

G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港 黄竹坑追37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

Certificate No.:

15CA1203 04-01

Page

of

2

Item tested

Description:

Sound Level Meter (Type 1)

Microphone

Expiry Date:

Manufacturer:

B&K

B&K

Type/Model No .:

2236

4188

Serial/Equipment No.:

2100736

2288941

Adaptors used:

Item submitted by

Customer Name:

Lam Geotechnics Limited

Address of Customer:

Request No.

Date of receipt:

03-Dec-2015

Date of test:

04-Dec-2015

Reference equipment used in the calibration

Description:

Signal generator

Signal generator

Multi function sound calibrator

Model: B&K 4226

DS 360

DS 360

Serial No. 2288444 33873

61227

19-Jun-2016 16-Apr-2016 16-Apr-2016

Traceable to:

CIGISMEC CEPREI CEPRE

Ambient conditions

Temperature:

Relative humidity: Air pressure:

22 ± 1 °C 50 ± 10 %

1010 ± 10 hPa

Test specifications

1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152

The electrical tests were performed using an electrical signal substituted for the microphone which was removed and 2, replaced by an equivalent capacitance within a tolerance of +20%

The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference 3, between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Huang Jian Min/Feng Jun Qi

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

05-Dec-2015

Company Chop:

The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

C Soils & Materials Engineering Co., Ltd.

Form No.CARP152-1/Issue 1/Rev.C/01/02/2007



G/F, 9/F, 12/F, 13/F & 20/F, Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃门坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

15CA1203 04-01

Page

2

2

1, Electrical Tests

The electrical tests were performed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertanity (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
3	C	Pass	1.0	2.1
	Lin	Pass	2.0	2.2
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/103 at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/104 at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertanity (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
	Weighting A at 8000 Hz	Pass	0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

Calibrated by:

Date:

Fung Chi Yip 04-Dec-2015 End

Checked by:

Date:

Lam Tze Wai 05-Dec-2015

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

Soils & Materials Engineering Co., Ltd.

Form No.CARP152-2/Issue 1/Rev.C/01/02/2007



G/F, 9/F, 12/F, 13/F & 20/F, Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com





CERTIFICATE OF CALIBRATION

Certificate No.:

16CA0307 02

Page

of

2

Item tested

Description: Manufacturer: Sound Level Meter (Type 1)

Microphone B & K Preamp B & K

Type/Model No.: Serial/Equipment No.: 2250-L 2701778

4950 2755097 ZC0032 19556

Adaptors used:

Item submitted by

Lam Geotechnics Ltd.

Customer Name: Address of Customer:

Request No.: Date of receipt:

-07-Mar-2016

Date of test:

08-Mar-2016

Reference equipment used in the calibration

Description:

Model:

Serial No. 2288444 Expiry Date: 19-Jun-2016 Traceable to: CIGISMEC

Multi function sound calibrator Signal generator Signal generator B&K 4226 DS 360 DS 360

33873 61227

16-Apr-2016 16-Apr-2016 CEPREI CEPREI

Ambient conditions

Temperature:

21 ± 1 °C 50 ± 10 %

Relative humidity: Air pressure:

1010 ± 5 hPa

Test specifications

 The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580; Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

 The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.

 The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Huang Jian Min/Feng Jun Qi

Actual Measurement data are documented on worksheets

Approved Signatory:

Date:

09-Mar-2016

Company Chop:

SENGINEERING COMPANY STORY OF THE STORY OF

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

C Soils & Materials Engineering Co., Ltd.

Form No CARP152-1/Issue 1/Rev C/01/02/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

16CA0307 02

Page

of

Electrical Tests

The electrical tests were performed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances,

Test:	Subtest:	Status:	Expanded Uncertanity (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	
	Lin	Pass	1.6	
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/103 at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/104 at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertanity (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz Weighting A at 8000 Hz	Pass Pass	0,3 0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated

Calibrated by:

Fung Chi Yip Date: 08-Mar-2016

Checked by:

Date:

Lam Tze Wai 09-Mar-2016

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

Soils & Materials Engineering Co . Ltd.

