



Superintendencia
del Medio Ambiente
Gobierno de Chile

MEMORÁNDUM D.S.C. N°401/2015

**A: RUBÉN VERDUGO CASTILLO
JEFE DIVISIÓN DE FISCALIZACIÓN.**

**DE: MARIE CLAUDE PLUMER BODIN
JEFA DE LA DIVISIÓN DE SANCIÓN Y CUMPLIMIENTO.**

MAT.: Remite antecedentes que indica

Fecha: 28 de agosto de 2015

En el marco de la revisión del Informe "DFZ-2014-2500-VIII-NE-IA", asociado al recinto deportivo denominado "Todo es Cancha", ubicado en Calle Pucará N° 2145, comuna de San Pedro de La Paz, Región del Biobío, que de acuerdo a lo establecido en el D.S. N° 38/2011, corresponde a una fuente emisora de ruidos, perteneciente al titular Constructora e Inmobiliaria Santísima Trinidad Ltda., paso a informar lo siguiente:

1. El Informe en comento, fue remitido a esta División el 23 de marzo de 2015, para su revisión y otros fines que se estimaran pertinentes.
2. A raíz de la revisión de los antecedentes señalados en el Informe DFZ-2014-2500-VIII-NE-IA, se ha llegado a la conclusión que éstos no tienen el mérito suficiente para servir de base para un procedimiento sancionatorio. Los motivos que fundan dicha conclusión, dicen relación con la ausencia de los Certificados de Calibración del Sonómetro y del Calibrador Acústico.
3. En virtud de lo anterior se ha procedido a solicitar al denunciante, a través de correo electrónico, los certificados faltantes, por lo que el denunciante se ha puesto en contacto con esta División adjuntando la información faltante.

En razón de lo anterior, se devuelve el Informe DFZ-2014-2500-VIII-NE-IA junto con los certificados para la validación pertinente.

Saluda atentamente.


Marie Claude Plumer Bodin
Jefa División de Sanción y Cumplimiento
Superintendencia del Medio Ambiente




SSV

Distribución:
División Fiscalización
División de Sanción y Cumplimiento



Superintendencia
del Medio Ambiente
Gobierno de Chile



MEMORANDUM DFZ N° 16/2016

A: MARIE CLAUDE PLUMER
JEFE DIVISIÓN DE SANCIÓN Y CUMPLIMIENTO

DE: RUBÉN VERDUGO CASTILLO
JEFE DIVISIÓN DE FISCALIZACIÓN

MAT.: Responde Memorandum D.S.C. N° 401/2015, sobre certificado de calibración de sonómetro.

Fecha: Lunes 11 de enero de 2016.

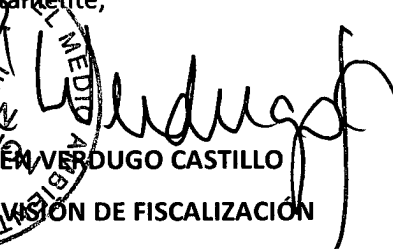
De mi consideración:

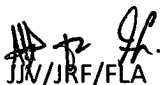
Revisados los certificados de calibración de equipos de medición de ruido adjuntos al memo D.S.C., cuyo detalle se observa en la tabla 1 y considerando que la medición de ruido fue realizada el día 07 de julio de 2014, es posible señalar que estos certificados son válidos. Por lo anterior, los datos registrados con el sonómetro mencionado, pueden considerarse para efectos de la evaluación de la Norma de Emisión de ruidos generados por fuentes que indica, D.S. N° 38 de 2011 del MMA.

Tabla 1. Información detallada equipos de medición.

Sonómetro		Calibrador Acústico	
Marca	Larson Davis	Marca	Larson Davis
Modelo	LxT1	Modelo	CAL200
N° de serie	1049	N° de serie	3707
Fecha de calibración	17/12/2013	Fecha de calibración	09/04/2012

Sin otro particular, saluda atentamente,


RUBÉN VERDUGO CASTILLO
 Jefe División de Fiscalización
 Superintendencia del Medio Ambiente


 JVN/JRF/FLA

Results summary: Device was tested and complies with following clauses of mentioned specifications:

CLAUSES ¹ FROM STANDARDS REFERENCED IN PROCEDURES:	MET ²	NOT MET	COMMENTS
Manufacturer specifications			
Manufacturer specifications: Sound pressure level	X		
Manufacturer specifications: Frequency	X		
Manufacturer specifications: Total harmonic distortion	X		
Current standards			
ANSI S1.40:2006 B.3 / IEC 60942: 2003 B.2 - Preliminary inspection	X		
ANSI S1.40:2006 B.4.4 / IEC 60942: 2003 B.3.4 - Sound pressure level	X		
ANSI S1.40:2006 A.5.4 / IEC 60942: 2003 A.4.4 - Sound pressure level stability	-	-	
ANSI S1.40:2006 B.4.5 / IEC 60942: 2003 B.3.5 - Frequency	X		
ANSI S1.40:2006 B.4.6 / IEC 60942: 2003 B.3.6 - Total harmonic distortion	X		

¹ The results of this calibration apply only to the instrument type with serial number identified in this report.

