

NOISE SURVEY REPORT

AT
MIRADOR LAS CASAS
SAN JUAN, P.R.



Physical Address:

Villa Blanca Industrial Park
Plaza Bairoa Suite 215
Caguas, P.R. 00725
www.sharetechgroup.com

October 23, 2020

Alexandra Domenech
Fernando L. Sumaza & Company Inc.
PO Box 3685
Mayaguez, P.R. 00681-3685
Email: adomenech@sumaza.org.com
Phone: 787-831-6030

RE: Environmental Noise Survey for Mirador Las Casas at San Juan, Puerto Rico

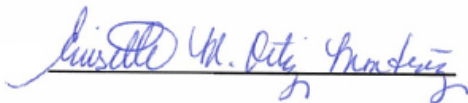
Dear Mrs. Domenech,

Enclosed please find professional consulting services report for subject environmental noise survey conducted at the location of Mirador Las Casas in San Juan, P.R., on October 8, 2020.

We appreciate the opportunity to service you and look forward to continuing supporting Fernando L. Sumaza & Company Inc. in the near future.

If you have any questions, do not hesitate to contact us.

Sincerely,



Enisette Ortiz
EHS Coordinator
ShareTech Group

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EXECUTIVE SUMMARY

This report summarizes the results obtained from environmental noise survey conducted at Mirador Las Casas on San Juan, P.R. (See figure #1 for location) during October 8, 2020.

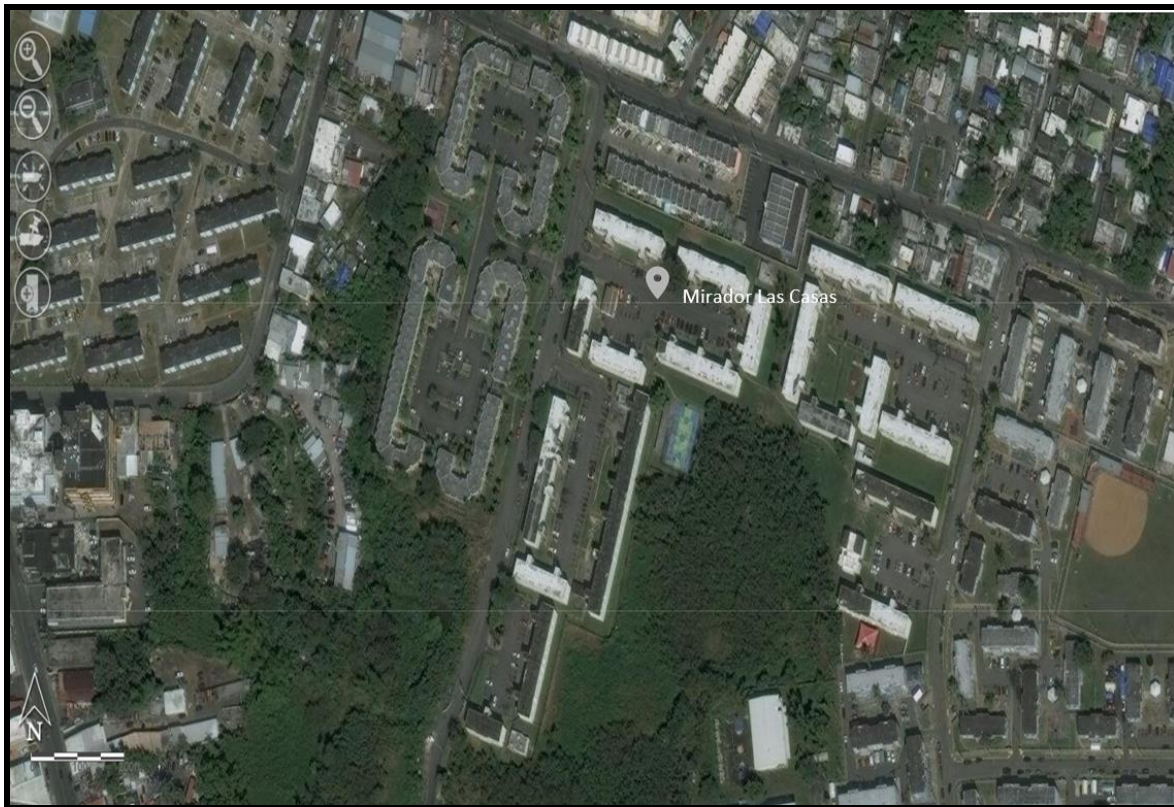


Figure #1- Survey Location for Mirador Las Casas (Satellite Photo)

The results from this survey are summarized on Table # 4 and 5. The interpretation of the results is presented on page 16, and the conclusions and recommendations on page 17.

The LDN represents the 24 hours average sound level. For daytime period, the Time – Weighted Average LDN is 59.8 dB. For nighttime period, the Time – Weighted Average LDN is 63.3 dB.

Based on the data collected during the noise survey at daytime and nighttime, the Calculated Time – Weighted LDN Average _{24 hours} is 61.1 dB reveal a LDN level acceptable using the acceptability criterion of 65 dB for exterior.

INTRODUCTION

ShareTech Group was contracted by Fernando L. Sumaza & Company Inc. on September 24, 2020 to perform a limited and specific-scope noise survey during day and night periods at their project Mirador Las Casas in the municipality of San Juan. The study was carried out to measure the noise levels at selected locations at the perimeter of the Project to confirm compliance with the established HUD Noise criteria (24 CFR 51).

HUD defines the day period with hours in a range between 7:00 am and 10:00 pm and the night period in a range between 10:01 pm until 6:59 am. Refer to Table I on next page for the HUD noise criteria.

This study was carried out considering the Environmental Quality Board (EQB) regulatory requirements. Results were compared with the EQB established noise limits during night and day periods based on the residential nature of the buildings in the area. Day and night periods for environmental noise control limits are defined in the Puerto Rico's Environmental Quality Board (EQB) Noise Control Regulation, refer to Table III on Appendix 6 referenced from said regulation.

The area under study is classified as general residential (R-3), as established by the Puerto Rico Planning Board, known in Spanish as "Junta de Planificación". Table I on the next page shows the HUD Site Acceptability Standards for Day – Night Average Sound Level in decibels. An exterior noise level of 65 dB or lower is considered acceptable by HUD.

The HUD exterior noise standards refer to the degree of acceptability of the noise environment at the site. Noise environment is determined by the additional sound levels of those generated by buildings or other facilities containing noise sensitive uses.

The standards shall usually apply at a location 2 meters (6.5 feet) from the building housing noise sensitive activities in the direction of the predominant noise source. Where the building location is undetermined, the standards shall apply 2 meters (6.5 feet) from the building setback line nearest to the predominant noise source. The standards shall also apply at other locations where it is determined that quite outdoor space is required in an area ancillary to the principal use on the site.

The noise environment inside a building is considered acceptable if: (i) The noise environment external to the building complies with these standards, and (ii) the building is constructed in a manner common to the area or, if of uncommon construction, has at least the equivalent noise attenuation characteristics.

Under HUD, the Site Acceptability Standards for Day – Night sound level (in decibels) is presented below:

Table #1 – HUD Site Acceptability Standards

Acceptable or Unacceptable	Day-night average sound level (in decibels)	Special approvals and requirements
Acceptable	Not exceeding 65 dB (1)	None.
Normally Unacceptable	Above 65 dB but not exceeding 75 dB	Special Approvals (2)
		Environmental Review (3).
		Attenuation (4).
Unacceptable	Above 75 dB	Special Approvals (2).
		Environmental Review (3).
		Attenuation (5).

Notes:

- (1) Acceptable threshold may be shifted to 70 dB in special circumstances pursuant to §51.105(a).
- (2) See §51.104(b) for requirements.
- (3) See §51.104(b) for requirements.
- (4) 5 dB additional attenuation required for sites above 65 dB but not exceeding 70 dB and 10 dB additional attenuation required for sites above 70 dB but not exceeding 75 dB. (See §51.104(a).)
- (5) Attenuation measures to be submitted for approval on a case-by-case basis.

This report includes the results of the noise levels during the daytime period as well as during the nighttime period.

METHODOLOGY & EQUIPMENT

The noise survey was conducted in accordance with the requirements under HUD 24 CFR 51 and by EQB's Noise Pollution Control Regulation entitled "Reglamento para el Control de la Contaminación de Ruido" Appendix 1. The following tasks were performed as part of this survey:

Task 1) As stated earlier, the noise survey was also conducted in accordance to the requirements of EQB's Noise Pollution Control Regulation entitled "*Reglamento para el Control de la Contaminación de Ruido*" and with *HUD Noise criteria (Appendix 1)* as stated under 24 CFR 51 using one (1) calibrated sound level meter under the required American National Standards Institute (ANSI) Specifications. Two 3M Sound Pro Series DL Sound Level Meters was used to carry out this study.

