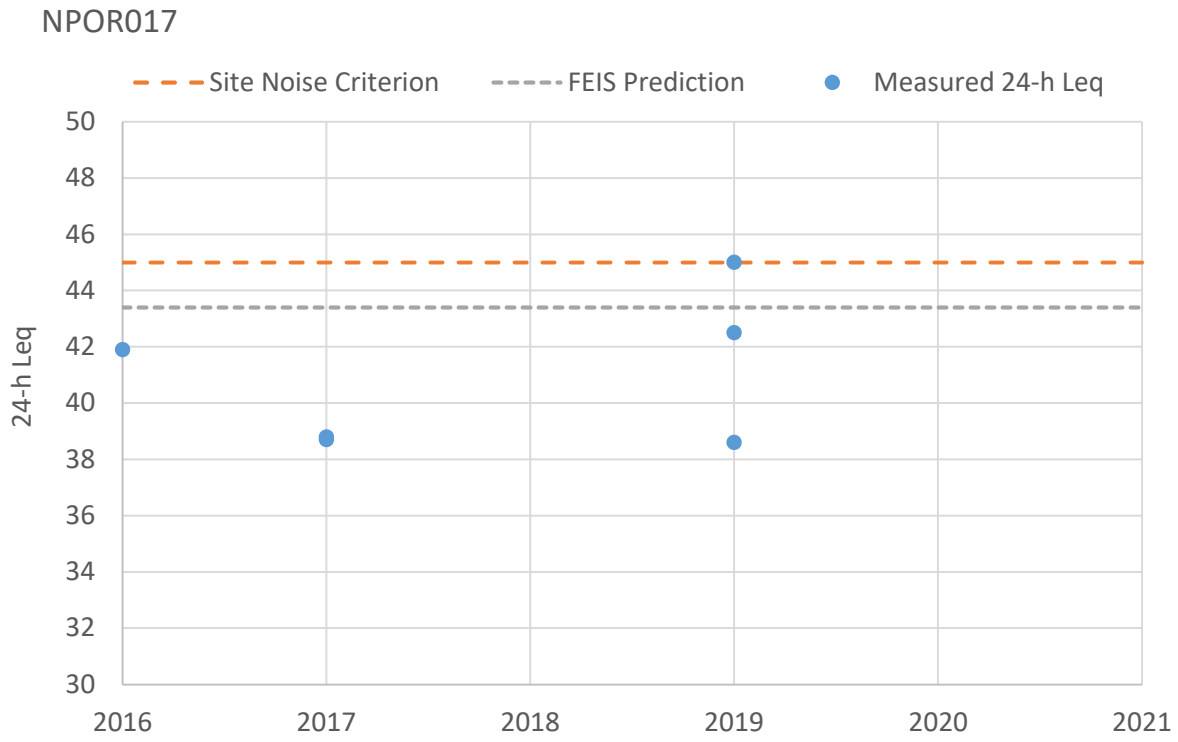



**Figure 20. Historical noise monitoring results (24-h Leq values) for site NPOR017. Insufficient valid data was available in 2018 to calculate Leq values.**

# 5 CONCLUSION

The objective of the noise monitoring program at Meliadine is to measure noise levels at four previously determined monitoring locations over at least two 24 h periods. In 2019 Agnico Eagle conducted two or three successful rounds of monitoring for stations NPOR005, NPOR006, NPOR008, and NPOR017. In accordance with the Noise Abatement and Monitoring Plan, monitoring was not conducted at NPOR014, because activities related to the Discovery Pit were not ongoing.

A summary of the noise monitoring results is provided in Table 5.

For all stations, sufficient valid data was available after filtering to calculate 24-h and night-time $L_{eq}$ values.

No exceedances of the site's noise monitoring criterion (45 dBA, 24-h $L_{eq}$) or night-time design target (40 dBA) occurred.

For NPOR005 and NPOR008, no measured values exceeded the FEIS predictions for those locations.

For NPOR006, one of two 24-h $L_{eq}$ measurements marginally exceeded the FEIS prediction of 39.8 dBA, at 40.2 dBA. Review of sound recordings indicated this was generally due to an elevated baseline

environment (wind noise), mixed with intermittent but frequent backup alarms. For NPOR017, one of three 24-h $L_{eq}$ measurements marginally exceeded the FEIS prediction of 43.4 dBA, at 45.0 dBA. This exceedance was generally caused by traffic noises and aircraft flyovers, occasionally compounded by simultaneous bird calls.

For both of these cases, since the exceedance was marginal (<3 dBA), occurred during a single monitoring event, the noise monitoring criterion was not exceeded, and no noise-related complaints have been received, the events were not investigated further.

**Table 6. Summary of noise monitoring results in 2019. Values exceeding FEIS predictions are in bold. "-" indicates not applicable. "NM" indicates not required to be measured in 2019.**

| Location | Monitoring Start | Monitoring End | Noise Monitoring Criterion $L_{eq(24\ h)}$ (dBA) | FEIS Prediction $L_{eq(24\ h)}$ (dBA) | Measured $L_{eq(24\ h)}$ (dBA) | Design Target $L_{eq\ (nighttime)}$ (dBA) | Measured $L_{eq\ (nighttime)}$ (dBA) |
|---|---|---|---|---|---|---|---|
| NPOR005 | 09/05/2019 3:22 PM | 09/07/2019 7:38 AM | 45 | 36.3 | 35.6 | 40 | 34.0 |
| | 09/12/2019 9:02 AM | 09/15/2019 4:31 PM | | | 35.1 | | 33.0 |
| NPOR006 | 09/12/2019 8:42 AM | 09/15/2019 16:19 PM | 45 | 39.8 | **40.2** | - | - |
| | 09/20/2019 12:56 PM | 09/22/2019 13:40 PM | | | 39.6 | | - |
| NPOR008 | 09/08/2019 2:55 PM | 09/11/2019 2:17 PM | 45 | 41.7 | 39.5 | 40 | 36.3 |
| | 09/22/2019 3:09 PM | 09/24/2019 6:59 PM | | | 34.9 | | 38.5 |
| | 10/03/2019 11:19 AM | 10/06/2019 3:07 PM | | | 36.9 | | 34.6 |
| NPOR014 | NM | NM | 45 | 44.7 | NM | - | - |
| NPOR017 | 09/08/2019 9:03 AM | 09/10/2019 4:06 PM | 45 | 43.4 | **45.0** | - | - |
| | 09/22/2019 10:07 AM | 09/25/2019 2:16 PM | | | 38.6 | | - |
| | 10/03/2019 3:51 PM | 10/06/2019 2:32 PM | | | 42.5 | | - |

# 6 ACTIONS

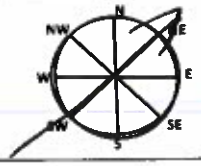
The following actions were planned for 2019 and responses of Agnico are indicated:

- Noise monitoring surveys will be conducted earlier in the ice-free season when wind speeds and animal interference (bird calls) are minimized.
    - Due to delays in receiving repaired equipment in 2019, all surveys were conducted in September and very early October. However, sufficient valid data was obtained to calculate 24-h $L_{eq}$ values for all monitoring periods, and a second noise meter was purchased to reduce the possibility for delays in future years
- Weather data will be reviewed during or immediately following noise monitoring events to estimate the proportion of usable data and the need for supplemental monitoring.
    - Completed
- Reconnaissance and monitoring (if feasible based on occupancy) will be conducted at NPOR005, since high occupancy rates at NPOR006 tend to interfere with assessments of mine-related noise in this location. Monitoring will also be conducted at NPOR006.
    - Completed - monitoring was conducted at NPOR005.
- Monitoring will focus on NPOR005, NPOR006, NPOR008 and NPOR017. Since activities at the Discovery Pit are not ongoing, monitoring is not required at NPOR014. However, data will be collected at this station if time and weather conditions permit.
    - Completed. Monitoring was conducted at all stations except NPOR014.

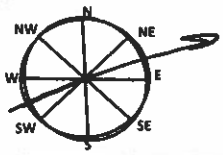
No specific supplemental actions are planned for 2020. Monitoring will be conducted at stations NPOR005 and/or NPOR006 depending on apparent cabin occupancy. No activities related to the Discovery Pit are planned, so monitoring will be conducted at NPOR014 as feasible.

# Appendix A: Field Logs

Used Noise Monitor #1

| MONITORING STARTS | | | |
|---|---|---|---|
| Operator: | BH, SA | | |
| Location: | NPOR05 | | |
| Noise Meter Start Time: | | | |
| Date: | Sept 5, 2019 | | |
| Calibration complete ?: | | | |
| Sensitivity | 29.93 | | |
| Derviation | -0.02 | | |
| Time of Calibration: | 15:10 | | |
| Battery Power Check: | Good | Poor | |
| Photographs of Setup (Y/N) | Y | | |
| Photographs of Surrounding (Y/N) | Y | | |
| Check available disk memory (Y/N) | Y 100% | | |
| Cloud cover: | | partly cloudy | sunny |
| Height of cloud (feet): | | ~~10,000-25,000~~ | 25,000 + |
| Air Temperature (C): | 9.6 °C | | |
| Wind Speed (km/hr): | 5.2 km/h | | |
| Wind Direction: North wind (wind blows from North) | SW   | | |
| Barometric Pressure (kPa): | 101.4 kPa | | |
| Relative Humidity (%) | 65.3 | | |
| Precipitation: | none | drizzle | rain |

| GENERAL SITE DESCRIPTION | | | |
|---|---|---|---|
| GPS Location | Latitude Easting 537978 | ~~Longitude~~ Northing 6991742 | ~~Altitude~~ |
| Type of Ground Surface: | low tundra | | |
| Acoustic Environment: | | | |
| Traffic | Hunting Cabin 500m away - hill in between survey location and Cabin | | |
| Human activities | quad trail 30m to the west | | |
| Animal | Melissa lake 200m to the east - could be boat traffic | | |
| Other noise sources | potential planes overhead | | |

| MONITORING ENDS | | | |
|---|---|---|---|
| Operator: | BH/DM | | |
| Record Data File Name: | NPOR005 | | |
| Total Monitoring Period | 2019-09-05 at 3:10pm → 2019-09-07 @ 7:38am = 39.5 hours | | |
| Noise Meter End Time: | 19:38 on analyzer but actually 7:38 am | | |
| Date: | | | |
| Calibration complete ?: | yes | | |
| Sensitivity | 30.09 | | |
| Derviation | 0.05 | | |
| Time of Calibration: | 7:41 | | |
| Check file size (GB) | | | |
| Battery Power Check: | ~~Good~~ | Poor | |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | 4.3 | | |
| Wind Speed (km/hr): | 10.5 | | |
| Wind Direction: North wind (wind blows from North) | W/SW 255°   | | |
| Barometric Pressure (kPa): | 101.8 | | |
| Relative Humidity (%) | 60.2 | | |
| Precipitation: | none | drizzle | rain |
| Depature Time: | 7:45 | | |

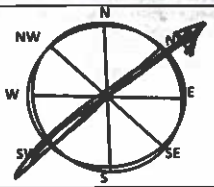
* Boated by this station at 12:20 and 3:10 pm on 2019-09-06

* Clock on analyzer was set 12 hours in advance. ie. recording was started at 3:10 pm but is logged as 3:10 am and so on.

