

# APPENDIX P

## Noise Tables

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## NOISE MONITORING DATA

The noise measurements were conducted Tuesday, March 16, 2010 at the two residential receptors shown in Figure 14-1 located along Route 312 near the project site and the data was assumed to be representative of the surrounding community. Noise measurements were taken for a 15-minute period during the Midday off-peak period between 2PM-4PM to determine the Leq noise levels representative of ambient conditions in the study area. The dominant source of ambient noise during the measurements was the observed steady flow of traffic along Route 312 immediately adjacent to the residential receptors.

The ambient noise levels were measured with the CEL 490.B.1 Sound Level Meter, which conforms to both the IEC and ANSI specifications for a Type 1 integrating sound level meter (SLM). The noise instrument was calibrated before and after the monitoring program using the CEL Instruments Acoustic Calibrator Type CEL-177. All noise equipment was certified as being calibrated electronically by the manufacturer within the past year and the appropriate certificates are included in this Appendix.

The ambient temperature recorded during noise testing was 62-63<sup>0</sup>F under sunny/partly cloudy skies, and wind speeds varied between 0-8 miles per hour with no wind gusts encountered during the measurements, and the relative humidity was 18-20 percent. The noise microphone was mounted on a tripod 5 feet above grade and at least 6 feet away from any large reflecting surface to avoid interference with sound propagation. The microphone was covered with a wind screen and the SLM was set to the A-weighted scale and slow-response during the ambient noise measurements.

The results of the noise monitoring program are summarized in Table 14-2 and the noise section of this report. The following data sheets represent the printout of the test results as recorded by the SLM instrumentation.

# CASELLA

## USA

### CERTIFICATE OF CALIBRATION

Certificate # 062896

#### Equipment Information

Model No.: CEL - 490.B1  
Serial No.: 208251  
Manufacturer: CEL INSTRUMENTS



#### Calibration References

Casella USA hereby certifies that the above listed sound measuring instrument has been tested according to the manufacturer's specifications and meets the requirements of the relevant American National Standards Institute (ANSI) Standard for Sound Level Meters S1.4 Type 1 - 1983.

#### Calibration Information

This instrument was calibrated against standards which are either traceable to the National Institute of Standards and Technology (NIST) or they have been derived by approved ratio techniques.

#### Sound Pressure Acoustic Calibration Results

The data represents the response of the sound level meter to the reference source corrected for atmospheric conditions at the time of calibration.

	Nominal Value	Tolerance	As Received	As Adjusted
Level (dB)	114.0	±1.0	114.0	114.0

#### Atmospheric Conditions

Temperature: 25 °C  
Relative Humidity: 78 %  
Static Pressure: 1003 mbar

Calibrated by: *John Brown* Date: 8/11/09 Calibration Due: 8/11/10  
Service Engineer

#### Casella USA

17 Old Nashua Road #15  
Amherst, NH 03031  
Email Service@CasellaUSA.com

Tel: 800-366-2966  
603-672-0031  
FAX: 603-672-8053



# CERTIFICATE OF CALIBRATION

Certificate # 063330

## Equipment Information

Model No.: CEL - 177  
Serial No.: 873079  
Manufacturer: CEL INSTRUMENTS

## Calibration References

Casella USA hereby certifies that the above listed instrument has been tested according to the manufacturer's specifications and meets the requirements of the relevant American National Standards Institute (ANSI) Standard for Sound Calibrators S1.40 - 1984

## Calibration Information

This instrument was calibrated against standards which are either traceable to the National Institute of Standards and Technology (NIST) or they have been derived by approved ratio techniques.

## Sound Pressure Calibration Results

The data represents the Sound Pressure level and the Frequency of the calibrator corrected for atmospheric conditions at the time of calibration.

	Nominal Value	Tolerance	As Received	As Adjusted
Frequency (Hz)	1,000	$\pm 5.0$	998.7	1000.5
Level (dB)	114.0	$\pm 0.5$	113.8	114.0
Voltage (mV)	100.0	$\pm 2.0$	95.9	100.0

## Atmospheric Conditions

Temperature: 23 °C  
Relative Humidity: 50 %  
Static Pressure: 997 mbar

Calibrated by:  Date: 2/25/10  
Service Engineer

Calibration Due: 2/25/11

**Casella USA**

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