The noise survey was conducted during the early morning periods at hours considered within both, the HUD and EQB daytime and nighttime regulatory definition on Thursday, October 8, 2020. Four (4) noise measurement locations were surveyed during the daytime and nighttime periods on that day. No rain event occurred during the noise survey.

The noise survey was carried out using two (2) calibrated sound level meters which meets the "American National Standards Institute" (ANSI) specification for Type 1, sound level meters on its latest revision (See Figure #2). Sound Pro Series DL Sound Level Meters manufactured by 3M (Quest Technologies) were used. Refer to Appendix 3 for data on calibration of the sound level meter instruments. The instruments are equipped with software and data logger and generate the data used to prepare this report. The raw data is included under Appendix 4.



Figure #2- Sound Level Meter Photo

The sequence followed for conducting the noise survey is described below:

- The noise level measurements for the nighttime period were started at around 05:31 a.m. and finished approximately 06:39 a.m. The EQB nighttime noise period is encompassed between 10:01 p.m. and 06:59 a.m. Refer to table #II for details.
- The measurements for the daytime period were started at around 07:01 a.m. and finished approximately 08:06 a.m. The EQB daytime noise period is encompassed between 07:00 a.m. and 10:00 p.m. Refer to table #III for details.
- The sound level meters were calibrated pre and post the measurement using calibrator model AC-300. Refer to Appendix 2 for equipment calibration data.

The readings were collected using two (2) calibrated Sound Level Meters Model Sound-Pro DL:

- Meter 1 – Serial Number: BLL100004 (Calibrator serial number: AC300001324)
- Meter 2 – Serial Number: BLP080003 (Calibrator serial number: AC300005899)

The monitoring stations (MS) or locations of this noise survey at Mirador Las Casas perimeter are described in the table shown above. Refer to Figure #3 for these locations.

Table #2- Noise Survey Data Collected on Nighttime Period

Meter	Monitoring Station (MS)	Time	Run Time	Description – Refer to figure #3 for locations
1	1	05:34:57 am	00:30:06	Located at west side.
2	2	05:31:37 am	00:30:02	Located at north side.
1	3	06:09:31 am	00:30:08	Located at east side.
2	4	06:05:15 am	00:30:02	Located at south side.

Table #3- Noise Survey Data Collected on Daytime Period

Meter	Monitoring Station (MS)	Time	Run Time	Description- Refer to figure #3 for locations
1	1	07:01:43 am	00:30:04	Located at west side.
2	2	07:01:08 am	00:30:02	Located at north side.
1	3	07:36:55 am	00:30:04	Located at east side.
2	4	07:32:50 am	00:30:03	Located at south side.

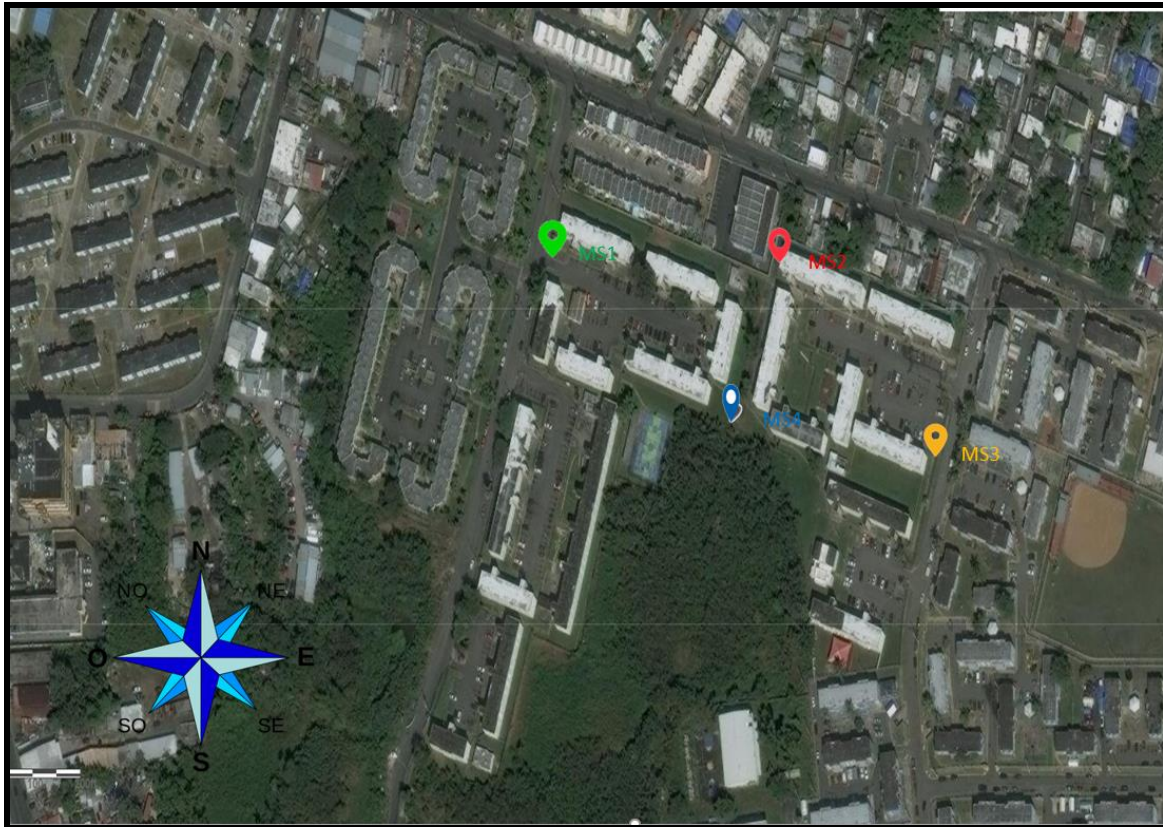


Figure #3- Monitoring Station Locations on Mirador Las Casas Aerial Photo

The monitoring stations (MS) for daytime and nighttime period are described as:

- **Monitoring Station #1:** Located at west side. Refer to Figure #3, the green pin.
- **Monitoring Station #2:** Located at north side. Refer to Figure #3, the red pin.
- **Monitoring Station #3:** Located at east side. Refer to Figure #3, the yellow pin.
- **Monitoring Station #4:** Located at south side. Refer to Figure #3, the blue pin.

***Note:** No rain event occurred during the noise survey. See Appendix 4 for Field Notes.



Figure #5- Monitoring Stations #1 location (West Side).



Figure #6- Monitoring Stations #2 location (North Side).