* E- same means the last segment of data only recorded decibel level and not sound

## MONITORING STARTS

| | | | |
|---|---|---|---|
| Operator: | BH | | |
| Location: | NP00R005 | | |
| Noise Meter Start Time: | 4:01 | | |
| Date: | 2019-09-10 | | |
| Calibration complete ?: | Y | | |
| Sensitivity | 29.73 | | |
| Derviation | 0.01 | | |
| Time of Calibration: | 8:59 | | |
| Battery Power Check: | ~~Good~~ | | Poor |
| Photographs of Setup (Y/N) | Y | | |
| Photographs of Surrounding (Y/N) | Y | | |
| Check available disk memory (Y/N) | Y | | |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): N/A | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): ~~8.5~~ 8.5 | | | |
| Wind Speed (km/hr): 10.2 | | | |
| Wind Direction: 224 | | | |
| North wind (wind blows from North) | | | |
| SW | | | |
| Barometric Pressure (kPa): | 109.9 | | |
| Relative Humidity (%) 77.7 | | | |
| Precipitation: | none | drizzle | rain |

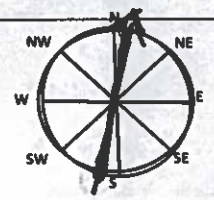



## GENERAL SITE DESCRIPTION

| | | | |
|---|---|---|---|
| GPS Location | Latitude | Longitude | ~~Altitude~~ |
| | 537978 | 6991742 | |
| Type of Ground Surface: | tundra | | |
| Acoustic Environment: | | | |
| Traffic | | | |
| Human activities | 500m from Ron Brown Cabin | | |
| Animal | | | |
| Other noise sources | quad trail 50m to the west<br>Meliadine lake 200m to the East (possible boat traffic) | | |

## MONITORING ENDS

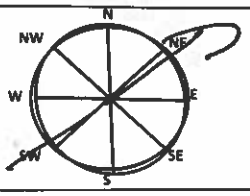
| | | | |
|---|---|---|---|
| Operator: | BH / MG | | |
| Record Data File Name: | NP00R005 | | |
| Total Monitoring Period | 80 h | | |
| Noise Meter End Time: | 4:31 | | |
| Date: | 2019-09-15 | | |
| Calibration complete ?: | | | |
| Sensitivity | 30.20 | | |
| Derviation | 0.14 | | |
| Time of Calibration: | 4:32 | | |
| Check file size (GB) | | | |
| Battery Power Check: | ~~Good~~ | | Poor |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | 8.0 | | |
| Wind Speed (km/hr): | 6.1 | | |
| Wind Direction: | 182° | | |
| North wind (wind blows from North) | | | |
| Barometric Pressure (kPa): | 100.4 | | |
| Relative Humidity (%) | 83.3 | | |
| Precipitation: | Rained 10mm before | none | drizzle / rain |
| Depature Time: | 4:45 | | |




Used noise monitor #2

Group of 20 seagulls near monitor when we arrived

## MONITORING STARTS

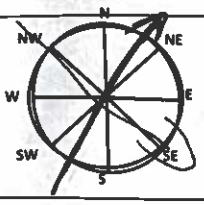
| | | | |
|---|---|---|---|
| Operator: | BH/SK | | |
| Location: | NP0R006 | | |
| Noise Meter Start Time: | 8:42 | | |
| Date: | 2019-09-12 | | |
| Calibration complete ?: | Y | | |
| Sensitivity | 29.75 | | |
| Derviation | -0.05 | | |
| Time of Calibration: | 8:39 | | |
| Battery Power Check: | ~~Low~~ Good | | Poor |
| Photographs of Setup (Y/N) | Y | | |
| Photographs of Surrounding (Y/N) | Y | | |
| Check available disk memory (Y/N) | Y | | |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): N/A | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | 17.7 | | |
| Wind Speed (km/hr): | ~~2~~ 16.7 | | |
| Wind Direction: North wind (wind blows from North) | SW 223° |  | |
| Barometric Pressure (kPa): | 101.9 | | |
| Relative Humidity (%) | 78.0 | | |
| Precipitation: | none | drizzle | rain |



## GENERAL SITE DESCRIPTION

| | | | |
|---|---|---|---|
| GPS Location | Latitude | Longitude | ~~Altitude~~ |
| | 538286 | 6096249 | |
| Type of Ground Surface: | tundra | | |
| Acoustic Environment: | | | |
| Traffic | 10m from ATV trail | | |
| Human activities | ~~Noise~~ 60m from Bon Browns Cabin | | |
| Animal | | | |
| Other noise sources | group of 30 birds 100m away when we arrived | | |

## MONITORING ENDS

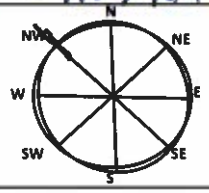
| | | | |
|---|---|---|---|
| Operator: | BH/DG | | |
| Record Data File Name: | NP0R006 | | |
| Total Monitoring Period | 80h | | |
| Noise Meter End Time: | 4:21 | | |
| Date: | 2019-09-19 | | |
| Calibration complete ?: | | | |
| Sensitivity | 30.49 | | |
| Derviation | 0.22 | | |
| Time of Calibration: | 4:23 | | |
| Check file size (GB) | | | |
| Battery Power Check: | ~~Low~~ Good | | Poor |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | 9.2 | | |
| Wind Speed (km/hr): | 17.8 | | |
| Wind Direction: North wind (wind blows from North) | 180 ~~315~~ |  | |
| Barometric Pressure (kPa): | 100.4 | | |
| Relative Humidity (%) | 80.7 | | |
| Precipitation: | none | drizzle | rain |
| Depature Time: | 4:29 | | |



Used noise monitor #1

Group of 10 Canada geese near Monitor when arrived

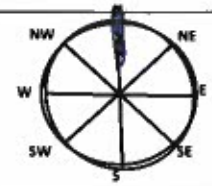
## MONITORING STARTS

| | | | |
|---|---|---|---|
| Operator: | LH/RS | | |
| Location: | NPOR06 | | |
| Noise Meter Start Time: | 12:55pm | | |
| Date: | 2019-09-20 | | |
| Calibration complete ?: | | | |
| Sensitivity | 29.64 | | |
| Derviation | -0.6db | | |
| Time of Calibration: | | | |
| Battery Power Check: | Good | | Poor |
| Photographs of Setup (Y/N) | | | |
| Photographs of Surrounding (Y/N) | | | |
| Check available disk memory (Y/N) | | | |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | 8.4°C | | |
| Wind Speed (km/hr): | 9.5 Km/hr - 11.7 Km hr max | | |
| Wind Direction: North wind (wind blows from North) |   | | |
| Barometric Pressure (kPa): | | | |
| Relative Humidity (%) | 67.7 | | |
| Precipitation: | none | drizzle | rain |

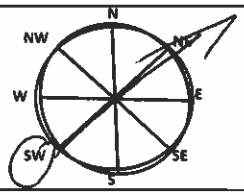
## GENERAL SITE DESCRIPTION

| | | | |
|---|---|---|---|
| GPS Location | Latitude | Longitude | Altitude |
| | 538286 | 6991299 | 154 |
| Type of Ground Surface: | Tundra | | |
| Acoustic Environment: | Hill Side | | |
| Traffic | Helicopter | | |
| Human activities | Ken Brewer, Mine | | |
| Animal | Birds | | |
| Other noise sources | | | |

## MONITORING ENDS

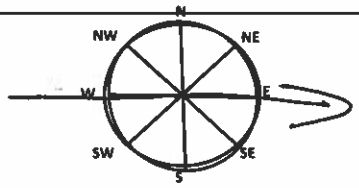
| | | | |
|---|---|---|---|
| Operator: | LH/RS | | |
| Record Data File Name: | | | |
| Total Monitoring Period | 13:40:30 | | |
| Noise Meter End Time: | | | |
| Date: | 2019-09-22 | | |
| Calibration complete ?: | Yes. | | |
| Sensitivity | 29.64 | | |
| Derviation | 0.00 | | |
| Time of Calibration: | 13:44 | | |
| Check file size (GB) | | | |
| Battery Power Check: | Good | | Poor |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | 7.6°C. | | |
| Wind Speed (km/hr): | 8.2Km/hr. | | |
| Wind Direction: North wind (wind blows from North) | 225 SW   | | |
| Barometric Pressure (kPa): | | | |
| Relative Humidity (%) | 77.4 % | | |
| Precipitation: | none | drizzle | rain |
| Depature Time: | | | |