Form No CARP152-2/Issue 1/Rev C/01/02/2007



G/F, 9/F, 12/F, 13/F. & 20/F, Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

Certificate No.:

16CA0413 02

Page

of

Item tested

Description:

Sound Level Meter (Type 1)

Microphone

Preamp

Manufacturer: Type/Model No.:

2250-L

B & K 4950 2698702 B & K ZC0032

Serial/Equipment No.: Adaptors used:

2722310

2030102

13318

Item submitted by

Customer Name:

Lam Geotechnics Limited

Address of Customer:

100

Request No.: Date of receipt:

13-Apr-2016

Date of test:

09-May-2016

Reference equipment used in the calibration

Description:

201 O OW 2

Serial No.

Expiry Date:

Traceable to:

Multi function sound calibrator Signal generator Signal generator Model: B&K 4226 DS 360 DS 360

2288444 33873 61227 19-Jun-2016 18-Apr-2017 18-Apr-2017 CIGISMEC

CEPREI

Ambient conditions

Temperature:

Air pressure:

21 ± 1 °C

Relative humidity:

60 ± 10 % 1005 ± 5 hPa

Test specifications

1. The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

2. The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of +20%.

 The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

lin/Fena Jun Qi

Actual Measurement data are documented on worksheets.

Huand

Approved Signatory:

Date:

10-May-2016

Company Chon

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

© Soils & Materials Engineering Co., Ltd

Form No.CARP152-1/Issue 1/Rev.C/01/02/2007



G/F, 9/F., 12/F, 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

16CA0413 02

Page

c

2

1, Electrical Tests

The electrical tests were performed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertanity (dB)	Coverage Factor
Self-generated noise	Α	Pass	0.3	
	C	Pass	0.8	
	Lin	Pass	1.6	
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	Α	Pass	0.3	
	С	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/103 at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/104 at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertanity (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
	Weighting A at 8000 Hz	Pass	0.5	
	Weighting A at 8000 Hz	Pass	0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

Calibrated by:

- End

Checked by:

Date:

Fung Chi Yip 09-May-2016

Date:

J.Q. Feng 10-May-2016

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd.

Form No.CARP152-2/Issue 1/Rev.C/01/02/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

Certificate No.:

15CA0604 02

Page

2

Item tested

Description: Manufacturer: Sound Level Meter (Type 1)

Microphone

Preamp **B&K**

Type/Model No.:

B&K 2250 2722311 **B&K** 4950 2698703

ZC 0032 13321

Serial/Equipment No.: Adaptors used:

Item submitted by

Customer Name:

Lam Geotechnics Ltd.

Address of Customer:

Request No.:

04-Jun-2015

Date of receipt:

Date of test:

05-Jun-2015

Reference equipment used in the calibration

Description:

Model:

Serial No.

Expiry Date:

Traceable to: CIGISMEC

Multi function sound calibrator Signal generator Signal generator

B&K 4226 DS 360

DS 360

2288444 33873 61227

20-Jun-2015 16-Apr-2016 16-Apr-2016

CEPREI CEPREI

Ambient conditions

Temperature:

21 ± 1 °C

Relative humidity: Air pressure:

60 ± 10 % 1000 ± 5 hPa

Test specifications

The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580; Part 1: 1997 1, and the lab calibration procedure SMTP004-CA-152.

2. The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of +20%

3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Huang-Jian Min/Fend Jun Qi

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

05-Jun-2015

Company Chop:

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

© Soils & Materials Engineering Co., Ltd.

Form No CARP152-1/Issue 1/Rev.C/01/02/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

15CA0604 02

Page

Electrical Tests

The electrical tests were performed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertanity (dB)	Coverage Factor
Self-generated noise	Α	Pass	0.3	
222 230 220 220 20 20 20 20 20 20 20 20 20 20	C	Pass	0.8	2.1
	Lin	Pass	1.6	2.2
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	Α	Pass	0.3	
	С	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/103 at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/104 at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0,3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertanity (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
And the second second	Weighting A at 8000 Hz	Pass	0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

Calibrated by:

Date:

End

Checked by:

Fung Chi Yip 05-Jun-2015 Date:

Lam Tze Wai

05-Jun-2015

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd.