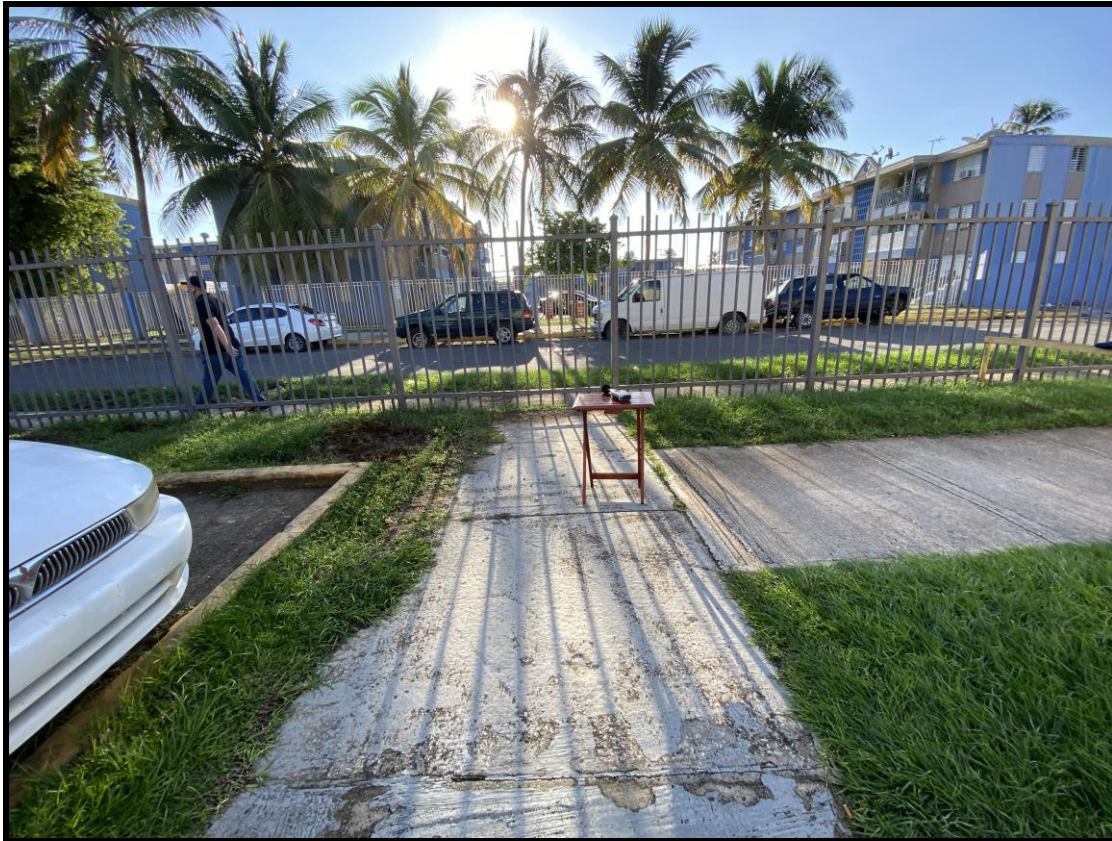


Figure #7- Monitoring Stations #3 location (East Side).



Figure #8- Monitoring Stations #4 location (South Side).

Task 2) Preparation of Report - This report summarizes the results of the noise survey and was prepared for client use and discussions as they consider pertinent. Report includes findings, explanation of existing particular conditions during this noise survey, and interpretations of results, conclusions and recommendations, as applicable. **Appendix 3** includes the noise level measurements data and associated graphs as collected by the sound level meters, data logged and retrieved at the end of the study.

REPORT OF RESULTS

On October 8, 2020, a noise survey was performed during the day and night periods establish by EQB. No rain event occurred during the noise survey. The levels of this survey will be compared to the levels established on the regulation.

The detailed results of this survey are illustrated in Appendix 3. A summary was prepared using LDN values for each monitoring station. The LDN represents the day / night sound level, this measurement is a 24 – hour average sound level where 10 dB is added to all the readings that occur between 10 pm and 7 am. The results of this survey are presented in tables #4 & 5, and in figure #9.

Table #4- Readings Recorded by the Sound Level Meters (Nighttime Period)

Monitoring Stations (MS)	LDN
Monitoring Station 1	65.5 dB
Monitoring Station 2	61.9 dB
Monitoring Station 3	63.0 dB
Monitoring Station 4	62.6 dB
Average Nighttime LDN	63.3 dB

Table #5- Readings Recorded by the Sound Level Meters (Daytime Period)

Monitoring Stations (MS)	LDN
Monitoring Station 1	60.2 dB
Monitoring Station 2	68.7 dB
Monitoring Station 3	55.3 dB
Monitoring Station 4	54.8 dB
Average Daytime LDN	59.8 dB

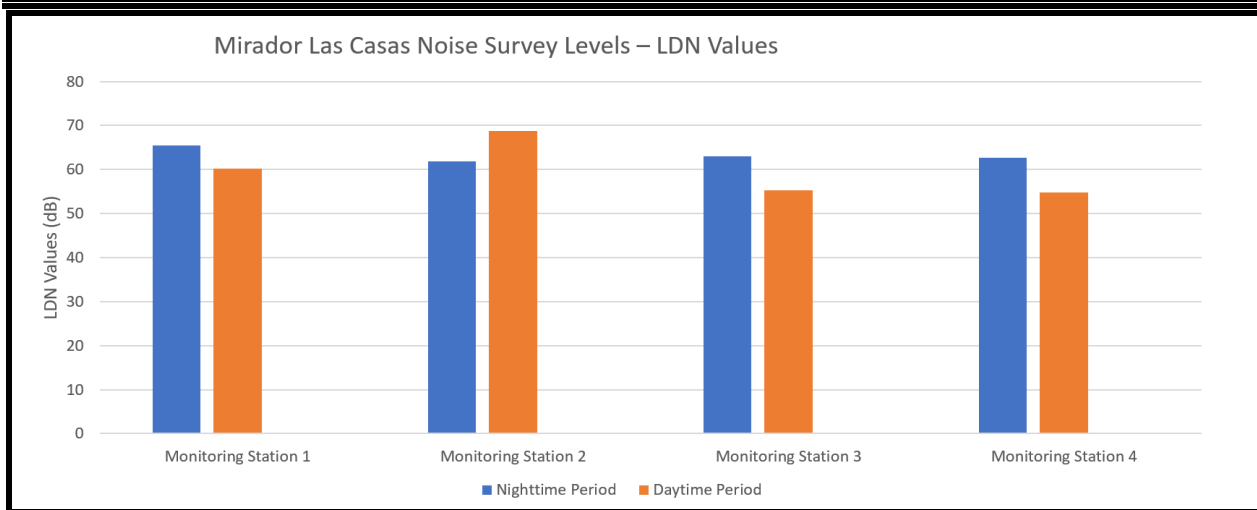


Figure #9- Monitoring Stations LDN Values.

A Calculated Time-Weighted Average for 24 hours is presented below:

$$\begin{aligned}
 \text{Weighted Average 24 hours} &= ((15/24) * \text{Daytime Period LDN}) + ((9/24) * \text{Nighttime Period LDN}) \\
 &= ((15/24) * 59.8 \text{ dB}) + ((9/24) * 63.3 \text{ dB}) \\
 &= 37.4 \text{ dB} + 23.7 \text{ dB}
 \end{aligned}$$

Calculated Time-Weighted LDN Average 24 hours = 61.1 dB

INTERPRETATION OF RESULTS

The EQB's Noise Pollution Control Regulation entitled "*Reglamento para el Control de la Contaminación de Ruido*" and HUD Noise criteria (Appendix 1) under 24 CFR 51 established the guidelines for an exterior noise level of 65 dB or lower is considered acceptable by HUD.

The LDN represents the 24 hours average sound level. For daytime period the Time – Weighted Average LDN is 59.8 dB. For nighttime period the Time – Weighted Average LDN is 63.3 dB.

Based on the data collected during the noise survey at daytime and nighttime, the Calculated Time – Weighted LDN Average _{24 hours} is 61.1 dB reveal a LDN level acceptable using the acceptability criterion of 65 dB for exterior.

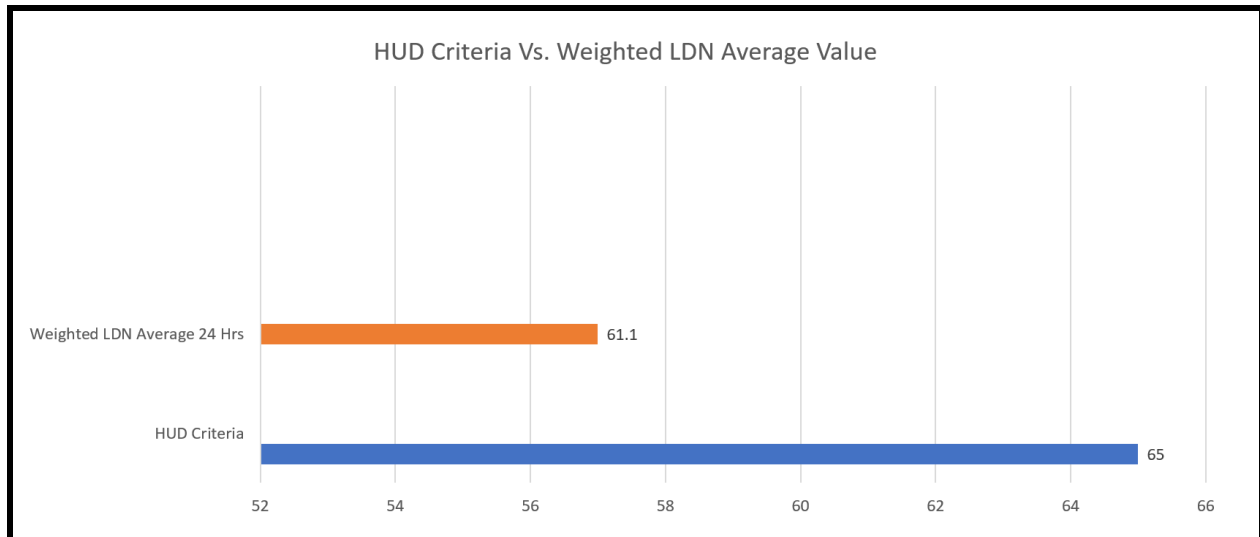


Figure #10- HUD Criteria -vs- Weighted LDN Average Value.