Used noise monitor #1

| MONITORING STARTS | | | |
|---|---|---|---|
| Operator: | BH/DM | | |
| Location: | NPOR008 | | |
| Noise Meter Start Time: | 2:55 pm | | |
| Date: | 2019-08-08 | | |
| Calibration complete ?: | Y | | |
| Sensitivity | 29.84 | | |
| Derviation | -0.01db | | |
| Time of Calibration: | 2:09 pm | | |
| Battery Power Check: | Good | | Poor |
| Photographs of Setup (Y/N) | Y | | |
| Photographs of Surrounding (Y/N) | Y | | |
| Check available disk memory (Y/N) | Y | | |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | ~~8.3~~ | | |
| Wind Speed (km/hr): | 14.2 km/h | | |
| Wind Direction: North wind (wind blows from North) | 216° |  | |
| Barometric Pressure (kPa): | 102.3 | | |
| Relative Humidity (%) | 63.5 | | |
| Precipitation: | none | drizzle | rain |



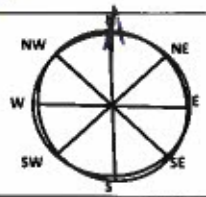
| GENERAL SITE DESCRIPTION | | | |
|---|---|---|---|
| GPS Location | ~~Latitude~~ E | ~~Longitude~~ N | Altitude |
| | 543707 | 6987276 | |
| Type of Ground Surface: | tundra tussocks | | |
| Acoustic Environment: | | | |
| Traffic | | | |
| Human activities | 100 m from Meliadine lake - possible boat traffic | | |
| Animal | Large group of birds ~~boom~~ away | | |
| Other noise sources | | | |

| MONITORING ENDS | | | |
|---|---|---|---|
| Operator: | BH/BK | | |
| Record Data File Name: | NPOR008 | | |
| Total Monitoring Period | | | |
| Noise Meter End Time: | 2019-09-11 2:19 pm | | |
| Date: | 2019-09-11 | | |
| Calibration complete ?: | Y | | |
| Sensitivity | 29.92 | | |
| Derviation | 0.02 | | |
| Time of Calibration: | | | |
| Check file size (GB) | | | |
| Battery Power Check: | Good | | Poor |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | 10.2°C | | |
| Wind Speed (km/hr): | 20.9 | | |
| Wind Direction: North wind (wind blows from North) | 275° W |  | |
| Barometric Pressure (kPa): | 102.1 | | |
| Relative Humidity (%) | 70.4 | | |
| Precipitation: | none | drizzle | rain |
| Depature Time: | 2:30 | | |



* Date on noise monitor was set 1 day behind. ie. started on 2019-09-8, but logged as 2019-09-07

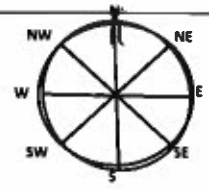
## MONITORING STARTS

| | | | |
|---|---|---|---|
| Operator: RS-A LH | RS-LH | | |
| Location: NPoR08 | NPoR08 | | |
| Noise Meter Start Time: | | | |
| Date: | 2019-09-22 | | |
| Calibration complete ?: | Yes | | |
| Sensitivity | 29.43 | | |
| Derviation | 0.0 | | |
| Time of Calibration: | 14:09 | | |
| Battery Power Check: | (Good) | | Poor |
| Photographs of Setup (Y/N) | Yes | | |
| Photographs of Surrounding (Y/N) | Yes | | |
| Check available disk memory (Y/N) | Yes | | |
| Cloud cover: | cloudy | (partly cloudy) | sunny |
| Height of cloud (feet): | 0-10,000 | (10,000-25,000) | 25,000 + |
| Air Temperature (C): | 5.7° | | |
| Wind Speed (km/hr): | 14.4 Km/hr | | |
| Wind Direction: North wind (wind blows from North) |   | | |
| Barometric Pressure (kPa): | | | |
| Relative Humidity (%) | 78.1 | | |
| Precipitation: | (None) | drizzle | rain |

## GENERAL SITE DESCRIPTION

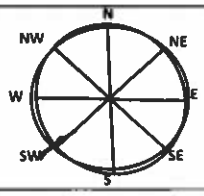
| | | | |
|---|---|---|---|
| GPS Location | Latitude | Longitude | Altitude |
| | | | |
| Type of Ground Surface: | Tundra | | |
| Acoustic Environment: | | | |
| Traffic | ~~Helicopter / boat~~ None | | |
| Human activities | Mine - helicopter - boat | | |
| Animal | Geese | | |
| Other noise sources | | | |

## MONITORING ENDS

| | | | |
|---|---|---|---|
| Operator: RS | | | |
| Record Data File Name: NPoR-08 | | | |
| Total Monitoring Period | | | |
| Noise Meter End Time: | | | |
| Date: 2019-09-29 | | | |
| Calibration complete ?: | | | |
| Sensitivity 29.58 | Calibrated at office due to dead battery | | |
| Derviation -0.01 | | | |
| Time of Calibration: 15:40 | | | |
| Check file size (GB) | | | |
| Battery Power Check: | (Good) | Dead | (Poor) |
| Cloud cover: | (cloudy) | partly cloudy | sunny |
| Height of cloud (feet): | (0-10,000) | 10,000-25,000 | 25,000 + |
| Air Temperature (C): -2 | | | |
| Wind Speed (km/hr): 6.2 Km/hr | | | |
| Wind Direction: North wind (wind blows from North) |   North | | |
| Barometric Pressure (kPa): 101.8 | | | |
| Relative Humidity (%) 72% | | | |
| Precipitation: None | (none) | drizzle | rain |
| Depature Time: 10:36am | | | |

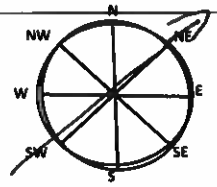
~~last time~~ 2019-09-~~30~~ 29 time when battery died
16:30pm
50 h run time

* The date on the noise monitor was 1 day ahead therefore it was started on 2019-09-8 but the file is saved with the date 2019-09-09

| MONITORING STARTS | | | |
|---|---|---|---|
| Operator: BH/DM | BH/DM | | |
| Location: | NPOR017 | | |
| Noise Meter Start Time: | 9:05 | | |
| Date: | 19-09-08 | | |
| Calibration complete ?: | Yes | | |
| Sensitivity | 94.63 | | |
| Derviation | 0.05 db | | |
| Time of Calibration: | 9:00 am | | |
| Battery Power Check: | Good | | Poor |
| Photographs of Setup (Y/N) | Y | | |
| Photographs of Surrounding (Y/N) | Y | | |
| Check available disk memory (Y/N) | Y | | |
| Cloud cover: 80% | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): 3°C | | | |
| Wind Speed (km/hr): 19.5 | | | |
| Wind Direction: SW | | | |
| North wind (wind blows from North) | 230° |  | |
| Barometric Pressure (kPa): | 102.1 kPa | | |
| Relative Humidity (%) 79 | | | |
| Precipitation: | none | drizzle | rain |

Used monitor #2

| GENERAL SITE DESCRIPTION | | | |
|---|---|---|---|
| GPS Location | ~~Latitude~~ E | ~~Longitude~~ N | Altitude |
| | 541203 | 6976536 | |
| Type of Ground Surface: | tundra-like | | |
| Acoustic Environment: | 1.6 km from Airport | | |
| Traffic | close to airport | | |
| Human activities | 100 m from cabin, lots of cabins in the area | | |
| Animal | | | |
| Other noise sources: Birds in area | ATV, planes, trucks, tankers will pass by | | |

| MONITORING ENDS | | | |
|---|---|---|---|
| Operator: BH/SK | | | |
| Record Data File Name: | NPOR017 | | |
| Total Monitoring Period | 55 hours | | |
| Noise Meter End Time: | 4:05 PM | | |
| Date: | 2019-09-10 | | |
| Calibration complete ?: | | | |
| Sensitivity | 94.69 | | |
| Derviation | 0.02 | | |
| Time of Calibration: | 4:10 pm | | |
| Check file size (GB) | | | |
| Battery Power Check: | Good | | Poor |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): 9.4 | | | |
| Wind Speed (km/hr): 6 Km/h | | | |
| Wind Direction: SW 208° | | | |
| North wind (wind blows from North) | |  | |
| Barometric Pressure (kPa): 101.6 | | | |
| Relative Humidity (%) 77.5 | | | |
| Precipitation: raining | none | drizzle | rain |
| Depature Time: 4:20 pm | | | |

6 Kph SW 208° → there was a group of ~100 birds with in 20-100m of the noise monitor when we got there

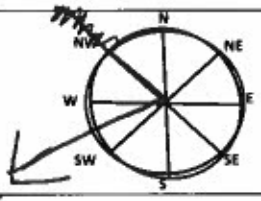
T = 9.4°C

Humid - 77.5

## MONITORING STARTS

| | |
|---|---|
| Operator: Laura H & Randy S | RS/LH |
| Location: | NPaRI7 |
| Noise Meter Start Time: 1008 | |
| Date: | 2018-09-27 |
| Calibration complete ?: Yes | |
| Sensitivity 29.80 mV/Pa | |
| Derviation −0.25 db | |
| Time of Calibration: 10:03 | |
| Battery Power Check: | Good / Poor |
| Photographs of Setup (Y/N) | |
| Photographs of Surrounding (Y/N) | |
| Check available disk memory (Y/N) | |

| Cloud cover: | cloudy | partly cloudy | sunny |
|---|---|---|---|
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |

| | |
|---|---|
| Air Temperature (C): 7.1°C | |
| Wind Speed (km/hr): 19 Km/hr | |
| Wind Direction: 195° SSW<br>North wind (wind blows from North) |  |
| Barometric Pressure (kPa) | 98.45 |
| Relative Humidity (%) 74.4% | |

| Precipitation: | none | drizzle | rain |
|---|---|---|---|

## GENERAL SITE DESCRIPTION

| GPS Location | Latitude | Longitude | Altitude |
|---|---|---|---|
| | 544203 | 697536 | 15 V |

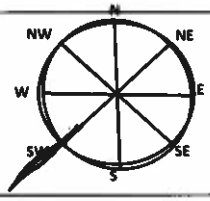
| | |
|---|---|
| Type of Ground Surface: | Tundra |
| Acoustic Environment: | |
| Traffic | Aircraft- truck, ATV, fuel trucks |
| Human activities | Hunting, fishing |
| Animal | Birds |
| Other noise sources | |

