

Certificate of Calibration - Wind Monitoring Station

Description: Yau Lai Estate, Bik Lai House

Manufacturer: <u>Davis Instruments</u>

Model No.: Davis7440

Serial No.: <u>MC01010A44</u>

Equipment No.: SA-03-04

Date of Calibration <u>17-Aug-2024</u>

Next Due Date <u>17-Feb-2025</u>

1. Performance check of Wind Speed

Wind Sp	peed, m/s	Difference D (m/s)		
Wind Speed Reading (V1)	Anemometer Value (V2)	D = V1 - V2		
0.0 0.0		0.0		
1.5	1.6	-0.1		
2.5	2.3	0.2		
4.0	4.0	0.0		

2. Performance check of Wind Direction

Wind Di	rection (°)	Difference D (°)
Wind Direction Reading (W1)	Marine Compass Value (W2)	D = W1 - W2
0	0	0.0
90	90	0.0
180	180	0.0
270	270	0.0

Test Specification:

- 1. Performance Wind Speed Test The wind meter was on-site calibrated against the anemometer
- 2. Performance Wind Direction Test The wind meter was on-site calibrated against the marine compass at four direction

Calibrated by:

Wong Shing Kwai

Approved by:

Henry Leung



RECALIBRATION DUE DATE:

January 15, 2025

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 15, 2024

Rootsmeter S/N: 438320

Ta: 294

°K

Operator: Jim Tisch

Pa: 755.4

mm Hg

Calibration Model #: TE-5025A

Calibrator S/N: 3864

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4380	3.3	2.00
2	3	4	1	1.0270	6.4	4.00
3	5	6	1	0.9180	8.0	5.00
4	7	8	1	0.8750	8.9	5.50
5	9	10	1	0.7230	12.9	8.00

Data Tabulation							
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	$\sqrt{\Delta H (Ta/Pa)}$		
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)		
1.0031	0.6975	1.4195	0.9956	0.6924	0.8823		
0.9989	0.9727	2.0075	0.9915	0.9655	1.2477		
0.9968	1.0858	2.2444	0.9894	1.0778	1.3950		
0.9956	1.1378	2.3539	0.9882	1.1294	1.4631		
0.9903	1.3697	2.8390	0.9829	1.3595	1.7645		
	m=	2.11196		m=	1.32248		
QSTD	b=	-0.05043	QA	b=	-0.03134		
	r=	0.99998	4 .	r=	0.99998		

	Calculatio	ns			
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)		
Qstd=	Vstd/∆Time	Qa= Va/ΔTime			
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=	$1/m\left(\left(\sqrt{\Delta H(Ta/Pa)}\right)-b\right)$		

Standard Conditions				
Tstd:	298.15 °K			
Pstd:	760 mm Hg			
	Key			
ΔH: calibrate	or manometer reading (in H2O)			
ΔP: rootsme	ter 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

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002

www.tisch-env.com

TOLL FREE: (877)263-7610 FAX: (513)467-9009





RECALIBRATION DUE DATE:

January 7, 2026

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 7, 2025 Rootsmeter S/N: 438320 Ta: 293 °K

Operator: Jim Tisch Pa: 759.0 mm Hg

Calibration Model #: TE-5025A Calibrator S/N: 3864

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4590	3.2	2.00
2	3	4	1	1.0360	6.4	4.00
3	5	6	1	0.9160	8.0	5.00
4	7	8	1	0.8800	8.8	5.50
5	9	10	1	0.7270	12.7	8.00

	Data Tabulation							
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	$\sqrt{\Delta H(Ta/Pa)}$			
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)			
1.0114	0.6932	1.4252	0.9958	0.6825	0.8787			
1.0071	0.9721	2.0156	0.9916	0.9571	1.2427			
1.0050	1.0971	2.2535	0.9895	1.0802	1.3893			
1.0039	1.1408	2.3635	0.9884	1.1232	1.4572			
0.9987	1.3737	2.8505	0.9833	1.3525	1.7574			
	m=	2.08969		m=	1.30853			
QSTD	b=	-0.02374	QA	b=	-0.01464			
	r=	0.99985	,	r=	0.99985			

	Calculations					
	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)			
Qstd=	Vstd/∆Time	Qa= Va/ΔTime				
	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=	$1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$			

Standard Conditions					
Tstd:	298.15 °K				
Pstd:	760 mm Hg				
	Key				
	or 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