CONCLUSIONS AND RECOMMENDATIONS

The HUD noise acceptability criterion of 65 dB for exterior of the Mirador Las Casas was met and, in our opinion, no further restrictions or controls are applicable to this project.

ACRONYMS

SPL - Sound Pressure Level will be displayed, with the selected weighting and response characteristics. The value displayed is the maximum SPL during the previous second. (SPL is also always shown in the display bar indicator.)

LEQ - The average integrated sound level accumulated while in the RUN mode is shown in the numeric display. LEQ indicates that a 3dB exchange rate was used for the measurements.

LAVG - The same type of measurement as LEQ, except that a 4, 5 or 6dB exchange rate was used. The display will be correct for the exchange rate selected.

TWA - Time Weighted Average. The average level accumulated during a study, but calculated with an eight-hour integration time.

LMAX - The Maximum SPL obtained while in the RUN mode is shown in the numeric display. With PEAK response selected, this functions as a Peak Hold.

LMIN - The Minimum Sound Pressure Level obtained while in the RUN mode is shown in the numeric display.

LN - The SPL exceeded for N of the time during a study. Four user selectable values are calculated. The default values are L5, L10, L50 and L90. The values may be changed in the PARA Setup Menu.

LDN - Day/Night Sound Level. The average sound pressure over a 24 hour study, with additional factors for time of day. Sound pressures between the hours of 10 pm and 7 am are increased by 10dB prior to being averaged. A 3dB exchange rate should be used and is generally assumed.

CNEL - Community Noise Exposure Level. The average sound pressure over a 24 hour study, with additional factors for time of day. Sound pressures between the hours of 7 pm and 10 pm are increased by 5dB prior to being averaged. Sound pressures between the hours of 10 pm and 7 am are increased by 10dB prior to being averaged. A 3dB exchange rate should be used and is generally assumed. If an exchange rate other than 3dB is selected via the Setup Menu, CNEL will not be calculated and the display will show.

% OL - Percentage of time during the study that an overload (OL) condition occurred. Overload indicates that the signal has exceeded the measuring range.

- SEL** - Sound Exposure in Pascal-squared seconds or Pascal-squared hours, switching from Pa2S to Pa2H at 3600 Pa2S. The display will show if the exchange rate is not 3dB.
- SEL** - The Sound Exposure Level is the constant Sound level which, if lasting for one Second, would deliver the same amount of acoustical energy as that accumulated over the entire Study
- RTMS** or **RTHM** - The total RUN time will be displayed. Time may be displayed in MIN:SEC and HRS:MIN. The MIN:SEC display for a Study that lasts over one hour will wrap around to 00:00. The HRS:MIN display will count to 99:59 and then wrap around to 00:00 but the actual time will be stored in memory.
- LPK** - The Peak Level. The output of a second peak detector may be viewed as LPK or logged. The frequency weighting is independent of the main RMS detector and may be set in the PAPA setup menu as 2PK. The selection of whether or not to log peaks is made in the LOG Setup Menu. The weighting selection (A, C or LIN) is made in the PAPA Setup Menu. While viewing LPK the weighting of the second peak detector is displayed, and the Weighting and Response keys are disabled.
- LLOG** - The LEQ (or LAVG) last logged during a study. Data is logged at a user defined interval. This feature may be used to display a timed LEQ for the previous logging interval. This display updates at the end of each logging interval. The display will show LLOG " if LEQ is not being logged.
- TAKM** - The time integration of individual Taktmaximal values. Taktmaximal is the maximum level (LMAX) encountered over either a 3 or 5 second interval. 3 or 5 second Taktmaximal is selected in the PAPA Setup Menu. Individual Taktmaximal (LMAX) values may be logged by setting the logging interval to 3 or 5 seconds in the LOG Setup Menu. Taktmaximal measurements are required by some countries' noise regulations. A Taktmaximal measurement calculates a higher average level for highly impulsive sounds than does a LEQ measurement. TAKM is affected by the Exchange Rate and should be run with an Exchange Rate of 3dB.
- BATT** - Displays the voltage of the weaker of the two 9 volt batteries to give an indication of remaining life. The low battery indication (DAT) on the display occurs at approximately 6.8 volts.
- LC-A** - An optional second RMS detector may be used to provide a simultaneous C-A weighted LEQ or LAVG of the measured sound. Refer to section 3.6 C-A Option".

DEFINITIONS

DbA- Sound level in decibels read on the A scale of sound-level meter. The A scale of a sound discriminates against very low frequencies (as does the human ear) and is therefore better for measuring general sound levels.

dBC- Sound level in decibels read on the C scale of sound-level meter. The C scale discriminates very little against very low frequencies.

Decibel (dB)- A unit used to express sound-power level (L and sound-pressure level (Lv). Sound power is the total acoustic output of a sound source in watts (W). By definition, sound-power level, in decibels, is: $L_w = 10 \log W/W_o$, where W is the sound power of the source and W_o is the reference sound power of 10^{-12} . Because the decibel is also used to describe other physical quantities, such as electrical current and electrical voltage, the correct reference quantity must be specified.

Far field- In noise measurements, this refers to the distance from the noise source where the sound-pressure level decreases 6 dBA for each doubling of distance (inverse square law).

Filter- A device for separating components of a signal on the basis of its frequency. It allows components in one or more frequency bands to pass relatively unattenuated, and it greatly attenuates components in other frequency bands.

Free sound field (free field)- A field in a homogeneous, isotropic medium free from boundaries. In practice it is a field in which the effects of the boundaries are negligible over the region of interest.

Frequency (in Hz)- Rate at which pressure oscillations are produced One hertz is equivalent to one cycle per second A subjective characteristic of sound related to frequency is pitch.

Hearing conservation- The prevention or minimizing of noise-induced deafness through the use of hearing protection devices, the control of noise through engineering methods, annual audiometric tests, and employee training.

Hearing level- The deviation in decibels of an individual's threshold from the zero reference of the audiometer.

Near Field- In noise measurements, refers to a field in the immediate vicinity of the noise source where the sound-pressure level does not follow the inverse square law.

Noise- Any unwanted sound.

Pink noise- Noise that has been weighted, especially at the low end of the spectrum, so that the energy per band (usually octave band) is approximately constant over the spectrum.

Sound absorption coefficient- The ratio of the sound energy absorbed by the surface of a medium (or material) exposed to a sound field (or to sound radiation) to the sound energy incident on that surface.

Sound analyzer- A device for measuring the band-pressure level or pressure-spectrum level of a sound as a function of frequency.

Sound level- A weighted sound-pressure level obtained by the use of metering characteristics and the weighting A, B, or C specified in ANSI S1.4.

Sound-level meter and octave-band analyzer- Instruments for measuring sound-pressure levels in decibels referenced to 0.0002 microbars. Readings can also be made in specific octave bands, usually beginning at 75 Hz and continuing through 10,000 Hz.

Sound-pressure level, SPL- The level, in decibels, of a sound is 20 times the logarithm to the base 10 of the ratio of the pressure of this sound to the reference pressure, which must be explicitly stated.

Sound transmission- The word sound usually means sound waves traveling in air. However, sound waves also travel in solids and liquids. These sound waves may be transmitted to air to make sound we can hear.

APPENDIX 1: “REGLAMENTO PARA EL CONTROL DE LA CONTAMINACIÓN DE RUIDO”

APPENDIX 2: EQUIPMENT DATA CALIBRATION

Meter #1

CALIBRATED CERTIFICATE OF CALIBRATION

BY TRANSCAT

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106

PO Number: 4081-1



Certificate/SO Number: 17-C6T3Y-20-1 Revision 0

Manufacturer: 3M Company
Model Number: Soundpro SE/DL
Description: Sound Level Meter
Serial Number: BLL100004
ID: NONE

As-Found: In Tolerance
As-Left: In Tolerance

Issue Date: Feb 07, 2020
Calibration Date: Feb 07, 2020
Due Date: Feb 07, 2021

Calibrated To: Manufacturer Specification
Calibration Procedure: 1-AC28066-1

Transcat Calibration Laboratories have been audited and found in compliance with ISO/IEC 17025:2017. Accredited calibrations performed within the Lab's Scope of Accreditation are indicated by the presence of the Accrediting Body's Logo and Certificate Number. Any measurements on an accredited calibration not covered by that Lab's Scope of Accreditation are listed in the notes section of the certificate. SCC, NRC, CLAS or ANAB do not guarantee the accuracy of an individual calibration by accredited laboratories.

