REPORT

EAST DURHAM WIND ENERGY CENTRE

MUNICIPALITY OF WEST GREY, COUNTY OF GREY

SUPPLEMENTAL RAM I-AUDIT MONITOR C
RWDI # 1502606
August 25, 2020

SUBMITTED TO

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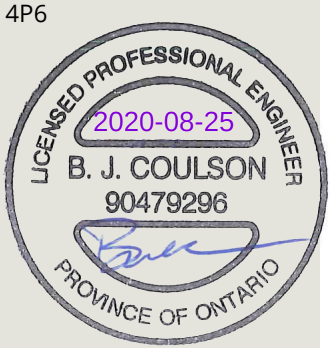

SIGNATURES

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EXECUTIVE SUMMARY

East Durham Wind, L.P, retained RWDI to conduct an immission acoustic audit of the East Durham Wind Energy Centre located in the County of Grey, Ontario. The purpose of this audit is to capture measurements of the sound level produced by the wind turbines for comparison with the applicable Ministry of the Environment, Conservation and Parks (MECP) limits. This I-Audit is intended to meet the requirements of Part E of the MECP 2017 Compliance Protocol for Wind Turbine Noise (2017 Protocol or Protocol), specifically the procedures of the revised assessment methodology for I-Audits (RAM I-Audit).

The wind farm is permitted to operate no more than fourteen wind turbine generators including twelve General Electric 1.6-100 wind turbine generators, one (1) General Electric 1.39-100 turbine generator, and one (1) General Electric 1.34-100 turbine generator. The wind farm also has one (1) 25 MVA transformer substation in the project switchyard. The total nameplate capacity of the wind farm is approximately 22 MW with the permitted wind turbine generators noted above.

The 1st I-Audit monitoring period was completed in the fall of 2015. Subsequent monitoring in the fall of 2016 provided the required data for the 1St I-Audit for Monitors A through E. The analysis and reporting for the 1st I-Audit followed the MECP 2011 Compliance Protocol for Wind Turbine Noise (2011 Protocol). Compliance was shown for Monitors A through E. The latest version of the 1st I-Audit report titled "Acoustic Audit Immission Report #1" is dated January 26, 2018.

An additional RAM I-Audit was completed for Monitors A through E in the spring and summer of 2018. A report was issued in October 2018 for this monitoring period. However, guidance provided by MECP in September 2018 for expanding the wind angles as permitted by Section E 5.5 (10) of the Protocol could not be incorporated into the report before the report deadline. All monitors were analyzed for potential expanded wind angle sectors, but the approach was ultimately applied at Monitor C only. The revised report (version 2) containing that analysis was dated February 15, 2019 and follows the requirements for RAM I-Audits outlined in the 2017 Protocol.

A further report (version 3) was submitted to account for database adjustments as a result of requests from the MECP and was dated May 10, 2019. Overall, the reports showed that Monitors A, C, and E were complete and compliant with the sound level limits identified in the REA, but that the required number of measurement points was not collected at Monitors B and D.

As a result of the incomplete campaigns submitted for monitors in the second RAM I-Audit, the MECP requested additional monitoring for one season at a worst-case location. Monitor C was selected as representative of the worst-case receptor based on discussions with the MECP and was deployed on March 12, 2020. Data sets remained incomplete after 10 weeks of monitoring. A conference call was convened on May 22, 2020 with the MECP to discuss the status. During this call, the MECP agreed that continued data collection would be unproductive; hence, a joint decision was made to terminate monitoring despite the incomplete data sets. Therefore, data collection was terminated on May 22, 2020. This report presents the results from this Monitor C campaign that was conducted from March 12, 2020 to May 22, 2020.

Based on discussions with the MECP, alternative data filtering methods were considered. Using these alternative methods, the minimum number of measurement data points for both operational and parked conditions was obtained for the 2 and 3 m/s wind speed bins. This satisfies Section E 5.5 (1) of the Protocol, which requires a minimum number of measurement points for two of the wind speed bins between 1 and 4 m/s. The results of the analysis indicate that Monitor C levels are in compliance with sound level limits identified in the REA. Hence, this campaign is considered successfully completed, and therefore all necessary measurement campaigns for the East Durham Wind Energy Centre have been completed. The facility has demonstrated compliance with MECP limits.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1 INTRODUCTION

East Durham Wind, L.P. retained RWDI to conduct an immission acoustic audit of the East Durham Wind Energy Centre (East Durham) located in the County of Grey, Ontario. The purpose of this audit is to capture measurements of the sound level produced by the wind turbines for comparison with the applicable Ministry of the Environment, Conservation and Parks (MECP) limits at nearby points of reception. This I-Audit is intended to meet the requirements of Part E5 of the 2017 MECP Compliance Protocol for Wind Turbine Noise (2017 Protocol or Protocol), specifically the procedures of the revised assessment methodology for I-Audits (RAM I-Audit).

The wind turbines and ancillary equipment are located on privately-owned farmland through a legal agreement between the landowner and East Durham Wind GP, ULC, as general partner for and on behalf of East Durham Wind, L.P. The zoning within the project area and surrounding areas is mainly general agricultural. The acoustic environment surrounding the project area is rural and is influenced primarily by road traffic, farming activities, and the sounds of nature. The Site Plan as found in the "East Durham Wind Energy Centre – Final Noise Assessment", dated December 10, 2013 and prepared by GENIVAR Inc. (NIA Report) is included in Appendix A. Turbines T12 and T13, as shown in this Site Plan, were not constructed.

The facility's Renewable Energy Approval (REA), number 7812-9E4QSC dated January 20, 2014 and amendment dated October 1, 2014 are provided in Appendix B. Condition E of the REA requires the facility to complete two immission acoustic audits at five locations to assess sound immissions from the wind turbine site. The general practice, though not explicitly stated in the REA, is to complete one test in the fall (i.e. suggested October/November) and one in the spring (i.e. suggested March/April). Two audit reports (i.e., spring and fall audit programs) have previously been submitted to meet the reporting requirements of the facility's REA under the original MECP 2011 Compliance Protocol for Wind Turbine Noise (2011 Protocol); however, wind conditions did not facilitate completion of all data requirements. As a result, these reports were combined into one audit report under guidance from MECP (i.e., NPC-350). This 1st I-Audit report for Monitors A through E is titled "Acoustic Audit Immission Report #1" and the latest version is dated January 26, 2018. The required data was obtained for Monitors A through E and compliance was shown for these points of reception in the 1st (fall) I-Audit report.

A second monitoring program was completed in the spring of 2018. The original version of this report was dated October 2018 and was updated in February 2019 (version 2). The February 2019 report included, for the first time, analysis following guidance provided by MECP in September 2018 for expanding the wind angles, as permitted by Section E 5.5 (10) of the Protocol. Version 3, dated May 10, 2019, was an update to the version 2 submission to include adjustments in the filtering of the measurement database made as a result of requests from the MECP. This report followed the requirements for RAM I-Audits outlined in the 2017 Protocol. Overall, the reports showed that Monitors A, C, and E were complete and compliant with the sound level limits identified in the REA, but that the required number of measurement points was not collected at Monitors B and D.

As a result of the incomplete campaigns submitted for monitors in the second RAM I-Audit, the MECP requested additional monitoring for one season at a worst-case location. Monitor C was selected as representative of the worst-case receptor based on discussions with the MECP and was deployed on March 12, 2020. Weather monitoring instrumentation was co-located with the sound level meter; including wind speed and direction. Precipitation data was also collected.

Data sets remained incomplete after 10 weeks of monitoring. A conference call was convened on May 22, 2020 with the MECP to discuss the status. During this call, the MECP agreed that continued data collection would be unproductive given valid data had slowed such that only a few valid data points had been added in the prior weeks, as a result of unusable wind directions and lower than anticipated power output. Continued monitoring through the summer period was not expected to be productive due to the anticipated change in wind directions and lower summer wind speeds. The 2017 Protocol filtering requirements for turbine electrical power output and wind direction were the primary factors in reducing the number of valid points. Hence, a joint decision was made to terminate monitoring despite the incomplete data sets. Therefore, data collection was terminated on May 22, 2020. This report presents the results from this Monitor C campaign that was conducted from March 12, 2020 to May 22, 2020.

The MECP expressed it would consider any conclusions that could be drawn from the limited Monitor C data set, including the use of alternative analysis or data filtering methods. Using a power criterion of 65% and an expanded angle sector of 180 degrees, the minimum number of measurement data points for both operational and parked conditions was obtained for the 2 and 3 m/s wind speed bins. This satisfies Section E 5.5 (1) of the Protocol, which requires a minimum number of measurement points for either three of the wind speed bins between 1 and 7 m/s, or two of the wind speed bins between 1 and 4 m/s. Furthermore, the results of the study indicate that Monitor C levels are in compliance with sound level limits identified in the REA.

A detailed discussion of the audit procedures and data analysis is provided in the subsequent sections.

2 FACILITY DESCRIPTION

The project is owned by East Durham Wind G.P., ULC, as general partner for and on behalf of East Durham Wind, LP. The East Durham Wind Energy Centre became commercially operational August 17, 2015. The project site is located in the County of Grey, Ontario. It is generally bounded by Artemesia Glenelg Townline to the east, Concession Road 4 to the north, Camp Oliver Road to the west, and South Line to the south.

The wind farm is permitted to operate no more than fourteen wind turbine generators including twelve General Electric 1.6-100 wind turbine generators, one (1) General Electric 1.39-100 turbine generator, and one (1) General Electric 1.34-100 turbine generator. The wind farm also has one (1) 25 MVA transformer substation in the project switchyard. The total nameplate capacity of the wind farm is approximately 22 MW with the permitted wind turbine generators noted above. All turbines have a hub height of 80 m above local grade.

3 INSTRUMENTATION

All instrumentation used for the immission testing followed the requirements set out in the Protocol.

3.1 Acoustic Instrumentation

The measurements were conducted using a proprietary data collection system developed by RWDI that is based on National Instruments signal processing hardware and software. A list of the acoustic equipment including serial numbers is provided in Appendix C. The data collection system is capable of recording both sound level and audio. The monitor meets the following requirements:

- Type 1 measurement system per the IEC standard 61672-1 Sound Level Meter, Part 1: Specifications;
- Class 1 microphone systems;
- The instrumentation having constant frequency response over at the 20 Hz to 20000Hz frequency range;
- The filters meeting the requirements of IEC 61620 for Class 1 filters; and
- The instrumentation being capable of measuring audio recordings continuously during the measurement campaign, at sampling rate of at least 8000 Hz.

The sound monitoring system was calibrated before the measurement campaign using a Larson-Davis CAL200 precision acoustic calibrator. The calibrator's accuracy is equal to or better than +/- 0.3 dB and is Class 1 according to IEC 60942 within the temperature range of this measurement program. Manufacturer recommendations suggest a re-calibration period of 1-2 years. RWDI policy is to calibrate all components at least every two years, with field calibrators being re-certified annually. As the components calibrated appropriately in the field, there are no concerns with measurement drift.

In addition to the 90mm diameter primary wind screen that is commonly used for long term monitoring campaigns, a secondary 500mm diameter wind screen was deployed at the monitoring location. The secondary wind screen was constructed according to MECP recommendations included in section D 2.1.4 of the 2017 Protocol. The secondary wind screen meets the specifications indicated in IEC 61400-11. Transmission loss was assumed to be negligible at the frequencies important for wind turbine sound (i.e., less than about 0.2 dB below 1000 Hz) based on manufacturer acoustic wind screen data (see attached excerpt from Larson Davis 824 manual in Appendix C). Our prior experience in testing a similar windscreen in a reverberation chamber equipped with registered sound source and flow noise yielded similar results.

3.2 Non-Acoustic Instrumentation

The sound level monitoring location was co-located with a meteorological station. The weather station consisted of a Campbell Scientific weather console using a CR300 data logging system and a R.M. Young 05103 wind anemometer. Auxiliary measurement instrumentation for temperature, relative humidity, and precipitation was also recorded at Monitor C. The weather monitoring equipment meets the requirements in the Protocol.

3.3 Calibration

All relevant acoustic equipment has calibration records that are traceable to an accredited acoustic laboratory and are within the valid calibration recertification time. All other equipment is within calibration range and recertification time. Calibration certificates are provided in Appendix C.

4 MEASUREMENT PROCEDURE

4.1 Noise Measurement Location

The microphone was located at a height of approximately 4.5 m above local ground representing a two-storey residence. This height is consistent with the dwellings located nearest the points of reception in this study and the modelled receptor height identified in the Noise Assessment Report.

The microphone was located as close to the dwelling as practically and technically feasible, or in an acoustically-equivalent location in accordance with the Protocol, as appropriate. More specifically, the microphone was located more than 5 m away from any large reflecting surface and generally away from trees or foliage that could affect the measurements. The monitoring position was also generally located such that any intervening obstacles or terrain did not shield it from line of sight to the wind turbines. The monitoring location is representative of the acoustic environment at the nearby sensitive receptor.

4.2 Wind Measurement Location

The Protocol requires the wind measurement location be in close proximity to the sound measurement location. An anemometer was mounted to the same tower as the microphone. The weather measurement location was not shielded by nearby buildings or obstructions. Wind speed and direction measurements were obtained at a height of 10 m. The monitoring station was configured to record data on a 10-second interval, the smallest interval permitted under the RAM I-Audit procedures (i.e., per section E5.5 (7)).

4.3 Acoustic Measurements

Turbines Operational

The key statistical data used in the analysis is the A-weighted 10-second energy equivalent sound level ($L_{EQ,\ 10\ sec}$ in dBA). Ten second intervals were used consistent with the meteorological measurements per the smallest interval permitted in the RAM I-Audit procedures. Audio recordings were also logged on a continual basis for sound identification purposes. Sound and weather measurement equipment were time synchronized with each other.

Turbines Parked

System configurations were not changed between the turbine operational and turbine parked conditions. The turbines were parked on different occasions to establish ambient sound levels. During parked conditions, all nearby influential turbines (i.e., turbines that contribute more than 30 dBA cumulatively to the modelled receptor sound level) were stopped so that the measured sound levels at the point of reception were representative of ambient background levels.

Appendix D includes a statement signed by an authorized representative of the East Durham wind farm confirming that all nearby influential wind turbines were not operational and that there were no modifications to the turbine blades during the audit.

Parked conditions were coordinated at several periods during the acoustical measurements to obtain the required ambient data. The parked conditions were confirmed by verifying the rotational speed (RPM) of the influential turbines was negligible. This was done based on turbine data received from NextEra.

Acoustic measurements were conducted during parked conditions between the following times:

- April 11, 2020 at 00:00 to April 11, 2020 at 05:00;
- April 19, 2020 at 22:00 to April 20, 2020 at 03:00; and
- May 4, 2020 at 00:35 to May 4, 2020 at 03:15;

4.4 Non-Acoustic Measurements

All meteorological stations were configured to continuously log the appropriate statistical parameters and output 10-second averaged data or instantaneous data where applicable. The station was configured to log the following data on 10-second intervals:

- average wind speed (m/s);
- maximum wind speed (m/s);
- minimum wind speed (m/s); and
- average wind direction (azimuth degrees).

Precipitation data was also collected at Monitor C with a data output of 10-seconds.

4.5 Number of Measurement Intervals

Turbines Operational

The Protocol requires 120 one-minute intervals (or 120 minutes total) to be measured for each integer wind speed for the data set to be considered large enough to conduct the analysis and to be able to assess compliance. However, in accordance with section E5.5 (7) of the Protocol, this audit was completed using 10-second rather than one-minute measurement intervals. As a result, 720 10-second intervals (120 minutes total) were required to be

measured for each integer wind speed. In certain circumstances, the Protocol permits consideration of a reduced number of data points with appropriate justification for RAM I-Audits per section E5.5 (5). Wind speed measurements are rounded to the nearest integer prior to sorting to a representative integer wind speed "bin".

Turbines Parked

Ambient sound measurements were completed with all applicable turbines parked. The Protocol states that 60 one-minute intervals (or 60 minutes total) are required to be measured for each integer wind speed for the data set to be considered large enough to determine the ambient sound level. However, in accordance with section E5.5 (7) of the Protocol, this audit was completed using 10-second rather than one-minute measurement intervals. As a result, 360 10-second intervals (60 minutes total) were required to be measured for each integer wind speed. Wind speed measurements are rounded to the nearest integer prior to "binning".

5 ACOUSTIC AUDIT PROCEDURE

5.1 Points of Reception

Condition E1 (2) of the REA requires measurements to be made at five different points of reception that represent the location of the greatest predicted sound levels and that are located in the direction of the prevailing winds. As discussed in the Introduction, measurement campaigns at other receptors were completed previously. This campaign focused on only one worst-case monitoring location.

The most affected points of reception were determined from the noise contours provided in the NIA report. The receptor nomenclature used below in describing each monitor location is consistent with that used in the NIA report.

A rationale summary table is included in Appendix E that takes into consideration worst case parameters such as high wind shear, highest predicted sound levels, and wind direction. Non-participating receptors from the NIA report were sorted from highest predicted sound level to lowest. Starting at the top of the list, locations were categorized based on surrounding influences, area of wind farm, and direction to prevailing winds for the current season (i.e., westerly winds). Locations that were not downwind of a nearby turbine for prevailing winds were ruled out. Permissions were then sought for the top ranked receptors in discrete areas of the wind farm. This review resulted in points of reception being ideally positioned in the locations shown in Figure 1.

For this campaign, an agreement on the worst-case location (Monitor C) was made with the MECP based on sound level impact, land owner permissions, and historical data collection issues at other sites.

Further information is provided below for Monitor C. Pictures of the monitor, the UTM coordinates and the microphone height are included in Appendix E.

Monitor C (UTM location Zone 17, 525330 m E, 4894015 m N) - monitor is positioned on the lands of non-participating receptor (R208). Though the monitor is not located directly east of turbines (dominant west wind direction), it is still in close proximity to Turbines 6, 7, 8 and 11 and this receptor was ranked relatively high in the NIA Report. The site also receives southerly winds, which makes this location downwind of Turbine 11.

5.2 Time of Measurements

The REA requires immission acoustic audit measurements be completed on two separate occasions. Though not explicitly stated in the REA, the assumed time periods are:

1. October and November; and
2. March and April.

Sound level measurements for this measurement program started on March 12, 2020. The measurement program ended with the final monitor data being acquired on May 22, 2020. The monitoring continued past the minimum six weeks as the required data was not obtained within this time period. After 10 weeks of monitoring, and upon consultation with MECP, the station's measurement campaign was ended.

6 DATA PROCESSING

6.1 Data Reduction and Filtering

The campaign used analysis based on the 2017 Protocol. The analysis and associated filtering of data is described in section 6.1.1 below. The MECP agreed that alternate approaches to analysis may be acceptable due to the lack of data shown after 10 weeks of collection and filtering under strict Protocol requirements. A potential approach was initially presented to the MECP through the memorandum titled "Monitor C Results, Spring 2020 Campaign – East Durham Wind Energy Centre – County of Grey, Ontario" and dated June 19, 2020. This memorandum, provided in Appendix J, presented the collected data and hypothesized that relaxation of the power criterion, from 85% to 75%, would significantly improve on the number of valid data points for compliance without changing the results. Ultimately, this relaxation was not enough to reach the minimum amount of points required and a 65% criterion was chosen instead. Final analysis showed that a further relaxation of the angle sector size limits, from 135 degrees to 180 degrees, was also required to reach the required minimum number of data specified in the Protocol. See below for a discussion on the methods used for each analysis case. As noted in section 6.4, figures displaying the valid data for each assessment are provided in the figures section and a table providing a compliance assessment for each case is presented as part of the tables.

6.1.1 Case 1: Power Threshold at 85% Power, 135-Degree Angle Sector

The measurement data for this scenario was filtered in accordance with the 2017 Protocol. The following filters were applied to the measured data and only the data that satisfied these conditions were used in the subsequent analysis:

1. Measurements between 22:00 and 05:00;
2. No rainfall within the hour of the measurement interval;
3. Operational data was valid, with reference to the turbine having the greatest predicted noise impact at the measurement location, only when downwind data spanned ±45 degrees from the line of sight between the turbine and measurement location, or/and with angles amended as per section E5.5 (10) of the Protocol;

- For the case of this measurement campaign, the angles were expanded per Appendix F11 of the Protocol. With reference to the turbine having the greatest predicted noise impact at the measurement location, operational data was valid only when downwind data spanned -53.5 (or 306.5) to 81.5 degrees, with due North as the reference (0 degrees). See Appendix I for an illustration of the expanded valid angle sector.

4. Operational data was valid, with reference to the turbine having the greatest predicted noise impact at the measurement location, only when sound power was greater than 90% of the maximum sound power level and turbine electrical power output was at least 85% of the maximum electrical power output. The electrical power criterion was the limiting condition as this model of turbine reaches 90% of maximum sound power prior to 85% electrical power output;
5. Parked data was valid, with reference to all impactful turbines at the measurement location, i.e., those within 1500 m of the receptor location and those defined in section D3.5.2, only when:
   - Operations curtailment of the impactful turbines was a result of a requested shutdown and not of calm weather activity. This condition was enacted to guard against collection of data while wind conditions were in a subdued state compared to regular weather patterns; and
   - Turbine RPM was confirmed to be equal to or less than 0.5 during a requested shutdown. This condition was enacted to ensure only data collected after the shutdown procedure had been fully completed were included as valid ambient measurements.
6. Data was valid only when removal of notable extraneous high-level events (e.g., wind over microphone, traffic pass-bys, human activities, etc.) was completed. Extraneous events were identified when they were heard in audio files.

Conditions during the measurement period are presented in Appendix F. The compliance assessment for this analysis is presented in Table 1.1. Figure 1.1 presents the valid operational and ambient data for this scenario.

6.1.2 Case 2: Power Threshold Reduced to 65%, 135-Degree Angle Sector

The data from Section 6.1.1 shows that there are not enough points to assess compliance per the 2017 Protocol assessment methods and filters. To introduce additional valid points into the assessment, the electrical power output criterion was relaxed to 65% of the maximum electrical power output from 85%. As noted in Section 6.1.1, Item 4, sound power and electrical power output are linked. It is not clear how the relaxation of the electrical output criterion to 65% would affect the sound power, as manufacturer's data was not available to make this comparison, but any effect would be captured in the average sound levels of the data. These average levels are discussed below. Other than the electrical power output criterion and any unknown effects on the sound power output, all other filters remained the same as described in Section 6.1.1. The resulting compliance assessment is provided in Table 1.2.

Table 1.2 shows that the average sound levels of the operational data fall by a maximum of 1 dB in wind bins 1, 2, and 7, but do not change at all in wind bins 3, 4, 5, and 6. The ambient data is not affected as the power criterion filters only the operational data. The overall effect of the shift in power criterion filter is therefore a maximum of 1 dB on the turbine-only sound levels.

Figure 1.2 presents the valid operational and ambient data using the same filtering as in Figure 1.1 but with a relaxation of the power criterion to 65%. Note that the trends appear very similar between these two graphs and there is no noticeable change in wind turbine sound patterns.

Despite the relaxation of the power criterion to 65%, Table 1.2 also shows a lack of enough points to reach the minimum described in the Protocol. Therefore, a further analysis scenario was considered below.

6.1.3 Case 3: Power Threshold Reduced to 65%, Angle Sector Expanded to 180°

On top of the relaxation of the electrical power output criteria described above, the angle criterion was relaxed to include downwind data that spanned -98.5 (or 261.5) to 81.5 degrees, for a total of 180 degrees. See Appendix I for an illustration of the expanded angle. The resulting compliance assessment is provided in Table 1.3.

As shown in Table 1.3, the average sound level values of the operational data fall by a maximum of 1 dB in wind bins 1, 5, and 7, with respect to the base Protocol filtering used in Table 1.1, but do not change at all in wind bins 2, 3, 4, and 6. The ambient data is not affected as the power criterion and angle sector filters are applicable only to the operational data. The overall effect of the shift in power criterion filter is therefore a maximum of 1 dB on the turbine-only sound levels.

Figure 1.3 presents the valid operational and ambient data using the same filtering as in Figure 1.1 but with a relaxation of the power criterion from 85% to 65% and an increase in the angle sector from 135 to 180 degrees. The trends are very similar and there is no noticeable change in wind turbine sound patterns. All three figures (Figures 1.1 to 1.3) maintain a consistent pattern indicating that the power and angle filters do not affect the overall behaviour of the collected valid data.

Table 1.3 shows that the minimum amount of data to assess compliance per the Protocol is obtained for the 2 and 3 m/s wind bins. The other wind bins do not contain enough data to reach the minimum. Using these wind bins to assess compliance shows worst-case turbine-only levels of 39 dBA. Per the above, the average operational sound levels are reduced by a maximum of 1 dB across all wind speed bins in spite of these data filter adjustments. Hence, applying this 1 dB change to the turbine-only values would still result in compliance with the 40 dBA limit (i.e., 39 dBA + 1 dB = 40 dBA). For the 2 and 3 m/s wind speeds, this approach is conservative since there is no change in the average operational levels at these wind bins.

Based on the above, the power criterion relaxed to 65% and the angle sector expanded to 180 degrees results in a useful data set to achieve the minimum number of data points for the 2 and 3 m/s wind bins. The turbine-only sound levels are compliant with the applicable limit even when the worst-case change in average sound levels across all wind speeds is considered.

6.2 Effects of Insects and Fauna

The audio recordings were reviewed for sounds from insects and fauna. Sounds of frogs were audible at times during the sampling program. One third-octave spectral analysis of the frog sound determined that it was limited to a couple octave bands and varied from 1250 Hz to 5000 Hz, which are frequencies above wind turbine sound contributions. The respective contribution in these bands was removed in the 1/3 octave spectra by linearly interpolating the values of the affected bands from the nearest non-contaminated bands. Figure 4 presents an example of the noise removal methodology utilized in this audit.

6.3 Data Analysis

Following the guidance of the Protocol, the "binning method" is used to analyze the sound level data. All sound level data that correlates to wind speeds between 1 to 7 m/s (per RAM I-Audit procedure) are grouped into integer wind speed bins. Data within each bin is +/- 0.5 m/s of the specified integer wind speed. Data within these bins are subsequently filtered and used for further analysis as detailed in Section 6.4.

6.4 Determination of Turbine Sound Level

As described in the Protocol, the measured data obtained for both the total sound (turbines operational) and ambient sound (turbines parked) are first reduced and filtered as described in Section 6.1. The binned data are then averaged. The resulting sound levels generated by the turbines only are the logarithmic subtraction of the average measured total sound minus the average measured ambient sound at each wind speed bin.

The resulting valid data for each of the three cases analyzed is plotted in Figure 2.1 to 2.3 for Monitor C. The figures show plots of valid sound level data versus wind speed for the three cases described in Section 6.1. Each plot shows the measured total sound and the measured ambient sound. Wind rose plots for Monitor C are presented in Figures 3.1 – 3.3. All data are presented in Figure 3.1. In addition, the operational and ambient only data is plotted in Figure 3.2 and Figure 3.3, respectively. All wind rose figures present only nighttime data, between 22:00 and 05:00, with the precipitation filter applied. For the operational wind plot in Figure 3.2, the 65% power criterion is also applied. For the ambient wind plot in Figure 3.3, only the shutdown periods are shown. Valid data can be found in Appendix G for the case presented in section 6.1.3 and ultimately used for an assessment of compliance for Monitor C. A summary of the final compliance analysis based on the valid data is provided in Tables 1.1 to 1.3 for the three cases presented in Section 6.1.

6.5 Tonal Assessment

Tonality was assessed per Section D3.8.3 of the Protocol and determined to not be present (i.e. not audible and no tonal audibility in manufacturer's data). No tones were detected from onsite observations and from a review of audio recordings. However, tonality was identified as a concern based on an emission test for this project, thus further tonality analysis was conducted at the receptor. A detailed tonality assessment was conducted on the collected Monitor C immission data per the ISO/PAS 20065 (2016) method:

- Section D3.8.3 of the Protocol requires that at least five 1-minute intervals are used. As the data is in 10-second format, 30 audio files (five minutes * six 10-second files each = 30) corresponding to the closest integer wind-bin values were used for the assessment of tonality.
- Section 4.2 of the Standard limits the permissible line spacing to a range of 1.9 Hz to 4.0 Hz, so a frequency resolution of 2.0 Hz was chosen.
- The sampling rate used was 51200 Hz, resulting in a required audio file of length 0.5 seconds to output a frequency resolution of 2.0 Hz.
- Formula (1) of Section 4.3 of the Standard was used to merge the 0.5-second-long spectra together such that an averaging time of 3.0 seconds was achieved, resulting in twenty 3-second merged spectra per 1-minute interval.
- These twenty spectra were then separately analyzed for tones per the Standard.
- Formula (20) in Section 5.3.9 of the Standard was used to calculate the mean tonal audibility associated with each minute of data. This audibility was then reported for each minute.
- As per ISO 1996-2:2017, no tonal penalty is applied to the measured levels if tonal audibility values were below 0 dB.

A summary of the results is presented in Appendix H, along with a list of data points used in the analysis. No tonal audibility values of concern were found for any of the wind bins; hence no tonality adjustments were applied to the results.

7 ASSESSMENT OF COMPLIANCE

The facility is required to meet the sound level limits identified in the REA. For a RAM I-Audit, the Protocol outlines the data requirements to show compliance. A facility is deemed to be in compliance if the resulting turbine sound levels do not exceed the sound level limit at each integer wind speed.

Section E 5.5 (1) of the Protocol requires a minimum number of measurement points for either three of the wind speed bins between 1 and 7 m/s, or two of the wind speed bins between 1 and 4 m/s. The minimum number of measurement data points at Monitor C for the parked conditions was obtained for the 2 and 3 m/s wind speed bins using adjusted filters for turbine power and wind angle.

The results of the study indicate that Monitor C is in compliance with the applicable sound level limits.

Therefore, all necessary measurement campaigns for the East Durham Wind Energy Centre have been completed and the facility is compliant.

TABLES

Table 1.1 - Summary of Sound Levels (85% Power and 135 Degrees) - Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Wind Speed	Average L_{EQ} for Total Sound Condition	Total # of Valid 10-Second Intervals for Total Sound	Standard Deviation of Valid Intervals for Total Sound	Average L_{EQ} for Ambient Sound Condition	Total # of Valid 10-Second Intervals for Ambient Sound Condition	Standard Deviation of Valid Intervals for Ambient Sound Condition	Turbine Only Sound Levels	REA Sound Level Limits	Over REA Limits?
(m/s)	(dBA)		(dBA)	(dBA)		(dBA)	(dBA)	(dBA)	(Yes/No)
1	40	4	0	31	595	1	N/a[2]	40	N/a[3]
2	40	43	1	32	1235	1	N/a[2]	40	N/a[3]
3	40	128	1	32	416	1	N/a[2]	40	N/a[3]
4	41	84	1	34	33	2	N/a[2]	40	N/a[3]
5	43	48	1	N/a[1]	0	N/a[1]	N/a[1]	40	N/a[3]
6	45	41	1	N/a[1]	0	N/a[1]	N/a[1]	40	N/a[3]
7	48	13	2	N/a[1]	0	N/a[1]	N/a[1]	43	N/a[3]

Notes:

[1] - No valid data points available to calculate value.

[2] - Insufficient valid data points available to calculate value.

[3] - Insufficient valid data points to make a statement on compliance based on the 2017 Compliance Protocol for Wind Turbine Noise.

Table 1.2 - Summary of Sound Levels (65% Power and 135 Degrees) - Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Wind Speed	Average L_{EQ} for Total Sound Condition	Total # of Valid 10-Second Intervals for Total Sound	Standard Deviation of Valid Intervals for Total Sound	Average L_{EQ} for Ambient Sound Condition	Total # of Valid 10-Second Intervals for Ambient Sound Condition	Standard Deviation of Valid Intervals for Ambient Sound Condition	Turbine Only Sound Levels	REA Sound Level Limits	Over REA Limits?
(m/s)	(dBA)		(dBA)	(dBA)		(dBA)	(dBA)	(dBA)	(Yes/No)
1	39	87	1	31	595	1	N/a[2]	40	N/a[3]
2	39	689	1	32	1235	1	N/a[2]	40	N/a[3]
3	40	672	1	32	416	1	N/a[2]	40	N/a[3]
4	41	302	1	34	33	2	N/a[2]	40	N/a[3]
5	43	170	1	N/a[1]	0	N/a[1]	N/a[1]	40	N/a[3]
6	45	69	1	N/a[1]	0	N/a[1]	N/a[1]	40	N/a[3]
7	47	20	2	N/a[1]	0	N/a[1]	N/a[1]	43	N/a[3]

Notes:

[1] - No valid data points available to calculate value.

[2] - Insufficient valid data points available to calculate value.

[3] - Insufficient valid data points to make a statement on compliance based on the 2017 Compliance Protocol for Wind Turbine Noise.

Table 1.3 - Summary of Sound Levels (65% Power and 180 Degrees) - Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Wind Speed	Average L_{EQ} for Total Sound Condition	Total # of Valid 10-Second Intervals for Total Sound	Standard Deviation of Valid Intervals for Total Sound	Average L_{EQ} for Ambient Sound Condition	Total # of Valid 10-Second Intervals for Ambient Sound Condition	Standard Deviation of Valid Intervals for Ambient Sound Condition	Turbine Only Sound Levels	REA Sound Level Limits	Over REA Limits?
(m/s)	(dBA)		(dBA)	(dBA)		(dBA)	(dBA)	(dBA)	(Yes/No)
1	39	87	1	31	595	1	N/a[2]	40	N/a[3]
2	40	720	1	32	1235	1	39	40	No
3	40	765	1	32	416	1	39	40	No
4	41	481	1	34	33	2	N/a[2]	40	N/a[3]
5	44	842	1	N/a[1]	0	N/a[1]	N/a[1]	40	N/a[3]
6	45	834	1	N/a[1]	0	N/a[1]	N/a[1]	40	N/a[3]
7	47	544	1	N/a[1]	0	N/a[1]	N/a[1]	43	N/a[3]

Notes:

[1] - No valid data points available to calculate value.

[2] - Insufficient valid data points available to calculate value.

[3] - Insufficient valid data points to make a statement on compliance based on the 2017 Compliance Protocol for Wind Turbine Noise.

FIGURES

522000
525000
528000
4899000
4896000
4893000
4890000
Irish Lake
Monitor E
ED15
ED14
ED2
Monitor D
ED1
ED7
ED8
ED6
ED3
ED4
ED5
Monitor C
Monitor A
Transformer Substation
Monitor B
ED16
ED11
ED17
Topcliff
Glen
East Durham Built Turbine
Transformer Substation
Monitoring Station
Major Road
Local Road
Watercourses
Waterbodies
Map Notes:
Projection: NAD 1983 UTM Zone 17N.
Geopolitical Boundaries: Government of Canada, Statistics Canada Census, 2011, Esri, 2013; Transportation, Land Cover & Hydrology: © Natural Resources Canada. All rights reserved., Esri, 2013.
0 0.5 1 1.5 km
Key Map
Barrie
Vaughan
0 25 50 75 km

East Durham Wind Farm - Noise Monitoring Locations

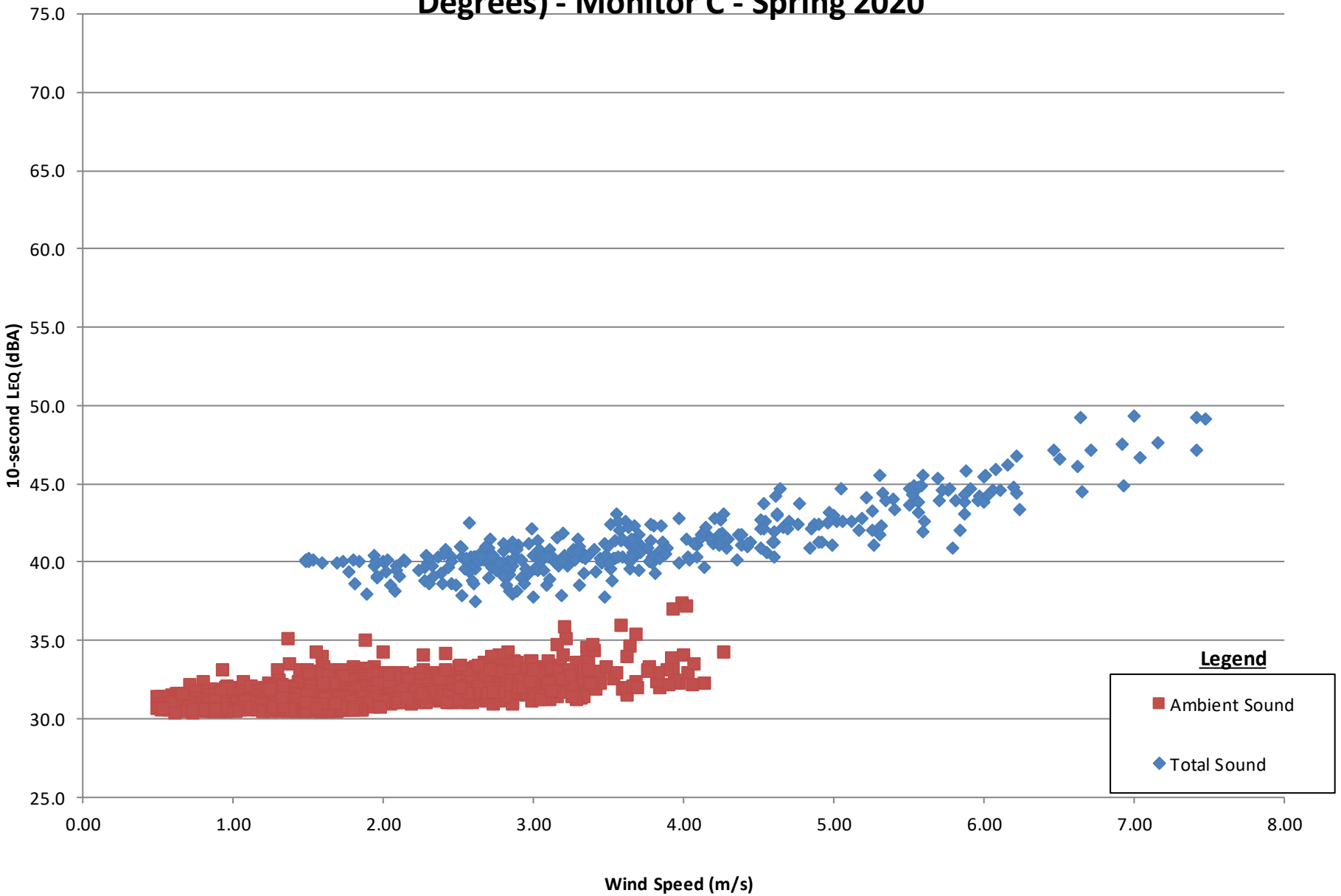
East Durham Wind Energy Centre - Durham County, Ontario

True North

Project #1502606

Drawn by:	DJH	Figure:	1
Approx. Scale:	1:30,000		
Date Revised:	Aug. 10, 2016		

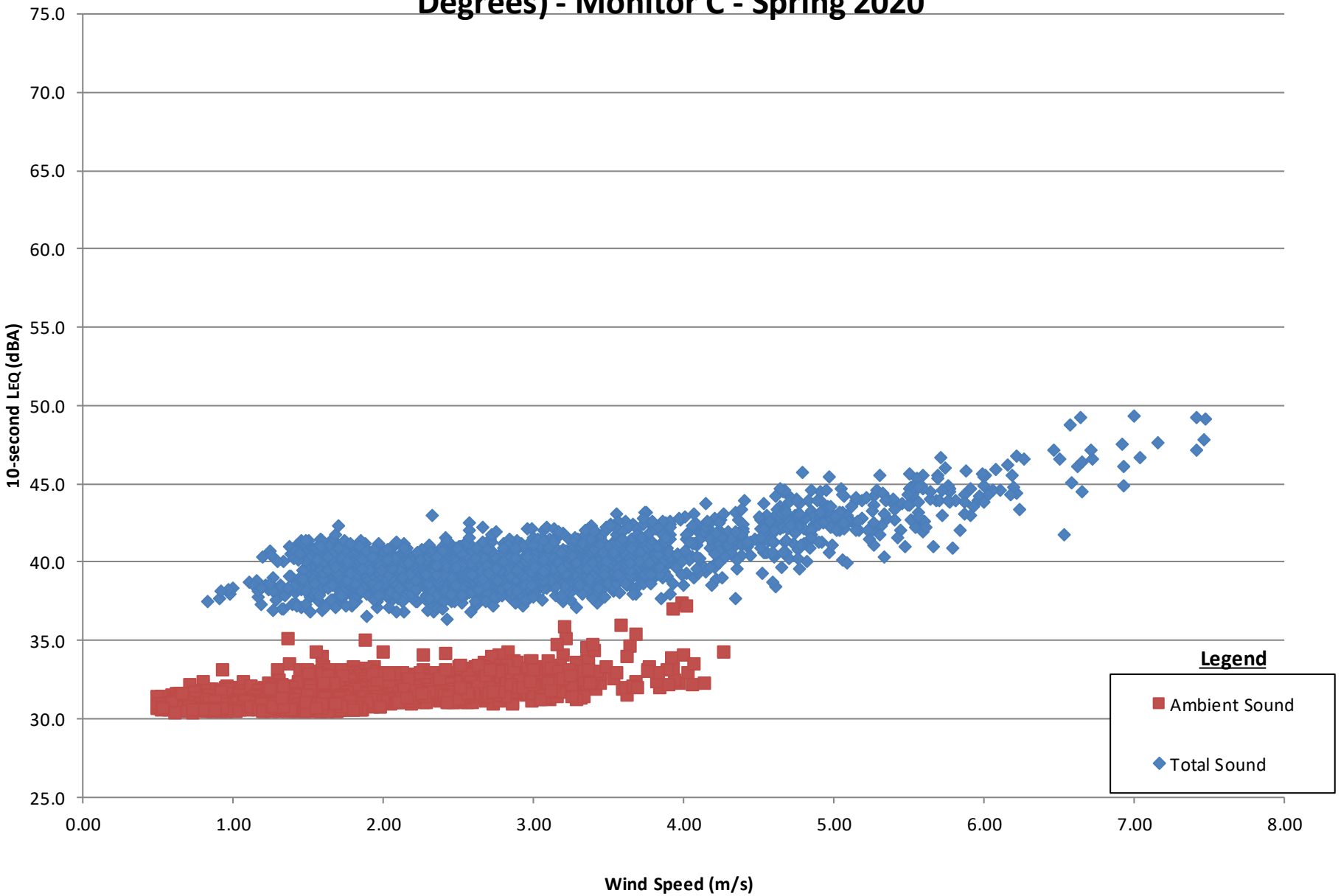
Figure 2.1 - Valid Total 10-Second Sound Data (85% Power and 135 Degrees) - Monitor C - Spring 2020



Valid Total 10-Second Sound Data – Monitor C (85% Power and 135 Degrees)
Spring 2020
East Durham Wind Farm, County of Grey, Ontario Project #1502606

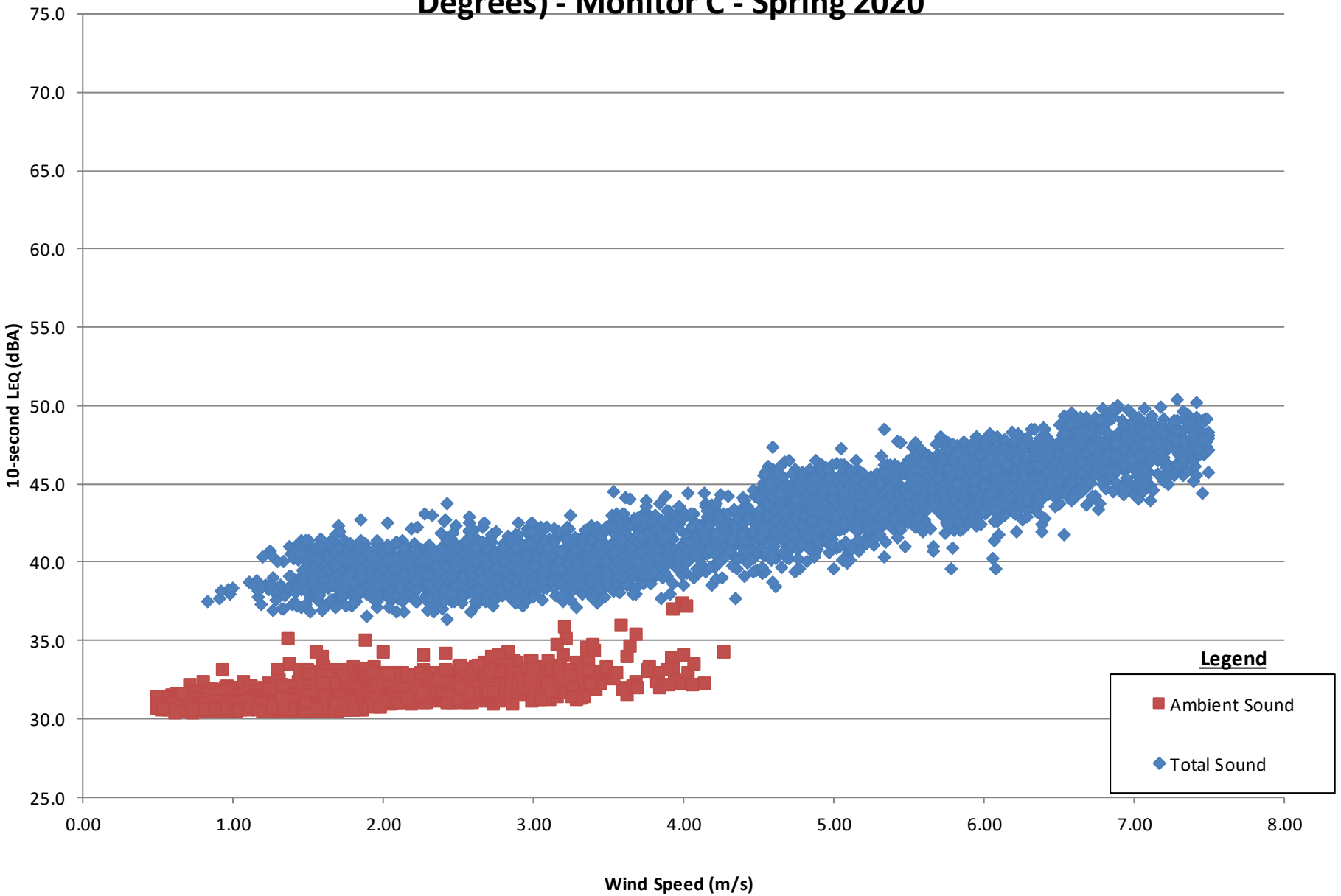
Drawn by: LRC | Figure: 2.1
Date: August 21, 2020

Figure 2.2 - Valid Total 10-Second Sound Data (65% Power and 135 Degrees) - Monitor C - Spring 2020

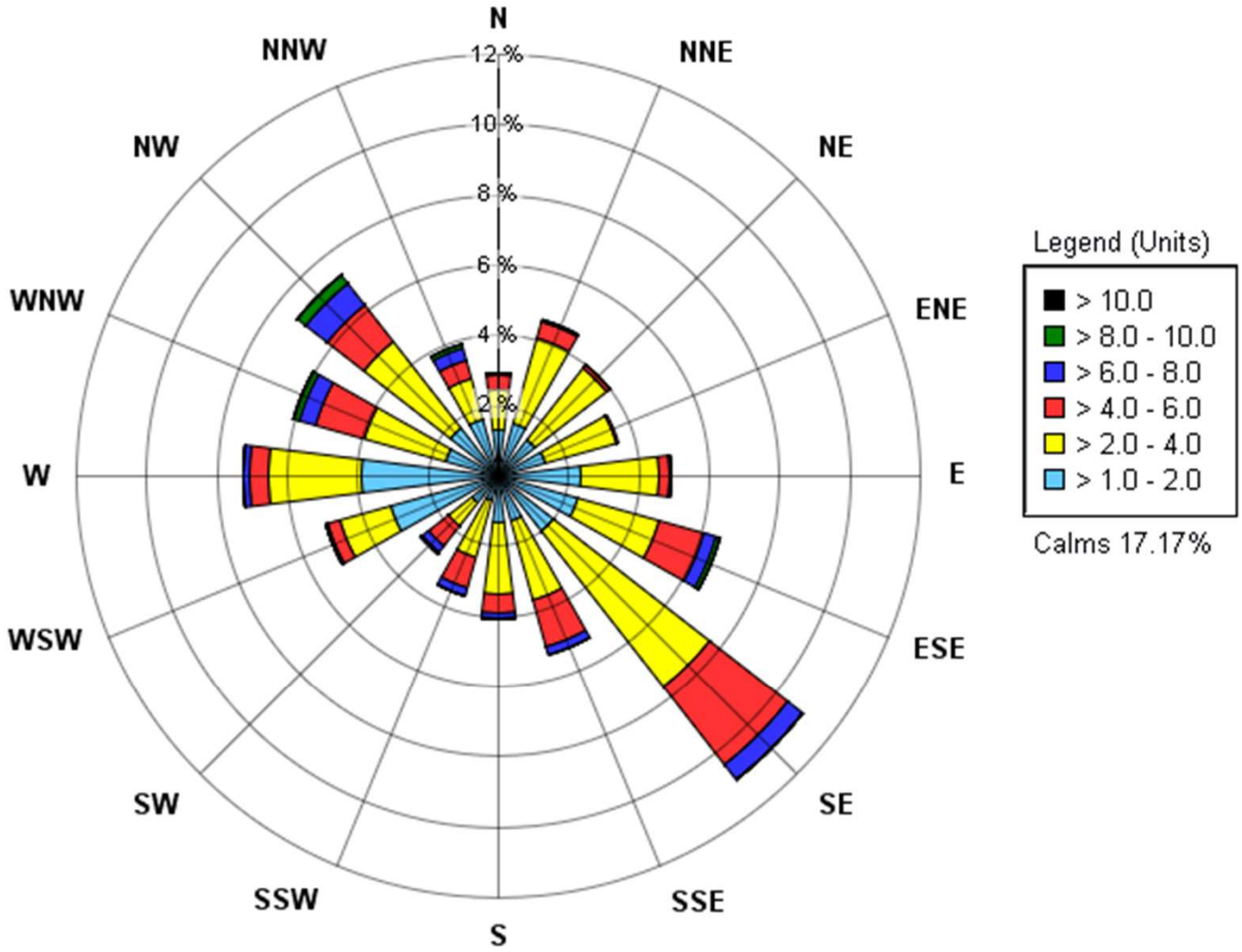


Valid Total 10-Second Sound Data – Monitor C (65% Power and 135 Degrees) **Spring 2020** East Durham Wind Farm, County of Grey, Ontario Project #1502606	Drawn by: LRC	Figure: 2.2	
	Date: August 21, 2020		

Figure 2.3 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees) - Monitor C - Spring 2020



Valid Total 10-Second Sound Data – Monitor C (65% Power and 180 Degrees) **Spring 2020** East Durham Wind Farm, County of Grey, Ontario Project #1502606	Drawn by: LRC	Figure: 2.3	RWDI
	Date: August 21, 2020		

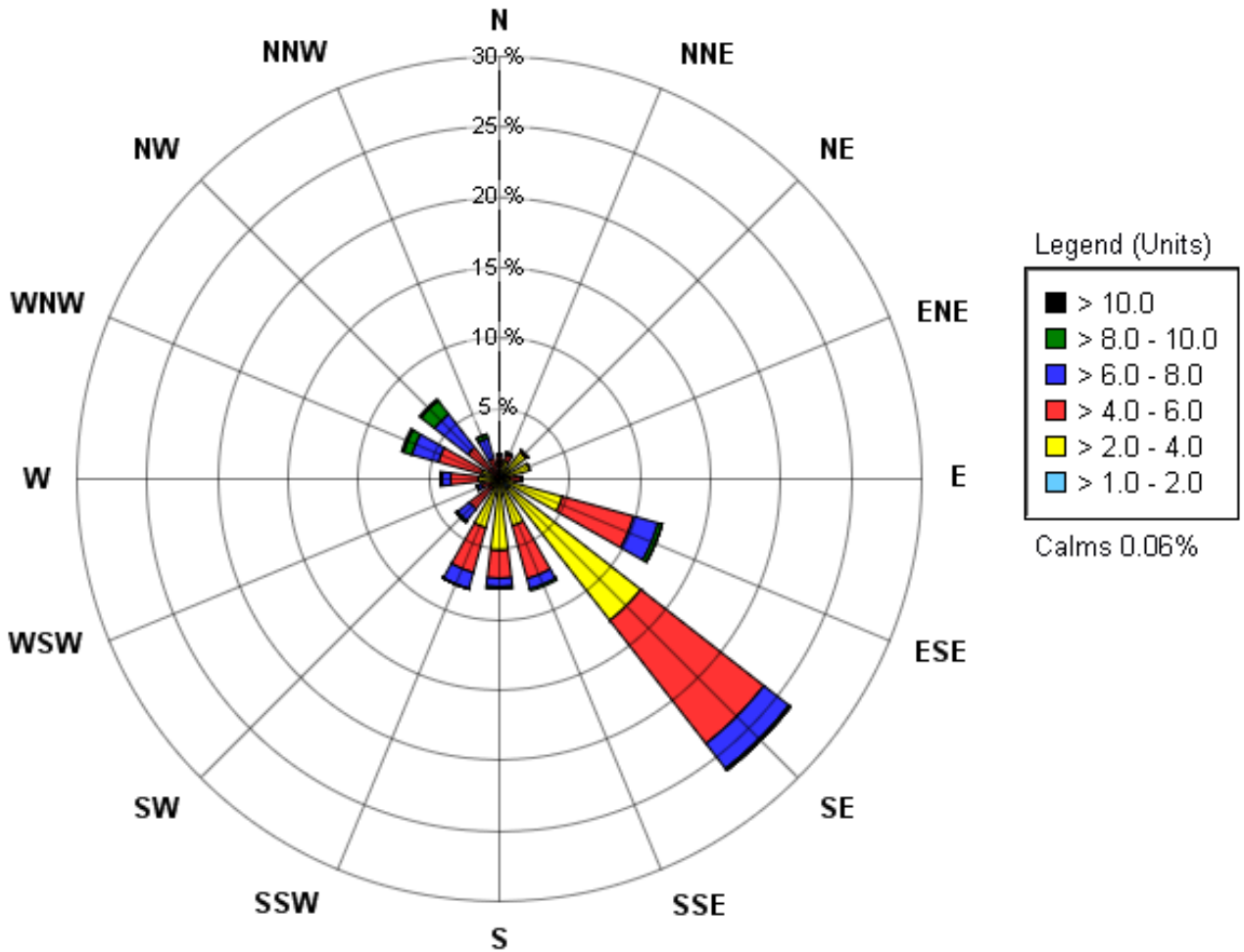


Wind Rose Plot – Monitor C – Night Only, All Data
No precipitation
March 12, 2020 to May 22, 2020

East Durham Wind Farm, County of Grey, Ontario Project #1502606

Drawn by: ACCL | Figure: 3.1

Date: August 21, 2020

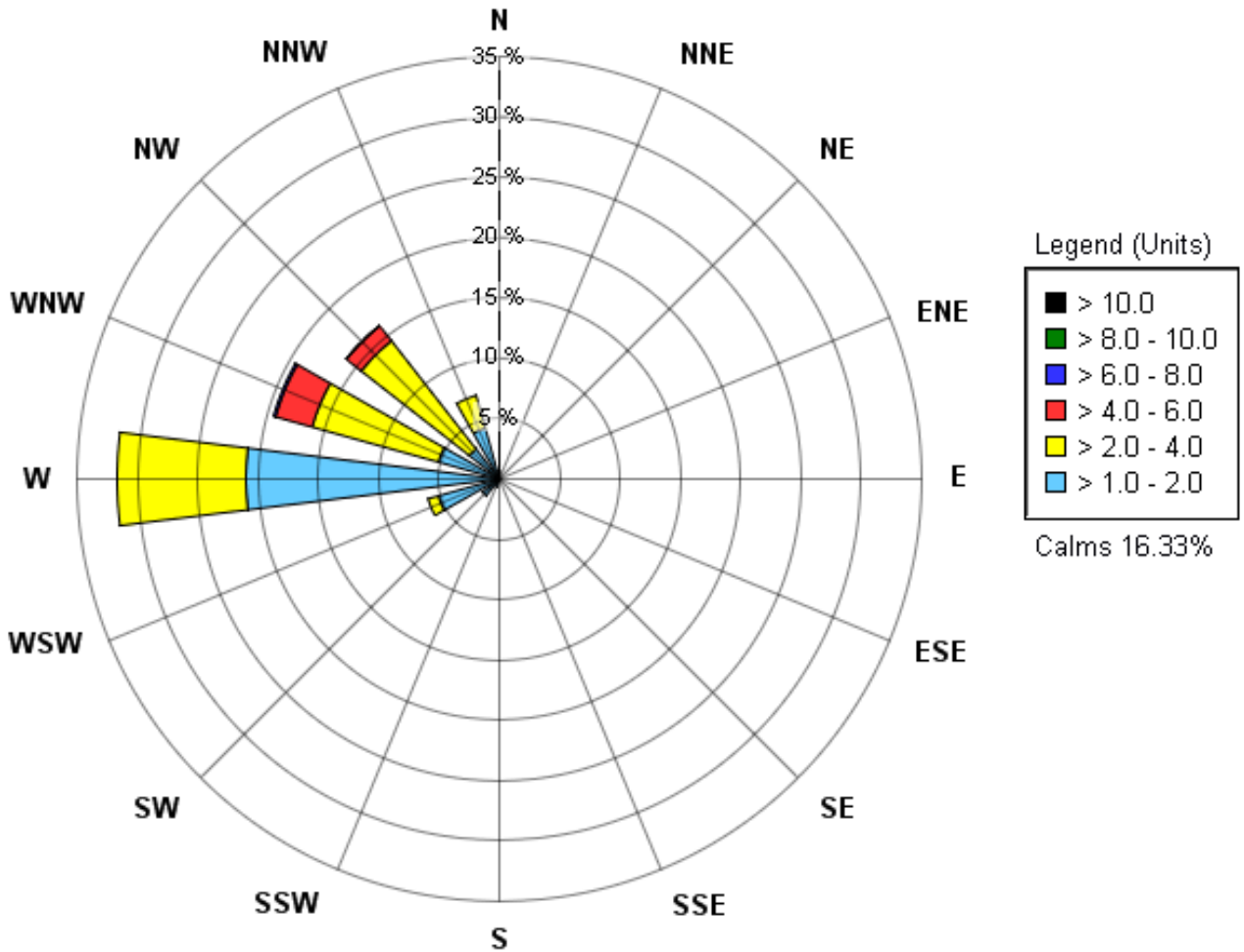


Wind Rose Plot – Monitor C – Night Only, Operational
>65% max power, no precipitation
March 12, 2020 to May 22, 2020

East Durham Wind Farm, County of Grey, Ontario Project #1502606

Drawn by: ACCL | Figure: 3.2

Date: August 21, 2020

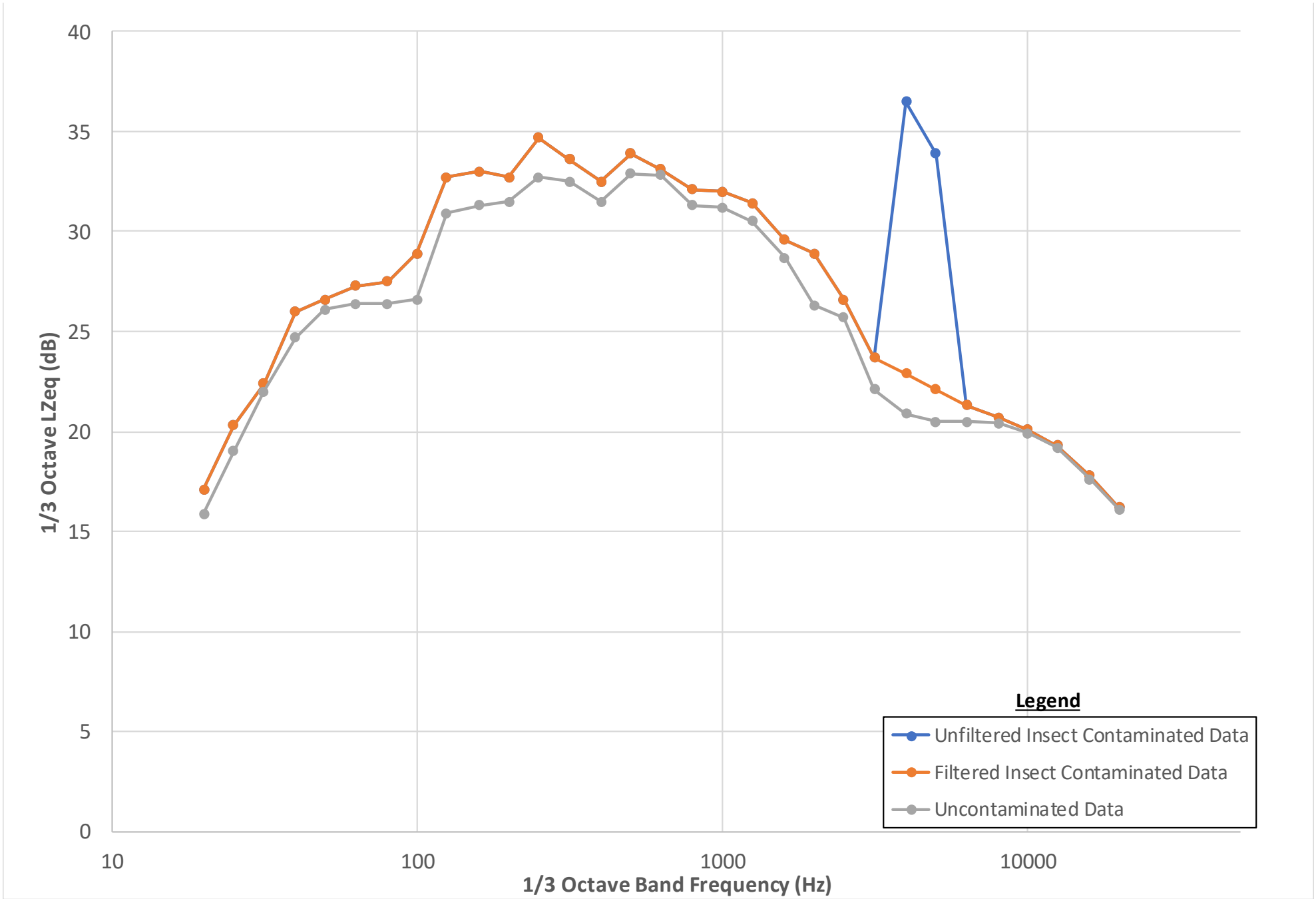


Wind Rose Plot – Monitor C – Night Only, Parked
No precipitation, requested parked conditions
March 12, 2020 to May 22, 2020

East Durham Wind Farm, County of Grey, Ontario Project #1502606

Drawn by: ACCL | Figure: 3.3

Date: August 21, 2020



Sample of Insect Data Filtering for Operational Data
Spring 2020

East Durham Wind Farm, County of Grey, Ontario

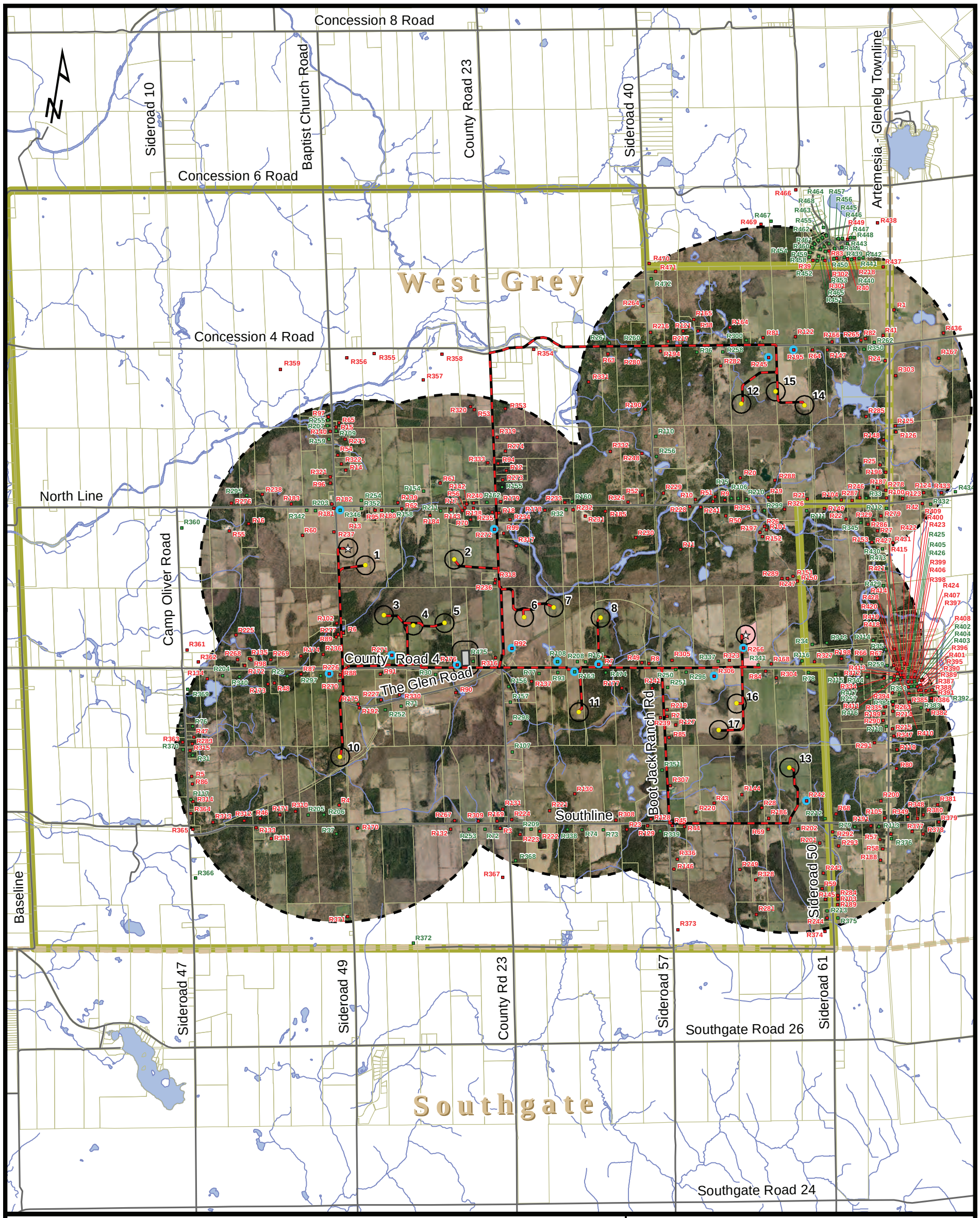
Project # 1502606

Drawn by: LRC

Figure: 4

Date: August 21, 2020

APPENDIX A
SITE INFORMATION



Legend

- Receptor
- Vacant Lot Receptor
- Participating Receptor
- Proposed Wind Turbine (Sept 12, 2012)
- Proposed Met Tower
- Town / Village
- Roadway
- Collection Line
- 120 m Buffer Distance / Project Location
- 2 km Distance from Project Location
- Proposed Substation
- Laydown Area
- Parcel
- Municipal Lower Tier
- Project Boundary

NEXTera ENERGY RESOURCES

GENIVAR

Scale:

0 500 1,000 2,000 3,000 m

1:50,000

Project:

EAST DURHAM
WIND ENERGY CENTRE

Title:

East Durham
Site Plan

Project No:.	Date:
MA-111-15446-MA	November 2013
Revision No:.	Figure No:.
1	2-1

APPENDIX B

RENEWABLE ENERGY APPROVAL

Ontario

Ministry of the Environment
Ministère de l'Environnement

RENEWABLE ENERGY APPROVAL

NUMBER 7812-9E4QSC
Issue Date: January 20, 2014

East Durham Wind, Inc.
390 Bay Street, Suite 1720
Toronto, Ontario
M5H 2Y2

Project Location: East Durham Wind Energy Centre
south of Concession 6, west of Sideroad 40,
Artemesia-Glenelg Townline and Sideroad 50, east of
Baseline Road and north of West-Grey Southgate
municipal boundary
Municipality of West Grey, County of Grey

You have applied in accordance with Section 47.4 of the Environmental Protection Act for approval to engage in a renewable energy project in respect of a Class 4 wind facility consisting of the following:

- the construction, installation, operation, use and retiring of a Class 4 wind facility with a total name plate capacity of 23 megawatts.