FAX: (513)467-9009



						File No. N	MA20003/18/029	
Project No.	CKL 1 - Flat 12	1 Cha Kwo Ling	Village					
Date:		ov-24		: 4-J	an-25	Operator:	SK	
	A-0							
Equipment 110	11-0	1-10	- Wiodel 140.		7.5170	Deriai 110.	0723	
			Ambient	Condition				
Temperatur	re, Ta (K)	302	Pressure, Pa	ı (mmHg)		762.7		
	T		rifice Transfer St	T T				
Serial		3864	Slope, mc	0.05976	Intercept		-0.05018	
	Last Calibration Date: 15-Jan-24 Next Calibration Date: 14-Jan-25				$c = [\Delta H \times (Pa/76)] \times (Pa/760) \times (298)$			
Next Calibra	ation Date:	14-Jan-25		$Qsta = \{ [\Delta H \}$	X (Pa//60) X (298/	/1a)] -bc}/m	<u>ic</u>	
		•	Calibration of	f TSP Sampler				
Callbard's a		Or	fice			HVS		
Calibration Point	ΔH (orifice), in. of water		50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	· ·) x (298/Ta)] ^{1/2} Y- axis	
1	13.5	,	3.66	62.02	9.1		3.00	
2	10.1		3.16	53.76	7.0		2.63	
3	8.4		2.88	49.10	5.2		2.27	
4	6.1		2.46	41.97	3.5	1.86		
5	3.5		1.86	31.99	1.7		1.30	
By Linear Regr Slope , mw =	ression of Y on X	K		Intercent hw :	-0.554	13		
Correlation		- 0.	.9979	intercept, by	0.00			
	Coefficient < 0.99			=				
				Calculation				
	eld Calibration (
From the Regres	sion Equation, th	ne "Y" value acco	ording to					
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W}]$	x (Pa/760) x (2	298/Ta)] ^{1/2}			
			2					
Therefore, Se	et Point; $W = (m)$	w x Qstd + bw)	² x (760 / Pa) x (Ta / 298) =	3.79			
Remarks:								
				br	λ			
Conducted by:	Wong Sh	ing Kwai	Signature	:	<u> </u>	Date:	4-Nov-24	
			<i>~</i> .	\ 0	V	_		
Checked by:	Henry	Leung	Signature	tem	1 mon	Date:	4-Nov-24	



						File No. N	MA20003/18/030
Project No.	CKL 1 - Flat 12	1 Cha Kwo Ling	Village				
Date:		n-25		6-N	Mar-25	Operator:	SK
		A-01-18 Model No.: TE 5170					
Equipment 110	71-0	1-10			73170	Deriai No.	0723
			Ambient	Condition			
Temperatur	re, Ta (K)	292.7	Pressure, Pa	(mmHg)		765.4	
	T		rifice Transfer Sta	1		<u> </u>	
Serial		3864	Slope, mc	0.05976	Intercept		-0.05018
		15-Jan-24			$c = [\Delta H \times (Pa/76)] \times (Pa/760) \times (298)$		
Next Calibra	ation Date:	14-Jan-25		$Qsta = \{ [\Delta H X] \}$	(Pa//60) X (298/	/1a)j -bc}/m	<u>c</u>
		•	Calibration of	TSP Sampler			
Callbard's a		Or	fice			HVS	
Calibration Point	ΔH (orifice), in. of water		50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		x (298/Ta)] ^{1/2} Y-
1	13.4	3.71		62.87	9.0		3.04
2	10.3	,	3.25	55.22	7.2	,	2.72
3	8.2		2.90	49.36	5.3	,	2.33
4	6.2		2.52	43.03	3.6		1.92
5	3.1		1.78	30.67	1.6		1.28
Bv Linear Regr	ression of Y on Y	ζ.					
Slope, mw =				Intercept, bw :	-0.445	58	
Correlation		0.	.9978	- /			
*If Correlation C	Coefficient < 0.99	0, check and rec	calibrate.	_			
			Set Point (Calculation			
	eld Calibration (-					
From the Regres	sion Equation, th	ne "Y" value acco	ording to				
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\mathbf{\Delta W}]$	x (Pa/760) x (2	(98/Ta)] ^{1/2}		
Therefore, Se	et Point; $W = (m)$	w x Qstd + bw)	2 x (760 / Pa) x (Ta / 298) =	3.76	<u> </u>	
Remarks:							
				(A	21		
Conducted by:	Wong Sh	ing Kwai	Signature:		火-	Date:	4-Jan-25
				1 -			
Checked by:	by: Henry Leung Signate			-lem	2 Xon	Date:	4-Jan-25