Form No.CARP152-2/Issue 1/Rev.C/01/02/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com



CERTIFICATE OF CALIBRATION

Certificate No.:

16CA0127 02

Page

Tel: (852) 2873 6860

Fax: (852) 2555 7533

Item tested

Description:

Sound Level Meter (Type 1)

Microphone

Manufacturer:

B&K

B&K

Preamp B&K

Type/Model No.: Serial/Equipment No .: 2250-L 3002695

4950 2940839 ZC0032

Adaptors used:

18582

Item submitted by

Customer Name:

Lam Geoechnics Ltd

Address of Customer:

Request No.

Date of receipt:

27-Jan-2016

Date of test:

28-Jan-2016

Reference equipment used in the calibration

Description:

Multi function sound calibrator

Model: B&K 4226 Serial No.

Expiry Date: 19-Jun-2016

Traceable to:

Signal generator Signal generator DS 360 DS 360 2288444 33873 61227

16-Apr-2016 16-Apr-2016 CIGISMEC CEPREI CEPREI

Ambient conditions

Temperature:

21 ± 1 °C

Relative humidity:

60 ± 10 %

Air pressure:

1010 ± 5 hPa

Test specifications

1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580; Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

2. The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of +20%

3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

29-Jan-2016

Company Chop:

Huang-Jian-Nin/Feng Jun Qi

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

© Soils & Materials Engineering Co., Ltd.

Form No CARP152-1/Issue 1/Rev C/01/02/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533

2



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

16CA0127 02

Page

of

2

1, Electrical Tests

The electrical tests were performed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertanity (dB)	Coverage Factor
Self-generated noise	Α	Pass	0.3	
	С	Pass	0.8	
	Lin	Pass	1.6	
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	Α	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/103 at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/104 at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertanity (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz Weighting A at 8000 Hz	Pass Pass	0.3 0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

Calibrated by:

Checked by:

Fung Chi Yip

28-Jan-2016

Date: 29-Jan-2016

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd

Form No CARP152-2/Issue 1/Rev C/01/02/2007



G/F, 9/F, 12/F, 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黄竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com



CERTIFICATE OF CALIBRATION

Certificate No.:

15CA0528 04-03

Page:

1

Tel: (852) 2873 6860

Fax: (852) 2555 7533

2

of

Item tested

Description: Manufacturer: Acoustical Calibrator (Class 1)

Type/Model No.: Serial/Equipment No.: Rion Co., Ltd. NC-73 10465798

Adaptors used:

10

Item submitted by

Curstomer:

Lam Geotechnics Ltd.

Address of Customer:

Request No.: Date of receipt:

28-May-2015

Date of test:

30-May-2015

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	2341427	15-Apr-2016	SCL
Preamplifier	B&K 2673	2239857	22-Apr-2016	CEPREI
Measuring amplifier	B&K 2610	2346941	22-Apr-2016	CEPREI
Signal generator	DS 360	61227	16-Apr-2016	CEPREI
Digital multi-meter	34401A	US36087050	17-Apr-2016	CEPREI
Audio analyzer	8903B	GB41300350	17-Apr-2016	CEPREI
Universal counter	53132A	MY40003662	16-Apr-2016	CEPREI

Ambient conditions

Temperature: 21 ± 1 °C Relative humidity: 60 ± 10 % Air pressure: 1000 ± 5 hPa

Test specifications

- The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
- 2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
- 3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on page 2 of this certificate.

n/Feng Jun Qi

Huano Jian

Approved Signatory:

Date: 01-Jun-2015

Company Chos

SENGINEER SENGI

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

@ Soils & Materials Engineering Co., Ltd.

Form No. CARP156-1/Issue 1/Rev. D/01/03/2007



G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com

Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

15CA0528 04-03

Page:

of

1, Measured Sound Pressure Level

The output Sound Pressure Level in the calibrator head was measured at the setting and frequency shown using a calibrated laboratory standard microphone and insert voltage technique. The results are given in below with the estimated uncertainties.