## MONITORING ENDS

| | |
|---|---|
| Operator: | DM RS |
| Record Data File Name: | |
| Total Monitoring Period | 14 hours + 16 minutes |
| Noise Meter End Time: | 18-18 |
| Date: | 2019-09-26 |
| Calibration complete ?: | Yes |
| Sensitivity | 29.98 |
| Derviation | 0.05 |
| Time of Calibration: | 10:54 |
| Check file size (GB) | |
| Battery Power Check: | Good / Poor |

Total monitoring period was actually 56 hours

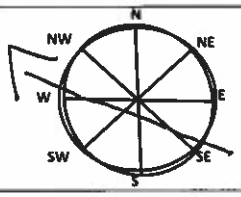
| Cloud cover: | cloudy | partly cloudy | sunny |
|---|---|---|---|
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |

| | |
|---|---|
| Air Temperature (C): | 7 |
| Wind Speed (km/hr): | 18.9 |
| Wind Direction: SW<br>North wind (wind blows from North) | 330°  |
| Barometric Pressure (kPa): | 98.45 |
| Relative Humidity (%) | 81.2 |

| Precipitation: | none | drizzle | rain |
|---|---|---|---|

| | |
|---|---|
| Depature Time: | 2019-09-26 |

## MONITORING STARTS

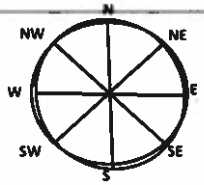
| | | | |
|---|---|---|---|
| Operator: | BH/JB/M | | |
| Location: | NPOOR017 | | |
| Noise Meter Start Time: | 3:45 | | |
| Date: | 2019-10-03 | | |
| Calibration complete ?: | | | |
| Sensitivity | 29.07 | | |
| Derviation | -0.11 | | |
| Time of Calibration: | 3:43 | | |
| Battery Power Check: | Good | | Poor |
| Photographs of Setup (Y/N) | Y | | |
| Photographs of Surrounding (Y/N) | Y | | |
| Check available disk memory (Y/N) | Y | | |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | 2.7°C | | |
| Wind Speed (km/hr): | 7.8Km/h | | |
| Wind Direction: North wind (wind blows from North) | SE 170° |  | |
| Barometric Pressure (kPa): | 101.9 | | |
| Relative Humidity (%) | 63.3 | | |
| Precipitation: | none | drizzle | rain |



## GENERAL SITE DESCRIPTION

| | | | |
|---|---|---|---|
| GPS Location | 5441203 6920536 | ~~Latitude~~ N 54.3407 | ~~Longitude~~ E 69[illegible]6 |
| | | ~~Altitude~~ 15V | |
| Type of Ground Surface: | tundra | | |
| Acoustic Environment: | | | |
| Traffic | | | |
| Human activities | cabins 200m away, road 100m away | | |
| Animal | | | |
| Other noise sources | no wildlife observed<br>close to airport | | |

## MONITORING ENDS

| | | | |
|---|---|---|---|
| Operator: | BH / JB | | |
| Record Data File Name: | NPOOR017 | | |
| Total Monitoring Period | 71 hours | | |
| Noise Meter End Time: | 2:30pm | | |
| Date: | 2019-10-06 | | |
| Calibration complete ?: | | | |
| Sensitivity | 23.32 | | |
| Derviation | -0.11 | | |
| Time of Calibration: | 2:33 | | |
| Check file size (GB) | yes | | |
| Battery Power Check: | Good | | Poor |
| Cloud cover: | cloudy | partly cloudy | sunny |
| Height of cloud (feet): | 0-10,000 | 10,000-25,000 | 25,000 + |
| Air Temperature (C): | 0.6°C | | |
| Wind Speed (km/hr): | 30Km/h | | |
| Wind Direction: North wind (wind blows from North) | 162° SSE |  | |
| Barometric Pressure (kPa): | 99.6 | | |
| Relative Humidity (%) | 84.4% | | |
| Precipitation: | none | drizzle | rain |
| Depature Time: | 2:40 pm | | |

# Appendix B: Weather Data and Hourly $L_{eq}$ values

**Appx B - Table 1. Weather data recorded from the Meliadine site permanent weather station for noise monitoring dates. Noise data was excluded from analyses when average wind speeds exceeded 15 km/h, and during the first and last hour of measurement to remove technician interference. $L_{eq}$ values removed from final analyses during data filtering steps are shaded gray.**