² The tests marked with (*) are not covered by the current NVLAP accreditation.

Main measured parameters³:

Measured ⁴ /Acceptable ⁵ Tone frequency (Hz):	Measured ⁴ /Acceptable ⁵ Total Harmonic Distortion (%):	Measured ⁴ /Acceptable Level ⁵ (dB):
1000.05 ± 1.0/1000.0 ± 10.0	0.7 ± 0.1/ < 3	93.97 ± 0.12/94.0 ± 0.4
1000.07 ± 1.0/1000.0 ± 10.0	0.6 ± 0.1/ < 3	113.95 ± 0.12/114.0 ± 0.4

³ Parameters are certified at actual environmental conditions.

⁴ The above expanded uncertainties for frequency and distortion are calculated with a coverage factor k=2; for level k=2.00

⁵ Acceptable parameters values are from the current standards

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.6 ± 1.1	100.24 ± 0.003	60.6 ± 2.4

Tests made with following attachments to instrument:

Calibrator ½" Adaptor

Other:

Adjustments: Unit was not adjusted.

Comments: The instrument was tested and met all specifications found in the referenced procedures.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger.

Compliance with any standard cannot be claimed based solely on the periodic tests.

Measured Data: in Acoustical Calibrator Test Report # 27072 of two pages.

Place of Calibration: Scantek, Inc.

6430 Dobbin Road, Suite C
Columbia, MD 21045 USA

Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.

This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored as: Z:\Calibration Lab\Cal 2012\LDCAL200_3707_M1.doc

Page 2 of 2

Certificate of Calibration and Conformance

Certificate Number 2013-183944

Instrument Model LXT1, Serial Number 0001049, was calibrated on 17DEC2013. The instrument meets factory specifications per Procedure D0001.8306, ANSI S1.4-1983 (R 2006) Type 1, S1.43-1997, S1.25-1991; S1.11-2004; IEC 61672-2002, 60651-2001, 60804-2000, 61260-2001, 61252-2002.

Instrument found to be in calibration as received: NO
Date Calibrated: 17DEC2013
Calibration due: 17DEC2015

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	2900 / 2239	0608 / 0110	12 Months	19DEC2013	2012-167989

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 23 ° Centigrade

Relative Humidity: 26 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"AS RECEIVED" data unavailable due to unit failure.
Tested with PRMLXT1-0131

Signed:


Technician: Eric Olson

Page 1 of 1

Scantek, Inc.
CALIBRATION LABORATORY



ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1 ACCREDITED
by NVLAP (an ILAC and APLAC signatory)

NVLAP Lab Code: 200625-0

Calibration Certificate No.27072

Instrument: Acoustical Calibrator
Model: CAL200
Manufacturer: Larson Davis
Serial number: 3707
Class (IEC 60942): 1
Barometer type:
Barometer s/n:

Date Calibrated: 9/4/2012 **Cal Due:**
Status:

Received	Sent
X	X

In tolerance:

X	X
---	---

Out of tolerance:

--	--

See comments:

--	--

Contains non-accredited tests: Yes X No

Customer: ACUS
Tel/Fax: (56-41) 322 5733

Address: Camino del Sur 436, Idahue
San Pedro de la Paz, Concepción, Chile

Tested in accordance with the following procedures and standards:
Calibration of Acoustical Calibrators, Scantek Inc., Rev. 10/1/2010

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence	Cal. Due
				Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	25747	Jul 2, 2012	Scantek, Inc./ NVLAP	Jul 2, 2013
DS-360-SRS	Function Generator	61646	Nov 16, 2011	ACR Env./ A2LA	Nov 16, 2013
34401A-Agilent Technologies	Digital Voltmeter	MY41022043	Dec 9, 2011	ACR Env./ A2LA	Dec 9, 2012
DPI 141-Druck	Pressure Indicator	790/00-04	Dec 13, 2010	ACR Env./ A2LA	Dec 13, 2012
HM30-Thommen	Meteo Station	1040170/39633	Nov 29, 2011	ACR Env./ A2LA	Nov 29, 2012
8903A-HP	Audio Analyzer	2514A05691	Dec 1, 2010	ACR Env./ A2LA	Dec 1, 2013
PC Program 1018 Norsonic	Calibration software	v.5.2	Validated March 2011	Scantek, Inc.	
4134-Brüel&Kjær	Microphone	456005	Mar 23, 2012	Scantek, Inc. / NVLAP	Mar 23, 2013
1203-Norsonic	Preamplifier	14059	Jan 3, 2012	Scantek, inc./ NVLAP	Jan 3, 2013

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK)

Calibrated by:	Valentin Buzduga	Authorized signatory:	Mariana Buzduga
Signature	<i>[Signature]</i>	Signature	<i>[Signature]</i>
Date	9/04/2012	Date	9/5/2012

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.
Document stored as: Z:\Calibration Lab\Cal 2012\LD CAL200_3707_ML.doc Page 1 of 2