Frequency	Output Sound Pressure	Measured Output	Estimated Expanded
Shown	Level Setting	Sound Pressure Level	Uncertainty
Hz	dB	dB	dB
1000	94.00	94.06	0.10

2, Sound Pressure Level Stability - Short Term Fluctuations

The Short Term Fluctuations was determined by measuring the maximum and minimum of the fast weighted DC output of the B&K 2610 measuring amplifier over a 20 second time interval as required in the standard. The Short Term Fluctuation was found to be:

At 1000 Hz

STF = 0.002 dB

Estimated expanded uncertainty

0.005 dB

3, **Actual Output Frequency**

The determination of actual output frequency was made using a B&K 4180 microphone together with a B&K 2673 preamplifier connected to a B&K 2610 measuring amplifier. The AC output of the B&K 2610 was taken to an universal counter which was used to determine the frequency averaged over 20 second of operation as required by the standard. The actual output frequency at 1 KHz was:

At 1000 Hz

Actual Frequency = 966.3 Hz

Estimated expanded uncertainty

0.1 Hz

Coverage factor k = 2.2

Total Noise and Distortion 4,

For the Total Noise and Distortion measurement, the unfiltered AC output of the B&K 2610 measuring amplifier was connected to an Agilent Type 8903 B distortion analyser. The TND result at 1 KHz was:

At 1000 Hz

TND = 0.5 %

Estimated expanded uncertainty

0.7 %

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

Calibrated by:

End

Fung Chi Yip

Checked by:

Lam Tze Wai

Date:

30-May-2015

Date:

01-Jun-2015

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.



TISCH ENVIRONMENTAL, INC. 145 SOUTH MIAMI AVE VILLAGE OF CLEVES, OH 45002 513.467.9000 877.263.7610 TOLL FREE 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

	Tisch	Rootsmeter Orifice I.I		0005	Pa (mm) -	749.3
PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1 2 3 4 5	NA NA NA NA NA	NA NA NA NA NA	1.00 1.00 1.00 1.00	1.3930 0.9800 0.8790 0.8350 0.6900	3.2 6.4 7.9 8.7 12.7	2.00 4.00 5.00 5.50 8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
0.9883 0.9841 0.9820 0.9810 0.9757	0.7095 1.0042 1.1172 1.1749 1.4141	1.4090 1.9926 2.2278 2.3365 2.8179	0.9957 0.9915 0.9894 0.9884 0.9830	0.7148 1.0117 1.1256 1.1837 1.4247	0.8889 1.2570 1.4054 1.4740 1.7777
Ostd slop intercept coefficient y axis =	t (b) = ent (r) =	2.00072 -0.01209 0.99995 Pa/760)(298/Ta)]	Qa slope intercept coefficie y axis =	= (b) $=$	1.25282 -0.00763 0.99995

CALCULATIONS

Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta) Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa] Qa = Va/Time

For subsequent flow rate calculations:

Qstd = $1/m\{[SQRT(H2O(Pa/760)(298/Ta))] - b\}$ $Qa = 1/m\{[SQRT H2O(Ta/Pa)] - b\}$



Date

Calibration Data for High Volume Sampler (TSP Sampler)

Location :		CMA1b			Calbi	ation Date	; 18-May-16
Equipment no.		HVS001			Calbi	ration Due Date	: 18-Jul-16
CALIBRATION OF CONTIN	NUOUS FL	OW RECO	RDER				
				Ambient Cor	ndition	k	
Temperature, T _a		299		Kelvin P	ressure, P _a	1	010 mmHg
			Orifice	Transfer Stand	lard Information		
Equipment No.		Ori001		Slope, m _c	2.00072	Intercept, bc	-0.01209
Last Calibration Date		30-Jun-1	5	·	(HxPa/	1013.3 x 298 /	$T_a)^{1/2}$
Next Calibration Date		30-Jun-1	6		= m	$_{c} \times Q_{std} + b_{c}$	
				Calibration of	of TSP		
Calibration	Mar	nometer R	eading	Q sto	Co	ontinuous Flow	IC
Point	Н (inches of	water)	(m ³ / m	in.)	Recorder, W	(W(P _a /1013.3x298/T _a) ^{1/2} /35.31)
	(up)	(down)	(difference)	X-axi	s	(CFM)	Y-axis
1	6.3	6.3	12.6	1.774	4	58	57.8086
2	4.9	4.9	9.8	1.565	6	52	51.8284
3	3.5	3.5	7.0	1.324	1	44	43.8548
4	2.5	2.5	5,0	1.120	0	36	35.8812
5	1.5	1.5	3.0	0.868	9	24	23.9208
By Linear Regression of Y	on X						
	Slope, m	8.	37.	1752	Intercept, b	-6.	8058
Correlation C	oefficient*	=	0.9	946			
Calibration	Accepted	=	Yes	'No**			
* if Correlation Coefficient <	0.990, che	ck and rec	alibration aga	in.			
** Delete as appropriate.							
Remarks : As per client's	provided i	nformation	, the equipme	nt reference no.	of the calibrated Hi	gh Volume Sampler h	as been
re-assigned fr	om EL452	to HVS001	with respect	to the update in	quality management	t system.	
Calibrated by		Kit Au			Chec	ked by	: Pauline Wong
D.44-	18	3-May-16			Date		: 18-May-16