For the purpose of this renewable energy approval, the following definitions apply:

1. "Acoustic Assessment Report" means the report included in the Application and entitled "East Durham Wind Energy Centre Final Noise Assessment Report," dated December 10, 2013, prepared by Genivar Inc. and signed by Bhuwan Prasad and Patricia Becker;

2. "Acoustic Audit - Emission" means an investigative procedure that is compliant with the IEC Standard 61400-11 and consisting of measurements and/or acoustic modelling of noise emissions produced by wind turbine generators, assessed to determine compliance with the manufacturer's noise (acoustic) equipment specifications and emission data of the wind turbine generators, included in the Acoustic Assessment Report;

3. "Acoustic Audit - Immission" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Equipment, assessed to determine compliance with the Noise Performance Limits set out in this Approval;

4. "Acoustic Audit Report-Emission" means a report presenting the results of the Acoustic Audit - Emission;

5. "Acoustic Audit Report-Immission" means a report presenting the results of the Acoustic Audit - Immission;

6. "Acoustic Audit Report - Transformer Substation" means a report presenting the results of the Acoustic Audit - Transformer Substation.

7. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is knowledgeable about Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from wind facilities;

8. "Act" means the *Environmental Protection Act* , R.S.O 1990, c.E.19, as amended;

9. "Adverse Effect" has the same meaning as in the Act;

10. "Application" means the application for a Renewable Energy Approval dated January 23, 2013, and signed by F. Allen Wiley, East Durham Wind, Inc., and all supporting documentation submitted with the application, including amended documentation submitted up to the date this Approval is issued;

11. "Approval" means this Renewable Energy Approval issued in accordance with Section 47.4 of the Act, including any schedules to it;

12. "A-weighting" means the frequency weighting characteristic as specified in the International Electrotechnical Commission (IEC) Standard 61672, and intended to approximate the relative sensitivity of the normal human ear to different frequencies (pitches) of sound. It is denoted as "A";

13. "A-weighted Sound Pressure Level" means the Sound Pressure Level modified by application of an A-weighting network. It is measured in decibels, A-weighted, and denoted "dBA";

14. CAN/CSA Standard C61400-11-07, "Wind Turbine Generator Systems – Part 11: Acoustic Noise Measurement Techniques", dated October 2007;

15. "Class 1 Area" means an area with an acoustical environment typical of a major population centre, where the background sound level is dominated by the activities of people, usually road traffic, often referred to as "urban hum";

16. "Class 2 Area" means an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Areas:

1. sound levels characteristic of Class 1 during daytime (07:00 to 19:00 or to 23:00 hours);

2. low evening and night background sound level defined by natural environment and infrequent human activity starting as early as 19:00 hours (19:00 or 23:00 to 07:00 hours);

3. no clearly audible sound from stationary sources other than from those under impact assessment.

17. "Class 3 Area" means a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as the following:

    1. a small community with less than 1000 population;

    2. agricultural area;

    3. a rural recreational area such as a cottage or a resort area; or

    4. a wilderness area.

18. "Company" means East Durham Wind, Inc. and includes its successors and assignees;

19. "Compliance Protocol for Wind Turbine Noise" means the Ministry document entitled, Compliance Protocol for Wind Turbine Noise, Guideline for Acoustic Assessment and Measurement, PIBS# 8540e;

20. "Decibel" means a dimensionless measure of Sound Level or Sound Pressure Level, denoted as dB;

21. "Director" means a person appointed in writing by the Minister of the Environment pursuant to section 5 of the Act as a Director for the purposes of section 47.5 of the Act;

22. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Facility is geographically located;

23. "Equipment" means the wind turbine generators and a transformer substation, identified in this Approval and as further described in the Application, to the extent approved by this Approval;

24. "Equivalent Sound Level" is the value of the constant sound level which would result in exposure to the same total A-weighted energy as would the specified time-varying sound, if the constant sound level persisted over an equal time interval. It is denoted L_{eq} and is measured in dB A-weighting (dBA);

25. "Facility" means the renewable energy generation facility, including the Equipment, as described in this Approval and as further described in the Application, to the extent approved by this Approval;

26. "Independent Acoustical Consultant" means an Acoustical Consultant who is not representing the Company and was not involved in preparing the Acoustic Assessment Report. The Independent Acoustical Consultant shall not be retained by the Acoustical Consultant involved in the noise impact assessment;

27. "Ministry" means the ministry of the government of Ontario responsible for the Act and includes all officials, employees or other persons acting on its behalf;

28. "Noise Guidelines for Wind Farms" means the Ministry document entitled, "Noise Guidelines for Wind Farms - Interpretation for Applying MOE NPC Publications to Wind Power Generation Facilities", dated October 2008;

29. "Noise Receptor" has the same meaning as in O. Reg. 359/09;

30. "O. Reg. 359/09" means Ontario Regulation 359/09 "Renewable Energy Approvals under Part V.0.1 of the Act" made under the Act;

31. "Point of Reception" has the same meaning as in the Noise Guidelines for Wind Farms and is subject to the same qualifications described in that document;

32. "Publication NPC-103" means Publication NPC-103, Procedures , August 1978.

33. "Publication NPC-233" means Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October 1995;

34. "Sound Level" means the A-weighted Sound Pressure Level;

35. "Sound Level Limit" is the limiting value described in terms of the one hour A-weighted Equivalent Sound Level L_{eq};

36. "Sound Power Level" means ten times the logarithm to the base of 10 of the ratio of the sound power (Watts) of a noise source to standard reference power of 10^{-12} Watts;

37. "Sound Pressure" means the instantaneous difference between the actual pressure and the average or barometric pressure at a given location. The unit of measurement is the micro pascal (μPa);

38. "Sound Pressure Level" means twenty times the logarithm to the base 10 of the ratio of the effective pressure (μPa) of a sound to the reference sound pressure of 20 μPa;

39. "UTM" means Universal Transverse Mercator coordinate system.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

A - GENERAL

A1. The Company shall construct, install, use, operate, maintain and retire the Facility in accordance with the terms and conditions of this Approval and the Application and in accordance with the following schedules attached hereto:

Schedule A - Facility Description
Schedule B - Coordinates of the Equipment and Noise Specifications
Schedule C - Noise Control Measures

A2. Where there is a conflict between a provision of this Approval and any document submitted by the Company, the conditions in this Approval shall take precedence. Where there is a conflict between one or more of the documents submitted by the Company, the document bearing the most recent date shall take precedence.

A3. The Company shall ensure a copy of this Approval is:

(1) accessible, at all times, by Company staff operating the Facility and;

(2) submitted to the clerk of each local municipality and upper-tier municipality in which the Facility is situated.

A4. If the Company has a publicly accessible website, the Company shall ensure that the Approval and the Application are posted on the Company's publicly accessible website within five (5) business days of receiving this Approval.

A5. The Company shall, at least six (6) months prior to the anticipated retirement date of the entire Facility, or part of the Facility, review its Decommissioning Plan Report to ensure that it is still accurate. If the Company determines that the Facility cannot be decommissioned in accordance with the Decommissioning Plan Report, the Company shall provide the Director and District Manager a written description of plans for the decommissioning of the Facility.

A6. The Facility shall be retired in accordance with the Decommissioning Plan Report and any directions provided by the Director or District Manager.

A7. The Company shall provide the District Manager and the Director at least ten (10) days written notice of the following:

(1) the commencement of any construction or installation activities at the project location; and

(2) the commencement of the operation of the Facility.

A8. As described in Schedule A of the Approval the Company shall:

(1) not construct or operate more than fourteen (14) out of the sixteen (16) wind turbine generators and the one (1) transformer substation, as specified in Schedules A and B of the Approval;

(2) construct and operate up to one of the General Electric model GE 1.39-100 LNTE wind turbine generator, with power rating equal to 1.39 MW, and a hub height of 80 m, at the location with UTM coordinates for the wind turbine generator designated as source ID No. T2; and

(3) construct and operate up to one of the General Electric model GE 1.34-100 LNTE wind turbine generator, with power rating equal to 1.34 MW, and a hub height of 80 m, at the location with UTM coordinates for the wind turbine generator designated as source ID No. T6.

B - EXPIRY OF APPROVAL

B1. Construction and installation of the Facility must be completed within three (3) years of the later of:

(1) the date this Approval is issued; or

(2) if there is a hearing or other litigation in respect of the issuance of this Approval, the date that this hearing or litigation is disposed of, including all appeals.

B2. This Approval ceases to apply in respect of any portion of the Facility not constructed or installed before the later of the dates identified in Condition B1.

C - NOISE PERFORMANCE LIMITS

C1. The Company shall ensure that:

(1) the Sound Levels from the Equipment, at the Points of Reception identified in the Acoustic Assessment Report, comply with the Sound Level Limits set in the Noise Guidelines for Wind Farms, as applicable, and specifically as stated in the table below:

Wind Speed (m/s) at 10 m height	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Sound Level Limits, dBA	40.0	40.0	40.0	43.0	45.0	49.0	51.0

(2) the Equipment is constructed and installed at either of the following locations:

a) at the locations identified in Schedule B of this Approval; or

b) at a location that does not vary by more than 10 metres from the locations identified in Schedule B of this Approval and provided that,

i) the Equipment will comply with Condition C1 (1); and

ii) all setback prohibitions established under O. Reg. 359/09 are complied with.

(3) the Equipment complies with the noise specifications set out in Schedule B of this Approval.

C2. If the Company determines that some or all of the Equipment cannot be constructed in accordance with Condition C1 (2), prior to the construction and installation of the Equipment in question, the Company shall apply to the Director for an amendment to the terms and conditions of the Approval.

C3. Within three (3) months of the completion of the construction of the Facility, the Company shall submit to the Director a written confirmation signed by an individual who has the authority to bind the Company that the UTM coordinates of the "as constructed" Equipment comply with the requirements of Condition C1 (2).

D – CONFIRMATION OF VACANT LOT NOISE RECEPTORS

D1. The one hundred thirteen (113) locations identified in the Table 9.9 entitled "Combined Wind Turbine & Transformer Noise Impact Summary", of the East Durham Wind Energy Centre Final Noise Assessment Report, as the Non-Participating Vacant Lots with ID numbers 29-37, 71-79, 93, 106-107, 109-118, 154-162, 203-213, 250-262, 295-300, 337-345, 350-352, 376, 383-384, 392-393, 402-405, 416-417, 425, 439-440, 450-456, 458-462, 465 and 472-475, are specified as Noise Receptors for the purposes of subsection 54 (1.1) of O. Reg. 359/09.

E - ACOUSTIC AUDIT - IMMISSION

E1. The Company shall carry out an Acoustic Audit - Immission of the Sound Levels produced by the operation of the Equipment in accordance with the following:

(1) the acoustic audit measurements shall be undertaken in accordance with Part D of the Compliance Protocol for Wind Turbine Noise;

(2) the acoustic audit measurements shall be performed by an Independent Acoustical Consultant on two (2) separate occasions at the five (5) different Points of Reception.

(3) the Points of Reception shall be selected using the following criteria, subject to the constraints imposed by the location of the Points of Reception with respect to the location of the Equipment:

(a) the selected Point(s) of Reception should represent the location of the greatest predicted noise impacts, i.e., the highest predicted Sound Levels; and

(b) the selected Point(s) of Reception should be located in the direction of prevailing winds from the Facility.

E2. The Company shall submit to the District Manager and the Director an Acoustic Audit Report - Immission, prepared by an Independent Acoustical Consultant, at the following points in time:

(1) no later than twelve (12) months after the commencement of the operation of the Facility for the first of the two (2) acoustic audit measurements at the five (5) Points of Reception; and

(2) no later than eighteen (18) months after the commencement of the operation of the Facility for the second of the two (2) acoustic audit measurements at the five (5) Points of Reception.

E3. The Company shall carry out an Acoustic Audit - Transformer Substation and shall submit to the District Manager and the Director an Acoustic Audit Report – Transformer Substation prepared by an Independent Acoustical Consultant no later than six (6) months after the commencement of the operation of the Facility.

F - ACOUSTIC AUDIT- EMISSION

F1. The Company shall carry out an Acoustic Audit - Emission of the acoustic emissions produced by the operation of the wind turbine generators in accordance with the following:

(1) the acoustic emission measurements of the wind turbine generators shall be undertaken in accordance with the CAN/CSA Standard C61400-11-07;

(2) the acoustic emission measurements shall be performed by an Independent Acoustical Consultant; and

(3) the acoustic emission measurements shall be performed on one (1) wind turbine generator of each of the three (3) types of the wind turbine generators used in the Facility and specified in Schedules A and B of the Approval.

F2. The Company shall submit to the District Manager and the Director an Acoustic Audit Report-Emission, prepared in accordance with Section 9 of the CAN/CSA Standard C61400-11-07 by an Independent Acoustical Consultant, no later than twelve (12) months after the commencement of the operation of the Facility.

G - STORMWATER MANAGEMENT

G1. The Company shall employ best management practices for stormwater management and sediment and erosion control during construction, installation, use, operation, maintenance and retiring of the Facility, as described in the Application.

G2. The Company shall develop and implement an erosion and sediment control plan prior to the commencement of construction of the Facility.

G3. Within six (6) months of the completion of the construction of the Facility, the Company shall provide the District Manager with a written description of post-construction stormwater management conditions.

H - WATER TAKING ACTIVITIES

H1. In the event that water taking occurs, the Company shall regulate the discharge, discharging through energy dissipation and filtration systems. Initial point of discharge to these systems from the pump hoses(s) shall be a minimum of 30 metres from surface water features. Energy dissipation and filtration control devices shall be implemented at the discharge site(s). Energy dissipation and filtration control devices shall be sufficient to control the volumes and shall be properly maintained.

H2. In the event that water taking occurs, the Company shall monitor water level and streamflow at any watercourse within 30 metres of the proposed discharge locations for the duration of dewatering activities using staff gauges, water level data loggers, and manual in-stream flow measurement tools to calculate watercourse assimilation capacity.

H3. In the event that water taking occurs, the Company shall collect surface water samples from any watercourse within 30 metres of the discharge locations before and after construction to determine background watercourse water quality at discharge locations.

H4. The Company shall ensure that any water discharged to the natural environment does not result in scouring, erosion or physical alteration of stream channels or banks and that there is no flooding in the receiving area or water body, downstream water bodies, ditches or properties caused or worsened by this discharge.

H5. The Company shall not discharge turbid water to any watercourse. Turbid water shall be defined as any discharge water or diverted water with a maximum increase of 5 NTUs above the receiving stream's background levels.

H6. In the event that water taking occurs, the Company shall, on each day water is taken, record the date, the volume of water taken on that date, and the rate at which it was taken. The daily volume of water taken shall be measured by a flow meter or estimated based on the rate and duration of pumping. The Company shall keep all records required by this condition current, and shall make these records available for review by the Ministry upon request.

H7. The Company shall conduct a monitoring program, documenting all water taking activities and discharges of water during construction of the Facility. The Company shall submit a report to the District Manager with the results of the monitoring program following the completion of water taking activities for the Facility. The report shall include, but not be limited to, an erosion and sediment control plan, records of water taking, locations of the discharge of water, and any water quality and quantity sampling conducted during construction of the Facility.

I - ACCIDENTAL SPILLS

I1. The Company shall ensure that all equipment used at the site is well maintained, clean and free of leaks. Maintenance on construction equipment such as refuelling, oil changes or lubrication shall only be permitted in designated areas located at a minimum 30 metres from any water feature, and all precautions shall be made to prevent oil, grease, antifreeze or other materials from entering the ground or surface water flow.

I2. The Company shall ensure that adequate spill clean-up equipment and/or supplies are available at the site for fuel, oil and lubricant spills, and that all on-site operators are familiar with the use of such equipment and/or supplies.

J - SURFACE WATER

J1. The Company shall retain a qualified person to conduct daily monitoring and recording of on-site conditions during the installation of electrical collection line at the Saugeen River crossing.

J2. The Company shall retain a qualified person to conduct daily monitoring and recording of on-site conditions during active directional drilling beneath any watercourses.

J3. The Company shall undertake, as necessary, any other proposed mitigation measures for water bodies described in the Water Assessment and Water Body Report, dated October 2012, prepared by LGL Limited.

K - SEWAGE WORKS OF THE TRANSFORMER SUBSTATION SPILL CONTAINMENT FACILITY

K1. The Company shall design and construct a transformer substation oil spill containment facility which meets the following requirements:

(1) the spill containment facility serving the transformer substation shall have a minimum volume equal to the volume of transformer oil and lubricants plus the volume equivalent to providing a minimum 24-hour duration, 50-year return storm capacity for the stormwater drainage area around the transformer under normal operating conditions. This containment area shall have:

(a) an impervious floor with walls usually of reinforced concrete or impervious plastic liners, sloped toward an outlet / oil control device, allowing for a freeboard of 0.25 metres terminating approximately 0.30 metres above grade to prevent external stormwater flows from entering the facility. The facility shall have a minimum of 300mm layer of crushed stoned (19mm to 38mm in diameter) within, all as needed in accordance to site specific conditions and final design parameters; or

(b) a permeable floor with impervious plastic walls and around the transformer pad; equipped with subsurface drainage with a minimum 50mm diameter drain installed on a sand layer sloped toward an outlet for sample collection purposes; designed with an oil absorbent material on floor and walls, and allowing for a freeboard of 0.25 metres terminating approximately 0.30 metres above grade to prevent external stormwater flows from entering the facility. The facility's berm shall be designed as needed in accordance to site specific conditions and the facility shall have a minimum 300mm layer of crushed stoned (19mm to 38mm in diameter) on top of the system, as needed in accordance to site specific conditions and final design parameters.

(2) the spill containment facility shall be equipped with an oil detection system; it also shall have a minimum of two (2) PVC pipes (or equivalent material) 50mm diameter to allow for visual inspection of water accumulation. One pipe has to be installed half way from the transformer pad to the vehicle access route;

(3) the spill containment facility shall have appropriate sewage appurtenances as necessary, such as but not limited to: sump, oil/grit separator, pumpout manhole, level controllers, floating oil sensors, etc., that allows for batch discharges or direct discharges and for proper implementation of the monitoring program described under Condition K4; and

(4) the Company shall have a qualified person on-site during construction to ensure that the system is installed in accordance with the approved design and specifications.

K2. The Company shall:

(1) within six (6) months after the completion of the construction of the transformer substation spill containment facility, provide to the District Manager an engineering report and as-built design drawings of the sewage works for the spill containment facility and any stormwater management works required for it, signed and stamped by an independent Professional Engineer licensed in Ontario and competent in electrical and environmental engineering. The engineering report shall include the following;

(a) as-built drawings of the sewage works for the spill containment facility and any stormwater management works required for it;

(b) a written report signed by a qualified person confirming the following:

(i) on-site supervision during construction
(ii) in case of a permeable floor systems: type of oil absorbent material used (for mineral-based transformer oil or vegetable-based transformer oil, make and material's specifications)
(ii) use of stormwater best management practices applied to prevent external surface water runoff from entering the spill containment facility, and
(iv) confirm adequacy of the installation in accordance with specifications.

(c) confirmation of the adequacy of the operating procedures and the emergency procedures manuals as it pertains to the installed sewage works.

(d) procedures to provide emergency response to the site in the form of pumping and clean-up equipment within 24 hours after an emergency has been identified. Such response shall be provided even under adverse weather conditions to prevent further danger of material loss to the environment.

(2) as a minimum, the Company shall check the oil detection systems on a monthly basis and create a written record of the inspections;

(3) ensure that the effluent is essentially free of floating and settle-able solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters;

(4) immediately identify and clean-up all losses of oil from the transformer;

(5) upon identification of oil in the spill containment facility, take immediate action to prevent the further occurrence of such loss;

(6) ensure that equipment and material for the containment, clean-up and disposal of oil and materials contaminated with oil are kept within easy access and in good repair for immediate use in the event of:

(a) loss of oil from the transformer,
(b) a spill within the meaning of Part X of the Act, or
(c) the identification of an abnormal amount of oil in the effluent.

(7) in the event of finding water accumulation in the PVC pipes at the time of inspection, as per Condition K4, the Company shall: (a) for impervious floors, inspect the sewage appurtenances that allow drainage of the concrete pit; or (b) for permeable systems, replace the oil absorbent material to ensure integrity of the system performance and design objectives.

(8) for permeable floor systems, the Company shall only use the type of oil specified in the design, i.e. mineral-based transformer oil or vegetable-based transformer oil. If a change is planned to modify the type of oil, the Company shall also change the type of the oil absorbent material and obtain approval from the Director to amend this Approval before any modification is implemented.

K3. The Company shall design, construct and operate the sewage works such that the concentration of the effluent parameter named in the table below does not exceed the maximum Concentration Objective shown for that parameter in the effluent, and shall comply with the following requirements:

Effluent Parameters	**Maximum Concentration Objective**
Oil and Grease	15mg/L

(1) notify the District Manager as soon as reasonably possible of any exceedance of the maximum concentration objective set out in the table above;

(2) take immediate action to identify the cause of the exceedance; and

(3) take immediate action to prevent further exceedances.

K4. Upon commencement of the operation of the Facility, the Company shall establish and carry out the following monitoring program for the sewage works:

(1) the Company shall collect and analyze the required set of samples at the sampling points listed in the table below in accordance with the measurement frequency and sample type specified for the effluent parameter, oil and grease, and create a written record of the monitoring:

Effluent Parameters	Measurement Frequency and Sample Points	Sample Type
Oil and Grease	Quarterly, i.e. four times over a year, relatively evenly spaced having a minimum two (2) of these samples taken within 48 hours after a 10mm rainfall event.	Grab

(2) in the event of an exceedance of the maximum concentration objective set out in the table in Condition K3, the Company shall:

(a) increase the frequency of sampling to once per month, for each month that effluent discharge occurs, and

(b) provide the District Manager, on a monthly basis, with copies of the written record created for the monitoring until the District Manager provides written direction that monthly sampling and reporting is no longer required; and

(3) if over a period of twenty-four (24) months of effluent monitoring under Condition K4, there are no exceedances of the maximum concentration set out in the table for Concentration Objective, the Company may reduce the measurement frequency of effluent monitoring to a frequency as the District Manager may specify in writing, provided that the new specified frequency is never less than annual.

K5. The Company shall comply with the following methods and protocols for any sampling, analysis and recording undertaken in accordance with Condition K4:

(1) Ministry of the Environment publication "Protocol for the Sampling and Analysis of Industrial/ Municipal Wastewater", January 1999, as amended from time to time by more recently published editions, and

(2) the publication "Standard Methods for the Examination of Water and Wastewater", 21st edition, 2005, as amended from time to time by more recently published editions.

L – NATURAL HERITAGE

General

L1. The Company shall implement the Environmental Effects Monitoring Plan for the East Durham Wind Energy Centre, dated May 2013, and the commitments made in the following reports and included in the Application, and which the Company submitted to the Ministry of Natural Resources in order to comply with O. Reg. 359/09:

(1) East Durham Wind Energy Centre Natural Heritage Assessment, dated November 2012, prepared by LGL Limited; and

(2) East Durham Wind Energy Centre Natural Heritage Assessment- Addendum, dated December 2012, prepared by LGL Limited.

L2. If the Company determines that it must deviate from the Environmental Effects Monitoring Plan, Natural Heritage Assessment, or Addendum thereto, described in Condition L1, the Company shall contact the Ministry of Natural Resources and the Director, prior to making any changes to the Environmental Effects Monitoring Plan, Natural Heritage Assessment, or Addendum, and follow any directions provided.

Pre Construction Monitoring - Significant Wildlife Habitat

L3. The Company shall implement the pre-construction monitoring described in the Natural Heritage Assessment and Addendum described in Condition L1, including the following:

(1) A baseline survey of Bat Maternity Colony Habitat (BMA-007);

(2) A baseline survey of Amphibian Wetland Breeding Habitat (WH-ABWE-01); and

(3) A baseline survey of Colonial Nesting Bird Breeding Habitat (WH-CNTS-13).

Post Construction Monitoring - Significant Wildlife Habitat

L4. The Company shall implement the post-construction monitoring described in the Environmental Effects Monitoring Plan, described in Condition L1, including the following:

(1) Disturbance Monitoring for Amphibian Woodland Breeding Habitat where access roads are within 30m of SWH-ABWO-01, SWH-ABWO-02, SWH-ABWO-03 and SWH-ABWO-04.

L5. Based on the results of the pre-construction monitoring described in Condition L3, should any of the Wildlife Habitats described in Condition L3 be deemed significant, the Company shall implement the post-construction monitoring described in the Environmental Effects Monitoring Plan and Addendum described in Condition L1, at the specific habitats that are found to be significant, including the following:

(1) Disturbance Monitoring for Bat Maternity Colony Habitat (BMA-007); and

(2) Disturbance Monitoring for Amphibian Wetland Breeding Habitat (WH-ABWE-01)

Post Construction Monitoring - Birds and Bats Mortality Monitoring

L6. The Company shall implement the post-construction bird and bat mortality monitoring described in the Environmental Effects Monitoring Plan, described in Condition L1, at a minimum of 10 of (up to) 14 constructed turbines. If constructed, Turbines 8, 10, and 11 must be monitored as three (3) of the selected turbines.

Thresholds and Mitigation

L7. The Company shall contact the Ministry of Natural Resources and the Director if any of the following bird and bat mortality thresholds, as stated in the Environmental Effects Monitoring Plan for the East Durham Wind Energy Centre described in Condition L1, exceeds:

(1) 10 bats per turbine per year;

(2) 14 birds per turbine per year at individual turbines or turbine groups;

(3) 0.2 raptors per turbine per year (all raptors) across the Facility;

(4) 0.1 raptors per turbine per year (provincially tracked raptors) across the Facility;

(5) 10 or more birds at any one turbine during a single monitoring survey; or

(6) 33 or more birds (including raptors) at multiple turbines during a single monitoring survey.

L8. If the bat mortality threshold described in Condition L7(1) is exceeded, the Company shall:

(1) implement operational mitigation measures consistent with those described in the Ministry of Natural Resources publication entitled "Bats and Bat Habitats: Guidelines for Wind Power Projects" dated July 2011, or in an amended version of the publication;

(2) increase cut-in speed to 5.5 m/s and/or feather wind turbine blades when wind speeds are below 5.5 m/s between sunset and sunrise, from July 15 to September 30 at all turbines for the operating life of the facility; and

(3) implement an additional three (3) years of effectiveness monitoring.

L9. If the bat mortality threshold described in Condition L7(1) is exceeded after operational mitigation is implemented in accordance with Condition L8, the Company shall prepare and implement a contingency plan, in consultation with the Ministry of Natural Resources, to address mitigation actions which shall include additional mitigation and scoped monitoring requirements.

L10. If any of the bird mortality thresholds described in Conditions L7(2), L7(3), L7(4) are exceeded for turbines located within 120m of bird significant wildlife habitat while monitoring is being implemented in accordance with L6, the Company shall implement immediate mitigation actions as described in the Natural Heritage Assessment and Environmental Effects Monitoring Plan described in Condition L1, and an additional three (3) years of effectiveness monitoring.

L11. If any of the bird mortality thresholds described in Conditions L7(2), L7(3), or L7(4) are exceeded for turbines located outside 120 metres of bird significant wildlife habitat, the Company shall conduct two (2) years of subsequent scoped mortality monitoring. Following the completion of scoped monitoring, the Company shall implement operational mitigation and effectiveness monitoring at individual turbines as agreed to between the Company and the Ministry of Natural Resources, for the first three (3) years following the implementation of mitigation.

L12. If either of the bird mortality thresholds described in Conditions L7(5) or L7(6) are exceeded, the Company shall prepare and implement a contingency plan to address immediate mitigation actions which shall include:

(1) periodic shut-down of select turbines; or

(2) blade feathering at specific times of year; or

(3) an alternate plan agreed to between the Company and the Ministry of Natural Resources.

L13. If any of the bird mortality thresholds described in Conditions L7(2), L7(3), or L7(4) are exceeded while monitoring is being implemented in accordance with Condition L10 or L11, or if either of the bird mortality thresholds described in Conditions L7(5) or L7(6) are exceeded after mitigation is implemented in accordance with Condition L12, the Company shall contact the Ministry of Natural Resources and prepare and implement an appropriate response plan that shall include some or all of the following mitigation measures:

(1) increased reporting frequency to identify potential threshold exceedance;

(2) additional behavioural studies to determine factors affecting mortality rates;

(3) periodic shut-down of select turbines;

(4) blade feathering at specific times of year; or

(5) an alternate plan agreed to between the Company and the Ministry of Natural Resources.

Reporting and Review of Results

L14. The Company shall report, in writing, the results of the post-construction disturbance monitoring described in Conditions L4 and L5, to the Ministry of Natural Resources for one (1) year, and within three (3) months of the end of the calendar year in which the monitoring took place for the following habitats:

(1) Amphibian Woodland Breeding for SWH-ABWO-01, SWH-ABWO-02, SWH-ABWO-03, and SWH-ABWO-04.

L15. The Company shall report, in writing, the results of the post-construction disturbance monitoring described in Conditions L4 and L5, to the Ministry of Natural Resources for three (3) years, and within three (3) months of the end of the calendar year in which the monitoring took place for the following habitat:

(1) Bat Maternity Colony BMA-007.

L16. The Company shall report, in writing, bird and bat mortality levels to the Ministry of Natural Resources for three (3) years on an annual basis and within three (3) months of the conclusion of the November mortality monitoring, with the exception of the following:

(1) if either of the bird mortality thresholds described in Conditions L7(5) or L7(6) are exceeded, the Company shall report the mortality event to the Ministry of Natural Resources within 48 hours of observation or the next business day;

(2) for any and all mortality of species at risk (including a species listed on the Species at Risk in Ontario list as Extirpated, Endangered or Threatened under the provincial *Endangered Species Act,* 2007) that occurs, the Company shall report the mortality to the Ministry of Natural Resources within 24 hours of observation or the next business day;

(3) if the bat mortality threshold described in Condition L7(1) is exceeded, the Company shall report mortality levels to the Ministry of Natural Resources for the additional three (3) years of monitoring described in Condition L8, on an annual basis and within three (3) months of the conclusion of the October mortality monitoring for each year;

(4) if any of the bird mortality thresholds described in Conditions L7(2), L7(3), or L7(4) are exceeded for turbines located within 120m of bird significant wildlife habitat, the Company shall report mortality levels to the Ministry of Natural Resources for the additional three (3) years of effectiveness monitoring described in Condition L10, on an annual basis and within three (3) months of the conclusion of the November mortality monitoring for each year;

(5) if any of the bird mortality thresholds described in Conditions L7(2), L7(3), or L7(4) are exceeded for turbines located outside 120 m of bird significant wildlife habitat, the Company shall report mortality levels to the Ministry of Natural Resources for the additional two (2) years of cause and effects monitoring described in Condition L11, on an annual basis and within three (3) months of the conclusion of the November mortality monitoring for each year; and

(6) if the Company implements operational mitigation following cause and effects monitoring in accordance with Condition L11, the Company shall report mortality levels to the Ministry of Natural Resources for the three (3) years of subsequent effectiveness monitoring described in Condition L11, on an annual basis and within three (3) months of the conclusion of the November mortality monitoring for each year.

Additional Post Construction Requirements

L17. As identified in the Natural Heritage Assessment and Environmental Effects Monitoring Plan, described in Condition L1, if turbines T10 or T17 are built, a woodland restoration plan will be prepared in consultation with Ministry of Natural Resources staff and submitted to the Ministry of Natural Resources within the first year of operation of the Facility.

M – ENDANGERED SPECIES ACT REQUIREMENTS

M1. No construction or installation activities shall be commenced in areas at the project location that support habitat for Bobolink and Eastern Meadowlark until the Company has met all requirements under the *Endangered Species Act, 2007.*

N - TRAFFIC MANAGEMENT PLANNING

N1. Within three (3) months of receiving this Approval, the Company shall prepare a Traffic Management Plan and provide it to the Municipality of West Grey and the County of Grey.

N2. Within three (3) months of having provided the Traffic Management Plan to the Municipality of West Grey and the County of Grey, the Company shall make reasonable efforts to enter into a Road Users Agreement with the Municipality of West Grey and the County of Grey.

N3. If a Road Users Agreement has not been signed with the Municipality of West Grey and the County of Grey within three (3) months of having provided the Traffic Management Plan to the Municipality of West Grey and the County of Grey, the Company shall provide a written explanation to the Director as to why this has not occurred.

O - ARCHAEOLOGICAL RESOURCES

O1. The Company shall implement all of the recommendations, if any, for further archaeological fieldwork and for the protection of archaeological sites found in the consultant archaeologist's report included in the Application, and which the Company submitted to the Ministry of Tourism, Culture and Sport in order to comply with O. Reg. 359/09.

O2. Should any previously undocumented archaeological resources be discovered, the Company shall:

(1) cease all alteration of the area in which the resources were discovered immediately;

(2) engage a consultant archaeologist to carry out the archaeological fieldwork necessary to further assess the area and to either protect and avoid or excavate any sites in the area in accordance with the *Ontario Heritage Act* , the regulations under that act and the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* ; and

(3) notify the Director as soon as reasonably possible.

P - COMMUNITY LIAISON COMMITTEE

P1. Within three (3) months of receiving this Approval, the Company shall make reasonable efforts to establish a Community Liaison Committee. The Community Liaison Committee shall be a forum to exchange ideas and share concerns with interested residents and members of the public. The Community Liaison Committee shall be established by:

(1) publishing a notice in a newspaper with general circulation in each local municipality in which the project location is situated; and

(2) posting a notice on the Company's publicly accessible website, if the Company has a website;

to notify members of the public about the proposal for a Community Liaison Committee and invite residents living within a one (1) kilometre radius of the Facility that may have an interest in the Facility to participate on the Community Liaison Committee.

P2. The Company may invite other members of stakeholders to participate in the Community Liaison Committee, including, but not limited to, local municipalities, local conservation authorities, Aboriginal communities, federal or provincial agencies, and local community groups.

P3. The Community Liaison Committee shall consist of at least one Company representative who shall attend all meetings.

P4. The purpose of the Community Liaison Committee shall be to:

(1) act as a liaison facilitating two way communications between the Company and members of the public with respect to issues relating to the construction, installation, use, operation, maintenance and retirement of the Facility;

(2) provide a forum for the Company to provide regular updates on, and to discuss issues or concerns relating to, the construction, installation, use, operation, maintenance and retirement of the Facility with members of the public; and

(3) ensure that any issues or concerns resulting from the construction, installation, use, operation, maintenance and retirement of the Facility are discussed and communicated to the Company.

P5. The Community Liaison Committee shall be deemed to be established on the day the Director is provided with written notice from the Company that representative Community Liaison Committee members have been chosen and a date for a first Community Liaison Committee meeting has been set.

P6. If a Community Liaison Committee has not been established within three (3) months of receiving this Approval, the Company shall provide a written explanation to the Director as to why this has not occurred.

P7. The Company shall ensure that the Community Liaison Committee operates for a minimum period of two (2) years from the day it is established. During this two (2) year period, the Company shall ensure that the Community Liaison Committee meets a minimum of two (2) times per year. At the end of this two (2) year period, the Company shall contact the Director to discuss the continued operation of the Community Liaison Committee.

P8. The Company shall ensure that all Community Liaison Committee meetings are open to the general public.

P9. The Company shall provide administrative support for the Community Liaison Committee including, at a minimum:

(1) providing a meeting space for Community Liaison Committee meetings;

(2) providing access to resources, such as a photocopier, stationery, and office supplies, so that the Community Liaison Committee can:

a) prepare and distribute meeting notices;

b) record and distribute minutes of each meeting; and

c) prepare reports about the Community Liaison Committee's activities.

P10. The Company shall submit any reports of the Community Liaison Committee to the Director and post it on the Company's publicly accessible website, if the Company has a website.

Q - OPERATION AND MAINTENANCE

Q1. Prior to the commencement of the operation of the Facility, the Company shall prepare a written manual for use by Company staff outlining the operating procedures and a maintenance program for the Equipment that includes as a minimum the following:

(1) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;

(2) emergency procedures;

(3) procedures for any record keeping activities relating to operation and maintenance of the Equipment; and

(4) all appropriate measures to minimize noise emissions from the Equipment.

Q2. The Company shall;

(1) update, as required, the manual described in Condition Q1; and

(2) make the manual described in Condition Q1 available for review by the Ministry upon request.

Q3. The Company shall ensure that the Facility is operated and maintained in accordance with the Approval and the manual described in Condition Q1.

R - RECORD CREATION AND RETENTION

R1. The Company shall create written records consisting of the following:

(1) an operations log summarizing the operation and maintenance activities of the Facility;

(2) within the operations log, a summary of routine and Ministry inspections of the Facility; and

(3) a record of any complaint alleging an Adverse Effect caused by the construction, installation, use, operation, maintenance or retirement of the Facility.

R2. A record described under Condition R1 (3) shall include:

(1) a description of the complaint that includes as a minimum the following:

a) the date and time the complaint was made;

b) the name, address and contact information of the person who submitted the complaint;

(2) a description of each incident to which the complaint relates that includes as a minimum the following:

a) the date and time of each incident;

b) the duration of each incident;

c) the wind speed and wind direction at the time of each incident;

d) the ID of the Equipment involved in each incident and its output at the time of each incident;

e) the location of the person who submitted the complaint at the time of each incident; and

(3) a description of the measures taken to address the cause of each incident to which the complaint relates and to prevent a similar occurrence in the future.

R3. The Company shall retain, for a minimum of five (5) years from the date of their creation, all records described in Condition R1, and make these records available for review by the Ministry upon request.

S - NOTIFICATION OF COMPLAINTS

S1. The Company shall notify the District Manager of each complaint within two (2) business days of the receipt of the complaint.

S2. The Company shall provide the District Manager with the written records created under Condition R2 within eight (8) business days of the receipt of the complaint.

T - CHANGE OF OWNERSHIP

T1. The Company shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any of the following changes:

(1) the ownership of the Facility;

(2) the operator of the Facility;

(3) the address of the Company;

(4) the partners, where the Company is or at any time becomes a partnership and a copy of the most recent declaration filed under the *Business Names Act* , R.S.O. 1990, c.B.17, as amended, shall be included in the notification; and

(5) the name of the corporation where the Company is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the *Corporations Information Act* , R.S.O. 1990, c. C.39, as amended, shall be included in the notification.

U – ABORIGINAL CONSULTATION

U1. During the construction, installation, operation, use and retiring of the Facility, the Company shall:

(1) create and maintain written records of any communications with Aboriginal communities; and

(2) make the written records available for review by the Ministry upon request.

U2. The Company shall provide the following to interested Aboriginal communities:

(1) updated project information, including the results of monitoring activities undertaken and copies of additional archaeological assessment reports that may be prepared; and;

(2) updates on key steps in the construction, installation, operation, use and retirement phases of the Facility, including notice of the commencement of construction activities at the project location.

U3. If an Aboriginal community requests a meeting to obtain information relating to the construction, installation, operation, use and retiring of the Facility, the Company shall make reasonable efforts to arrange and participate in such a meeting.

U4. If any archaeological resources of Aboriginal origin are found during the construction of the Facility, the Company shall:

(1) notify any Aboriginal community considered likely to be interested or which has expressed an interest in such finds; and,

(2) if a meeting is requested by an Aboriginal community to discuss the archaeological find(s), make reasonable efforts to arrange and participate in such a meeting.

SCHEDULE A

Facility Description

The Facility shall consist of the construction, installation, operation, use and retiring of the following:

(a) a total of fourteen (14) out of the proposed sixteen (16) wind turbine generators, with a total name plate capacity of up to 23 megawatts;

(b) the proposed sixteen (16) wind turbine generators are composed of:

- fourteen (14) General Electric GE-1.6-100 wind turbine generators each rated at 1.62 megawatts, designated as source ID Nos. T1, T3-T5, T7, T8, and T10-T17, respectively, each with a hub height of 80 metres above grade;

- one (1) General Electric GE-1.39-100 wind turbine generator with a total name plate capacity of 1.39 megawatts, designated as source ID No. T2, with a hub height of 80 metres above grade;

- one (1) General Electric GE-1.34-100 wind turbine generator with a total name plate capacity of 1.34 megawatts, designated as source ID No. T6, with a hub height of 80 metres above grade;

and all sited at the locations shown in Schedule B;

(c) one (1) transformer substation including one (1) transformer rated at 25 MVA and sited at the location shown in Schedule B; and

(d) associated ancillary equipment, systems and technologies including on-site access roads, underground cabling and overhead distribution/transmission lines, interconnection equipment,

all in accordance with the Application.

SCHEDULE B

Coordinates of the Equipment and Noise Specifications

Coordinates of the Equipment are listed below in UTM, Z17-NAD83 projection:

Table B1: Coordinates and Maximum Sound Power Levels of Wind Turbine Generators and Transformers

Source ID	Maximum Sound Power Level (dBA)	Easting (m)	Northing (m)	Equipment description
T1	**103.0**	522697	4894753	GE 1.6-100 LNTE 1.62 MW
T2	**101.0**	523810	4895004	GE 1.39-100 LNTE 1.39 MW
T3	**103.0**	523031	4894158	GE 1.6-100 LNTE 1.62 MW
T4	**103.0**	523425	4894086	GE 1.6-100 LNTE 1.62 MW
T5	**103.0**	523815	4894179	GE 1.6-100 LNTE 1.62 MW
T6	**100.0**	524812	4894414	GE 1.34-100 LNTE 1.34 MW
T7	**103.0**	525170	4894597	GE 1.6-100 LNTE 1.62 MW
T8	**103.0**	525783	4894560	GE 1.6-100 LNTE 1.62 MW
T10	**103.0**	522761	4892274	GE 1.6-100 LNTE 1.62 MW
T11	**103.0**	525698	4893320	GE 1.6-100 LNTE 1.62 MW
T12	**103.0**	527137	4897555	GE 1.6-100 LNTE 1.62 MW
T13	**103.0**	528474	4893041	GE 1.6-100 LNTE 1.62 MW
T14	**103.0**	527940	4897664	GE 1.6-100 LNTE 1.62 MW
T15	**103.0**	527547	4897779	GE 1.6-100 LNTE 1.62 MW
T16	**103.0**	527680	4893745	GE 1.6-100 LNTE 1.62 MW
T17	**103.0**	527506	4893375	GE 1.6-100 LNTE 1.62 MW
Transformer Substation	**98***	524146	4893780	Transformer Substation 25 MVA

*NOTE: The Sound Power Level reported above for the Transformer Substation does include the 5 decibels (dB) adjustment for tonality as prescribed in Publication NPC-104.

Table B2: Maximum Sound Power Spectrums (dBA and dB Lin) for the Transformer Substation

Transformer Substation (25 MVA, 44 kV)	Octave Band Centre Frequency (Hz)								
	63	125	250	500	1000	2000	4000	8000	Overall
Lw (dB A)	74.5	86.6	89.1	94.5	91.7	87.9	82.7	73.6	98.0
Lw (dB Lin)	100.7	102.7	97.7	97.7	91.7	86.7	81.7	74.6	106.5

Note: The Transformer Substation Sound Power Level values include the 5 decibel (dB) adjustment for tonality as prescribed in Publication NPC-104.

SCHEDULE C

Noise Control Measures

Acoustic Barrier for the 25 MVA Transformer Substation:

One (1) L-shaped acoustic barrier, approximately 10.7 metres long and with a height at least 3.93 metres above the top of the transformer, shall be positioned around the transformer as per Figure 1 entitled "Noise Barrier Configuration" of the Acoustic Assessment Report. The acoustic barrier will have the absorptive coefficient of 0.8, and it will be continuous without holes, gaps and other penetrations, and having a surface mass at least 20 kilograms per square metres.

The reasons for the imposition of these terms and conditions are as follows:

1. Conditions A1 and A2 are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in the manner in which it was described for review and upon which Approval was granted. These conditions are also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

2. Conditions A3 and A4 are included to require the Company to provide information to the public and the local municipality.

3. Conditions A5 and A6 are included to ensure that final retirement of the Facility is completed in an aesthetically pleasing manner, in accordance with Ministry standards, and to ensure long-term protection of the health and safety of the public and the environment.

4. Condition A7 is included to require the Company to inform the Ministry of the commencement of activities related to the construction, installation and operation of the Facility.

5. Condition B is intended to limit the time period of the Approval.

6. Condition C1 is included to provide the minimum performance requirement considered necessary to prevent an Adverse Effect resulting from the operation of the Equipment and to ensure that the noise emissions from the Equipment will be in compliance with applicable limits set in the Noise Guidelines for Wind Farms.

7. Conditions A8, C2, C3 and D are included to ensure that the Equipment is constructed, installed, used, operated, maintained and retired in a way that meets the regulatory setback prohibitions set out in O. Reg. 359/09.

8. Conditions E and F are included to require the Company to gather accurate information so that the environmental noise impact and subsequent compliance with the Act, O. Reg. 359/09, the Noise Guidelines for Wind Farms and this Approval can be verified.

9. Conditions G, H, I, J, K, L, M and N are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in a way that does not result in an Adverse Effect or hazard to the natural environment or any persons.

10. Condition O is included to protect archaeological resources that may be found at the project location.

11. Condition P is included to ensure continued communication between the Company and the local residents.

12. Condition Q is included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the Act, O. Reg. 359/09 and this Approval.

13. Condition R is included to require the Company to keep records and provide information to the Ministry so that compliance with the Act, O. Reg. 359/09 and this Approval can be verified.

14. Condition S is included to ensure that any complaints regarding the construction, installation, use, operation, maintenance or retirement of the Facility are responded to in a timely and efficient manner.

15. Condition T is included to ensure that the Facility is operated under the corporate name which appears on the application form submitted for this Approval and to ensure that the Director is informed of any changes.

17. Condition U is included to ensure continued communication between the Company and interested Aboriginal communities.

NOTICE REGARDING HEARINGS

In accordance with Section 139 of the Environmental Protection Act, within 15 days after the service of this notice, you may by further written notice served upon the Director, the Environmental Review Tribunal and the Environmental Commissioner, require a hearing by the Tribunal.

In accordance with Section 47 of the Environmental Bill of Rights, 1993, the Environmental Commissioner will place notice of your request for a hearing on the Environmental Registry.

Section 142 of the Environmental Protection Act provides that the notice requiring the hearing shall state:

1. The portions of the renewable energy approval or each term or condition in the renewable energy approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The signed and dated notice requiring the hearing should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The renewable energy approval number;
6. The date of the renewable energy approval;
7. The name of the Director;
8. The municipality or municipalities within which the project is to be engaged in;

This notice must be served upon:

The Secretary* Environmental Review Tribunal 655 Bay Street, 15th Floor Toronto, Ontario M5G 1E5	AND	The Environmental Commissioner 1075 Bay Street, 6th Floor Suite 605 Toronto, Ontario M5S 2B1	AND	The Director Section 47.5, *Environmental Protection Act* Ministry of the Environment 2 St. Clair Avenue West, Floor 12A Toronto, Ontario M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

Under Section 142.1 of the Environmental Protection Act, residents of Ontario may require a hearing by the Environmental Review Tribunal within 15 days after the day on which notice of this decision is published in the Environmental Registry. By accessing the Environmental Registry at www.ebr.gov.on.ca , you can determine when this period ends.

Approval for the above noted renewable energy project is issued to you under Section 47.5 of the Environmental Protection Act subject to the terms and conditions outlined above.

DATED AT TORONTO this 20th day of January, 2014

Vic Schroter, P.Eng.
Director
Section 47.5, *Environmental Protection Act*

NC/
c: District Manager, MOE Owen Sound
Adam Rickel, NextEra Energy Canada, ULC

Ontario

Ministry of the Environment
Ministère de l'Environnement

AMENDMENT TO RENEWABLE ENERGY APPROVAL

NUMBER 7812-9E4QSC
Issue Date: October 1, 2014

East Durham Wind GP, ULC, as general partner for and on behalf of East Durham Wind, LP
390 Bay Street, Suite 1720
Toronto, Ontario
M5H 2Y2

Site Location: East Durham Wind Energy Centre
south of Concession 6, west of Sideroad 40, Artemesia-Glenelg Townline and Sideroad 50, east of Baseline Road and north of West-Grey Southgate municipal boundary
Municipality of West Grey, County of Grey

You are hereby notified that I have amended Approval No.7812-9E4QSC issued on January 20, 2014 fora Class 4 wind facility, as follows:

A. The owner/ operator of the Facility is deleted and replaced with the following:

East Durham Wind GP, ULC, as general partner for and on behalf of East Durham Wind, LP
390 Bay Street, Suite 1720
Toronto, Ontario
M5H 2Y2

B. The definitions of "Application" and "Company" are deleted and replaced with the following:

10. "Application" means the application for a Renewable Energy Approval dated January 23, 2013, and signed by F. Allen Wiley, East Durham Wind, Inc., and all supporting documentation submitted with the application, including amended documentation submitted up to January 20, 2014; and as further amended by two applications for amendments to a Renewable Energy Approval dated February 3, 2014 and August 1, 2014, and signed by F. Allen Wiley, Vice President, East Durham Wind GP, ULC as a general partner for and on behalf of East Durham Wind, LP, and all supporting documentation submitted with the application, including amended documentation submitted up to the date this amendment is issued;

18. "Company" means East Durham Wind GP, ULC, as general partner for and on behalf of East Durham Wind, LP, a limited partnership formed under the laws of Ontario, and includes its successors and assignees;

All other Terms and Conditions of the Approval remain the same.

This Notice shall constitute part of the approval issued under Approval No. 7812-9E4QSC dated January 20, 2014.

In accordance with Section 139 of the Environmental Protection Act, within 15 days after the service of this notice, you may by further written notice served upon the Director, the Environmental Review Tribunal and the Environmental Commissioner, require a hearing by the Tribunal.

In accordance with Section 47 of the Environmental Bill of Rights, 1993, the Environmental Commissioner will place notice of your request for a hearing on the Environmental Registry.

Section 142 of the Environmental Protection Act provides that the notice requiring the hearing shall state:

1. The portions of the renewable energy approval or each term or condition in the renewable energy approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The signed and dated notice requiring the hearing should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The renewable energy approval number;
6. The date of the renewable energy approval;
7. The name of the Director;
8. The municipality or municipalities within which the project is to be engaged in;

This notice must be served upon:

The Secretary* Environmental Review Tribunal 655 Bay Street, 15th Floor Toronto, Ontario M5G 1E5	AND	The Environmental Commissioner 1075 Bay Street, 6th Floor Suite 605 Toronto, Ontario M5S 2B1	AND	The Director Section 47.5, *Environmental Protection Act* Ministry ofthe Environment 2 St. Clair Avenue West, Floor 12A Toronto, Ontario M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

Under Section 142.1 of the Environmental Protection Act, residents of Ontario may require a hearing by the Environmental Review Tribunal within 15 days after the day on which notice of this decision is published in the Environmental Registry. By accessing the Environmental Registry at www.ebr.gov.on.ca, you can determine when this period ends.

Approval for the above noted renewable energy project is issued to you under Section 47.5 of the Environmental Protection Act subject to the terms and conditions outlined above.
DATED AT TORONTO this 1st day of October, 2014

Vic Schroter, P.Eng.
Director
Section 47.5, *Environmental Protection Act*

HM/
c: District Manager, MOE Owen Sound
Nancy O'Neill, NextEra Energy Canada

APPENDIX C

EQUIPMENT LIST

MEASUREMENT EQUIPMENT

Sound Level Meter

Sound Level Meter	
Make and Model	RWDI Envision Data Collection System
Serial No.	NAVCAD03
Preamplifier	
Make and Type	PCB Piezotronics Preamplifier Type 426E01
Serial No.	058625
Microphone	
Make and Type	PCB Piezotronics Microphone Type 377B02
Serial No.	136585
Data Acquisition	
Make and Type	National Instruments NI9234
Serial No.	19F98E3
Calibrator	
Make and Type	Larson-Davis CAL200 precision acoustic calibrator (1000 Hz)
Serial No.	2939 and 3628

PCB PIEZOTRONICS
MTS SYSTEMS CORPORATION

CERTIFICATION OF CONFORMANCE

Title Page of Calibration Certificate Documentation

CUSTOMER:

RWDI
600 Southgate Drive
Guelph, ON N1G 4P6
CANADA

PURCHASE ORDER #: **88962/1803100-2000200**

PCB ORDER #: **I000280366**

QTY	ITEM	DESCRIPTION
1	ACS-63	RECALIBRATE-378B02
	S/N 136585 307047 058625	

Notes:

1. This document certifies that the subject item(s) have been manufactured, repaired (if applicable), tested, or inspected in accordance with referenced purchase order and conform(s) to applicable specifications per PCB Quality Policy Manual Rev. M 10/03/2018.
2. Equipment used in validation is traceable to NIST and appropriate records are on file.
3. Calibrations comply with ISO 17025 and ANSI/NCSL Z540.3-2006 except as noted on associated calibration certificate(s). Order placement is an acknowledgement and acceptance of measurement capability. Product is compliant with specification if measured value is within or equal to the specification tolerance. Product is not compliant with specification if measured value falls outside the specification tolerance.
4. Calibrations are performed using processes having a test uncertainty ratio (TUR) of four or more times greater than the unit calibrated, unless otherwise noted on the calibration certificate. Calibration at 4:1 TUR provides reasonable confidence that the instrument is within product specifications.

Logistics Associate: _____ **Date:** 02/10/20

- ISO 9001 Certified / ISO 17025 Accredited / AS9100 Certified -

PCB PIEZOTRONICS, INC.
3425 WALDEN AVENUE, DEPEW, NY 14043 UNITED STATES
Phone: (716) 684-0001, Fax: (716) 684-0987

~ Certificate of Calibration and Compliance ~

Model: 378B02	Serial Number: 136585	
Microphone Model: 377B02	Serial Number: 307047	Manufacturer: PCB
Preamplifier Model: 426E01	Serial Number: 058625	Manufacturer: PCB

Calibration Environmental Conditions

Environmental test conditions as printed on microphone calibration chart.

Reference Equipment

Manufacturer	Model #	Serial #	PCB Control #	Cal Date	Due Date
National Instruments	PCIe-6351	1896F08	CA1918	10/18/19	10/16/20
Larson Davis	PRM915	134	CA2114	11/11/19	11/11/20
Larson Davis	PRM902	4407	CA1248	5/31/19	5/29/20
Larson Davis	PRM916	131	CA1203	3/20/19	3/20/20
Larson Davis	CAL250	4147	LD018	4/15/19	4/15/20
Larson Davis	2201	144	CA1409	4/18/19	3/2/20
Bruel & Kjaer	4192	2764626	CA1636	8/20/19	8/21/20
Larson Davis	GPRM902	4162	CA1088	3/21/19	3/20/20
Newport	iTHX-SD/N	1080002	CA1511	2/8/19	2/7/20
Larson Davis	PRA951-4	234	CA1154	11/8/19	11/6/20
Larson Davis	PRM915	123	CA866	11/20/20	11/20/20
PCB	68510-02	N/A	CA2672	12/11/19	12/11/20
0	0	0	0	not required	not required
0	0	0	0	not required	not required
0	0	0	0	not required	not required

Frequency sweep performed with B&K UA0033 electrostatic actuator.

Condition of Unit

As Found: In Tolerance

As Left: In Tolerance

Notes

1. Calibration of reference equipment is traceable to one or more of the following National Labs; NIST, PTB or DFM.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 10012-1, ANSI/NCSL Z540.3 and ISO 17025.
4. See Manufacturer's Specification Sheet for a detailed listing of performance specifications.
5. System Sensitivity is measured following procedure AT603-5.
6. Measurement uncertainty (95% confidence level with coverage factor of 2) for sensitivity is +/-0.20 dB.
7. Unit calibrated per ACS-63.

Technician: Leonard Lukasik Date: January 23, 2020

ilac-MRA A2LA ACCREDITED

CALIBRATION CERT #1862.01

PCB PIEZOTRONICS INC.
VIBRATION DIVISION
3425 Walden Avenue, Depew, New York, 14043
TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

ID:CAL112-3662651688.496+0

~ *Calibration Report* ~

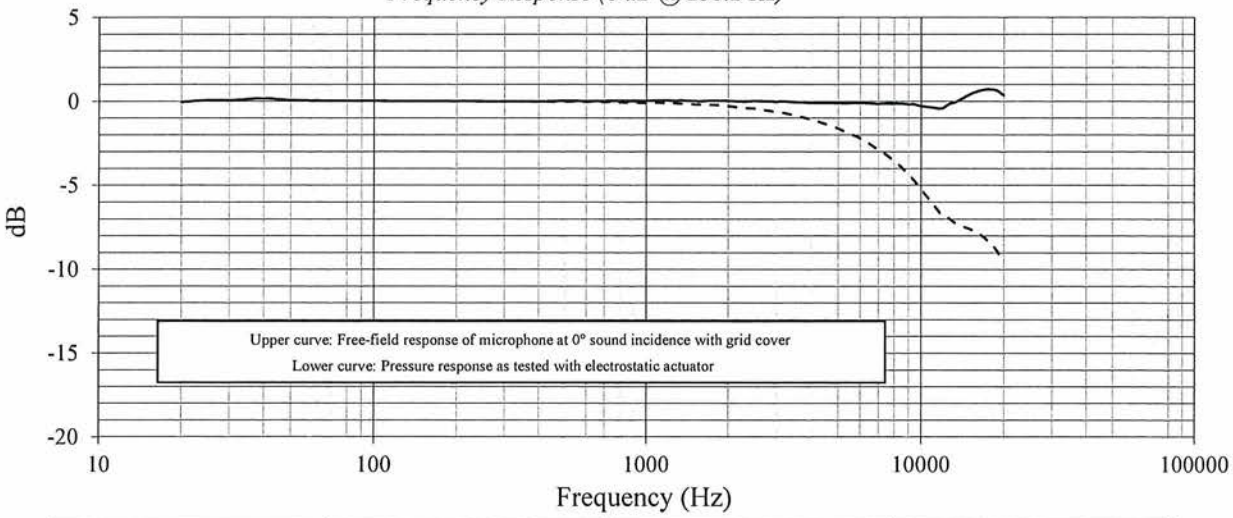
Model: 378B02 Serial Number: 136585
Microphone Model: 377B02 Serial Number: 307047 Description: 1/2" Free-Field Microphone
Preamplifier Model: 426E01 Serial Number: 058625 and Preamplifier

Calibration Data

System Sensitivity @ 251.2 Hz: 50.82 mV/Pa Polarization Voltage, External: 0 V
-25.88 dB re 1V/Pa

Temperature: 72 °F (22°C) Ambient Pressure: 997 mbar Relative Humidity: 25 %

Frequency Response (0 dB @ 251.2 Hz)



Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)
20.0	-0.05	-0.05	1679	-0.20	0.03	7499	-3.20	-0.13	-	-	-
25.1	0.07	0.07	1778	-0.22	0.03	7943	-3.52	-0.13	-	-	-
31.6	0.07	0.07	1884	-0.25	0.03	8414	-3.87	-0.14	-	-	-
39.8	0.17	0.17	1995	-0.29	0.02	8913	-4.28	-0.17	-	-	-
50.1	0.06	0.06	2114	-0.34	0.00	9441	-4.71	-0.19	-	-	-
63.1	0.04	0.04	2239	-0.39	-0.02	10000	-5.25	-0.30	-	-	-
79.4	0.03	0.03	2371	-0.42	-0.01	10593	-5.74	-0.34	-	-	-
100.0	0.03	0.03	2512	-0.44	0.02	11220	-6.26	-0.40	-	-	-
125.9	0.01	0.01	2661	-0.51	0.00	11885	-6.75	-0.43	-	-	-
158.5	0.01	0.01	2818	-0.57	-0.01	12589	-6.95	-0.18	-	-	-
199.5	0.01	0.01	2985	-0.64	-0.02	13335	-7.24	-0.05	-	-	-
251.2	0.00	0.00	3162	-0.69	-0.01	14125	-7.43	0.16	-	-	-
316.2	-0.01	0.00	3350	-0.78	-0.04	14962	-7.58	0.40	-	-	-
398.1	-0.02	-0.02	3548	-0.88	-0.06	15849	-7.78	0.57	-	-	-
501.2	-0.02	0.02	3758	-0.97	-0.07	16788	-8.04	0.68	-	-	-
631.0	-0.03	0.01	3981	-1.09	-0.09	17783	-8.41	0.70	-	-	-
794.3	-0.07	0.02	4217	-1.21	-0.10	18837	-8.87	0.64	-	-	-
1000.0	-0.10	0.02	4467	-1.34	-0.11	19953	-9.57	0.36	-	-	-
1059.3	-0.09	0.04	4732	-1.47	-0.10	-	-	-	-	-	-
1122.0	-0.09	0.05	5012	-1.63	-0.10	-	-	-	-	-	-
1188.5	-0.10	0.05	5309	-1.82	-0.12	-	-	-	-	-	-
1258.9	-0.13	0.03	5623	-1.99	-0.11	-	-	-	-	-	-
1333.5	-0.14	0.04	5957	-2.17	-0.10	-	-	-	-	-	-
1412.5	-0.17	0.03	6310	-2.40	-0.11	-	-	-	-	-	-
1496.2	-0.19	0.01	6683	-2.67	-0.15	-	-	-	-	-	-
1584.9	-0.21	0.00	7080	-2.93	-0.15	-	-	-	-	-	-

Technician: Leonard Lukasik Date: January 23, 2020

ilac-MRA A2LA ACCREDITED
CALIBRATION CERT #1862.01

PCB PIEZOTRONICS INC
VIBRATION DIVISION

3425 Walden Avenue, Depew, New York, 14043
TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

ID:CAL112-3662651688.496+0

CERTIFICATE of CALIBRATION

Make :	National Instruments	Reference # :	160123
Model :	NI9234	Customer :	Rowan Williams Davies & Irwin Inc Guelph, ON
Descr. :	ADC Module 4Ch 24Bit		
Serial # :	19F98E3	P. Order :	NOI-01-01 AHP
Asset # :	NI IEPE 13		

Cal. status : Received in spec's, no adjustment made.

Navair Technologies certifies that the above listed instrument was calibrated on date noted and was released from this laboratory performing in accordance with the specifications set forth by the manufacturer.

Unless otherwise noted in the calibration report a 4:1 accuracy ratio was maintained for this calibration.

Our Quality System system complies with the requirements of ISO-9001-2015 and is registered under certificate CA96/269, working standards used for calibration are certified by or traceable to the National Research Council of Canada or the National Institute of Standards and Technology.