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/05/19 15:00 | 8.1 | 7.16 | 220 | 66 | 56.0 | | | |
| 9/05/19 16:00 | 8.1 | 9.29 | 216 | 65 | 29.6 | | | |
| 9/05/19 17:00 | 8.0 | 10.05 | 190 | 65 | 50.0 | | | |
| 9/05/19 18:00 | 7.6 | 10.85 | 203 | 67 | 29.3 | | | |
| 9/05/19 19:00 | 7.2 | 10.31 | 213 | 69 | 26.0 | | | |
| 9/05/19 20:00 | 6.6 | 8.09 | 213 | 72 | 26.6 | | | |
| 9/05/19 21:00 | 6.0 | 6.18 | 209 | 76 | 28.5 | | | |
| 9/05/19 22:00 | 5.7 | 6.53 | 212 | 75 | 27.8 | | | |
| 9/05/19 23:00 | 5.4 | 6.13 | 216 | 80 | 33.6 | | | |
| 9/06/19 0:00 | 4.8 | 4.03 | 189 | 88 | 31.1 | | | |
| 9/06/19 1:00 | 4.5 | 3.65 | 178 | 93 | 29.4 | | | |
| 9/06/19 2:00 | 4.3 | 3.09 | 161 | 98 | 23.1 | | | |
| 9/06/19 3:00 | 4.3 | 2.71 | 161 | 100 | 22.1 | | | |
| 9/06/19 4:00 | 4.5 | 3.03 | 222 | 100 | 23.2 | | | |
| 9/06/19 5:00 | 5.0 | 3.63 | 271 | 79 | 29.4 | | | |
| 9/06/19 6:00 | 4.5 | 4.94 | 336 | 92 | 30.4 | | | |
| 9/06/19 7:00 | 3.7 | 10.57 | 8 | 100 | 30.4 | | | |
| 9/06/19 8:00 | 3.6 | 8.38 | 15 | 100 | 26.9 | | | |
| 9/06/19 9:00 | 4.0 | 8.10 | 30 | 100 | 28.5 | | | |
| 9/06/19 10:00 | 4.5 | 7.90 | 12 | 95 | 34.5 | | | |
| 9/06/19 11:00 | 4.5 | 7.27 | 344 | 94 | 26.0 | | | |
| 9/06/19 12:00 | 4.9 | 5.79 | 331 | 88 | 29.8 | | | |
| 9/06/19 13:00 | 6.0 | 6.76 | 329 | 77 | 34.1 | | | |
| 9/06/19 14:00 | 5.7 | 8.93 | 340 | 77 | 25.4 | | | |
| 9/06/19 15:00 | 6.7 | 6.61 | 306 | 69 | 26.5 | | | |
| 9/06/19 16:00 | 6.7 | 5.97 | 333 | 66 | 32.8 | | | |
| 9/06/19 17:00 | 6.6 | 8.23 | 328 | 71 | 32.1 | | | |
| 9/06/19 18:00 | 6.4 | 10.41 | 323 | 77 | 36.2 | | | |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/06/19 19:00 | 6.0 | 8.60 | 331 | 83 | 23.7 | | | |
| 9/06/19 20:00 | 5.7 | 5.89 | 319 | 83 | 24.6 | | | |
| 9/06/19 21:00 | 5.3 | 2.09 | 208 | 92 | 20.9 | | | |
| 9/06/19 22:00 | 5.2 | 2.66 | 184 | 97 | 21.3 | | | |
| 9/06/19 23:00 | 5.1 | 2.50 | 183 | 100 | 22.1 | | | |
| 9/07/19 0:00 | 4.9 | 4.39 | 194 | 100 | 21.9 | | | |
| 9/07/19 1:00 | 4.7 | 3.41 | 223 | 100 | 23.9 | | | |
| 9/07/19 2:00 | 4.5 | 3.99 | 282 | 100 | 30.3 | | | |
| 9/07/19 3:00 | 4.9 | 8.72 | 325 | 99 | 28.2 | | | |
| 9/07/19 4:00 | 4.6 | 7.29 | 326 | 96 | 37.9 | | | |
| 9/07/19 5:00 | 4.4 | 9.60 | 325 | 96 | 40.1 | | | |
| 9/07/19 6:00 | 4.1 | 11.12 | 337 | 94 | 41.7 | | | |
| 9/07/19 7:00 | 3.6 | 13.28 | 337 | 91 | 63.6 | | | |
| | | | | | | | | |
| 9/08/19 9:00 | 1.7 | 19.48 | 357 | 100 | | | | 51.2 |
| 9/08/19 10:00 | 2.4 | 19.20 | 354 | 100 | | | | 52.5 |
| 9/08/19 11:00 | 3.7 | 16.56 | 8 | 100 | | | | 45.6 |
| 9/08/19 12:00 | 5.1 | 13.79 | 9 | 94 | | | | 46.0 |
| 9/08/19 13:00 | 6.0 | 14.19 | 359 | 88 | | | | 41.9 |
| 9/08/19 14:00 | 7.0 | 14.60 | 356 | 83 | | | 59.8 | 49.6 |
| 9/08/19 15:00 | 7.5 | 14.95 | 352 | 77 | | | 37.8 | 42.8 |
| 9/08/19 16:00 | 7.9 | 13.94 | 356 | 73 | | | 41.6 | 44.1 |
| 9/08/19 17:00 | 8.0 | 14.90 | 352 | 69 | | | 39.7 | 42.7 |
| 9/08/19 18:00 | 7.9 | 15.34 | 355 | 67 | | | 46.3 | 45.2 |
| 9/08/19 19:00 | 7.4 | 14.46 | 352 | 67 | | | 38.8 | 51.9 |
| 9/08/19 20:00 | 6.6 | 10.46 | 350 | 73 | | | 28.9 | 47.4 |
| 9/08/19 21:00 | 5.8 | 7.95 | 333 | 77 | | | 30.0 | 44.6 |
| 9/08/19 22:00 | 5.0 | 9.17 | 325 | 86 | | | 38.4 | 41.6 |
| 9/08/19 23:00 | 4.8 | 10.99 | 337 | 90 | | | 42.1 | 40.8 |
| 9/09/19 0:00 | 4.8 | 11.86 | 346 | 90 | | | 40.4 | 40.6 |
| 9/09/19 1:00 | 3.8 | 10.96 | 353 | 98 | | | 37.9 | 43.6 |
| 9/09/19 2:00 | 3.3 | 8.93 | 354 | 100 | | | 33.4 | 40.6 |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/09/19 3:00 | 3.2 | 7.99 | 343 | 100 | | | 28.9 | 41.6 |
| 9/09/19 4:00 | 3.2 | 7.77 | 343 | 100 | | | 32.3 | 39.9 |
| 9/09/19 5:00 | 2.6 | 8.75 | 329 | 100 | | | 32.7 | 41.7 |
| 9/09/19 6:00 | 2.3 | 7.81 | 334 | 100 | | | 33.9 | 45.0 |
| 9/09/19 7:00 | 2.6 | 8.29 | 328 | 100 | | | 38.4 | 48.6 |
| 9/09/19 8:00 | 3.0 | 8.74 | 335 | 100 | | | 36.9 | 43.0 |
| 9/09/19 9:00 | 4.0 | 8.12 | 343 | 100 | | | 36.8 | 42.0 |
| 9/09/19 10:00 | 5.1 | 10.71 | 333 | 100 | | | 37.6 | 42.4 |
| 9/09/19 11:00 | 6.1 | 13.92 | 319 | 98 | | | 39.6 | 44.5 |
| 9/09/19 12:00 | 7.1 | 15.65 | 322 | 83 | | | 40.8 | 43.4 |
| 9/09/19 13:00 | 8.2 | 16.03 | 321 | 66 | | | 43.8 | 47.3 |
| 9/09/19 14:00 | 8.9 | 18.23 | 321 | 59 | | | 44.5 | 50.0 |
| 9/09/19 15:00 | 9.4 | 17.43 | 320 | 58 | | | 44.3 | 50.4 |
| 9/09/19 16:00 | 10.0 | 15.57 | 324 | 60 | | | 41.8 | 43.0 |
| 9/09/19 17:00 | 10.4 | 15.12 | 323 | 53 | | | 38.2 | 43.2 |
| 9/09/19 18:00 | 10.6 | 12.52 | 322 | 54 | | | 34.0 | 41.4 |
| 9/09/19 19:00 | 10.1 | 10.45 | 320 | 58 | | | 28.4 | 49.2 |
| 9/09/19 20:00 | 8.2 | 3.61 | 293 | 71 | | | 28.5 | 45.0 |
| 9/09/19 21:00 | 6.9 | 4.53 | 303 | 77 | | | 29.2 | 43.4 |
| 9/09/19 22:00 | 5.5 | 3.75 | 292 | 83 | | | 28.4 | 42.9 |
| 9/09/19 23:00 | 4.9 | 4.52 | 292 | 87 | | | 30.9 | 41.4 |
| 9/10/19 0:00 | 4.6 | 6.53 | 255 | 88 | | | 31.0 | 43.0 |
| 9/10/19 1:00 | 4.3 | 6.06 | 252 | 93 | | | 33.9 | 43.5 |
| 9/10/19 2:00 | 3.7 | 6.80 | 243 | 97 | | | 33.6 | 40.1 |
| 9/10/19 3:00 | 3.3 | 7.42 | 239 | 99 | | | 34.5 | 41.6 |
| 9/10/19 4:00 | 3.1 | 7.18 | 235 | 98 | | | 34.9 | 40.1 |
| 9/10/19 5:00 | 3.0 | 10.03 | 242 | 100 | | | 36.2 | 40.6 |
| 9/10/19 6:00 | 3.0 | 7.93 | 251 | 100 | | | 38.6 | 46.7 |
| 9/10/19 7:00 | 3.2 | 7.20 | 264 | 100 | | | 42.0 | 50.2 |
| 9/10/19 8:00 | 4.0 | 9.01 | 253 | 99 | | | 42.0 | 42.3 |
| 9/10/19 9:00 | 5.1 | 11.95 | 235 | 92 | | | 44.6 | 46.1 |
| 9/10/19 10:00 | 6.1 | 15.03 | 233 | 89 | | | 47.6 | 52.1 |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR005 | NPOR006 | NPOR008 | NPOR017 |
| 9/10/19 11:00 | 7.9 | 18.30 | 237 | 78 | | | 50.0 | 51.3 |
| 9/10/19 12:00 | 9.9 | 20.99 | 230 | 68 | | | 52.9 | 54.7 |
| 9/10/19 13:00 | 10.3 | 21.54 | 235 | 68 | | | 52.8 | 51.7 |
| 9/10/19 14:00 | 10.8 | 21.19 | 255 | 69 | | | 47.1 | 46.5 |
| 9/10/19 15:00 | 8.5 | 13.84 | 251 | 98 | | | 43.3 | 46.7 |
| 9/10/19 16:00 | 8.5 | 13.21 | 240 | 100 | | | 41.6 | 58.2 |
| 9/10/19 17:00 | 8.8 | 11.97 | 228 | 100 | | | 36.8 | |
| 9/10/19 18:00 | 9.9 | 9.02 | 241 | 100 | | | 38.2 | |
| 9/10/19 19:00 | 9.9 | 10.85 | 301 | 99 | | | 38.6 | |
| 9/10/19 20:00 | 9.3 | 13.21 | 319 | 97 | | | 42.8 | |
| 9/10/19 21:00 | 8.7 | 16.86 | 320 | 97 | | | 41.7 | |
| 9/10/19 22:00 | 8.1 | 16.76 | 321 | 100 | | | 40.6 | |
| 9/10/19 23:00 | 7.9 | 15.47 | 318 | 100 | | | 39.1 | |
| 9/11/19 0:00 | 7.6 | 13.20 | 318 | 100 | | | 39.7 | |
| 9/11/19 1:00 | 7.3 | 12.33 | 331 | 100 | | | 38.8 | |
| 9/11/19 2:00 | 7.3 | 12.20 | 324 | 100 | | | 42.8 | |
| 9/11/19 3:00 | 7.2 | 13.37 | 328 | 100 | | | 43.9 | |
| 9/11/19 4:00 | 7.1 | 17.19 | 317 | 100 | | | 45.3 | |
| 9/11/19 5:00 | 6.9 | 16.58 | 324 | 100 | | | 45.4 | |
| 9/11/19 6:00 | 6.7 | 15.34 | 327 | 100 | | | 45.7 | |
| 9/11/19 7:00 | 6.5 | 15.67 | 330 | 100 | | | 46.3 | |
| 9/11/19 8:00 | 6.5 | 16.33 | 331 | 100 | | | 49.4 | |
| 9/11/19 9:00 | 6.6 | 18.69 | 338 | 100 | | | 49.4 | |
| 9/11/19 10:00 | 6.8 | 19.76 | 336 | 100 | | | 48.6 | |
| 9/11/19 11:00 | 7.2 | 18.38 | 336 | 100 | | | 47.6 | |
| 9/11/19 12:00 | 7.5 | 17.75 | 337 | 100 | | | 44.9 | |
| 9/11/19 13:00 | 8.2 | 18.63 | 325 | 100 | | | 42.9 | |
| 9/11/19 14:00 | 9.3 | 19.47 | 322 | 96 | | | 49.4 | |
| | | | | | | | | |
| 9/12/19 8:00 | 4.9 | 7.23 | 208 | 100 | | 57.1 | | |
| 9/12/19 9:00 | 6.9 | 9.10 | 229 | 100 | 50.9 | 49.1 | | |
| 9/12/19 10:00 | 8.7 | 12.74 | 235 | 96 | 39.9 | 48.3 | | |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/12/19 11:00 | 10.6 | 16.14 | 235 | 83 | 47.7 | 49.4 | | |
| 9/12/19 12:00 | 12.9 | 16.94 | 236 | 72 | 45.0 | 52.6 | | |
| 9/12/19 13:00 | 14.8 | 18.78 | 238 | 61 | 51.6 | 54.9 | | |
| 9/12/19 14:00 | 16.0 | 21.76 | 241 | 53 | 52.8 | 55.2 | | |
| 9/12/19 15:00 | 15.9 | 22.87 | 259 | 50 | 54.1 | 54.9 | | |
