

APPENDIX C
COPIES OF CALIBRATION
CERTIFICATES



東恒測試顧問有限公司
AQUALITY TESTCONSULT LIMITED
香港新界粉嶺坪輦路啟芳園11A&B號
NO.11A&B, KAI FONG GARDEN, PING CHE ROAD, FANLING, N.T., HONG KONG

TEL : 852-2674-0478
FAX : 852-2674-1177
EMAIL : main.aqtl@gmail.com
WEBSITE : www.aqtlgroup.com

CERTIFICATE OF CALIBRATION

Ka Shing Facility Management Ltd. Flat C, 14/F, Jing Ho Industrial Building, 78-84 Wang Lung Street, Tsuen Wan, N.T.	Test Report No.	250603MCA-1P
	Date of Issue	3-Jun-25
	Date of Testing	2-Jun-25
	Page	1 of 1

Item for Calibration

Description : Laser Dust Monitor
Manufacturer : Met One Instruments, Inc.
Model No. : AEROCET-831
Serial No. : F12258

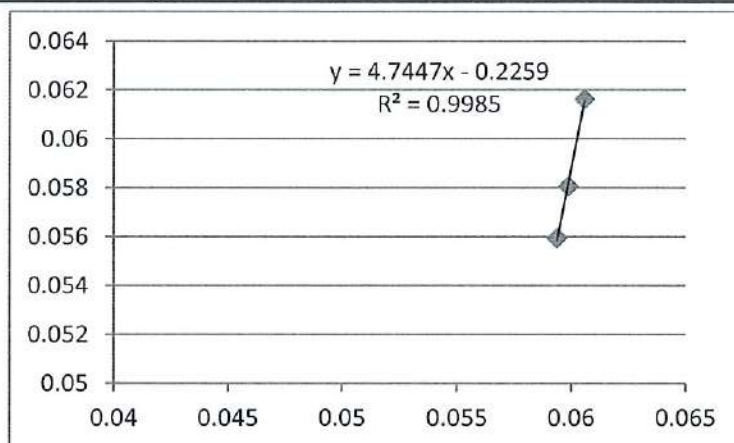
Standard Equipment

Description : High Volume Sampler / Calibration Orifice
Manufacturer : Tisch Environmental, Inc.
Model No. : TE-5170 / TE-5025A
Serial No. : 3476 / 4088
Last Calibration : 24-AUG-24 / 15-OCT-24

Date	Time	Mean Temp (°C)	Mean Pressure (hPa)	Concentration Standard Equipment (mg/m3)	Concentration Calibrated Equipment (mg/m3)
2-Jun-25	19:00	24.8	1002.2	0.0606	0.0616
2-Jun-25	20:05	24.8	1002.2	0.0594	0.0560
2-Jun-25	21:10	24.8	1002.2	0.0599	0.0581

By Linear Regression of Y or X

Slope : 4.7447
Correlation Coefficient : 0.9985
K-Factor : 1.0253
Validity of Calibration : 1-Jun-26



Recorded by : Jessica Liu

Signature:

Date: 2-Jun-25

Checked by : S Tang

Signature:

Date: 2-Jun-25



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CERTIFICATE OF CALIBRATION

Ka Shing Facility Management Ltd. Flat C, 14/F, Jing Ho Industrical Building, 78- 84 Wang Lung Street, Tsuen Wan, N.T.	Test Report No.	250512MCA-2P
	Date of Issue	12-May-25
	Date of Testing	11-May-25
	Page	1 of 1

Item for Calibration

Description : Laser Dust Monitor

Manufacturer : Met One Instruments, Inc.

Model No. : AEROCET-831

Serial No. : F12045

Standard Equipment

Description : High Volume Sampler / Calibration Orifice

Manufacturer : Tisch Environmental, Inc.