Calibrated : Jan 17, 2020 By : Petro Onasko

Cal. Due : Jan 17, 2022

Temperature : 23 °C ± 2 °C Relative Humidity : 30% to 70%

Standards used : J-215 J-367 J-512

Navair Technologies

REPAIR AND CALIBRATION TRACEABLE TO NRC AND NIST

6375 Dixie Rd. Mississauga, ON, L5T 2E7 http: // www.navair.com

Phone : 800-668-7440 Fax: 905 565 8325 e-Mail: service @ navair.com

6375 Dixie Rd Unit# 7
Mississauga, ON L5T 2E7
Tel: (905)565-1583
Fax: (905)565-8325

Form: NI 9234	Approved by: J. Raposo	Mar-19	Ver 1.2

Calibration Report for Certificate : 160123

Make	Model	Serial №	Asset	Cal by
National Instruments	NI 9234	19F98E3	NI IEPE 13	P O

Test	Input	Min	Reading	Max	In/Out
Gain Accuracy					
AI 0	+4.0000 V	3.9952	4.0006	4.0048	In
	0.0000 V	-0.0012	0.0008	0.0012	In
	-4.0000 V	-4.0048	-3.9990	-3.9952	In
AI 1	+4.0000 V	3.9952	4.0006	4.0048	In
	0.0000 V	-0.0012	0.0008	0.0012	In
	-4.0000 V	-4.0048	-3.9991	-3.9952	In
AI 2	+4.0000 V	3.9952	4.0008	4.0048	In
	0.0000 V	-0.0012	0.0008	0.0012	In
	-4.0000 V	-4.0048	-3.9991	-3.9952	In
AI 3	+4.0000 V	3.9952	4.0006	4.0048	In
	0.0000 V	-0.0012	0.0007	0.0012	In
	-4.0000 V	-4.0048	-3.9993	-3.9952	In
Channel Gain Match					
	AI 0	-0.04 dB	-0.0005 dB	+0.04 dB	In
	AI 1	-0.04 dB	-0.0004 dB	+0.04 dB	In
	AI 2	-0.04 dB	-0.0001 dB	+0.04 dB	In
	AI 3	-0.04 dB	-0.0002 dB	+0.04 dB	In

6375 Dixie Rd Unit# 7
Mississauga, ON L5T 2E7
Tel: (905)565-1583
Fax: (905)565-8325

Test	Input	Min	Reading	Max	In/Out
Flatness Accuracy	0.1 to 22.5 kHz				
	Ref: 4.5 V p-p @ 1.000 kHz				
	AI 0	-0.04 dB	+0.020 dB	+0.04 dB	In
	AI 1	-0.04 dB	+0.020 dB	+0.04 dB	In
	AI 2	-0.04 dB	+0.016 dB	+0.04 dB	In
	AI 3	-0.04 dB	+0.020 dB	+0.04 dB	In
AC/DC coupling					Pass
IEPE Operation					Pass

CERTIFICATE of CALIBRATION

Make :	Larson Davis	Reference # :	160012
Model :	CAL200	Customer :	Rowan Williams Davies & Irwin Inc Guelph, ON
Descr. :	Sound cal 94/114dB 1KHz		
Serial # :	3628	P. Order :	NOI-01-01 AHP
Asset # :	KIT# 3		

Cal. status : Received in spec's, no adjustment made.

Navair Technologies certifies that the above listed instrument was calibrated on date noted and was released from this laboratory performing in accordance with the specifications set forth by the manufacturer.

Unless otherwise noted in the calibration report a 4:1 accuracy ratio was maintained for this calibration.

Our calibration system complies with the requirements of ISO-17025 standard, working standards used for calibration are certified by or traceable to the National Research Council of Canada or the National Institute of Standards and Technology.

Calibrated : Jan 13, 2020 By : J. Raposo

Cal. Due : Jan 13, 2022

Temperature : 23 °C ± 2 °C Relative Humidity : 30% to 70%

Standards used : J-163 J-261 J-282 J-512

Navair Technologies

REPAIR AND CALIBRATION TRACEABLE TO NRC AND NIST

6375 Dixie Rd. Mississauga, ON, L5T 2E7 http: // www.navair.com

Phone : 800-668-7440 Fax: 905 565 8325 e-Mail: service @ navair.com

6375 Dixie Rd Unit# 7,
Mississauga, ON L5T 2E7
Tel: (905)565-1583
Fax: (905)565-8325

Form:CAL200	Approved By:JR Jan/04	ver 1.0

Calibration Report part of Certificate #: 160012

Make	Model	Serial	Asset	Cal. By
Larson Davis	CAL200	3628	820 KIT3	JR

Test	Reading	Spec's	In/Out
SPL re 20µPa			
100.5kPa			
94dB	94.0	±0.2dB	In
114dB	114.0	±0.2dB	In
Freq. Accuracy			
1000Hz	999.7	±10Hz	In

CERTIFICATE of CALIBRATION

Make :	Larson Davis	Reference # :	160128
Model :	CAL200	Customer :	Rowan Williams Davies & Irwin Inc Guelph, ON
Descr. :	Sound cal 94/114dB 1KHz		
Serial # :	2939	P. Order :	NOI-01-01 AHP
Asset # :	812 KIT 2		

Cal. status : Received in spec's, no adjustment made.

Navair Technologies certifies that the above listed instrument was calibrated on date noted and was released from this laboratory performing in accordance with the specifications set forth by the manufacturer.

Unless otherwise noted in the calibration report a 4:1 accuracy ratio was maintained for this calibration.

Our Quality System system complies with the requirements of ISO-9001-2015 and is registered under certificate CA96/269, working standards used for calibration are certified by or traceable to the National Research Council of Canada or the National Institute of Standards and Technology.

Calibrated : Jan 20, 2020 By : Petro Onasko

Cal. Due : Jan 20, 2022

Temperature : 23 °C ± 2 °C Relative Humidity : 30% to 70%

Standards used : J-163 J-261 J-282 J-512

Navair Technologies

REPAIR AND CALIBRATION TRACEABLE TO NRC AND NIST

6375 Dixie Rd. Mississauga, ON, L5T 2E7
Phone : 800-668-7440 Fax: 905 565 8325
http: // www.navair.com
e-Mail: service @ navair.com

NAVAIR TECHNOLOGIES

6375 Dixie Rd Unit # 7
Mississauga ON L5T 2E7
Tel: (905) 565-1583
Fax: (905) 565-8325

Form: CAL200	Approved by: JR	Jan-04	Ver 1.0

Calibration Report part of Certificate #: 160128

Make	Model	Serial	Asset	Cal by
Larson Davis	CAL200	2939	812 KIT 2	P O

Test	Reading	Spec's	In/Out
SPL 101.0 kPa			
94.0 dB	93.9	±0.2 dB	In
114.0 dB	114.0	±0.2 dB	In
FREQ. ACCURACY			
1000 Hz	1000.1	±10 Hz	In

Ambient Pressure Response of Free-Field Microphones

(Variation over Static Pressure)

Pressure	65 kPa	75 kPa	85 kPa	93 kPa	101 kPa	110kPa
2520	.38 dB	.20 dB	.14 dB	.069 dB	0.000	-.047 dB
2540	.34 dB	.24 dB	.15 dB	.08 dB	0.000	-.075 dB
377B41	.43 dB	.31 dB	.19 dB	.099 dB	0.000	-.10 dB

NOTE: Results in dB referenced to 101 kPa

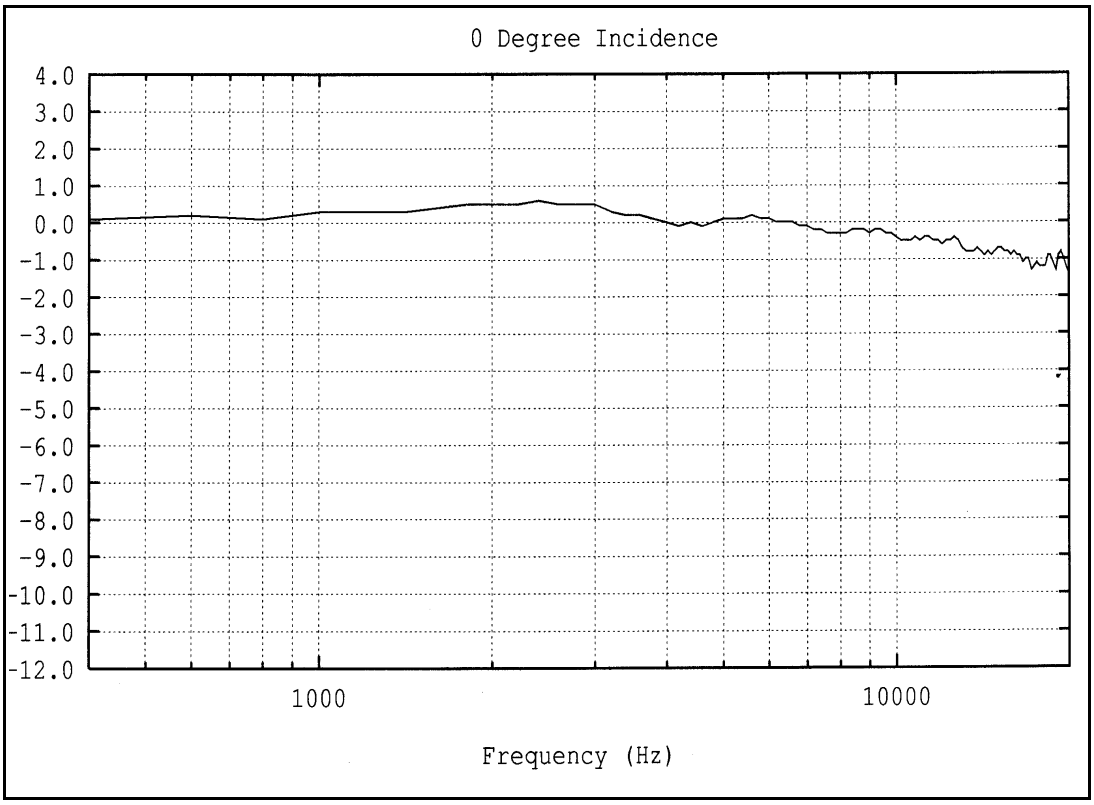
Position of Instrument and Operator:

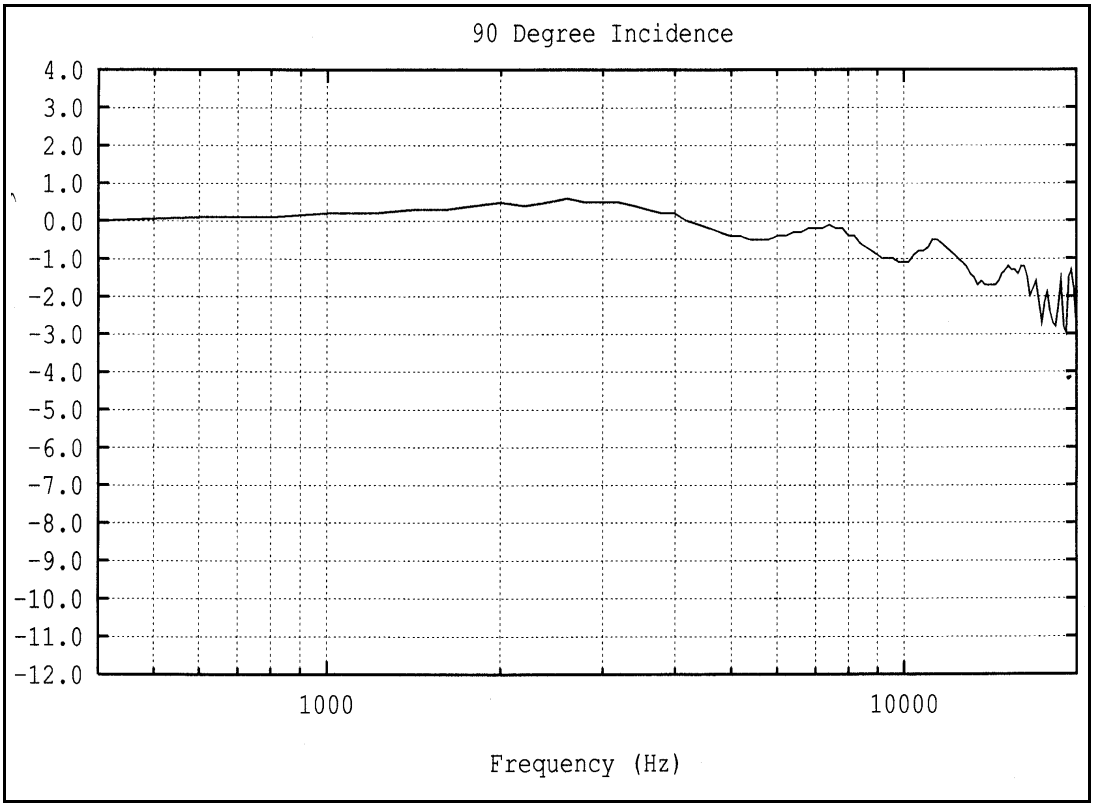
When making a measurement, it is recommended that the observer be positioned as far behind and to the right of the instrument as possible to minimize interference of the sound field at the microphone resulting from body reflections. When using the 824, the meter is held in one hand with the arm extended away from the body. Better results can be obtained by using a tripod.

Effect of Windscreen:

The Corrections which should be subtracted from the measured data when using the Larson-Davis Model WS001 3½ inch diameter windscreen with a ½ inch Larson-Davis microphone are as indicated in the following graphs.

Windscreen Response with Respect to No Windscreen




90 Degree Incidence
4.0
3.0
2.0
1.0
0.0
-1.0
-2.0
-3.0
-4.0
-5.0
-6.0
-7.0
-8.0
-9.0
-10.0
-11.0
-12.0
1000
10000
Frequency (Hz)

APPENDIX D

SIGNED STATEMENT

I can confirm on behalf of East Durham Wind GP, ULC that the wind turbines located within the East Durham Wind Energy Centre that were included in this immission report were operating normally for the duration of the measurement campaign from March 12, 2020 through May 22, 2020, except when the turbines were either parked deliberately for ambient noise measurements, or were parked due to operational considerations (i.e. to match power demands, or for maintenance).

Company Name:
East Durham Wind GP, ULC

Name of Company Representative: Michael Blackmore

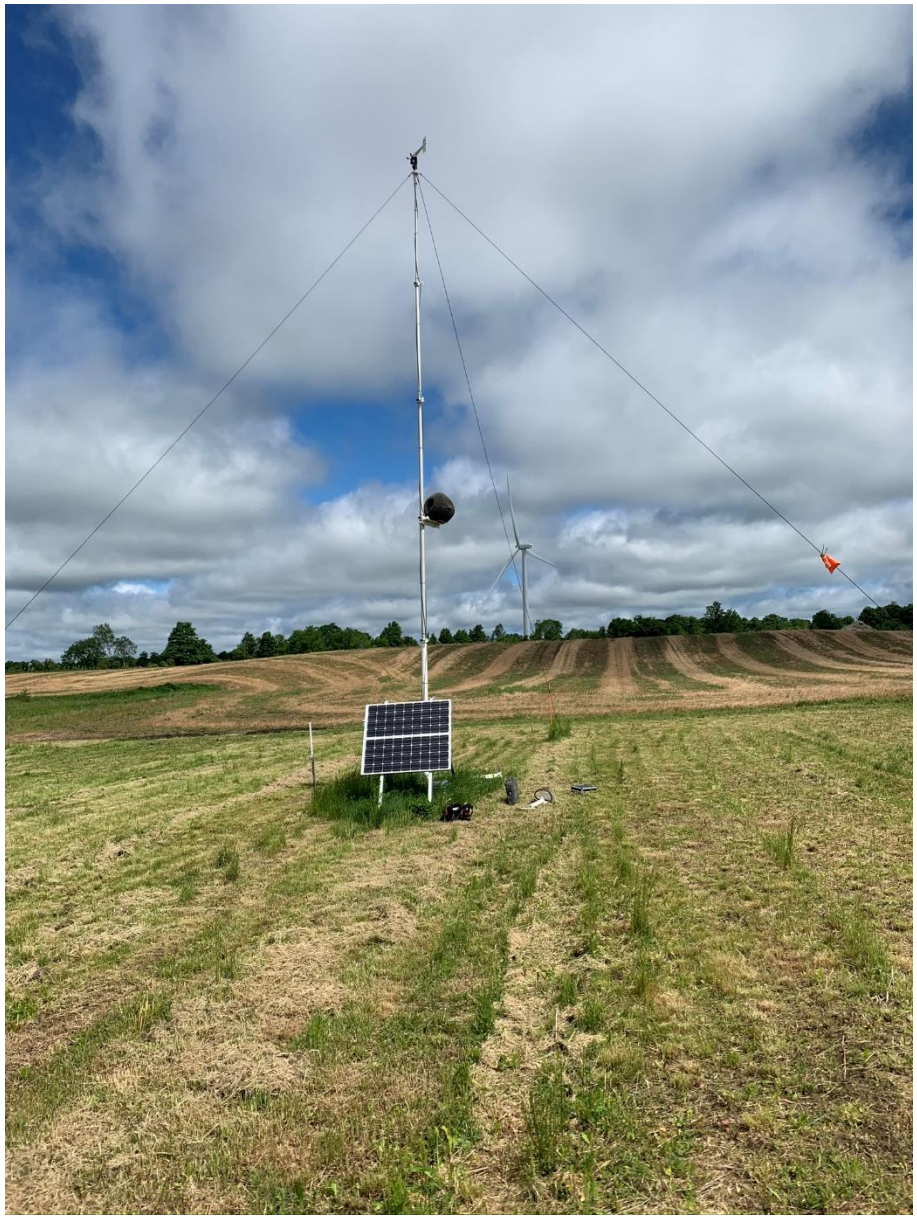
Title: Wind Site Manager

Signature of Company Representative:

Date: 8/25/2020

APPENDIX E

LOCATIONS



At Measurement Location in the Direction of the Turbine

East Durham Wind Farm **Monitor Location C** East Durham Spring 2020 Immisson Report Project #1502606	Drawn by: LRC	Figure: E.1	
	Date: August 20, 2020		

In Close Proximity to the Turbine in the Direction of the Measurement Location

East Durham Wind Farm **Monitor Location C** East Durham Spring 2020 Immisson Report Project #1502606	Drawn by: LRC	Figure: E.2	
	Date: August 20, 2020		

At 90° to the Line Between the Turbine and Measurement Location

East Durham Wind Farm **Monitor Location C** East Durham Spring 2020 Immisson Report Project #1502606	Drawn by: LRC	Figure: E.3	
	Date: August 20, 2020		

Rationale Summary Table for Measurement Locations (East Durham I-Audits)

Rank	Rec Id.	Re. Type	Rec. Height (m)	Distance to Nearest Turbine (m)	Nearest Turbine	Modelled Sound Level (dBA)	Location Comment	Location Conclusion
1	475	Vlr	4.5	615	T5	40.0	Ideal location. Downwind of the dominant wind direction (East of T5 and the substation)	Permission obtained (Monitor B)
2	30	Vlr	4.5	676	T5	39.7	Not down wind of prevailing wind (south of turbines)	Not Selected
3	161	Vlr	4.5	602	T8	39.5	Good location for monitoring. Equivalent to R208 where monitoring was conducted	Not Selected
4	208	Vlr	4.5	644	T8	39.5	Located in decent location for down wind conditions. Located in close proximity to several turbines for combined effects	Permission obtained (Monitor C)
5	236	Res	4.5	609	T2	39.5	Ideal location, downwind of T2 and is an existing house. Alt participating Location is R272	Similar to R318
6	318	Res	4.5	594	T2	39.3	Ideal location, downwind of T2 and is an existing house. Alt participating Location is R272	Selected Participating receptor R272 as permission was not granted at R318 (Monitor D)
7	93	Vlr	4.5	579	T11	39.0	Located downwind of T11 and is in close proximity to several turbines	Permission obtained (Monitor A)
8	474	Vlr	4.5	619	T11	38.6	Located downwind of T11 and is in close proximity to several turbines	Similar to R93
9	6	Res	4.5	576	T3	38.5	Not down wind of prevailing wind (west of turbines)	Not Selected
10	316	Res	4.5	792	T5(*)	38.5	Downwind of T5 and substation	Similar to R475
11	127	Res	4.5	562	T17	38.3	Not down wind of prevailing wind (west of turbines)	Not Selected
12	4	Res	4.5	625	T10	38.1	Not down wind of prevailing wind (south of turbines)	Not Selected
13	77	Vlr	4.5	719	T11	38.1	Not down wind of prevailing wind (northwest of turbines)	Not Selected
14	102	Res	4.5	624	T3	38.0	Not down wind of prevailing wind (west of turbines)	Not Selected
15	282	Res	4.5	563	T12	38.0	Not down wind of prevailing wind (northwest of turbines)	Not Selected
16	91	Res	4.5	759	T4	37.9	Not down wind of prevailing wind (southwest of turbines)	Not Selected
17	323	Res	4.5	567	T16	37.7	Not down wind of prevailing wind (west of turbines)	Not Selected
18	84	Res	4.5	562	T16	37.6	Winds are decently downwind of T6	Permission was not obtained
19	277	Res	4.5	646	T3	37.6	Not down wind of prevailing wind (west of turbines)	Not Selected
20	137	Res	4.5	730	T11	37.5	Not down wind of prevailing wind (northwest of turbines)	Not Selected
21	177	Res	4.5	637	T11	37.5	Winds are decently downwind of T11. Monitor A at R93 is better monitoring choice	Not Selected
22	337	Vlr	4.5	600	T16	37.5	Not down wind of prevailing wind (west of turbines)	Not Selected
23	341	Vlr	4.5	571	T16	37.4	Winds are decently downwind of T16, but not a great location	Not Selected
24	89	Res	4.5	682	T3	37.2	Not down wind of prevailing wind (west of turbines)	Not Selected
25	2	Res	4.5	691	T17	37.1	Not down wind of prevailing wind (west of turbines)	Not Selected
26	304	Res	4.5	610	T16	37.1	Winds are decently downwind of T16, but not a great location	Not Selected
27	64	Res	4.5	720	T15	37.0	Great location as it is downwind of T14 and T15	Permission obtained and monitor was originally placed here. Due to wind break affecting data, the monitor was moved to participating land R195. The new location is equivalent to R64

Noise Monitoring Location

Monitoring Location	UTM 17		Microphone Height (m)
	Easting (m)	Northing (m)	
East Durham C	525330	4894015	4.5

APPENDIX F

MEASUREMENT CONDITIONS

Appendix F1 - Summary of Measurement Conditions East Durham Wind Farm, 1502606	
Measurement Duration	March 12, 2020 to May 22, 2020
Wind Speed	0 to 17 m/s
Temperature	-12° to 24˚C
General Weather Conditions	Weather conditions varied significantly over the measurement campaign
Wind Rose Plots	Found in Figure 3
Signed Statement by the Operator	Found in Appendix D

APPENDIX G

VALID DATA TABLES

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-14 01:20:20	6.90	49.8
2020-03-14 01:21:50	5.50	46.5
2020-03-14 01:23:40	5.01	44.9
2020-03-14 01:23:50	5.37	45.0
2020-03-14 01:25:40	6.44	46.7
2020-03-14 01:26:00	5.33	45.3
2020-03-14 01:26:10	4.55	45.7
2020-03-14 01:28:20	6.25	46.7
2020-03-14 01:29:10	6.72	44.1
2020-03-14 01:29:20	7.21	46.4
2020-03-14 01:29:30	6.63	47.1
2020-03-14 01:32:20	6.72	48.5
2020-03-14 01:32:30	5.00	44.5
2020-03-14 01:32:40	4.90	42.5
2020-03-14 01:32:50	6.74	44.2
2020-03-14 01:33:50	5.90	46.5
2020-03-14 01:34:00	5.58	44.2
2020-03-14 01:34:10	5.04	44.7
2020-03-14 01:36:40	4.89	45.3
2020-03-14 01:39:20	6.64	46.6
2020-03-14 01:39:40	6.32	48.5
2020-03-14 01:41:20	4.98	44.7
2020-03-14 01:41:30	7.21	48.5
2020-03-14 01:41:40	6.87	47.1
2020-03-14 01:42:30	6.03	46.2
2020-03-14 01:42:40	6.06	45.5
2020-03-14 01:43:10	5.76	45.2
2020-03-14 01:43:20	6.72	46.3
2020-03-14 01:43:30	5.66	45.9
2020-03-14 01:43:40	4.84	44.2
2020-03-14 01:43:50	4.59	44.3
2020-03-14 01:44:10	5.55	45.1
2020-03-14 01:44:20	6.74	47.8
2020-03-14 01:45:50	3.62	44.1
2020-03-14 01:46:10	2.27	43.1
2020-03-14 01:46:50	5.51	45.8
2020-03-14 01:47:40	6.41	47.4
2020-03-14 01:47:50	4.66	44.1
2020-03-14 01:48:30	7.36	49.4
2020-03-14 01:49:40	5.41	46.2
2020-03-14 01:55:40	5.32	46.8
2020-03-14 01:55:50	4.57	43.8
2020-03-14 01:58:30	5.28	44.9
2020-03-14 01:58:40	7.29	49.0
2020-03-14 01:58:50	6.05	44.9
2020-03-14 01:59:00	5.66	44.2
2020-03-14 01:59:10	4.71	43.3
2020-03-14 01:59:30	5.08	43.1

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-14 01:59:40	4.73	42.5
2020-03-14 01:59:50	4.04	43.0
2020-03-14 02:00:00	3.91	42.5
2020-03-14 02:00:10	4.41	41.7
2020-03-14 02:00:20	3.93	41.5
2020-03-14 02:00:30	4.12	42.1
2020-03-14 02:00:40	3.90	42.8
2020-03-14 02:00:50	4.55	43.5
2020-03-14 02:01:00	4.91	43.3
2020-03-14 02:01:40	5.74	44.0
2020-03-14 02:01:50	6.02	43.8
2020-03-14 02:02:30	4.93	45.1
2020-03-14 02:02:50	3.75	42.1
2020-03-14 02:03:00	3.24	43.0
2020-03-14 02:03:20	2.48	42.3
2020-03-14 02:03:40	4.87	42.3
2020-03-14 02:03:50	5.03	43.7
2020-03-14 02:04:00	6.50	44.2
2020-03-14 02:04:10	6.30	46.5
2020-03-14 02:04:20	5.04	43.7
2020-03-14 02:04:30	5.09	43.8
2020-03-14 02:04:40	6.36	45.1
2020-03-14 02:04:50	5.75	43.6
2020-03-14 02:05:40	6.30	47.3
2020-03-14 02:07:30	6.45	45.7
2020-03-14 02:07:40	7.16	47.3
2020-03-14 02:08:50	6.73	48.0
2020-03-14 02:09:20	6.69	47.3
2020-03-14 02:09:40	6.21	47.0
2020-03-14 02:11:30	5.61	45.0
2020-03-14 02:11:40	5.40	45.3
2020-03-14 02:11:50	5.53	43.7
2020-03-14 02:12:00	5.56	47.3
2020-03-14 02:12:40	6.10	44.0
2020-03-14 02:12:50	5.21	42.7
2020-03-14 02:13:00	5.27	42.6
2020-03-14 02:13:10	4.99	42.8
2020-03-14 02:13:20	5.19	43.1
2020-03-14 02:13:30	5.06	43.5
2020-03-14 02:13:40	4.77	43.9
2020-03-14 02:14:10	4.80	42.1
2020-03-14 02:14:20	4.54	41.9
2020-03-14 02:14:30	5.74	41.8
2020-03-14 02:14:40	5.00	45.4
2020-03-14 02:17:10	6.61	47.0
2020-03-14 02:17:20	5.71	44.0
2020-03-14 02:17:30	6.58	47.8
2020-03-14 02:20:00	6.80	47.0

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-14 02:20:10	6.92	46.9
2020-03-14 02:21:00	5.16	44.3
2020-03-14 02:21:10	5.59	46.8
2020-03-14 02:21:20	6.10	44.9
2020-03-14 02:21:30	5.39	44.2
2020-03-14 02:22:10	4.63	44.8
2020-03-14 02:24:20	6.66	46.7
2020-03-14 02:24:30	4.68	46.4
2020-03-14 02:24:50	3.90	43.3
2020-03-14 02:25:10	3.90	42.5
2020-03-14 02:25:20	5.13	43.0
2020-03-14 02:25:30	6.16	47.2
2020-03-14 02:25:50	5.90	47.1
2020-03-14 02:26:00	6.14	45.5
2020-03-14 02:26:10	5.66	45.1
2020-03-14 02:26:30	6.68	46.2
2020-03-14 02:26:40	4.88	43.8
2020-03-14 02:26:50	5.51	43.7
2020-03-14 02:27:00	5.36	44.1
2020-03-14 02:27:10	5.96	44.4
2020-03-14 02:27:20	5.25	43.1
2020-03-14 02:27:30	5.71	44.9
2020-03-14 02:27:40	4.58	43.2
2020-03-14 02:28:20	6.88	45.8
2020-03-14 02:28:30	6.09	46.5
2020-03-14 02:28:40	6.32	44.1
2020-03-14 02:29:00	5.82	47.4
2020-03-14 02:29:20	4.86	43.8
2020-03-14 02:29:30	5.71	45.1
2020-03-14 02:29:40	6.36	46.6
2020-03-14 02:30:00	5.89	44.3
2020-03-14 02:30:10	6.38	46.2
2020-03-14 02:31:00	6.66	45.5
2020-03-14 02:31:10	5.71	45.0
2020-03-14 02:31:50	3.91	42.0
2020-03-14 02:32:20	7.36	48.7
2020-03-14 02:32:50	5.35	43.7
2020-03-14 02:33:00	5.69	46.9
2020-03-14 02:33:40	6.49	44.2
2020-03-14 02:35:20	6.44	47.7
2020-03-14 02:35:30	7.33	45.5
2020-03-14 02:35:40	5.61	45.6
2020-03-14 02:35:50	5.11	43.6
2020-03-14 02:36:00	5.10	43.5
2020-03-14 02:36:10	6.31	46.0
2020-03-14 02:36:20	6.97	47.0
2020-03-14 02:36:30	6.94	48.5
2020-03-14 02:37:20	5.88	46.5

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-14 02:37:30	5.25	43.3
2020-03-14 02:37:40	5.80	42.0
2020-03-14 02:37:50	5.96	44.9
2020-03-14 02:38:30	6.14	47.7
2020-03-14 02:39:10	5.14	44.3
2020-03-14 02:40:40	6.21	47.4
2020-03-14 02:40:50	6.66	45.0
2020-03-14 02:41:00	5.90	46.2
2020-03-14 02:42:20	5.59	44.6
2020-03-14 02:42:30	6.73	48.8
2020-03-14 02:44:40	6.14	46.5
2020-03-14 02:45:00	5.64	44.9
2020-03-14 02:46:20	6.00	44.6
2020-03-14 02:46:30	5.61	46.1
2020-03-14 02:46:40	5.27	44.8
2020-03-14 02:46:50	5.10	45.1
2020-03-14 02:49:20	5.88	44.0
2020-03-14 02:49:30	4.53	43.1
2020-03-14 02:51:00	5.02	46.3
2020-03-14 02:51:20	4.62	43.6
2020-03-14 02:51:30	5.20	44.2
2020-03-14 02:51:50	2.42	43.7
2020-03-14 02:52:20	5.39	45.3
2020-03-14 02:53:00	5.97	45.6
2020-03-14 02:53:10	6.97	48.0
2020-03-14 02:53:20	5.93	47.4
2020-03-14 02:53:30	6.03	47.2
2020-03-14 02:53:40	4.54	45.1
2020-03-14 02:54:00	4.35	42.3
2020-03-14 02:54:10	3.90	42.7
2020-03-14 02:54:20	3.53	43.0
2020-03-14 02:54:30	4.94	43.9
2020-03-14 02:54:40	5.91	43.1
2020-03-14 02:54:50	6.18	46.9
2020-03-14 02:55:50	6.80	47.4
2020-03-14 02:58:20	6.96	48.5
2020-03-14 03:00:00	6.11	46.7
2020-03-14 03:00:10	5.51	45.6
2020-03-14 03:00:20	5.99	47.4
2020-03-14 03:00:30	5.25	45.1
2020-03-14 03:00:40	5.17	45.8
2020-03-14 03:01:00	5.34	48.5
2020-03-14 03:08:10	6.65	49.1
2020-03-14 03:10:30	6.25	47.8
2020-03-14 03:14:10	6.69	47.2
2020-03-14 03:16:50	5.82	47.3
2020-03-14 03:17:30	6.64	48.5
2020-03-14 03:17:40	6.44	47.3

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-14 03:21:20	6.46	47.5
2020-03-14 03:21:40	5.30	43.8
2020-03-14 03:21:50	6.43	44.3
2020-03-14 03:22:00	6.77	49.0
2020-03-14 03:22:10	5.91	46.3
2020-03-14 03:23:30	6.21	47.1
2020-03-14 03:23:40	6.95	48.8
2020-03-14 03:23:50	4.98	44.6
2020-03-14 03:24:10	4.82	45.2
2020-03-14 03:26:20	5.29	44.0
2020-03-14 03:29:20	4.57	45.4
2020-03-14 03:29:40	5.98	47.7
2020-03-14 03:29:50	6.11	45.8
2020-03-14 03:30:40	5.52	45.7
2020-03-14 03:30:50	5.48	44.6
2020-03-14 03:31:00	5.57	45.3
2020-03-14 03:31:10	5.23	43.6
2020-03-14 03:31:20	4.99	44.2
2020-03-14 03:32:50	5.59	44.3
2020-03-14 03:33:00	5.80	46.2
2020-03-14 03:33:50	6.59	48.6
2020-03-14 03:34:40	6.68	47.3
2020-03-14 03:36:40	5.40	43.9
2020-03-14 03:38:20	7.27	49.0
2020-03-14 03:39:00	7.02	48.9
2020-03-14 03:39:20	4.84	45.9
2020-03-14 03:39:50	4.74	42.9
2020-03-14 03:40:00	4.63	42.5
2020-03-14 03:40:10	4.84	42.7
2020-03-14 03:40:40	6.51	48.8
2020-03-14 03:40:50	5.94	45.2
2020-03-14 03:41:00	5.64	46.8
2020-03-14 03:42:20	6.94	47.9
2020-03-14 03:42:30	6.02	46.2
2020-03-14 03:42:40	5.05	47.2
2020-03-14 03:42:50	4.88	46.5
2020-03-14 03:43:00	6.83	48.2
2020-03-14 03:43:40	5.78	46.9
2020-03-14 03:46:30	6.70	47.4
2020-03-14 03:46:40	6.06	46.5
2020-03-14 03:47:20	6.55	45.0
2020-03-14 03:47:40	6.38	45.5
2020-03-14 03:58:40	7.04	47.8
2020-03-14 04:00:10	6.71	48.7
2020-03-14 04:02:40	4.36	43.1
2020-03-14 04:02:50	4.40	44.1
2020-03-14 04:03:00	5.18	43.3
2020-03-14 04:03:20	7.09	48.9

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-14 04:03:50	7.31	48.4
2020-03-14 04:04:10	6.82	47.9
2020-03-14 04:17:00	5.34	44.5
2020-03-14 04:17:10	6.14	45.7
2020-03-14 04:17:20	5.42	45.7
2020-03-14 04:17:30	6.64	47.8
2020-03-14 04:18:00	5.06	45.1
2020-03-14 04:18:10	5.34	45.7
2020-03-14 04:18:30	5.44	45.5
2020-03-14 04:18:40	7.34	47.8
2020-03-14 04:19:10	4.96	45.4
2020-03-14 04:19:40	4.91	43.9
2020-03-14 04:20:40	5.58	47.1
2020-03-14 04:21:10	5.75	47.2
2020-03-14 04:21:40	5.79	45.0
2020-03-14 04:23:00	7.50	48.3
2020-03-14 04:23:20	7.28	47.8
2020-03-14 04:24:30	5.61	47.0
2020-03-14 04:26:50	6.67	48.6
2020-03-14 04:27:10	5.08	46.1
2020-03-14 04:27:20	4.70	46.5
2020-03-14 04:27:30	4.79	44.9
2020-03-14 04:28:00	4.93	43.5
2020-03-14 04:28:10	5.02	44.2
2020-03-14 04:28:20	5.51	44.4
2020-03-14 04:28:30	5.49	44.0
2020-03-14 04:28:40	6.24	44.6
2020-03-14 04:30:30	4.14	44.4
2020-03-14 04:30:40	5.21	43.8
2020-03-14 04:31:30	6.27	47.3
2020-03-14 04:38:00	5.73	47.5
2020-03-14 04:38:50	6.82	47.7
2020-03-14 04:39:00	5.01	43.5
2020-03-14 04:39:10	7.24	48.0
2020-03-14 04:39:20	6.51	47.4
2020-03-14 04:39:30	5.96	46.2
2020-03-14 04:39:40	5.52	43.9
2020-03-14 04:39:50	4.99	46.2
2020-03-14 04:40:10	3.76	42.3
2020-03-14 04:40:20	3.85	42.7
2020-03-14 04:40:40	4.77	44.5
2020-03-14 04:44:00	5.53	47.3
2020-03-14 04:46:40	5.14	46.5
2020-03-14 04:46:50	5.79	47.1
2020-03-14 04:48:40	6.33	46.8
2020-03-14 04:49:10	7.14	48.8
2020-03-14 04:49:40	6.00	46.4
2020-03-14 04:49:50	4.80	45.5

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-14 04:50:00	5.94	44.6
2020-03-14 04:50:10	6.86	45.5
2020-03-14 04:50:40	6.90	47.1
2020-03-14 04:50:50	5.48	43.6
2020-03-14 04:51:40	6.70	47.9
2020-03-14 04:52:30	6.00	45.7
2020-03-14 04:53:10	5.14	43.3
2020-03-14 04:53:20	4.93	42.4
2020-03-14 04:54:00	6.10	42.6
2020-03-14 04:54:10	6.16	44.1
2020-03-14 04:54:20	7.19	48.3
2020-03-14 04:55:20	5.99	45.0
2020-03-14 04:55:30	5.71	44.7
2020-03-14 04:56:30	4.60	45.9
2020-03-14 04:56:40	5.67	46.5
2020-03-14 04:57:00	5.90	44.7
2020-03-14 04:57:10	6.51	46.4
2020-03-14 04:58:00	3.72	42.5
2020-03-14 04:58:10	5.23	43.0
2020-03-14 04:58:30	5.53	44.1
2020-03-14 04:58:40	6.34	47.0
2020-03-14 04:58:50	5.45	43.8
2020-03-14 04:59:20	5.31	42.1
2020-03-14 04:59:30	5.74	43.3
2020-03-14 04:59:40	5.68	46.8
2020-03-20 22:00:00	4.18	42.0
2020-03-20 22:00:10	4.37	42.7
2020-03-20 22:00:20	4.16	42.4
2020-03-20 22:03:30	4.87	42.4
2020-03-20 22:03:40	4.30	41.5
2020-03-20 22:04:30	3.34	41.7
2020-03-20 22:05:00	5.68	43.9
2020-03-20 22:05:50	4.35	43.2
2020-03-20 22:06:10	3.58	42.0
2020-03-20 22:06:40	4.62	44.2
2020-03-20 22:13:20	5.52	44.8
2020-03-20 22:13:30	4.91	44.5
2020-03-20 22:13:40	4.71	44.1
2020-03-20 22:16:10	3.62	42.6
2020-03-20 22:16:30	4.24	42.7
2020-03-20 22:16:40	3.79	42.5
2020-03-20 22:16:50	4.12	41.7
2020-03-20 22:21:30	3.07	42.0
2020-03-20 22:24:10	5.77	43.8
2020-03-20 22:24:20	4.63	43.0
2020-03-20 22:24:50	5.19	42.8
2020-03-20 22:26:10	4.81	42.8
2020-03-20 22:26:20	4.55	42.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-20 22:26:50	5.59	44.9
2020-03-20 22:27:00	5.57	43.2
2020-03-20 22:27:10	5.13	42.6
2020-03-20 22:27:20	4.11	41.5
2020-03-20 22:27:30	5.06	43.2
2020-03-20 22:27:40	5.27	44.2
2020-03-20 22:29:40	4.18	40.9
2020-03-20 22:30:00	2.90	41.1
2020-03-20 22:30:20	4.76	43.1
2020-03-20 22:31:50	4.40	42.1
2020-03-20 22:32:10	4.16	41.7
2020-03-20 22:33:00	3.98	42.7
2020-03-20 22:33:10	4.75	44.0
2020-03-20 22:33:20	4.85	43.3
2020-03-20 22:33:30	4.52	42.7
2020-03-20 22:33:40	3.56	43.1
2020-03-20 22:34:20	3.71	41.1
2020-03-20 22:37:50	4.21	40.7
2020-03-20 22:38:00	4.25	41.6
2020-03-20 22:38:10	4.26	41.7
2020-03-20 22:39:30	3.39	41.0
2020-03-20 22:49:50	2.92	41.2
2020-03-20 22:50:00	2.32	40.7
2020-03-20 22:50:10	3.01	40.8
2020-03-20 22:50:20	2.69	40.8
2020-03-20 22:50:30	2.73	40.4
2020-03-20 22:50:40	2.38	40.3
2020-03-20 22:50:50	2.27	40.5
2020-03-20 22:51:00	2.41	40.8
2020-03-20 22:51:20	2.30	41.1
2020-03-20 22:52:30	2.57	41.2
2020-03-20 22:52:40	3.70	41.7
2020-03-20 22:52:50	3.03	41.4
2020-03-20 22:53:00	2.97	41.2
2020-03-20 22:53:30	5.81	43.9
2020-03-20 22:53:40	4.19	41.2
2020-03-20 22:54:00	4.25	41.8
2020-03-20 22:54:10	4.18	41.5
2020-03-20 22:54:20	3.77	41.0
2020-03-20 22:54:30	2.42	40.4
2020-03-20 22:54:40	2.45	41.1
2020-03-20 22:55:20	4.32	40.5
2020-03-20 22:55:30	4.86	42.9
2020-03-20 22:55:50	5.09	43.0
2020-03-20 22:59:40	2.41	41.6
2020-03-20 23:09:30	4.02	41.5
2020-03-20 23:09:50	6.19	45.5
2020-03-20 23:10:00	4.85	42.1

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-20 23:10:10	4.45	41.3
2020-03-20 23:10:20	2.89	41.1
2020-03-20 23:14:10	4.80	41.2
2020-03-20 23:14:20	4.14	41.9
2020-03-20 23:14:30	3.86	41.3
2020-03-20 23:14:40	3.66	42.4
2020-03-20 23:25:00	3.88	42.2
2020-03-20 23:25:10	3.16	40.6
2020-03-20 23:25:20	2.54	40.7
2020-03-20 23:34:00	4.30	41.9
2020-03-20 23:34:10	4.62	42.7
2020-03-20 23:34:50	3.71	41.3
2020-03-20 23:35:00	2.71	41.5
2020-03-20 23:35:10	3.09	42.2
2020-03-20 23:35:20	3.23	41.5
2020-03-20 23:35:40	2.81	40.1
2020-03-20 23:35:50	2.84	40.0
2020-03-20 23:36:00	3.00	40.4
2020-03-20 23:36:10	3.29	41.5
2020-03-20 23:36:20	3.85	42.3
2020-03-20 23:36:30	3.91	42.4
2020-03-20 23:36:50	4.31	40.8
2020-03-20 23:37:00	3.88	41.6
2020-03-20 23:37:10	3.06	41.6
2020-03-20 23:37:20	3.45	41.6
2020-03-20 23:37:30	3.05	40.9
2020-03-20 23:38:40	3.14	40.3
2020-03-20 23:39:40	3.91	41.7
2020-03-20 23:42:30	4.63	43.1
2020-03-20 23:42:40	5.02	42.6
2020-03-20 23:42:50	4.37	41.7
2020-03-20 23:43:00	3.55	41.4
2020-03-20 23:43:40	3.67	42.3
2020-03-20 23:44:40	3.78	42.4
2020-03-20 23:45:00	4.66	44.5
2020-03-20 23:45:10	4.83	43.9
2020-03-20 23:46:00	4.08	42.1
2020-03-20 23:46:10	4.93	43.0
2020-03-20 23:46:20	5.04	43.2
2020-03-20 23:47:40	3.48	41.9
2020-03-20 23:47:50	3.16	41.6
2020-03-20 23:48:00	3.48	41.2
2020-03-20 23:48:30	4.39	41.7
2020-03-20 23:48:50	3.69	41.7
2020-03-20 23:49:10	4.27	41.5
2020-03-20 23:49:20	3.64	42.2
2020-03-20 23:49:30	4.14	42.2
2020-03-20 23:50:10	4.20	42.8

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-20 23:50:30	5.77	44.5
2020-03-20 23:51:10	5.96	43.9
2020-03-20 23:51:20	5.16	42.0
2020-03-20 23:51:30	4.22	41.4
2020-03-20 23:51:40	5.27	43.6
2020-03-20 23:52:00	4.92	43.8
2020-03-20 23:52:30	4.81	42.8
2020-03-20 23:53:20	4.28	41.1
2020-03-20 23:53:30	3.41	42.0
2020-03-20 23:54:30	4.61	42.9
2020-03-20 23:54:40	4.41	43.9
2020-03-20 23:55:10	5.19	42.8
2020-03-20 23:55:20	4.64	42.1
2020-03-20 23:55:30	3.69	42.1
2020-03-20 23:57:30	3.16	40.7
2020-03-20 23:57:50	3.27	41.6
2020-03-20 23:58:00	3.54	41.2
2020-03-20 23:58:10	3.33	40.8
2020-03-20 23:58:20	3.26	41.3
2020-03-20 23:58:30	3.78	41.4
2020-03-20 23:58:40	3.60	41.3
2020-03-20 23:58:50	3.49	40.9
2020-03-20 23:59:00	4.23	42.5
2020-03-21 00:06:00	2.67	40.8
2020-03-21 00:06:10	2.58	40.3
2020-03-21 00:09:30	6.72	46.6
2020-03-21 00:11:10	6.22	44.4
2020-03-21 00:11:20	5.70	43.9
2020-03-21 00:11:40	4.66	42.2
2020-03-21 00:11:50	4.76	42.4
2020-03-21 00:12:40	4.61	41.9
2020-03-21 00:13:00	3.52	42.4
2020-03-21 00:13:20	5.51	43.6
2020-03-21 00:19:10	5.19	43.9
2020-03-21 00:19:30	5.76	44.9
2020-03-21 00:24:20	3.68	39.2
2020-03-21 00:24:30	3.57	39.4
2020-03-21 00:25:10	4.58	42.1
2020-03-21 00:27:50	4.72	44.0
2020-03-21 00:28:00	3.91	41.5
2020-03-21 00:29:40	5.51	45.6
2020-03-21 00:30:00	5.88	45.8
2020-03-21 00:30:40	5.54	44.9
2020-03-21 00:32:30	5.76	43.9
2020-03-21 00:33:00	4.80	42.1
2020-03-21 00:33:10	3.68	41.4
2020-03-21 00:33:30	5.56	42.5
2020-03-21 00:33:40	5.29	44.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-21 00:34:20	5.45	42.0
2020-03-21 00:34:30	4.64	43.5
2020-03-21 00:34:40	5.64	44.0
2020-03-21 00:35:20	5.60	41.9
2020-03-21 00:35:30	4.84	40.9
2020-03-21 00:35:50	4.55	40.6
2020-03-21 00:36:00	4.52	41.2
2020-03-21 00:36:30	5.07	44.2
2020-03-21 00:37:10	4.74	43.0
2020-03-21 00:48:10	2.86	38.2
2020-03-21 00:54:20	2.92	40.0
2020-03-21 00:54:30	2.77	40.2
2020-03-21 00:55:30	5.71	46.7
2020-03-21 00:55:40	4.76	42.2
2020-03-21 00:59:50	3.80	40.7
2020-03-21 01:04:30	4.40	42.4
2020-03-21 01:04:40	3.72	40.7
2020-03-21 01:04:50	2.29	40.3
2020-03-21 01:05:00	1.90	39.7
2020-03-21 01:06:40	3.24	39.9
2020-03-21 01:06:50	3.32	40.3
2020-03-21 01:07:00	4.06	40.3
2020-03-21 01:07:40	3.23	40.1
2020-03-21 01:07:50	3.11	40.8
2020-03-21 01:08:00	2.80	40.7
2020-03-21 01:08:10	2.70	40.9
2020-03-21 01:08:20	2.36	40.3
2020-03-21 01:08:30	2.84	39.5
2020-03-21 01:12:20	4.23	41.7
2020-03-21 01:12:30	4.09	41.1
2020-03-21 01:12:40	2.86	41.3
2020-03-21 01:12:50	2.51	41.0
2020-03-21 01:13:00	3.50	41.0
2020-03-21 01:13:20	2.72	41.3
2020-03-21 01:13:30	2.48	40.9
2020-03-21 01:13:40	3.42	40.5
2020-03-21 01:14:00	3.88	42.5
2020-03-21 01:14:10	3.64	40.1
2020-03-21 01:14:30	4.85	41.7
2020-03-21 01:15:20	3.24	40.3
2020-03-21 01:16:00	3.79	40.0
2020-03-21 01:20:50	3.79	40.6
2020-03-21 01:21:20	3.58	41.0
2020-03-21 01:21:30	3.43	40.4
2020-03-21 01:21:40	3.04	40.8
2020-03-21 01:21:50	2.88	40.3
2020-03-21 01:22:00	2.49	40.0
2020-03-21 01:22:10	2.74	40.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-21 01:26:20	4.63	43.4
2020-03-21 01:27:20	4.82	40.0
2020-03-21 01:27:30	4.73	41.2
2020-03-21 01:27:40	5.55	42.2
2020-03-21 01:27:50	4.59	41.7
2020-03-21 01:28:00	4.68	41.3
2020-03-21 01:29:00	4.40	41.9
2020-03-21 01:29:10	3.65	41.1
2020-03-21 01:29:20	3.73	41.1
2020-03-21 01:29:40	5.52	42.7
2020-03-21 01:29:50	4.56	43.0
2020-03-21 01:32:30	4.85	42.0
2020-03-21 01:32:50	4.05	42.0
2020-03-21 01:33:00	4.57	41.4
2020-03-21 01:33:10	3.85	40.5
2020-03-21 01:33:20	3.21	40.6
2020-03-21 01:33:30	4.02	39.3
2020-03-21 01:33:40	3.53	38.8
2020-03-21 01:33:50	3.79	39.9
2020-03-21 01:34:40	5.64	44.5
2020-03-21 01:34:50	4.96	42.5
2020-03-21 01:35:30	4.68	42.9
2020-03-21 01:36:40	4.92	41.3
2020-03-21 01:37:00	5.55	44.6
2020-03-21 01:37:10	5.79	40.9
2020-03-21 01:37:20	4.28	40.9
2020-03-21 01:37:50	4.78	43.0
2020-03-21 01:38:00	5.39	43.8
2020-03-21 01:38:10	4.85	41.5
2020-03-21 01:49:50	5.60	44.7
2020-03-21 01:51:10	4.48	41.5
2020-03-21 02:02:20	4.55	41.9
2020-03-21 02:02:40	4.70	40.2
2020-03-21 02:02:50	4.33	40.9
2020-03-21 02:03:10	4.91	42.9
2020-03-21 02:03:20	4.21	39.9
2020-03-21 02:04:10	4.29	40.7
2020-03-21 02:04:20	3.70	38.5
2020-03-21 02:11:20	3.78	39.1
2020-03-21 02:17:00	3.34	39.5
2020-03-21 02:21:20	4.32	40.6
2020-03-21 02:21:30	4.77	39.6
2020-03-21 02:21:40	3.71	39.4
2020-03-21 03:05:00	1.94	40.0
2020-03-21 03:05:10	1.94	40.4
2020-03-21 03:05:20	2.48	40.6
2020-03-21 03:05:30	2.81	39.6
2020-03-21 03:05:40	2.38	39.8

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-21 03:06:00	2.83	38.6
2020-03-21 03:06:30	3.40	39.2
2020-03-21 03:08:10	4.62	38.4
2020-03-21 03:08:20	3.99	39.2
2020-03-21 03:08:30	3.41	38.1
2020-03-21 03:08:40	2.72	38.2
2020-03-21 03:09:00	3.80	39.1
2020-03-21 03:09:10	3.80	39.5
2020-03-21 03:09:20	3.81	39.3
2020-03-21 03:09:30	3.52	39.1
2020-03-21 03:09:40	2.58	38.5
2020-03-21 03:09:50	3.19	37.5
2020-03-21 03:18:10	3.56	38.6
2020-03-21 03:21:10	4.07	39.0
2020-03-21 03:21:20	4.45	40.4
2020-03-21 03:22:50	4.68	41.4
2020-03-21 03:23:10	3.41	38.5
2020-03-21 03:23:20	3.24	37.6
2020-03-21 03:24:10	3.28	37.1
2020-03-21 03:24:20	3.43	37.4
2020-03-21 03:24:30	2.59	36.8
2020-03-21 03:24:50	2.96	39.2
2020-03-21 03:25:10	5.27	41.1
2020-03-21 03:25:20	5.24	41.5
2020-03-21 03:25:30	3.90	39.9
2020-03-21 04:48:40	3.91	38.0
2020-03-22 01:40:30	1.74	37.9
2020-03-22 01:46:20	2.93	37.2
2020-03-22 01:46:30	1.98	37.9
2020-03-22 01:46:40	1.82	37.5
2020-03-22 01:46:50	1.67	37.6
2020-03-22 01:47:00	1.39	37.3
2020-03-22 01:47:10	1.51	37.8
2020-03-22 01:47:20	1.69	38.3
2020-03-22 01:51:40	1.89	36.5
2020-03-22 01:51:50	1.96	37.1
2020-03-22 01:52:00	2.33	36.8
2020-03-22 01:52:10	2.42	36.3
2020-03-22 01:52:20	2.29	36.9
2020-03-22 01:56:30	1.59	36.9
2020-03-22 01:56:40	1.57	37.5
2020-03-22 01:56:50	1.51	36.8
2020-03-22 01:57:00	1.45	37.1
2020-03-22 01:57:10	0.83	37.5
2020-03-22 02:14:50	1.28	37.6
2020-03-22 02:15:00	1.19	37.3
2020-03-22 02:15:10	1.69	37.7
2020-03-22 02:15:20	2.44	38.8

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-22 02:18:10	1.61	37.1
2020-03-22 02:18:20	1.56	37.6
2020-03-22 02:18:30	1.24	38.2
2020-03-22 02:18:40	1.70	37.8
2020-03-22 02:19:20	1.41	37.4
2020-03-22 02:19:30	1.42	37.2
2020-03-22 02:22:30	1.33	37.0
2020-03-22 02:22:40	1.32	37.0
2020-03-22 02:23:30	2.11	37.9
2020-03-22 02:23:40	1.96	37.5
2020-03-22 02:23:50	2.37	37.3
2020-03-22 02:24:00	2.35	37.1
2020-03-22 02:24:10	2.06	37.6
2020-03-22 02:24:20	2.52	37.7
2020-03-22 02:29:00	2.31	37.4
2020-03-22 02:32:30	2.14	36.8
2020-03-22 02:32:40	1.26	36.9
2020-03-31 22:38:20	3.85	37.7
2020-03-31 22:38:30	3.53	39.1
2020-03-31 22:38:40	3.74	39.0
2020-03-31 22:41:50	3.19	37.7
2020-03-31 22:55:00	5.66	41.0
2020-03-31 22:56:30	4.85	41.6
2020-03-31 23:01:30	4.35	37.7
2020-03-31 23:01:50	3.65	39.4
2020-03-31 23:02:00	3.41	40.0
2020-03-31 23:02:10	3.16	40.8
2020-03-31 23:10:20	4.76	40.8
2020-03-31 23:12:50	4.20	39.7
2020-03-31 23:13:00	3.54	39.3
2020-03-31 23:19:10	5.48	41.0
2020-03-31 23:19:30	5.06	40.1
2020-03-31 23:19:50	5.09	39.9
2020-03-31 23:26:50	5.46	43.7
2020-03-31 23:28:50	3.31	38.8
2020-03-31 23:29:20	4.72	42.2
2020-03-31 23:29:30	4.66	39.7
2020-03-31 23:29:40	3.59	40.0
2020-03-31 23:29:50	4.08	41.2
2020-03-31 23:30:00	5.10	42.6
2020-03-31 23:33:50	6.54	41.7
2020-03-31 23:37:00	3.94	40.1
2020-03-31 23:37:10	3.76	40.6
2020-03-31 23:38:00	5.34	40.3
2020-03-31 23:38:10	4.00	38.5
2020-03-31 23:38:30	4.60	38.7
2020-03-31 23:39:20	3.16	40.1
2020-03-31 23:39:30	4.14	39.4

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-03-31 23:40:50	4.68	40.6
2020-03-31 23:41:00	4.40	41.9
2020-03-31 23:41:10	5.26	42.0
2020-03-31 23:41:20	4.61	40.3
2020-03-31 23:41:30	3.90	40.2
2020-03-31 23:41:40	3.65	39.1
2020-04-02 23:07:30	1.38	40.5
2020-04-02 23:07:40	1.58	41.2
2020-04-02 23:08:10	1.71	42.3
2020-04-02 23:08:30	1.51	40.7
2020-04-02 23:08:40	1.81	40.9
2020-04-02 23:08:50	1.40	40.6
2020-04-02 23:10:20	1.85	40.6
2020-04-02 23:10:30	1.88	41.2
2020-04-02 23:10:40	1.75	41.3
2020-04-02 23:10:50	1.69	40.4
2020-04-02 23:11:00	1.61	40.3
2020-04-02 23:11:10	1.46	40.4
2020-04-02 23:11:20	1.56	40.9
2020-04-02 23:11:30	1.71	41.0
2020-04-02 23:11:40	1.97	40.5
2020-04-02 23:11:50	1.96	40.3
2020-04-02 23:12:00	1.67	40.6
2020-04-02 23:12:50	1.75	40.6
2020-04-02 23:13:00	1.87	40.8
2020-04-02 23:13:10	1.69	41.2
2020-04-02 23:13:20	1.69	41.2
2020-04-02 23:13:30	1.78	40.7
2020-04-02 23:13:40	1.67	40.7
2020-04-02 23:13:50	1.68	40.6
2020-04-02 23:14:00	1.63	40.6
2020-04-02 23:14:10	1.74	40.5
2020-04-02 23:14:20	1.97	41.1
2020-04-02 23:14:30	2.34	40.6
2020-04-02 23:14:40	2.13	40.6
2020-04-02 23:14:50	1.74	40.7
2020-04-02 23:15:00	1.45	40.7
2020-04-02 23:15:10	1.70	40.7
2020-04-02 23:15:20	1.40	40.5
2020-04-02 23:15:30	1.55	40.9
2020-04-02 23:15:40	1.52	40.5
2020-04-02 23:15:50	1.44	40.5
2020-04-02 23:16:00	1.20	40.3
2020-04-02 23:16:10	1.45	40.6
2020-04-02 23:16:20	1.52	40.9
2020-04-02 23:16:30	1.95	40.8
2020-04-02 23:16:40	1.96	40.8
2020-04-02 23:16:50	1.81	40.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-02 23:17:00	1.83	40.6
2020-04-02 23:17:10	2.04	40.7
2020-04-02 23:17:20	2.06	40.5
2020-04-02 23:17:30	1.59	41.2
2020-04-02 23:17:40	1.87	40.8
2020-04-02 23:17:50	2.03	40.7
2020-04-02 23:18:00	1.74	40.9
2020-04-02 23:18:10	1.57	40.9
2020-04-02 23:18:20	1.46	40.9
2020-04-02 23:18:30	1.45	41.4
2020-04-02 23:18:40	1.67	41.2
2020-04-02 23:18:50	1.65	41.1
2020-04-02 23:19:00	1.72	40.8
2020-04-02 23:19:10	1.49	41.2
2020-04-02 23:19:20	1.65	41.3
2020-04-02 23:19:30	1.74	40.6
2020-04-02 23:19:40	1.94	40.3
2020-04-02 23:19:50	2.06	40.9
2020-04-02 23:20:00	2.16	40.9
2020-04-02 23:20:10	2.00	40.7
2020-04-02 23:20:20	1.84	41.2
2020-04-02 23:20:30	1.76	41.0
2020-04-02 23:20:40	1.58	41.1
2020-04-02 23:20:50	1.65	41.2
2020-04-02 23:21:00	1.69	41.0
2020-04-02 23:21:10	1.68	41.2
2020-04-02 23:21:20	1.58	41.1
2020-04-02 23:21:30	1.89	40.8
2020-04-02 23:21:40	1.47	40.9
2020-04-02 23:21:50	1.51	40.8
2020-04-02 23:22:00	1.58	41.5
2020-04-02 23:22:10	1.70	41.1
2020-04-02 23:22:20	1.75	40.3
2020-04-02 23:22:30	1.89	40.6
2020-04-02 23:23:10	1.76	40.8
2020-04-02 23:23:20	1.87	41.0
2020-04-02 23:23:30	1.97	41.2
2020-04-02 23:23:40	1.67	41.3
2020-04-02 23:23:50	1.89	40.7
2020-04-02 23:24:00	1.62	40.4
2020-04-02 23:24:10	1.74	40.7
2020-04-02 23:24:20	1.45	40.7
2020-04-02 23:24:30	1.66	40.8
2020-04-02 23:24:40	2.01	40.7
2020-04-02 23:24:50	1.62	40.8
2020-04-02 23:25:00	1.55	40.7
2020-04-02 23:25:10	1.79	41.0
2020-04-02 23:25:20	1.70	40.8

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-02 23:25:30	1.25	40.7
2020-04-02 23:26:10	1.47	41.1
2020-04-02 23:26:20	1.59	41.4
2020-04-02 23:26:30	2.08	41.2
2020-04-02 23:26:40	1.85	41.4
2020-04-02 23:26:50	1.68	40.9
2020-04-02 23:27:00	1.79	41.0
2020-04-02 23:27:10	1.65	41.0
2020-04-02 23:27:20	1.42	41.1
2020-04-02 23:27:30	1.50	41.4
2020-04-02 23:27:40	1.45	41.2
2020-04-02 23:27:50	1.37	41.0
2020-04-02 23:28:00	1.74	41.4
2020-04-02 23:28:30	2.14	41.2
2020-04-02 23:28:40	2.00	40.5
2020-04-02 23:28:50	1.59	40.9
2020-04-02 23:29:00	1.54	40.8
2020-04-02 23:29:10	1.54	40.6
2020-04-02 23:29:20	1.56	40.7
2020-04-02 23:29:30	1.47	41.2
2020-04-02 23:29:40	1.55	40.9
2020-04-02 23:29:50	1.47	40.6
2020-04-02 23:30:00	1.48	41.4
2020-04-02 23:30:10	1.73	40.4
2020-04-02 23:30:20	1.59	40.2
2020-04-02 23:30:30	1.67	40.5
2020-04-02 23:31:10	1.68	41.7
2020-04-02 23:31:20	1.40	40.2
2020-04-02 23:31:40	1.41	40.7
2020-04-02 23:31:50	2.07	39.8
2020-04-02 23:32:00	1.80	40.4
2020-04-02 23:32:10	1.51	39.8
2020-04-02 23:32:20	1.68	39.9
2020-04-02 23:32:30	1.25	40.4
2020-04-02 23:32:40	1.61	39.9
2020-04-02 23:32:50	1.56	39.8
2020-04-02 23:33:00	1.33	40.0
2020-04-02 23:33:10	1.84	39.8
2020-04-02 23:33:20	2.04	40.2
2020-04-02 23:33:30	1.74	40.0
2020-04-02 23:33:40	1.53	40.1
2020-04-02 23:33:50	1.48	40.1
2020-04-02 23:34:00	2.29	39.9
2020-04-02 23:34:10	2.62	39.6
2020-04-02 23:34:20	2.28	40.4
2020-04-02 23:34:30	1.94	39.8
2020-04-02 23:34:40	2.14	40.1
2020-04-02 23:34:50	2.09	39.8

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-02 23:35:00	1.84	40.0
2020-04-02 23:35:10	1.95	40.0
2020-04-02 23:35:20	1.80	40.1
2020-04-02 23:35:30	1.50	40.0
2020-04-02 23:35:40	1.50	40.2
2020-04-02 23:35:50	1.70	39.9
2020-04-02 23:36:00	2.86	39.8
2020-04-02 23:36:10	2.27	39.7
2020-04-02 23:36:20	1.77	39.4
2020-04-02 23:36:30	2.40	40.5
2020-04-02 23:36:40	2.23	39.5
2020-04-02 23:36:50	2.38	39.3
2020-04-02 23:37:00	2.09	39.5
2020-04-02 23:37:10	1.48	40.0
2020-04-02 23:37:20	1.59	39.9
2020-04-02 23:37:30	2.83	40.0
2020-04-02 23:37:40	2.67	40.1
2020-04-02 23:37:50	2.59	39.7
2020-04-02 23:38:00	2.45	40.3
2020-04-02 23:38:10	3.08	40.4
2020-04-02 23:39:00	2.83	39.9
2020-04-02 23:39:10	2.57	39.4
2020-04-02 23:39:20	2.43	39.7
2020-04-02 23:39:30	2.32	39.8
2020-04-02 23:39:40	2.55	39.6
2020-04-02 23:39:50	3.22	39.8
2020-04-02 23:40:00	3.65	39.6
2020-04-02 23:40:10	2.78	39.7
2020-04-02 23:40:20	2.69	40.4
2020-04-02 23:40:30	2.62	40.3
2020-04-02 23:40:40	2.56	40.0
2020-04-02 23:41:20	2.80	41.2
2020-04-02 23:41:50	3.19	40.1
2020-04-02 23:42:00	3.01	39.6
2020-04-02 23:42:10	3.52	39.6
2020-04-02 23:42:20	2.72	40.0
2020-04-02 23:44:00	2.89	40.8
2020-04-02 23:44:20	2.59	40.3
2020-04-02 23:44:40	2.15	40.0
2020-04-02 23:44:50	2.30	40.2
2020-04-02 23:45:00	2.61	40.3
2020-04-02 23:45:10	3.45	40.2
2020-04-02 23:45:20	3.21	40.0
2020-04-02 23:45:30	2.52	40.3
2020-04-02 23:45:40	3.20	40.4
2020-04-02 23:45:50	3.25	40.1
2020-04-02 23:46:00	3.50	39.9
2020-04-02 23:46:10	2.92	40.1