| 9/12/19 16:00 | 16.0 | 21.35 | 264 | 49 | 45.8 | 51.2 | | |
| 9/12/19 17:00 | 15.8 | 19.48 | 270 | 49 | 43.2 | 49.1 | | |
| 9/12/19 18:00 | 15.3 | 17.15 | 261 | 51 | 30.6 | 41.6 | | |
| 9/12/19 19:00 | 14.0 | 9.86 | 260 | 58 | 25.7 | 33.5 | | |
| 9/12/19 20:00 | 11.5 | 6.48 | 237 | 68 | 29.6 | 36.7 | | |
| 9/12/19 21:00 | 9.6 | 6.87 | 225 | 76 | 29.6 | 40.5 | | |
| 9/12/19 22:00 | 9.6 | 8.99 | 234 | 80 | 31.1 | 42.8 | | |
| 9/12/19 23:00 | 9.6 | 8.74 | 251 | 80 | 30.5 | 41.3 | | |
| 9/13/19 0:00 | 9.4 | 9.18 | 242 | 82 | 30.8 | 41.8 | | |
| 9/13/19 1:00 | 9.4 | 9.03 | 246 | 81 | 30.0 | 40.6 | | |
| 9/13/19 2:00 | 9.1 | 8.89 | 250 | 82 | 28.4 | 38.7 | | |
| 9/13/19 3:00 | 8.4 | 6.93 | 248 | 90 | 27.7 | 38.7 | | |
| 9/13/19 4:00 | 8.1 | 7.50 | 247 | 96 | 25.2 | 35.0 | | |
| 9/13/19 5:00 | 7.6 | 5.32 | 252 | 100 | 33.2 | 31.3 | | |
| 9/13/19 6:00 | 6.5 | 6.04 | 243 | 100 | 31.5 | 31.4 | | |
| 9/13/19 7:00 | 5.5 | 4.32 | 202 | 100 | 26.2 | 32.0 | | |
| 9/13/19 8:00 | 5.7 | 3.85 | 181 | 100 | 25.2 | 30.5 | | |
| 9/13/19 9:00 | 7.4 | 3.49 | 208 | 100 | 25.2 | 33.0 | | |
| 9/13/19 10:00 | 9.1 | 7.08 | 226 | 100 | 32.7 | 34.3 | | |
| 9/13/19 11:00 | 10.7 | 6.98 | 240 | 91 | 23.9 | 27.5 | | |
| 9/13/19 12:00 | 12.0 | 7.39 | 237 | 83 | 26.3 | 30.8 | | |
| 9/13/19 13:00 | 13.6 | 9.16 | 239 | 75 | 25.6 | 28.9 | | |
| 9/13/19 14:00 | 15.3 | 7.67 | 251 | 64 | 24.4 | 38.9 | | |
| 9/13/19 15:00 | 16.1 | 6.43 | 276 | 54 | 22.1 | 43.6 | | |
| 9/13/19 16:00 | 16.2 | 7.46 | 343 | 54 | 24.8 | 32.3 | | |
| 9/13/19 17:00 | 15.9 | 6.89 | 354 | 54 | 22.2 | 44.2 | | |
| 9/13/19 18:00 | 16.1 | 4.44 | 14 | 53 | 25.3 | 40.7 | | |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/13/19 19:00 | 14.6 | 2.62 | 117 | 59 | 32.2 | 35.4 | | |
| 9/13/19 20:00 | 11.5 | 2.65 | 166 | 73 | 28.4 | 43.0 | | |
| 9/13/19 21:00 | 9.1 | 1.08 | 168 | 96 | 32.3 | 38.6 | | |
| 9/13/19 22:00 | 8.3 | 0.00 | 0 | 100 | 33.4 | 42.1 | | |
| 9/13/19 23:00 | 7.7 | 1.81 | 71 | 100 | 33.3 | 38.6 | | |
| 9/14/19 0:00 | 7.7 | 2.21 | 70 | 100 | 33.4 | 39.2 | | |
| 9/14/19 1:00 | 7.1 | 4.77 | 125 | 100 | 35.1 | 39.5 | | |
| 9/14/19 2:00 | 6.1 | 6.32 | 138 | 100 | 35.5 | 39.4 | | |
| 9/14/19 3:00 | 6.1 | 6.82 | 136 | 100 | 34.4 | 39.6 | | |
| 9/14/19 4:00 | 5.5 | 4.77 | 147 | 100 | 36.6 | 39.2 | | |
| 9/14/19 5:00 | 6.1 | 4.49 | 132 | 100 | 34.5 | 38.8 | | |
| 9/14/19 6:00 | 6.1 | 5.47 | 127 | 100 | 33.6 | 37.0 | | |
| 9/14/19 7:00 | 5.3 | 5.46 | 141 | 100 | 34.0 | 39.0 | | |
| 9/14/19 8:00 | 5.8 | 5.79 | 143 | 100 | 47.8 | 48.1 | | |
| 9/14/19 9:00 | 6.8 | 7.64 | 137 | 100 | 40.2 | 40.6 | | |
| 9/14/19 10:00 | 7.6 | 11.12 | 136 | 100 | 41.1 | 43.6 | | |
| 9/14/19 11:00 | 8.4 | 13.36 | 137 | 100 | 39.4 | 41.1 | | |
| 9/14/19 12:00 | 9.7 | 13.14 | 149 | 100 | 40.3 | 43.1 | | |
| 9/14/19 13:00 | 11.0 | 15.86 | 165 | 100 | 43.4 | 43.0 | | |
| 9/14/19 14:00 | 11.3 | 17.31 | 158 | 94 | 47.9 | 50.4 | | |
| 9/14/19 15:00 | 12.0 | 17.95 | 165 | 89 | 43.6 | 42.9 | | |
| 9/14/19 16:00 | 12.1 | 17.76 | 162 | 89 | 45.4 | 44.7 | | |
| 9/14/19 17:00 | 11.7 | 19.49 | 166 | 88 | 43.3 | 45.1 | | |
| 9/14/19 18:00 | 10.7 | 17.44 | 158 | 91 | 45.0 | 51.0 | | |
| 9/14/19 19:00 | 9.1 | 17.85 | 148 | 95 | 57.6 | 50.6 | | |
| 9/14/19 20:00 | 7.3 | 18.15 | 138 | 100 | 49.7 | 49.3 | | |
| 9/14/19 21:00 | 6.5 | 19.62 | 136 | 100 | 52.2 | 50.2 | | |
| 9/14/19 22:00 | 6.6 | 19.49 | 137 | 100 | 52.5 | 51.2 | | |
| 9/14/19 23:00 | 6.8 | 19.14 | 135 | 100 | 51.1 | 49.4 | | |
| 9/15/19 0:00 | 7.0 | 19.07 | 136 | 100 | 52.4 | 49.7 | | |
| 9/15/19 1:00 | 7.1 | 22.67 | 145 | 100 | 52.8 | 51.0 | | |
| 9/15/19 2:00 | 7.0 | 23.43 | 146 | 100 | 53.3 | 50.9 | | |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/15/19 3:00 | 7.2 | 24.28 | 150 | 100 | 55.2 | 53.7 | | |
| 9/15/19 4:00 | 7.1 | 25.44 | 151 | 100 | 56.7 | 54.6 | | |
| 9/15/19 5:00 | 7.0 | 25.57 | 146 | 100 | 58.4 | 54.7 | | |
| 9/15/19 6:00 | 7.2 | 27.07 | 147 | 100 | 57.4 | 53.6 | | |
| 9/15/19 7:00 | 7.1 | 25.30 | 149 | 100 | 55.7 | 51.8 | | |
| 9/15/19 8:00 | 7.3 | 23.32 | 153 | 100 | 56.2 | 51.7 | | |
| 9/15/19 9:00 | 7.4 | 26.73 | 154 | 100 | 56.4 | 52.4 | | |
| 9/15/19 10:00 | 7.5 | 25.99 | 151 | 100 | 60.1 | 55.2 | | |
| 9/15/19 11:00 | 8.0 | 29.87 | 157 | 100 | 61.6 | 56.2 | | |
| 9/15/19 12:00 | 8.0 | 31.81 | 155 | 100 | 63.6 | 58.1 | | |
| 9/15/19 13:00 | 8.4 | 34.78 | 160 | 100 | 60.4 | 57.0 | | |
| 9/15/19 14:00 | 7.9 | 31.64 | 165 | 100 | 58.3 | 56.5 | | |
| 9/15/19 15:00 | 7.7 | 26.85 | 151 | 100 | 56.6 | 53.3 | | |
| 9/15/19 16:00 | 8.1 | 25.73 | 153 | 100 | 58.6 | 64.7 | | |
| | | | | | | | | |
| 9/20/19 12:00 | 4.7 | 7.07 | 228 | 99 | | 62.6 | | |
| 9/20/19 13:00 | 5.2 | 8.27 | 202 | 97 | | 43.3 | | |
| 9/20/19 14:00 | 6.2 | 12.38 | 161 | 94 | | 37.5 | | |
| 9/20/19 15:00 | 7.6 | 13.29 | 142 | 87 | | 38.4 | | |
| 9/20/19 16:00 | 7.2 | 17.21 | 153 | 89 | | 46.1 | | |
| 9/20/19 17:00 | 6.8 | 19.57 | 135 | 92 | | 51.0 | | |
| 9/20/19 18:00 | 6.7 | 21.96 | 134 | 94 | | 53.2 | | |
| 9/20/19 19:00 | 6.2 | 22.72 | 132 | 98 | | 53.8 | | |
| 9/20/19 20:00 | 5.4 | 23.16 | 129 | 100 | | 52.3 | | |
| 9/20/19 21:00 | 5.1 | 22.27 | 132 | 100 | | 53.1 | | |
| 9/20/19 22:00 | 5.7 | 23.25 | 131 | 100 | | 51.9 | | |
| 9/20/19 23:00 | 5.8 | 22.10 | 143 | 100 | | 44.2 | | |
| 9/21/19 0:00 | 6.0 | 15.89 | 139 | 100 | | 42.1 | | |
| 9/21/19 1:00 | 6.0 | 13.31 | 139 | 100 | | 42.0 | | |
| 9/21/19 2:00 | 6.0 | 13.69 | 125 | 100 | | 42.1 | | |
| 9/21/19 3:00 | 6.1 | 13.29 | 99 | 100 | | 41.7 | | |
| 9/21/19 4:00 | 6.2 | 14.65 | 104 | 100 | | 43.5 | | |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/21/19 5:00 | 6.5 | 14.34 | 107 | 100 | | 45.7 | | |
| 9/21/19 6:00 | 6.6 | 15.61 | 101 | 100 | | 52.2 | | |
| 9/21/19 7:00 | 6.5 | 18.97 | 104 | 100 | | 57.7 | | |
| 9/21/19 8:00 | 6.2 | 23.98 | 91 | 100 | | 56.8 | | |
| 9/21/19 9:00 | 6.5 | 23.57 | 91 | 100 | | 54.8 | | |
| 9/21/19 10:00 | 6.6 | 22.71 | 91 | 100 | | 56.3 | | |
| 9/21/19 11:00 | 6.4 | 22.73 | 91 | 100 | | 54.1 | | |
| 9/21/19 12:00 | 6.6 | 19.56 | 88 | 100 | | 53.6 | | |
| 9/21/19 13:00 | 6.8 | 15.63 | 78 | 100 | | 55.5 | | |
| 9/21/19 14:00 | 6.8 | 21.24 | 70 | 100 | | 59.5 | | |
| 9/21/19 15:00 | 6.5 | 25.28 | 69 | 100 | | 62.2 | | |
| 9/21/19 16:00 | 6.4 | 25.94 | 68 | 100 | | 63.4 | | |
| 9/21/19 17:00 | 6.1 | 27.92 | 67 | 100 | | 63.3 | | |
| 9/21/19 18:00 | 5.8 | 26.85 | 66 | 100 | | 61.3 | | |
| 9/21/19 19:00 | 5.6 | 23.74 | 64 | 100 | | 61.2 | | |
| 9/21/19 20:00 | 5.5 | 23.13 | 64 | 100 | | 58.6 | | |
| 9/21/19 21:00 | 5.4 | 22.20 | 65 | 100 | | 54.6 | | |
| 9/21/19 22:00 | 5.4 | 20.05 | 60 | 100 | | 56.6 | | |
| 9/21/19 23:00 | 5.2 | 19.67 | 60 | 100 | | 54.9 | | |
| 9/22/19 0:00 | 5.0 | 18.90 | 56 | 100 | | 52.5 | | |
| 9/22/19 1:00 | 4.8 | 17.35 | 58 | 100 | | 52.5 | | |
| 9/22/19 2:00 | 4.6 | 16.29 | 55 | 100 | | 46.6 | | |
| 9/22/19 3:00 | 4.4 | 14.51 | 52 | 100 | | 47.7 | | |
| 9/22/19 4:00 | 4.1 | 13.69 | 48 | 100 | | 38.6 | | |
| 9/22/19 5:00 | 3.9 | 11.54 | 53 | 100 | | 39.1 | | |
| 9/22/19 6:00 | 3.6 | 12.74 | 42 | 100 | | 35.0 | | |
| 9/22/19 7:00 | 3.3 | 10.49 | 47 | 100 | | 31.6 | | |
| 9/22/19 8:00 | 3.4 | 7.23 | 57 | 100 | | 29.1 | | |
| 9/22/19 9:00 | 3.5 | 3.77 | 39 | 100 | | 31.9 | | |
| 9/22/19 10:00 | 3.9 | 1.78 | 144 | 100 | | 34.9 | | 50.2 |
| 9/22/19 11:00 | 4.2 | 3.39 | 168 | 100 | | 34.6 | | 40.7 |
| 9/22/19 12:00 | 4.4 | 3.43 | 174 | 100 | | 36.9 | | 41.1 |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/22/19 13:00 | 4.8 | 6.02 | 189 | 100 | | 51.8 | | 39.2 |
| 9/22/19 14:00 | 5.2 | 9.10 | 190 | 100 | | | | 41.9 |
| 9/22/19 15:00 | 5.3 | 12.70 | 187 | 100 | | | 46.1 | 38.2 |
| 9/22/19 16:00 | 5.2 | 13.92 | 181 | 100 | | | 32.5 | 39.5 |