Transcat calibrations, as applicable, are performed in compliance with the requirements of the Transcat Quality Manual QAC-P01-000, the customer's Purchase Order and/or Quality Agreement requirements, ISO 9001:2015, ANSI/NCSL Z540.1-1994 (R2002) or NQA-1, as applicable. Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are listed on this certificate.

Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST), or the National Research Council of Canada (NRC), or other national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Arrangement, or accepted fundamental and/or natural physical constants, or by the use of specified methods, consensus standards or ratio type measurements. Documentation supporting traceability information is available for review upon written request at a Transcat facility. The measured quantity and the measurement uncertainty are required for further dissemination of traceability.

A binary decision rule, utilizing simple acceptance, and simple rejection criteria is used for the determination of compliance. When compliance statements are present, they are reported without factoring in the effects of uncertainty and comply with the guidelines established by ASME B89.7.3.1-2001 (R2011) as follows:

-The acceptance zone is defined as: less than or equal to the high limit, and/or greater than or equal to the low limit. The rejection zones are defined as greater than the high limit and/or less than the low limit.

-Single measurement results in the acceptance zone are identified as in-tolerance. Single measurement results in the rejection zone are identified as out-of-tolerance (OOT).

-When all measurement results are in the acceptance zone for repeated measurements, for the same characteristic, the test is identified as in-tolerance. For repeated characteristic measurements, a single measurement result in the rejection zone, will cause the test to be identified as out-of-tolerance (OOT).

Uncertainties are reported with a coverage factor $k=2$, providing a level of confidence of approximately 95%. All calibrations have been performed using processes having a TUR of 4:1 or better (3:1 for mass calibrations), unless otherwise noted. The Test Uncertainty Ratio (TUR) is calculated in accordance with NCSL International RP-18. For mass calibrations: Conventional mass referenced to 8.0 g/cm³.

The results in this report relate only to the item calibrated or tested. Recorded calibration data is valid at the time of calibration within the stated uncertainties at the environmental conditions noted. The determination of compliance to the specification is specific to the model/serial no./ID no. referenced above based on the tolerances shown; these tolerances are either the original equipment manufacturers (OEM's) warranted specifications or the client's requested specifications. This certificate may not be reproduced except in full, without the written approval of Transcat. Additional information, if applicable may be included on separate report(s).

As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O O T	TUR
Source Level (A Weight)							
A Weight	114dB	$\pm(1 \text{ dB})$	96.9	98.9	98.1 dB		3.1 : 1
125Hz	114dB	$\pm(1 \text{ dB})$	104.4	106.4	105.6 dB		2.9 : 1
250Hz	114dB	$\pm(1 \text{ dB})$	109.8	111.8	110.8 dB		2.8 : 1

Date Received: February 05, 2020
Service Level : R5

Certificate - Page 1 of 3

Customer Number: 1-593031-000
QPS-F20-013R5 08/26/2019 FP001R5 9/23/2019

CALIBRATED CERTIFICATE OF CALIBRATION

BY TRANSCAT

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106



PO Number: 4057-1

Certificate/SO Number: 17-C6M0R-260-1 Revision 0

Manufacturer: 3M Company
Model Number: AC-300
Description: Sound Level Calibrator
Serial Number: AC-300001324
ID: NONE

As-Found: In Tolerance
As-Left: In Tolerance

Issue Date: Jan 20, 2020
Calibration Date: Jan 20, 2020
Due Date: Jan 20, 2021

Calibrated To: Manufacturer Specification
Calibration Procedure: 1-AC62139-1

Transcat Calibration Laboratories have been audited and found in compliance with ISO/IEC 17025:2017. Accredited calibrations performed within the Lab's Scope of Accreditation are indicated by the presence of the Accrediting Body's Logo and Certificate Number. Any measurements on an accredited calibration not covered by that Lab's Scope of Accreditation are listed in the notes section of the certificate. SCC, NRC, CLAS or ANAB do not guarantee the accuracy of an individual calibration by accredited laboratories.

Transcat calibrations, as applicable, are performed in compliance with the requirements of the Transcat Quality Manual QAC-P01-000, the customer's Purchase Order and/or Quality Agreement requirements, ISO 9001:2015, ANSI/NCCL Z540.1-1994 (R2002) or NQA-1, as applicable. Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are listed on this certificate.

Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST), or the National Research Council of Canada (NRC), or other national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Arrangement, or accepted fundamental and/or natural physical constants, or by the use of specified methods, consensus standards or ratio type measurements. Documentation supporting traceability information is available for review upon written request at a Transcat facility. The measured quantity and the measurement uncertainty are required for further dissemination of traceability.

A binary decision rule, utilizing simple acceptance, and simple rejection criteria is used for the determination of compliance. When compliance statements are present, they are reported without factoring in the effects of uncertainty and comply with the guidelines established by ASME B89.7.3.1-2001 (R2011) as follows:

-The acceptance zone is defined as: less than or equal to the high limit, and/or greater than or equal to the low limit. The rejection zones are defined as greater than the high limit and/or less than the low limit.

-Single measurement results in the acceptance zone are identified as in-tolerance. Single measurement results in the rejection zone are identified as out-of-tolerance (OOT).

-When all measurement results are in the acceptance zone for repeated measurements, for the same characteristic, the test is identified as in-tolerance. For repeated characteristic measurements, a single measurement result in the rejection zone, will cause the test to be identified as out-of-tolerance (OOT).

Uncertainties are reported with a coverage factor $k=2$, providing a level of confidence of approximately 95%. All calibrations have been performed using processes having a TUR of 4:1 or better (3:1 for mass calibrations), unless otherwise noted. The Test Uncertainty Ratio (TUR) is calculated in accordance with NCSL International RP-18. For mass calibrations: Conventional mass referenced to 8.0 g/cm³.

The results in this report relate only to the item calibrated or tested. Recorded calibration data is valid at the time of calibration within the stated uncertainties at the environmental conditions noted. The determination of compliance to the specification is specific to the model/serial no./ID no. referenced above based on the tolerances shown; these tolerances are either the original equipment manufacturers (OEM's) warranted specifications or the client's requested specifications. This certificate may not be reproduced except in full, without the written approval of Transcat. Additional information, if applicable may be included on separate report(s).

As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O O T TUR
Source Level						
1000Hz	114.0dB	±(0.4 dB)	113.6	114.4	114.0 dB	1.1 : 1
250Hz	114.0dB	±(0.4 dB)	113.6	114.4	114.0 dB	1.1 : 1

Field not applicable.

Date Received: January 17, 2020
Service Level : R3

Certificate - Page 1 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/26/2019 FP001R6 9/23/2019

CALIBRATED CERTIFICATE OF CALIBRATION

BY TRANSAT

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106

PO Number: 4057-1



Certificate/SO Number: 17-C6M0R-260-1 Revision 0

Traceable Standards

Asset	Manufacturer	Model Number	Description	Cal Date	Due Date	Traceability Number	Use
13414	General Radio	1986	Sound Level Calibrator	24-Sep-19	31-Mar-20	CAS-405612-X0D4F C-901	AF/AL
18985	Simpson Electric Company	886-2	Sound Level Meter	1-Mar-19	31-Mar-20	17-818985-721-1	AF/AL
21848	Agilent/HP	53131A	Frequency Counter, 2 Channel	11-Apr-19	30-Apr-20	17-821848-23-1	AF/AL
O10277	Extech Instrument Corporation	407732	Sound Level Meter, Type-2	27-Sep-19	30-Sep-20	17-8O10277-13-1	AF/AL

The use of the standard is defined as: AF - used for as-found readings, AL - used for as-left readings.

Environmental Data

Temperature	Relative Humidity	Temp/ RH Asset
67.95°F /19.97°C	44.40%	O10253-1

Legend

Topic	Description
Accuracy	UUT specification that establishes expected tolerances and a time limit(calibration interval) over which the instrument is expected to hold these tolerances
As Found	Initial measurement results
As Left	Measurement results after adjustment and/or repair
Blank Data Field	Test is not applicable for the UUT
Cal Process Uncertainty (CPU)	The uncertainty of calibration process for the reported measurement result
Cover Factor (k)	A measure of uncertainty that defines an interval about the measurement result
Low / High Limits	Establishes UUT acceptable performance limits for the test measurement
Measurement Uncertainty	The dispersion of the values attributed to a measured quantity
OOT	Out of Tolerance
Setpoints	Measurement target values
Traceability	Unbroken chain of comparisons relating an instrument's measurements to a known standard(s)
Traceability Number	Unique identifier(s) used to document traceability of calibration standards
TUR	Test Uncertainty Ratio, ratio of the tolerance or specification of the test measurement in relation to the uncertainty in measurement results
UUT	Unit Under test

Date Received: January 17, 2020
Service Level: R3

Certificate - Page 2 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/28/2019 FP001R6 9/23/2019



CALIBRATED CERTIFICATE OF CALIBRATION

BY TRANSOT

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106

PO Number: 4081-1



Certificate/SO Number: 17-C6T3Y-20-1 Revision 0

Traceable Standards

Asset	Manufacturer	Model Number	Description	Cal Date	Due Date	Traceability Number	Use
13414	General Radio	1986	Sound Level Calibrator	24-Sep-19	31-Mar-20	CAS-405612-X0D4F 0-901	AF/AL

The use of the standard is defined as: AF - used for as-found readings, AL - used for as-left readings.