Date

18-May-16

Calibration Data for High Volume Sampler (TSP Sampler)

Location		CMA2a	Calbration Date		18-May-16	
Equipment no.	:	HVS002	Calbration Due Date	:	18-Jul-16	
						_

			Ambient C	ondition			
	299		Kelvin	Pressure, Pa		1010	mmHg
		Orifice 1	Transfer Sta	ndard Information	1		
	Ori001		Slope, m _c	2.00072	Intercept, t	ос	-0.01209
	30-Jun-1	5		(HxF	a / 1013.3 x 298	/Ta) 1	/2
	30-Jun-1	6		141			
			Calibratio	n of TSP			
			Q _{std} (m³ / min.) X-axis		Continuous Flow Recorder, W (CFM)		IC _a /1013.3x298/T _a) ^{1/2} /35.31 Y-axis
6,8	6.8	13.6	1.8432		58		57.8086
5.5	5.5	11.0	1.6583		52		51.8284
4.3	4.3	8.6	1.4	670	44		43.8548
2.8	2.8	5.6	1.1	849	38		37.8746
1.8	1.8	3.6	0.9	9513	32		31.8944
n X Slope, m oefficient* Accepted	=	0.9	928	Interce	pt, b =	3.6256	
					december 2 december 1		
provided i	nformation,	the equipmen	nt reference r	no. of the calibrate	d High Volume Sample	er has bee	n
	H ((up) 6.8 5.5 4.3 2.8 1.8 n X Slope, m pefficient* Accepted	Ori001 30-Jun-1 30-Jun-1 30-Jun-1 Manometer R H (inches of to the context of the	Ori001 30-Jun-15 30-Jun-16 Manometer Reading H (inches of water) (up) (down) (difference) 6.8 6.8 13.6 5.5 5.5 11.0 4.3 4.3 8.6 2.8 2.8 5.6 1.8 1.8 3.6 IX Slope, m = 28.8 Defficient* = 0.9 Accepted = Yes/	Description Calibration Calibration	Orifice Transfer Standard Information Ori001 Slope, m _c 2.00072 30-Jun-15 (HxF) 30-Jun-16 = Calibration of TSP Manometer Reading Q std H (inches of water) (m³ / min.) (up) (down) (difference) 5.5 5.5 11.0 1.6583 1.4670 2.8 2.8 5.6 1.1849 1.8 1.8 1.8 0.9513 In X Slope, m = 28.8731 Intercest Deefficient* = 0.9928 Accepted = Yes/Ne**	Orifice Transfer Standard Information	Continuous Flow Continuous Flow Continuous Flow Common C

Date

18-May-16



Location		СМАЗа	Calbration Date	5	18-May-16	
Equipment no.	1	HVS012	Calbration Due Date	3	18-Jul-16	