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-02 23:46:20	2.66	40.1
2020-04-02 23:46:30	2.82	39.7
2020-04-02 23:46:40	2.68	40.1
2020-04-02 23:46:50	2.78	39.9
2020-04-02 23:47:00	2.62	40.3
2020-04-02 23:47:50	3.15	39.9
2020-04-02 23:48:00	2.85	39.9
2020-04-02 23:48:20	4.03	40.3
2020-04-02 23:48:30	3.76	40.9
2020-04-02 23:48:40	3.41	40.8
2020-04-02 23:49:00	3.10	40.5
2020-04-02 23:49:10	3.05	40.0
2020-04-02 23:49:20	2.56	40.2
2020-04-02 23:49:30	2.67	40.4
2020-04-02 23:49:40	3.48	40.3
2020-04-02 23:49:50	3.66	40.2
2020-04-02 23:50:10	3.06	40.3
2020-04-02 23:50:20	3.79	40.3
2020-04-02 23:50:30	3.28	40.6
2020-04-02 23:50:40	2.86	40.9
2020-04-02 23:50:50	3.32	40.3
2020-04-02 23:51:10	2.72	40.3
2020-04-02 23:51:20	2.80	39.9
2020-04-02 23:51:30	3.05	40.4
2020-04-02 23:51:50	3.33	40.5
2020-04-02 23:52:00	3.33	39.3
2020-04-02 23:52:10	2.64	40.0
2020-04-02 23:52:20	3.29	40.4
2020-04-02 23:52:30	4.04	40.1
2020-04-02 23:52:40	3.11	40.3
2020-04-02 23:52:50	2.00	40.0
2020-04-02 23:53:00	2.66	40.6
2020-04-02 23:53:10	3.30	41.0
2020-04-02 23:53:20	3.26	40.8
2020-04-02 23:53:40	3.89	40.9
2020-04-02 23:53:50	4.39	41.1
2020-04-02 23:54:00	4.43	41.0
2020-04-02 23:54:10	3.70	40.8
2020-04-02 23:54:20	4.24	41.4
2020-04-02 23:54:30	3.84	40.7
2020-04-02 23:54:50	3.25	40.6
2020-04-02 23:55:10	2.72	39.7
2020-04-02 23:55:20	2.75	39.5
2020-04-02 23:55:40	2.45	40.0
2020-04-02 23:55:50	2.66	40.3
2020-04-02 23:56:00	3.14	40.2
2020-04-02 23:56:10	3.03	39.5
2020-04-02 23:56:20	3.54	40.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-02 23:56:30	3.07	40.3
2020-04-02 23:56:40	4.61	41.3
2020-04-02 23:56:50	4.43	41.2
2020-04-02 23:57:00	3.55	40.2
2020-04-02 23:57:10	3.71	40.6
2020-04-02 23:57:20	3.48	40.2
2020-04-02 23:57:30	4.14	39.7
2020-04-02 23:57:40	3.34	40.2
2020-04-02 23:57:50	3.66	41.1
2020-04-02 23:58:00	3.70	39.5
2020-04-02 23:58:10	3.84	40.2
2020-04-02 23:58:20	3.66	40.6
2020-04-02 23:58:30	4.23	41.1
2020-04-02 23:58:50	3.16	39.8
2020-04-02 23:59:00	3.65	40.0
2020-04-02 23:59:10	3.52	40.1
2020-04-02 23:59:20	3.27	40.1
2020-04-02 23:59:30	3.50	39.9
2020-04-02 23:59:40	3.36	40.4
2020-04-02 23:59:50	3.67	40.4
2020-04-03 00:00:00	3.10	40.4
2020-04-03 00:00:10	3.60	40.3
2020-04-03 00:00:20	3.88	40.5
2020-04-03 00:00:30	3.10	40.3
2020-04-03 00:00:40	3.65	40.3
2020-04-03 00:00:50	3.97	39.9
2020-04-03 00:01:00	4.07	41.2
2020-04-03 00:01:10	3.77	40.0
2020-04-03 00:01:20	3.49	40.4
2020-04-03 00:01:30	3.29	40.7
2020-04-03 00:01:40	3.35	40.2
2020-04-03 00:01:50	3.19	40.2
2020-04-03 00:02:10	3.90	40.6
2020-04-03 00:02:20	3.65	40.5
2020-04-03 00:02:30	3.65	40.2
2020-04-03 00:02:40	3.90	40.6
2020-04-03 00:02:50	3.62	40.7
2020-04-03 00:03:30	3.11	39.9
2020-04-03 00:03:40	3.06	40.0
2020-04-03 00:04:00	3.47	39.9
2020-04-03 00:04:10	4.33	41.3
2020-04-03 00:04:20	4.24	40.7
2020-04-03 00:04:30	4.30	41.1
2020-04-03 00:04:40	3.71	40.3
2020-04-03 00:05:00	3.16	39.9
2020-04-03 00:05:10	2.95	39.6
2020-04-03 00:05:20	2.71	39.7
2020-04-03 00:05:30	2.94	40.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-03 00:05:40	3.18	39.5
2020-04-03 00:05:50	2.84	39.7
2020-04-03 00:06:00	2.73	40.2
2020-04-03 00:06:20	4.39	40.4
2020-04-03 00:06:30	4.23	39.9
2020-04-03 00:06:40	4.21	38.9
2020-04-03 00:06:50	3.31	39.4
2020-04-03 00:07:00	3.65	39.2
2020-04-03 00:07:10	4.11	40.2
2020-04-03 00:07:20	3.69	40.2
2020-04-03 00:07:30	4.61	40.5
2020-04-03 00:07:40	3.99	40.0
2020-04-03 00:07:50	3.95	39.7
2020-04-03 00:08:00	3.83	40.4
2020-04-03 00:08:10	4.18	39.7
2020-04-03 00:08:20	3.65	39.8
2020-04-03 00:08:30	3.70	39.3
2020-04-03 00:08:40	3.65	38.4
2020-04-03 00:08:50	3.29	38.5
2020-04-03 00:09:00	3.52	39.4
2020-04-03 00:09:10	3.16	39.4
2020-04-03 00:09:20	3.21	39.4
2020-04-03 00:09:30	3.74	39.2
2020-04-03 00:09:40	3.05	39.8
2020-04-03 00:09:50	3.50	39.0
2020-04-03 00:10:00	3.45	39.1
2020-04-03 00:11:40	3.63	39.7
2020-04-03 00:11:50	3.28	39.3
2020-04-03 00:12:00	2.92	39.1
2020-04-03 00:12:10	3.21	39.5
2020-04-03 00:12:20	2.75	39.6
2020-04-03 00:12:30	2.86	39.6
2020-04-03 00:12:40	2.98	39.6
2020-04-03 00:12:50	4.10	39.3
2020-04-03 00:13:00	4.36	39.6
2020-04-03 00:13:10	4.76	40.2
2020-04-03 00:13:20	4.53	39.3
2020-04-03 00:13:30	3.65	39.5
2020-04-03 00:13:40	3.81	39.1
2020-04-03 00:13:50	3.79	39.1
2020-04-03 00:14:00	4.25	39.0
2020-04-03 00:14:10	4.18	38.5
2020-04-03 00:14:20	3.93	38.6
2020-04-03 00:14:40	2.91	38.8
2020-04-03 00:14:50	2.69	38.3
2020-04-03 00:15:00	2.81	38.6
2020-04-03 00:15:10	2.86	39.5
2020-04-03 00:16:00	2.81	39.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-03 00:16:10	2.81	39.8
2020-04-03 00:16:20	3.08	39.5
2020-04-09 03:25:20	4.26	43.1
2020-04-09 03:25:40	5.05	44.7
2020-04-09 03:26:20	5.91	44.7
2020-04-09 03:26:30	5.87	44.3
2020-04-09 03:27:00	4.77	43.7
2020-04-09 03:27:40	3.75	43.2
2020-04-09 03:27:50	4.39	43.4
2020-04-09 03:32:30	5.72	43.0
2020-04-09 03:33:00	5.77	44.7
2020-04-09 03:33:40	6.20	44.8
2020-04-09 03:35:30	6.24	43.4
2020-04-09 03:36:00	5.53	44.3
2020-04-09 03:36:10	5.00	43.0
2020-04-09 03:36:40	7.05	46.7
2020-04-09 03:36:50	5.32	42.3
2020-04-09 03:40:30	3.56	41.7
2020-04-09 03:40:40	2.96	42.1
2020-04-09 03:40:50	3.91	42.6
2020-04-09 03:41:00	4.16	42.6
2020-04-09 03:41:40	4.09	42.4
2020-04-09 03:46:10	2.58	42.5
2020-04-09 03:46:40	4.58	42.6
2020-04-09 03:46:50	5.14	43.9
2020-04-09 03:49:30	5.33	44.4
2020-04-09 03:49:40	4.76	43.0
2020-04-09 03:49:50	4.70	43.8
2020-04-09 03:50:20	4.14	43.7
2020-04-09 03:52:00	5.36	44.0
2020-04-09 03:52:30	6.18	44.3
2020-04-09 03:52:40	5.04	42.0
2020-04-09 03:55:50	4.39	41.7
2020-04-09 03:56:30	2.52	40.9
2020-04-09 03:56:40	3.65	41.5
2020-04-09 03:57:00	3.38	42.3
2020-04-09 03:57:30	5.93	43.5
2020-04-09 04:01:40	2.75	39.8
2020-04-09 04:02:10	3.19	41.8
2020-04-09 04:02:40	4.51	42.9
2020-04-09 04:07:10	5.74	46.0
2020-04-09 04:12:10	4.97	43.2
2020-04-09 04:12:20	3.80	42.3
2020-04-09 04:12:50	2.67	42.2
2020-04-09 04:13:00	2.99	42.1
2020-04-09 04:13:20	3.36	42.1
2020-04-09 04:17:20	3.86	42.6
2020-04-09 04:18:30	4.01	42.9

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-09 04:23:20	4.96	43.5
2020-04-09 04:32:00	4.23	40.7
2020-04-09 22:00:00	6.84	47.3
2020-04-09 22:00:50	6.64	46.6
2020-04-09 22:01:00	5.93	44.0
2020-04-09 22:01:10	5.38	46.2
2020-04-09 22:01:40	7.04	45.9
2020-04-09 22:01:50	5.46	45.6
2020-04-09 22:02:00	7.15	47.9
2020-04-09 22:02:20	7.24	47.7
2020-04-09 22:02:30	6.14	46.5
2020-04-09 22:03:20	4.82	45.3
2020-04-09 22:03:30	5.26	44.0
2020-04-09 22:03:40	6.26	44.8
2020-04-09 22:04:00	7.11	44.9
2020-04-09 22:04:10	5.01	43.5
2020-04-09 22:04:20	5.45	42.6
2020-04-09 22:04:30	5.34	43.1
2020-04-09 22:04:50	5.20	44.0
2020-04-09 22:05:20	5.73	45.2
2020-04-09 22:05:30	6.14	45.7
2020-04-09 22:05:40	5.58	44.2
2020-04-09 22:05:50	5.67	43.9
2020-04-09 22:06:00	5.81	43.8
2020-04-09 22:06:10	4.79	43.6
2020-04-09 22:06:20	5.13	44.8
2020-04-09 22:06:30	5.80	47.3
2020-04-09 22:06:40	4.87	45.3
2020-04-09 22:06:50	5.64	46.8
2020-04-09 22:07:30	5.80	44.6
2020-04-09 22:07:40	4.89	45.7
2020-04-09 22:07:50	7.36	46.7
2020-04-09 22:08:00	5.48	46.2
2020-04-09 22:08:10	5.13	45.3
2020-04-09 22:08:20	5.46	44.1
2020-04-09 22:08:30	5.00	44.6
2020-04-09 22:08:50	5.97	46.9
2020-04-09 22:09:20	7.43	49.1
2020-04-09 22:09:30	6.54	46.8
2020-04-09 22:09:40	5.96	44.4
2020-04-09 22:10:10	7.00	48.8
2020-04-09 22:10:20	7.02	46.7
2020-04-09 22:10:30	5.86	46.1
2020-04-09 22:10:40	5.74	47.1
2020-04-09 22:11:00	6.22	46.3
2020-04-09 22:11:10	6.57	44.1
2020-04-09 22:11:20	7.03	48.7
2020-04-09 22:11:40	5.79	44.9

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-09 22:11:50	6.09	46.0
2020-04-09 22:12:10	6.37	46.0
2020-04-09 22:12:20	5.70	44.2
2020-04-09 22:12:30	5.17	44.1
2020-04-09 22:12:40	4.59	44.5
2020-04-09 22:12:50	5.97	45.0
2020-04-09 22:13:00	5.26	44.2
2020-04-09 22:13:10	6.42	45.7
2020-04-09 22:13:20	5.88	44.4
2020-04-09 22:13:30	6.79	45.0
2020-04-09 22:13:40	5.92	44.7
2020-04-09 22:13:50	5.00	43.7
2020-04-09 22:14:00	5.01	44.1
2020-04-09 22:14:10	6.14	47.6
2020-04-09 22:15:50	6.26	45.6
2020-04-09 22:16:00	5.04	44.9
2020-04-09 22:16:10	4.57	46.1
2020-04-09 22:16:20	5.51	46.1
2020-04-09 22:16:30	6.32	46.1
2020-04-09 22:16:40	6.82	48.9
2020-04-09 22:17:50	6.93	47.4
2020-04-09 22:18:50	7.09	48.6
2020-04-09 22:19:10	6.22	46.7
2020-04-09 22:19:30	6.35	47.3
2020-04-09 22:19:40	5.80	46.8
2020-04-09 22:21:20	6.64	47.8
2020-04-09 22:21:40	6.98	48.6
2020-04-09 22:26:20	6.90	47.5
2020-04-09 22:27:20	7.03	45.5
2020-04-09 22:27:30	6.01	44.6
2020-04-09 22:27:40	6.17	44.6
2020-04-09 22:28:10	7.20	47.0
2020-04-09 22:28:20	7.25	48.7
2020-04-09 22:28:30	7.07	47.6
2020-04-09 22:28:40	7.29	46.3
2020-04-09 22:28:50	6.63	45.1
2020-04-09 22:29:00	6.76	45.5
2020-04-09 22:29:10	5.98	45.1
2020-04-09 22:29:20	5.90	44.4
2020-04-09 22:29:30	5.77	43.9
2020-04-09 22:30:10	6.69	48.2
2020-04-09 22:30:20	6.34	44.5
2020-04-09 22:30:30	5.84	44.2
2020-04-09 22:30:40	5.38	44.6
2020-04-09 22:30:50	5.82	43.1
2020-04-09 22:31:00	4.53	42.5
2020-04-09 22:31:10	5.33	44.2
2020-04-09 22:31:30	5.94	46.4

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-09 22:31:40	6.08	43.7
2020-04-09 22:31:50	5.43	44.1
2020-04-09 22:32:00	4.83	43.6
2020-04-09 22:32:20	4.95	44.3
2020-04-09 22:32:30	5.98	43.6
2020-04-09 22:32:40	5.89	46.2
2020-04-09 22:32:50	6.64	46.3
2020-04-09 22:33:00	5.72	44.3
2020-04-09 22:33:10	4.91	43.9
2020-04-09 22:33:20	5.24	43.6
2020-04-09 22:33:30	4.87	43.0
2020-04-09 22:33:40	4.12	42.3
2020-04-09 22:33:50	3.89	42.7
2020-04-09 22:34:00	4.14	43.5
2020-04-09 22:34:10	4.91	42.6
2020-04-09 22:34:20	5.12	43.6
2020-04-09 22:34:50	6.00	45.1
2020-04-09 22:35:20	6.68	43.6
2020-04-09 22:35:30	5.56	45.0
2020-04-09 22:35:40	5.79	43.7
2020-04-09 22:35:50	4.21	43.3
2020-04-09 22:36:10	3.60	43.1
2020-04-09 22:36:40	4.98	44.2
2020-04-09 22:36:50	6.10	45.9
2020-04-09 22:37:10	5.64	45.5
2020-04-09 22:37:20	6.03	45.0
2020-04-09 22:37:30	6.93	45.9
2020-04-09 22:37:40	7.11	45.7
2020-04-09 22:37:50	6.14	45.8
2020-04-09 22:38:00	5.36	44.5
2020-04-09 22:38:20	6.55	45.8
2020-04-09 22:38:30	7.11	46.4
2020-04-09 22:38:40	6.69	47.8
2020-04-09 22:38:50	6.74	47.6
2020-04-09 22:39:00	7.37	46.9
2020-04-09 22:39:10	5.88	42.8
2020-04-09 22:39:20	5.27	43.9
2020-04-09 22:39:30	5.87	47.5
2020-04-09 22:39:40	7.46	44.4
2020-04-09 22:39:50	5.49	44.5
2020-04-09 22:40:00	6.04	45.4
2020-04-09 22:40:10	6.66	46.8
2020-04-09 22:40:20	7.11	47.8
2020-04-09 22:40:30	7.13	44.6
2020-04-09 22:40:40	6.91	46.6
2020-04-09 22:41:00	6.13	45.6
2020-04-09 22:41:10	6.20	45.0
2020-04-09 22:41:20	6.09	45.4

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-09 22:41:30	6.17	45.2
2020-04-09 22:41:40	6.20	44.4
2020-04-09 22:41:50	5.93	46.2
2020-04-09 22:42:00	6.97	45.2
2020-04-09 22:42:10	4.95	46.0
2020-04-09 22:42:20	6.06	47.1
2020-04-09 22:43:00	6.73	46.5
2020-04-09 22:43:10	6.29	47.3
2020-04-09 22:43:20	7.42	48.3
2020-04-09 22:43:40	6.63	45.8
2020-04-09 22:43:50	6.05	45.5
2020-04-09 22:44:00	6.79	46.3
2020-04-09 22:44:10	6.57	45.9
2020-04-09 22:44:30	7.29	48.5
2020-04-09 22:45:10	6.71	46.1
2020-04-09 22:45:20	6.81	45.3
2020-04-09 22:45:30	4.78	44.0
2020-04-09 22:45:40	3.75	43.9
2020-04-09 22:45:50	5.45	43.5
2020-04-09 22:46:20	6.36	46.2
2020-04-09 22:46:30	4.72	44.6
2020-04-09 22:46:40	4.63	45.2
2020-04-09 22:46:50	6.01	46.3
2020-04-09 22:47:00	7.38	47.3
2020-04-09 22:47:10	7.01	44.7
2020-04-09 22:47:20	5.02	44.7
2020-04-09 22:47:30	5.96	44.9
2020-04-09 22:47:50	5.14	45.7
2020-04-09 22:48:00	6.32	44.6
2020-04-09 22:48:10	5.67	44.3
2020-04-09 22:48:30	5.07	46.2
2020-04-09 22:48:40	6.06	45.5
2020-04-09 22:48:50	5.09	44.9
2020-04-09 22:49:00	4.68	45.1
2020-04-09 22:50:40	5.75	45.3
2020-04-09 22:50:50	4.57	44.2
2020-04-09 22:52:10	6.28	44.8
2020-04-09 22:52:20	4.95	44.8
2020-04-09 22:52:30	5.57	45.4
2020-04-09 22:52:40	5.32	45.7
2020-04-09 22:55:20	6.88	46.6
2020-04-09 22:55:30	7.04	46.6
2020-04-09 22:55:40	6.77	46.1
2020-04-09 22:55:50	5.91	45.4
2020-04-09 22:56:00	5.14	44.6
2020-04-09 22:56:10	4.96	44.0
2020-04-09 22:56:20	5.46	43.9
2020-04-09 22:56:30	5.96	44.0

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-09 22:56:40	5.56	44.3
2020-04-09 22:56:50	5.78	46.1
2020-04-09 22:57:00	7.09	46.6
2020-04-09 22:57:10	6.45	45.7
2020-04-09 22:57:20	6.90	47.3
2020-04-09 22:57:30	6.70	48.2
2020-04-09 22:57:40	6.65	48.2
2020-04-09 22:58:10	6.69	46.7
2020-04-09 22:58:20	6.59	48.8
2020-04-09 22:58:30	7.11	48.1
2020-04-09 23:01:20	6.22	44.9
2020-04-09 23:01:30	5.74	43.7
2020-04-09 23:01:40	5.02	43.6
2020-04-09 23:01:50	4.87	43.9
2020-04-09 23:02:00	5.51	43.8
2020-04-09 23:02:10	4.79	43.4
2020-04-09 23:02:20	5.17	44.5
2020-04-09 23:02:40	7.01	47.8
2020-04-09 23:02:50	5.79	45.3
2020-04-09 23:03:30	7.09	48.0
2020-04-09 23:03:40	6.37	43.8
2020-04-09 23:03:50	4.68	43.6
2020-04-09 23:04:00	4.59	44.0
2020-04-09 23:04:10	4.75	43.7
2020-04-09 23:04:50	5.75	46.4
2020-04-09 23:05:00	5.90	45.8
2020-04-09 23:05:10	6.48	46.0
2020-04-09 23:05:20	7.40	48.5
2020-04-09 23:06:30	6.64	44.6
2020-04-09 23:06:40	6.27	47.2
2020-04-09 23:06:50	7.08	46.2
2020-04-09 23:07:00	6.61	46.9
2020-04-09 23:07:10	7.50	47.9
2020-04-09 23:07:50	7.46	49.0
2020-04-09 23:08:00	6.80	49.1
2020-04-09 23:08:10	7.28	48.0
2020-04-09 23:08:20	6.20	45.5
2020-04-09 23:08:30	5.30	45.3
2020-04-09 23:08:40	4.77	44.3
2020-04-09 23:08:50	4.80	44.0
2020-04-09 23:09:00	4.62	44.4
2020-04-09 23:09:10	4.64	44.5
2020-04-09 23:10:50	6.92	47.5
2020-04-09 23:11:00	6.17	45.6
2020-04-09 23:11:10	6.14	45.8
2020-04-09 23:11:20	7.33	47.4
2020-04-09 23:11:30	6.57	45.7
2020-04-09 23:11:40	6.92	46.0

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-09 23:11:50	6.46	46.4
2020-04-09 23:12:00	7.04	48.2
2020-04-09 23:13:20	7.29	47.2
2020-04-09 23:13:30	7.01	47.1
2020-04-09 23:13:40	7.41	46.1
2020-04-09 23:13:50	6.26	42.7
2020-04-09 23:14:20	6.65	45.9
2020-04-09 23:14:30	7.19	48.0
2020-04-09 23:14:40	6.61	45.1
2020-04-09 23:14:50	5.76	47.6
2020-04-09 23:15:00	7.25	47.6
2020-04-09 23:15:10	6.97	49.7
2020-04-09 23:15:20	6.64	48.5
2020-04-09 23:15:50	4.93	46.1
2020-04-09 23:16:00	7.30	46.2
2020-04-09 23:16:10	7.23	46.2
2020-04-09 23:16:50	6.63	46.6
2020-04-09 23:17:20	6.04	46.0
2020-04-09 23:17:30	5.40	43.3
2020-04-09 23:17:40	5.35	43.7
2020-04-09 23:17:50	5.68	45.4
2020-04-09 23:18:00	4.56	44.7
2020-04-09 23:18:10	7.20	49.1
2020-04-09 23:18:20	6.88	44.8
2020-04-09 23:18:30	5.66	44.7
2020-04-09 23:18:40	5.70	44.9
2020-04-09 23:18:50	6.99	48.3
2020-04-09 23:19:10	5.35	46.1
2020-04-09 23:19:20	5.05	45.0
2020-04-09 23:19:30	5.41	43.9
2020-04-09 23:19:50	7.09	46.2
2020-04-09 23:20:20	7.27	48.3
2020-04-09 23:20:30	6.18	45.0
2020-04-09 23:21:00	7.38	46.9
2020-04-09 23:21:10	6.57	47.5
2020-04-09 23:21:20	5.47	43.8
2020-04-09 23:21:30	4.79	43.1
2020-04-09 23:21:40	5.74	45.4
2020-04-09 23:21:50	6.45	47.3
2020-04-09 23:23:50	6.64	44.7
2020-04-09 23:24:00	6.37	45.3
2020-04-09 23:24:10	6.54	45.3
2020-04-09 23:24:20	6.19	45.7
2020-04-09 23:24:30	5.23	44.7
2020-04-09 23:24:40	6.29	45.4
2020-04-09 23:24:50	7.26	46.0
2020-04-09 23:25:40	6.68	48.3
2020-04-09 23:28:00	5.03	45.1

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-09 23:28:10	6.47	46.8
2020-04-09 23:28:20	6.93	45.9
2020-04-09 23:28:30	6.83	45.4
2020-04-09 23:28:40	5.38	44.2
2020-04-09 23:28:50	4.75	43.5
2020-04-09 23:29:00	5.84	43.5
2020-04-09 23:29:10	5.40	45.3
2020-04-09 23:31:00	6.59	48.7
2020-04-09 23:31:10	6.56	48.0
2020-04-09 23:31:30	7.47	46.9
2020-04-09 23:32:00	6.18	44.4
2020-04-09 23:32:10	4.84	45.3
2020-04-09 23:32:40	6.36	47.1
2020-04-09 23:33:30	7.14	47.7
2020-04-09 23:33:40	6.97	47.1
2020-04-09 23:33:50	5.69	44.2
2020-04-09 23:34:00	5.26	44.3
2020-04-09 23:34:50	6.96	44.7
2020-04-09 23:35:00	6.47	45.6
2020-04-09 23:35:10	7.27	45.5
2020-04-09 23:35:20	7.01	49.0
2020-04-09 23:37:00	6.61	45.9
2020-04-09 23:37:10	6.91	47.1
2020-04-09 23:37:30	7.20	47.7
2020-04-09 23:37:40	5.81	45.7
2020-04-09 23:37:50	5.11	45.2
2020-04-09 23:38:10	7.29	48.2
2020-04-09 23:38:20	6.58	45.1
2020-04-09 23:38:30	6.33	45.5
2020-04-09 23:39:00	6.85	46.7
2020-04-09 23:40:10	7.02	47.8
2020-04-09 23:40:30	6.19	46.5
2020-04-09 23:41:00	7.16	48.4
2020-04-09 23:41:10	7.28	47.6
2020-04-09 23:41:30	5.27	44.2
2020-04-09 23:41:40	5.10	44.8
2020-04-09 23:41:50	5.97	45.2
2020-04-09 23:42:00	6.40	46.4
2020-04-09 23:42:20	6.34	46.4
2020-04-09 23:43:10	7.09	46.2
2020-04-09 23:43:20	6.29	44.8
2020-04-09 23:43:30	5.91	44.8
2020-04-09 23:43:40	5.35	44.2
2020-04-09 23:43:50	7.41	47.3
2020-04-09 23:44:20	7.36	45.8
2020-04-09 23:44:30	5.95	46.1
2020-04-09 23:44:40	6.50	47.1
2020-04-09 23:44:50	6.27	46.4

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-09 23:45:00	7.07	44.5
2020-04-09 23:45:10	6.18	44.3
2020-04-09 23:45:20	6.35	44.7
2020-04-09 23:45:30	5.43	44.1
2020-04-09 23:45:40	5.74	43.6
2020-04-09 23:45:50	5.61	46.9
2020-04-09 23:46:40	7.42	48.8
2020-04-09 23:52:40	7.20	46.7
2020-04-09 23:52:50	6.61	49.2
2020-04-09 23:53:00	6.61	48.5
2020-04-09 23:53:10	5.79	44.7
2020-04-09 23:53:20	5.94	43.5
2020-04-09 23:54:00	4.90	43.7
2020-04-09 23:54:20	6.31	45.2
2020-04-09 23:54:30	6.05	45.4
2020-04-09 23:54:40	5.72	46.2
2020-04-09 23:54:50	6.07	44.1
2020-04-09 23:55:00	5.44	43.7
2020-04-09 23:55:10	5.41	46.2
2020-04-09 23:55:20	7.11	47.5
2020-04-09 23:55:30	5.85	45.9
2020-04-09 23:55:40	5.95	44.9
2020-04-09 23:55:50	5.43	43.8
2020-04-09 23:56:00	4.72	44.6
2020-04-09 23:56:20	4.55	42.0
2020-04-09 23:56:30	4.57	42.4
2020-04-09 23:56:50	3.93	42.2
2020-04-09 23:57:00	4.76	43.5
2020-04-09 23:57:10	5.82	45.4
2020-04-09 23:58:10	3.63	40.7
2020-04-09 23:58:20	3.86	41.4
2020-04-09 23:59:00	3.37	42.0
2020-04-09 23:59:10	4.46	41.7
2020-04-10 00:01:30	4.66	42.5
2020-04-10 00:01:40	3.75	42.2
2020-04-10 00:01:50	2.58	42.9
2020-04-10 00:02:00	2.61	42.0
2020-04-10 00:02:10	2.99	42.5
2020-04-10 00:02:20	3.95	43.0
2020-04-10 00:02:30	5.06	42.6
2020-04-10 00:02:50	4.68	43.4
2020-04-10 00:03:00	5.06	44.3
2020-04-10 00:03:10	5.61	42.6
2020-04-10 00:03:20	5.40	44.0
2020-04-10 00:03:30	4.70	42.6
2020-04-10 00:04:40	5.36	42.8
2020-04-10 00:05:00	5.97	44.2
2020-04-10 00:05:50	4.68	44.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 00:06:00	4.79	45.7
2020-04-10 00:08:20	5.60	45.5
2020-04-10 00:10:30	6.92	47.5
2020-04-10 00:11:30	5.57	43.8
2020-04-10 00:13:40	5.51	44.7
2020-04-10 00:13:50	5.31	45.5
2020-04-10 00:16:30	6.02	45.5
2020-04-10 00:16:50	6.51	46.6
2020-04-10 00:17:00	6.22	46.8
2020-04-10 00:17:10	6.71	47.1
2020-04-10 00:17:30	6.63	46.1
2020-04-10 00:17:50	6.47	47.1
2020-04-10 00:18:20	5.41	43.4
2020-04-10 00:20:30	7.48	49.1
2020-04-10 00:24:20	5.95	48.0
2020-04-10 00:24:30	5.71	48.0
2020-04-10 00:24:50	7.11	48.1
2020-04-10 00:25:00	7.34	49.1
2020-04-10 00:25:10	6.58	47.2
2020-04-10 00:26:30	6.99	47.8
2020-04-10 00:26:40	7.18	49.9
2020-04-10 00:27:40	6.95	47.4
2020-04-10 00:27:50	5.78	46.0
2020-04-10 00:28:10	6.74	46.3
2020-04-10 00:28:20	6.42	45.8
2020-04-10 00:28:30	6.94	47.4
2020-04-10 00:28:40	6.61	48.7
2020-04-10 00:29:30	5.93	45.3
2020-04-10 00:29:40	6.05	47.3
2020-04-10 00:29:50	6.17	44.6
2020-04-10 00:30:00	6.05	44.7
2020-04-10 00:30:10	5.41	45.4
2020-04-10 00:30:20	5.86	46.8
2020-04-10 00:30:30	6.14	45.0
2020-04-10 00:30:40	5.82	43.7
2020-04-10 00:30:50	5.80	45.9
2020-04-10 00:31:00	6.81	47.0
2020-04-10 00:31:10	6.82	49.4
2020-04-10 00:31:30	6.11	45.2
2020-04-10 00:31:40	5.64	43.8
2020-04-10 00:32:10	4.93	44.2
2020-04-10 00:32:20	5.43	44.5
2020-04-10 00:32:50	6.92	46.3
2020-04-10 00:33:00	6.36	45.3
2020-04-10 00:33:10	4.59	44.7
2020-04-10 00:35:00	4.86	43.3
2020-04-10 00:35:10	4.80	44.6
2020-04-10 00:35:20	5.14	44.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 00:35:30	6.53	48.1
2020-04-10 00:35:40	6.49	45.5
2020-04-10 00:36:20	7.42	46.7
2020-04-10 00:36:30	6.26	44.5
2020-04-10 00:36:40	5.57	43.9
2020-04-10 00:36:50	5.31	43.9
2020-04-10 00:37:00	5.27	42.3
2020-04-10 00:37:10	4.52	44.7
2020-04-10 00:37:20	5.72	43.8
2020-04-10 00:37:30	5.45	42.6
2020-04-10 00:37:40	4.68	43.4
2020-04-10 00:37:50	4.69	44.9
2020-04-10 00:38:00	5.05	44.3
2020-04-10 00:38:30	4.43	42.9
2020-04-10 00:38:40	4.28	42.4
2020-04-10 00:39:00	5.44	45.0
2020-04-10 00:39:10	5.96	45.1
2020-04-10 00:39:20	5.52	45.3
2020-04-10 00:39:30	5.53	44.1
2020-04-10 00:39:40	6.08	43.4
2020-04-10 00:39:50	5.51	42.6
2020-04-10 00:40:10	3.57	42.9
2020-04-10 00:40:20	3.97	42.4
2020-04-10 00:41:00	7.22	45.3
2020-04-10 00:41:10	6.21	46.1
2020-04-10 00:41:20	6.70	45.9
2020-04-10 00:41:30	6.21	43.1
2020-04-10 00:41:40	6.15	44.4
2020-04-10 00:41:50	6.11	46.5
2020-04-10 00:42:00	6.45	47.6
2020-04-10 00:42:30	7.04	48.7
2020-04-10 00:42:50	7.09	45.3
2020-04-10 00:43:00	5.95	45.9
2020-04-10 00:43:10	6.75	46.1
2020-04-10 00:43:20	5.73	47.7
2020-04-10 00:43:40	6.96	45.9
2020-04-10 00:43:50	6.81	47.6
2020-04-10 00:44:40	7.03	47.3
2020-04-10 00:45:00	6.94	47.0
2020-04-10 00:45:10	6.52	46.3
2020-04-10 00:45:20	5.77	46.5
2020-04-10 00:45:30	6.03	47.4
2020-04-10 00:45:50	7.34	47.0
2020-04-10 00:46:00	6.56	48.8
2020-04-10 00:47:30	7.23	47.8
2020-04-10 00:47:40	7.27	47.9
2020-04-10 00:48:00	7.02	47.0
2020-04-10 00:48:10	6.28	45.8

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 00:48:20	6.51	43.7
2020-04-10 00:48:30	5.64	44.1
2020-04-10 00:48:40	6.28	44.7
2020-04-10 00:48:50	6.67	47.3
2020-04-10 00:49:00	6.49	45.5
2020-04-10 00:49:10	6.41	48.5
2020-04-10 00:49:20	6.96	45.3
2020-04-10 00:49:30	6.21	46.8
2020-04-10 00:49:40	6.97	47.3
2020-04-10 00:49:50	6.96	47.4
2020-04-10 00:50:00	7.13	47.2
2020-04-10 00:50:10	6.97	47.5
2020-04-10 00:50:20	6.16	45.1
2020-04-10 00:50:30	5.49	43.0
2020-04-10 00:50:40	5.00	43.4
2020-04-10 00:51:50	6.64	45.0
2020-04-10 00:52:00	6.40	45.6
2020-04-10 00:52:10	7.21	47.2
2020-04-10 00:52:20	5.80	44.6
2020-04-10 00:52:30	6.09	44.6
2020-04-10 00:52:40	5.38	44.3
2020-04-10 00:52:50	6.08	47.2
2020-04-10 00:53:00	5.48	44.3
2020-04-10 00:53:10	5.58	44.8
2020-04-10 00:53:20	5.81	44.6
2020-04-10 00:53:30	5.72	44.8
2020-04-10 00:53:50	6.92	47.4
2020-04-10 00:54:00	6.81	46.5
2020-04-10 00:54:30	6.06	44.6
2020-04-10 00:54:40	5.59	47.1
2020-04-10 00:57:50	7.01	49.3
2020-04-10 00:58:00	7.42	49.2
2020-04-10 00:58:20	7.42	47.1
2020-04-10 00:59:00	6.94	44.9
2020-04-10 01:01:30	6.65	44.5
2020-04-10 01:01:40	6.01	45.4
2020-04-10 01:01:50	5.35	43.9
2020-04-10 01:02:00	4.64	44.7
2020-04-10 01:02:20	5.87	43.8
2020-04-10 01:03:40	6.11	44.6
2020-04-10 01:04:30	5.84	42.0
2020-04-10 01:05:00	4.90	42.4
2020-04-10 01:05:20	5.22	44.1
2020-04-10 01:05:30	4.54	43.7
2020-04-10 01:05:40	3.97	42.8
2020-04-10 01:05:50	3.91	42.2
2020-04-10 01:06:00	3.74	43.2
2020-04-10 01:06:40	4.98	43.5

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 01:07:00	5.76	44.6
2020-04-10 01:07:10	5.72	44.6
2020-04-10 01:07:20	6.01	43.8
2020-04-10 01:08:10	5.41	42.7
2020-04-10 01:08:20	5.07	42.1
2020-04-10 01:09:40	4.35	41.9
2020-04-10 01:09:50	4.06	42.3
2020-04-10 01:10:20	3.14	42.1
2020-04-10 01:11:30	5.99	45.6
2020-04-10 01:12:50	5.61	42.2
2020-04-10 01:13:00	5.16	42.6
2020-04-10 01:14:40	3.00	41.6
2020-04-10 01:15:50	3.60	41.9
2020-04-10 01:16:00	3.49	42.2
2020-04-10 01:19:30	4.64	42.8
2020-04-10 01:20:20	4.07	43.1
2020-04-10 01:22:00	5.69	45.5
2020-04-10 01:22:40	5.14	44.1
2020-04-10 01:22:50	4.20	43.5
2020-04-10 01:23:00	4.74	45.2
2020-04-10 01:23:40	5.03	43.1
2020-04-10 01:23:50	5.20	44.4
2020-04-10 01:24:00	5.82	46.4
2020-04-10 01:26:40	2.03	42.5
2020-04-10 01:27:00	5.66	45.7
2020-04-10 01:27:10	6.14	47.3
2020-04-10 01:27:20	6.87	48.0
2020-04-10 01:27:30	6.24	46.6
2020-04-10 01:27:40	6.20	44.5
2020-04-10 01:28:00	6.45	44.5
2020-04-10 01:28:10	4.76	44.0
2020-04-10 01:28:20	5.14	42.9
2020-04-10 01:29:10	6.74	47.8
2020-04-10 01:29:20	6.89	46.1
2020-04-10 01:29:30	6.36	46.5
2020-04-10 01:29:40	6.87	47.9
2020-04-10 01:29:50	5.85	44.2
2020-04-10 01:30:20	4.68	43.4
2020-04-10 01:30:30	4.58	43.2
2020-04-10 01:30:40	4.88	42.9
2020-04-10 01:30:50	4.66	41.7
2020-04-10 01:31:00	4.14	41.3
2020-04-10 01:32:10	4.85	43.1
2020-04-10 01:32:20	4.57	42.7
2020-04-10 01:32:30	4.60	42.9
2020-04-10 01:34:10	4.97	44.7
2020-04-10 01:34:20	5.07	45.4
2020-04-10 01:34:30	5.36	43.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 01:34:40	5.93	44.6
2020-04-10 01:34:50	4.82	44.0
2020-04-10 01:35:10	6.38	45.6
2020-04-10 01:35:20	6.15	45.7
2020-04-10 01:35:30	6.72	45.9
2020-04-10 01:35:40	6.56	45.1
2020-04-10 01:35:50	6.40	47.8
2020-04-10 01:36:00	6.45	45.1
2020-04-10 01:36:10	6.77	47.7
2020-04-10 01:36:20	7.13	46.8
2020-04-10 01:36:30	6.42	45.4
2020-04-10 01:36:40	6.34	43.6
2020-04-10 01:36:50	5.26	43.2
2020-04-10 01:37:00	5.02	44.3
2020-04-10 01:37:10	5.56	44.2
2020-04-10 01:37:20	6.61	48.6
2020-04-10 01:37:30	7.35	48.6
2020-04-10 01:37:40	7.39	47.6
2020-04-10 01:37:50	6.90	46.7
2020-04-10 01:38:00	6.72	44.2
2020-04-10 01:38:10	6.41	47.2
2020-04-10 01:38:40	7.24	47.9
2020-04-10 01:38:50	7.36	46.6
2020-04-10 01:39:00	6.73	46.3
2020-04-10 01:39:10	6.50	46.2
2020-04-10 01:39:20	6.09	43.2
2020-04-10 01:39:30	5.84	43.7
2020-04-10 01:39:40	5.38	43.2
2020-04-10 01:39:50	5.73	43.5
2020-04-10 01:40:00	6.61	44.5
2020-04-10 01:40:10	6.08	45.3
2020-04-10 01:40:30	6.57	46.9
2020-04-10 01:41:10	6.69	47.2
2020-04-10 01:41:20	6.39	44.9
2020-04-10 01:41:30	7.42	48.9
2020-04-10 01:41:40	6.99	47.2
2020-04-10 01:41:50	6.91	46.6
2020-04-10 01:42:00	6.46	45.4
2020-04-10 01:42:10	7.04	46.7
2020-04-10 01:42:20	6.96	47.3
2020-04-10 01:42:30	6.76	48.3
2020-04-10 01:42:50	7.29	50.4
2020-04-10 01:43:20	7.02	47.9
2020-04-10 01:43:30	6.46	45.0
2020-04-10 01:43:40	5.60	43.9
2020-04-10 01:43:50	6.67	46.0
2020-04-10 01:44:00	5.94	43.4
2020-04-10 01:44:10	6.52	47.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 01:44:30	7.39	48.9
2020-04-10 01:44:40	6.58	46.6
2020-04-10 01:44:50	6.06	46.3
2020-04-10 01:45:00	7.38	46.7
2020-04-10 01:45:30	6.93	47.4
2020-04-10 01:45:40	7.41	46.8
2020-04-10 01:45:50	6.64	45.3
2020-04-10 01:46:00	6.37	45.4
2020-04-10 01:46:10	5.74	45.0
2020-04-10 01:46:20	6.31	44.8
2020-04-10 01:47:20	6.49	46.3
2020-04-10 01:47:30	5.73	45.9
2020-04-10 01:47:40	6.38	44.5
2020-04-10 01:48:20	5.64	43.6
2020-04-10 01:48:30	6.06	45.3
2020-04-10 01:48:40	5.97	44.2
2020-04-10 01:48:50	5.74	45.1
2020-04-10 01:49:00	6.47	45.9
2020-04-10 01:49:10	6.64	45.9
2020-04-10 01:49:20	6.03	45.1
2020-04-10 01:49:30	4.96	43.3
2020-04-10 01:49:40	6.52	46.2
2020-04-10 01:50:20	7.16	46.5
2020-04-10 01:50:30	6.27	44.4
2020-04-10 01:51:20	6.67	46.7
2020-04-10 01:51:30	5.88	44.6
2020-04-10 01:51:40	5.98	44.0
2020-04-10 01:51:50	4.79	43.2
2020-04-10 01:52:00	4.77	42.2
2020-04-10 01:52:10	4.87	43.5
2020-04-10 01:52:20	4.91	43.4
2020-04-10 01:52:30	5.33	45.3
2020-04-10 01:52:40	6.47	46.7
2020-04-10 01:52:50	6.36	43.5
2020-04-10 01:53:00	5.61	42.7
2020-04-10 01:53:20	4.60	43.4
2020-04-10 01:54:50	6.90	46.2
2020-04-10 01:55:50	6.67	46.3
2020-04-10 01:56:00	6.29	44.1
2020-04-10 01:56:30	6.16	44.4
2020-04-10 01:56:40	5.88	46.1
2020-04-10 01:56:50	6.69	44.9
2020-04-10 01:57:00	5.81	45.0
2020-04-10 01:57:10	5.19	43.4
2020-04-10 01:57:20	4.72	43.0
2020-04-10 01:57:30	5.55	43.5
2020-04-10 01:57:40	5.12	42.3
2020-04-10 01:57:50	5.28	42.3

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 01:58:00	4.90	42.4
2020-04-10 01:58:30	5.04	44.2
2020-04-10 01:58:40	5.23	43.2
2020-04-10 01:59:00	4.73	43.7
2020-04-10 01:59:10	4.70	43.9
2020-04-10 01:59:20	5.79	44.6
2020-04-10 01:59:40	6.85	45.4
2020-04-10 01:59:50	6.59	49.1
2020-04-10 02:00:00	6.19	45.9
2020-04-10 02:00:10	5.21	44.0
2020-04-10 02:00:20	5.43	44.2
2020-04-10 02:00:30	6.44	46.6
2020-04-10 02:00:40	5.97	45.1
2020-04-10 02:00:50	6.20	45.0
2020-04-10 02:01:00	6.57	46.5
2020-04-10 02:01:10	5.63	45.3
2020-04-10 02:01:20	6.40	45.5
2020-04-10 02:01:30	5.71	43.8
2020-04-10 02:01:40	5.54	43.9
2020-04-10 02:01:50	5.04	43.3
2020-04-10 02:02:00	5.64	44.6
2020-04-10 02:02:10	6.15	43.3
2020-04-10 02:02:20	6.44	45.7
2020-04-10 02:02:30	6.22	46.6
2020-04-10 02:02:40	5.59	45.3
2020-04-10 02:02:50	6.36	45.2
2020-04-10 02:03:00	6.03	43.6
2020-04-10 02:03:10	5.50	44.6
2020-04-10 02:03:20	4.89	44.6
2020-04-10 02:03:30	5.40	43.3
2020-04-10 02:03:40	4.64	43.0
2020-04-10 02:04:10	5.46	44.1
2020-04-10 02:04:20	4.64	43.2
2020-04-10 02:04:30	4.71	43.1
2020-04-10 02:04:40	5.07	44.6
2020-04-10 02:04:50	5.82	43.6
2020-04-10 02:05:00	4.93	44.4
2020-04-10 02:05:10	5.58	43.4
2020-04-10 02:05:20	4.93	43.7
2020-04-10 02:05:30	5.25	44.9
2020-04-10 02:06:40	5.81	43.1
2020-04-10 02:06:50	5.23	44.7
2020-04-10 02:07:00	6.29	43.4
2020-04-10 02:07:10	5.64	43.9
2020-04-10 02:07:20	4.97	42.7
2020-04-10 02:07:30	4.58	43.3
2020-04-10 02:07:40	4.75	42.7
2020-04-10 02:07:50	5.40	42.1

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 02:08:00	4.74	42.6
2020-04-10 02:08:10	6.26	47.4
2020-04-10 02:08:20	6.96	44.7
2020-04-10 02:09:00	6.99	46.1
2020-04-10 02:09:10	5.42	45.5
2020-04-10 02:09:20	5.60	45.5
2020-04-10 02:09:30	5.79	44.2
2020-04-10 02:09:40	5.75	45.2
2020-04-10 02:09:50	5.95	43.4
2020-04-10 02:10:30	5.58	44.9
2020-04-10 02:10:40	6.63	45.0
2020-04-10 02:11:00	7.30	46.9
2020-04-10 02:11:10	4.68	44.1
2020-04-10 02:11:20	5.16	45.1
2020-04-10 02:11:30	5.69	45.1
2020-04-10 02:11:40	6.54	49.3
2020-04-10 02:11:50	6.99	48.8
2020-04-10 02:12:10	6.18	43.6
2020-04-10 02:12:20	4.75	42.9
2020-04-10 02:12:50	6.35	44.3
2020-04-10 02:13:20	7.29	46.1
2020-04-10 02:14:10	6.15	46.3
2020-04-10 02:14:20	7.28	45.8
2020-04-10 02:14:30	5.56	44.5
2020-04-10 02:14:40	5.66	43.8
2020-04-10 02:15:10	7.27	45.8
2020-04-10 02:15:20	6.52	46.1
2020-04-10 02:15:30	6.16	45.8
2020-04-10 02:16:20	6.64	47.8
2020-04-10 02:16:40	6.30	46.2
2020-04-10 02:17:10	6.27	43.9
2020-04-10 02:17:20	4.68	42.0
2020-04-10 02:17:30	4.55	42.3
2020-04-10 02:17:40	5.01	43.6
2020-04-10 02:17:50	5.82	43.5
2020-04-10 02:18:00	5.97	43.8
2020-04-10 02:18:10	6.13	45.6
2020-04-10 02:18:20	6.02	44.0
2020-04-10 02:18:30	5.09	43.8
2020-04-10 02:18:40	6.00	45.7
2020-04-10 02:19:30	6.53	47.0
2020-04-10 02:19:40	6.64	47.2
2020-04-10 02:19:50	6.55	47.4
2020-04-10 02:20:00	5.89	46.5
2020-04-10 02:20:10	5.96	44.8
2020-04-10 02:20:20	6.17	46.9
2020-04-10 02:20:30	6.03	45.3
2020-04-10 02:20:40	4.96	42.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 02:20:50	5.11	44.6
2020-04-10 02:21:00	5.24	44.7
2020-04-10 02:21:10	5.24	43.2
2020-04-10 02:21:40	7.22	45.7
2020-04-10 02:22:50	6.99	47.6
2020-04-10 02:23:10	6.14	45.2
2020-04-10 02:23:20	5.98	45.0
2020-04-10 02:23:30	6.92	44.9
2020-04-10 02:23:40	5.95	42.3
2020-04-10 02:24:00	5.36	43.8
2020-04-10 02:24:10	4.64	46.1
2020-04-10 02:24:20	6.96	48.1
2020-04-10 02:24:30	7.27	48.9
2020-04-10 02:25:20	7.13	47.8
2020-04-10 02:25:30	6.59	49.5
2020-04-10 02:25:40	7.06	45.5
2020-04-10 02:25:50	5.64	46.3
2020-04-10 02:26:00	6.95	46.8
2020-04-10 02:27:10	7.19	46.4
2020-04-10 02:27:20	6.65	48.5
2020-04-10 02:27:40	6.10	43.8
2020-04-10 02:27:50	5.29	43.3
2020-04-10 02:28:00	4.73	43.9
2020-04-10 02:28:10	5.75	45.1
2020-04-10 02:28:30	5.16	45.6
2020-04-10 02:28:50	7.19	48.8
2020-04-10 02:29:00	6.59	46.9
2020-04-10 02:29:10	5.56	44.5
2020-04-10 02:29:20	5.74	45.3
2020-04-10 02:29:30	5.27	44.2
2020-04-10 02:29:50	7.41	47.1
2020-04-10 02:30:00	6.66	46.6
2020-04-10 02:30:10	6.22	45.4
2020-04-10 02:30:30	6.31	46.4
2020-04-10 02:30:40	5.93	43.1
2020-04-10 02:30:50	5.10	44.9
2020-04-10 02:31:10	6.10	46.7
2020-04-10 02:31:20	5.59	42.9
2020-04-10 02:31:50	6.64	45.8
2020-04-10 02:32:20	7.25	47.9
2020-04-10 02:34:10	7.22	46.3
2020-04-10 02:34:20	7.11	48.2
2020-04-10 02:34:30	6.21	46.6
2020-04-10 02:34:40	7.33	48.4
2020-04-10 02:34:50	6.97	46.2
2020-04-10 02:35:00	6.09	44.3
2020-04-10 02:35:10	5.82	44.7
2020-04-10 02:35:20	6.06	43.8

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 02:35:30	4.74	45.9
2020-04-10 02:35:40	6.75	47.0
2020-04-10 02:35:50	6.85	46.8
2020-04-10 02:36:10	6.77	45.6
2020-04-10 02:36:20	7.21	47.2
2020-04-10 02:36:50	6.57	46.2
2020-04-10 02:37:00	4.95	43.5
2020-04-10 02:37:10	4.45	42.9
2020-04-10 02:37:20	4.55	43.0
2020-04-10 02:37:50	5.70	44.0
2020-04-10 02:38:00	5.09	42.3
2020-04-10 02:38:30	5.63	43.4
2020-04-10 02:39:00	7.35	46.5
2020-04-10 02:39:10	6.54	48.3
2020-04-10 02:39:30	7.33	46.6
2020-04-10 02:39:40	6.15	45.9
2020-04-10 02:39:50	5.88	47.5
2020-04-10 02:40:00	6.40	44.6
2020-04-10 02:40:10	5.63	45.5
2020-04-10 02:40:20	6.35	45.5
2020-04-10 02:40:30	6.11	47.1
2020-04-10 02:40:40	6.61	48.2
2020-04-10 02:40:50	7.49	47.3
2020-04-10 02:41:20	7.36	48.9
2020-04-10 02:43:10	5.02	44.1
2020-04-10 02:43:20	6.14	45.6
2020-04-10 02:43:30	5.83	46.8
2020-04-10 02:43:40	6.80	47.0
2020-04-10 02:44:20	6.89	47.3
2020-04-10 02:44:50	6.85	47.8
2020-04-10 02:45:00	7.08	47.3
2020-04-10 02:45:10	7.16	46.6
2020-04-10 02:45:20	6.83	48.0
2020-04-10 02:45:40	5.71	44.0
2020-04-10 02:45:50	4.75	44.5
2020-04-10 02:46:00	4.43	43.5
2020-04-10 02:46:20	4.00	43.2
2020-04-10 02:46:30	5.11	44.1
2020-04-10 02:46:40	5.85	45.5
2020-04-10 02:46:50	6.42	46.3
2020-04-10 02:47:20	6.65	48.3
2020-04-10 02:47:30	7.04	46.0
2020-04-10 02:47:40	6.10	46.2
2020-04-10 02:47:50	5.88	43.7
2020-04-10 02:48:00	4.92	45.0
2020-04-10 02:48:10	6.40	45.7
2020-04-10 02:48:20	6.30	45.6
2020-04-10 02:48:30	6.14	46.0

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 02:48:50	6.50	47.6
2020-04-10 02:49:00	5.36	46.2
2020-04-10 02:50:40	6.35	47.1
2020-04-10 02:50:50	6.65	46.8
2020-04-10 02:51:00	5.87	45.0
2020-04-10 02:51:10	5.51	46.3
2020-04-10 02:51:20	6.42	47.1
2020-04-10 02:51:30	6.37	46.1
2020-04-10 02:52:30	7.08	49.8
2020-04-10 02:53:10	6.61	49.1
2020-04-10 02:54:00	6.79	49.8
2020-04-10 02:54:10	7.18	48.5
2020-04-10 02:54:40	6.77	46.7
2020-04-10 02:54:50	6.54	47.8
2020-04-10 02:55:00	7.50	45.7
2020-04-10 02:55:10	5.41	45.3
2020-04-10 02:55:30	5.99	47.5
2020-04-10 02:56:30	6.87	46.2
2020-04-10 02:57:00	5.96	47.8
2020-04-10 02:57:20	6.43	46.4
2020-04-10 02:58:10	5.61	45.9
2020-04-10 02:58:20	6.40	46.9
2020-04-10 02:58:30	6.37	44.6
2020-04-10 02:58:40	5.95	45.8
2020-04-10 02:58:50	5.95	46.7
2020-04-10 02:59:00	6.92	47.3
2020-04-10 02:59:20	6.81	44.7
2020-04-10 02:59:30	5.75	45.3
2020-04-10 02:59:40	6.22	46.6
2020-04-10 02:59:50	6.20	46.8
2020-04-10 03:00:00	5.55	46.9
2020-04-10 03:00:10	6.51	44.8
2020-04-10 03:00:20	5.03	42.8
2020-04-10 03:00:30	4.28	43.0
2020-04-10 03:00:40	4.79	44.8
2020-04-10 03:00:50	4.16	42.8
2020-04-10 03:01:00	4.74	42.9
2020-04-10 03:01:10	5.50	44.3
2020-04-10 03:01:40	7.48	47.1
2020-04-10 03:02:10	6.45	45.3
2020-04-10 03:02:20	4.76	45.7
2020-04-10 03:02:40	5.91	45.0
2020-04-10 03:02:50	5.64	44.4
2020-04-10 03:03:00	4.85	44.5
2020-04-10 03:03:20	5.73	46.6
2020-04-10 03:03:40	6.86	44.5
2020-04-10 03:03:50	6.32	47.4
2020-04-10 03:04:00	5.36	44.0

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 03:04:10	5.60	45.3
2020-04-10 03:04:20	5.69	45.7
2020-04-10 03:04:50	6.00	45.5
2020-04-10 03:05:10	6.87	47.6
2020-04-10 03:05:20	7.05	48.4
2020-04-10 03:05:30	6.27	45.8
2020-04-10 03:05:50	6.45	47.0
2020-04-10 03:06:00	6.42	45.5
2020-04-10 03:06:10	5.79	46.4
2020-04-10 03:06:30	6.55	49.0
2020-04-10 03:06:40	5.59	46.5
2020-04-10 03:08:50	6.69	48.4
2020-04-10 03:09:00	6.61	45.2
2020-04-10 03:09:10	4.82	45.3
2020-04-10 03:09:20	4.48	44.2
2020-04-10 03:09:30	5.04	45.5
2020-04-10 03:09:40	5.83	46.3
2020-04-10 03:09:50	5.81	46.5
2020-04-10 03:10:00	6.14	47.8
2020-04-10 03:13:10	5.75	46.3
2020-04-10 03:16:20	6.66	48.4
2020-04-10 03:16:40	6.85	49.1
2020-04-10 03:17:20	6.92	49.0
2020-04-10 03:17:30	6.17	46.8
2020-04-10 03:17:40	6.00	46.0
2020-04-10 03:17:50	5.72	47.6
2020-04-10 03:19:10	6.68	49.2
2020-04-10 03:22:40	6.90	50.0
2020-04-10 03:22:50	6.82	46.4
2020-04-10 03:23:00	5.76	45.4
2020-04-10 03:23:10	6.77	46.9
2020-04-10 03:23:20	6.42	46.3
2020-04-10 03:23:30	6.61	45.7
2020-04-10 03:23:40	6.52	46.3
2020-04-10 03:23:50	6.67	47.1
2020-04-10 03:24:00	5.84	45.4
2020-04-10 03:24:10	5.77	46.2
2020-04-10 03:24:20	4.63	45.2
2020-04-10 03:24:30	4.95	44.5
2020-04-10 03:24:40	5.29	45.5
2020-04-10 03:24:50	5.43	47.7
2020-04-10 03:25:30	6.94	48.6
2020-04-10 03:25:50	7.21	48.1
2020-04-10 03:27:00	6.96	47.6
2020-04-10 03:27:50	7.23	45.0
2020-04-10 03:28:10	7.39	48.4
2020-04-10 03:29:00	6.64	47.7
2020-04-10 03:30:30	6.04	48.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 03:30:40	7.44	48.0
2020-04-10 03:31:10	6.53	47.1
2020-04-10 03:31:20	7.11	48.5
2020-04-10 03:32:00	6.50	46.3
2020-04-10 03:32:10	6.28	45.3
2020-04-10 03:32:40	6.93	46.2
2020-04-10 03:34:00	6.83	45.8
2020-04-10 03:34:10	6.45	46.8
2020-04-10 03:34:20	5.60	45.3
2020-04-10 03:34:50	7.23	47.6
2020-04-10 03:35:00	6.15	45.2
2020-04-10 03:35:10	5.78	45.8
2020-04-10 03:35:50	7.27	47.2
2020-04-10 03:36:00	6.30	45.2
2020-04-10 03:36:10	6.07	45.3
2020-04-10 03:36:20	6.27	46.3
2020-04-10 03:36:30	6.59	46.8
2020-04-10 03:36:40	6.32	46.8
2020-04-10 03:36:50	5.34	44.4
2020-04-10 03:37:00	5.82	43.4
2020-04-10 03:37:10	6.03	45.0
2020-04-10 03:37:20	5.41	43.7
2020-04-10 03:37:30	4.75	44.4
2020-04-10 03:37:40	5.14	45.2
2020-04-10 03:37:50	5.52	44.2
2020-04-10 03:38:00	5.54	43.8
2020-04-10 03:38:10	5.07	43.9
2020-04-10 03:38:20	5.24	44.0
2020-04-10 03:38:40	4.66	44.1
2020-04-10 03:38:50	4.87	45.3
2020-04-10 03:39:00	5.92	45.1
2020-04-10 03:39:10	5.92	47.1
2020-04-10 03:39:30	6.49	45.5
2020-04-10 03:40:10	6.14	47.2
2020-04-10 03:40:20	6.09	46.1
2020-04-10 03:40:40	7.09	47.1
2020-04-10 03:40:50	6.88	45.8
2020-04-10 03:41:10	6.74	49.2
2020-04-10 03:41:20	6.94	48.8
2020-04-10 03:41:40	7.21	47.4
2020-04-10 03:42:20	7.14	47.9
2020-04-10 03:42:30	6.58	47.1
2020-04-10 03:42:50	5.92	47.5
2020-04-10 03:43:00	6.71	47.5
2020-04-10 03:43:10	7.14	46.7
2020-04-10 03:43:20	6.38	46.1
2020-04-10 03:44:40	7.45	48.8
2020-04-10 03:44:50	6.57	44.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 03:45:30	7.13	49.3
2020-04-10 03:45:40	6.19	48.3
2020-04-10 03:45:50	7.27	48.4
2020-04-10 03:46:20	7.33	49.6
2020-04-10 03:46:30	6.15	46.0
2020-04-10 03:46:40	5.86	46.5
2020-04-10 03:47:10	7.45	47.3
2020-04-10 03:47:20	6.91	46.4
2020-04-10 03:47:30	6.16	44.9
2020-04-10 03:47:40	6.54	46.4
2020-04-10 03:47:50	5.86	44.0
2020-04-10 03:48:00	5.30	44.4
2020-04-10 03:48:10	5.12	45.8
2020-04-10 03:48:20	5.45	43.9
2020-04-10 03:48:30	5.27	44.8
2020-04-10 03:48:40	5.86	45.2
2020-04-10 03:48:50	5.54	44.3
2020-04-10 03:49:00	5.66	44.0
2020-04-10 03:49:10	5.16	43.4
2020-04-10 03:49:20	5.82	44.1
2020-04-10 03:49:30	6.00	46.9
2020-04-10 03:49:40	7.24	47.3
2020-04-10 03:49:50	6.74	46.6
2020-04-10 03:50:00	7.33	49.1
2020-04-10 03:50:10	7.22	46.0
2020-04-10 03:50:20	6.39	45.2
2020-04-10 03:50:30	4.84	43.5
2020-04-10 03:50:40	4.81	43.2
2020-04-10 03:50:50	5.16	44.3
2020-04-10 03:51:00	6.34	47.1
2020-04-10 03:51:10	7.30	46.1
2020-04-10 03:51:20	6.49	45.7
2020-04-10 03:51:30	6.68	45.7
2020-04-10 03:51:40	4.85	44.5
2020-04-10 03:51:50	5.05	46.2
2020-04-10 03:52:20	7.49	49.1
2020-04-10 03:52:30	6.92	48.2
2020-04-10 03:52:40	5.97	46.2
2020-04-10 03:52:50	5.28	44.4
2020-04-10 03:53:00	6.00	47.5
2020-04-10 03:53:10	7.11	46.4
2020-04-10 03:53:20	6.55	46.0
2020-04-10 03:53:30	6.56	48.7
2020-04-10 03:53:40	5.76	47.2
2020-04-10 03:54:00	6.67	47.0
2020-04-10 03:54:10	7.44	48.4
2020-04-10 03:54:20	6.36	46.8
2020-04-10 03:54:30	6.68	47.0

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 03:54:40	6.10	48.0
2020-04-10 03:54:50	5.96	46.9
2020-04-10 03:55:20	7.00	46.6
2020-04-10 03:55:40	6.61	47.3
2020-04-10 03:55:50	5.76	45.2
2020-04-10 03:56:00	4.68	43.3
2020-04-10 03:56:10	5.59	43.4
2020-04-10 03:56:20	5.42	43.4
2020-04-10 03:56:30	4.89	44.8
2020-04-10 03:56:40	7.47	47.0
2020-04-10 03:56:50	5.57	44.8
2020-04-10 03:57:00	5.49	45.7
2020-04-10 03:57:10	7.41	47.2
2020-04-10 03:57:30	7.44	47.4
2020-04-10 03:59:00	7.09	48.3
2020-04-10 03:59:10	6.81	46.7
2020-04-10 03:59:20	6.55	47.6
2020-04-10 03:59:30	5.69	47.6
2020-04-10 03:59:40	7.07	48.1
2020-04-10 03:59:50	6.52	46.0
2020-04-10 04:01:30	7.40	48.1
2020-04-10 04:01:40	6.42	48.0
2020-04-10 04:02:00	6.34	45.9
2020-04-10 04:02:20	6.69	45.6
2020-04-10 04:02:40	7.05	45.3
2020-04-10 04:02:50	6.72	47.4
2020-04-10 04:03:00	5.33	43.5
2020-04-10 04:03:30	6.02	45.1
2020-04-10 04:03:40	6.27	46.6
2020-04-10 04:04:50	6.95	47.1
2020-04-10 04:05:20	6.41	45.3
2020-04-10 04:05:40	6.24	46.8
2020-04-10 04:05:50	5.20	43.6
2020-04-10 04:06:00	5.46	43.8
2020-04-10 04:06:10	5.70	44.0
2020-04-10 04:06:20	6.06	45.0
2020-04-10 04:06:30	5.42	44.5
2020-04-10 04:06:40	6.03	46.0
2020-04-10 04:07:30	6.91	46.6
2020-04-10 04:07:40	6.48	44.1
2020-04-10 04:07:50	5.07	43.8
2020-04-10 04:08:00	6.49	45.1
2020-04-10 04:08:10	6.04	43.7
2020-04-10 04:08:30	5.60	45.1
2020-04-10 04:08:40	5.86	45.0
2020-04-10 04:08:50	6.11	46.3
2020-04-10 04:09:00	6.61	45.7
2020-04-10 04:09:10	5.97	45.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 04:09:20	6.21	45.3
2020-04-10 04:09:30	6.55	47.1
2020-04-10 04:09:40	6.06	44.7
2020-04-10 04:09:50	4.48	43.1
2020-04-10 04:10:10	5.03	43.4
2020-04-10 04:10:20	5.85	45.4
2020-04-10 04:10:30	6.36	43.2
2020-04-10 04:10:40	4.93	43.8
2020-04-10 04:10:50	4.84	44.4
2020-04-10 04:11:00	4.82	43.9
2020-04-10 04:11:10	5.28	43.6
2020-04-10 04:11:20	4.86	43.2
2020-04-10 04:11:30	4.77	43.1
2020-04-10 04:11:40	4.04	43.0
2020-04-10 04:11:50	4.16	42.9
2020-04-10 04:12:00	5.60	44.5
2020-04-10 04:12:10	5.73	43.4
2020-04-10 04:12:30	4.89	43.5
2020-04-10 04:12:50	5.97	45.3
2020-04-10 04:13:20	5.58	44.9
2020-04-10 04:13:30	6.29	47.9
2020-04-10 04:13:40	6.56	46.1
2020-04-10 04:13:50	7.29	47.3
2020-04-10 04:14:10	6.81	45.8
2020-04-10 04:14:20	6.48	47.1
2020-04-10 04:14:30	6.37	45.8
2020-04-10 04:14:40	5.10	45.3
2020-04-10 04:14:50	4.72	44.4
2020-04-10 04:15:00	5.54	46.1
2020-04-10 04:15:10	6.82	46.8
2020-04-10 04:15:20	6.43	46.2
2020-04-10 04:15:30	4.84	44.1
2020-04-10 04:15:50	4.86	44.4
2020-04-10 04:16:00	5.11	45.5
2020-04-10 04:16:10	6.05	43.9
2020-04-10 04:16:20	6.26	44.0
2020-04-10 04:16:30	6.56	45.8
2020-04-10 04:17:00	6.83	46.2
2020-04-10 04:17:10	6.33	45.2
2020-04-10 04:17:20	5.73	44.5
2020-04-10 04:17:30	6.54	44.5
2020-04-10 04:17:40	4.92	44.8
2020-04-10 04:17:50	5.89	46.9
2020-04-10 04:18:00	4.60	47.3
2020-04-10 04:18:50	6.49	46.3
2020-04-10 04:19:00	6.51	45.8
2020-04-10 04:19:10	6.04	46.2
2020-04-10 04:19:40	6.79	48.5