Environmental Data

Temperature	Relative Humidity	Temp / RH Asset
68.20°F /20.1°C	51.10%	O10253-1

Legend

Topic	Description
Accuracy	UUT specification that establishes expected tolerances and a time limit(calibration interval) over which the instrument is expected to hold these tolerances
As Found	Initial measurement results
As Left	Measurement results after adjustment and/or repair
Blank Data Field	Test is not applicable for the UUT
Cal Process Uncertainty (CPU)	The uncertainty of calibration process for the reported measurement result
Cover Factor (K)	A measure of uncertainty that defines an interval about the measurement result
Low / High Limits	Establishes UUT acceptable performance limits for the test measurement
Measurement Uncertainty	The dispersion of the values attributed to a measured quantity
OOT	Out of Tolerance
Setpoints	Measurement target values
Traceability	Unbroken chain of comparisons relating an instrument's measurements to a known standard(s)
Traceability Number	Unique Identifier(s) used to document traceability of calibration standards
TUR	Test Uncertainty Ratio, ratio of the tolerance or specification of the test measurement in relation to the uncertainty in measurement results
UUT	Unit Under test

Calibrated At:
8334B Arrow Ridge Blvd.
Charlotte, NC 28273

Facility Responsible:
8334B Arrow Ridge Blvd.
Charlotte, NC 28273
800-828-1470

Calibrated By:
Electronically Signed By:
Tracy Dye

Tracy Dye Feb 07, 2020
Calibration Technician 11:23:57 -05:00

Reviewed By:
Electronically Signed By:
Adam McCrea

Adam McCrea Feb 07, 2020
Lab Manager 11:30:39 -05:00

Unit Barcode: 
0600B335689

Date Received: February 05, 2020
Service Level: R6

Certificate - Page 3 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/25/2019 FP001R6 9/23/2019



CALIBRATED BY TRANS CAT CERTIFICATE OF CALIBRATION

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106

PO Number: 4081-1



Certificate/SO Number: 17-C6T3Y-20-1 Revision 0

As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O O T TUR
Source Level (A Weight)						
500Hz	114dB	±(1 dB)	113.0	115.0	113.9 dB	2.7 : 1
1000Hz	114dB	±(1 dB)	114.2	116.2	115.3 dB	2.7 : 1
2000Hz	114dB	±(1 dB)	114.0	116.0	114.4 dB	1.6 : 1
4000Hz						
Sound Level (C Weight)						
C Weight	114dB	±(1 dB)	113.0	115.0	113.9 dB	2.7 : 1
125Hz	114dB	±(1 dB)	113.0	115.0	114.1 dB	2.7 : 1
250Hz	114dB	±(1 dB)	113.0	115.0	114.0 dB	2.7 : 1
500Hz	114dB	±(1 dB)	113.0	115.0	113.8 dB	2.7 : 1
1000Hz	114dB	±(1 dB)	113.0	115.0	113.9 dB	2.7 : 1
2000Hz	114dB	±(1 dB)	113.0	115.0	113.6 dB	1.6 : 1
4000Hz						
Sound Level Test						
Level Test	74dB	±(1 dB)	73.0	75.0	74.5 dB	2.2 : 1
1kHz	84dB	±(1 dB)	83.0	85.0	83.9 dB	2.2 : 1
1kHz	94dB	±(1 dB)	93.0	95.0	94.1 dB	2.2 : 1
1kHz	104dB	±(1 dB)	103.0	105.0	103.8 dB	2.2 : 1
1kHz	114dB	±(1 dB)	113.0	115.0	113.7 dB	2.7 : 1
1kHz						

Field not applicable.

Date Received: February 05, 2020
Service Level : R6

Certificate - Page 2 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/25/2019 FP001R6 0/23/2019



CALIBRATED CERTIFICATE OF CALIBRATION

BY **TRANSOT**

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106



PO Number: 4057-1

Certificate/SO Number: 17-C6M0R-260-1 Revision 0

Calibrated At:
8334B Arrow Ridge Blvd.
Charlotte, NC 28273

Facility Responsible:
8334B Arrow Ridge Blvd.
Charlotte, NC 28273
800-828-1470

Calibrated By:
Electronically Signed By:
Tracy Dye

Tracy Dye Jan 20, 2020
Calibration Technician 07:37:21 -05:00

Reviewed By:
Electronically Signed By:
Eric Hubrich for

Adam McCrea Jan 20, 2020
Lab Manager 08:27:48 -05:00

Unit Barcode:
0900B333287

Date Received: January 17, 2020
Service Level: R3

Certificate - Page 3 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/26/2019 FP001R6 9/23/2019

Meter #2

CALIBRATED CERTIFICATE OF CALIBRATION

BY TRANSCAT

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106

PO Number: 3887-1



Certificate/SO Number: 17-C515K-260-1 Revision 0

Manufacturer: 3M Company
Model Number: SoundPro DL-1-1/3
Description: Sound Level Meter, Type-1
Serial Number: BLP080003
ID: NONE

As-Found: In Tolerance
As-Left: In Tolerance

Issue Date: Oct 30, 2019
Calibration Date: Oct 30, 2019
Due Date: Oct 30, 2020

Calibrated To: Manufacturer Specification
Calibration Procedure: 1-AC28066-1

Transcat Calibration Laboratories have been audited and found in compliance with ISO/IEC 17025:2017. Accredited calibrations performed within the Lab's Scope of Accreditation are indicated by the presence of the Accrediting Body's Logo and Certificate Number. Any measurements on an accredited calibration not covered by that Lab's Scope of Accreditation are listed in the notes section of the certificate. SCC, NRC, CLAS or ANAB do not guarantee the accuracy of an individual calibration by accredited laboratories.

Transcat calibrations, as applicable, are performed in compliance with the requirements of the Transcat Quality Manual QAC-P01-000, the customer's Purchase Order and/or Quality Agreement requirements, ISO 9001:2015, ANSI/NCSL Z540.1-1994 (R2002) or NQA-1, as applicable. Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are listed on this certificate.

Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST), or the National Research Council of Canada (NRC), or other national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Arrangement, or accepted fundamental and/or natural physical constants, or by the use of specified methods, consensus standards or ratio type measurements. Documentation supporting traceability information is available for review upon written request at a Transcat facility. The measured quantity and the measurement uncertainty are required for further dissemination of traceability.

A binary decision rule, utilizing simple acceptance, and simple rejection criteria is used for the determination of compliance. When compliance statements are present, they are reported without factoring in the effects of uncertainty and comply with the guidelines established by ASME B89.7.3.1-2001 (R2011) as follows:

- The acceptance zone is defined as: less than or equal to the high limit, and/or greater than or equal to the low limit. The rejection zones are defined as: greater than the high limit and/or less than the low limit.
- Single measurement results in the acceptance zone are identified as in-tolerance. Single measurement results in the rejection zone are identified as out-of-tolerance (OOT).
- When all measurement results are in the acceptance zone for repeated measurements, for the same characteristic, the test is identified as in-tolerance. For repeated characteristic measurements, a single measurement result in the rejection zone, will cause the test to be identified as out-of-tolerance (OOT).

Uncertainties are reported with a coverage factor $k=2$, providing a level of confidence of approximately 95%. All calibrations have been performed using processes having a TUR of 4:1 or better (3:1 for mass calibrations), unless otherwise noted. The Test Uncertainty Ratio (TUR) is calculated in accordance with NCSL International RP-18. For mass calibrations: Conventional mass referenced to 8.0 μcm^3 .