CALIBRATION OF CONTINUOUS FLOW RECORDER

				Ambient Con	dition			
Temperature, T _a		299)	Kelvin Pı	essure, P _a		1010	mmHg
			Orifice T	ransfer Standa	ard Information			
Equipment No.		Ori001		Slope, m _c	2.00072	Intercept, b	С	-0.01209
Last Calibration Date		30-Jun-15			(HxPa/	1013.3 x 298	/Ta) 1/2	1
Next Calibration Date 30-Jun-16			= m	$_{c} \times Q_{std} + b_{c}$				
				Calibration o	TSP			
Calibration Manometer Reading		Q st	Coi	ntinuous Flow		IC		
Point	H (inches of water)		(m³ / m	in.) F	Recorder, W	(W(P _a /1013.3x298/T _a) ^{1/2} /		
	(up)	(down)	(difference)	X-ax	s	(CFM)		Y-axis
1	6.0	6.0	12.0	1.731	8	56		55.8152
2	4.8	4.8	9.6	1.549	96	52		51.8284
3	4.0	4.0	8.0	1.415	31	44		43.8548
4	2.8	2.8	5.6	1.184	9	38		37.8746
5	1.7	1,7	3.4	0.924	6	30		29.9010
By Linear Regression of Y	on X							
	Slope, m	=	32.9	166	Intercept,	b =	-0.9510	
Correlation Co	efficient*	=	0.9	925				
Calibration	Accepted	=	Yes/	Ne**				

^{*} if Correlation Coefficient < 0.990, check and recalibration again.

Remarks: As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-assigned from EL333 to HVS012 with respect to the update in quality management system.

Calibrated by : Kit Au Checked by : Pauline Wong

Date : 18-May-16 Date : 18-May-16

^{**} Delete as appropriate.



Location	1	CMA4a	Calbration Date	:	18-May-16
Equipment no.		HVS004	Calbration Due Date	:	18-Jul-16

				Ambient	Condition				
Temperature, T _a		299		Kelvin	Pressure, Pa			1010	mmHg
			Orifice	Transfer Sta	andard Inform	ation			
Equipment No.		Ori001		Slope, m _c	2.0007	72	Intercept, bc		-0.01209
Last Calibration Date		30-Jun-1	5	(HxP _a /101:			1013.3 x 298/	Ta) 1/2	
Next Calibration Date		30-Jun-1	6	$= m_c \times Q_{std} + b_c$					
				Calibratio	on of TSP				
Calibration	Manometer Reading		Q	std Continuous Flow		ntinuous Flow	IC		
Point	H (i	inches of	nes of water) (m³/min.)		F	Recorder, W	(W(P _a /101	3.3x298/T _a) ^{1/2} /35.31	
	(up)	(down)	(difference)	X-a	ixis	(CFM)			Y-axis
1	6.4	6.4	12.8	1.7	884		54		53.8218
2	5.3	5.3	10.6	1.6	280		50		49.8350
3	4.2	4.2	8.4	1.4	499		44		43.8548
4	2.8	2.8	5.6	1.1	849		32		31.8944
5	1.6	1.6	3.2	0.8	972		22		21.9274
By Linear Regression of Y	on X								
	Slope, m	=	37.0	104	Inte	ercept, b	= -1	1.1654	
Correlation Co	pefficient*	=	0.9	968					
Calibration	Accepted	=	Yes/	No**					

^{*} if Correlation Coefficient < 0.990, check and recalibration again.

18-May-16

Date

Remarks:

As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-assigned from EL390 to HVS004 with respect to the update in quality management system.

Calibrated by

Kit Au

Checked by

Pauline Wong

Date

18-May-16

^{**} Delete as appropriate.



Location	
Equipment	no

CMA5b	
HVS010	

Calbration Date
Calbration Due Date

21-May-16 21-Jul-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition							
Temperature, T _a	299	Kelvin	Pressure, Pa	1010	mmHg		

	01	ifice Transfer Standa	ard Information		
Equipment No.	Ori001	Slope, m _c	2.00072	Intercept, bc	-0.01209
Last Calibration Date	30-Jun-15		(HxP	a / 1013.3 x 298 / Ta)	1/2
Next Calibration Date	30-Jun-16		- E	$m_c \times Q_{std} + b_c$	

			C	Calibration of TSP			
Calibration Point	11 9	nometer R (inches of (down)		Q _{std} (m ³ / min.) X-axis	Rec	order, W	IC (W(P _a /1013.3x298/T _a) ^{1/2} /35.31) Y-axis
1	6.2	6.2	12.4	1.7603		64	63.7888
2	4.8	4.8	9.6	1.5496		58	57.8086
3	3.4	3.4	6.8	1.3051		54	53.8218
4	2.4	2,4	4.8	1.0975		46	45.8482
5	1.4	1.4	2.8	0.8396		40	39.8680
	Y on X Slope, m Coefficient* on Accepted	-	26.025- 0.9942 Yes/No		Intercept, b =	1	8.1230

^{*} if Correlation Coefficient < 0.990, check and recalibration again.