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 04:19:50	5.91	45.6
2020-04-10 04:20:00	5.76	46.0
2020-04-10 04:20:10	6.28	46.3
2020-04-10 04:20:20	6.86	49.2
2020-04-10 04:21:00	7.41	48.6
2020-04-10 04:21:10	5.82	47.2
2020-04-10 04:21:50	7.28	48.4
2020-04-10 04:22:00	7.36	48.7
2020-04-10 04:22:20	7.50	48.1
2020-04-10 04:22:30	7.03	45.7
2020-04-10 04:23:10	6.55	44.3
2020-04-10 04:23:20	5.38	45.3
2020-04-10 04:23:30	6.83	48.2
2020-04-10 04:23:40	6.59	45.7
2020-04-10 04:23:50	6.68	46.2
2020-04-10 04:24:10	5.53	45.1
2020-04-10 04:24:20	6.27	44.0
2020-04-10 04:24:30	5.53	44.3
2020-04-10 04:24:40	5.50	43.7
2020-04-10 04:25:00	4.87	43.7
2020-04-10 04:25:10	5.16	44.7
2020-04-10 04:25:20	5.75	43.6
2020-04-10 04:25:30	5.80	44.1
2020-04-10 04:25:40	5.52	45.1
2020-04-10 04:25:50	5.60	45.0
2020-04-10 04:26:00	4.75	44.4
2020-04-10 04:26:20	5.43	46.1
2020-04-10 04:26:40	6.89	46.8
2020-04-10 04:26:50	6.89	47.8
2020-04-10 04:27:00	6.64	45.6
2020-04-10 04:27:20	6.31	46.1
2020-04-10 04:27:30	6.09	45.2
2020-04-10 04:27:40	6.08	44.8
2020-04-10 04:27:50	4.81	44.8
2020-04-10 04:28:00	4.68	43.2
2020-04-10 04:28:10	5.14	44.4
2020-04-10 04:28:20	4.58	45.0
2020-04-10 04:29:20	7.11	47.0
2020-04-10 04:30:10	6.23	48.2
2020-04-10 04:30:30	7.06	48.2
2020-04-10 04:30:40	6.07	45.7
2020-04-10 04:30:50	6.24	44.8
2020-04-10 04:31:20	7.06	45.8
2020-04-10 04:31:30	6.34	48.5
2020-04-10 04:31:40	6.59	44.2
2020-04-10 04:31:50	5.47	44.7
2020-04-10 04:32:00	5.70	43.2
2020-04-10 04:32:10	5.30	43.1

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 04:32:20	4.47	44.6
2020-04-10 04:32:30	4.78	45.4
2020-04-10 04:32:40	4.76	44.2
2020-04-10 04:32:50	3.65	44.0
2020-04-10 04:33:00	4.75	43.6
2020-04-10 04:33:10	5.37	45.0
2020-04-10 04:33:20	4.58	44.1
2020-04-10 04:34:30	4.73	43.0
2020-04-10 04:35:00	4.90	43.2
2020-04-10 04:35:10	4.76	43.1
2020-04-10 04:35:20	4.74	44.5
2020-04-10 04:35:30	5.29	44.0
2020-04-10 04:35:40	5.41	43.7
2020-04-10 04:35:50	5.47	43.3
2020-04-10 04:36:00	5.22	43.3
2020-04-10 04:36:10	5.51	44.8
2020-04-10 04:36:20	6.28	45.0
2020-04-10 04:36:30	6.18	44.7
2020-04-10 04:36:40	5.98	45.7
2020-04-10 04:36:50	5.52	44.5
2020-04-10 04:37:00	6.06	44.6
2020-04-10 04:37:10	5.18	43.6
2020-04-10 04:37:20	4.18	43.6
2020-04-10 04:37:30	4.16	43.3
2020-04-10 04:37:40	4.94	42.8
2020-04-10 04:37:50	5.12	42.4
2020-04-10 04:38:00	5.14	43.7
2020-04-10 04:38:10	5.21	45.1
2020-04-10 04:38:20	6.87	47.4
2020-04-10 04:39:30	6.33	45.3
2020-04-10 04:39:40	6.71	45.1
2020-04-10 04:39:50	5.86	44.8
2020-04-10 04:40:00	7.18	47.1
2020-04-10 04:40:10	6.37	45.3
2020-04-10 04:40:20	5.53	45.5
2020-04-10 04:40:30	4.81	43.0
2020-04-10 04:40:40	4.24	44.3
2020-04-10 04:40:50	4.96	45.1
2020-04-10 04:41:00	5.14	44.6
2020-04-10 04:41:10	5.31	43.7
2020-04-10 04:41:20	5.37	45.1
2020-04-10 04:41:30	5.82	43.1
2020-04-10 04:41:40	4.92	43.6
2020-04-10 04:41:50	5.00	43.5
2020-04-10 04:42:00	4.92	43.8
2020-04-10 04:42:10	5.27	45.2
2020-04-10 04:42:20	6.14	45.3
2020-04-10 04:42:30	5.81	45.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 04:43:10	6.59	45.5
2020-04-10 04:43:20	6.40	46.2
2020-04-10 04:43:30	5.71	44.3
2020-04-10 04:43:50	6.02	43.2
2020-04-10 04:44:00	4.99	44.3
2020-04-10 04:44:10	5.57	43.8
2020-04-10 04:44:20	4.64	44.0
2020-04-10 04:44:30	5.47	44.5
2020-04-10 04:44:40	5.70	45.0
2020-04-10 04:44:50	5.52	43.9
2020-04-10 04:45:00	4.91	43.2
2020-04-10 04:45:20	5.26	44.1
2020-04-10 04:45:30	5.34	43.7
2020-04-10 04:45:40	5.34	44.3
2020-04-10 04:45:50	5.53	43.0
2020-04-10 04:46:00	3.95	42.4
2020-04-10 04:46:10	4.28	42.7
2020-04-10 04:46:20	5.18	42.2
2020-04-10 04:46:30	5.64	45.1
2020-04-10 04:46:40	6.23	43.7
2020-04-10 04:46:50	4.62	42.7
2020-04-10 04:47:00	4.81	41.5
2020-04-10 04:47:20	4.54	42.1
2020-04-10 04:47:30	4.57	42.1
2020-04-10 04:48:00	6.89	45.1
2020-04-10 04:48:10	5.32	43.7
2020-04-10 04:48:20	5.16	44.6
2020-04-10 04:48:30	5.13	43.8
2020-04-10 04:48:40	5.45	43.8
2020-04-10 04:48:50	5.72	43.3
2020-04-10 04:49:00	4.66	43.1
2020-04-10 04:49:10	5.16	44.2
2020-04-10 04:49:50	6.16	46.0
2020-04-10 04:50:00	6.39	42.4
2020-04-10 04:50:20	5.45	43.9
2020-04-10 04:50:40	7.26	47.9
2020-04-10 04:50:50	6.25	45.2
2020-04-10 04:51:00	6.29	44.3
2020-04-10 04:51:10	6.11	45.5
2020-04-10 04:51:20	5.50	44.2
2020-04-10 04:51:30	5.10	44.0
2020-04-10 04:51:40	5.04	42.9
2020-04-10 04:52:00	5.93	47.3
2020-04-10 04:52:10	7.29	47.5
2020-04-10 04:52:20	6.11	44.0
2020-04-10 04:52:30	5.51	43.3
2020-04-10 04:52:40	5.71	45.0
2020-04-10 04:52:50	6.14	44.1

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-10 04:53:00	5.26	42.3
2020-04-10 04:53:10	5.05	45.2
2020-04-10 04:53:20	5.41	45.2
2020-04-10 04:53:30	4.53	43.8
2020-04-10 04:53:50	4.90	44.4
2020-04-10 04:54:00	5.10	44.0
2020-04-10 04:54:10	4.68	42.0
2020-04-10 04:54:20	3.97	43.5
2020-04-10 04:55:00	6.35	47.4
2020-04-10 04:55:10	6.40	48.6
2020-04-10 04:55:30	5.32	43.5
2020-04-10 04:55:40	5.16	45.3
2020-04-10 04:57:20	6.31	46.0
2020-04-10 04:57:30	6.01	46.4
2020-04-10 04:57:40	6.36	46.5
2020-04-10 04:57:50	6.34	46.1
2020-04-10 04:58:00	6.00	45.6
2020-04-10 04:58:10	5.73	43.8
2020-04-10 04:58:20	4.99	43.5
2020-04-10 04:58:30	5.72	43.0
2020-04-10 04:58:40	4.93	43.3
2020-04-10 04:59:00	4.57	43.7
2020-04-10 04:59:20	5.11	44.1
2020-04-10 04:59:30	5.45	43.2
2020-04-10 04:59:50	4.76	45.0
2020-04-13 22:00:10	3.63	41.7
2020-04-13 22:00:20	5.14	42.5
2020-04-13 22:00:30	3.55	41.8
2020-04-13 22:00:40	3.05	42.2
2020-04-13 22:01:00	4.99	41.9
2020-04-13 22:01:10	3.70	42.0
2020-04-13 22:01:20	3.83	42.1
2020-04-13 22:01:30	4.57	45.6
2020-04-13 22:01:40	5.01	42.4
2020-04-13 22:02:20	4.58	45.5
2020-04-14 01:16:50	5.37	44.8
2020-04-14 01:17:00	5.25	44.3
2020-04-14 01:17:10	3.54	44.5
2020-04-14 01:17:20	4.03	44.4
2020-04-14 01:17:50	5.37	45.7
2020-04-14 01:18:00	6.55	48.2
2020-04-14 01:18:30	6.08	47.9
2020-04-14 01:26:40	5.31	45.1
2020-04-14 01:27:10	6.02	47.8
2020-04-14 01:27:20	6.93	47.2
2020-04-14 01:27:30	5.63	46.2
2020-04-14 01:27:40	6.37	46.1
2020-04-14 01:27:50	5.60	46.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-14 01:29:10	5.79	47.5
2020-04-14 01:31:40	6.66	49.0
2020-04-14 01:31:50	6.36	47.6
2020-04-14 01:33:50	6.90	48.2
2020-04-14 01:34:00	5.47	45.9
2020-04-14 01:34:20	5.13	44.5
2020-04-14 01:35:00	6.77	49.0
2020-04-14 01:35:30	5.84	45.1
2020-04-14 01:35:40	5.35	44.0
2020-04-14 01:36:00	6.38	44.3
2020-04-14 01:36:10	4.93	43.8
2020-04-14 01:36:20	6.09	43.7
2020-04-14 01:36:30	5.05	43.0
2020-04-14 01:37:00	5.27	44.8
2020-04-14 01:37:20	4.59	43.8
2020-04-14 01:38:10	4.90	46.0
2020-04-14 01:39:10	5.76	45.9
2020-04-14 01:39:40	6.75	47.2
2020-04-14 01:39:50	5.41	44.4
2020-04-14 01:40:00	4.30	43.1
2020-04-14 01:40:20	2.96	41.8
2020-04-14 01:40:40	5.77	45.4
2020-04-14 01:40:50	6.86	49.8
2020-04-14 01:41:00	7.04	49.2
2020-04-14 01:41:10	5.90	45.9
2020-04-14 01:41:20	3.67	42.8
2020-04-14 01:41:30	3.03	41.9
2020-04-14 01:42:00	5.57	43.6
2020-04-14 01:42:20	6.14	46.3
2020-04-14 01:42:30	5.95	43.9
2020-04-14 01:42:40	5.60	46.3
2020-04-14 01:42:50	5.59	45.7
2020-04-14 01:43:20	6.95	48.1
2020-04-14 01:43:40	5.03	45.2
2020-04-14 01:44:00	6.98	47.1
2020-04-14 01:44:10	6.40	45.0
2020-04-14 01:44:30	6.29	44.6
2020-04-14 01:44:40	5.95	45.3
2020-04-14 01:45:00	7.29	47.7
2020-04-14 01:45:10	6.26	45.9
2020-04-14 01:45:20	5.38	44.0
2020-04-14 01:45:40	5.96	43.8
2020-04-14 01:45:50	4.56	45.8
2020-04-14 01:46:00	6.80	47.5
2020-04-14 01:46:30	5.79	46.5
2020-04-14 01:46:40	6.71	48.3
2020-04-14 01:47:00	6.72	47.2
2020-04-14 01:47:10	5.34	46.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-14 01:47:20	5.37	44.7
2020-04-14 01:47:30	6.16	46.1
2020-04-14 01:47:40	4.98	44.5
2020-04-14 01:47:50	4.05	43.1
2020-04-14 01:48:10	2.40	42.6
2020-04-14 01:48:20	1.85	42.7
2020-04-14 01:48:30	2.67	42.5
2020-04-14 01:50:50	3.73	42.3
2020-04-14 01:51:00	4.93	42.7
2020-04-14 01:51:10	4.63	45.7
2020-04-14 01:51:20	4.61	43.5
2020-04-14 01:51:30	4.30	44.2
2020-04-14 01:52:40	4.72	45.6
2020-04-14 01:53:00	5.72	44.5
2020-04-14 01:54:10	5.50	42.5
2020-04-14 01:54:30	5.22	42.7
2020-04-14 01:55:00	4.66	44.8
2020-04-14 01:55:10	5.68	47.5
2020-04-14 01:55:20	5.86	47.6
2020-04-14 01:56:40	4.21	43.8
2020-04-14 01:57:50	4.51	42.3
2020-04-14 01:58:00	3.61	43.1
2020-04-14 01:58:10	3.84	43.7
2020-04-14 01:58:40	3.23	42.1
2020-04-14 01:59:50	4.88	43.4
2020-04-14 02:00:10	3.41	41.8
2020-04-14 02:00:20	2.90	42.5
2020-04-14 02:00:50	4.76	42.6
2020-04-14 02:02:30	3.08	41.4
2020-04-14 02:03:00	2.18	42.1
2020-04-14 02:03:10	2.83	41.7
2020-04-14 02:03:20	3.04	41.2
2020-04-14 02:03:40	1.58	41.0
2020-04-14 02:03:50	1.72	41.9
2020-04-14 02:04:00	2.57	41.9
2020-04-14 02:06:30	4.53	41.8
2020-04-14 02:08:50	4.22	40.6
2020-04-14 02:09:00	3.98	42.0
2020-04-14 02:09:20	3.38	41.0
2020-04-14 02:09:30	3.68	40.9
2020-04-14 02:13:50	2.49	40.0
2020-04-14 02:14:00	3.10	41.1
2020-04-14 02:14:10	3.37	41.0
2020-04-14 02:14:20	1.96	41.4
2020-04-14 02:14:30	1.91	40.5
2020-04-14 02:14:40	2.53	40.6
2020-04-14 02:14:50	2.64	40.1
2020-04-14 02:21:10	3.28	40.0

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-14 02:21:20	3.50	40.5
2020-04-14 02:21:50	2.56	41.4
2020-04-14 02:22:00	2.56	40.8
2020-04-14 02:22:10	4.35	41.2
2020-04-14 02:22:20	4.22	40.7
2020-04-14 02:22:30	5.14	43.0
2020-04-14 02:22:40	4.61	41.4
2020-04-14 02:23:00	4.14	41.5
2020-04-14 02:23:10	3.08	41.0
2020-04-14 02:23:20	2.76	40.5
2020-04-14 02:23:30	2.14	40.2
2020-04-14 02:23:40	2.42	40.9
2020-04-14 02:23:50	3.22	40.7
2020-04-14 02:24:20	3.21	40.0
2020-04-14 02:24:50	4.90	42.0
2020-04-14 02:25:10	2.15	40.6
2020-04-14 02:25:30	3.02	40.8
2020-04-14 02:25:40	2.82	40.4
2020-04-14 02:26:00	2.45	41.5
2020-04-14 02:26:10	3.00	41.0
2020-04-14 02:26:50	2.87	40.5
2020-04-14 02:27:00	5.08	41.3
2020-04-14 02:27:10	4.62	41.9
2020-04-14 02:27:20	3.81	40.9
2020-04-14 02:27:30	3.18	40.5
2020-04-14 02:27:40	3.61	41.0
2020-04-14 02:27:50	3.15	40.6
2020-04-14 02:28:10	3.11	40.0
2020-04-14 02:28:20	2.03	41.0
2020-04-14 02:28:30	2.13	41.4
2020-04-14 02:28:40	2.24	40.7
2020-04-14 02:28:50	4.47	40.2
2020-04-14 02:29:00	4.89	40.8
2020-04-14 02:29:10	4.43	40.5
2020-04-14 02:31:00	4.99	41.5
2020-04-14 02:31:10	4.54	40.4
2020-04-14 02:31:40	4.39	41.5
2020-04-14 02:31:50	3.74	41.6
2020-04-14 02:32:00	2.20	41.2
2020-04-14 02:32:20	5.48	43.7
2020-04-14 03:11:10	5.29	43.4
2020-04-14 03:11:30	4.85	43.8
2020-04-14 03:11:50	2.67	41.1
2020-04-14 03:12:50	2.46	41.8
2020-04-14 03:13:10	3.24	41.2
2020-04-14 03:13:20	3.06	41.1
2020-04-14 03:13:30	3.20	40.4
2020-04-14 03:13:40	4.00	40.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-14 03:13:50	4.70	41.9
2020-04-14 03:14:00	4.16	42.8
2020-04-14 03:14:20	3.37	40.7
2020-04-14 03:14:30	2.28	40.7
2020-04-14 03:15:00	3.93	42.3
2020-04-14 03:15:10	3.34	42.0
2020-04-14 03:16:30	4.51	43.3
2020-04-14 03:17:20	5.24	44.7
2020-04-14 03:18:00	6.89	47.5
2020-04-14 03:18:10	6.76	46.2
2020-04-14 03:19:20	5.49	44.1
2020-04-14 03:19:30	5.46	43.6
2020-04-14 03:19:40	5.41	42.8
2020-04-14 03:19:50	4.77	43.1
2020-04-14 03:20:00	4.56	42.9
2020-04-14 03:21:00	6.45	45.0
2020-04-14 03:21:10	6.41	47.8
2020-04-14 03:22:20	5.12	43.6
2020-04-14 03:23:10	4.57	44.4
2020-04-14 03:23:40	5.58	44.4
2020-04-14 03:23:50	6.44	47.0
2020-04-14 03:24:00	5.64	45.5
2020-04-14 03:24:50	4.61	43.3
2020-04-14 03:25:10	4.58	43.6
2020-04-14 03:25:40	4.92	46.2
2020-04-14 03:26:00	5.20	45.6
2020-04-14 03:26:30	4.91	46.0
2020-04-14 03:26:40	5.04	44.8
2020-04-14 03:27:10	5.05	42.8
2020-04-14 03:27:20	3.69	42.8
2020-04-14 03:27:30	4.54	43.9
2020-04-14 03:28:30	4.71	42.8
2020-04-14 03:28:40	4.53	44.5
2020-04-14 03:28:50	2.99	41.9
2020-04-14 03:29:50	4.98	41.8
2020-04-14 03:30:20	4.79	44.6
2020-04-14 03:30:30	5.25	45.4
2020-04-14 03:30:40	4.07	41.6
2020-04-14 03:31:00	3.98	41.0
2020-04-14 03:31:50	4.40	41.3
2020-04-14 03:32:00	3.80	40.9
2020-04-14 03:32:10	3.03	40.7
2020-04-14 03:32:20	5.06	45.3
2020-04-14 03:32:30	4.74	42.0
2020-04-14 03:32:40	5.21	41.5
2020-04-14 03:33:00	2.88	41.7
2020-04-14 03:33:10	3.21	41.5
2020-04-14 03:33:20	2.28	40.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-14 03:33:30	2.90	41.7
2020-04-14 03:33:40	3.22	42.2
2020-04-14 03:33:50	3.32	41.5
2020-04-14 03:34:30	4.98	44.7
2020-04-14 03:36:40	2.49	41.0
2020-04-14 03:36:50	3.07	41.1
2020-04-14 03:37:00	4.25	41.2
2020-04-14 03:37:10	4.54	41.7
2020-04-14 03:40:00	4.66	45.4
2020-04-14 03:40:30	5.92	47.1
2020-04-14 03:40:40	6.38	47.9
2020-04-14 03:40:50	5.80	42.6
2020-04-14 03:41:00	5.45	42.2
2020-04-14 03:41:10	4.16	41.0
2020-04-14 03:42:30	4.54	45.5
2020-04-14 03:43:20	4.62	42.3
2020-04-14 03:43:50	2.97	41.3
2020-04-14 03:44:30	4.00	41.2
2020-04-14 03:44:50	5.86	42.1
2020-04-14 03:45:00	5.02	40.9
2020-04-14 03:45:10	4.61	41.0
2020-04-14 03:45:30	4.62	40.2
2020-04-14 03:45:40	3.52	40.4
2020-04-14 03:45:50	3.99	39.8
2020-04-14 03:46:00	3.27	39.9
2020-04-14 03:46:10	3.61	40.6
2020-04-14 03:50:30	4.31	40.7
2020-04-14 03:52:50	4.04	40.9
2020-04-14 03:53:00	3.62	40.3
2020-04-14 03:53:10	3.59	40.8
2020-04-14 03:53:20	2.96	40.9
2020-04-14 03:53:30	2.68	41.2
2020-04-14 03:53:40	2.98	41.3
2020-04-14 03:54:10	2.22	42.2
2020-04-14 03:54:40	4.51	44.1
2020-04-14 03:54:50	4.93	45.7
2020-04-14 03:55:00	3.88	44.2
2020-04-14 03:56:10	5.83	43.3
2020-04-14 03:56:30	4.34	41.7
2020-04-14 03:56:40	3.85	41.5
2020-04-14 03:56:50	2.41	42.7
2020-04-14 03:58:00	3.21	42.1
2020-04-14 03:58:10	4.09	42.4
2020-04-14 03:58:20	4.42	41.9
2020-04-14 03:58:40	3.61	40.8
2020-04-14 03:59:00	5.08	43.9
2020-04-14 04:01:50	3.82	42.3
2020-04-14 04:03:20	2.40	39.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-14 04:03:30	2.73	40.1
2020-04-14 04:03:40	3.63	39.9
2020-04-14 04:03:50	2.77	40.1
2020-04-14 04:04:00	2.92	40.8
2020-04-14 04:04:10	2.86	41.5
2020-04-14 04:04:30	2.74	40.7
2020-04-14 04:05:40	4.48	42.5
2020-04-14 04:06:00	2.38	41.8
2020-04-14 04:12:00	5.17	40.9
2020-04-14 04:12:10	4.87	40.5
2020-04-14 04:18:50	3.59	38.4
2020-04-14 04:19:00	4.55	39.4
2020-04-14 04:20:00	4.83	40.9
2020-04-21 04:43:50	7.38	48.7
2020-04-21 04:46:30	7.50	48.1
2020-04-21 04:46:40	6.55	46.9
2020-04-21 04:46:50	5.45	47.6
2020-04-21 04:49:00	5.64	45.9
2020-04-21 04:49:50	5.38	44.2
2020-04-21 04:50:00	4.95	45.9
2020-04-21 04:51:20	7.42	50.2
2020-04-21 04:54:40	6.15	46.6
2020-04-21 04:54:50	7.04	47.4
2020-04-21 04:55:00	6.75	46.8
2020-04-21 04:56:20	4.55	45.6
2020-04-21 04:56:30	5.16	43.5
2020-04-21 04:56:40	4.71	43.3
2020-04-21 04:56:50	4.50	42.6
2020-04-21 04:57:10	4.60	44.1
2020-04-21 04:57:20	4.24	42.7
2020-04-21 04:57:30	3.89	43.3
2020-04-21 04:57:40	4.61	42.6
2020-04-21 04:57:50	3.72	43.0
2020-04-21 22:01:10	5.16	43.7
2020-04-21 22:01:20	5.29	43.6
2020-04-21 22:01:30	4.77	43.3
2020-04-21 22:01:40	5.88	44.0
2020-04-21 22:02:00	5.02	42.0
2020-04-21 22:02:10	5.84	45.6
2020-04-21 22:02:20	6.59	47.4
2020-04-21 22:02:40	7.39	46.5
2020-04-21 22:03:20	6.80	45.8
2020-04-21 22:03:30	6.15	43.6
2020-04-21 22:03:40	5.85	42.8
2020-04-21 22:03:50	6.14	44.5
2020-04-21 22:04:00	6.07	44.8
2020-04-21 22:04:10	6.59	43.9
2020-04-21 22:04:20	4.92	44.3

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-21 22:04:30	5.94	46.0
2020-04-21 22:04:50	5.51	43.7
2020-04-21 22:05:00	6.77	46.5
2020-04-21 22:05:30	6.09	45.7
2020-04-21 22:05:40	5.05	42.1
2020-04-21 22:06:00	4.81	42.0
2020-04-21 22:06:10	4.68	42.8
2020-04-21 22:06:20	5.21	43.0
2020-04-21 22:06:50	5.25	43.3
2020-04-21 22:07:00	4.82	42.5
2020-04-21 22:07:10	6.27	45.1
2020-04-21 22:07:20	6.29	42.9
2020-04-21 22:08:10	5.89	42.4
2020-04-21 22:08:20	5.16	41.4
2020-04-21 22:12:00	6.13	46.9
2020-04-21 22:12:10	5.55	47.6
2020-04-21 22:12:30	6.83	45.8
2020-04-21 22:12:40	6.52	46.1
2020-04-21 22:12:50	5.06	43.6
2020-04-21 22:13:00	6.09	46.1
2020-04-21 22:13:10	6.76	43.4
2020-04-21 22:13:30	3.84	39.6
2020-04-21 22:13:40	4.05	40.9
2020-04-21 22:13:50	4.73	41.4
2020-04-21 22:14:00	4.91	41.3
2020-04-21 22:14:10	4.90	41.8
2020-04-21 22:14:20	5.19	43.0
2020-04-21 22:14:30	6.23	46.7
2020-04-21 22:14:40	6.49	47.0
2020-04-21 22:15:00	5.97	42.9
2020-04-21 22:15:10	5.12	43.7
2020-04-21 22:16:00	4.52	42.2
2020-04-21 22:16:10	5.27	43.1
2020-04-21 22:16:40	5.76	42.3
2020-04-21 22:16:50	4.63	42.6
2020-04-21 22:17:10	6.08	41.4
2020-04-21 22:17:20	5.10	40.6
2020-04-21 22:17:30	4.87	40.3
2020-04-21 22:17:40	4.72	41.7
2020-04-21 22:17:50	4.03	41.6
2020-04-21 22:18:20	5.92	44.6
2020-04-21 22:19:00	5.17	43.2
2020-04-21 22:19:10	6.01	45.1
2020-04-21 22:19:20	6.58	45.5
2020-04-21 22:19:30	6.02	43.3
2020-04-21 22:19:40	5.14	42.2
2020-04-21 22:20:00	2.78	40.8
2020-04-21 22:20:10	4.32	42.4

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-21 22:20:20	4.39	42.4
2020-04-21 22:20:30	3.90	40.8
2020-04-21 22:20:40	4.11	40.8
2020-04-21 22:20:50	4.19	41.8
2020-04-21 22:21:10	4.76	42.6
2020-04-21 22:21:20	5.47	43.5
2020-04-21 22:21:30	5.49	43.3
2020-04-21 22:21:40	5.01	43.7
2020-04-21 22:21:50	6.48	43.5
2020-04-21 22:22:00	5.57	42.4
2020-04-21 22:22:10	5.29	42.8
2020-04-21 22:22:20	5.87	44.0
2020-04-21 22:22:30	5.57	42.9
2020-04-21 22:22:40	4.14	42.2
2020-04-21 22:22:50	3.50	39.9
2020-04-21 22:23:00	4.74	42.0
2020-04-21 22:23:10	4.32	41.3
2020-04-21 22:23:20	3.81	43.0
2020-04-21 22:23:30	3.97	43.5
2020-04-21 22:23:40	3.79	41.8
2020-04-21 22:27:20	4.40	41.7
2020-04-21 22:27:30	4.68	42.8
2020-04-21 22:27:40	4.37	42.8
2020-04-21 22:27:50	4.44	43.4
2020-04-21 22:28:00	5.82	45.0
2020-04-21 22:28:10	4.96	42.9
2020-04-21 22:28:20	4.63	42.0
2020-04-21 22:28:30	4.72	42.2
2020-04-21 22:28:40	4.11	42.2
2020-04-21 22:28:50	4.96	41.6
2020-04-21 22:29:30	6.57	47.1
2020-04-21 22:29:40	5.89	45.3
2020-04-21 22:29:50	5.82	47.0
2020-04-21 22:30:00	5.48	45.6
2020-04-21 22:31:00	5.59	44.3
2020-04-21 22:31:10	5.88	43.3
2020-04-21 22:31:30	4.50	42.9
2020-04-21 22:31:40	4.75	42.9
2020-04-21 22:31:50	4.64	44.2
2020-04-21 22:32:00	6.44	47.0
2020-04-21 22:32:10	6.94	47.2
2020-04-21 22:32:50	4.90	42.0
2020-04-21 22:33:00	4.79	43.2
2020-04-21 22:33:10	5.98	46.8
2020-04-21 22:33:20	6.38	44.9
2020-04-21 22:33:30	6.01	45.0
2020-04-21 22:33:40	4.34	43.4
2020-04-21 22:33:50	4.54	41.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-21 22:34:00	4.81	41.3
2020-04-21 22:34:10	4.14	40.6
2020-04-21 22:34:20	4.77	41.6
2020-04-21 22:34:30	3.71	42.0
2020-04-21 22:38:20	3.28	40.9
2020-04-21 22:38:30	2.80	40.8
2020-04-21 22:51:30	3.45	41.6
2020-04-21 22:53:40	5.94	46.2
2020-04-21 22:53:50	7.44	47.1
2020-04-21 22:54:00	7.05	45.1
2020-04-21 22:54:10	6.93	44.3
2020-04-21 22:54:20	6.26	44.2
2020-04-21 22:54:40	6.08	42.6
2020-04-21 22:54:50	4.86	43.3
2020-04-21 22:55:00	6.42	45.7
2020-04-21 22:55:10	7.11	43.9
2020-04-21 22:57:30	4.68	40.3
2020-04-21 22:57:40	4.87	40.8
2020-04-21 22:57:50	5.04	41.0
2020-04-21 22:58:00	5.83	42.5
2020-04-21 22:58:10	7.40	45.2
2020-04-21 22:58:20	6.61	44.1
2020-04-21 22:59:00	6.39	41.9
2020-04-21 22:59:10	6.11	41.7
2020-04-21 22:59:30	5.27	41.5
2020-04-21 22:59:40	4.34	42.3
2020-04-21 22:59:50	5.17	40.7
2020-04-21 23:00:00	5.55	45.3
2020-04-21 23:00:10	5.39	44.2
2020-04-21 23:00:20	6.53	45.9
2020-04-21 23:00:30	5.66	44.7
2020-04-21 23:00:40	5.56	43.4
2020-04-21 23:02:10	4.79	42.0
2020-04-21 23:03:30	4.94	43.6
2020-04-21 23:06:40	5.87	42.9
2020-04-21 23:28:00	5.66	40.7
2020-04-21 23:28:10	5.35	41.3
2020-04-21 23:28:30	4.58	45.0
2020-04-21 23:33:20	6.13	42.9
2020-04-21 23:36:50	7.13	46.7
2020-04-21 23:37:00	7.20	45.2
2020-04-21 23:37:20	6.73	45.5
2020-04-21 23:39:00	4.77	42.4
2020-04-21 23:39:10	6.14	43.0
2020-04-21 23:39:20	5.92	42.7
2020-04-21 23:42:10	5.64	42.1
2020-04-21 23:42:20	5.35	43.5
2020-04-21 23:42:30	5.79	43.9

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-21 23:42:40	4.85	41.6
2020-04-21 23:42:50	5.07	44.4
2020-04-21 23:43:00	6.25	45.1
2020-04-21 23:43:10	7.42	45.5
2020-04-21 23:43:20	6.11	43.7
2020-04-21 23:43:30	6.02	43.1
2020-04-21 23:43:40	5.40	43.8
2020-04-21 23:45:00	4.56	41.9
2020-04-21 23:45:10	3.94	40.8
2020-04-21 23:45:20	4.09	40.8
2020-04-21 23:46:50	5.14	42.6
2020-04-21 23:47:00	5.38	42.3
2020-04-21 23:47:10	3.90	41.8
2020-04-21 23:47:20	3.82	40.6
2020-04-21 23:48:40	5.73	43.7
2020-04-21 23:48:50	6.29	44.0
2020-04-21 23:50:20	4.95	41.3
2020-04-21 23:50:30	5.74	43.0
2020-04-21 23:51:20	5.85	43.5
2020-04-21 23:52:20	4.43	39.9
2020-04-21 23:52:30	3.98	40.6
2020-04-21 23:54:40	4.61	40.3
2020-04-21 23:54:50	4.84	40.9
2020-04-21 23:55:00	5.01	43.8
2020-04-22 00:03:20	3.47	39.4
2020-04-22 00:03:30	2.53	40.3
2020-04-22 00:03:40	2.63	41.5
2020-04-22 00:03:50	2.59	39.7
2020-04-22 00:06:50	5.88	46.7
2020-04-22 00:07:00	6.93	47.1
2020-04-22 00:07:10	5.75	43.7
2020-04-22 00:08:10	6.38	43.9
2020-04-22 00:08:20	6.00	43.2
2020-04-22 00:08:30	5.52	43.7
2020-04-22 00:09:40	4.68	41.5
2020-04-22 00:09:50	6.22	41.9
2020-04-22 00:10:00	5.56	42.6
2020-04-22 00:12:30	4.98	42.5
2020-04-22 00:12:50	7.16	45.6
2020-04-22 00:13:00	7.50	47.1
2020-04-22 00:13:10	6.42	44.4
2020-04-22 00:13:20	6.27	45.4
2020-04-22 00:13:30	5.38	43.4
2020-04-22 00:13:40	4.68	42.6
2020-04-22 00:13:50	6.20	47.7
2020-04-22 00:14:00	7.01	47.3
2020-04-22 00:14:10	5.75	43.0
2020-04-22 00:15:40	7.49	47.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-22 00:15:50	7.01	44.3
2020-04-22 00:16:00	6.29	43.9
2020-04-22 00:16:10	6.59	44.1
2020-04-22 00:16:50	4.16	42.3
2020-04-22 00:17:00	5.18	43.2
2020-04-22 00:17:10	6.65	45.7
2020-04-22 00:20:50	5.23	42.1
2020-04-22 00:21:00	5.55	42.8
2020-04-22 00:21:10	5.33	43.7
2020-04-22 00:21:20	6.77	43.7
2020-04-22 00:21:50	5.98	46.9
2020-04-22 00:22:00	6.80	46.4
2020-04-22 00:22:10	7.09	47.5
2020-04-22 00:22:20	6.57	44.9
2020-04-22 00:24:10	5.22	43.6
2020-04-22 00:24:20	4.78	42.3
2020-04-22 00:26:00	4.73	42.0
2020-04-22 00:27:00	5.13	42.5
2020-04-22 00:27:20	5.38	44.2
2020-04-22 00:27:30	4.73	42.4
2020-04-22 00:27:40	4.05	42.1
2020-04-22 00:27:50	4.86	41.6
2020-04-22 00:28:00	4.69	41.0
2020-04-22 00:30:40	3.22	39.9
2020-04-22 00:30:50	4.55	40.6
2020-04-22 00:53:00	2.91	40.3
2020-04-22 00:53:10	2.85	40.6
2020-04-22 00:53:20	3.46	39.7
2020-04-22 00:53:30	3.08	39.8
2020-04-22 00:53:40	2.67	40.7
2020-04-22 00:53:50	3.33	40.3
2020-04-22 00:56:40	2.98	41.1
2020-04-22 00:57:50	6.41	42.8
2020-04-22 00:58:00	5.75	42.5
2020-04-22 00:59:30	3.55	40.2
2020-04-22 00:59:40	3.68	41.1
2020-04-22 00:59:50	3.31	41.0
2020-04-22 01:00:00	5.25	43.2
2020-04-22 01:00:10	4.16	40.6
2020-04-22 01:00:20	2.67	40.4
2020-04-22 01:00:30	3.73	41.5
2020-04-22 01:00:40	4.64	42.2
2020-04-22 01:03:30	4.49	40.6
2020-04-22 01:04:20	7.09	45.8
2020-04-22 01:04:30	6.09	43.4
2020-04-22 01:04:40	5.59	47.1
2020-04-22 01:04:50	5.93	45.2
2020-04-22 01:06:00	5.17	43.1

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-22 01:06:10	5.31	45.0
2020-04-22 01:08:10	5.98	42.4
2020-04-22 01:10:10	4.05	40.8
2020-04-22 01:14:20	5.33	43.2
2020-04-22 01:14:30	6.64	48.9
2020-04-22 01:14:40	4.74	42.8
2020-04-22 01:16:30	6.13	46.6
2020-04-22 01:16:40	5.74	44.0
2020-04-22 01:16:50	6.34	44.7
2020-04-22 01:17:00	6.50	45.2
2020-04-22 01:17:10	5.59	44.1
2020-04-22 01:17:20	5.66	45.5
2020-04-22 01:17:30	5.91	45.8
2020-04-22 01:17:40	5.10	43.1
2020-04-22 01:17:50	4.68	42.0
2020-04-22 01:18:00	4.46	41.8
2020-04-22 01:18:10	4.68	42.8
2020-04-22 01:18:20	5.54	43.6
2020-04-22 01:18:30	6.23	44.1
2020-04-22 01:18:40	5.96	43.7
2020-04-22 01:18:50	4.69	43.3
2020-04-22 01:19:00	5.05	43.3
2020-04-22 01:56:20	3.75	43.5
2020-04-22 01:57:50	4.42	40.6
2020-04-22 01:58:00	4.16	40.5
2020-04-22 01:58:10	5.22	41.2
2020-04-22 01:58:20	5.10	40.8
2020-04-22 01:58:30	4.76	41.4
2020-04-22 01:58:40	4.43	42.9
2020-04-22 02:00:20	5.16	42.6
2020-04-22 02:00:40	5.00	44.0
2020-04-22 02:00:50	5.97	44.2
2020-04-22 02:01:00	5.49	44.1
2020-04-22 02:01:10	6.15	44.5
2020-04-22 02:01:20	6.55	45.6
2020-04-22 02:01:30	6.33	44.6
2020-04-22 02:01:40	5.61	44.5
2020-04-22 02:01:50	5.90	46.2
2020-04-22 02:02:00	4.82	44.3
2020-04-22 02:02:10	5.29	45.6
2020-04-22 02:02:20	5.34	45.7
2020-04-22 02:02:40	6.16	46.2
2020-04-22 02:02:50	5.69	45.3
2020-04-22 02:03:40	5.56	45.3
2020-04-22 02:04:10	6.59	45.1
2020-04-22 02:05:50	6.64	49.2
2020-04-22 02:07:00	6.58	48.8
2020-04-22 02:07:50	6.27	46.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-22 02:09:30	3.69	41.7
2020-04-22 02:11:00	6.09	45.9
2020-04-22 02:11:10	6.07	44.6
2020-04-22 02:11:40	7.16	47.6
2020-04-22 02:13:00	5.50	43.6
2020-04-22 02:13:40	4.69	42.1
2020-04-22 02:13:50	3.83	41.0
2020-04-22 02:14:00	4.89	43.9
2020-04-22 02:15:40	3.57	42.6
2020-04-22 02:15:50	3.86	41.7
2020-04-22 02:16:00	3.76	41.7
2020-04-22 02:16:30	5.54	44.8
2020-04-22 02:16:40	6.03	44.3
2020-04-22 02:17:00	5.23	42.0
2020-04-22 02:17:10	4.66	43.1
2020-04-22 02:17:20	4.54	40.6
2020-04-22 02:17:30	3.00	40.5
2020-04-22 03:14:00	3.47	40.0
2020-04-22 03:20:40	7.47	47.8
2020-04-22 03:21:00	5.91	43.0
2020-04-22 03:21:10	4.77	43.1
2020-04-22 03:21:20	6.01	44.9
2020-04-22 03:21:30	5.50	44.3
2020-04-22 03:21:40	4.61	42.0
2020-04-22 03:23:20	4.97	45.4
2020-04-22 03:24:10	4.27	40.3
2020-04-22 03:24:40	5.87	43.1
2020-04-22 03:24:50	4.52	42.1
2020-04-22 03:25:00	4.97	42.6
2020-04-22 03:25:20	5.31	41.7
2020-04-22 03:25:30	4.54	42.1
2020-04-22 03:25:50	5.26	43.3
2020-04-22 03:26:00	4.56	40.6
2020-04-22 03:26:10	4.36	40.1
2020-04-22 03:26:30	4.09	40.3
2020-04-22 03:26:40	3.09	38.5
2020-04-22 03:26:50	3.48	40.3
2020-04-22 03:27:00	4.90	41.3
2020-04-22 03:27:10	5.57	44.8
2020-04-22 03:27:20	4.85	44.6
2020-04-22 03:27:40	6.94	46.1
2020-04-22 03:27:50	4.75	43.9
2020-04-22 03:28:00	4.97	40.6
2020-04-22 03:28:10	5.05	42.4
2020-04-22 03:35:20	5.57	42.9
2020-04-22 03:35:30	5.14	42.0
2020-04-22 03:35:40	5.27	42.5
2020-04-22 03:36:00	4.98	42.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-22 03:36:10	4.68	41.4
2020-04-22 03:59:40	3.46	39.9
2020-04-22 03:59:50	3.51	39.9
2020-04-22 04:01:30	6.65	46.4
2020-04-22 04:01:40	4.95	44.6
2020-04-22 04:03:10	3.81	42.1
2020-04-22 04:03:20	4.32	41.5
2020-04-22 04:03:30	4.99	41.1
2020-04-22 04:03:40	4.60	41.3
2020-04-22 04:04:10	5.07	42.5
2020-04-22 04:04:20	5.02	42.0
2020-04-22 04:04:30	5.43	41.6
2020-04-22 04:04:40	4.78	41.1
2020-04-22 04:22:40	4.00	40.2
2020-04-22 04:23:30	3.53	39.8
2020-04-22 04:23:40	3.63	41.1
2020-04-22 04:23:50	3.36	40.9
2020-04-22 04:24:00	3.99	40.9
2020-04-22 04:24:20	4.69	40.6
2020-04-22 04:24:30	3.83	40.8
2020-04-22 04:24:40	3.69	42.7
2020-04-22 04:24:50	4.61	41.9
2020-04-22 04:30:30	4.69	40.9
2020-04-22 04:31:20	5.28	42.3
2020-04-22 04:31:30	4.82	41.6
2020-04-25 22:00:00	1.11	38.7
2020-04-25 22:00:10	1.54	38.8
2020-04-25 22:01:00	3.35	39.1
2020-04-25 22:01:10	3.06	39.1
2020-04-25 22:01:50	3.79	39.2
2020-04-25 22:02:00	2.75	39.4
2020-04-25 22:02:10	3.14	39.6
2020-04-25 22:02:40	2.09	38.9
2020-04-25 22:02:50	1.80	39.4
2020-04-25 22:03:00	1.73	39.4
2020-04-25 22:03:10	1.80	39.3
2020-04-25 22:03:20	3.04	39.3
2020-04-25 22:04:10	3.27	39.5
2020-04-25 22:04:20	2.76	39.1
2020-04-25 22:07:10	1.85	38.7
2020-04-25 22:07:20	2.48	39.0
2020-04-25 22:08:40	3.18	39.4
2020-04-25 22:09:20	3.16	38.8
2020-04-25 22:09:30	3.68	39.5
2020-04-25 22:09:40	2.25	38.5
2020-04-25 22:09:50	2.37	38.7
2020-04-25 22:26:50	3.44	39.0
2020-04-25 22:33:40	2.39	37.0

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-25 22:34:40	1.79	37.2
2020-04-25 22:39:20	2.37	38.0
2020-04-25 22:39:30	2.46	38.1
2020-04-25 22:39:40	2.42	38.6
2020-04-25 22:41:50	3.38	38.5
2020-04-25 22:42:00	2.49	38.0
2020-04-25 22:45:00	3.29	40.4
2020-04-25 22:45:10	3.96	40.6
2020-04-25 22:52:40	2.34	38.1
2020-04-25 22:53:00	2.88	38.1
2020-04-25 22:53:50	2.57	39.5
2020-04-25 22:54:00	2.26	39.1
2020-04-25 22:56:10	3.63	38.5
2020-04-25 22:56:20	2.59	38.5
2020-04-25 22:56:30	2.56	38.6
2020-04-25 23:04:20	2.59	39.0
2020-04-25 23:04:30	3.39	38.7
2020-04-25 23:04:40	3.54	38.1
2020-04-25 23:04:50	3.54	38.3
2020-04-25 23:05:00	3.59	39.6
2020-04-25 23:05:10	3.41	39.4
2020-04-25 23:05:20	2.77	38.5
2020-04-25 23:05:30	2.83	38.2
2020-04-25 23:05:40	2.39	38.4
2020-04-25 23:05:50	2.99	38.2
2020-04-25 23:06:20	3.24	38.1
2020-04-25 23:06:30	3.53	39.4
2020-04-25 23:06:40	2.87	39.3
2020-04-25 23:07:10	1.83	38.9
2020-04-25 23:07:40	1.49	39.1
2020-04-25 23:07:50	2.01	38.5
2020-04-25 23:08:00	2.09	38.7
2020-04-25 23:08:10	1.85	38.1
2020-04-25 23:08:20	2.57	38.7
2020-04-25 23:08:30	2.95	38.8
2020-04-25 23:08:40	3.82	39.1
2020-04-25 23:08:50	3.73	38.6
2020-04-25 23:09:00	2.78	38.6
2020-04-25 23:09:10	2.38	38.4
2020-04-25 23:09:30	2.68	38.0
2020-04-25 23:09:40	3.00	37.9
2020-04-25 23:09:50	2.66	38.7
2020-04-25 23:10:40	1.90	39.0
2020-04-25 23:10:50	2.56	38.7
2020-04-25 23:11:00	2.55	38.3
2020-04-25 23:11:10	2.23	38.5
2020-04-25 23:11:20	2.57	38.8
2020-04-25 23:11:30	2.65	38.4

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-25 23:11:40	2.89	38.7
2020-04-25 23:11:50	2.32	39.2
2020-04-25 23:12:00	2.85	38.8
2020-04-25 23:12:10	3.22	39.0
2020-04-25 23:12:20	3.07	38.9
2020-04-25 23:12:30	2.67	39.0
2020-04-25 23:12:40	2.69	39.0
2020-04-25 23:12:50	2.84	38.2
2020-04-25 23:13:00	2.05	40.2
2020-04-25 23:13:30	2.63	39.3
2020-04-25 23:13:50	2.40	39.2
2020-04-25 23:15:40	2.72	39.7
2020-04-25 23:15:50	2.74	40.1
2020-04-25 23:16:00	2.98	39.9
2020-04-25 23:21:30	2.62	39.2
2020-04-25 23:22:20	3.45	39.0
2020-04-25 23:22:30	1.98	39.2
2020-04-25 23:22:40	2.34	39.6
2020-04-25 23:22:50	3.16	39.7
2020-04-25 23:39:20	3.26	38.7
2020-04-25 23:39:30	3.45	39.2
2020-04-25 23:39:40	3.04	39.0
2020-04-25 23:40:40	3.06	39.3
2020-04-25 23:40:50	3.11	39.9
2020-04-25 23:41:00	3.59	38.9
2020-04-25 23:41:10	3.75	39.2
2020-04-25 23:41:20	2.67	39.2
2020-04-25 23:41:30	2.16	39.2
2020-04-25 23:43:10	2.86	38.3
2020-04-25 23:43:20	2.59	39.7
2020-04-25 23:43:50	2.32	38.8
2020-04-25 23:44:00	2.11	38.8
2020-04-25 23:44:20	1.88	38.8
2020-04-25 23:44:30	2.26	39.0
2020-04-25 23:44:40	2.68	39.2
2020-04-25 23:44:50	3.30	39.6
2020-04-25 23:45:00	3.51	39.8
2020-04-25 23:45:10	2.95	39.5
2020-04-25 23:45:20	3.09	39.8
2020-04-25 23:45:30	3.76	39.9
2020-04-25 23:46:20	3.40	39.4
2020-04-25 23:46:30	3.16	39.1
2020-04-25 23:47:20	3.19	38.6
2020-04-25 23:47:50	1.82	39.0
2020-04-25 23:48:00	2.16	39.5
2020-04-25 23:48:10	2.30	39.8
2020-04-25 23:48:50	2.58	39.4
2020-04-25 23:49:00	2.28	39.9

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-25 23:49:10	2.57	39.3
2020-04-25 23:49:20	2.28	39.5
2020-04-25 23:49:30	2.65	39.2
2020-04-25 23:49:40	3.02	39.3
2020-04-25 23:50:00	2.46	39.2
2020-04-25 23:50:10	2.71	39.3
2020-04-25 23:51:50	2.39	40.4
2020-04-25 23:53:00	3.74	40.7
2020-04-25 23:53:10	3.24	40.9
2020-04-25 23:53:30	2.43	40.5
2020-04-25 23:53:40	2.73	40.0
2020-04-25 23:54:00	2.18	40.3
2020-04-25 23:54:10	2.13	39.8
2020-04-25 23:54:20	3.03	40.0
2020-04-25 23:54:40	3.74	39.9
2020-04-25 23:54:50	2.63	39.7
2020-04-25 23:55:00	2.34	39.6
2020-04-25 23:55:10	2.21	39.9
2020-04-25 23:55:20	2.46	40.1
2020-04-25 23:56:00	2.75	39.5
2020-04-25 23:56:20	2.00	38.9
2020-04-25 23:56:40	3.46	39.7
2020-04-25 23:57:00	3.18	40.0
2020-04-25 23:58:10	2.52	40.6
2020-04-25 23:58:20	2.34	39.6
2020-04-25 23:58:30	1.80	40.0
2020-04-25 23:58:40	2.14	39.6
2020-04-25 23:58:50	3.54	39.7
2020-04-25 23:59:00	3.54	40.1
2020-04-26 00:00:00	2.77	39.5
2020-04-26 00:00:10	2.56	40.2
2020-04-26 00:00:20	2.77	39.9
2020-04-26 00:00:30	4.52	40.9
2020-04-26 00:00:40	4.01	40.7
2020-04-26 00:01:20	3.57	40.3
2020-04-26 00:01:40	2.58	40.5
2020-04-26 00:01:50	3.35	40.1
2020-04-26 00:02:00	3.36	39.8
2020-04-26 00:02:10	3.39	39.6
2020-04-26 00:02:20	3.63	39.6
2020-04-26 00:02:30	4.20	40.5
2020-04-26 00:02:40	3.47	39.5
2020-04-26 00:02:50	3.80	40.0
2020-04-26 00:03:00	3.54	40.5
2020-04-26 00:03:10	3.18	40.1
2020-04-26 00:03:20	2.64	39.9
2020-04-26 00:03:30	3.39	40.0
2020-04-26 00:03:50	2.60	39.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 00:04:10	3.71	40.6
2020-04-26 00:05:00	4.25	41.5
2020-04-26 00:05:10	3.87	39.4
2020-04-26 00:05:20	3.29	39.8
2020-04-26 00:05:30	3.29	40.2
2020-04-26 00:05:40	2.93	40.1
2020-04-26 00:05:50	2.88	40.2
2020-04-26 00:06:00	2.26	40.0
2020-04-26 00:06:10	2.00	40.0
2020-04-26 00:06:20	2.26	40.7
2020-04-26 00:07:50	3.63	39.6
2020-04-26 00:08:30	2.92	39.5
2020-04-26 00:08:40	3.20	40.2
2020-04-26 00:08:50	3.66	39.3
2020-04-26 00:09:00	3.08	39.6
2020-04-26 00:09:10	2.51	39.8
2020-04-26 00:09:20	2.47	39.9
2020-04-26 00:09:30	2.92	39.9
2020-04-26 00:09:40	3.66	39.1
2020-04-26 00:11:00	1.73	39.3
2020-04-26 00:11:10	3.14	40.2
2020-04-26 00:11:20	2.75	40.2
2020-04-26 00:11:30	2.60	39.3
2020-04-26 00:11:40	2.80	39.2
2020-04-26 00:13:10	1.81	39.5
2020-04-26 00:13:20	2.70	39.4
2020-04-26 00:14:10	3.29	39.4
2020-04-26 00:14:20	2.51	39.2
2020-04-26 00:14:30	2.16	38.5
2020-04-26 00:14:40	2.13	39.3
2020-04-26 00:14:50	2.18	39.1
2020-04-26 00:15:20	2.81	39.4
2020-04-26 00:15:30	3.03	38.8
2020-04-26 00:15:40	2.92	39.3
2020-04-26 00:15:50	2.87	39.4
2020-04-26 00:16:40	2.51	39.0
2020-04-26 00:16:50	2.86	38.9
2020-04-26 00:17:10	3.28	39.1
2020-04-26 00:17:20	2.72	39.0
2020-04-26 00:17:30	2.85	39.0
2020-04-26 00:17:40	2.46	39.4
2020-04-26 00:17:50	2.03	39.1
2020-04-26 00:18:00	2.48	39.1
2020-04-26 00:18:10	2.96	39.4
2020-04-26 00:18:30	2.15	40.0
2020-04-26 00:18:40	2.66	39.6
2020-04-26 00:19:00	2.52	39.2
2020-04-26 00:19:10	3.08	39.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 00:19:20	3.65	40.2
2020-04-26 00:19:30	2.52	40.2
2020-04-26 00:19:40	2.86	39.5
2020-04-26 00:20:50	2.74	39.1
2020-04-26 00:21:00	2.38	39.6
2020-04-26 00:21:20	2.27	40.2
2020-04-26 00:21:30	2.49	39.3
2020-04-26 00:21:40	2.13	40.3
2020-04-26 00:22:00	3.38	39.6
2020-04-26 00:22:10	3.28	39.9
2020-04-26 00:23:20	1.74	39.8
2020-04-26 00:23:30	1.71	39.8
2020-04-26 00:23:40	2.92	39.6
2020-04-26 00:23:50	2.69	39.8
2020-04-26 00:24:00	2.45	39.6
2020-04-26 00:24:10	2.01	39.9
2020-04-26 00:24:20	1.60	39.9
2020-04-26 00:24:30	1.56	39.6
2020-04-26 00:24:40	1.53	39.3
2020-04-26 00:24:50	1.74	39.2
2020-04-26 00:25:00	2.02	39.6
2020-04-26 00:25:10	1.96	40.3
2020-04-26 00:25:20	2.31	40.3
2020-04-26 00:25:30	2.09	39.9
2020-04-26 00:25:40	1.58	39.4
2020-04-26 00:25:50	2.11	40.0
2020-04-26 00:26:00	1.74	39.7
2020-04-26 00:26:20	2.10	39.4
2020-04-26 00:26:30	1.58	39.5
2020-04-26 00:26:40	1.90	39.3
2020-04-26 00:26:50	1.52	39.6
2020-04-26 00:27:00	1.52	39.2
2020-04-26 00:27:10	1.74	39.5
2020-04-26 00:27:20	2.31	39.6
2020-04-26 00:27:50	2.48	39.9
2020-04-26 00:28:00	1.84	41.0
2020-04-26 00:28:10	2.31	40.6
2020-04-26 00:28:20	2.21	40.0
2020-04-26 00:28:40	2.33	39.7
2020-04-26 00:29:00	3.75	40.3
2020-04-26 00:29:10	3.04	39.6
2020-04-26 00:29:20	2.36	39.0
2020-04-26 00:29:30	2.41	39.3
2020-04-26 00:29:40	1.73	39.1
2020-04-26 00:29:50	1.76	39.4
2020-04-26 00:30:00	2.69	39.3
2020-04-26 00:30:20	1.60	38.9
2020-04-26 00:30:30	1.48	39.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 00:30:40	2.16	40.0
2020-04-26 00:31:20	3.64	39.9
2020-04-26 00:31:30	2.94	38.8
2020-04-26 00:31:40	2.95	39.8
2020-04-26 00:31:50	1.82	39.8
2020-04-26 00:32:00	2.02	39.1
2020-04-26 00:32:10	1.81	39.5
2020-04-26 00:32:20	2.02	39.9
2020-04-26 00:32:30	2.11	38.5
2020-04-26 00:32:40	2.22	39.4
2020-04-26 00:32:50	2.80	39.4
2020-04-26 00:33:00	3.20	39.4
2020-04-26 00:33:10	3.00	39.2
2020-04-26 00:33:20	3.57	39.6
2020-04-26 00:33:30	4.09	39.6
2020-04-26 00:34:10	1.56	40.1
2020-04-26 00:35:10	1.91	39.1
2020-04-26 00:35:20	2.57	38.4
2020-04-26 00:36:10	2.00	39.0
2020-04-26 00:36:20	2.15	38.6
2020-04-26 00:36:40	2.36	38.8
2020-04-26 00:37:00	3.23	39.4
2020-04-26 00:37:10	2.37	40.1
2020-04-26 00:37:20	2.00	38.4
2020-04-26 00:37:30	1.46	39.5
2020-04-26 00:38:50	3.16	39.4
2020-04-26 00:39:00	2.61	38.9
2020-04-26 00:39:10	1.97	38.7
2020-04-26 00:39:20	1.86	39.0
2020-04-26 00:39:30	1.74	39.5
2020-04-26 00:39:40	1.88	40.0
2020-04-26 00:39:50	2.15	40.7
2020-04-26 00:40:00	1.64	39.4
2020-04-26 00:40:10	1.72	39.5
2020-04-26 00:40:20	1.81	39.3
2020-04-26 00:40:30	1.58	41.0
2020-04-26 00:42:00	3.76	39.4
2020-04-26 00:42:10	3.86	39.9
2020-04-26 00:43:00	3.07	38.6
2020-04-26 00:43:30	3.74	39.1
2020-04-26 00:45:20	2.14	38.8
2020-04-26 00:46:50	2.53	39.3
2020-04-26 00:47:00	2.20	39.0
2020-04-26 00:53:00	1.96	38.6
2020-04-26 00:53:10	1.56	38.6
2020-04-26 00:53:20	1.46	38.5
2020-04-26 00:53:50	3.05	38.6
2020-04-26 00:54:20	3.03	38.5

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 00:55:30	1.65	38.9
2020-04-26 00:55:40	1.60	38.9
2020-04-26 00:55:50	1.20	38.4
2020-04-26 00:57:50	1.71	37.6
2020-04-26 00:58:00	2.04	38.0
2020-04-26 01:00:20	2.52	38.3
2020-04-26 01:00:30	2.32	39.0
2020-04-26 01:00:40	1.97	40.1
2020-04-26 01:00:50	2.64	39.4
2020-04-26 01:01:00	2.61	39.4
2020-04-26 01:01:10	2.53	38.7
2020-04-26 01:01:20	2.07	38.8
2020-04-26 01:01:40	2.90	38.3
2020-04-26 01:01:50	2.49	39.9
2020-04-26 01:02:00	2.29	39.0
2020-04-26 01:02:20	2.59	38.5
2020-04-26 01:03:10	2.25	39.3
2020-04-26 01:03:20	2.17	39.3
2020-04-26 01:03:30	2.24	39.6
2020-04-26 01:04:30	3.00	39.1
2020-04-26 01:04:40	1.95	38.9
2020-04-26 01:04:50	2.09	39.5
2020-04-26 01:05:00	1.62	38.4
2020-04-26 01:05:10	1.54	38.5
2020-04-26 01:05:20	1.38	39.1
2020-04-26 01:05:30	1.55	38.5
2020-04-26 01:05:40	1.41	38.5
2020-04-26 01:05:50	1.96	39.6
2020-04-26 01:06:10	2.37	40.0
2020-04-26 01:07:00	2.87	39.3
2020-04-26 01:07:10	2.55	38.9
2020-04-26 01:08:30	1.55	39.3
2020-04-26 01:08:40	1.80	39.2
2020-04-26 01:08:50	2.00	39.6
2020-04-26 01:09:00	2.17	39.3
2020-04-26 01:09:10	2.63	39.5
2020-04-26 01:09:40	3.49	39.0
2020-04-26 01:09:50	2.91	38.7
2020-04-26 01:10:20	1.81	37.7
2020-04-26 01:10:50	2.72	40.3
2020-04-26 01:11:20	2.13	40.0
2020-04-26 01:11:30	2.39	40.2
2020-04-26 01:11:40	1.63	39.1
2020-04-26 01:11:50	1.89	39.0
2020-04-26 01:12:00	1.58	39.5
2020-04-26 01:13:00	2.63	39.3
2020-04-26 01:13:10	2.36	38.9
2020-04-26 01:13:20	1.86	38.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 01:13:50	2.18	38.3
2020-04-26 01:14:00	2.72	38.9
2020-04-26 01:14:10	3.19	38.6
2020-04-26 01:14:20	2.33	38.8
2020-04-26 01:15:30	1.16	38.8
2020-04-26 01:15:40	1.79	38.5
2020-04-26 01:16:00	2.78	38.4
2020-04-26 01:16:10	2.07	38.4
2020-04-26 01:16:40	1.56	38.1
2020-04-26 01:16:50	1.75	38.2
2020-04-26 01:17:00	1.88	38.4
2020-04-26 01:17:40	1.99	38.7
2020-04-26 01:17:50	1.91	38.2
2020-04-26 01:18:00	2.39	38.2
2020-04-26 01:18:10	2.31	38.1
2020-04-26 01:19:10	1.80	38.5
2020-04-26 01:19:50	2.38	38.5
2020-04-26 01:20:00	2.14	38.6
2020-04-26 01:20:10	1.96	39.0
2020-04-26 01:20:20	2.20	38.0
2020-04-26 01:20:30	2.05	38.1
2020-04-26 01:20:40	2.19	38.2
2020-04-26 01:20:50	2.52	38.0
2020-04-26 01:21:00	2.70	38.1
2020-04-26 01:21:20	1.48	37.3
2020-04-26 01:21:30	2.15	37.7
2020-04-26 01:39:50	1.47	38.4
2020-04-26 01:40:20	1.17	37.8
2020-04-26 01:41:00	1.82	37.8
2020-04-26 01:41:10	2.28	38.6
2020-04-26 01:41:20	2.15	38.7
2020-04-26 01:41:30	1.71	38.2
2020-04-26 01:41:40	1.42	38.6
2020-04-26 01:41:50	1.65	38.4
2020-04-26 01:42:10	1.58	38.9
2020-04-26 01:43:20	2.80	38.1
2020-04-26 01:43:30	2.20	38.3
2020-04-26 01:43:40	2.16	38.6
2020-04-26 01:43:50	1.98	39.2
2020-04-26 01:44:00	1.52	38.3
2020-04-26 01:44:10	1.57	38.6
2020-04-26 01:44:20	1.37	39.1
2020-04-26 01:44:30	1.41	38.1
2020-04-26 01:44:40	1.72	37.8
2020-04-26 01:44:50	1.86	38.6
2020-04-26 01:45:00	1.50	38.7
2020-04-26 01:45:10	1.90	38.4
2020-04-26 01:46:00	2.64	37.8