The results in this report relate only to the item calibrated or tested. Recorded calibration data is valid at the time of calibration within the stated uncertainties at the environmental conditions noted. The determination of compliance to the specification is specific to the model/serial no./ID no. referenced above based on the tolerances shown; these tolerances are either the original equipment manufacturers (OEM's) warranted specifications or the client's requested specifications. This certificate may not be reproduced except in full, without the written approval of Transcat. Additional information, if applicable may be included on separate report(s).

As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O O T TUR
Source Level (A Weight)						
A Weight	114dB	$\pm(1 \text{ dB})$	95.9	98.9	97.4 dB	3.1 : 1
125Hz	114dB	$\pm(1 \text{ dB})$	104.4	106.4	104.9 dB	2.9 : 1
250Hz	114dB	$\pm(1 \text{ dB})$	109.8	111.8	110.2 dB	2.8 : 1

Date Received: October 23, 2019
Service Level : R6

Certificate - Page 1 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/26/2010 FP001R6 9/23/2019

CALIBRATED CERTIFICATE OF CALIBRATION

BY TRANSOT

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106

PO Number: 3887-1



Certificate/SO Number: 17-C515K-260-1 Revision 0

As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O O T	TUR
Source Level (A Weight)							
500Hz	114dB	±(1 dB)	113.0	115.0	113.4 dB		2.7 : 1
1000Hz	114dB	±(1 dB)	114.2	116.2	114.5 dB		2.7 : 1
2000Hz	114dB	±(1 dB)	114.0	116.0	114.3 dB		1.6 : 1
4000Hz							
Sound Level (C Weight)							
C Weight	114dB	±(1 dB)	113.0	115.0	113.3 dB		2.7 : 1
125Hz	114dB	±(1 dB)	113.0	115.0	113.3 dB		2.7 : 1
250Hz	114dB	±(1 dB)	113.0	115.0	113.3 dB		2.7 : 1
500Hz	114dB	±(1 dB)	113.0	115.0	113.5 dB		2.7 : 1
1000Hz	114dB	±(1 dB)	113.0	115.0	113.4 dB		2.7 : 1
2000Hz	114dB	±(1 dB)	113.0	115.0	113.3 dB		1.6 : 1
4000Hz							
Sound Level Test							
Level Test	74dB	±(1 dB)	73.0	75.0	73.4 dB		2.2 : 1
1kHz	84dB	±(1 dB)	83.0	85.0	83.3 dB		2.2 : 1
1kHz	94dB	±(1 dB)	93.0	95.0	93.3 dB		2.2 : 1
1kHz	104dB	±(1 dB)	103.0	105.0	103.3 dB		2.2 : 1
1kHz	114dB	±(1 dB)	113.0	115.0	113.4 dB		2.7 : 1
1kHz							

Field not applicable.

Date Received: October 23, 2019
Service Level : RG

Certificate - Page 2 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/26/2019 FP001R6 9/23/2019

CALIBRATED CERTIFICATE OF CALIBRATION

BY **TRANSCAT**

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106

PO Number: 3887-1



Certificate/SO Number: 17-C515K-260-1 Revision 0

Traceable Standards

Asset	Manufacturer	Model Number	Description	Cal Date	Due Date	Traceability Number	Use
13414	General Radio	1986	Sound Level Calibrator	24-Sep-19	31-Mar-20	CAS-405612-X0D4F Q-901	AF/AL

The use of the standard is defined as: AF - used for as-found readings, AL - used for as-left readings.

Environmental Data

Temperature	Relative Humidity	Temp / RH Asset
67.14°F / 19.52°C	62.60%	Q10253-1

Legend

Topic	Description
Accuracy	UUT specification that establishes expected tolerances and a time limit (calibration interval) over which the instrument is expected to hold these tolerances
As Found	Initial measurement results
As Left	Measurement results after adjustment and/or repair
Blank Data Field	Test is not applicable for the UUT
Cal Process Uncertainty (CPU)	The uncertainty of calibration process for the reported measurement result
Cover Factor (k)	A measure of uncertainty that defines an interval about the measurement result
Low / High Limits	Establishes UUT acceptable performance limits for the test measurement
Measurement Uncertainty	The dispersion of the values attributed to a measured quantity
OOT	Out of Tolerance
Setpoints	Measurement target values
Traceability	Unbroken chain of comparisons relating an instrument's measurements to a known standard(s)
Traceability Number	Unique identifier(s) used to document traceability of calibration standards
TUR	Test Uncertainty Ratio, ratio of the tolerance or specification of the test measurement in relation to the uncertainty in measurement results
UUT	Unit Under test

Calibrated At:
8334B Arrow Ridge Blvd.
Charlotte, NC 28273

Facility Responsible:
8334B Arrow Ridge Blvd.
Charlotte, NC 28273
800-828-1470

Calibrated By:
Electronically Signed By:
Tracy Dye

Tracy Dye
Calibration Technician
Oct 30, 2019
09:47:04 -04:00

Reviewed By:
Electronically Signed By:
Adam McCrea

Adam McCrea
Lab Manager
Oct 30, 2019
09:54:46 -04:00

Unit Barcode:
600B0202121

Date Received: October 23, 2019
Service Level: R6

Certificate - Page 3 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/26/2019 FP001R6 9/23/2019



CALIBRATED CERTIFICATE OF CALIBRATION

BY TRANSCAT

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106



PO Number: 3887-1

Certificate/SO Number: 17-C5I5K-240-1 Revision 0

Manufacturer: 3M Company
Model Number: AC-300
Description: Sound Level Calibrator
Serial Number: AC300005899
ID: NONE

As-Found: In Tolerance
As-Left: In Tolerance

Issue Date: Oct 30, 2019
Calibration Date: Oct 30, 2019
Due Date: Oct 30, 2020

Calibrated To: Manufacturer Specification
Calibration Procedure: 1-AC62139-1

Transcat Calibration Laboratories have been audited and found in compliance with ISO/IEC 17025:2017. Accredited calibrations performed within the Lab's Scope of Accreditation are indicated by the presence of the Accrediting Body's Logo and Certificate Number. Any measurements on an accredited calibration not covered by that Lab's Scope of Accreditation are listed in the notes section of the certificate. SCC, NRC, CLAS or ANAB do not guarantee the accuracy of an individual calibration by accredited laboratories.

Transcat calibrations, as applicable, are performed in compliance with the requirements of the Transcat Quality Manual QAC-P01-000, the customer's Purchase Order and/or Quality Agreement requirements, ISO 9001:2015, ANSI/NCSL Z540.1-1994 (R2002) or NQA-1, as applicable. Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are listed on this certificate.

Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST), or the National Research Council of Canada (NRC), or other national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Arrangement, or accepted fundamental and/or natural physical constants, or by the use of specified methods, consensus standards or ratio type measurements. Documentation supporting traceability information is available for review upon written request at a Transcat facility. The measured quantity and the measurement uncertainty are required for further dissemination of traceability.

A binary decision rule, utilizing simple acceptance, and simple rejection criteria is used for the determination of compliance. When compliance statements are present, they are reported without factoring in the effects of uncertainty and comply with the guidelines established by ASME B89.7.3.1-2001 (R2011) as follows:

-The acceptance zone is defined as: less than or equal to the high limit, and/or greater than or equal to the low limit. The rejection zones are defined as greater than the high limit and/or less than the low limit.

-Single measurement results in the acceptance zone are identified as in-tolerance. Single measurement results in the rejection zone are identified as out-of-tolerance (OOT).

-When all measurement results are in the acceptance zone for repeated measurements, for the same characteristic, the test is identified as in-tolerance. For repeated characteristic measurements, a single measurement result in the rejection zone, will cause the test to be identified as out-of-tolerance (OOT).

Uncertainties are reported with a coverage factor $k=2$, providing a level of confidence of approximately 95%. All calibrations have been performed using processes having a TUR of 4:1 or better (3:1 for mass calibrations), unless otherwise noted. The Test Uncertainty Ratio (TUR) is calculated in accordance with NCSL International RP-18. For mass calibrations: Conventional mass referenced to 9.0 g/cm³.

The results in this report relate only to the item calibrated or tested. Recorded calibration data is valid at the time of calibration within the stated uncertainties at the environmental conditions noted. The determination of compliance to the specification is specific to the model/serial no./ID no. referenced above based on the tolerances shown; these tolerances are either the original equipment manufacturers (OEM's) warranted specifications or the client's requested specifications. This certificate may not be reproduced except in full, without the written approval of Transcat. Additional information, if applicable may be included on separate report(s).