Model No. : TE-5170 / TE-5025A

Serial No. : 3476 / 4088

Last Calibration : 24-AUG-24 / 15-OCT-24

Date	Time	Mean Temp (°C)	Mean Pressure (hPa)	Concentration Standard Equipment (mg/m ³)	Concentration Calibrated Equipment (mg/m ³)
11-May-25	19:00	24.8	1010.1	0.0612	0.0625
11-May-25	20:05	24.8	1010.1	0.0560	0.0568
11-May-25	21:10	24.8	1010.1	0.0582	0.0599

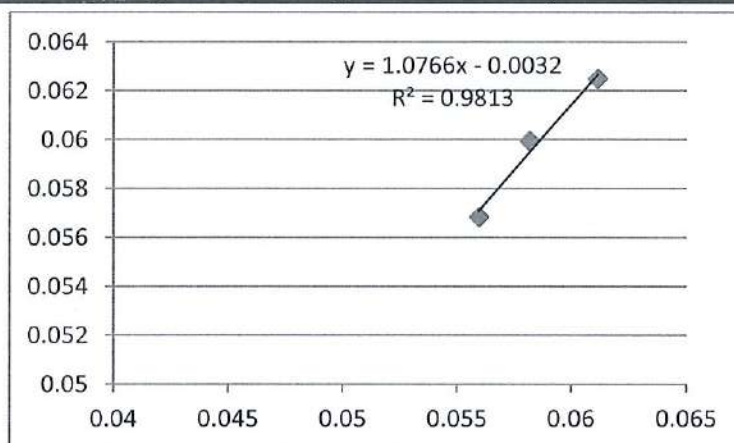
By Linear Regression of Y or X

Slope : 1.0766

Correlation Coefficient : 0.9813

K-Factor : 0.9783

Validity of Calibration : 10-May-26



Recorded by : Jessica Liu

Signature:

Date: 11-May-25

Checked by : S Tang

Signature:

Date: 11-May-25

Certificate of Calibration

Calibration Certification Information

Cal. Date: September 9, 2025 Rootsmeter S/N: 438320 Ta: 294 °K
Operator: Jim Tisch Pa: 754.9 mm Hg
Calibration Model #: TE-5025A Calibrator S/N: 4088

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4460	3.2	2.00
2	3	4	1	1.0320	6.4	4.00
3	5	6	1	0.9210	8.0	5.00
4	7	8	1	0.8840	8.8	5.50
5	9	10	1	0.7240	12.8	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis)
1.0025	0.6933	1.4190	0.9958	0.6886	0.8826
0.9983	0.9673	2.0068	0.9915	0.9608	1.2481
0.9961	1.0816	2.2436	0.9894	1.0743	1.3955
0.9951	1.1256	2.3532	0.9883	1.1180	1.4636
0.9897	1.3670	2.8380	0.9830	1.3578	1.7651
QSTD	m=	2.11142	QA	m=	1.32213
	b=	-0.03845		b=	-0.02391
	r=	0.99983		r=	0.99983

Calculations

Vstd=	$\Delta Vol((Pa-\Delta P)/Pstd)(Tstd/Ta)$	Va=	$\Delta Vol((Pa-\Delta P)/Pa)$
Qstd=	$Vstd/\Delta Time$	Qa=	$Va/\Delta Time$
For subsequent flow rate calculations:			
Qstd= $1/m \left(\left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b \right)$		Qa= $1/m \left(\left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} \right) - b \right)$	

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

ΔH: calibrator manometer reading (in H2O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

FAQ / Information

Mutual Recognition Arrangements (MRA) / Multilateral Recognition Arrangements (MLA)

Mutual Recognition Arrangement (MRA) Partners for HOKLAS ^

Every effort is made to promote acceptance of test data from accredited laboratories, both internationally and locally. HKAS has concluded mutual recognition arrangements with accreditation bodies listed below by being one of the signatories of the [International Laboratory Accreditation Cooperation Mutual Recognition Arrangement \(ILAC MRA\)](#) and the [Asia Pacific Accreditation Cooperation Mutual Recognition Arrangement \(APAC MRA\)](#) for testing, calibration, medical testing, Proficiency Testing Providers (PTP) and Reference Material Producers (RMP). Click [here](#) to view the up-to-date signatories of ILAC and [here](#) to access the up-to-date signatories of APAC.

Visitors checking the names, logos and accreditation symbols shown on an endorsed certificate or report should note that some of our MRA partners may have their names, logos or accreditation symbols changed recently and test reports or certificates endorsed by displaying their old accreditation symbols may still be valid during the change-over period. For details, please visit their websites or contact them directly.

> [Mutual Recognition Arrangement \(MRA\) Partners for HOKLAS](#)

HKAS MRA partners will recognise HOKLAS endorsed test certificates as having the same technical validity as certificates endorsed by their respective schemes.