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 01:46:10	2.90	38.2
2020-04-26 01:46:20	2.28	38.7
2020-04-26 01:46:30	1.61	38.7
2020-04-26 01:47:20	1.14	38.5
2020-04-26 01:47:30	1.94	38.5
2020-04-26 01:47:50	2.74	38.4
2020-04-26 01:48:30	3.29	38.4
2020-04-26 01:48:40	3.03	39.0
2020-04-26 01:51:30	3.28	40.3
2020-04-26 01:51:40	3.42	39.0
2020-04-26 01:52:00	2.58	38.3
2020-04-26 01:52:10	3.02	39.0
2020-04-26 01:52:20	2.63	38.1
2020-04-26 01:52:30	2.04	38.5
2020-04-26 01:52:40	2.07	38.7
2020-04-26 01:52:50	2.41	38.4
2020-04-26 01:53:00	2.42	37.9
2020-04-26 01:53:40	2.34	37.7
2020-04-26 01:53:50	2.36	37.8
2020-04-26 01:54:00	2.55	38.1
2020-04-26 01:54:10	3.22	39.1
2020-04-26 01:54:20	3.65	39.0
2020-04-26 01:54:30	3.89	39.1
2020-04-26 01:54:40	3.28	40.0
2020-04-26 01:55:20	2.47	38.4
2020-04-26 01:58:50	3.36	38.0
2020-04-26 02:00:00	2.71	38.9
2020-04-26 02:00:10	2.12	38.4
2020-04-26 02:00:20	1.71	37.3
2020-04-26 02:00:30	2.28	37.6
2020-04-26 02:00:40	2.45	37.5
2020-04-26 02:00:50	1.73	38.5
2020-04-26 02:01:10	1.26	38.1
2020-04-26 02:01:20	1.22	38.5
2020-04-26 02:01:30	1.59	38.3
2020-04-26 02:01:40	1.57	37.9
2020-04-26 02:01:50	1.51	38.5
2020-04-26 02:02:00	1.59	38.6
2020-04-26 02:02:10	0.98	37.9
2020-04-26 02:02:20	1.54	38.0
2020-04-26 02:02:30	1.43	38.4
2020-04-26 02:02:50	1.33	38.0
2020-04-26 02:03:00	1.74	37.9
2020-04-26 02:03:10	1.66	37.6
2020-04-26 02:03:20	1.17	38.1
2020-04-26 02:03:30	1.31	38.5
2020-04-26 02:04:00	1.73	38.2
2020-04-26 02:04:10	1.32	38.4

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 02:04:20	1.84	40.0
2020-04-26 02:04:30	2.34	38.4
2020-04-26 02:05:10	2.53	38.4
2020-04-26 02:05:20	2.23	38.4
2020-04-26 02:05:30	2.32	38.3
2020-04-26 02:05:40	1.66	38.8
2020-04-26 02:05:50	1.61	38.7
2020-04-26 02:06:50	2.57	38.6
2020-04-26 02:07:00	2.13	38.9
2020-04-26 02:07:10	1.91	38.3
2020-04-26 02:07:20	1.82	39.2
2020-04-26 02:07:30	2.01	39.4
2020-04-26 02:07:40	2.11	38.4
2020-04-26 02:07:50	2.19	39.2
2020-04-26 02:08:00	2.08	38.6
2020-04-26 02:08:10	2.22	39.4
2020-04-26 02:08:40	2.22	38.9
2020-04-26 02:08:50	1.72	38.6
2020-04-26 02:09:00	1.69	38.9
2020-04-26 02:10:00	2.22	37.5
2020-04-26 02:11:30	3.03	38.2
2020-04-26 02:11:40	3.50	38.6
2020-04-26 02:11:50	3.13	38.5
2020-04-26 02:12:00	3.10	38.9
2020-04-26 02:12:30	2.97	38.2
2020-04-26 02:12:40	2.65	38.3
2020-04-26 02:12:50	2.58	38.0
2020-04-26 02:13:00	2.93	37.9
2020-04-26 02:13:30	3.06	37.6
2020-04-26 02:13:40	3.01	38.6
2020-04-26 02:13:50	2.33	39.2
2020-04-26 02:14:00	2.13	38.5
2020-04-26 02:14:20	3.09	38.3
2020-04-26 02:15:40	2.57	39.0
2020-04-26 02:15:50	2.47	38.7
2020-04-26 02:16:00	2.32	38.4
2020-04-26 02:16:10	3.58	38.0
2020-04-26 02:26:40	2.37	37.9
2020-04-26 02:27:30	2.80	38.7
2020-04-26 02:31:50	2.84	37.9
2020-04-26 02:32:00	2.60	38.5
2020-04-26 02:35:50	1.91	38.2
2020-04-26 02:36:00	1.80	37.4
2020-04-26 02:36:10	1.75	37.2
2020-04-26 02:36:20	2.28	37.9
2020-04-26 02:36:30	1.72	38.9
2020-04-26 02:36:50	2.74	38.2
2020-04-26 02:37:00	1.86	38.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 02:37:10	2.77	39.5
2020-04-26 02:37:20	3.42	39.4
2020-04-26 02:37:30	2.84	39.2
2020-04-26 02:37:40	2.11	39.1
2020-04-26 02:37:50	2.02	39.4
2020-04-26 02:38:00	1.93	39.7
2020-04-26 02:38:10	2.18	38.6
2020-04-26 02:38:20	2.65	38.7
2020-04-26 02:38:50	2.74	38.7
2020-04-26 02:39:00	2.36	38.9
2020-04-26 02:39:10	1.70	39.3
2020-04-26 02:39:20	1.51	38.6
2020-04-26 02:39:30	1.89	38.9
2020-04-26 02:39:40	1.78	38.3
2020-04-26 02:39:50	1.54	37.9
2020-04-26 02:40:00	1.96	37.6
2020-04-26 02:40:10	1.53	37.8
2020-04-26 02:40:20	1.73	37.7
2020-04-26 02:40:30	1.97	38.4
2020-04-26 02:40:40	2.12	38.3
2020-04-26 02:40:50	1.85	39.2
2020-04-26 02:41:00	1.59	38.3
2020-04-26 02:41:10	1.00	38.3
2020-04-26 02:41:20	0.97	38.2
2020-04-26 02:41:30	1.49	38.4
2020-04-26 02:42:00	2.44	38.5
2020-04-26 02:42:10	1.97	38.3
2020-04-26 02:42:20	2.11	38.4
2020-04-26 02:42:30	2.01	38.2
2020-04-26 02:44:10	2.97	37.7
2020-04-26 02:44:20	2.64	38.0
2020-04-26 02:44:30	2.64	37.6
2020-04-26 02:44:40	2.11	38.4
2020-04-26 02:44:50	1.99	38.0
2020-04-26 02:45:00	2.09	36.8
2020-04-26 02:45:10	2.04	37.1
2020-04-26 02:45:20	2.10	37.7
2020-04-26 02:45:30	2.09	39.0
2020-04-26 02:45:40	1.94	38.6
2020-04-26 02:45:50	2.62	38.3
2020-04-26 02:46:00	2.55	38.8
2020-04-26 02:46:10	2.93	39.2
2020-04-26 02:46:20	2.95	38.6
2020-04-26 02:46:30	2.51	38.2
2020-04-26 02:46:40	2.85	38.3
2020-04-26 02:46:50	2.76	38.4
2020-04-26 02:47:00	2.57	38.7
2020-04-26 02:47:10	2.05	38.5

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 02:47:20	2.08	38.1
2020-04-26 02:47:50	2.45	38.6
2020-04-26 02:48:00	1.89	38.0
2020-04-26 02:48:10	2.39	38.6
2020-04-26 02:48:20	2.61	38.6
2020-04-26 02:48:30	2.33	39.1
2020-04-26 02:48:40	2.27	38.8
2020-04-26 02:49:00	1.93	38.2
2020-04-26 02:49:10	1.95	38.2
2020-04-26 02:49:30	1.94	37.6
2020-04-26 02:49:50	1.96	39.0
2020-04-26 02:50:00	0.91	37.7
2020-04-26 02:50:10	0.92	38.1
2020-04-26 02:50:20	1.53	38.0
2020-04-26 02:50:30	1.26	39.0
2020-04-26 02:50:40	1.63	38.4
2020-04-26 02:50:50	1.19	38.3
2020-04-26 02:51:00	1.43	38.2
2020-04-26 02:51:20	1.77	38.3
2020-04-26 02:51:30	2.65	38.2
2020-04-26 02:51:40	2.50	38.3
2020-04-26 02:51:50	2.36	38.0
2020-04-26 02:52:00	2.41	38.0
2020-04-26 02:52:10	2.90	38.5
2020-04-26 02:52:20	2.52	37.4
2020-04-26 02:52:30	2.48	38.5
2020-04-26 02:52:40	2.55	38.3
2020-04-26 02:52:50	2.40	37.5
2020-04-26 03:28:50	2.84	37.8
2020-04-26 03:29:00	2.31	37.7
2020-04-26 03:29:10	2.47	37.5
2020-04-26 03:29:20	2.18	37.9
2020-04-26 03:29:30	3.46	38.2
2020-04-26 03:29:40	2.62	38.1
2020-04-26 03:29:50	2.95	37.6
2020-04-26 03:30:00	2.88	38.0
2020-04-26 03:30:30	2.48	38.1
2020-04-26 03:30:40	2.21	37.5
2020-04-26 03:32:30	2.19	37.7
2020-04-26 03:38:30	2.03	37.8
2020-04-26 03:42:30	1.34	37.9
2020-04-26 03:42:40	1.45	38.2
2020-04-26 03:42:50	1.63	38.3
2020-04-26 03:43:00	1.68	37.1
2020-04-26 03:59:40	2.69	38.8
2020-04-26 03:59:50	3.22	38.3
2020-04-26 04:00:10	2.68	38.6
2020-04-26 04:00:20	2.38	38.1

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 04:00:30	2.61	38.6
2020-04-26 04:00:40	2.92	38.1
2020-04-26 04:00:50	2.77	37.9
2020-04-26 04:01:00	2.79	37.9
2020-04-26 04:01:40	1.40	38.4
2020-04-26 04:01:50	2.03	37.9
2020-04-26 04:02:00	2.01	38.6
2020-04-26 04:02:10	2.19	39.0
2020-04-26 04:02:30	1.90	38.6
2020-04-26 04:02:40	1.67	38.5
2020-04-26 04:02:50	1.85	38.6
2020-04-26 04:03:00	1.98	38.8
2020-04-26 04:03:10	2.53	38.4
2020-04-26 04:03:20	2.29	37.8
2020-04-26 04:03:30	2.14	37.8
2020-04-26 04:03:40	2.33	38.8
2020-04-26 04:03:50	2.56	38.6
2020-04-26 04:04:20	2.68	38.6
2020-04-26 04:04:30	2.34	38.3
2020-04-26 04:04:40	2.60	38.7
2020-04-26 04:04:50	2.97	38.6
2020-04-26 04:05:00	3.01	38.2
2020-04-26 04:05:10	2.87	38.3
2020-04-26 04:05:20	1.85	38.4
2020-04-26 04:05:40	1.84	38.5
2020-04-26 04:05:50	1.85	38.7
2020-04-26 04:06:00	2.23	38.9
2020-04-26 04:06:10	2.29	38.0
2020-04-26 04:06:20	2.06	38.6
2020-04-26 04:06:30	2.33	38.4
2020-04-26 04:06:40	2.59	38.1
2020-04-26 04:06:50	2.62	38.8
2020-04-26 04:07:00	3.20	39.2
2020-04-26 04:07:10	2.89	39.0
2020-04-26 04:07:20	2.31	38.2
2020-04-26 04:07:30	3.03	38.7
2020-04-26 04:07:40	2.48	39.5
2020-04-26 04:07:50	2.39	38.9
2020-04-26 04:08:00	1.79	38.4
2020-04-26 04:08:10	1.84	38.6
2020-04-26 04:08:20	2.00	39.2
2020-04-26 04:08:30	1.79	38.9
2020-04-26 04:08:40	1.60	38.9
2020-04-26 04:08:50	1.54	38.1
2020-04-26 04:09:30	1.81	38.3
2020-04-26 04:09:40	1.74	38.8
2020-04-26 04:09:50	2.05	38.1
2020-04-26 04:10:30	2.60	38.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 04:10:50	2.36	38.6
2020-04-26 04:11:00	2.73	38.2
2020-04-26 04:11:10	2.18	38.5
2020-04-26 04:11:20	1.99	38.6
2020-04-26 04:11:30	1.95	38.3
2020-04-26 04:19:30	2.63	37.3
2020-04-26 04:20:20	2.09	37.9
2020-04-26 04:20:30	1.74	38.4
2020-04-26 04:20:40	2.00	38.7
2020-04-26 04:21:30	1.57	37.8
2020-04-26 04:21:40	2.18	38.0
2020-04-26 04:21:50	3.78	38.6
2020-04-26 04:22:00	3.70	40.0
2020-04-26 04:22:10	3.12	38.5
2020-04-26 04:22:20	2.70	38.0
2020-04-26 04:22:30	1.97	37.9
2020-04-26 04:22:40	1.74	38.1
2020-04-26 04:22:50	2.34	38.1
2020-04-26 04:23:00	2.35	37.9
2020-04-26 04:23:10	2.56	38.1
2020-04-26 04:23:20	2.26	38.5
2020-04-26 04:23:30	2.11	38.2
2020-04-26 04:23:40	2.02	38.6
2020-04-26 04:23:50	2.21	38.2
2020-04-26 04:24:00	2.11	38.5
2020-04-26 04:24:10	2.71	38.4
2020-04-26 04:24:30	2.02	39.1
2020-04-26 04:24:50	1.87	38.3
2020-04-26 04:25:00	3.15	37.9
2020-04-26 04:25:10	3.42	38.0
2020-04-26 04:25:20	3.44	38.3
2020-04-26 04:25:30	3.07	39.5
2020-04-26 04:25:40	2.75	38.6
2020-04-26 04:25:50	2.40	38.0
2020-04-26 04:26:00	2.07	38.7
2020-04-26 04:26:10	2.41	38.1
2020-04-26 04:26:20	2.62	38.9
2020-04-26 04:27:00	2.90	38.3
2020-04-26 04:28:00	3.32	38.0
2020-04-26 04:28:20	3.13	39.5
2020-04-26 04:29:00	2.69	38.0
2020-04-26 04:29:10	2.73	37.2
2020-04-26 04:31:00	2.27	37.7
2020-04-26 04:31:10	2.76	37.8
2020-04-26 04:31:20	2.74	38.9
2020-04-26 04:31:50	2.80	38.7
2020-04-26 04:32:00	2.56	38.4
2020-04-26 04:32:10	2.78	38.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 04:32:20	2.28	38.5
2020-04-26 04:32:30	2.64	38.3
2020-04-26 04:32:40	3.20	38.1
2020-04-26 04:32:50	3.29	38.7
2020-04-26 04:33:00	3.56	38.7
2020-04-26 04:33:20	3.07	38.3
2020-04-26 04:33:40	2.74	37.8
2020-04-26 04:33:50	2.64	38.5
2020-04-26 04:34:00	2.11	38.3
2020-04-26 04:34:10	1.82	38.3
2020-04-26 04:34:20	2.01	38.6
2020-04-26 04:34:30	3.01	38.0
2020-04-26 04:34:40	2.46	38.1
2020-04-26 04:35:00	3.09	39.3
2020-04-26 04:35:10	2.64	39.0
2020-04-26 04:35:20	2.27	39.1
2020-04-26 04:35:30	2.63	39.0
2020-04-26 04:36:40	3.56	39.1
2020-04-26 04:36:50	2.55	38.1
2020-04-26 04:37:00	2.79	37.9
2020-04-26 04:37:10	3.68	38.0
2020-04-26 04:38:00	2.88	37.4
2020-04-26 04:38:10	3.39	37.6
2020-04-26 04:38:20	3.66	37.9
2020-04-26 04:38:30	3.06	38.9
2020-04-26 04:38:40	3.35	38.4
2020-04-26 04:38:50	3.37	38.7
2020-04-26 04:39:10	3.05	38.5
2020-04-26 04:39:20	2.90	38.0
2020-04-26 04:39:30	2.87	38.1
2020-04-26 04:39:40	2.56	38.1
2020-04-26 04:40:00	3.86	39.0
2020-04-26 04:40:10	2.93	38.5
2020-04-26 04:40:20	2.68	37.5
2020-04-26 04:40:30	2.63	38.0
2020-04-26 04:40:40	2.47	38.4
2020-04-26 04:40:50	2.28	39.2
2020-04-26 04:41:00	2.86	38.7
2020-04-26 04:41:10	2.13	37.5
2020-04-26 04:41:20	2.30	37.7
2020-04-26 04:41:30	2.52	38.4
2020-04-26 04:41:40	2.77	38.3
2020-04-26 04:41:50	2.60	38.1
2020-04-26 04:42:00	2.31	38.2
2020-04-26 04:42:10	2.46	37.7
2020-04-26 04:42:20	2.45	37.9
2020-04-26 04:42:30	2.62	38.4
2020-04-26 04:42:40	2.85	38.7

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-26 04:42:50	3.20	38.5
2020-04-26 04:43:00	2.79	38.2
2020-04-26 04:43:10	2.85	38.4
2020-04-26 04:43:50	3.65	39.1
2020-04-26 04:44:00	2.95	39.3
2020-04-26 04:44:10	1.73	37.9
2020-04-26 04:44:50	1.96	38.5
2020-04-26 04:45:00	1.92	39.1
2020-04-26 04:46:20	2.86	38.0
2020-04-26 04:46:50	2.82	39.6
2020-04-26 04:47:30	2.22	39.3
2020-04-26 04:48:00	2.84	38.2
2020-04-26 04:48:10	2.89	38.1
2020-04-26 04:48:20	3.48	37.8
2020-04-26 04:48:30	3.18	37.9
2020-04-26 04:48:40	2.80	39.1
2020-04-26 04:48:50	2.92	39.0
2020-04-26 04:51:00	2.85	38.9
2020-04-26 04:51:10	3.00	37.8
2020-04-26 04:51:20	1.96	39.1
2020-04-26 04:51:40	2.60	38.8
2020-04-26 04:51:50	3.04	38.7
2020-04-26 04:52:20	2.29	38.5
2020-04-26 04:52:30	2.82	38.5
2020-04-26 04:52:40	3.30	38.5
2020-04-26 04:52:50	2.70	39.0
2020-04-26 04:53:00	2.84	39.1
2020-04-26 04:53:10	2.72	38.6
2020-04-26 04:53:20	2.07	38.7
2020-04-26 04:53:30	2.73	38.9
2020-04-26 04:53:40	3.60	38.9
2020-04-26 04:56:50	2.62	37.5
2020-04-26 04:57:00	2.48	38.6
2020-04-26 04:57:10	2.80	39.1
2020-04-26 04:57:20	1.92	39.2
2020-04-26 04:57:30	1.48	38.2
2020-04-26 04:57:50	2.64	38.3
2020-04-26 04:58:00	1.85	38.2
2020-04-26 04:58:20	3.11	38.9
2020-04-26 04:58:30	2.94	38.6
2020-04-26 04:58:40	2.30	38.6
2020-04-26 04:58:50	2.53	37.9
2020-04-26 04:59:00	1.81	38.6
2020-05-02 22:06:50	4.16	41.0
2020-05-02 22:28:20	4.96	42.4
2020-05-02 22:28:30	5.18	43.7
2020-05-02 22:28:40	5.53	44.4
2020-05-02 22:28:50	5.81	43.5

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-02 22:29:00	5.30	43.6
2020-05-02 22:29:10	5.51	45.6
2020-05-02 22:29:20	5.47	43.3
2020-05-05 04:28:20	2.24	40.0
2020-05-05 04:28:50	1.36	38.3
2020-05-05 04:29:00	1.25	38.6
2020-05-05 04:29:10	1.53	38.9
2020-05-05 04:30:00	2.05	39.1
2020-05-05 04:30:10	1.79	39.3
2020-05-05 04:30:20	1.60	39.3
2020-05-05 04:30:30	1.63	39.5
2020-05-05 04:30:40	2.24	40.2
2020-05-05 04:31:20	1.92	38.7
2020-05-05 04:31:30	1.89	39.0
2020-05-05 04:31:40	2.06	39.0
2020-05-05 04:31:50	2.01	39.0
2020-05-05 04:32:00	1.76	38.8
2020-05-05 04:33:20	2.72	41.7
2020-05-05 04:34:50	1.48	40.0
2020-05-05 04:35:30	1.80	39.4
2020-05-05 04:35:40	2.35	39.8
2020-05-05 04:35:50	2.04	39.4
2020-05-05 04:36:00	1.83	39.2
2020-05-05 04:36:10	2.21	40.0
2020-05-05 04:36:20	2.30	39.2
2020-05-05 04:36:30	1.54	38.6
2020-05-05 04:37:00	2.20	40.1
2020-05-05 04:37:10	2.63	39.5
2020-05-05 04:37:20	2.22	39.8
2020-05-05 04:37:30	2.37	39.3
2020-05-05 04:37:40	2.44	39.5
2020-05-05 04:37:50	1.93	39.3
2020-05-05 04:38:00	1.87	39.3
2020-05-05 04:38:10	1.98	39.2
2020-05-05 04:38:20	2.22	39.5
2020-05-05 04:38:30	1.93	39.5
2020-05-05 04:38:40	2.28	39.3
2020-05-05 04:38:50	2.57	39.0
2020-05-05 04:39:00	2.58	39.2
2020-05-05 04:39:10	2.45	39.0
2020-05-05 04:39:20	2.84	39.0
2020-05-05 04:39:30	3.09	39.1
2020-05-05 04:39:40	2.93	39.3
2020-05-05 04:39:50	3.11	38.8
2020-05-05 04:40:00	3.15	38.4
2020-05-05 04:41:30	2.87	39.7
2020-05-05 04:41:40	2.27	39.4
2020-05-05 04:42:40	2.70	38.9

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-05 04:42:50	2.39	39.0
2020-05-05 04:43:00	2.21	39.3
2020-05-05 04:46:00	3.39	39.2
2020-05-05 04:47:00	2.36	39.9
2020-05-05 04:47:10	2.13	38.9
2020-05-05 04:47:20	1.93	39.2
2020-05-05 04:47:30	2.23	39.1
2020-05-05 04:47:40	2.15	39.0
2020-05-05 04:47:50	2.17	39.0
2020-05-05 04:48:10	3.12	38.8
2020-05-05 04:48:20	2.36	38.7
2020-05-05 04:48:30	2.24	39.0
2020-05-05 04:48:40	2.92	39.0
2020-05-05 04:48:50	2.27	39.2
2020-05-05 04:49:00	2.57	39.3
2020-05-05 04:49:10	2.64	38.8
2020-05-05 04:49:20	2.22	39.1
2020-05-05 04:49:50	2.12	39.5
2020-05-05 04:50:00	2.30	39.1
2020-05-05 04:50:10	2.04	39.2
2020-05-05 04:51:30	3.74	39.2
2020-05-05 04:51:40	3.05	38.8
2020-05-05 04:52:00	2.88	38.9
2020-05-05 04:52:10	2.36	39.0
2020-05-05 04:52:20	2.21	38.8
2020-05-05 04:52:30	2.43	40.0
2020-05-05 04:54:00	2.38	40.3
2020-05-05 04:54:10	2.30	40.2
2020-05-05 04:55:00	2.03	39.8
2020-05-05 04:56:00	2.39	40.4
2020-05-05 04:56:10	2.70	39.9
2020-05-05 04:56:20	2.39	40.0
2020-05-05 04:56:30	2.43	39.7
2020-05-05 04:57:00	2.52	39.7
2020-05-05 04:57:10	2.35	39.9
2020-05-05 04:57:20	2.30	39.3
2020-05-05 04:57:30	1.96	39.4
2020-05-05 04:57:40	1.86	40.1
2020-05-05 04:57:50	1.85	39.5
2020-05-05 04:58:00	1.87	39.6
2020-05-05 04:58:10	2.40	39.2
2020-05-05 04:58:30	2.07	39.9
2020-05-05 04:58:40	2.79	40.4
2020-05-05 04:58:50	2.84	40.2
2020-05-05 04:59:00	2.42	40.6
2020-05-05 04:59:40	2.63	39.8
2020-05-05 04:59:50	2.69	39.2
2020-05-06 00:36:00	2.68	38.5

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-06 00:59:30	2.99	39.0
2020-05-06 01:10:50	3.21	39.2
2020-05-06 01:14:40	2.52	39.6
2020-05-06 01:23:00	3.30	39.6
2020-05-06 01:23:40	3.84	39.2
2020-05-06 01:23:50	3.77	39.3
2020-05-06 01:24:20	2.65	39.8
2020-05-06 01:24:50	3.63	40.0
2020-05-06 01:25:10	3.07	38.8
2020-05-06 01:26:40	3.03	41.5
2020-05-06 01:26:50	3.63	39.6
2020-05-06 01:27:00	3.21	40.0
2020-05-06 01:27:10	2.80	38.9
2020-05-06 01:27:20	3.62	39.6
2020-05-06 01:27:30	3.86	39.9
2020-05-06 01:27:40	3.00	39.3
2020-05-06 01:27:50	3.44	40.0
2020-05-06 01:28:00	3.62	40.4
2020-05-06 01:28:20	3.39	39.1
2020-05-06 01:28:30	3.21	39.3
2020-05-06 01:28:40	3.06	39.2
2020-05-06 01:29:30	3.08	39.9
2020-05-06 01:29:40	2.63	39.3
2020-05-06 01:29:50	2.66	39.4
2020-05-06 01:30:00	2.72	39.2
2020-05-06 01:30:10	2.70	39.8
2020-05-06 01:30:20	3.63	39.8
2020-05-06 01:30:40	3.44	40.0
2020-05-06 01:30:50	3.84	39.7
2020-05-06 01:35:20	3.21	39.7
2020-05-06 01:36:20	2.76	38.8
2020-05-06 01:38:00	2.85	39.5
2020-05-06 01:38:10	3.04	39.7
2020-05-06 01:38:20	3.25	40.1
2020-05-06 01:38:30	3.77	39.9
2020-05-06 01:38:40	3.65	39.5
2020-05-06 01:38:50	3.65	40.3
2020-05-06 01:39:00	3.25	40.4
2020-05-06 01:39:10	3.01	40.1
2020-05-06 01:39:20	3.08	39.7
2020-05-06 01:39:30	3.57	39.2
2020-05-06 01:39:40	3.37	38.9
2020-05-06 01:39:50	2.99	38.5
2020-05-06 01:40:00	2.67	39.4
2020-05-06 01:40:10	2.91	39.8
2020-05-06 01:40:20	2.99	39.9
2020-05-06 01:40:30	2.97	39.6
2020-05-06 01:40:40	3.04	39.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-06 01:40:50	3.39	39.9
2020-05-06 01:41:00	2.97	39.7
2020-05-06 01:41:10	2.24	40.1
2020-05-06 01:41:20	2.31	39.4
2020-05-06 01:41:30	2.44	39.8
2020-05-06 01:41:40	2.66	39.1
2020-05-06 01:41:50	2.71	39.5
2020-05-06 01:42:00	2.67	39.2
2020-05-06 01:42:40	3.65	40.2
2020-05-06 01:42:50	2.99	39.4
2020-05-06 01:43:00	3.01	39.7
2020-05-06 01:43:10	2.82	39.3
2020-05-06 01:43:20	3.17	40.1
2020-05-06 01:43:30	2.56	40.3
2020-05-06 01:43:40	2.76	40.1
2020-05-06 01:43:50	2.70	39.7
2020-05-06 01:44:00	2.68	39.7
2020-05-06 01:44:10	2.37	40.2
2020-05-06 01:44:20	2.25	40.8
2020-05-06 01:44:30	2.61	40.1
2020-05-06 01:44:40	3.16	40.1
2020-05-06 01:44:50	2.59	39.6
2020-05-06 01:45:00	3.16	39.9
2020-05-06 01:45:10	2.95	40.0
2020-05-06 01:45:20	3.08	39.6
2020-05-06 01:45:30	2.93	39.1
2020-05-06 01:45:40	2.65	39.9
2020-05-06 01:46:00	2.84	39.6
2020-05-06 01:46:10	2.67	40.0
2020-05-06 01:46:20	2.48	40.0
2020-05-06 01:46:30	2.25	40.2
2020-05-06 01:46:40	2.35	39.7
2020-05-06 01:46:50	2.20	39.6
2020-05-06 01:47:00	2.19	39.8
2020-05-06 01:47:10	2.84	39.1
2020-05-06 01:47:20	2.18	39.2
2020-05-06 01:47:30	1.92	39.5
2020-05-06 01:47:40	2.19	40.2
2020-05-06 01:47:50	2.30	40.2
2020-05-06 01:48:00	2.28	40.1
2020-05-06 01:48:10	2.59	39.9
2020-05-06 01:48:20	2.36	40.3
2020-05-06 01:48:30	2.33	39.3
2020-05-06 01:48:40	2.27	39.3
2020-05-06 01:48:50	2.35	39.2
2020-05-06 01:49:00	2.63	39.0
2020-05-06 01:49:10	2.07	39.9
2020-05-06 01:49:20	2.19	40.0

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-06 01:49:30	2.42	39.7
2020-05-06 01:49:40	1.90	39.8
2020-05-06 01:49:50	2.74	40.3
2020-05-06 01:50:00	2.84	40.2
2020-05-06 01:50:30	2.66	39.4
2020-05-06 01:51:00	2.41	40.5
2020-05-06 01:51:10	2.14	39.9
2020-05-06 01:51:20	1.85	40.2
2020-05-06 01:51:30	1.73	40.2
2020-05-06 01:51:40	2.20	40.4
2020-05-06 01:51:50	2.09	40.1
2020-05-06 01:52:00	2.06	39.6
2020-05-06 01:52:10	1.78	39.5
2020-05-06 01:52:50	2.28	40.1
2020-05-06 01:53:00	2.53	40.5
2020-05-06 01:54:10	2.03	40.1
2020-05-06 01:54:20	2.19	40.0
2020-05-06 01:54:30	2.41	40.7
2020-05-06 01:54:40	2.53	39.9
2020-05-06 01:54:50	2.55	39.5
2020-05-06 01:55:00	2.53	39.5
2020-05-06 01:55:10	2.53	39.7
2020-05-06 01:55:50	2.32	43.0
2020-05-06 01:57:40	2.57	42.0
2020-05-06 02:08:10	2.39	41.0
2020-05-06 02:08:20	2.09	41.3
2020-05-06 02:09:00	2.68	41.0
2020-05-06 02:09:10	2.55	41.2
2020-05-06 02:13:10	4.02	41.8
2020-05-06 02:14:50	4.71	42.3
2020-05-06 02:16:30	3.40	41.4
2020-05-06 02:18:20	3.16	41.9
2020-05-06 02:18:30	3.34	42.0
2020-05-06 02:18:40	3.59	41.4
2020-05-06 02:18:50	3.73	42.4
2020-05-06 02:19:00	4.06	41.2
2020-05-06 02:19:10	3.45	41.1
2020-05-06 02:20:50	3.58	41.3
2020-05-06 02:21:00	3.73	42.8
2020-05-06 02:21:50	5.04	43.2
2020-05-06 02:22:40	2.89	41.4
2020-05-06 02:23:40	3.05	41.0
2020-05-06 02:23:50	2.57	41.6
2020-05-06 02:24:00	2.84	41.5
2020-05-06 02:24:20	2.14	40.9
2020-05-06 02:28:30	2.50	41.0
2020-05-06 02:29:00	3.32	41.2
2020-05-06 02:33:00	4.04	41.3

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-06 02:35:10	2.67	41.3
2020-05-06 02:35:20	1.94	40.8
2020-05-06 02:35:30	1.86	40.1
2020-05-06 03:32:00	4.52	41.6
2020-05-06 03:32:10	3.79	42.6
2020-05-06 03:32:30	3.21	40.7
2020-05-06 03:32:40	3.11	41.5
2020-05-06 03:33:00	3.86	41.3
2020-05-06 03:33:30	3.55	42.2
2020-05-06 03:33:40	4.91	43.2
2020-05-06 03:33:50	5.13	43.5
2020-05-06 03:34:10	3.38	41.5
2020-05-06 03:34:20	3.60	41.5
2020-05-06 03:34:40	4.93	42.5
2020-05-06 03:34:50	5.34	43.1
2020-05-06 03:35:00	5.01	42.9
2020-05-06 03:35:10	4.68	43.2
2020-05-06 03:37:00	3.13	41.4
2020-05-06 03:37:10	3.10	40.9
2020-05-06 03:37:20	3.88	41.3
2020-05-06 03:37:30	3.52	42.3
2020-05-06 03:37:40	3.40	41.9
2020-05-06 03:37:50	2.92	41.1
2020-05-06 03:38:00	3.14	41.3
2020-05-06 03:38:10	3.72	41.6
2020-05-06 03:38:20	3.47	40.6
2020-05-06 03:38:30	2.96	40.5
2020-05-06 03:38:40	3.07	41.4
2020-05-06 03:38:50	2.72	40.7
2020-05-06 03:39:00	2.96	40.3
2020-05-06 03:39:10	2.69	40.8
2020-05-06 03:39:30	3.88	41.6
2020-05-06 03:40:20	2.83	41.1
2020-05-06 03:40:30	2.93	41.0
2020-05-06 03:40:40	3.19	40.8
2020-05-06 03:40:50	2.67	40.2
2020-05-06 03:41:00	2.88	40.9
2020-05-06 03:41:20	2.39	40.7
2020-05-06 03:45:10	2.22	40.6
2020-05-06 03:45:20	3.65	40.9
2020-05-06 03:46:30	2.35	40.3
2020-05-06 03:48:50	1.71	40.9
2020-05-06 03:49:20	2.67	40.2
2020-05-06 03:49:40	2.49	40.9
2020-05-06 03:49:50	2.80	40.0
2020-05-06 03:50:30	3.18	40.6
2020-05-06 03:50:40	3.54	40.6
2020-05-06 03:50:50	3.18	39.6

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-06 03:54:10	1.44	40.6
2020-05-06 03:54:20	1.66	40.1
2020-05-06 03:55:20	1.43	40.1
2020-05-06 03:56:00	1.93	40.3
2020-05-06 03:56:10	1.78	41.2
2020-05-06 03:56:20	2.03	40.8
2020-05-06 03:56:30	2.24	40.1
2020-05-06 03:56:40	2.01	39.7
2020-05-06 03:56:50	2.02	40.0
2020-05-06 03:57:00	2.04	40.2
2020-05-06 03:57:30	1.63	40.3
2020-05-06 03:58:50	2.17	39.9
2020-05-06 03:59:40	1.77	39.9
2020-05-06 03:59:50	1.44	40.5
2020-05-06 04:00:00	1.29	40.0
2020-05-06 04:00:10	2.06	40.1
2020-05-06 04:00:20	2.08	40.2
2020-05-06 04:00:50	2.03	40.1
2020-05-06 04:01:00	2.90	39.3
2020-05-06 04:01:10	2.47	39.6
2020-05-06 04:01:40	1.91	39.5
2020-05-06 04:01:50	3.49	40.0
2020-05-06 04:02:40	3.28	39.9
2020-05-06 04:02:50	3.07	40.1
2020-05-06 04:03:00	2.82	39.5
2020-05-06 04:09:00	3.35	39.6
2020-05-06 04:14:30	3.00	41.1
2020-05-06 04:15:10	2.80	40.9
2020-05-06 04:15:20	4.74	41.8
2020-05-06 04:18:00	1.68	39.7
2020-05-06 04:19:30	1.76	40.0
2020-05-06 04:22:40	2.62	40.2
2020-05-06 04:23:10	2.63	40.9
2020-05-06 04:27:40	2.88	40.2
2020-05-06 04:44:50	2.60	39.2
2020-05-06 04:45:00	2.89	39.5
2020-05-06 04:45:10	2.28	39.2
2020-05-06 04:45:20	1.86	39.6
2020-05-06 04:48:50	2.13	39.0
2020-05-06 04:49:10	3.62	38.6
2020-05-06 04:49:20	3.48	39.5
2020-05-06 04:49:30	4.60	40.6
2020-05-06 04:49:40	3.65	39.9
2020-05-06 04:49:50	4.43	41.3
2020-05-06 04:51:00	4.66	40.6
2020-05-06 04:51:10	3.78	39.2
2020-05-06 04:51:20	2.70	39.5
2020-05-06 04:51:30	2.78	39.5

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-06 04:51:40	1.98	39.8
2020-05-06 04:52:30	2.52	39.8
2020-05-06 04:52:40	2.75	39.6
2020-05-06 04:52:50	2.69	39.8
2020-05-06 04:53:00	2.48	39.7
2020-05-06 04:53:10	2.35	39.8
2020-05-06 04:54:00	3.07	39.4
2020-05-06 04:54:20	3.48	39.2
2020-05-06 04:54:30	2.67	38.9
2020-05-06 04:54:40	2.70	39.3
2020-05-06 04:54:50	1.99	39.5
2020-05-06 04:55:00	1.44	39.0
2020-05-06 04:55:10	1.46	38.9
2020-05-06 04:55:20	1.78	39.3
2020-05-07 22:12:50	6.09	39.6
2020-05-07 22:13:00	6.07	40.2
2020-05-07 22:13:10	5.00	39.6
2020-05-07 22:13:20	4.75	39.5
2020-05-07 22:44:00	3.50	39.2
2020-05-07 22:48:20	4.70	40.7
2020-05-07 22:48:30	3.61	39.0
2020-05-07 22:48:40	2.82	39.4
2020-05-07 22:50:30	3.82	39.6
2020-05-07 22:50:40	3.96	39.9
2020-05-07 22:50:50	3.97	40.5
2020-05-07 22:51:00	4.02	39.9
2020-05-07 22:51:10	4.33	39.8
2020-05-07 22:51:20	6.04	44.3
2020-05-07 22:51:30	5.78	39.6
2020-05-07 22:51:40	3.69	39.9
2020-05-07 22:52:00	2.82	39.4
2020-05-07 22:52:10	3.20	38.9
2020-05-07 22:52:20	3.16	38.9
2020-05-07 22:52:30	2.37	39.4
2020-05-07 22:52:40	2.60	39.7
2020-05-07 23:15:30	5.87	47.6
2020-05-07 23:16:30	4.14	41.9
2020-05-07 23:17:30	5.22	41.2
2020-05-07 23:17:40	5.11	40.1
2020-05-07 23:18:20	5.13	40.8
2020-05-07 23:18:30	4.74	39.4
2020-05-07 23:18:40	5.55	45.9
2020-05-07 23:18:50	4.46	41.9
2020-05-07 23:19:00	3.43	42.2
2020-05-07 23:19:10	5.55	44.6
2020-05-07 23:19:30	5.26	44.5
2020-05-07 23:19:40	4.80	42.9
2020-05-07 23:21:30	5.09	41.2

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-07 23:21:40	3.83	40.2
2020-05-07 23:22:10	2.98	41.1
2020-05-07 23:22:20	3.27	40.8
2020-05-07 23:22:30	4.58	40.5
2020-05-07 23:24:10	6.63	48.1
2020-05-07 23:24:40	4.86	42.6
2020-05-07 23:24:50	4.59	40.1
2020-05-07 23:25:10	3.80	39.4
2020-05-07 23:25:50	5.66	43.5
2020-05-07 23:26:00	6.04	46.6
2020-05-07 23:26:10	6.34	44.8
2020-05-07 23:27:40	7.37	48.9
2020-05-07 23:28:10	4.71	41.0
2020-05-07 23:28:50	7.34	47.6
2020-05-07 23:29:00	5.17	43.7
2020-05-07 23:30:00	7.05	46.9
2020-05-07 23:30:10	7.09	45.1
2020-05-07 23:31:10	5.93	44.6
2020-05-07 23:31:20	6.22	46.6
2020-05-07 23:31:30	5.84	43.6
2020-05-07 23:31:40	5.18	43.6
2020-05-07 23:32:00	4.71	42.4
2020-05-07 23:32:10	4.96	45.9
2020-05-07 23:32:20	4.99	44.6
2020-05-07 23:32:30	4.55	40.6
2020-05-07 23:32:40	7.04	44.0
2020-05-07 23:56:00	4.94	42.3
2020-05-07 23:56:10	4.45	40.9
2020-05-07 23:56:20	4.41	39.1
2020-05-07 23:56:30	4.49	39.5
2020-05-07 23:58:20	4.53	39.7
2020-05-07 23:58:30	4.60	40.3
2020-05-08 00:00:40	4.16	40.8
2020-05-08 00:02:30	4.44	40.8
2020-05-08 00:02:40	4.41	40.7
2020-05-08 00:02:50	4.64	44.4
2020-05-08 00:03:00	4.90	43.5
2020-05-08 00:11:50	4.90	43.2
2020-05-08 00:12:00	6.18	44.1
2020-05-08 00:13:00	4.47	39.4
2020-05-12 04:10:50	2.62	40.0
2020-05-12 04:21:10	1.86	39.0
2020-05-12 04:21:20	2.14	39.3
2020-05-12 04:27:10	2.54	39.0
2020-05-12 04:27:20	3.17	38.6
2020-05-19 22:01:50	3.83	42.3
2020-05-19 22:02:00	4.21	41.9
2020-05-19 22:02:10	2.42	41.4

Appendix G1 - Valid Total 10-Second Sound Data (65% Power and 180 Degrees)
Monitor C - Spring 2020
East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-19 22:02:40	2.75	41.9

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 00:00:50	2.39	32.7
2020-04-11 00:01:00	2.10	32.8
2020-04-11 00:02:00	1.60	33.9
2020-04-11 00:03:30	1.37	35.0
2020-04-11 00:04:00	1.89	34.9
2020-04-11 00:04:10	2.01	34.2
2020-04-11 00:05:30	1.95	33.2
2020-04-11 00:05:40	1.61	33.2
2020-04-11 00:05:50	1.81	33.2
2020-04-11 00:06:10	1.30	33.0
2020-04-11 00:06:20	1.91	33.0
2020-04-11 00:06:30	1.58	32.9
2020-04-11 00:06:40	1.79	32.7
2020-04-11 00:06:50	1.94	32.9
2020-04-11 00:07:00	2.01	32.8
2020-04-11 00:07:20	1.56	32.9
2020-04-11 00:07:40	1.38	33.4
2020-04-11 00:11:30	1.89	33.1
2020-04-11 00:11:40	1.45	33.0
2020-04-11 00:11:50	1.50	33.0
2020-04-11 00:12:10	1.71	32.7
2020-04-11 00:14:00	1.84	32.9
2020-04-11 00:14:10	1.85	32.7
2020-04-11 00:14:20	1.70	32.7
2020-04-11 00:14:40	1.81	32.8
2020-04-11 00:14:50	2.29	32.7
2020-04-11 00:15:00	2.09	32.8
2020-04-11 00:15:50	1.66	32.7
2020-04-11 00:16:30	0.94	33.0
2020-04-11 00:18:30	1.88	32.6
2020-04-11 00:19:40	1.68	32.0
2020-04-11 00:19:50	1.46	32.1
2020-04-11 00:20:30	1.93	32.1
2020-04-11 00:20:40	1.87	32.2
2020-04-11 00:20:50	1.78	31.8
2020-04-11 00:21:00	1.79	32.2
2020-04-11 00:21:10	1.75	32.0
2020-04-11 00:21:20	2.03	32.1
2020-04-11 00:22:10	1.61	32.7
2020-04-11 00:22:20	2.15	32.0
2020-04-11 00:22:30	1.70	31.9
2020-04-11 00:23:00	1.74	31.8
2020-04-11 00:23:10	1.67	31.9
2020-04-11 00:23:20	2.54	31.7
2020-04-11 00:23:30	1.99	31.7
2020-04-11 00:23:40	1.77	32.0
2020-04-11 00:23:50	1.71	32.4
2020-04-11 00:24:00	1.40	32.0

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 00:24:20	1.96	32.4
2020-04-11 00:24:30	1.78	32.3
2020-04-11 00:24:40	1.84	32.1
2020-04-11 00:24:50	1.83	32.0
2020-04-11 00:25:00	2.20	31.8
2020-04-11 00:25:20	1.84	32.2
2020-04-11 00:25:30	1.52	32.4
2020-04-11 00:25:40	1.68	32.6
2020-04-11 00:25:50	2.22	32.4
2020-04-11 00:26:00	1.77	32.2
2020-04-11 00:26:10	1.87	32.2
2020-04-11 00:26:20	2.50	32.5
2020-04-11 00:26:30	1.94	32.5
2020-04-11 00:26:40	2.07	32.0
2020-04-11 00:26:50	2.42	32.2
2020-04-11 00:27:20	2.11	32.4
2020-04-11 00:29:50	1.68	32.1
2020-04-11 00:30:00	2.18	31.9
2020-04-11 00:30:10	2.17	32.0
2020-04-11 00:30:20	2.26	32.7
2020-04-11 00:30:40	1.84	32.4
2020-04-11 00:30:50	3.24	32.0
2020-04-11 00:31:00	2.91	31.7
2020-04-11 00:31:10	2.06	31.8
2020-04-11 00:31:20	1.63	32.2
2020-04-11 00:31:30	2.19	32.2
2020-04-11 00:31:40	2.37	32.0
2020-04-11 00:31:50	2.78	32.0
2020-04-11 00:32:00	1.92	32.4
2020-04-11 00:32:10	2.69	31.9
2020-04-11 00:32:20	2.48	32.5
2020-04-11 00:32:40	1.76	31.9
2020-04-11 00:32:50	2.09	32.6
2020-04-11 00:33:00	2.49	31.6
2020-04-11 00:33:20	2.11	31.8
2020-04-11 00:33:30	1.95	31.7
2020-04-11 00:33:40	1.77	31.9
2020-04-11 00:33:50	1.77	31.6
2020-04-11 00:34:00	2.12	31.4
2020-04-11 00:34:10	1.39	31.6
2020-04-11 00:34:20	2.21	31.7
2020-04-11 00:34:30	2.20	31.8
2020-04-11 00:34:40	2.16	31.8
2020-04-11 00:35:00	1.77	31.9
2020-04-11 00:35:10	1.57	31.7
2020-04-11 00:35:20	1.97	31.8
2020-04-11 00:35:40	1.72	31.4
2020-04-11 00:35:50	1.33	32.1

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 00:36:00	1.68	31.6
2020-04-11 00:36:10	1.79	31.7
2020-04-11 00:36:20	1.64	32.2
2020-04-11 00:36:30	1.85	31.8
2020-04-11 00:36:40	2.00	31.8
2020-04-11 00:36:50	1.84	32.6
2020-04-11 00:37:00	1.68	31.9
2020-04-11 00:37:10	2.25	32.0
2020-04-11 00:37:20	1.92	32.2
2020-04-11 00:37:40	1.39	31.6
2020-04-11 00:37:50	1.51	31.9
2020-04-11 00:38:10	1.74	31.6
2020-04-11 00:38:20	1.83	31.6
2020-04-11 00:38:30	2.35	31.6
2020-04-11 00:38:40	1.68	32.0
2020-04-11 00:38:50	1.71	32.1
2020-04-11 00:39:00	1.46	31.7
2020-04-11 00:39:10	1.30	31.6
2020-04-11 00:39:20	1.22	31.7
2020-04-11 00:39:30	1.59	32.6
2020-04-11 00:39:40	1.96	31.7
2020-04-11 00:39:50	2.23	32.3
2020-04-11 00:40:00	1.53	31.8
2020-04-11 00:40:10	1.44	31.9
2020-04-11 00:40:20	1.36	32.0
2020-04-11 00:40:30	0.97	32.0
2020-04-11 00:40:40	0.96	31.9
2020-04-11 00:40:50	1.62	31.9
2020-04-11 00:41:00	1.33	31.8
2020-04-11 00:41:20	1.90	32.0
2020-04-11 00:41:30	2.95	32.0
2020-04-11 00:41:40	3.85	31.9
2020-04-11 00:41:50	3.69	32.3
2020-04-11 00:42:00	3.20	31.7
2020-04-11 00:42:10	2.64	32.2
2020-04-11 00:42:20	2.19	32.2
2020-04-11 00:42:30	1.98	32.1
2020-04-11 00:42:40	1.86	32.3
2020-04-11 00:42:50	2.28	32.6
2020-04-11 00:45:40	2.28	32.3
2020-04-11 00:46:00	2.09	32.4
2020-04-11 00:46:10	2.04	31.9
2020-04-11 00:46:20	1.50	31.7
2020-04-11 00:46:30	1.66	31.5
2020-04-11 00:46:40	1.75	32.1
2020-04-11 00:46:50	1.66	32.0
2020-04-11 00:47:00	1.66	32.0
2020-04-11 00:47:10	2.12	31.9

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 00:47:20	1.90	32.2
2020-04-11 00:47:50	1.79	32.3
2020-04-11 00:48:00	2.02	31.8
2020-04-11 00:48:10	1.84	31.7
2020-04-11 00:48:20	2.01	32.1
2020-04-11 00:48:30	2.15	31.6
2020-04-11 00:48:50	1.53	31.8
2020-04-11 00:49:00	1.94	31.9
2020-04-11 00:49:10	3.14	31.8
2020-04-11 00:49:20	2.66	32.2
2020-04-11 00:49:30	2.53	31.8
2020-04-11 00:49:40	2.25	32.0
2020-04-11 00:49:50	1.58	31.8
2020-04-11 00:50:00	1.37	31.4
2020-04-11 00:50:10	1.54	32.6
2020-04-11 00:50:20	1.57	31.6
2020-04-11 00:50:30	1.59	31.9
2020-04-11 00:50:40	2.13	32.2
2020-04-11 00:50:50	1.86	32.0
2020-04-11 00:51:00	2.21	31.9
2020-04-11 00:51:20	2.29	31.9
2020-04-11 00:51:30	1.75	31.9
2020-04-11 00:51:40	2.16	32.0
2020-04-11 00:51:50	1.77	31.5
2020-04-11 00:52:00	1.54	32.1
2020-04-11 00:52:10	1.64	31.9
2020-04-11 00:52:20	2.15	32.1
2020-04-11 00:52:40	1.93	32.5
2020-04-11 00:52:50	1.65	32.0
2020-04-11 00:53:10	2.16	31.5
2020-04-11 00:53:30	2.21	31.8
2020-04-11 00:53:40	2.14	31.8
2020-04-11 00:54:10	2.03	31.8
2020-04-11 00:54:20	2.15	31.9
2020-04-11 00:54:30	3.13	32.1
2020-04-11 00:54:40	3.25	32.2
2020-04-11 00:54:50	3.05	32.0
2020-04-11 00:55:00	2.17	32.2
2020-04-11 00:55:10	2.75	32.0
2020-04-11 00:55:20	1.97	31.8
2020-04-11 00:56:00	1.89	31.7
2020-04-11 00:56:10	2.27	31.7
2020-04-11 00:56:20	1.91	31.7
2020-04-11 00:56:30	1.65	31.4
2020-04-11 00:56:40	1.64	31.6
2020-04-11 00:57:00	1.30	31.6
2020-04-11 00:57:10	0.97	31.6
2020-04-11 00:57:30	1.84	31.6

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 00:57:40	2.23	32.4
2020-04-11 00:57:50	2.09	31.5
2020-04-11 00:58:00	1.78	32.2
2020-04-11 00:58:10	1.78	32.3
2020-04-11 00:58:20	1.65	31.8
2020-04-11 00:58:50	1.37	31.4
2020-04-11 00:59:10	1.96	31.7
2020-04-11 00:59:40	2.17	31.8
2020-04-11 00:59:50	2.29	31.8
2020-04-11 01:00:00	2.13	31.7
2020-04-11 01:00:10	1.92	31.7
2020-04-11 01:00:20	1.51	32.2
2020-04-11 01:00:30	1.37	31.8
2020-04-11 01:00:40	1.55	31.6
2020-04-11 01:00:50	1.64	31.5
2020-04-11 01:01:00	1.88	32.0
2020-04-11 01:01:10	2.06	31.7
2020-04-11 01:01:30	2.05	32.5
2020-04-11 01:01:40	1.88	32.1
2020-04-11 01:01:50	1.49	31.7
2020-04-11 01:02:00	1.40	31.7
2020-04-11 01:02:10	1.22	31.6
2020-04-11 01:02:20	1.75	32.0
2020-04-11 01:02:30	1.99	31.8
2020-04-11 01:02:50	1.37	31.8
2020-04-11 01:03:00	1.49	31.7
2020-04-11 01:03:10	1.35	31.7
2020-04-11 01:03:20	1.25	31.8
2020-04-11 01:03:30	1.39	31.9
2020-04-11 01:04:00	2.61	32.8
2020-04-11 01:04:10	1.63	31.8
2020-04-11 01:05:10	1.71	31.5
2020-04-11 01:05:20	1.42	31.8
2020-04-11 01:05:30	1.51	32.2
2020-04-11 01:05:40	1.52	31.6
2020-04-11 01:05:50	1.39	31.9
2020-04-11 01:06:00	1.32	31.8
2020-04-11 01:06:10	1.16	31.8
2020-04-11 01:06:20	1.12	31.7
2020-04-11 01:06:30	1.61	31.6
2020-04-11 01:07:00	1.28	31.6
2020-04-11 01:07:10	1.28	31.7
2020-04-11 01:07:20	1.00	31.5
2020-04-11 01:08:00	1.12	31.8
2020-04-11 01:08:10	1.05	31.9
2020-04-11 01:08:30	1.53	31.4
2020-04-11 01:08:40	1.29	31.5
2020-04-11 01:09:00	1.36	32.0

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 01:09:10	1.43	31.7
2020-04-11 01:09:30	1.34	31.9
2020-04-11 01:09:40	1.54	31.8
2020-04-11 01:09:50	1.72	31.7
2020-04-11 01:10:00	1.51	31.8
2020-04-11 01:10:10	1.45	32.1
2020-04-11 01:10:20	1.67	31.6
2020-04-11 01:10:30	1.63	31.7
2020-04-11 01:10:50	1.79	31.7
2020-04-11 01:11:00	1.54	32.0
2020-04-11 01:11:10	1.42	31.7
2020-04-11 01:11:20	1.34	32.0
2020-04-11 01:11:30	1.25	32.2
2020-04-11 01:11:40	1.31	32.4
2020-04-11 01:12:30	1.51	32.6
2020-04-11 01:12:40	2.39	32.7
2020-04-11 01:14:20	1.68	32.3
2020-04-11 01:14:50	1.59	32.0
2020-04-11 01:15:00	1.59	31.7
2020-04-11 01:15:10	1.74	31.7
2020-04-11 01:15:20	1.63	31.6
2020-04-11 01:15:50	1.33	31.9
2020-04-11 01:16:00	1.45	31.5
2020-04-11 01:16:10	1.25	31.8
2020-04-11 01:16:30	1.75	32.2
2020-04-11 01:16:40	1.58	32.0
2020-04-11 01:17:00	1.68	32.0
2020-04-11 01:17:10	2.20	31.8
2020-04-11 01:17:20	1.74	32.0
2020-04-11 01:18:10	1.80	31.7
2020-04-11 01:18:20	1.70	32.2
2020-04-11 01:19:00	1.13	32.0
2020-04-11 01:19:30	0.86	31.3
2020-04-11 01:19:50	1.28	32.1
2020-04-11 01:20:00	1.42	31.9
2020-04-11 01:20:20	1.67	32.7
2020-04-11 01:20:40	1.57	32.0
2020-04-11 01:20:50	1.61	32.2
2020-04-11 01:21:10	1.53	32.4
2020-04-11 01:21:20	1.57	32.4
2020-04-11 01:21:30	1.70	32.4
2020-04-11 01:21:40	2.29	32.7
2020-04-11 01:23:40	1.59	32.4
2020-04-11 01:24:00	1.70	32.6
2020-04-11 01:25:40	1.45	32.0
2020-04-11 01:27:30	1.78	32.4
2020-04-11 01:27:50	1.61	31.6
2020-04-11 01:28:00	1.65	31.7

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 01:28:10	2.02	32.7
2020-04-11 01:28:20	2.09	31.7
2020-04-11 01:28:30	1.84	31.9
2020-04-11 01:28:50	1.74	31.9
2020-04-11 01:29:00	1.68	31.6
2020-04-11 01:29:10	1.57	32.3
2020-04-11 01:29:30	1.70	32.0
2020-04-11 01:30:00	2.25	32.0
2020-04-11 01:30:20	2.29	31.6
2020-04-11 01:30:40	2.25	31.8
2020-04-11 01:30:50	2.30	31.7
2020-04-11 01:31:10	1.28	31.5
2020-04-11 01:31:20	1.70	31.5
2020-04-11 01:31:30	1.75	32.1
2020-04-11 01:31:40	1.79	32.0
2020-04-11 01:32:10	2.03	32.1
2020-04-11 01:32:20	1.91	32.3
2020-04-11 01:32:30	1.87	31.9
2020-04-11 01:32:40	2.18	31.4
2020-04-11 01:32:50	2.27	32.2
2020-04-11 01:33:00	2.19	32.5
2020-04-11 01:33:10	1.74	31.9
2020-04-11 01:33:20	2.03	32.5
2020-04-11 01:33:30	2.20	32.6
2020-04-11 01:33:40	1.93	32.6
2020-04-11 01:33:50	2.46	32.5
2020-04-11 01:34:10	2.92	31.8
2020-04-11 01:34:20	2.33	31.4
2020-04-11 01:34:30	2.74	31.4
2020-04-11 01:34:40	2.04	31.7
2020-04-11 01:34:50	1.65	32.0
2020-04-11 01:35:00	1.67	32.2
2020-04-11 01:35:10	1.55	32.0
2020-04-11 01:35:30	1.94	32.6
2020-04-11 01:35:40	1.70	32.1
2020-04-11 01:35:50	2.54	31.9
2020-04-11 01:36:50	3.06	32.1
2020-04-11 01:37:00	2.38	31.7
2020-04-11 01:37:10	2.38	31.8
2020-04-11 01:37:20	2.29	32.1
2020-04-11 01:37:30	2.27	31.8
2020-04-11 01:37:40	2.08	32.7
2020-04-11 01:38:00	1.77	31.6
2020-04-11 01:38:20	1.56	32.1
2020-04-11 01:38:30	1.64	32.0
2020-04-11 01:38:40	1.60	31.7
2020-04-11 01:38:50	1.78	31.6
2020-04-11 01:39:20	1.77	31.4

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 01:39:30	1.52	31.6
2020-04-11 01:39:40	1.40	31.5
2020-04-11 01:39:50	1.46	31.9
2020-04-11 01:40:40	1.68	31.6
2020-04-11 01:41:50	1.96	32.6
2020-04-11 01:42:20	1.80	32.3
2020-04-11 01:42:30	2.50	32.6
2020-04-11 01:43:00	2.52	32.3
2020-04-11 01:43:10	2.19	32.0
2020-04-11 01:43:20	1.96	32.1
2020-04-11 01:43:40	3.12	33.0
2020-04-11 01:44:00	2.63	32.3
2020-04-11 01:44:20	2.28	31.8
2020-04-11 01:44:30	2.14	32.6
2020-04-11 01:44:40	1.54	32.3
2020-04-11 01:44:50	1.73	32.0
2020-04-11 01:45:10	1.56	31.8
2020-04-11 01:45:20	1.77	31.7
2020-04-11 01:46:10	1.87	31.8
2020-04-11 01:46:20	1.41	31.9
2020-04-11 01:46:40	1.17	31.7
2020-04-11 01:47:00	1.56	32.0
2020-04-11 01:47:20	1.73	31.8
2020-04-11 01:47:30	1.54	31.9
2020-04-11 01:47:40	1.41	31.8
2020-04-11 01:48:00	1.88	31.7
2020-04-11 01:48:10	1.48	32.0
2020-04-11 01:48:20	2.55	33.0
2020-04-11 01:48:30	3.06	32.1
2020-04-11 01:48:40	3.23	32.5
2020-04-11 01:48:50	1.93	31.8
2020-04-11 01:49:10	2.28	31.9
2020-04-11 01:49:30	1.31	32.1
2020-04-11 01:49:50	1.78	31.6
2020-04-11 01:50:00	2.18	31.8
2020-04-11 01:50:20	2.43	32.1
2020-04-11 01:50:30	1.65	31.9
2020-04-11 01:50:40	2.15	31.9
2020-04-11 01:50:50	2.88	32.7
2020-04-11 01:51:00	3.19	32.5
2020-04-11 01:51:20	1.88	31.6
2020-04-11 01:51:30	1.52	32.1
2020-04-11 01:51:50	2.23	32.3
2020-04-11 01:52:00	2.39	31.6
2020-04-11 01:52:10	1.79	31.6
2020-04-11 01:52:20	1.69	31.7
2020-04-11 01:52:30	1.59	31.6
2020-04-11 01:52:50	3.37	31.9

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 01:53:00	3.94	33.1
2020-04-11 01:53:30	1.96	32.3
2020-04-11 01:54:00	1.55	31.7
2020-04-11 01:54:10	2.97	32.9
2020-04-11 01:54:30	2.68	32.5
2020-04-11 01:55:00	1.79	31.9
2020-04-11 01:55:40	2.37	32.1
2020-04-11 01:56:10	1.93	31.9
2020-04-11 01:56:20	1.91	31.6
2020-04-11 01:56:30	1.90	32.1
2020-04-11 01:56:50	2.47	32.0
2020-04-11 01:57:00	1.51	32.0
2020-04-11 01:57:10	1.60	32.0
2020-04-11 01:58:00	2.67	32.6
2020-04-11 01:58:10	2.67	32.4
2020-04-11 01:58:20	3.43	32.5
2020-04-11 01:58:30	3.43	31.8
2020-04-11 01:58:40	2.40	31.8
2020-04-11 01:59:00	2.37	32.1
2020-04-11 01:59:10	1.62	32.2
2020-04-11 01:59:20	1.20	31.8
2020-04-11 01:59:40	2.37	32.2
2020-04-11 01:59:50	2.36	32.7
2020-04-11 02:00:10	1.85	31.6
2020-04-11 02:00:20	2.18	32.7
2020-04-11 02:01:00	2.58	32.4
2020-04-11 02:01:10	3.16	33.1
2020-04-11 02:01:20	1.80	31.4
2020-04-11 02:01:30	1.74	31.7
2020-04-11 02:01:50	1.87	32.5
2020-04-11 02:02:00	1.94	32.6
2020-04-11 02:02:10	3.31	32.4
2020-04-11 02:02:20	3.61	31.8
2020-04-11 02:02:30	2.79	31.9
2020-04-11 02:02:40	2.73	32.0
2020-04-11 02:03:00	1.82	32.2
2020-04-11 02:03:10	2.27	31.9
2020-04-11 02:03:50	2.06	32.7
2020-04-11 02:06:50	2.15	32.7
2020-04-11 02:07:40	1.61	32.0
2020-04-11 02:08:20	1.57	32.6
2020-04-11 02:08:30	2.67	32.9
2020-04-11 02:08:50	2.75	32.7
2020-04-11 02:09:10	2.67	32.5
2020-04-11 02:09:30	2.21	32.6
2020-04-11 02:09:40	2.04	31.8
2020-04-11 02:09:50	1.57	31.3
2020-04-11 02:10:00	1.77	31.9

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 02:10:10	2.08	31.8
2020-04-11 02:10:30	1.97	31.6
2020-04-11 02:10:40	2.03	31.5
2020-04-11 02:10:50	1.64	32.2
2020-04-11 02:11:00	1.65	32.0
2020-04-11 02:11:10	1.54	32.6
2020-04-11 02:11:20	1.96	32.0
2020-04-11 02:11:30	3.16	33.1
2020-04-11 02:11:40	2.67	31.6
2020-04-11 02:11:50	2.63	31.7
2020-04-11 02:12:00	2.60	31.5
2020-04-11 02:12:10	2.19	31.4
2020-04-11 02:12:20	1.83	31.7
2020-04-11 02:12:30	1.65	31.5
2020-04-11 02:12:50	1.34	32.0
2020-04-11 02:13:00	1.75	31.8
2020-04-11 02:13:10	1.84	31.6
2020-04-11 02:13:20	2.02	31.3
2020-04-11 02:13:30	2.19	32.2
2020-04-11 02:13:40	2.18	31.7
2020-04-11 02:14:10	1.89	32.3
2020-04-11 02:15:20	2.26	32.6
2020-04-11 02:15:30	2.55	32.3
2020-04-11 02:15:40	2.80	32.1
2020-04-11 02:15:50	2.41	32.4
2020-04-11 02:16:10	2.39	31.7
2020-04-11 02:16:20	2.46	32.0
2020-04-11 02:16:30	2.12	32.2
2020-04-11 02:16:40	2.33	31.8
2020-04-11 02:16:50	1.96	31.9
2020-04-11 02:17:10	2.21	31.7
2020-04-11 02:17:20	2.29	31.8
2020-04-11 02:17:40	2.25	32.1
2020-04-11 02:17:50	1.63	31.5
2020-04-11 02:18:10	1.97	32.5
2020-04-11 02:18:20	2.41	32.6
2020-04-11 02:18:30	2.03	32.1
2020-04-11 02:19:20	1.56	32.4
2020-04-11 02:19:30	1.99	31.9
2020-04-11 02:19:40	2.28	32.1
2020-04-11 02:19:50	2.15	32.1
2020-04-11 02:20:00	2.03	32.4
2020-04-11 02:20:10	1.76	32.7
2020-04-11 02:20:20	3.34	32.6
2020-04-11 02:20:40	2.18	32.5
2020-04-11 02:20:50	1.65	32.4
2020-04-11 02:21:00	1.89	32.3
2020-04-11 02:21:50	2.60	33.1

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 02:22:10	2.17	31.9
2020-04-11 02:22:20	2.52	32.0
2020-04-11 02:22:40	2.84	31.7
2020-04-11 02:22:50	1.97	31.8
2020-04-11 02:23:00	1.96	32.2
2020-04-11 02:23:20	2.28	31.3
2020-04-11 02:23:30	2.02	31.8
2020-04-11 02:23:40	2.64	31.6
2020-04-11 02:23:50	2.51	32.5
2020-04-11 02:24:00	2.38	31.4
2020-04-11 02:24:10	2.40	31.6
2020-04-11 02:24:20	2.11	32.0
2020-04-11 02:24:50	2.54	31.6
2020-04-11 02:25:00	2.30	32.2
2020-04-11 02:25:10	2.55	32.0
2020-04-11 02:25:20	3.30	31.8
2020-04-11 02:25:50	2.06	32.5
2020-04-11 02:26:00	2.11	32.4
2020-04-11 02:26:10	2.11	31.7
2020-04-11 02:26:20	1.84	31.7
2020-04-11 02:28:40	2.11	31.4
2020-04-11 02:28:50	1.68	31.6
2020-04-11 02:29:00	1.80	31.8
2020-04-11 02:29:10	1.81	32.1
2020-04-11 02:29:20	1.67	31.5
2020-04-11 02:29:30	1.72	32.3
2020-04-11 02:29:40	1.55	31.6
2020-04-11 02:29:50	1.60	31.3
2020-04-11 02:30:00	1.60	31.5
2020-04-11 02:30:10	1.51	32.0
2020-04-11 02:30:40	1.38	31.7
2020-04-11 02:31:00	1.79	31.2
2020-04-11 02:31:10	1.94	31.5
2020-04-11 02:31:20	1.70	32.5
2020-04-11 02:31:50	1.80	31.6
2020-04-11 02:32:10	1.54	31.3
2020-04-11 02:32:30	1.45	31.7
2020-04-11 02:32:40	1.49	31.5
2020-04-11 02:32:50	1.47	31.4
2020-04-11 02:33:00	1.46	31.4
2020-04-11 02:33:20	1.62	32.4
2020-04-11 02:33:30	1.65	31.7
2020-04-11 02:33:50	1.39	31.3
2020-04-11 02:34:20	2.18	31.4
2020-04-11 02:35:10	2.90	31.5
2020-04-11 02:35:50	1.96	31.5
2020-04-11 02:36:00	1.60	31.5
2020-04-11 02:36:10	2.18	31.6