File No. MA20003/55/029 Project No. CKL 2 - Flat 103 Cha Kwo Ling Village 4-Nov-24 Next Due Date: 4-Jan-25 Date: Operator: SK Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956 **Ambient Condition** 302 Temperature, Ta (K) Pressure, Pa (mmHg) 762.7 **Orifice Transfer Standard Information** 0.05976 Intercept, bc 3864 Slope, mc Serial No. -0.05018 $mc \times Ostd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 15-Jan-24 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 14-Jan-25 Next Calibration Date: **Calibration of TSP Sampler** Orfice Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ ΔH (orifice), Ostd (CFM) ΔW (HVS), in. $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Point in. of water X - axis of water Y-axis 1 13.5 3.66 62.02 9.3 3.03 2.69 2 11.3 3.35 56.82 7.3 3.02 51.35 5.9 2.42 4 2.33 39.89 2.8 1.67 3.5 31.99 1.9 1.37 5 1.86 By Linear Regression of Y on X Slope , mw = 0.0566 Intercept, bw :____ -0.5013 Correlation coefficient* = 0.9966 *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.76 Remarks: Conducted by: Wong Shing Kwai Checked by: Henry Leung



File No. MA20003/55/030 Project No. CKL 2 - Flat 103 Cha Kwo Ling Village 4-Jan-25 Next Due Date: 6-Mar-25 Operator: SK Date: Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956 **Ambient Condition** 292.7 Temperature, Ta (K) Pressure, Pa (mmHg) 765.4 **Orifice Transfer Standard Information** 0.05976 Intercept, bc 3864 Slope, mc Serial No. -0.05018 $mc \times Ostd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 15-Jan-24 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 14-Jan-25 Next Calibration Date: **Calibration of TSP Sampler** Orfice Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ ΔH (orifice), Ostd (CFM) ΔW (HVS), in. $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Point in. of water X - axis of water Y-axis 3.07 1 13.6 3.73 63.33 9.2 11.2 2.74 2 3.39 57.55 7.3 3.04 51.67 5.7 2.42 4 5.3 2.33 39.85 2.6 1.63 3.6 32.99 1.8 5 1.92 1.36 By Linear Regression of Y on X Slope , mw = 0.0581 Intercept, bw : -0.6068 Correlation coefficient* = 0.9980 *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; W = $(\text{mw x Qstd} + \text{bw})^2 \text{ x} (760 / \text{Pa}) \text{ x} (\text{Ta}/298) =$ 3.49 Remarks: Conducted by: Wong Shing Kwai Checked by: Henry Leung

5-POINT CALIBRATION DATA SHEET



File No. MA20003/04/0027

Project No.	KER 1 - Future	Residential Deve	elopment at Kerry (Godown		<u> </u>	
Date:	11-N	ov-24	Next Due Date:	11-	Jan-25	Operator:	SK
Equipment No.:	A-0	1-04	Model No.:	TE	E 5170	Serial No.	10595
			Ambient C	ondition			
Temperatu	re, Ta (K)	297.9	Pressure, Pa (mmHg)			760.8	
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	l No.	3864	Slope, mc	0.05976 Intercept, bc			-0.05018
Last Calibra	ation Date:	15-Jan-24	mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$				
Next Calibr	ation Date:	14-Jan-25	Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$				
			Calibration of T	FCD Camplar			
		Or		i Sr Samplei		HVS	
Calibration Point	ΔH (orifice), in. of water	Orfice [ΔH x (Pa/760) x (298/Ta)] ^{1/2}		Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/7	60) x (298/Ta)] ^{1/2} Y-axis
1	13.2		3.64	61.68	8.7	2.95	
2	10.8		3.29	55.87	7.1	2.67	
3	8.8		2.97	50.51	5.1	2.26	
4	5.5		2.35	40.11	3.2	1.79	
5	3.9		1.98	33.91	2.1	1.45	
Slope , mw = Correlation	coefficient < 0.99	0	.9973	Intercept, bw	-0.393	35	
	ield Calibration Casion Equation, th	ne "Y" value acco			98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	² x (760 / Pa) x (7	Γα / 298) =	3.72		
Remarks:							
		· w	~·		<u></u>		11.37 5:
Conducted by:	Wong Sh	ning Kwai	Signature:	/	y (X27	Date: 11-Nov-24	
Checked by:	Henry	Leung	Signature:	\-lem	, ohen	Date:	11-Nov-24