**	Delete	as	api	pro	priate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-assigned from EL222 to HVS010 with respect to the update in quality management system.

Calibrated by Date Kit Au 21-May-16 Checked by Date Pauline Wong 21-May-16



Location	1	MA1e	Calbration Date :	:	18-May-16
Equipment no.	:	HVS007	Calbration Due Date :		18-Jul-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

		Ambient Condition		
Temperature, T _a	299	Kelvin Pressure, Pa	1010	mmHg

	Orif	ice Transfer Standa	rd Information		
Equipment No.	Ori001	Slope, m _c	2.00072	Intercept, bc	-0.01209
Last Calibration Date	30-Jun-15		$(HxP_a/$	1013.3 x 298 / T _a)	1/2
Next Calibration Date	30-Jun-16		= <i>m</i>	$_{c} \times Q_{std} + b_{c}$	

			Ca	libration of TSP		
Calibration Point		nometer R (inches of (down)		Q _{std} (m³ / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P _a /1013.3x298/T _a) ^{1/2} /35.31) Y-axis
1	6.5	6.5	13.0	1.8022	58	57.8086
2	5.4	5.4	10.8	1.6432	52	51.8284
3	4.0	4.0	8.0	1.4151	42	41.8614
4	2.5	2.5	5.0	1.1200	32	31.8944
5	1.4	1.4	2.8	0.8396	24	23.9208
By Linear Regression of	Y on X Slope, m	-	35.596	3 In	ntercept, b =	7.0923
Correlation	Coefficient*	=	0.9969			
Calibratio	n Accepted	-	Yes/No	**		

^{*} if Correlation Coefficient < 0.990, check and recalibration again.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-assigned from EL455 to HVS007 with respect to the update in quality management system.

 Calibrated by
 :
 Kit Au
 Checked by
 :
 Pauline Wong

 Date
 :
 18-May-16
 Date
 :
 18-May-16



Location	1	MA1w	Calbration Date	:	18-May-16	
Equipment no.	4 =	HVS008	Calbration Due Date	4	18-Jul-16	

CALIBRATION OF CONTINUOUS FLOW RECORDER

		Ambient Condition		
Temperature, T _a	299	Kelvin Pressure, Pa	1010	mmHg

	Orifi	ce Transfer Standar	rd Information		
Equipment No.	Ori001	Slope, m _c	2.00072	Intercept, bc	-0.01209
Last Calibration Date	30-Jun-15		$(HxP_a/$	1013.3 x 298 / T _a)	1/2
Next Calibration Date	30-Jun-16		= m	$_{c} \times Q_{std} + b_{c}$	

			Cal	ibration of TSP		
Calibration Point		nometer R (inches of (down)		Q _{std} (m ³ / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P _a /1013.3x298/T _a) ^{1/2} /35.31 Y-axis
1	6.6	6.6	13.2	1.8160	60	59.8020
2	5.2	5.2	10.4	1.6126	52	51.8284
3	4.2	4.2	8.4	1.4499	44	43.8548
4	2.4	2.4	4.8	1.0975	32	31.8944
5	1.5	1.5	3.0	0.8689	25	24.9175
y Linear Regression of	Y on X					
	Slope, m	=	36.9607		Intercept, b =	-8.1386
Correlation	Coefficient*	=	0.9972			

 if Correlation Coefficient < 0.990, check and recalibration 	on again.
--	-----------

Calibration Accepted

Remarks :	As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been			
	re-assigned from EL080 to HVS008 with respect to the update in quality management system.			

Yes/No**

Calibrated by	1	Kit Au	Checked by	11	Pauline Wong
Date	:	18-May-16	Date	1.	18-May-16