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 02:36:30	2.21	32.3
2020-04-11 02:36:40	2.21	31.2
2020-04-11 02:36:50	2.38	32.7
2020-04-11 02:37:00	1.87	31.3
2020-04-11 02:37:10	1.54	31.5
2020-04-11 02:37:20	1.64	31.8
2020-04-11 02:37:40	1.53	31.4
2020-04-11 02:37:50	1.73	31.5
2020-04-11 02:38:10	1.90	31.4
2020-04-11 02:38:20	1.56	31.4
2020-04-11 02:38:30	1.62	31.4
2020-04-11 02:38:40	1.59	31.7
2020-04-11 02:39:00	2.29	32.0
2020-04-11 02:39:20	1.69	31.6
2020-04-11 02:39:30	1.79	31.5
2020-04-11 02:39:40	1.60	31.7
2020-04-11 02:39:50	1.62	32.2
2020-04-11 02:40:00	2.50	31.6
2020-04-11 02:40:10	2.38	32.4
2020-04-11 02:40:40	1.96	31.3
2020-04-11 02:41:10	1.71	31.6
2020-04-11 02:42:00	2.30	31.4
2020-04-11 02:42:10	1.75	31.4
2020-04-11 02:42:20	1.38	31.7
2020-04-11 02:42:30	1.74	31.8
2020-04-11 02:42:40	2.31	31.6
2020-04-11 02:42:50	2.09	31.6
2020-04-11 02:43:20	1.60	31.7
2020-04-11 02:43:30	1.65	31.9
2020-04-11 02:43:40	2.46	31.4
2020-04-11 02:43:50	1.95	31.2
2020-04-11 02:44:00	1.77	32.1
2020-04-11 02:44:20	2.03	31.4
2020-04-11 02:44:30	1.46	31.3
2020-04-11 02:44:50	2.64	31.6
2020-04-11 02:45:00	2.57	31.5
2020-04-11 02:45:10	1.91	31.8
2020-04-11 02:45:20	2.36	32.0
2020-04-11 02:45:30	2.28	32.0
2020-04-11 02:45:40	2.27	32.7
2020-04-11 02:45:50	1.98	31.3
2020-04-11 02:46:10	2.61	31.7
2020-04-11 02:46:30	2.01	31.6
2020-04-11 02:46:40	2.32	31.6
2020-04-11 02:47:00	2.27	31.9
2020-04-11 02:47:20	2.31	32.0
2020-04-11 02:47:30	2.57	31.6
2020-04-11 02:48:00	1.72	31.5

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 02:48:20	1.76	31.6
2020-04-11 02:48:30	1.61	31.5
2020-04-11 02:48:40	2.88	31.8
2020-04-11 02:48:50	3.12	32.2
2020-04-11 02:49:00	3.46	32.2
2020-04-11 02:49:20	2.32	31.4
2020-04-11 02:49:30	1.86	31.7
2020-04-11 02:49:50	1.43	31.5
2020-04-11 02:50:10	1.85	31.6
2020-04-11 02:50:20	2.48	32.1
2020-04-11 02:50:30	2.48	32.0
2020-04-11 02:50:50	1.92	32.0
2020-04-11 02:51:00	1.87	32.4
2020-04-11 02:51:10	2.22	31.8
2020-04-11 02:51:20	2.18	32.3
2020-04-11 02:51:30	2.72	31.6
2020-04-11 02:51:40	2.71	31.6
2020-04-11 02:51:50	2.29	32.2
2020-04-11 02:52:00	1.78	32.2
2020-04-11 02:52:10	2.10	32.0
2020-04-11 02:52:30	1.65	31.6
2020-04-11 02:52:40	1.90	31.9
2020-04-11 02:52:50	1.74	31.9
2020-04-11 02:53:20	2.13	32.4
2020-04-11 02:55:20	2.64	32.6
2020-04-11 02:56:10	2.47	32.3
2020-04-11 02:56:20	2.30	31.9
2020-04-11 02:56:30	2.06	32.0
2020-04-11 02:56:50	2.73	32.0
2020-04-11 02:57:10	2.50	32.1
2020-04-11 02:57:20	2.26	32.1
2020-04-11 02:57:30	1.85	32.1
2020-04-11 02:57:50	1.67	31.4
2020-04-11 02:58:10	1.97	32.3
2020-04-11 02:58:20	2.93	32.7
2020-04-11 02:58:30	2.51	32.0
2020-04-11 02:58:50	2.39	32.2
2020-04-11 02:59:00	2.88	32.2
2020-04-11 02:59:20	1.86	31.9
2020-04-11 02:59:30	2.82	32.0
2020-04-11 02:59:40	2.10	31.9
2020-04-11 02:59:50	1.75	31.8
2020-04-11 03:00:00	1.58	31.5
2020-04-11 03:00:20	1.59	31.5
2020-04-11 03:00:30	1.71	31.7
2020-04-11 03:00:50	1.99	31.6
2020-04-11 03:01:00	1.79	31.6
2020-04-11 03:01:10	1.69	32.4

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 03:01:20	2.15	31.7
2020-04-11 03:01:50	2.31	31.6
2020-04-11 03:02:00	2.21	31.7
2020-04-11 03:02:20	1.83	31.6
2020-04-11 03:02:30	1.66	31.7
2020-04-11 03:02:40	1.62	32.0
2020-04-11 03:02:50	1.58	32.2
2020-04-11 03:03:30	2.62	32.3
2020-04-11 03:03:40	2.29	32.5
2020-04-11 03:06:50	2.42	32.6
2020-04-11 03:07:30	2.26	32.1
2020-04-11 03:07:40	2.03	32.0
2020-04-11 03:07:50	1.70	31.7
2020-04-11 03:08:10	1.91	32.6
2020-04-11 03:08:20	1.88	32.4
2020-04-11 03:08:40	2.88	33.2
2020-04-11 03:09:00	1.92	32.3
2020-04-11 03:09:20	1.97	32.3
2020-04-11 03:09:30	2.14	32.6
2020-04-11 03:10:40	1.93	31.9
2020-04-11 03:10:50	1.78	32.1
2020-04-11 03:11:00	1.95	31.6
2020-04-11 03:11:10	1.99	32.4
2020-04-11 03:11:20	1.86	31.8
2020-04-11 03:11:30	1.83	31.7
2020-04-11 03:11:40	1.96	32.0
2020-04-11 03:11:50	2.07	32.2
2020-04-11 03:12:10	2.26	32.2
2020-04-11 03:12:30	1.51	31.9
2020-04-11 03:12:40	2.12	31.8
2020-04-11 03:12:50	2.14	31.6
2020-04-11 03:13:00	2.16	31.9
2020-04-11 03:13:20	1.86	32.0
2020-04-11 03:13:40	2.25	32.2
2020-04-11 03:14:10	1.98	32.1
2020-04-11 03:14:20	1.66	32.2
2020-04-11 03:14:40	1.76	32.0
2020-04-11 03:15:00	1.75	31.9
2020-04-11 03:15:10	2.18	32.0
2020-04-11 03:15:20	1.74	32.4
2020-04-11 03:16:00	1.52	32.1
2020-04-11 03:16:20	2.17	32.4
2020-04-11 03:16:30	2.14	32.3
2020-04-11 03:16:40	1.35	32.0
2020-04-11 03:17:10	2.29	31.9
2020-04-11 03:17:20	1.53	31.6
2020-04-11 03:17:30	1.86	31.8
2020-04-11 03:17:40	2.28	32.1

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 03:17:50	2.25	31.7
2020-04-11 03:18:10	2.48	32.1
2020-04-11 03:18:20	2.22	31.7
2020-04-11 03:18:30	1.67	32.2
2020-04-11 03:18:40	1.86	31.9
2020-04-11 03:18:50	2.00	31.9
2020-04-11 03:19:00	1.89	31.5
2020-04-11 03:19:10	2.03	31.4
2020-04-11 03:19:40	1.61	31.5
2020-04-11 03:19:50	1.66	31.7
2020-04-11 03:20:00	1.76	31.8
2020-04-11 03:20:10	1.88	32.1
2020-04-11 03:20:30	1.93	32.0
2020-04-11 03:21:10	1.36	31.9
2020-04-11 03:21:40	2.03	32.4
2020-04-11 03:21:50	2.48	31.9
2020-04-11 03:22:00	3.19	32.2
2020-04-11 03:22:10	2.74	32.2
2020-04-11 03:22:50	1.95	32.3
2020-04-11 03:23:00	2.66	32.6
2020-04-11 03:23:10	3.98	32.2
2020-04-11 03:23:20	2.67	31.9
2020-04-11 03:23:30	2.21	32.1
2020-04-11 03:23:50	2.22	32.4
2020-04-11 03:24:00	3.20	32.6
2020-04-11 03:24:10	2.74	32.8
2020-04-11 03:24:30	1.78	32.8
2020-04-11 03:29:40	3.09	33.2
2020-04-11 03:30:10	2.07	32.6
2020-04-11 03:30:20	2.66	32.6
2020-04-11 03:30:30	2.24	32.3
2020-04-11 03:31:00	4.04	32.8
2020-04-11 03:31:10	2.40	32.5
2020-04-11 03:31:50	1.86	32.1
2020-04-11 03:32:10	1.53	32.3
2020-04-11 03:32:20	1.93	32.4
2020-04-11 03:32:30	2.05	32.3
2020-04-11 03:32:50	1.28	32.1
2020-04-11 03:33:30	1.71	32.0
2020-04-11 03:33:40	1.90	32.3
2020-04-11 03:33:50	2.27	33.0
2020-04-11 03:34:00	2.27	34.0
2020-04-11 03:34:20	2.51	33.2
2020-04-11 03:34:40	2.29	32.7
2020-04-11 03:35:00	1.84	32.2
2020-04-11 03:35:30	1.74	32.6
2020-04-11 03:36:50	2.54	31.9
2020-04-11 03:37:00	2.29	32.0

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 03:37:20	1.69	32.3
2020-04-11 03:37:30	1.71	32.6
2020-04-11 03:37:40	2.06	31.8
2020-04-11 03:37:50	2.32	32.1
2020-04-11 03:38:30	1.84	32.0
2020-04-11 03:38:40	1.82	32.5
2020-04-11 03:39:20	1.84	31.9
2020-04-11 03:39:30	1.67	32.2
2020-04-11 03:39:40	1.73	32.7
2020-04-11 03:39:50	1.63	32.1
2020-04-11 03:40:10	1.56	32.4
2020-04-11 03:40:20	1.54	32.1
2020-04-11 03:40:30	1.44	31.8
2020-04-11 03:40:50	1.68	32.6
2020-04-11 03:43:50	2.37	31.9
2020-04-11 03:44:00	1.88	32.0
2020-04-11 03:44:10	2.12	32.1
2020-04-11 03:44:20	1.75	32.3
2020-04-11 03:44:30	1.40	32.0
2020-04-11 03:44:40	2.30	32.7
2020-04-11 03:47:00	2.12	32.3
2020-04-11 03:47:10	2.47	32.5
2020-04-11 03:49:00	2.00	31.7
2020-04-11 03:49:20	1.75	32.4
2020-04-11 03:49:30	2.64	32.3
2020-04-11 03:49:40	2.52	32.8
2020-04-11 03:50:00	2.01	32.0
2020-04-11 03:50:10	1.94	31.7
2020-04-11 03:50:30	1.91	31.6
2020-04-11 03:50:40	1.72	32.2
2020-04-11 03:50:50	1.90	32.4
2020-04-11 03:51:00	1.78	31.7
2020-04-11 03:51:20	2.34	32.3
2020-04-11 03:51:30	2.07	31.3
2020-04-11 03:51:40	2.13	31.4
2020-04-11 03:52:00	1.25	31.6
2020-04-11 03:52:20	1.63	31.4
2020-04-11 03:52:30	1.96	31.2
2020-04-11 03:52:40	1.74	31.1
2020-04-11 03:52:50	1.68	31.2
2020-04-11 03:53:10	1.88	31.1
2020-04-11 03:53:20	2.11	31.4
2020-04-11 03:53:30	1.53	31.3
2020-04-11 03:53:40	1.41	31.2
2020-04-11 03:54:00	1.40	31.3
2020-04-11 03:54:10	1.45	31.5
2020-04-11 03:54:30	1.22	31.6
2020-04-11 03:54:40	1.31	31.3

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 03:54:50	1.02	31.4
2020-04-11 03:55:00	1.54	31.4
2020-04-11 03:55:10	1.51	31.5
2020-04-11 03:57:10	1.22	31.9
2020-04-11 03:57:20	1.44	32.1
2020-04-11 03:57:30	1.51	32.3
2020-04-11 03:57:40	1.64	31.7
2020-04-11 03:57:50	2.17	31.5
2020-04-11 03:58:00	1.89	31.8
2020-04-11 03:59:00	1.56	34.2
2020-04-11 03:59:30	1.61	32.7
2020-04-11 03:59:50	2.14	32.1
2020-04-11 04:00:00	1.79	32.5
2020-04-11 04:00:10	2.15	32.7
2020-04-11 04:00:30	1.57	32.3
2020-04-11 04:00:40	1.99	32.0
2020-04-11 04:00:50	1.83	31.6
2020-04-11 04:01:00	1.98	32.5
2020-04-11 04:01:10	1.79	31.9
2020-04-11 04:01:20	1.65	31.8
2020-04-11 04:01:40	1.45	31.7
2020-04-11 04:01:50	1.68	31.7
2020-04-11 04:02:10	2.04	31.8
2020-04-11 04:02:20	1.83	32.2
2020-04-11 04:02:30	1.48	31.9
2020-04-11 04:02:40	1.57	31.9
2020-04-11 04:03:00	2.84	32.2
2020-04-11 04:03:10	3.41	32.4
2020-04-11 04:03:20	2.56	32.3
2020-04-11 04:03:30	2.39	32.1
2020-04-11 04:03:40	2.14	32.8
2020-04-11 04:04:00	1.71	31.9
2020-04-11 04:04:10	1.97	31.5
2020-04-11 04:04:20	1.84	31.9
2020-04-11 04:04:40	1.53	31.7
2020-04-11 04:04:50	1.60	31.7
2020-04-11 04:05:10	1.60	32.1
2020-04-11 04:05:20	1.34	31.8
2020-04-11 04:05:40	1.42	31.5
2020-04-11 04:05:50	1.58	31.5
2020-04-11 04:06:10	1.52	31.5
2020-04-11 04:06:20	1.38	31.8
2020-04-11 04:06:30	1.71	31.7
2020-04-11 04:07:00	1.82	31.6
2020-04-11 04:07:10	1.81	31.7
2020-04-11 04:07:20	1.52	32.7
2020-04-11 04:07:30	1.47	31.7
2020-04-11 04:07:40	1.19	31.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 04:07:50	1.36	31.8
2020-04-11 04:08:10	1.59	31.7
2020-04-11 04:08:20	1.84	31.5
2020-04-11 04:08:30	1.74	31.7
2020-04-11 04:08:40	1.26	31.6
2020-04-11 04:09:00	1.66	31.4
2020-04-11 04:09:10	1.19	31.5
2020-04-11 04:09:20	1.46	31.8
2020-04-11 04:09:30	1.68	32.0
2020-04-11 04:09:40	1.91	32.5
2020-04-11 04:09:50	2.05	32.7
2020-04-11 04:10:10	2.08	31.7
2020-04-11 04:10:20	1.49	31.7
2020-04-11 04:10:30	1.93	31.6
2020-04-11 04:10:50	1.74	32.0
2020-04-11 04:11:00	1.77	32.1
2020-04-11 04:11:10	1.53	32.1
2020-04-11 04:11:20	1.13	32.0
2020-04-11 04:11:40	1.51	31.6
2020-04-11 04:11:50	1.59	31.3
2020-04-11 04:12:00	1.66	31.5
2020-04-11 04:12:10	1.26	31.8
2020-04-11 04:12:20	1.61	31.5
2020-04-11 04:12:40	1.43	31.9
2020-04-11 04:12:50	1.35	31.6
2020-04-11 04:13:00	1.71	31.6
2020-04-11 04:13:20	1.50	31.9
2020-04-11 04:13:30	1.78	31.6
2020-04-11 04:13:40	1.85	31.7
2020-04-11 04:14:00	1.38	31.4
2020-04-11 04:14:10	1.57	31.2
2020-04-11 04:14:20	1.61	31.3
2020-04-11 04:15:20	2.00	32.1
2020-04-11 04:15:40	1.86	31.5
2020-04-11 04:17:00	1.63	31.5
2020-04-11 04:17:10	1.65	31.6
2020-04-11 04:17:20	1.55	31.7
2020-04-11 04:17:30	1.33	32.0
2020-04-11 04:17:40	1.47	31.4
2020-04-11 04:18:00	1.88	31.2
2020-04-11 04:18:10	2.27	31.6
2020-04-11 04:18:20	2.01	31.6
2020-04-11 04:18:30	2.04	31.7
2020-04-11 04:18:40	2.14	31.6
2020-04-11 04:18:50	1.85	31.5
2020-04-11 04:19:10	1.51	31.4
2020-04-11 04:19:20	2.03	31.6
2020-04-11 04:19:30	2.13	31.4

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 04:19:40	1.81	31.3
2020-04-11 04:20:00	1.75	32.2
2020-04-11 04:20:10	1.93	32.2
2020-04-11 04:20:20	2.19	31.7
2020-04-11 04:20:40	1.94	31.8
2020-04-11 04:20:50	2.47	31.9
2020-04-11 04:21:00	2.51	31.5
2020-04-11 04:21:20	2.16	31.6
2020-04-11 04:21:30	2.23	32.1
2020-04-11 04:21:40	2.53	31.9
2020-04-11 04:22:00	1.53	31.7
2020-04-11 04:22:10	1.77	31.6
2020-04-11 04:22:30	1.88	31.5
2020-04-11 04:22:50	1.51	31.6
2020-04-11 04:23:00	1.38	31.7
2020-04-11 04:23:10	1.38	31.5
2020-04-11 04:23:30	2.03	31.5
2020-04-11 04:23:40	1.61	31.8
2020-04-11 04:23:50	1.74	31.4
2020-04-11 04:24:00	1.89	32.5
2020-04-11 04:24:10	1.64	31.5
2020-04-11 04:24:20	2.52	31.4
2020-04-11 04:24:30	2.01	31.4
2020-04-11 04:24:40	2.20	31.7
2020-04-11 04:25:00	2.35	31.4
2020-04-11 04:25:10	1.67	31.7
2020-04-11 04:25:20	1.71	31.7
2020-04-11 04:25:30	1.57	31.6
2020-04-11 04:25:40	1.72	32.1
2020-04-11 04:26:00	1.38	31.8
2020-04-11 04:26:10	1.26	31.7
2020-04-11 04:26:20	1.44	31.9
2020-04-11 04:26:30	1.43	31.6
2020-04-11 04:26:40	1.76	31.5
2020-04-11 04:26:50	1.67	31.6
2020-04-11 04:27:10	1.25	31.8
2020-04-11 04:27:20	1.49	32.0
2020-04-11 04:27:30	1.85	31.5
2020-04-11 04:27:50	1.34	31.5
2020-04-11 04:28:00	1.26	31.4
2020-04-11 04:28:10	1.07	31.6
2020-04-11 04:28:40	1.56	31.7
2020-04-11 04:28:50	1.35	32.0
2020-04-11 04:29:10	1.12	31.5
2020-04-11 04:29:20	0.87	31.8
2020-04-11 04:29:30	1.29	31.5
2020-04-11 04:29:50	1.05	31.7
2020-04-11 04:30:00	1.19	31.4

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 04:30:10	1.31	31.4
2020-04-11 04:30:20	1.46	31.7
2020-04-11 04:30:30	1.31	31.5
2020-04-11 04:30:50	1.05	31.5
2020-04-11 04:31:00	1.36	31.6
2020-04-11 04:31:10	1.25	31.9
2020-04-11 04:31:30	1.53	31.4
2020-04-11 04:31:40	1.40	31.5
2020-04-11 04:31:50	1.16	31.5
2020-04-11 04:32:00	0.88	31.7
2020-04-11 04:32:20	0.86	31.4
2020-04-11 04:32:30	0.96	31.5
2020-04-11 04:32:40	0.79	31.3
2020-04-11 04:33:00	0.83	31.3
2020-04-11 04:33:10	0.93	31.3
2020-04-11 04:33:20	1.01	31.4
2020-04-11 04:33:30	1.02	31.9
2020-04-11 04:33:40	1.08	32.0
2020-04-11 04:33:50	1.23	31.7
2020-04-11 04:34:00	0.85	31.8
2020-04-11 04:34:20	1.06	31.5
2020-04-11 04:34:30	1.27	31.8
2020-04-11 04:34:40	1.26	31.7
2020-04-11 04:35:40	1.00	31.7
2020-04-11 04:36:10	1.58	32.4
2020-04-11 04:37:00	0.81	32.3
2020-04-11 04:37:10	0.82	31.7
2020-04-11 04:37:20	1.04	31.8
2020-04-11 04:40:30	1.44	31.9
2020-04-11 04:40:50	1.55	32.0
2020-04-11 04:41:00	1.60	32.4
2020-04-11 04:41:20	1.08	32.3
2020-04-11 04:42:40	1.74	31.9
2020-04-11 04:43:30	1.56	32.6
2020-04-11 04:43:50	1.36	31.9
2020-04-11 04:44:00	1.62	32.2
2020-04-11 04:44:30	1.77	32.6
2020-04-11 04:45:00	2.34	32.5
2020-04-11 04:45:30	1.78	32.5
2020-04-11 04:45:40	1.44	32.3
2020-04-11 04:45:50	1.61	32.4
2020-04-11 04:47:00	1.60	33.0
2020-04-11 04:50:40	1.74	33.0
2020-04-11 04:50:50	1.58	32.8
2020-04-11 04:51:00	2.08	32.4
2020-04-11 04:51:20	1.98	32.7
2020-04-11 04:51:40	1.57	32.8
2020-04-11 04:52:10	1.59	32.4

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-11 04:52:40	2.25	32.8
2020-04-11 04:52:50	1.66	33.0
2020-04-11 04:53:10	1.56	32.3
2020-04-11 04:53:30	1.60	32.7
2020-04-11 04:54:50	1.71	32.1
2020-04-11 04:55:00	1.89	32.3
2020-04-11 04:55:10	2.07	32.5
2020-04-11 04:55:50	1.68	32.4
2020-04-11 04:57:40	2.32	32.7
2020-04-11 04:57:50	1.65	32.6
2020-04-19 22:00:00	2.44	30.9
2020-04-19 22:00:10	2.19	30.8
2020-04-19 22:00:20	2.23	31.8
2020-04-19 22:00:30	1.90	31.3
2020-04-19 22:00:40	2.43	31.2
2020-04-19 22:00:50	2.83	31.4
2020-04-19 22:01:00	2.56	31.2
2020-04-19 22:01:10	3.30	31.2
2020-04-19 22:01:20	3.29	33.0
2020-04-19 22:01:30	2.62	31.9
2020-04-19 22:01:40	2.99	32.1
2020-04-19 22:02:00	2.98	32.4
2020-04-19 22:02:10	3.27	32.1
2020-04-19 22:02:20	2.63	33.2
2020-04-19 22:02:30	2.37	32.1
2020-04-19 22:02:40	2.42	32.7
2020-04-19 22:03:00	2.22	32.5
2020-04-19 22:03:10	2.42	34.1
2020-04-19 22:04:30	2.72	31.7
2020-04-19 22:04:40	2.47	31.0
2020-04-19 22:04:50	2.54	31.0
2020-04-19 22:05:00	2.22	31.1
2020-04-19 22:05:10	2.34	31.2
2020-04-19 22:05:20	2.87	30.9
2020-04-19 22:05:30	3.12	31.1
2020-04-19 22:05:40	3.32	31.2
2020-04-19 22:05:50	3.64	31.4
2020-04-19 22:06:00	3.06	31.7
2020-04-19 22:06:10	3.17	32.0
2020-04-19 22:06:20	3.17	31.9
2020-04-19 22:06:30	3.15	33.2
2020-04-19 22:06:40	2.62	31.9
2020-04-19 22:06:50	2.76	31.5
2020-04-19 22:07:00	2.56	32.1
2020-04-19 22:07:10	2.29	31.6
2020-04-19 22:07:20	2.57	31.3
2020-04-19 22:07:30	2.98	32.4
2020-04-19 22:07:40	2.38	32.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 22:07:50	3.03	31.7
2020-04-19 22:08:00	3.13	31.9
2020-04-19 22:09:00	3.93	33.7
2020-04-19 22:09:50	2.94	33.1
2020-04-19 22:10:10	3.05	33.2
2020-04-19 22:10:30	2.48	32.7
2020-04-19 22:12:00	2.85	32.1
2020-04-19 22:13:00	2.73	32.0
2020-04-19 22:13:20	3.83	32.3
2020-04-19 22:13:30	3.25	32.7
2020-04-19 22:13:40	2.49	32.0
2020-04-19 22:14:00	4.14	32.2
2020-04-19 22:14:10	3.55	32.5
2020-04-19 22:14:20	3.46	32.8
2020-04-19 22:14:30	3.03	32.4
2020-04-19 22:14:40	2.68	32.2
2020-04-19 22:14:50	3.33	32.4
2020-04-19 22:15:00	2.99	32.2
2020-04-19 22:15:10	2.80	32.2
2020-04-19 22:15:20	1.97	32.1
2020-04-19 22:15:40	3.46	32.7
2020-04-19 22:18:00	3.18	33.1
2020-04-19 22:18:10	3.23	32.7
2020-04-19 22:18:20	3.07	32.1
2020-04-19 22:18:30	2.02	32.2
2020-04-19 22:18:40	2.17	31.8
2020-04-19 22:19:00	3.28	32.1
2020-04-19 22:19:10	2.98	31.7
2020-04-19 22:19:20	2.48	31.7
2020-04-19 22:19:30	2.77	33.6
2020-04-19 22:19:40	2.61	31.7
2020-04-19 22:21:10	1.79	32.4
2020-04-19 22:21:20	2.31	32.5
2020-04-19 22:21:30	2.52	31.8
2020-04-19 22:21:40	2.52	31.7
2020-04-19 22:21:50	1.71	31.7
2020-04-19 22:22:00	2.31	32.6
2020-04-19 22:22:10	2.72	31.5
2020-04-19 22:22:20	2.86	31.6
2020-04-19 22:22:30	2.67	31.4
2020-04-19 22:22:40	2.69	31.2
2020-04-19 22:22:50	2.69	31.1
2020-04-19 22:23:00	2.13	31.4
2020-04-19 22:23:10	2.37	31.3
2020-04-19 22:23:20	2.37	31.4
2020-04-19 22:23:30	1.71	31.4
2020-04-19 22:23:40	2.35	32.8
2020-04-19 22:23:50	3.16	31.7

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 22:24:00	2.43	31.7
2020-04-19 22:24:10	2.71	31.8
2020-04-19 22:24:20	3.16	31.7
2020-04-19 22:24:30	2.87	31.8
2020-04-19 22:24:40	2.66	31.8
2020-04-19 22:24:50	2.65	32.0
2020-04-19 22:25:00	2.23	31.7
2020-04-19 22:25:10	2.21	32.0
2020-04-19 22:25:20	2.03	31.6
2020-04-19 22:25:30	1.62	31.6
2020-04-19 22:25:40	1.57	31.4
2020-04-19 22:25:50	1.21	31.2
2020-04-19 22:26:00	1.75	31.3
2020-04-19 22:26:10	1.28	31.2
2020-04-19 22:26:20	2.15	31.3
2020-04-19 22:26:30	2.01	31.3
2020-04-19 22:26:40	2.56	31.5
2020-04-19 22:26:50	2.78	31.2
2020-04-19 22:27:00	1.56	31.3
2020-04-19 22:27:10	1.91	31.4
2020-04-19 22:27:20	2.96	31.4
2020-04-19 22:27:30	3.21	31.6
2020-04-19 22:27:40	2.42	31.6
2020-04-19 22:27:50	2.49	31.5
2020-04-19 22:28:00	2.98	31.7
2020-04-19 22:28:10	2.86	32.8
2020-04-19 22:28:20	2.68	33.5
2020-04-19 22:28:30	1.95	31.7
2020-04-19 22:28:40	2.11	31.5
2020-04-19 22:28:50	2.04	31.6
2020-04-19 22:29:00	1.78	31.4
2020-04-19 22:29:10	2.15	31.2
2020-04-19 22:29:20	2.16	31.3
2020-04-19 22:29:30	1.66	31.3
2020-04-19 22:29:50	2.23	31.6
2020-04-19 22:30:00	1.85	31.4
2020-04-19 22:30:10	1.89	31.6
2020-04-19 22:30:20	1.50	31.6
2020-04-19 22:30:30	1.99	31.5
2020-04-19 22:30:40	3.02	32.0
2020-04-19 22:30:50	2.93	33.0
2020-04-19 22:31:00	3.02	32.0
2020-04-19 22:31:10	3.30	32.4
2020-04-19 22:31:20	2.76	32.9
2020-04-19 22:31:30	2.43	32.2
2020-04-19 22:31:40	2.52	32.1
2020-04-19 22:31:50	2.95	31.9
2020-04-19 22:32:00	2.69	33.0

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 22:32:30	2.64	32.9
2020-04-19 22:32:50	2.47	32.6
2020-04-19 22:33:30	2.89	32.9
2020-04-19 22:33:40	2.40	32.6
2020-04-19 22:33:50	2.48	32.8
2020-04-19 22:34:20	2.70	33.4
2020-04-19 22:34:30	2.89	33.2
2020-04-19 22:34:40	2.72	33.0
2020-04-19 22:34:50	3.38	32.9
2020-04-19 22:35:00	3.36	33.6
2020-04-19 22:35:10	3.22	32.4
2020-04-19 22:35:20	3.12	32.9
2020-04-19 22:35:30	2.93	32.9
2020-04-19 22:35:40	3.20	34.0
2020-04-19 22:35:50	2.84	34.2
2020-04-19 22:36:00	2.58	32.4
2020-04-19 22:36:10	2.72	32.2
2020-04-19 22:36:20	2.93	32.5
2020-04-19 22:36:30	2.88	33.6
2020-04-19 22:36:40	2.78	34.0
2020-04-19 22:36:50	3.11	32.6
2020-04-19 22:37:00	2.99	33.0
2020-04-19 22:38:30	2.64	33.2
2020-04-19 22:38:40	2.11	32.2
2020-04-19 22:38:50	2.74	32.0
2020-04-19 22:39:00	2.99	32.0
2020-04-19 22:39:10	2.95	32.9
2020-04-19 22:39:20	2.66	32.5
2020-04-19 22:39:30	2.85	32.7
2020-04-19 22:39:40	2.73	33.9
2020-04-19 22:39:50	2.78	31.7
2020-04-19 22:40:00	2.51	31.8
2020-04-19 22:40:10	2.45	32.2
2020-04-19 22:40:20	2.57	31.6
2020-04-19 22:40:30	2.54	31.6
2020-04-19 22:40:40	2.34	31.9
2020-04-19 22:40:50	2.84	32.4
2020-04-19 22:41:00	2.81	32.5
2020-04-19 22:41:10	2.79	33.2
2020-04-19 22:41:20	2.59	32.2
2020-04-19 22:41:30	2.25	32.5
2020-04-19 22:41:40	3.27	32.9
2020-04-19 22:41:50	3.95	32.4
2020-04-19 22:42:10	3.00	31.6
2020-04-19 22:42:20	2.67	31.6
2020-04-19 22:42:30	3.63	31.9
2020-04-19 22:42:40	4.07	32.1
2020-04-19 22:43:00	3.77	33.0

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 22:43:40	3.65	34.6
2020-04-19 22:45:00	3.37	33.3
2020-04-19 22:45:10	3.29	33.5
2020-04-19 22:45:40	2.92	32.0
2020-04-19 22:45:50	2.95	32.8
2020-04-19 22:46:00	3.78	33.2
2020-04-19 22:46:20	2.89	32.5
2020-04-19 22:46:30	3.07	32.0
2020-04-19 22:46:40	3.01	32.2
2020-04-19 22:46:50	3.02	32.4
2020-04-19 22:47:00	3.10	32.6
2020-04-19 22:47:10	2.89	31.7
2020-04-19 22:47:20	2.42	32.7
2020-04-19 22:47:30	2.67	32.0
2020-04-19 22:48:20	2.62	32.6
2020-04-19 22:48:30	3.08	33.0
2020-04-19 22:48:40	3.38	32.2
2020-04-19 22:48:50	3.90	33.0
2020-04-19 22:49:30	3.37	33.6
2020-04-19 22:49:40	3.22	35.0
2020-04-19 22:49:50	3.36	34.4
2020-04-19 22:50:00	3.14	32.0
2020-04-19 22:50:10	2.83	31.5
2020-04-19 22:50:20	2.39	31.2
2020-04-19 22:50:30	2.26	31.6
2020-04-19 22:50:40	3.10	33.0
2020-04-19 22:51:00	3.22	32.8
2020-04-19 22:51:10	2.67	31.5
2020-04-19 22:51:20	2.73	31.5
2020-04-19 22:51:30	3.20	32.0
2020-04-19 22:51:40	3.27	31.5
2020-04-19 22:51:50	2.86	31.9
2020-04-19 22:52:00	2.95	32.5
2020-04-19 22:52:40	3.06	32.3
2020-04-19 22:52:50	2.67	31.6
2020-04-19 22:53:40	2.53	32.8
2020-04-19 22:54:50	2.16	32.1
2020-04-19 22:55:00	2.48	31.6
2020-04-19 22:55:10	2.30	31.4
2020-04-19 22:55:20	2.23	31.4
2020-04-19 22:55:30	1.92	31.9
2020-04-19 22:55:40	2.22	31.7
2020-04-19 22:55:50	1.98	31.4
2020-04-19 22:56:00	2.34	31.2
2020-04-19 22:56:10	2.38	31.1
2020-04-19 22:56:20	2.01	31.1
2020-04-19 22:56:30	2.07	30.9
2020-04-19 22:56:40	1.80	31.0

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 22:56:50	2.33	31.3
2020-04-19 22:57:00	2.06	31.1
2020-04-19 22:57:10	1.97	31.1
2020-04-19 22:57:20	1.95	31.8
2020-04-19 22:57:30	2.57	31.6
2020-04-19 22:57:40	2.82	31.3
2020-04-19 22:57:50	2.52	31.0
2020-04-19 22:58:00	2.52	31.0
2020-04-19 22:58:10	2.99	33.6
2020-04-19 22:58:30	3.84	32.8
2020-04-19 22:58:40	2.91	32.8
2020-04-19 22:58:50	2.70	32.2
2020-04-19 22:59:00	2.82	31.6
2020-04-19 22:59:10	2.48	31.4
2020-04-19 22:59:20	2.24	31.4
2020-04-19 22:59:30	2.03	31.1
2020-04-19 22:59:40	2.38	31.0
2020-04-19 22:59:50	2.74	30.8
2020-04-19 23:00:00	3.04	31.1
2020-04-19 23:00:10	3.34	31.3
2020-04-19 23:00:20	3.16	31.9
2020-04-19 23:00:30	3.09	31.2
2020-04-19 23:00:40	3.29	31.1
2020-04-19 23:00:50	2.87	30.8
2020-04-19 23:01:00	2.53	30.9
2020-04-19 23:01:10	2.58	30.9
2020-04-19 23:01:20	2.67	32.7
2020-04-19 23:01:50	2.68	32.1
2020-04-19 23:02:00	2.87	31.9
2020-04-19 23:02:10	2.18	31.0
2020-04-19 23:02:20	2.11	30.9
2020-04-19 23:02:30	1.92	31.3
2020-04-19 23:02:40	2.05	31.6
2020-04-19 23:02:50	2.58	31.2
2020-04-19 23:03:00	1.98	31.1
2020-04-19 23:03:10	1.41	31.0
2020-04-19 23:03:20	2.00	31.1
2020-04-19 23:03:30	2.47	30.9
2020-04-19 23:03:40	1.84	30.9
2020-04-19 23:03:50	2.37	31.1
2020-04-19 23:04:00	3.16	31.3
2020-04-19 23:04:10	3.00	31.0
2020-04-19 23:04:20	2.27	30.9
2020-04-19 23:04:30	1.74	31.1
2020-04-19 23:04:40	2.44	31.3
2020-04-19 23:04:50	2.20	31.6
2020-04-19 23:05:00	1.74	31.8
2020-04-19 23:05:10	2.33	31.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 23:05:20	1.97	31.7
2020-04-19 23:05:30	2.38	31.7
2020-04-19 23:05:40	2.35	31.8
2020-04-19 23:05:50	2.31	32.1
2020-04-19 23:06:00	2.52	31.9
2020-04-19 23:06:10	2.25	31.4
2020-04-19 23:06:20	2.25	31.2
2020-04-19 23:06:30	1.87	31.0
2020-04-19 23:06:40	1.50	31.3
2020-04-19 23:06:50	1.48	31.3
2020-04-19 23:07:00	1.62	31.3
2020-04-19 23:07:10	1.85	31.5
2020-04-19 23:07:20	1.95	31.4
2020-04-19 23:07:30	1.93	31.3
2020-04-19 23:07:40	1.85	31.5
2020-04-19 23:07:50	1.73	31.6
2020-04-19 23:08:00	1.72	31.2
2020-04-19 23:08:10	1.67	31.3
2020-04-19 23:08:20	1.81	31.3
2020-04-19 23:08:30	1.87	31.3
2020-04-19 23:08:40	1.44	32.0
2020-04-19 23:09:10	1.13	31.8
2020-04-19 23:10:00	1.07	31.7
2020-04-19 23:10:10	1.01	31.6
2020-04-19 23:10:20	1.13	32.0
2020-04-19 23:10:30	1.28	31.6
2020-04-19 23:10:40	1.18	31.7
2020-04-19 23:12:00	0.97	31.8
2020-04-19 23:12:10	1.01	31.5
2020-04-19 23:12:20	0.93	31.6
2020-04-19 23:13:00	1.17	31.0
2020-04-19 23:13:10	1.26	30.9
2020-04-19 23:13:20	1.21	31.0
2020-04-19 23:13:30	1.17	31.0
2020-04-19 23:13:40	1.23	30.9
2020-04-19 23:13:50	1.43	31.0
2020-04-19 23:14:00	1.36	31.4
2020-04-19 23:14:10	1.26	31.3
2020-04-19 23:14:20	1.25	31.0
2020-04-19 23:14:30	1.27	30.9
2020-04-19 23:14:40	1.22	31.0
2020-04-19 23:14:50	1.17	31.0
2020-04-19 23:15:00	1.07	30.9
2020-04-19 23:15:10	1.24	31.1
2020-04-19 23:15:20	1.55	31.3
2020-04-19 23:15:30	1.68	31.2
2020-04-19 23:15:40	1.52	31.1
2020-04-19 23:15:50	1.32	31.1

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 23:16:00	1.25	31.0
2020-04-19 23:16:10	1.13	31.1
2020-04-19 23:16:20	1.28	31.6
2020-04-19 23:16:30	1.73	32.0
2020-04-19 23:16:40	1.51	30.9
2020-04-19 23:16:50	1.64	31.3
2020-04-19 23:17:00	1.35	31.1
2020-04-19 23:17:10	1.48	30.9
2020-04-19 23:17:20	1.57	30.7
2020-04-19 23:17:30	1.45	30.6
2020-04-19 23:17:40	1.37	31.0
2020-04-19 23:17:50	1.38	30.8
2020-04-19 23:18:00	1.77	30.9
2020-04-19 23:18:10	2.03	31.0
2020-04-19 23:18:20	1.72	31.4
2020-04-19 23:18:30	1.89	31.3
2020-04-19 23:18:40	1.94	31.5
2020-04-19 23:18:50	2.14	31.3
2020-04-19 23:19:00	2.06	30.8
2020-04-19 23:19:10	1.77	30.7
2020-04-19 23:19:20	1.35	30.9
2020-04-19 23:19:30	1.35	31.1
2020-04-19 23:19:40	1.74	31.0
2020-04-19 23:19:50	1.93	31.3
2020-04-19 23:20:00	1.85	31.1
2020-04-19 23:20:10	1.98	31.1
2020-04-19 23:20:20	1.77	31.0
2020-04-19 23:20:30	1.72	31.0
2020-04-19 23:20:40	1.70	31.1
2020-04-19 23:20:50	1.38	30.9
2020-04-19 23:21:00	1.50	31.1
2020-04-19 23:21:10	1.23	31.1
2020-04-19 23:21:20	1.50	31.6
2020-04-19 23:21:30	1.96	31.3
2020-04-19 23:21:40	1.74	31.3
2020-04-19 23:21:50	1.85	31.1
2020-04-19 23:22:00	1.74	31.3
2020-04-19 23:22:10	1.88	31.3
2020-04-19 23:22:20	2.07	31.4
2020-04-19 23:22:30	1.89	31.2
2020-04-19 23:22:40	1.72	31.6
2020-04-19 23:22:50	2.01	32.1
2020-04-19 23:23:00	1.95	31.6
2020-04-19 23:23:10	1.56	31.5
2020-04-19 23:23:20	1.88	32.1
2020-04-19 23:23:30	1.73	31.9
2020-04-19 23:23:40	1.94	32.7
2020-04-19 23:24:00	1.68	32.2

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 23:24:20	1.45	32.3
2020-04-19 23:24:30	1.40	31.9
2020-04-19 23:24:40	1.63	31.8
2020-04-19 23:24:50	1.48	31.5
2020-04-19 23:25:00	1.51	32.7
2020-04-19 23:26:00	2.04	31.5
2020-04-19 23:26:10	1.88	31.5
2020-04-19 23:26:20	1.66	31.3
2020-04-19 23:26:30	1.55	32.0
2020-04-19 23:26:40	1.51	32.1
2020-04-19 23:26:50	1.75	31.9
2020-04-19 23:27:00	2.15	31.2
2020-04-19 23:27:10	1.76	31.2
2020-04-19 23:27:20	1.86	31.4
2020-04-19 23:27:30	1.87	31.7
2020-04-19 23:27:40	1.96	32.0
2020-04-19 23:27:50	1.84	32.0
2020-04-19 23:28:00	1.76	31.6
2020-04-19 23:28:10	1.84	31.7
2020-04-19 23:28:20	1.68	31.4
2020-04-19 23:28:30	1.74	31.3
2020-04-19 23:28:40	1.75	31.4
2020-04-19 23:28:50	1.65	31.5
2020-04-19 23:29:00	1.86	31.6
2020-04-19 23:29:10	1.86	31.4
2020-04-19 23:29:20	1.53	31.2
2020-04-19 23:29:30	1.89	31.0
2020-04-19 23:29:40	2.04	31.1
2020-04-19 23:29:50	1.66	31.4
2020-04-19 23:30:00	1.62	31.6
2020-04-19 23:30:10	1.78	31.5
2020-04-19 23:30:20	1.70	31.4
2020-04-19 23:30:30	1.90	31.3
2020-04-19 23:30:40	2.21	31.4
2020-04-19 23:30:50	1.92	31.9
2020-04-19 23:32:50	2.36	32.3
2020-04-19 23:33:00	2.61	32.0
2020-04-19 23:33:10	2.49	31.9
2020-04-19 23:33:20	2.50	31.7
2020-04-19 23:33:30	2.39	31.3
2020-04-19 23:33:40	2.19	31.6
2020-04-19 23:33:50	2.14	31.8
2020-04-19 23:34:00	1.70	31.4
2020-04-19 23:34:10	1.95	31.5
2020-04-19 23:34:20	2.11	32.0
2020-04-19 23:34:30	2.18	32.1
2020-04-19 23:34:40	2.47	31.9
2020-04-19 23:34:50	2.91	31.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 23:35:00	2.50	31.4
2020-04-19 23:35:10	2.28	31.6
2020-04-19 23:35:20	2.31	31.8
2020-04-19 23:35:30	2.28	32.0
2020-04-19 23:35:40	2.00	32.1
2020-04-19 23:35:50	2.06	32.7
2020-04-19 23:36:00	2.53	32.3
2020-04-19 23:36:40	2.67	33.1
2020-04-19 23:36:50	2.59	32.7
2020-04-19 23:37:00	2.90	33.5
2020-04-19 23:37:50	2.32	32.4
2020-04-19 23:38:00	2.26	32.0
2020-04-19 23:38:20	2.96	32.1
2020-04-19 23:38:30	2.55	31.6
2020-04-19 23:38:40	2.71	32.0
2020-04-19 23:38:50	3.02	32.7
2020-04-19 23:39:00	2.91	32.0
2020-04-19 23:39:10	3.32	32.9
2020-04-19 23:39:20	3.26	32.9
2020-04-19 23:39:30	2.72	32.1
2020-04-19 23:39:40	2.78	31.5
2020-04-19 23:39:50	2.57	31.9
2020-04-19 23:40:00	2.58	31.7
2020-04-19 23:40:10	2.85	31.8
2020-04-19 23:40:20	3.15	32.1
2020-04-19 23:40:30	2.79	33.3
2020-04-19 23:40:50	3.18	33.3
2020-04-19 23:41:00	2.90	31.7
2020-04-19 23:41:10	3.02	32.4
2020-04-19 23:41:20	2.70	31.8
2020-04-19 23:41:30	2.49	31.9
2020-04-19 23:41:40	3.03	31.6
2020-04-19 23:41:50	2.46	31.4
2020-04-19 23:42:00	2.62	31.5
2020-04-19 23:42:10	2.66	31.6
2020-04-19 23:42:20	2.93	31.6
2020-04-19 23:42:30	2.70	31.4
2020-04-19 23:42:40	3.26	31.3
2020-04-19 23:42:50	3.16	31.6
2020-04-19 23:43:00	2.67	32.2
2020-04-19 23:43:10	2.92	31.5
2020-04-19 23:43:20	2.29	31.3
2020-04-19 23:43:30	2.18	31.5
2020-04-19 23:43:40	2.49	31.8
2020-04-19 23:43:50	2.96	32.2
2020-04-19 23:44:00	3.42	34.3
2020-04-19 23:44:10	3.11	33.6
2020-04-19 23:44:20	2.37	32.0

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 23:44:30	2.83	33.3
2020-04-19 23:44:40	3.10	31.9
2020-04-19 23:44:50	2.40	31.9
2020-04-19 23:45:00	1.86	31.9
2020-04-19 23:45:10	2.22	31.4
2020-04-19 23:45:20	2.99	31.9
2020-04-19 23:45:30	3.11	32.1
2020-04-19 23:45:40	2.18	32.1
2020-04-19 23:45:50	2.06	31.7
2020-04-19 23:46:00	2.42	32.1
2020-04-19 23:46:10	2.53	32.0
2020-04-19 23:46:20	1.77	31.7
2020-04-19 23:46:30	2.08	31.7
2020-04-19 23:46:40	1.84	31.6
2020-04-19 23:46:50	2.14	31.6
2020-04-19 23:47:00	3.21	32.0
2020-04-19 23:47:10	3.18	32.2
2020-04-19 23:47:20	3.18	31.6
2020-04-19 23:47:30	2.89	31.5
2020-04-19 23:47:40	2.25	31.5
2020-04-19 23:47:50	2.25	31.7
2020-04-19 23:48:00	2.46	32.1
2020-04-19 23:48:10	2.19	32.0
2020-04-19 23:48:20	2.15	31.2
2020-04-19 23:48:30	2.29	31.4
2020-04-19 23:48:40	2.83	32.0
2020-04-19 23:48:50	2.54	31.7
2020-04-19 23:49:00	2.75	31.4
2020-04-19 23:49:10	2.74	32.4
2020-04-19 23:49:20	3.64	33.9
2020-04-19 23:49:50	2.82	32.1
2020-04-19 23:50:30	2.31	31.8
2020-04-19 23:50:40	2.47	31.4
2020-04-19 23:50:50	2.19	31.3
2020-04-19 23:51:00	2.44	31.7
2020-04-19 23:51:10	2.88	31.6
2020-04-19 23:51:20	2.54	31.8
2020-04-19 23:51:30	2.94	32.2
2020-04-19 23:52:00	2.35	31.4
2020-04-19 23:52:10	2.57	31.6
2020-04-19 23:52:20	2.56	31.7
2020-04-19 23:52:30	2.35	31.3
2020-04-19 23:52:40	2.66	31.4
2020-04-19 23:52:50	2.47	31.3
2020-04-19 23:53:00	2.40	31.2
2020-04-19 23:53:10	2.18	31.0
2020-04-19 23:53:20	1.97	31.2
2020-04-19 23:53:30	2.04	31.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-19 23:53:40	1.61	31.5
2020-04-19 23:53:50	1.44	31.3
2020-04-19 23:54:00	1.69	31.3
2020-04-19 23:54:10	1.39	31.4
2020-04-19 23:54:20	1.90	31.3
2020-04-19 23:54:30	2.63	31.6
2020-04-19 23:54:40	2.67	31.2
2020-04-19 23:54:50	2.61	30.9
2020-04-19 23:55:00	2.78	31.0
2020-04-19 23:55:10	2.34	31.3
2020-04-19 23:55:20	2.17	31.4
2020-04-19 23:55:30	2.06	31.3
2020-04-19 23:55:40	2.01	31.1
2020-04-19 23:55:50	1.96	31.1
2020-04-19 23:56:00	1.90	31.3
2020-04-19 23:56:10	1.73	31.3
2020-04-19 23:56:20	1.57	31.2
2020-04-19 23:56:30	1.53	31.2
2020-04-19 23:56:40	2.18	31.3
2020-04-19 23:56:50	2.69	31.4
2020-04-19 23:57:00	2.71	31.9
2020-04-19 23:57:10	2.55	32.0
2020-04-19 23:57:20	2.22	31.6
2020-04-19 23:57:30	2.18	31.6
2020-04-19 23:57:40	2.24	31.6
2020-04-19 23:57:50	2.81	31.6
2020-04-19 23:58:00	2.58	31.5
2020-04-19 23:58:10	2.10	31.4
2020-04-19 23:58:20	2.15	31.4
2020-04-19 23:58:30	1.90	31.3
2020-04-19 23:58:40	1.80	31.4
2020-04-19 23:58:50	1.84	31.2
2020-04-19 23:59:00	1.40	31.2
2020-04-19 23:59:10	1.65	31.3
2020-04-19 23:59:20	1.36	31.4
2020-04-19 23:59:30	1.76	31.1
2020-04-19 23:59:40	2.01	31.1
2020-04-19 23:59:50	2.22	31.3
2020-04-20 00:00:00	1.95	31.3
2020-04-20 00:00:10	1.72	32.0
2020-04-20 00:00:20	2.56	32.1
2020-04-20 00:00:30	2.73	31.5
2020-04-20 00:00:40	2.65	32.0
2020-04-20 00:00:50	2.52	32.4
2020-04-20 00:01:00	2.05	32.1
2020-04-20 00:01:10	2.09	32.7
2020-04-20 00:01:30	2.97	33.1
2020-04-20 00:01:40	3.16	34.6

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 00:01:50	3.60	35.9
2020-04-20 00:02:00	3.02	32.8
2020-04-20 00:02:10	2.95	32.1
2020-04-20 00:02:20	2.73	33.0
2020-04-20 00:02:30	2.80	33.0
2020-04-20 00:02:40	2.56	32.4
2020-04-20 00:02:50	2.45	32.3
2020-04-20 00:03:00	2.36	32.2
2020-04-20 00:03:10	2.71	32.6
2020-04-20 00:03:20	2.40	32.4
2020-04-20 00:03:30	2.68	33.2
2020-04-20 00:03:40	3.13	33.1
2020-04-20 00:03:50	2.96	32.5
2020-04-20 00:04:00	2.53	33.1
2020-04-20 00:04:10	3.17	32.9
2020-04-20 00:04:20	2.99	32.3
2020-04-20 00:04:30	2.70	32.0
2020-04-20 00:04:40	2.87	32.4
2020-04-20 00:04:50	2.93	32.1
2020-04-20 00:05:00	2.96	32.3
2020-04-20 00:05:10	3.16	32.3
2020-04-20 00:05:20	2.49	32.3
2020-04-20 00:05:30	2.83	32.2
2020-04-20 00:05:40	2.89	32.4
2020-04-20 00:05:50	2.88	32.5
2020-04-20 00:06:00	2.71	32.6
2020-04-20 00:06:10	2.58	32.7
2020-04-20 00:06:20	3.44	32.9
2020-04-20 00:06:30	3.01	32.9
2020-04-20 00:06:40	2.59	32.1
2020-04-20 00:06:50	2.45	31.9
2020-04-20 00:07:00	2.69	32.1
2020-04-20 00:07:10	2.86	32.3
2020-04-20 00:07:20	2.39	32.0
2020-04-20 00:07:30	2.60	32.3
2020-04-20 00:07:40	2.28	32.1
2020-04-20 00:07:50	2.44	32.3
2020-04-20 00:08:00	2.44	32.2
2020-04-20 00:08:30	3.40	34.6
2020-04-20 00:08:40	3.00	33.6
2020-04-20 00:08:50	2.88	32.8
2020-04-20 00:09:00	2.70	32.6
2020-04-20 00:09:10	2.95	32.4
2020-04-20 00:09:20	2.71	31.9
2020-04-20 00:09:30	2.33	31.3
2020-04-20 00:09:40	2.59	31.5
2020-04-20 00:09:50	2.29	31.2
2020-04-20 00:10:00	2.59	31.3

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 00:10:10	2.56	31.2
2020-04-20 00:10:20	2.50	31.3
2020-04-20 00:10:30	2.79	31.8
2020-04-20 00:10:40	3.18	32.4
2020-04-20 00:10:50	2.84	32.0
2020-04-20 00:11:00	2.92	32.4
2020-04-20 00:11:10	2.50	31.6
2020-04-20 00:11:20	2.20	31.4
2020-04-20 00:11:30	2.52	31.6
2020-04-20 00:11:40	3.01	31.5
2020-04-20 00:11:50	2.36	31.7
2020-04-20 00:12:00	2.26	31.7
2020-04-20 00:12:10	2.39	31.5
2020-04-20 00:12:20	2.31	31.8
2020-04-20 00:12:30	2.38	31.7
2020-04-20 00:12:40	2.11	31.3
2020-04-20 00:12:50	2.03	31.3
2020-04-20 00:13:00	1.84	31.1
2020-04-20 00:13:10	1.91	31.1
2020-04-20 00:13:20	2.00	31.3
2020-04-20 00:13:30	1.76	31.2
2020-04-20 00:13:40	2.09	31.0
2020-04-20 00:13:50	1.90	31.0
2020-04-20 00:14:00	2.12	30.9
2020-04-20 00:14:10	2.46	31.3
2020-04-20 00:14:20	2.44	31.2
2020-04-20 00:14:30	2.34	31.2
2020-04-20 00:14:40	1.99	31.4
2020-04-20 00:14:50	2.05	32.0
2020-04-20 00:16:40	1.74	32.6
2020-04-20 00:17:00	1.97	32.2
2020-04-20 00:17:10	1.75	31.4
2020-04-20 00:17:20	1.85	31.5
2020-04-20 00:17:30	2.04	31.3
2020-04-20 00:17:40	1.85	31.6
2020-04-20 00:17:50	2.65	31.9
2020-04-20 00:18:00	2.59	31.9
2020-04-20 00:18:10	1.89	31.5
2020-04-20 00:18:20	2.17	31.5
2020-04-20 00:18:30	2.87	31.6
2020-04-20 00:18:40	2.82	31.3
2020-04-20 00:18:50	2.11	31.1
2020-04-20 00:19:00	2.20	31.2
2020-04-20 00:19:10	2.13	31.5
2020-04-20 00:19:20	2.39	31.5
2020-04-20 00:19:30	2.39	31.7
2020-04-20 00:19:40	2.05	31.5
2020-04-20 00:19:50	1.82	31.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 00:20:00	1.52	32.0
2020-04-20 00:20:10	2.22	31.5
2020-04-20 00:20:20	2.76	31.4
2020-04-20 00:20:30	2.65	32.0
2020-04-20 00:20:40	3.15	32.0
2020-04-20 00:20:50	3.06	31.4
2020-04-20 00:21:00	2.33	31.4
2020-04-20 00:21:10	2.37	31.4
2020-04-20 00:21:20	2.03	31.1
2020-04-20 00:21:30	1.72	31.1
2020-04-20 00:21:40	2.19	31.0
2020-04-20 00:21:50	2.05	31.0
2020-04-20 00:22:00	2.32	31.3
2020-04-20 00:22:10	2.00	31.4
2020-04-20 00:22:20	2.39	31.4
2020-04-20 00:22:30	2.62	31.5
2020-04-20 00:22:40	2.70	31.3
2020-04-20 00:22:50	2.04	31.2
2020-04-20 00:23:00	2.52	31.4
2020-04-20 00:23:10	2.18	31.2
2020-04-20 00:23:20	2.20	31.2
2020-04-20 00:23:30	2.47	31.8
2020-04-20 00:23:40	2.78	31.6
2020-04-20 00:23:50	2.31	31.3
2020-04-20 00:24:00	2.31	31.5
2020-04-20 00:24:10	2.50	31.2
2020-04-20 00:24:20	1.97	31.3
2020-04-20 00:24:30	2.06	31.1
2020-04-20 00:24:40	2.59	31.3
2020-04-20 00:24:50	2.30	31.3
2020-04-20 00:25:00	2.27	31.4
2020-04-20 00:25:10	2.07	31.1
2020-04-20 00:25:20	1.81	31.1
2020-04-20 00:25:30	1.78	31.1
2020-04-20 00:25:40	2.18	31.5
2020-04-20 00:25:50	2.22	32.0
2020-04-20 00:26:40	2.18	32.5
2020-04-20 00:26:50	2.83	32.4
2020-04-20 00:27:40	2.12	31.6
2020-04-20 00:27:50	2.54	31.7
2020-04-20 00:28:00	2.71	31.5
2020-04-20 00:28:10	2.54	31.2
2020-04-20 00:28:20	2.44	31.4
2020-04-20 00:28:30	2.37	31.6
2020-04-20 00:28:40	2.19	31.4
2020-04-20 00:28:50	2.44	31.4
2020-04-20 00:29:00	2.47	31.6
2020-04-20 00:29:10	1.98	31.2

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 00:29:20	2.15	31.8
2020-04-20 00:29:30	1.95	31.6
2020-04-20 00:29:40	1.40	31.5
2020-04-20 00:29:50	1.81	31.3
2020-04-20 00:30:00	2.27	31.6
2020-04-20 00:30:10	2.31	31.6
2020-04-20 00:30:20	2.21	31.4
2020-04-20 00:30:30	2.05	31.1
2020-04-20 00:30:40	1.84	31.3
2020-04-20 00:30:50	2.22	31.7
2020-04-20 00:31:00	1.64	31.4
2020-04-20 00:31:10	1.41	31.5
2020-04-20 00:31:20	1.52	31.4
2020-04-20 00:31:30	1.23	31.5
2020-04-20 00:33:30	1.17	31.4
2020-04-20 00:33:40	1.29	31.1
2020-04-20 00:33:50	1.78	30.9
2020-04-20 00:34:00	1.66	30.9
2020-04-20 00:34:10	1.35	30.9
2020-04-20 00:34:20	1.37	31.2
2020-04-20 00:34:30	1.59	31.2
2020-04-20 00:34:40	1.44	31.0
2020-04-20 00:34:50	0.97	31.0
2020-04-20 00:35:00	0.80	31.3
2020-04-20 00:35:10	1.16	31.3
2020-04-20 00:35:20	1.17	31.1
2020-04-20 00:35:30	1.25	31.0
2020-04-20 00:35:40	1.30	30.9
2020-04-20 00:35:50	1.16	30.9
2020-04-20 00:36:00	1.45	31.1
2020-04-20 00:36:10	1.36	31.2
2020-04-20 00:36:20	1.24	31.0
2020-04-20 00:36:30	1.38	31.0
2020-04-20 00:36:40	1.43	31.2
2020-04-20 00:36:50	1.34	31.1
2020-04-20 00:37:00	1.44	30.9
2020-04-20 00:37:10	1.58	30.9
2020-04-20 00:37:20	1.31	31.0
2020-04-20 00:37:30	1.29	31.0
2020-04-20 00:37:40	1.25	31.2
2020-04-20 00:37:50	1.05	31.4
2020-04-20 00:38:00	1.04	31.1
2020-04-20 00:38:10	1.17	31.0
2020-04-20 00:38:20	1.24	31.1
2020-04-20 00:38:30	1.35	31.1
2020-04-20 00:38:40	1.55	31.0
2020-04-20 00:38:50	1.84	31.0
2020-04-20 00:39:00	1.72	31.0

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 00:39:10	1.38	30.9
2020-04-20 00:39:20	1.37	30.9
2020-04-20 00:39:30	1.67	31.1
2020-04-20 00:39:40	1.68	32.2
2020-04-20 00:39:50	1.62	31.8
2020-04-20 00:40:00	1.77	31.6
2020-04-20 00:40:10	1.88	31.1
2020-04-20 00:40:20	1.68	31.1
2020-04-20 00:40:30	1.73	31.1
2020-04-20 00:40:40	1.34	31.0
2020-04-20 00:40:50	1.05	30.9
2020-04-20 00:41:00	1.00	31.0
2020-04-20 00:41:10	1.26	31.2
2020-04-20 00:41:20	1.29	31.8
2020-04-20 00:41:30	1.43	31.4
2020-04-20 00:41:40	1.46	31.1
2020-04-20 00:41:50	1.63	31.0
2020-04-20 00:42:00	1.56	31.2
2020-04-20 00:42:10	1.38	31.2
2020-04-20 00:42:20	1.75	31.2
2020-04-20 00:42:30	1.64	31.1
2020-04-20 00:42:40	1.63	31.2
2020-04-20 00:42:50	1.70	31.1
2020-04-20 00:43:00	1.56	31.0
2020-04-20 00:43:10	1.56	31.3
2020-04-20 00:43:20	1.65	31.2
2020-04-20 00:43:30	1.74	31.2
2020-04-20 00:43:40	1.74	31.0
2020-04-20 00:43:50	1.70	31.0
2020-04-20 00:44:00	1.60	31.1
2020-04-20 00:44:10	1.53	31.3
2020-04-20 00:44:20	1.84	31.0
2020-04-20 00:44:30	1.81	31.1
2020-04-20 00:44:40	2.05	31.1
2020-04-20 00:44:50	1.99	31.0
2020-04-20 00:45:00	1.85	30.9
2020-04-20 00:45:10	1.72	31.0
2020-04-20 00:45:20	1.79	30.9
2020-04-20 00:45:30	1.71	30.9
2020-04-20 00:45:40	1.74	30.7
2020-04-20 00:45:50	1.92	30.8
2020-04-20 00:46:00	2.42	31.1
2020-04-20 00:46:10	2.41	31.4
2020-04-20 00:46:20	2.44	31.3
2020-04-20 00:46:30	2.13	31.2
2020-04-20 00:46:40	1.97	31.3
2020-04-20 00:46:50	1.71	31.1
2020-04-20 00:47:00	1.91	30.9

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 00:47:10	1.94	30.8
2020-04-20 00:47:20	2.04	30.9
2020-04-20 00:47:30	2.02	30.9
2020-04-20 00:47:40	1.87	30.9
2020-04-20 00:47:50	2.43	30.9
2020-04-20 00:48:00	2.51	31.1
2020-04-20 00:48:10	2.29	30.9
2020-04-20 00:48:20	2.01	31.0
2020-04-20 00:48:30	2.11	30.9
2020-04-20 00:48:40	2.17	31.2
2020-04-20 00:48:50	1.89	31.0
2020-04-20 00:49:00	1.95	30.9
2020-04-20 00:49:10	1.87	30.9
2020-04-20 00:49:20	1.66	31.0
2020-04-20 00:50:00	1.61	32.2
2020-04-20 00:50:10	1.64	31.2
2020-04-20 00:50:20	1.55	30.9
2020-04-20 00:50:30	1.74	31.4
2020-04-20 00:50:40	1.88	31.2
2020-04-20 00:50:50	1.62	31.4
2020-04-20 00:52:00	1.52	31.7
2020-04-20 00:52:10	1.34	32.0
2020-04-20 00:52:20	0.85	31.4
2020-04-20 00:52:30	1.03	30.7
2020-04-20 00:52:40	1.09	31.1
2020-04-20 00:52:50	1.04	31.0
2020-04-20 00:53:00	0.89	30.9
2020-04-20 00:53:10	1.09	30.8
2020-04-20 00:53:20	1.03	30.9
2020-04-20 00:53:30	0.95	30.9
2020-04-20 00:53:40	0.88	30.7
2020-04-20 00:53:50	0.74	30.8
2020-04-20 00:54:00	0.63	31.1
2020-04-20 00:54:10	0.52	31.1
2020-04-20 01:01:10	0.51	30.7
2020-04-20 01:01:20	0.69	30.7
2020-04-20 01:01:30	0.56	30.7
2020-04-20 01:01:40	0.79	30.7
2020-04-20 01:01:50	0.85	30.7
2020-04-20 01:02:00	1.03	30.7
2020-04-20 01:02:10	0.81	30.6
2020-04-20 01:02:20	0.64	30.6
2020-04-20 01:02:30	0.80	30.6
2020-04-20 01:02:40	1.20	30.8
2020-04-20 01:02:50	1.31	30.8
2020-04-20 01:03:00	0.95	30.8
2020-04-20 01:03:10	0.83	30.7
2020-04-20 01:03:20	0.61	30.6