| 9/22/19 17:00 | 5.0 | 15.38 | 175 | 100 | | | 37.8 | 43.1 |
| 9/22/19 18:00 | 5.0 | 15.31 | 172 | 100 | | | 34.7 | 40.0 |
| 9/22/19 19:00 | 5.4 | 15.06 | 179 | 100 | | | 35.3 | 39.9 |
| 9/22/19 20:00 | 5.5 | 16.35 | 183 | 100 | | | 38.3 | 38.1 |
| 9/22/19 21:00 | 5.8 | 17.65 | 188 | 100 | | | 43.4 | 37.4 |
| 9/22/19 22:00 | 6.1 | 17.22 | 208 | 100 | | | 40.0 | 36.7 |
| 9/22/19 23:00 | 6.0 | 18.82 | 197 | 100 | | | 41.9 | 41.6 |
| 9/23/19 0:00 | 5.9 | 18.98 | 203 | 100 | | | 50.3 | 39.8 |
| 9/23/19 1:00 | 5.5 | 22.96 | 204 | 100 | | | 55.1 | 44.0 |
| 9/23/19 2:00 | 5.3 | 25.16 | 209 | 100 | | | 52.1 | 45.1 |
| 9/23/19 3:00 | 5.5 | 23.62 | 209 | 100 | | | 52.6 | 42.5 |
| 9/23/19 4:00 | 5.6 | 24.63 | 205 | 100 | | | 51.1 | 42.7 |
| 9/23/19 5:00 | 5.7 | 24.14 | 200 | 100 | | | 51.4 | 43.4 |
| 9/23/19 6:00 | 5.7 | 23.78 | 198 | 100 | | | 52.3 | 44.9 |
| 9/23/19 7:00 | 5.9 | 25.06 | 197 | 100 | | | 53.4 | 43.1 |
| 9/23/19 8:00 | 6.0 | 26.47 | 192 | 100 | | | 54.8 | 48.0 |
| 9/23/19 9:00 | 6.3 | 26.99 | 189 | 100 | | | 56.7 | 48.1 |
| 9/23/19 10:00 | 6.4 | 26.91 | 188 | 100 | | | 56.0 | 49.0 |
| 9/23/19 11:00 | 6.5 | 25.65 | 190 | 100 | | | 55.6 | 46.9 |
| 9/23/19 12:00 | 6.6 | 26.25 | 191 | 100 | | | 50.0 | 44.7 |
| 9/23/19 13:00 | 6.9 | 24.24 | 198 | 100 | | | 46.2 | 42.8 |
| 9/23/19 14:00 | 7.1 | 21.43 | 193 | 100 | | | 46.5 | 45.9 |
| 9/23/19 15:00 | 7.3 | 22.15 | 193 | 100 | | | 42.0 | 39.1 |
| 9/23/19 16:00 | 7.3 | 18.21 | 193 | 100 | | | 36.5 | 42.3 |
| 9/23/19 17:00 | 7.2 | 14.60 | 194 | 100 | | | 30.4 | 39.4 |
| 9/23/19 18:00 | 7.1 | 10.89 | 191 | 100 | | | 24.7 | 36.0 |
| 9/23/19 19:00 | 6.8 | 7.81 | 179 | 100 | | | 24.9 | 27.9 |
| 9/23/19 20:00 | 6.6 | 6.59 | 149 | 100 | | | 28.6 | 31.0 |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/23/19 21:00 | 6.4 | 7.68 | 137 | 100 | | | 33.2 | 40.2 |
| 9/23/19 22:00 | 6.2 | 10.34 | 130 | 100 | | | 35.1 | 39.1 |
| 9/23/19 23:00 | 6.1 | 10.82 | 131 | 100 | | | 33.3 | 36.3 |
| 9/24/19 0:00 | 6.2 | 9.10 | 114 | 100 | | | 39.9 | 35.0 |
| 9/24/19 1:00 | 6.0 | 14.04 | 103 | 100 | | | 39.6 | 36.3 |
| 9/24/19 2:00 | 6.0 | 14.00 | 115 | 100 | | | 43.1 | 38.6 |
| 9/24/19 3:00 | 6.0 | 15.35 | 108 | 100 | | | 45.1 | 39.2 |
| 9/24/19 4:00 | 6.0 | 15.55 | 109 | 100 | | | 49.1 | 45.4 |
| 9/24/19 5:00 | 6.1 | 16.65 | 103 | 100 | | | 58.9 | 54.5 |
| 9/24/19 6:00 | 6.4 | 23.59 | 107 | 100 | | | 63.2 | 55.5 |
| 9/24/19 7:00 | 6.3 | 28.13 | 104 | 100 | | | 59.0 | 53.9 |
| 9/24/19 8:00 | 6.4 | 25.26 | 126 | 100 | | | 57.4 | 50.8 |
| 9/24/19 9:00 | 6.8 | 22.34 | 112 | 100 | | | 56.3 | 50.4 |
| 9/24/19 10:00 | 7.2 | 19.56 | 110 | 100 | | | 60.9 | 53.1 |
| 9/24/19 11:00 | 7.5 | 27.96 | 123 | 100 | | | 54.8 | 44.0 |
| 9/24/19 12:00 | 7.5 | 25.18 | 138 | 100 | | | 44.6 | 48.1 |
| 9/24/19 13:00 | 8.6 | 20.04 | 149 | 100 | | | 46.8 | 41.7 |
| 9/24/19 14:00 | 8.6 | 22.24 | 158 | 100 | | | 45.4 | 39.6 |
| 9/24/19 15:00 | 8.7 | 22.36 | 163 | 100 | | | 47.1 | 41.5 |
| 9/24/19 16:00 | 8.4 | 24.03 | 165 | 100 | | | 46.6 | 41.9 |
| 9/24/19 17:00 | 8.0 | 23.04 | 159 | 100 | | | 43.5 | 41.7 |
| 9/24/19 18:00 | 7.9 | 18.35 | 152 | 100 | | | 43.2 | 41.0 |
| 9/24/19 19:00 | 7.5 | 15.29 | 138 | 100 | | | | 42.2 |
| 9/24/19 20:00 | 6.9 | 16.81 | 129 | 100 | | | | 41.5 |
| 9/24/19 21:00 | 6.8 | 15.95 | 121 | 100 | | | | 44.4 |
| 9/24/19 22:00 | 6.8 | 17.32 | 121 | 100 | | | | 43.6 |
| 9/24/19 23:00 | 6.8 | 17.41 | 121 | 100 | | | | 41.4 |
| 9/25/19 0:00 | 6.7 | 15.80 | 121 | 100 | | | | 43.4 |
| 9/25/19 1:00 | 6.6 | 15.48 | 118 | 100 | | | | 45.1 |
| 9/25/19 2:00 | 6.6 | 16.26 | 120 | 100 | | | | 45.4 |
| 9/25/19 3:00 | 6.6 | 18.23 | 120 | 100 | | | | 46.0 |
| 9/25/19 4:00 | 6.6 | 18.73 | 126 | 100 | | | | 47.3 |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 9/25/19 5:00 | 6.5 | 18.70 | 127 | 100 | | | | 45.3 |
| 9/25/19 6:00 | 6.5 | 20.53 | 131 | 100 | | | | 44.4 |
| 9/25/19 7:00 | 6.4 | 17.74 | 122 | 100 | | | | 46.8 |
| 9/25/19 8:00 | 6.3 | 19.28 | 123 | 100 | | | | 45.6 |
| 9/25/19 9:00 | 6.3 | 18.79 | 124 | 100 | | | | 43.5 |
| 9/25/19 10:00 | 6.3 | 18.07 | 123 | 100 | | | | 46.2 |
| 9/25/19 11:00 | 6.5 | 19.59 | 125 | 100 | | | | 46.3 |
| 9/25/19 12:00 | 6.6 | 16.29 | 118 | 100 | | | | 42.9 |
| 9/25/19 13:00 | 6.5 | 17.20 | 129 | 100 | | | | 42.0 |
| 9/25/19 14:00 | 6.5 | 17.23 | 131 | 100 | | | | 41.2 |
| | | | | | | | | |
| 10/03/19 11:00 | -0.5 | 16.79 | 337 | 100 | | | 54.6 | |
| 10/03/19 12:00 | -0.5 | 17.98 | 341 | 100 | | | 46.6 | |
| 10/03/19 13:00 | -0.6 | 18.02 | 347 | 99 | | | 45.5 | |
| 10/03/19 14:00 | -0.6 | 18.06 | 347 | 98 | | | 40.9 | |
| 10/03/19 15:00 | -0.7 | 15.05 | 349 | 96 | | | 42.2 | 52.8 |
| 10/03/19 16:00 | -0.2 | 14.95 | 341 | 92 | | | 37.6 | 42.3 |
| 10/03/19 17:00 | -0.2 | 12.98 | 351 | 91 | | | 32.1 | 42.6 |
| 10/03/19 18:00 | -0.6 | 9.84 | 345 | 94 | | | 25.5 | 37.2 |
| 10/03/19 19:00 | -1.3 | 5.87 | 336 | 99 | | | 25.3 | 45.8 |
| 10/03/19 20:00 | -1.9 | 3.35 | 299 | 100 | | | 25.8 | 42.5 |
| 10/03/19 21:00 | -2.5 | 3.28 | 283 | 100 | | | 27.1 | 39.6 |
| 10/03/19 22:00 | -2.8 | 3.05 | 260 | 100 | | | 24.2 | 40.2 |
| 10/03/19 23:00 | -3.1 | 1.96 | 179 | 100 | | | 29.3 | 35.8 |
| 10/04/19 0:00 | -3.4 | 6.28 | 204 | 100 | | | 31.5 | 36.7 |
| 10/04/19 1:00 | -3.1 | 8.22 | 190 | 100 | | | 35.1 | 36.3 |
| 10/04/19 2:00 | -2.6 | 9.31 | 186 | 100 | | | 38.3 | 38.1 |
| 10/04/19 3:00 | -0.9 | 13.52 | 197 | 100 | | | 40.2 | 43.0 |
| 10/04/19 4:00 | 0.0 | 16.94 | 205 | 100 | | | 41.5 | 42.7 |
| 10/04/19 5:00 | 0.6 | 17.72 | 203 | 100 | | | 42.5 | 45.8 |
| 10/04/19 6:00 | 0.9 | 18.43 | 192 | 100 | | | 51.2 | 53.0 |
| 10/04/19 7:00 | 1.4 | 22.22 | 191 | 100 | | | 52.4 | 57.6 |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 10/04/19 8:00 | 1.6 | 22.24 | 198 | 100 | | | 55.9 | 57.3 |
| 10/04/19 9:00 | 1.8 | 23.04 | 201 | 100 | | | 55.8 | 55.2 |
| 10/04/19 10:00 | 2.3 | 22.98 | 204 | 100 | | | 56.0 | 56.9 |
| 10/04/19 11:00 | 2.7 | 22.68 | 204 | 100 | | | 51.7 | 55.1 |
| 10/04/19 12:00 | 3.1 | 22.35 | 207 | 100 | | | 47.5 | 47.2 |
| 10/04/19 13:00 | 3.8 | 19.32 | 205 | 100 | | | 45.1 | 41.3 |
| 10/04/19 14:00 | 4.8 | 18.22 | 208 | 100 | | | 46.0 | 41.3 |
| 10/04/19 15:00 | 7.1 | 17.98 | 220 | 94 | | | 41.3 | 41.2 |
| 10/04/19 16:00 | 6.7 | 15.33 | 217 | 92 | | | 39.4 | 43.5 |
| 10/04/19 17:00 | 5.9 | 10.24 | 225 | 95 | | | 39.1 | 42.9 |
| 10/04/19 18:00 | 4.9 | 6.93 | 223 | 100 | | | 32.9 | 43.5 |
| 10/04/19 19:00 | 4.2 | 4.16 | 230 | 100 | | | 31.4 | 45.0 |
| 10/04/19 20:00 | 3.0 | 3.57 | 199 | 100 | | | 30.8 | 43.2 |
| 10/04/19 21:00 | 2.2 | 1.93 | 174 | 100 | | | 29.5 | 42.1 |
| 10/04/19 22:00 | 2.3 | 5.40 | 191 | 100 | | | 32.2 | 41.2 |
| 10/04/19 23:00 | 2.1 | 7.12 | 210 | 100 | | | 32.5 | 38.5 |
| 10/05/19 0:00 | 1.6 | 5.01 | 242 | 100 | | | 32.6 | 37.4 |
| 10/05/19 1:00 | 1.3 | 2.67 | 251 | 100 | | | 32.8 | 40.3 |
| 10/05/19 2:00 | 1.0 | 5.41 | 231 | 100 | | | 31.7 | 39.9 |
| 10/05/19 3:00 | -0.3 | 2.72 | 177 | 100 | | | 30.6 | 36.9 |
| 10/05/19 4:00 | -0.8 | 2.45 | 160 | 100 | | | 31.7 | 34.6 |
| 10/05/19 5:00 | -0.7 | 3.09 | 163 | 100 | | | 32.4 | 34.0 |
| 10/05/19 6:00 | 0.0 | 5.06 | 176 | 100 | | | 32.3 | 34.2 |
| 10/05/19 7:00 | 0.1 | 3.58 | 173 | 100 | | | 34.9 | 44.6 |
| 10/05/19 8:00 | 0.4 | 7.22 | 174 | 100 | | | 37.7 | 42.9 |
| 10/05/19 9:00 | 0.8 | 8.60 | 181 | 100 | | | 36.9 | 42.6 |
| 10/05/19 10:00 | 1.4 | 7.83 | 181 | 100 | | | 36.9 | 41.7 |
| 10/05/19 11:00 | 2.1 | 5.08 | 169 | 100 | | | 40.5 | 37.5 |
| 10/05/19 12:00 | 3.1 | 7.25 | 162 | 100 | | | 36.4 | 40.8 |
| 10/05/19 13:00 | 3.8 | 7.75 | 161 | 100 | | | 38.8 | 36.6 |
| 10/05/19 14:00 | 4.3 | 8.42 | 168 | 100 | | | 39.5 | 44.7 |
| 10/05/19 15:00 | 4.5 | 9.00 | 163 | 100 | | | 36.5 | 39.5 |