As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O O T	TUR
Source Level							
	114.0dB	±(0.4 dB)	113.6	114.4	114.1 dB		1.1 : 1
1000Hz							
	114.0dB	±(0.4 dB)	113.6	114.4	114.1 dB		1.1 : 1
250Hz							

Date Received: October 23, 2019
Service Level: RS

Certificate - Page 1 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/26/2019 FP001R6 8/23/2019

CALIBRATED BY TRANSAT CERTIFICATE OF CALIBRATION

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106

PO Number: 3887-1



Certificate/SO Number: 17-C5I5K-240-1 Revision 0

As Found/As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O O Y TUR
Frequency (Hz) Measure						
Frequency	1000Hz	±(0.5% Rdg)	995	1005	1000 Hz	
	250.0Hz	±(0.5% Rdg)	248.7	251.3	250.4 Hz	

Field not applicable.

Traceable Standards

Asset	Manufacturer	Model Number	Description	Cal Date	Due Date	Traceability Number	Use
13414	General Radio	1986	Sound Level Calibrator	24-Sep-19	31-Mar-20	CAS-405612-X0D4F 0-901	AF/AL
18985	Simpson Electric Company	886-2	Sound Level Meter	1-Mar-19	31-Mar-20	17-&18985-721-1	AF/AL
O10051	HP	53132A opt 010	Frequency Counter, 2 Channel	27-Dec-18	31-Dec-19	17-&O10051-24-2	AF/AL
O10277	Extech Instrument Corporation	407732	Sound Level Meter, Type-2	27-Sep-19	30-Sep-20	17-&O10277-13-1	AF/AL

The use of the standard is defined as: AF - used for as-found readings, AL - used for as-left readings.

Environmental Data

Temperature	Relative Humidity	Temp/ RH Asset
66.67°F /19.26°C	61.40%	O10253-1

Date Received: October 23, 2019
Service Level: R6

Certificate - Page 2 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/26/2019 FP001R6 9/23/2019

CALIBRATED BY TRANSIT CERTIFICATE OF CALIBRATION

Customer: RAECO RENTS LLC
135 BERNICE DRIVE
BENSENVILLE, IL 60106

PO Number: 3887-1



Certificate/SO Number: 17-C5I5K-240-1 Revision 0

Legend

Topic	Description
Accuracy	UUT specification that establishes expected tolerances and a time limit (calibration interval) over which the instrument is expected to hold these tolerances
As Found	Initial measurement results
As Left	Measurement results after adjustment and/or repair
Blank Data Field	Test is not applicable for the UUT
Cal Process Uncertainty (CPU)	The uncertainty of calibration process for the reported measurement result
Cover Factor (k)	A measure of uncertainty that defines an interval about the measurement result
Low / High Limits	Establishes UUT acceptable performance limits for the test measurement
Measurement Uncertainty	The dispersion of the values attributed to a measured quantity
OOT	Out of Tolerance
Setpoints	Measurement target values
Traceability	Unbroken chain of comparisons relating an instrument's measurements to a known standard(s)
Traceability Number	Unique identifier(s) used to document traceability of calibration standards
TUR	Test Uncertainty Ratio, ratio of the tolerance or specification of the test measurement in relation to the uncertainty in measurement results
UUT	Unit Under test

Calibrated At:
8334B Arrow Ridge Blvd.
Charlotte, NC 28273

Facility Responsible:
8334B Arrow Ridge Blvd.
Charlotte, NC 28273
800-828-1470

Calibrated By:
Electronically Signed By:
Tracy Dye

Tracy Dye Oct 30, 2019
Calibration Technician 09:24:30 -04:00

Reviewed By:
Electronically Signed By:
Adam McCrea

Adam McCrea Oct 30, 2019
Lab Manager 09:32:15 -04:00

Unit Barcode: 90080202122


Date Received: October 23, 2019
Service Level: R6

Certificate - Page 3 of 3

Customer Number: 1-593031-000
OPS-F20-013R5 08/26/2019 FP001R6 9/23/2019

APPENDIX 3: NOISE LEVEL MEASUREMENT AND GRAPHS

APPENDIX 4: FIELD NOTES



Noise Survey Field Notes Form

Project Name:

Fernando Sumaza- Mirador Las Casas

Project Location:

San Juan, Puerto Rico

Calibrator Serial Number:

AC-300001324

Calibration Value:

114 dB

Equipment Serial Number:

BLL100004 - Meter #1

Daytime Measures

Monitoring Station (MS)	Location	Comments
Monitoring Station # 1	Located at West Side of the Mirador Las Casas	Coord: 18.4354, -66.0412
Monitoring Station # 3	Located at East Side of the Mirador Las Casas	Coord: 18.4347, -66.0389

Nighttime Measures

Monitoring Station (MS)	Location	Comments
Monitoring Station # 1	Located at West Side of the Mirador Las Casas	Coord: 18.4355, -66.0411
Monitoring Station # 3	Located at East Side of the Mirador Las Casas	Coord: 18.4347, -66.0388

Weather: The weather was clear, sunny morning

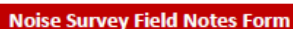
Traffic: The traffic was moderate

Neighboring: Around it has residential buildings

Other surroundings noise: Birds, passing motor vehicles, planes flying through the area.

Others: During the daytime they were employed cutting the grass with trimmers and a tractor near the stations.

Sharetech Personnel: Grace Berrios and Juan Alvarado



Daytime Measures

Nighttime Measures

Weather: The weather was clear

Traffic: The traffic was slow

Neighboring: Around it has residential buildings

Other surroundings noise: Birds, passing motor vehicles, planes flying through the area.

Others: During the daytime they were employed cutting the grass with trimmers and a tractor near the stations.

Item #	Description
	Equipment #1
	Nighttime Period
	Station #1 (5:33 AM @ 6:03 AM) (Al Oeste del predio)
	Aves cantando en todo momento.
	Auto en movimiento (5:38 am, 5:42 am, 5:53 am, 5:55 am, 5:59 am)
	Gallos cantando (5:39 AM, 5:50 AM, 5:53 AM, 6:00 AM)
	Persona hablando (5:53 AM)
	Avión pasando por el área. (5:43 AM)
	Station #3 (6:08 AM @ 6:38 AM) (Al Este del predio)
	Aves cantando (6:19 AM, 6:26 AM)
	Auto en movimiento (6:31 AM, 6:33 AM, 6:36 AM)
	Perro ladrando (6:13 AM, 6:36 AM)
	Avión pasando por el área. (6: 24 AM)
	Daytime Period
	Station #1 (7:00 AM @ 7:30 AM) (Al Oeste del predio)
	Movimiento constante de autos pasando por el área
	A partir de las 7:04 AM comenzaron a cortar grama en el área.
	Camión pasando por lugar.
	Gallos cantando constantemente.
	Station # 3 (7:35 AM @ 8:05 AM) (Al Este del predio)
	Auto en movimiento (7:38 AM, 7:44 AM)
	Persona hablando (7:39 AM, 7:45 AM)
	Avión pasando por el área. (8:04 AM)

Item #	Description
	Equipment #2
	Nighttime Period
	Station #2 (5:31 AM @ 6:01 AM) (Al Norte del predio)
	Aves cantando en todo momento.
	Autos en movimiento
	Compresores de aire acondicionados encendidos
	Avión pasando por el área.
	Station #4 (6:05 AM @ 7:05 AM) (Al Sur del predio)
	Aves cantando en todo momento.
	Autos en movimiento
	Compresores de aire acondicionados encendidos
	Perros ladrando
	Personas hablando
	Daytime Period
	Station #1 (7:01 AM @ 7:31 AM) (Al Norte del predio)
	Movimiento constante de autos pasando por el área
	A partir de las 7:04 AM comenzaron a cortar grama en el área (trimmers y tractor)
	Camión pasando por lugar.
	Personas hablando
	Station # 3 (7:33 AM @ 8:03 AM) (Al Sur del predio)
	Movimiento constante de autos pasando por el área
	A partir de las 7:04 AM comenzaron a cortar grama en el área (trimmers y tractor)
	Camión pasando por lugar.
	Personas hablando

Photos

Station #1 Nighttime Measures (5:33 AM @ 6:03 AM)



Station #3 Nighttime Measures (6:08 AM @ 6:38 AM)



Photos

Station #1 Daytime Measures (7:00 AM @ 7:30 AM)



Station #3 Daytime Measures (7:35 AM @ 8:05 AM)



Photos

Station # 2 Nighttime Measures (5:31 AM @ 6:01 AM)



Station # 4 Nighttime Measures (6:05 AM @ 6:35 AM)



Photos

Station #2 Daytime Measures (7:01 AM @ 7:31 AM)



Station #4 Daytime Measures (7:33 AM @ 8:03 AM)