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 01:03:40	0.63	30.5
2020-04-20 01:03:50	0.79	30.5
2020-04-20 01:04:00	0.89	30.5
2020-04-20 01:04:10	0.77	30.5
2020-04-20 01:04:20	0.76	30.5
2020-04-20 01:04:30	0.96	30.6
2020-04-20 01:04:40	0.90	30.7
2020-04-20 01:04:50	1.15	30.8
2020-04-20 01:05:00	1.29	30.8
2020-04-20 01:05:10	1.24	30.6
2020-04-20 01:05:20	1.61	30.6
2020-04-20 01:05:30	1.53	30.6
2020-04-20 01:05:40	1.21	30.8
2020-04-20 01:05:50	1.17	30.7
2020-04-20 01:06:00	1.41	30.6
2020-04-20 01:06:10	1.60	30.6
2020-04-20 01:06:20	1.82	30.8
2020-04-20 01:06:30	1.63	30.8
2020-04-20 01:06:40	1.13	30.8
2020-04-20 01:06:50	1.19	30.9
2020-04-20 01:07:00	1.34	31.0
2020-04-20 01:07:10	1.49	30.9
2020-04-20 01:07:20	1.60	30.9
2020-04-20 01:07:30	1.37	30.9
2020-04-20 01:07:40	1.21	30.9
2020-04-20 01:07:50	1.49	30.9
2020-04-20 01:08:00	1.62	30.9
2020-04-20 01:08:10	1.73	30.8
2020-04-20 01:08:20	1.72	30.8
2020-04-20 01:08:30	1.79	31.1
2020-04-20 01:08:40	1.84	31.2
2020-04-20 01:08:50	1.62	31.3
2020-04-20 01:09:00	1.74	31.2
2020-04-20 01:09:10	1.72	31.3
2020-04-20 01:09:20	1.84	31.1
2020-04-20 01:09:30	1.72	31.1
2020-04-20 01:09:40	1.36	31.1
2020-04-20 01:09:50	1.67	31.1
2020-04-20 01:10:00	1.88	31.3
2020-04-20 01:10:10	1.75	31.3
2020-04-20 01:10:20	1.66	31.0
2020-04-20 01:10:30	1.66	31.0
2020-04-20 01:10:40	1.60	31.1
2020-04-20 01:10:50	1.73	31.2
2020-04-20 01:11:00	1.72	30.9
2020-04-20 01:11:10	1.73	30.8
2020-04-20 01:11:20	1.99	30.7
2020-04-20 01:11:30	1.85	30.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 01:11:40	1.66	30.9
2020-04-20 01:11:50	1.76	30.7
2020-04-20 01:12:00	1.85	30.9
2020-04-20 01:12:10	1.96	31.1
2020-04-20 01:12:20	1.93	31.1
2020-04-20 01:12:30	1.77	30.9
2020-04-20 01:12:40	1.94	30.7
2020-04-20 01:12:50	1.99	30.7
2020-04-20 01:13:00	1.78	30.7
2020-04-20 01:13:10	1.78	30.7
2020-04-20 01:13:20	1.88	30.9
2020-04-20 01:13:30	1.90	30.9
2020-04-20 01:13:40	1.85	30.8
2020-04-20 01:13:50	1.55	30.8
2020-04-20 01:14:00	1.84	30.7
2020-04-20 01:14:10	1.73	30.7
2020-04-20 01:14:20	1.64	30.9
2020-04-20 01:14:30	1.54	30.8
2020-04-20 01:14:40	1.79	31.0
2020-04-20 01:14:50	1.53	30.9
2020-04-20 01:15:00	1.06	30.9
2020-04-20 01:15:10	1.12	30.9
2020-04-20 01:15:20	1.26	31.0
2020-04-20 01:15:30	1.42	31.1
2020-04-20 01:15:40	1.26	30.8
2020-04-20 01:15:50	1.27	30.9
2020-04-20 01:16:00	1.28	30.9
2020-04-20 01:16:10	1.00	30.9
2020-04-20 01:16:20	1.00	30.9
2020-04-20 01:16:30	1.18	30.8
2020-04-20 01:16:40	1.13	30.8
2020-04-20 01:16:50	1.16	30.9
2020-04-20 01:17:00	0.94	31.0
2020-04-20 01:17:10	1.09	31.0
2020-04-20 01:17:20	0.82	31.1
2020-04-20 01:17:30	0.77	30.9
2020-04-20 01:17:40	0.86	30.8
2020-04-20 01:17:50	0.96	30.8
2020-04-20 01:19:50	0.58	30.9
2020-04-20 01:20:00	0.79	30.8
2020-04-20 01:20:10	0.66	30.8
2020-04-20 01:20:20	0.61	30.8
2020-04-20 01:20:30	0.84	30.9
2020-04-20 01:20:40	0.81	31.0
2020-04-20 01:20:50	0.66	31.2
2020-04-20 01:21:10	0.64	30.9
2020-04-20 01:21:20	0.56	30.8
2020-04-20 01:21:30	0.53	30.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 01:23:10	0.57	31.0
2020-04-20 01:28:10	0.52	30.6
2020-04-20 01:28:40	0.53	30.6
2020-04-20 01:28:50	0.63	31.1
2020-04-20 01:29:00	0.75	31.6
2020-04-20 01:29:20	0.74	31.7
2020-04-20 01:29:30	0.71	31.1
2020-04-20 01:29:40	0.64	31.0
2020-04-20 01:29:50	0.61	30.9
2020-04-20 01:30:40	0.68	30.9
2020-04-20 01:30:50	0.68	30.9
2020-04-20 01:31:00	0.62	30.9
2020-04-20 01:31:10	0.67	30.9
2020-04-20 01:31:20	0.61	31.0
2020-04-20 01:31:30	0.56	31.0
2020-04-20 01:31:50	0.52	31.2
2020-04-20 01:32:00	0.52	31.2
2020-04-20 01:32:10	0.62	31.0
2020-04-20 01:32:20	0.68	31.0
2020-04-20 01:32:30	0.64	31.0
2020-04-20 01:32:40	0.66	31.0
2020-04-20 01:32:50	0.59	30.8
2020-04-20 01:33:00	0.62	30.8
2020-04-20 01:33:10	0.71	30.9
2020-04-20 01:33:20	0.67	30.9
2020-04-20 01:33:30	0.64	30.8
2020-04-20 01:33:40	0.74	30.7
2020-04-20 01:33:50	0.86	31.0
2020-04-20 01:34:00	0.85	30.8
2020-04-20 01:34:10	0.82	30.7
2020-04-20 01:34:20	0.66	30.7
2020-04-20 01:34:30	0.55	30.7
2020-04-20 01:34:40	0.64	30.7
2020-04-20 01:34:50	0.65	30.7
2020-04-20 01:35:00	0.73	30.8
2020-04-20 01:35:10	0.77	30.7
2020-04-20 01:35:20	0.83	30.6
2020-04-20 01:35:30	0.79	30.6
2020-04-20 01:35:40	0.70	30.7
2020-04-20 01:35:50	0.60	30.9
2020-04-20 01:36:00	0.70	31.0
2020-04-20 01:36:10	0.60	30.9
2020-04-20 01:36:20	0.67	31.0
2020-04-20 01:36:30	0.67	30.8
2020-04-20 01:36:40	0.74	30.7
2020-04-20 01:36:50	0.58	30.7
2020-04-20 01:37:00	0.50	30.8
2020-04-20 01:37:10	0.53	30.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 01:37:50	0.62	30.8
2020-04-20 01:38:00	0.60	30.9
2020-04-20 01:38:10	0.67	30.8
2020-04-20 01:38:20	0.60	31.1
2020-04-20 01:44:40	0.55	30.6
2020-04-20 01:44:50	0.61	30.6
2020-04-20 01:45:00	0.60	30.7
2020-04-20 01:45:10	0.55	30.7
2020-04-20 01:45:20	0.59	30.8
2020-04-20 01:45:30	0.70	30.8
2020-04-20 01:45:40	0.80	30.7
2020-04-20 01:45:50	0.71	30.7
2020-04-20 01:46:00	0.66	30.6
2020-04-20 01:46:10	0.63	30.6
2020-04-20 01:46:20	0.62	30.5
2020-04-20 01:46:30	1.10	30.6
2020-04-20 01:46:40	1.09	30.6
2020-04-20 01:46:50	0.78	30.5
2020-04-20 01:47:00	0.71	30.6
2020-04-20 01:47:10	0.65	30.6
2020-04-20 01:47:20	0.66	30.6
2020-04-20 01:47:30	0.69	30.7
2020-04-20 01:47:40	0.70	30.5
2020-04-20 01:47:50	0.71	30.6
2020-04-20 01:48:00	0.71	30.6
2020-04-20 01:48:10	0.85	30.6
2020-04-20 01:48:20	0.81	30.6
2020-04-20 01:48:30	0.77	30.7
2020-04-20 01:48:40	0.69	30.7
2020-04-20 01:48:50	0.59	30.7
2020-04-20 01:49:00	0.51	30.7
2020-04-20 01:49:10	0.57	30.7
2020-04-20 01:49:20	0.53	30.6
2020-04-20 01:49:30	0.54	30.6
2020-04-20 01:49:40	0.53	30.5
2020-04-20 01:49:50	0.53	30.7
2020-04-20 01:50:00	0.57	30.6
2020-04-20 01:50:10	0.65	30.6
2020-04-20 01:50:20	0.67	30.7
2020-04-20 01:50:30	0.75	30.7
2020-04-20 01:50:40	0.82	30.6
2020-04-20 01:50:50	0.71	30.6
2020-04-20 01:51:00	0.73	30.6
2020-04-20 01:51:10	0.70	30.5
2020-04-20 01:51:20	0.76	30.6
2020-04-20 01:51:30	0.71	30.8
2020-04-20 01:51:40	0.71	30.6
2020-04-20 01:51:50	0.61	30.6

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 01:52:00	0.61	30.7
2020-04-20 01:52:10	0.52	30.7
2020-04-20 01:52:40	0.53	30.7
2020-04-20 01:53:30	0.67	30.7
2020-04-20 01:53:40	0.74	30.7
2020-04-20 01:53:50	0.67	30.8
2020-04-20 01:54:00	0.70	30.7
2020-04-20 01:54:10	0.57	30.6
2020-04-20 01:54:20	0.52	30.8
2020-04-20 01:54:30	0.58	30.7
2020-04-20 01:54:40	0.50	30.6
2020-04-20 01:55:30	0.66	30.8
2020-04-20 01:55:40	0.78	30.9
2020-04-20 01:57:00	0.71	32.1
2020-04-20 01:57:10	0.60	31.4
2020-04-20 01:57:20	0.56	31.1
2020-04-20 01:57:30	0.58	30.8
2020-04-20 01:57:40	0.56	30.7
2020-04-20 01:57:50	0.57	30.7
2020-04-20 01:58:00	0.62	30.7
2020-04-20 01:59:00	0.58	30.9
2020-04-20 01:59:10	0.79	30.8
2020-04-20 01:59:20	0.71	30.9
2020-04-20 01:59:30	0.76	30.7
2020-04-20 01:59:40	0.86	30.9
2020-04-20 01:59:50	0.82	30.9
2020-04-20 02:00:00	0.78	30.8
2020-04-20 02:00:10	0.66	30.7
2020-04-20 02:00:20	0.56	30.7
2020-04-20 02:00:30	0.59	30.9
2020-04-20 02:00:40	0.69	30.7
2020-04-20 02:00:50	0.81	30.7
2020-04-20 02:01:00	0.71	30.8
2020-04-20 02:01:10	0.60	30.7
2020-04-20 02:01:20	0.55	30.6
2020-04-20 02:01:30	0.58	30.5
2020-04-20 02:01:40	0.71	30.6
2020-04-20 02:01:50	0.79	30.6
2020-04-20 02:02:00	0.73	30.6
2020-04-20 02:02:10	0.68	30.6
2020-04-20 02:02:20	0.88	30.7
2020-04-20 02:02:30	0.97	30.6
2020-04-20 02:02:40	0.75	31.0
2020-04-20 02:02:50	0.69	30.8
2020-04-20 02:03:20	0.58	31.2
2020-04-20 02:03:30	0.57	30.8
2020-04-20 02:04:00	0.65	31.5
2020-04-20 02:04:10	0.63	31.5

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 02:05:30	0.53	31.3
2020-04-20 02:05:40	0.53	30.7
2020-04-20 02:12:30	0.76	30.7
2020-04-20 02:12:40	0.75	30.7
2020-04-20 02:12:50	0.60	30.6
2020-04-20 02:13:30	0.55	30.9
2020-04-20 02:13:40	0.57	30.8
2020-04-20 02:13:50	0.51	30.7
2020-04-20 02:14:10	0.53	30.6
2020-04-20 02:14:20	0.53	30.6
2020-04-20 02:14:30	0.53	30.7
2020-04-20 02:15:00	0.53	31.1
2020-04-20 02:16:10	0.50	31.0
2020-04-20 02:16:50	0.53	31.1
2020-04-20 02:17:00	0.50	31.2
2020-04-20 02:17:50	0.57	31.2
2020-04-20 02:18:00	0.65	31.0
2020-04-20 02:18:10	0.71	30.8
2020-04-20 02:18:20	0.74	31.3
2020-04-20 02:18:30	0.65	31.5
2020-04-20 02:18:40	0.66	31.5
2020-04-20 02:18:50	0.73	31.2
2020-04-20 02:19:00	0.75	31.0
2020-04-20 02:19:10	0.76	31.0
2020-04-20 02:19:20	0.71	30.9
2020-04-20 02:19:30	0.66	31.0
2020-04-20 02:19:40	0.76	31.3
2020-04-20 02:19:50	0.75	31.6
2020-04-20 02:20:00	0.75	31.2
2020-04-20 02:20:10	0.77	30.9
2020-04-20 02:20:20	0.77	30.8
2020-04-20 02:20:30	0.71	30.9
2020-04-20 02:20:40	0.62	31.1
2020-04-20 02:20:50	0.63	31.2
2020-04-20 02:21:00	0.60	31.1
2020-04-20 02:21:30	0.53	31.2
2020-04-20 02:21:40	0.63	31.0
2020-04-20 02:21:50	0.61	31.0
2020-04-20 02:22:00	0.53	31.3
2020-04-20 02:22:10	0.50	31.3
2020-04-20 02:29:00	0.50	30.7
2020-04-20 02:29:50	0.51	30.8
2020-04-20 02:30:00	0.59	30.8
2020-04-20 02:30:10	0.53	30.8
2020-04-20 02:30:20	0.54	30.7
2020-04-20 02:30:30	0.59	30.9
2020-04-20 02:30:40	0.66	30.5
2020-04-20 02:30:50	0.71	30.7

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 02:31:00	0.75	30.6
2020-04-20 02:31:10	0.88	30.7
2020-04-20 02:31:20	0.83	31.1
2020-04-20 02:31:30	0.63	30.7
2020-04-20 02:31:40	0.59	30.7
2020-04-20 02:31:50	0.60	30.9
2020-04-20 02:32:00	0.73	30.7
2020-04-20 02:32:10	0.71	30.7
2020-04-20 02:32:20	0.84	30.7
2020-04-20 02:32:30	0.91	30.7
2020-04-20 02:32:40	0.94	30.8
2020-04-20 02:32:50	0.85	30.9
2020-04-20 02:33:00	0.89	31.0
2020-04-20 02:33:10	0.86	30.6
2020-04-20 02:33:20	0.89	30.6
2020-04-20 02:33:30	1.05	30.6
2020-04-20 02:33:40	1.08	30.7
2020-04-20 02:33:50	1.13	30.7
2020-04-20 02:34:00	1.25	30.7
2020-04-20 02:34:10	1.28	30.8
2020-04-20 02:34:20	1.44	30.8
2020-04-20 02:34:30	1.52	30.6
2020-04-20 02:34:40	1.49	30.6
2020-04-20 02:34:50	1.52	30.8
2020-04-20 02:35:00	1.53	30.8
2020-04-20 02:35:10	1.62	31.2
2020-04-20 02:35:20	1.50	31.4
2020-04-20 02:35:30	1.63	30.4
2020-04-20 02:35:40	1.69	30.5
2020-04-20 02:35:50	1.78	30.5
2020-04-20 02:36:00	1.72	30.5
2020-04-20 02:36:10	1.71	30.5
2020-04-20 02:36:20	1.79	30.5
2020-04-20 02:36:30	1.70	30.4
2020-04-20 02:36:40	1.74	30.5
2020-04-20 02:36:50	1.71	30.5
2020-04-20 02:37:00	1.71	30.7
2020-04-20 02:37:10	1.75	30.6
2020-04-20 02:37:20	1.62	30.7
2020-04-20 02:37:30	1.56	30.5
2020-04-20 02:37:40	1.69	30.6
2020-04-20 02:37:50	1.72	30.5
2020-04-20 02:38:00	1.71	30.4
2020-04-20 02:38:10	1.69	30.6
2020-04-20 02:38:20	1.60	30.4
2020-04-20 02:38:30	1.61	30.5
2020-04-20 02:38:40	1.51	30.5
2020-04-20 02:38:50	1.57	30.5

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 02:39:00	1.56	30.6
2020-04-20 02:39:10	1.59	30.5
2020-04-20 02:39:20	1.58	30.5
2020-04-20 02:39:30	1.53	30.4
2020-04-20 02:39:40	1.48	30.4
2020-04-20 02:39:50	1.41	30.6
2020-04-20 02:40:00	1.37	30.4
2020-04-20 02:40:10	1.22	30.4
2020-04-20 02:40:20	1.26	30.5
2020-04-20 02:40:30	1.23	30.5
2020-04-20 02:40:40	1.06	30.5
2020-04-20 02:40:50	0.96	30.4
2020-04-20 02:41:00	0.95	30.5
2020-04-20 02:41:10	1.03	30.4
2020-04-20 02:41:20	0.97	30.4
2020-04-20 02:41:30	0.87	30.5
2020-04-20 02:41:40	0.83	30.5
2020-04-20 02:41:50	0.87	30.4
2020-04-20 02:42:00	0.93	30.4
2020-04-20 02:42:10	0.92	30.5
2020-04-20 02:42:20	0.88	30.4
2020-04-20 02:42:30	0.83	30.4
2020-04-20 02:42:40	0.70	30.4
2020-04-20 02:44:50	0.54	30.6
2020-04-20 02:46:40	0.62	30.3
2020-04-20 02:46:50	0.74	30.3
2020-04-20 02:47:00	0.85	30.5
2020-04-20 02:47:10	0.81	30.5
2020-04-20 02:47:20	0.74	30.5
2020-04-20 02:47:30	0.94	30.6
2020-04-20 02:47:40	0.89	30.5
2020-04-20 02:47:50	1.11	30.5
2020-04-20 02:48:00	1.13	30.7
2020-04-20 02:48:10	1.20	30.8
2020-04-20 02:48:20	1.18	30.5
2020-04-20 02:48:30	1.21	30.4
2020-04-20 02:48:40	1.26	30.4
2020-04-20 02:48:50	1.31	30.4
2020-04-20 02:49:00	1.35	30.5
2020-04-20 02:49:10	1.37	30.5
2020-04-20 02:49:20	1.44	30.5
2020-04-20 02:49:30	1.47	30.5
2020-04-20 02:49:40	1.44	30.4
2020-04-20 02:49:50	1.39	30.5
2020-04-20 02:50:00	1.41	30.5
2020-04-20 02:50:10	1.40	30.4
2020-04-20 02:50:20	1.49	30.4
2020-04-20 02:50:30	1.59	30.4

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-04-20 02:50:40	1.58	30.4
2020-04-20 02:50:50	1.65	30.4
2020-04-20 02:51:00	1.74	30.6
2020-04-20 02:51:10	1.79	30.5
2020-04-20 02:51:20	1.87	30.5
2020-04-20 02:51:30	1.81	30.5
2020-04-20 02:51:40	1.86	30.5
2020-04-20 02:51:50	1.74	30.5
2020-04-20 02:52:00	1.83	30.6
2020-04-20 02:52:10	1.83	30.7
2020-04-20 02:52:20	1.79	30.7
2020-04-20 02:52:30	1.81	30.5
2020-04-20 02:52:40	1.74	30.7
2020-04-20 02:52:50	1.70	30.8
2020-04-20 02:53:00	1.57	30.8
2020-04-20 02:53:10	1.60	30.6
2020-04-20 02:53:20	1.60	30.8
2020-04-20 02:53:30	1.49	30.9
2020-04-20 02:53:40	1.56	30.6
2020-04-20 02:53:50	1.39	30.5
2020-04-20 02:54:00	1.31	30.5
2020-04-20 02:54:10	1.28	30.6
2020-04-20 02:54:20	1.27	30.7
2020-04-20 02:54:30	1.34	30.7
2020-04-20 02:54:40	1.33	31.2
2020-04-20 02:54:50	1.25	31.8
2020-04-20 02:56:40	0.67	31.5
2020-05-04 00:39:50	4.00	37.3
2020-05-04 00:42:00	3.77	32.9
2020-05-04 00:42:30	3.69	35.3
2020-05-04 00:45:20	3.24	33.0
2020-05-04 00:45:30	2.52	33.3
2020-05-04 00:46:00	3.67	32.0
2020-05-04 00:48:00	2.65	33.3
2020-05-04 00:50:50	3.26	32.1
2020-05-04 00:51:00	2.86	32.1
2020-05-04 00:51:10	2.38	32.5
2020-05-04 00:51:20	3.26	32.1
2020-05-04 00:52:20	3.11	32.2
2020-05-04 00:52:30	2.91	31.9
2020-05-04 00:52:40	3.37	33.0
2020-05-04 00:53:10	4.01	34.0
2020-05-04 00:53:40	2.56	31.8
2020-05-04 00:54:20	4.08	33.4
2020-05-04 00:54:30	3.91	32.0
2020-05-04 00:54:50	3.50	33.2
2020-05-04 00:55:00	2.94	31.9
2020-05-04 00:55:20	3.57	32.8

Appendix G2 - Valid Ambient 10-Second Sound Data Monitor C - Spring 2020

East Durham Wind Farm - Spring 2020 Audit, 1502606

Day and Time of Measurement	Average Wind Speed (10-Second Average)	Measured Leq (dBA)
2020-05-04 00:56:10	4.27	34.2
2020-05-04 00:56:20	2.78	32.9
2020-05-04 00:56:30	3.03	32.8
2020-05-04 00:56:50	2.28	31.3
2020-05-04 00:57:00	2.74	31.6
2020-05-04 00:57:10	2.58	31.5
2020-05-04 00:58:20	3.01	33.0
2020-05-04 00:58:30	3.01	32.1
2020-05-04 00:58:40	2.53	31.9
2020-05-04 00:58:50	2.05	32.7
2020-05-04 00:59:00	2.69	32.6
2020-05-04 00:59:50	2.72	33.0
2020-05-04 01:00:50	3.06	31.2
2020-05-04 01:01:00	3.20	32.5
2020-05-04 01:02:10	3.25	32.6
2020-05-04 01:02:20	2.26	31.5
2020-05-04 01:02:30	2.99	32.3
2020-05-04 01:11:10	3.94	36.9
2020-05-04 01:12:10	3.70	31.9
2020-05-04 01:12:20	3.13	31.7
2020-05-04 01:12:30	3.21	35.8
2020-05-04 01:13:20	2.42	33.0
2020-05-04 01:36:20	4.03	37.1

APPENDIX H
TONAL AUDIBILITY

Table H.1 - Summary of Tonal Audibility - Monitor C - East Durham

East Durham Wind Farm - Spring 2020 Audit, 1502606

Wind Bin	Minute File 1	Minute File 2	Minute File 3	Minute File 4	Minute File 5
2	N/a[1]	-6.88 dB	N/a[1]	-6.64 dB	-4.04 dB
3	-6.79 dB	-6.71 dB	-7.03 dB	N/a[1]	-6.89 dB

Notes:

[1] - No Tones Found.

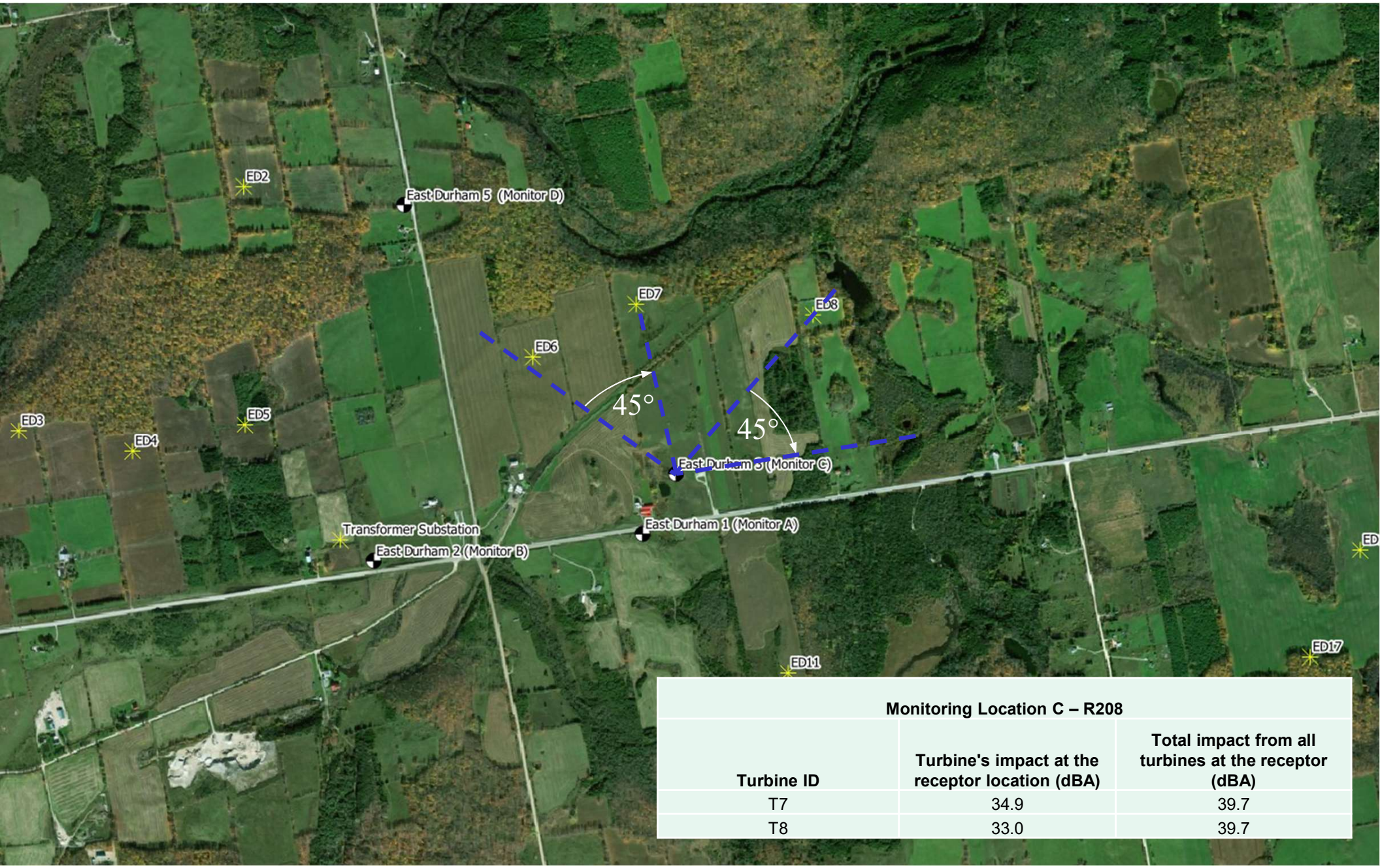
Table H.2 - Summary of Data Points Used In Tonality Analysis - Monitor C - East Durham

East Durham Wind Farm - Spring 2020 Audit, 1502606

Wind Bin 2	01 Minute			02 Minute			03 Minute			04 Minute			05 Minute		
	Time Stamp	Leq (dBA)	Wind Speed (m/s)	Time Stamp	Leq (dBA)	Wind Speed (m/s)	Time Stamp	Leq (dBA)	Wind Speed (m/s)	Time Stamp	Leq (dBA)	Wind Speed (m/s)	Time Stamp	Leq (dBA)	Wind Speed (m/s)
	04-02-2020 11:20:10 PM	40.7	1.999	05-06-2020 1:54:10 AM	40.1	2.029	05-05-2020 4:35:50 AM	39.4	2.038	04-02-2020 11:16:30 PM	40.8	1.950	04-02-2020 11:19:40 PM	40.3	1.940
	04-02-2020 11:28:40 PM	40.5	1.999	05-06-2020 3:56:20 AM	40.8	2.029	05-05-2020 4:50:10 AM	39.2	2.038	04-02-2020 11:17:20 PM	40.5	2.058	04-02-2020 11:34:30 PM	39.8	1.940
	04-26-2020 2:44:50 AM	38.0	1.989	04-02-2020 11:11:40 PM	40.5	1.970	03-22-2020 1:51:50 AM	37.1	1.960	04-02-2020 11:19:50 PM	40.9	2.058	05-06-2020 2:35:20 AM	40.8	1.940
	05-06-2020 4:51:40 AM	39.8	1.980	04-02-2020 11:14:20 PM	41.1	1.970	04-02-2020 11:11:50 PM	40.3	1.960	05-06-2020 1:52:00 AM	39.6	2.058	04-02-2020 11:31:50 PM	39.8	2.068
	04-02-2020 11:17:50 PM	40.7	2.029	04-02-2020 11:23:30 PM	41.2	1.970	04-02-2020 11:16:40 PM	40.8	1.960	03-21-2020 3:05:00 AM	40.0	1.940	05-06-2020 1:49:10 AM	39.9	2.068
	04-26-2020 3:38:30 AM	37.8	2.029	04-02-2020 11:17:10 PM	40.7	2.038	05-05-2020 4:57:30 AM	39.4	1.960	03-21-2020 3:05:10 AM	40.4	1.940	05-05-2020 4:37:50 AM	39.3	1.931

Wind Bin 3	01 Minute			02 Minute			03 Minute			04 Minute			05 Minute		
	Time Stamp	Leq (dBA)	Wind Speed (m/s)	Time Stamp	Leq (dBA)	Wind Speed (m/s)	Time Stamp	Leq (dBA)	Wind Speed (m/s)	Time Stamp	Leq (dBA)	Wind Speed (m/s)	Time Stamp	Leq (dBA)	Wind Speed (m/s)
	03-20-2020 11:36:00 PM	40.4	2.999	05-06-2020 1:43:00 AM	39.7	3.009	04-26-2020 2:44:10 AM	37.7	2.969	04-14-2020 3:53:20 AM	40.9	2.960	04-03-2020 12:05:10 AM	39.6	2.950
	04-22-2020 2:17:30 AM	40.5	2.999	05-06-2020 1:39:50 AM	38.5	2.989	05-06-2020 1:40:30 AM	39.6	2.969	05-06-2020 3:38:30 AM	40.5	2.960	05-06-2020 1:45:10 AM	40.0	2.950
	04-26-2020 12:33:10 AM	39.2	2.999	05-06-2020 1:40:20 AM	39.9	2.989	05-06-2020 1:41:00 AM	39.7	2.969	05-06-2020 3:39:00 AM	40.3	2.960	03-20-2020 11:37:10 PM	41.6	3.058
	05-06-2020 1:27:40 AM	39.3	2.999	05-06-2020 1:42:50 AM	39.4	2.989	05-06-2020 1:38:10 AM	39.7	3.038	03-20-2020 11:37:30 PM	40.9	3.048	04-03-2020 12:03:40 AM	40.0	3.058
	05-06-2020 4:14:30 AM	41.1	2.999	04-03-2020 12:12:40 AM	39.6	2.979	05-06-2020 1:40:40 AM	39.6	3.038	05-05-2020 4:51:40 AM	38.8	3.048	04-26-2020 2:13:30 AM	37.6	3.058
	05-06-2020 1:39:10 AM	40.1	3.009	03-20-2020 10:53:00 PM	41.2	2.969	04-09-2020 3:40:40 AM	42.1	2.960	05-06-2020 2:23:40 AM	41.0	3.048	04-03-2020 12:05:30 AM	40.2	2.940

APPENDIX I
EXPANDED WIND ANGLE



Monitoring Location C – R208		
Turbine ID	Turbine's impact at the receptor location (dBA)	Total impact from all turbines at the receptor (dBA)
T7	34.9	39.7
T8	33.0	39.7

Wind Angles – Monitor C – 135° Sector

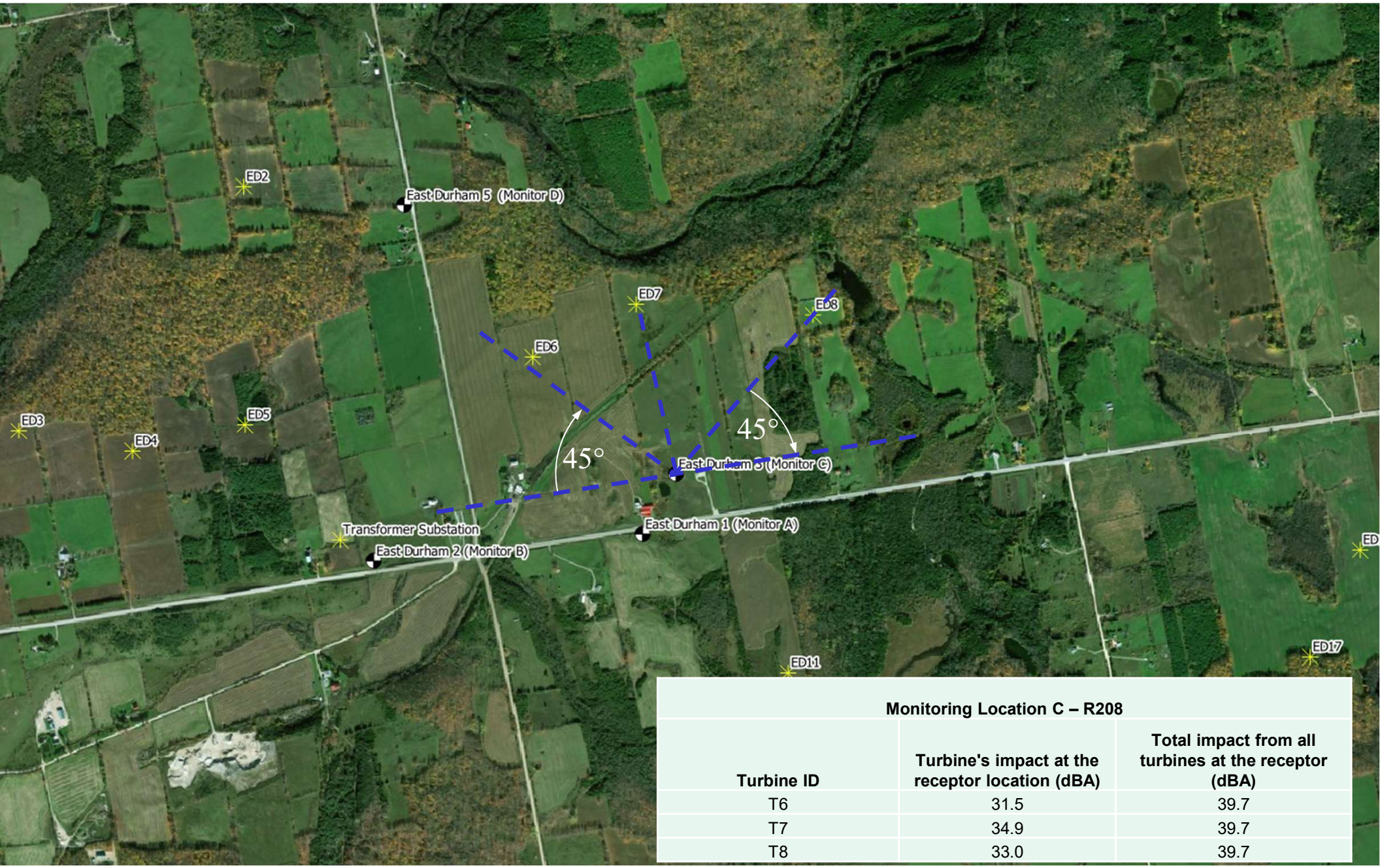
East Durham Wind Farm, County of Grey, Ontario

Project #1502606

Drawn by: MFA

Figure: I.1

Date: August 21, 2020



Monitoring Location C – R208		
Turbine ID	Turbine's impact at the receptor location (dBA)	Total impact from all turbines at the receptor (dBA)
T6	31.5	39.7
T7	34.9	39.7
T8	33.0	39.7

Wind Angles – Monitor C – 180° Sector

East Durham Wind Farm, County of Grey, Ontario

Project #1502606

Drawn by: MFA

Figure: I.2

Date: August 21, 2020

APPENDIX J

MEMO TO MECP JUNE 19, 2020

600 Southgate Drive
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MEMORANDUM

DATE:	2020-06-19	**RWDI Reference No.:** 1502606
TO:	Miroslav Ubovic	**EMAIL:** Miroslav.Ubovic@ontario.ca
CC:	Derek Dudek	**EMAIL:** Derek.Dudek@nexteraenergy.com
	John S. Ritchie	**EMAIL:** john.s.ritchie@ontario.ca
FROM:	Ben Coulson	**EMAIL:** Ben.Coulson@RWDI.com
RE:	**Monitor C Results, Spring 2020 Campaign** **East Durham Wind Energy Centre** **County of Grey, Ontario**	

Dear Miroslav,

Further to our conference call of May 22, 2020, this memo summarizes the data collected at Monitor C during RWDI's spring 2020 measurement campaign at the East Durham Wind Energy Centre. It also includes options for a path forward, subject to agreement with the MECP.

Background

RWDI previously assessed the East Durham Wind Energy Centre in the report titled "Acoustic Audit Immission Report #1" and dated January 26, 2018, and the report titled "RAM I-Audit #2 Report (Ver. 3) and dated May 10, 2019. Obtaining a complete data set for these I-audits was a challenge at some monitoring locations due to available wind conditions and, in some cases, land owner constraints. As a result, the MECP requested additional monitoring for one season at a worst-case location to address the incomplete datasets. Monitor C was selected as representative of the worst-case receptor based on discussions with MECP. It was deployed March 12, 2020. Data updates to show progress towards completion were provided bi-weekly to MECP.

Data sets remained incomplete after 10 weeks of monitoring. A conference call was convened on May 22, 2020 with the MECP to discuss the status. During this call the MECP agreed that continued data collection would be unproductive given valid data had slowed such that only a few valid data points had been added in the prior weeks, as a result of unusable wind directions and lower than anticipated power output. Continued monitoring through the summer period was not expected to be productive due to the anticipated change in wind directions and lower summer wind speeds. The 2017 Protocol filtering requirements for turbine electrical power output and wind direction were the primary factors in reducing the number of valid points. Hence, a joint decision was made to terminate monitoring despite the incomplete data sets.

The MECP expressed it would consider any conclusions that could be drawn from the limited Monitor C data set, including the use of alternative analysis or data filtering methods.

Monitoring Results

The data from the measurement period is as summarized in the table below.

Table 1: Summary of Sound Levels at East Durham Monitor C during Spring 2020

Wind Speed	Total Sound (Turbines On)			Ambient Sound (Turbines Off)			Turbine Only Sound	Sound Level Limit	Over REA Limits?
	Average L_{EQ}	Valid 10-Second Intervals	Standard Deviation	Average L_{EQ}	Valid 10-Second Intervals	Standard Deviation			
(m/s)	(dBA)		(dBA)	(dBA)		(dBA)	(dBA)	(dBA)	(Yes/No)
1	40	4	0.08	31	620	0.55	39	40	N/A[2]
2	40	54	0.75	32	1236	0.57	39	40	N/A[2]
3	40	142	0.94	32	416	0.71	39	40	N/A[2]
4	41	101	0.90	34	34	1.6	40	40	N/A[2]
5	43	57	1.1	41	5	5.0	39	41[1]	N/A[2]
6	45	51	1.4	41	1	0	43	41[1]	N/A[2]
7	48	16	1.6	-	0	-	-	43	N/A[2]

Notes:

[1] - Limit has been amended to account for elevated background levels under Section D 3.5 of the 2017 Compliance Protocol for Wind Turbine Noise.

[2] - Insufficient valid data points to make a statement on compliance based on the 2017 Compliance Protocol for Wind Turbine Noise.

Table 1 shows that there is insufficient data for the operational points in all wind bins; however, there is sufficient parked data in wind bins 1, 2, and 3. In these lower wind bins the turbine-only level is below the sound level limits. The 6 m/s bin does show a turbine only value above the sound level limit, but it is based on a single ambient data point so the results are not reliable. Additionally, the standard deviations are all 2 dB or less for all wind bins except the 5 m/s ambient bin which only has 5 data points.

As a result of the above, a review of compliance is only reasonable for the lower wind speed bins. Where data bins have less than 20 points, the standard deviations are likely unrealistic, either too high or too low, which can be directly attributed to the small number of data points. Even the 34 ambient data points at 4 m/s could be considered marginal.

The most useful results are in wind bins 2 and 3, which exhibit a reasonable number of valid points (meeting the Protocol for ambient data) and low standard deviations. Since both of these wind bins show compliance, if 54 points was an acceptable minimum number of valid total sound points, they would satisfy the requirement for compliance per Section E5.5 (1)b of the 2017 Protocol (i.e., two wind bins in the 1-4 m/s range are compliant).

Analysis

Statistical theory can be used to understand the importance of the number of valid total sound sample points, particularly if 54 data points alters the conclusions. T-statistics are used where the population standard deviation is unknown and a sample of a population is taken, such as occurs in these types of monitoring programs (i.e., a sample is taken of all the possible data points that could occur). The true population mean is related to the sample mean via the margin of error as follows:

Population Mean = Sample Mean ± Margin of Error

In other words, the statistical values of the measurements can be used to assess the level of confidence that the population mean lies within the interval defined by the sample mean plus and minus the margin of error.

The margin of error around the sample mean for any data bin can be determined from the sample standard deviation and number of sample points based on statistical t-values as follows:

$$\text{Margin of Error} = t^* \cdot s / \sqrt{n}$$

Where, ***t**** = critical t-value for a particular confidence level
s = sample standard deviation
n = number of samples

For the 2 m/s bin, with 54 sampled total sound (turbine on) points and a sample standard deviation of 0.75 dB, and using a 99.99% confidence interval for a critical t-value of 4.0, the resulting margin of error is 0.4 dB. In other words, there is 99.99% confidence that the population mean of total sound is between 39.6 and 40.4 dBA. Similarly, for the ambient data (turbine off), there is 99.99% confidence that the population mean is between 31.9 and 32.1 dBA.

As a conservative comparison, the turbine only sound level can be estimated using the highest total sound value in the 99.99% confidence interval (i.e., 40.4 dBA) and the lowest ambient value (i.e., 31.9 dBA). The resulting turbine only value of 39.7 dBA for the 2 m/s wind bin is below the applicable 40 dBA limit. Despite this very conservative comparison and the low number of data points, additional sampling of the 2 m/s wind speed is expected to yield a similar or lower turbine only value 99.99% of the time.

A similar comparison for the 3 m/s wind bin gives 99.99% confidence intervals of 39.7 to 40.3 dBA for total sound (turbine on) and 31.9 to 32.1 dBA for ambient sound (turbine off). The resulting worst-case turbine only value is 39.6 dBA for 3 m/s, below the applicable 40 dBA limit. Hence, additional sampling of the 3 m/s wind speed is expected to yield a similar or lower turbine only value 99.99% of the time.

Based on these results, sound levels at Monitor C demonstrate continued compliance with the applicable sound level limits despite the limited data collected.

Alternate Data Filtering

The collected data set was also reviewed to assess whether some alterations to the data filtering based on the 2017 Protocol could yield more valid data points. Pending MECP approval, these methods reviewed may be used individually or together to improve the completeness of the Monitor C data.

The review of the data filtering focused on the total sound (turbine on) points at 2 and 3 m/s wind speeds since these bins had achieved the 2017 Protocol's minimum number of data points for ambient (turbine off) conditions.

Power vs. RPM

Lighthill (1952)[1] famously showed that aeroacoustic noise associated with turbulence and separated flows over an airfoil (such as a wind turbine blade) is a fourth power function of air speed over the surface of the airfoil. In a wind turbine, this airfoil air speed is a function of the incoming wind speed and the blade rotational speed (i.e., RPM). The wind turbine generator ideally operates in an optimal rotational speed range to efficiently generate electrical power. Hence, in higher winds the turbine blades may pitch to reduce the rotational speed and keep it in the optimal range. Similarly, in low wind conditions the blades may pitch to increase rotational speed towards the optimal range. Given this behavior, the turbine sound emissions may remain high even when electrical power generation is lower.

Experience with the operating parameters of wind turbines suggests that they have a range where they may be operating near their maximum rated RPM but produce less than 85% of the maximum electrical output power. Since the Compliance Protocol requires that the turbines be operating at 85% of more of their maximum rated electrical output to be counted as a valid operational point, there can be points that are omitted where the turbines are operating at high RPM but lower power output.

Figures 1 and 2 plot the electrical power output versus the rotational speed of the main turbine (T7) for Monitor C for the 2 and 3 m/s wind speeds, respectively. The graphs show all of the data, data filtered for the respective wind speed (i.e., 2 or 3 m/s), and data filtered for 75% and 85% of maximum power. These graphs illustrate that there is a range of power outputs down to about 75% of maximum power where the turbines are operating at functionally the same RPM as when they are at maximum power. Since the turbine sound levels depend on the RPM of the blades, lowering the power criterion filter to 75% would capture more valid operational points but still correlate to higher sound levels.

[1] Hansen, C.H., Doolan, C.J., and Hansen, K.L.; Wind Farm Noise – Measurement, Assessment and Control; John Wiley & Sons; 2017.

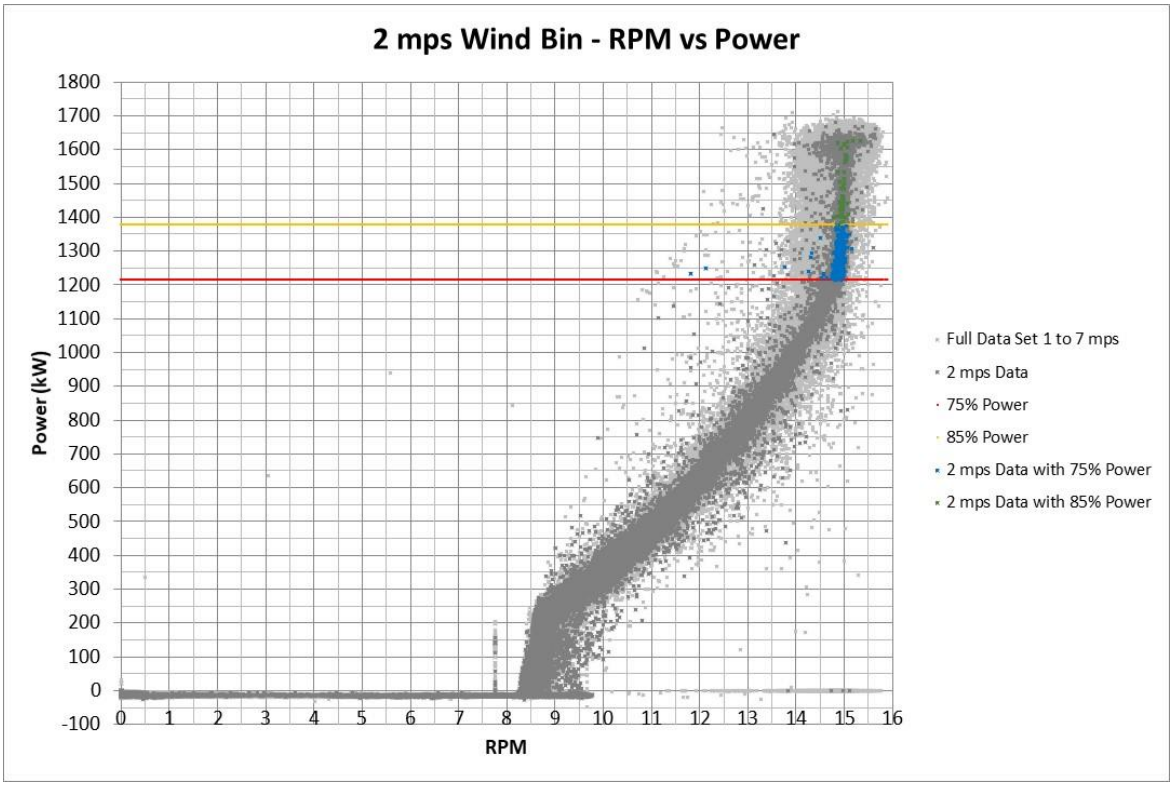

Figure 1: Influence of Rotational Speed (RPM) for Different Power Filter Thresholds (2 m/s winds)

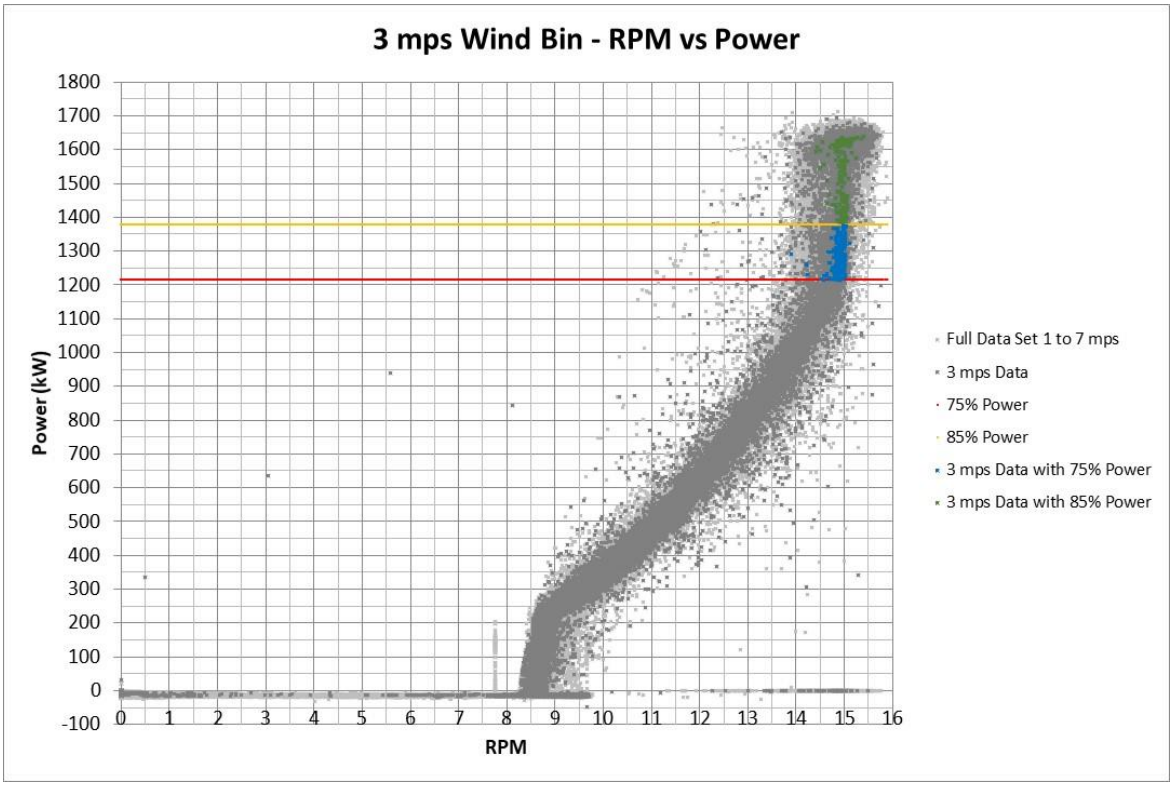

Figure 2: Influence of Rotational Speed (RPM) for Different Power Filter Thresholds (3 m/s winds)

Sound vs. Power

To validate the consistency in the sound levels, the same data are plotted in Figures 3 and 4 as the total sound versus electrical power for 2 and 3 m/s winds, respectively. The graphs highlight the valid operational data based on an 85% power threshold and the proposed 75% power threshold. They show that the potential data points remain in the same sound level range for both power thresholds. Listening to remove extraneous events has not been completed for the 75% power threshold data, so it shows some high sound-level points that are expected to be removed. However, the similarity of the sound levels gives confidence that the operational points based on 75% of maximum power produce similar sound levels to those based on 85% of the maximum power.

Sound vs. Wind Speed

Figures 5 and 6 show the total sound versus the hub height wind speed for the 2 and 3 m/s winds measured at 10m, respectively. These graphs show the overlap in sound levels for various hub wind speeds despite the consistent wind near ground level indicating wind shear is not a critical factor in influencing sound level. In addition, given the rotational speed is near its maximum for both power thresholds, these graphs also show how the incoming wind speed is not as influential as rotational speed. These figures demonstrate that the proposed 75% power threshold contains similar sound level data points compared to the 85% power threshold.

Summary

As shown in the figures, reducing the power threshold to 75% is expected to approximately double the number of valid total sound points. While this adjustment will not achieve the minimum data requirements in the 2017 Protocol, it does capture significantly more points at 2 and 3 m/s which would help give additional confidence to the conclusions. At this power threshold the graphs also show there is no appreciable alteration in sound levels despite the lower power threshold. It is recommended that this alteration to the power exclusion threshold be considered if additional data confidence is desired beyond the statistical analysis provided above.

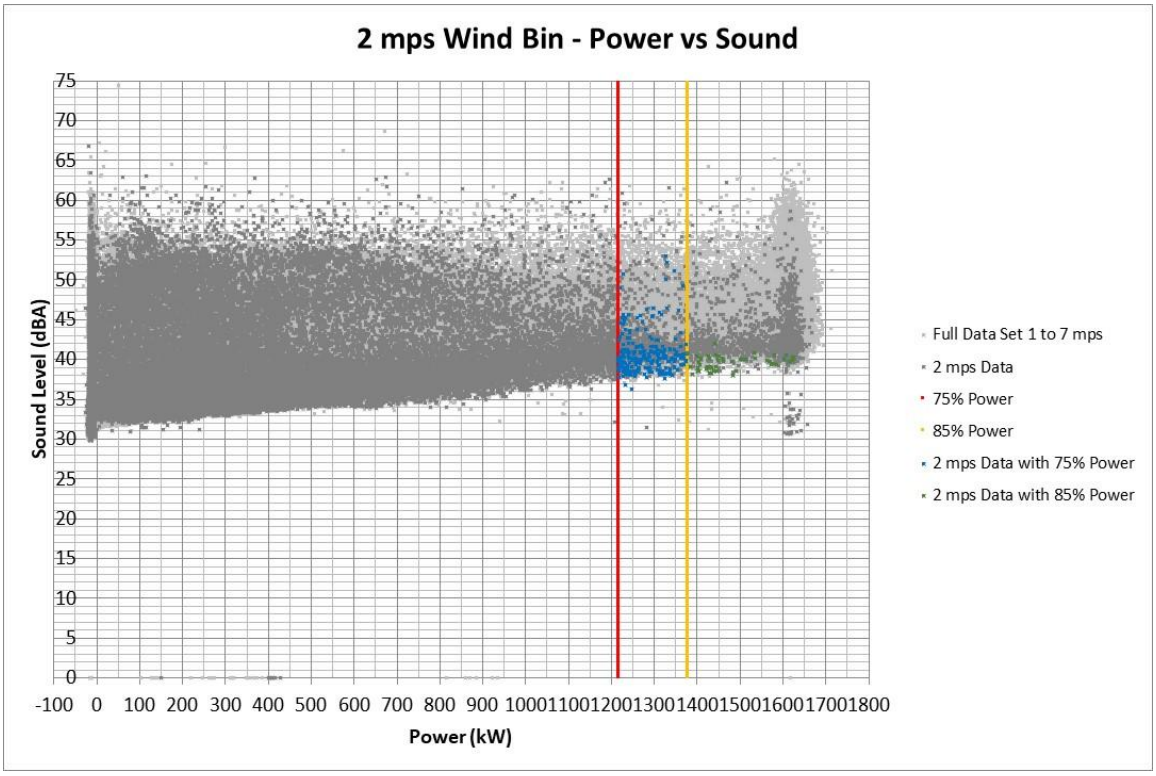

Figure 3: Influence of Power Filter Threshold on Sound Levels (2 m/s winds)

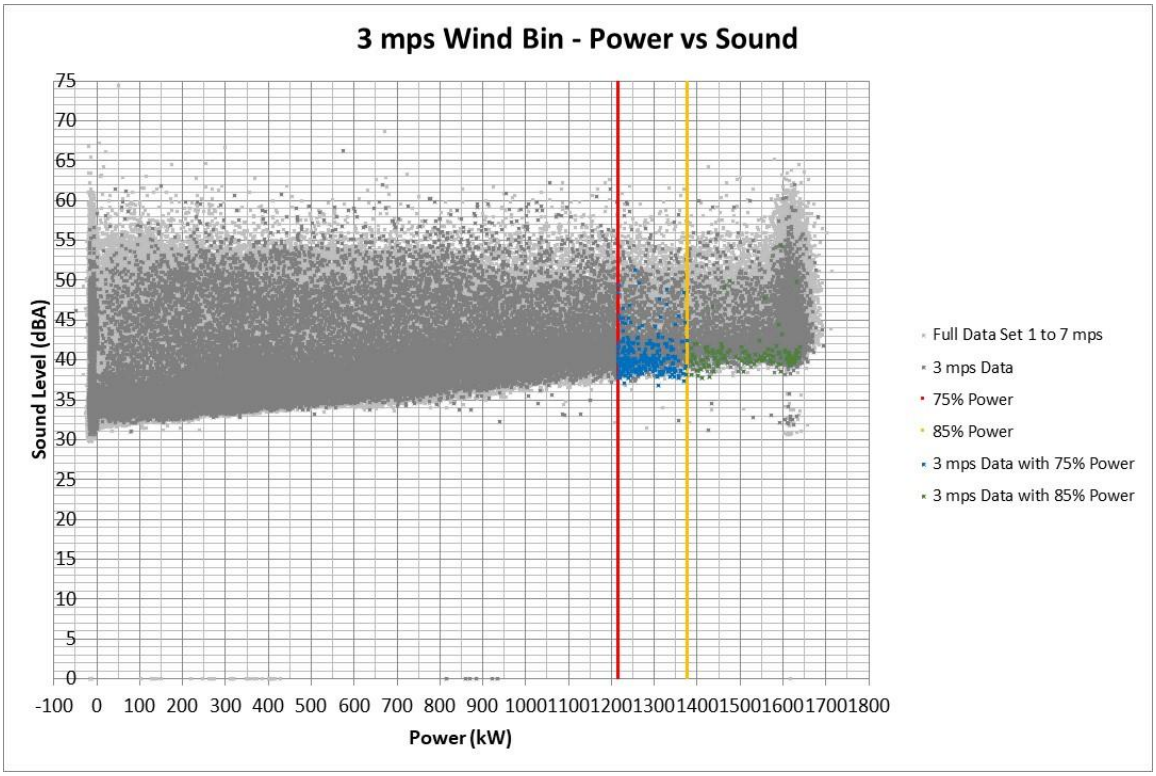

Figure 4: Influence of Power Filter Threshold on Sound Levels (3 m/s winds)

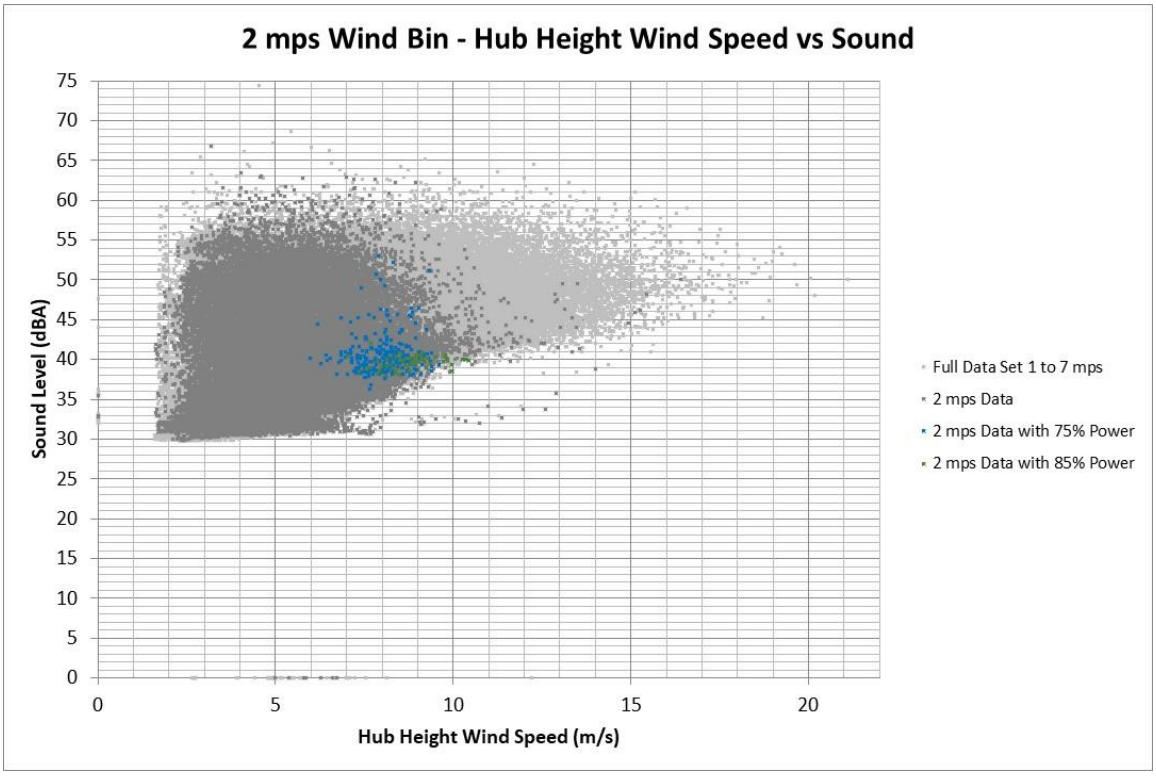

Figure 5: Influence of Power Threshold on Sound Level for Differing Hub Height Wind Speed (2 m/s winds)

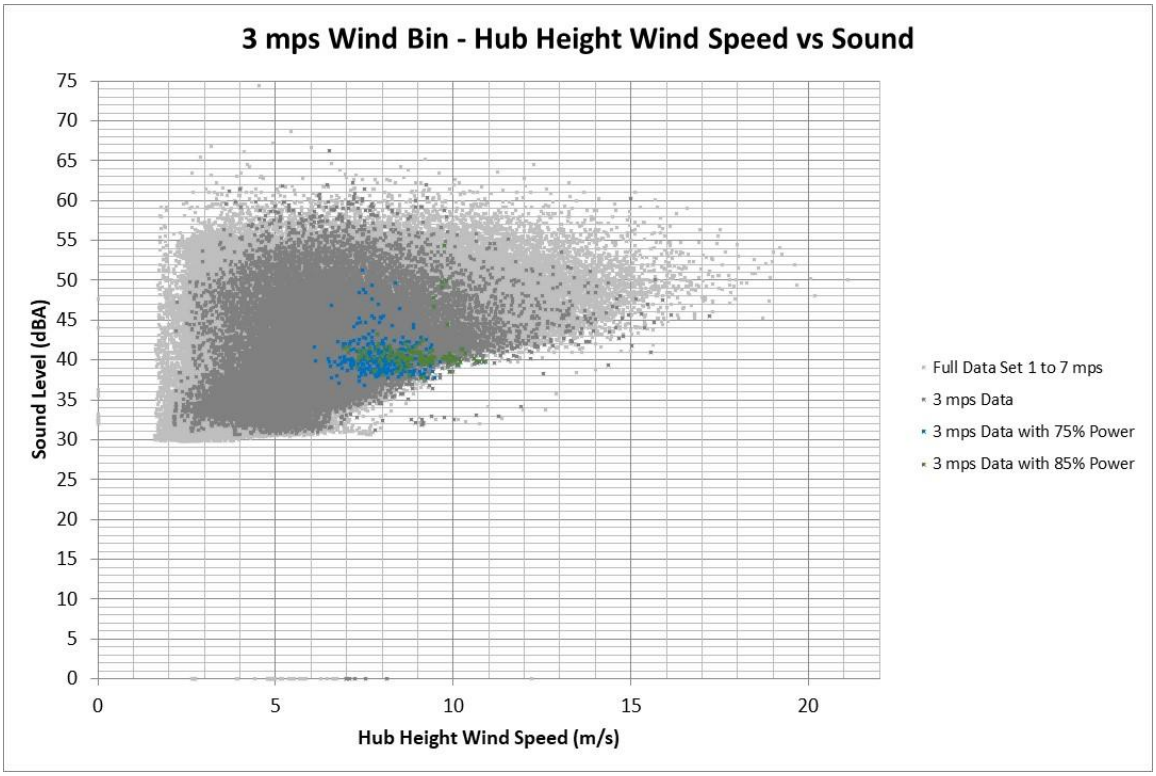

Figure 6: Influence of Power Threshold on Sound Level for Differing Hub Height Wind Speed (3 m/s winds)

Closing

We trust that this is the information that you require currently. If you have any questions, please do not hesitate to contact us.

Yours truly,

RWDI

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