Multilateral Recognition Arrangements (MLA) for HKCAS v

Mutual Recognition Arrangement (MRA) Partners for HKIAS v

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Hong Kong Laboratory Accreditation Scheme (HOKLAS) - Mutual Recognition Arrangement (MRA) Partners

Economy	Logo	Name of Partner	URL	Test Area
United Kingdom of Great Britain and Northern Ireland		United Kingdom Accreditation Service (UKAS)	http://www.ukas.com	Calibration, Medical Testing, Non-medical Testing, Proficiency Testing Provider, Reference Material Producer
United States of America		APHA Laboratory Accreditation Programs, LLC (APHA-LAP, LLC)	http://www.apha-lap.com/affiliates.html	Non-medical Testing
United States of America		American Association for Laboratory Accreditation (A2LA)	http://www.a2la.org	Calibration, Medical Testing, Non-medical Testing, Proficiency Testing Provider, Reference Material Producer
United States of America		ANSI National Accreditation Board (ANAB)	http://www.anab.org	Calibration, Medical Testing, Non-medical Testing, Proficiency Testing Provider, Reference Material Producer
United States of America		International Accreditation Service Inc. (IAS)	http://www.iasinc.com	Calibration, Medical Testing, Non-medical Testing
United States of America		National Accreditation Center LLC (NAC)		Calibration, Non-medical Testing
United States of America		National Voluntary Laboratory Accreditation Program (NVLAP)	http://www.nvlap.gov	Calibration, Non-medical Testing



INTERNATIONAL
ACCREDITATION
SERVICE™

CERTIFICATE OF ACCREDITATION

This is to attest that

AQUALITY TESTCONSULT LIMITED

11AAB, KAI FONG GARDEN, PING CHE ROAD
FANLING, HONG KONG

Calibration Laboratory CL-207

has met the requirements of AC204, IAS Accreditation Criteria for Calibration Laboratories, and has demonstrated compliance with ISO/IEC Standard 17025:2017, General requirements for the competence of testing and calibration laboratories. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date February 19, 2024




President

Full web membership for current accreditation information

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

MEASURED QUANTITY or DEVICE TYPE CALIBRATED	RANGE	UNCERTAINTY ^{1,2} (±)	CALIBRATION PROCEDURE AND/OR STANDARD EQUIPMENT USED
			dimensional requirements as specified in BS 1881- Part 105: 1984)
Test Sieve ³	4 mm to 50 mm	50 µm	Reference Caliper by direct measurement as per BS 410 : 1986
Elongation Gauge ³	Gap between Pins of Gauge 10 mm to 100 mm	0.29 mm	Reference Caliper by direct measurement (Verification in accordance with in-house method for the dimensional requirements as specified in BS 812- Part 1:1975; BS 812- Part 105.2: 1990)
Flakiness Gauge ³	Length of Slot of Gauge 4.9 mm to 33.9 mm	0.06 mm	Reference Caliper by direct measurement ((Verification in accordance with in-house method for the dimensional requirements as specified in BS 812- Part 1:1975; BS 812- Part105.1:1985; BS 812- Part105.1:1989)
Riffle Box ³	Width 6 mm to 100 mm	0.06 mm	Reference Caliper by direct measurement (Verification in accordance with in-house method for the dimensional requirements as specified in BS 812- Part 1:1975)
Mechanical			
Force Measuring Machine ³ (Compression Mode)	1 kN to 3000 kN	0.4 %	Reference Load cell by direct measurement (Based on BS 1610: Part 1:1985; BS 1610: Part 1:1992; BS EN ISO 12390-4:2000 Annex B; BS EN 12390-4: 2019; BS EN ISO 7500-1:2004, BS EN ISO 7500-1: 2015, BS EN ISO 7500-1: 2018)
Laser Dust Meter ³	Dust particles 0.1 mg/m ³ to 3 mg/m ³ 3 mg/m ³ to 8 mg/m ³	0.006 mg/m ³ 0.39 mg/m ³	By comparison method by using reference laser dust meter (Based on ISO 12103-1:2016)
Rebound Hammer ³	80 unit (hardness)	1.6 rebound count	Reference Rebound count by comparison method (Based on BS1881: Part 202:1986, BS EN 12604-2:2001; BS EN