| Date and Time | Average Air Temperature (°C) | Average Wind Speed (km/h) | Average Wind Direction (°) | Average Relative Humidity (%) | 1-h Leq (dBA) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NPOR0 05 | NPOR0 06 | NPOR0 08 | NPOR0 17 |
| 10/05/19 16:00 | 5.2 | 9.34 | 187 | 100 | | | 37.2 | 45.8 |
| 10/05/19 17:00 | 5.2 | 2.80 | 208 | 100 | | | 34.2 | 41.4 |
| 10/05/19 18:00 | 4.3 | 1.17 | 163 | 100 | | | 32.4 | 36.7 |
| 10/05/19 19:00 | 3.0 | 5.39 | 178 | 100 | | | 30.4 | 42.1 |
| 10/05/19 20:00 | 2.8 | 4.53 | 185 | 100 | | | 32.1 | 41.6 |
| 10/05/19 21:00 | 3.0 | 4.33 | 230 | 100 | | | 30.1 | 37.6 |
| 10/05/19 22:00 | 2.7 | 4.12 | 280 | 100 | | | 26.6 | 39.8 |
| 10/05/19 23:00 | 2.2 | 6.36 | 312 | 100 | | | 30.7 | 39.3 |
| 10/06/19 0:00 | 1.8 | 8.97 | 335 | 100 | | | 29.5 | 43.0 |
| 10/06/19 1:00 | 1.0 | 9.16 | 336 | 100 | | | 32.0 | 44.3 |
| 10/06/19 2:00 | 0.0 | 10.05 | 328 | 100 | | | 37.1 | 45.4 |
| 10/06/19 3:00 | -0.6 | 11.52 | 346 | 100 | | | 35.8 | 43.4 |
| 10/06/19 4:00 | -1.1 | 11.22 | 340 | 100 | | | 37.0 | 46.4 |
| 10/06/19 5:00 | -1.2 | 12.08 | 345 | 100 | | | 34.2 | 44.6 |
| 10/06/19 6:00 | -1.1 | 11.30 | 16 | 100 | | | 36.4 | 45.0 |
| 10/06/19 7:00 | -0.9 | 10.04 | 27 | 100 | | | 31.0 | 43.4 |
| 10/06/19 8:00 | -0.3 | 9.37 | 11 | 100 | | | 29.6 | 39.9 |
| 10/06/19 9:00 | 0.1 | 9.42 | 4 | 100 | | | 34.0 | 40.9 |
| 10/06/19 10:00 | 0.8 | 10.53 | 12 | 100 | | | 40.7 | 43.7 |
| 10/06/19 11:00 | 1.4 | 13.08 | 27 | 100 | | | 47.9 | 49.8 |
| 10/06/19 12:00 | 1.3 | 15.51 | 28 | 100 | | | 50.1 | 50.4 |
| 10/06/19 13:00 | 1.1 | 17.41 | 29 | 100 | | | 51.7 | 52.4 |
| 10/06/19 14:00 | 0.8 | 15.83 | 22 | 100 | | | 53.7 | 52.8 |
| 10/06/19 15:00 | 0.5 | 18.56 | 11 | 100 | | | 57.3 | |