5-POINT CALIBRATION DATA SHEET



File No. MA20003/04/0028

Project No.	KER 1 - Future	_					
Date:	11-Jan-25		Next Due Date:	13-Mar-25		Operator:	SK
Equipment No.:	A-0	01-04	Model No.:	TE	E 5170	Serial No.	10595
			Ambient C	ondition			
Temperatu	re, Ta (K)	289.6	Pressure, Pa			771.8	
•	•			·			
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	l No.	3864	Slope, mc	0.05976	Intercept		-0.05018
Last Calibra	ation Date:	15-Jan-24	mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$				
Next Calibra	ation Date:	14-Jan-25	($Qstd = \{ [\Delta H \ x] $	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / m	c
	l		Calibration of 7	TSP Sampler		*****	
Calibration	ΔH (orifice),		fice	Octd (CEM)	AW (IIVG) :	HVS	50) x (298/Ta)] ^{1/2}
Point	in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$		Qstd (CFM) X - axis	Δ W (HVS), in. of water		50) x (298/1a)] Z-axis
1	13.1		3.70	62.75	8.6		3.00
2	10.9		3.37	57.31	7.0	2.70	
3	8.6		3.00	51.00	5.3		2.35
4	5.3		2.35	40.22	3.1	1.80	
5	3.8		1.99	34.19	2.4	1.58	
By Linear Regr Slope , mw = Correlation		<u> </u>	. 9981	Intercept, bw :	-0.179	00	
		90, check and rec	calibrate.	•			
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration (Curve, take Qstd					
From the Regres	sion Equation, th	ne "Y" value acco	ording to				
				(D. (E.(0)) (A)	20/57 > 1/2		
		mw x C	$\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) x (29	98/Ta)]***		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	2 x (760 / Pa) x (7	Γa / 298) =	3.76		
Remarks:							
				-10	-1		
Conducted by:	Conducted by: Wong Shing Kwai Signature: Date: 11-J.						11-Jan-25
Checked by:	Henry	Leung	Signature:	\-Pa.	2 (X2)	Date:	11-Jan-25

5-POINT CALIBRATION DATA SHEET



File No. MA20003/44/0026

Project No.	KTD1 - Centre	_					
Date:	11-Nov-24		Next Due Date: 11-		Jan-25 Operator		SK
Equipment No.:	A-0	01-44	Model No.:	TE-5170		Serial No.	1316
			Ambient C	ondition			
Temperatu	re, Ta (K)	297.9	Pressure, Pa (mmHg)		760.8		
•	•						
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	l No.	3864	Slope, mc	0.05976	Intercept		-0.05018
Last Calibra	ation Date:	15-Jan-24	mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$				
Next Calibra	ation Date:	14-Jan-25	($Qstd = \{ [\Delta H \ x] \}$	(Pa/760) x (298/	Γa)] ^{1/2} -bc} / m	ıc
			Calibration of 7	TSP Sampler			
Calibration	AII (c.::£:)		fice	0.41(07)() 497(07)()		HVS	(0) (000 /F) 1/
Point	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] ^{1/2}		Qstd (CFM) X - axis	ΔW (HVS), in. of water		60) x (298/Ta)] ^{1/} /- axis
1	13.8		3.72	63.05	9.5		3.08
2	11.2		3.35	56.88	7.5	2.74	
3	9.1		3.02	51.35	5.6		2.37
4	6.4		2.53	43.20	3.7		1.92
5	3.7		1.92	33.05	2.0	1.42	
Slope , mw =		<u> </u>		Intercept, bw :	-0.468	31	
	coefficient* =		.9988				
*If Correlation C	Coefficient < 0.99	90, check and rec	ealibrate.				
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration (Curve, take Qstd					
From the Regres	sion Equation, th	ne "Y" value acco	ording to				
					1/2		
		mw x Q	$\mathbf{pstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) x (29	98/Ta)]" ²		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	3.77		
Remarks:							
				h	<u> </u>		
Conducted by:	Wong Sh	ning Kwai	Signature:		<u> </u>	Date:	11-Nov-24
				1 ~			
Checked by:	Henry	Leung	Signature:	1-Pa.	2 Xon	Date:	11-Nov-24

5-POINT CALIBRATION DATA SHEET



File No. MA20003/44/0027

Project No.	KTD1 - Centre	_					
Date:	11-J	an-25	Next Due Date: 13-I		Mar-25 Operator		SK
Equipment No.:	A-0	01-44	Model No.:	: TE-5170		Serial No.	1316
			Ambient C	ondition			
Temperatu	re, Ta (K)	289.6	Pressure, Pa	ı (mmHg)		771.8	
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	l No.	3864	Slope, mc	0.05976	Intercept		
Last Calibra	1	15-Jan-24	mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Qstd = $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$				
Next Calibr	ation Date:	14-Jan-25	($Qstd = \{ [\Delta H \ x]$	(Pa/760) x (298/	$[\Gamma a]^{1/2}$ -bc $\}$ / m	ıc
			Calibration of 7	FSP Sampler			
		Or	fice	ioi bampier		HVS	
Calibration Point	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] ^{1/2}		Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/7)	60) x (298/Ta)] ^{1/2} 7-axis
1	13.7		3.78	64.15	9.6	3.17	
2	11.3		3.44	58.34	7.4	2.78	
3	9.0		3.07	52.16	5.6		2.42
4	6.2		2.55	43.43	3.5	1.91	
5	3.5		1.91	32.84	2.0	1.45	
Slope , mw =	ession of Y on Y 0.0551 coefficient* =	_	99 71	Intercept, bw :	-0.419	02	
*If Correlation C	Coefficient < 0.99	90, check and rec	ealibrate.				
			Set Point Ca	alculation			
		Curve, take Qstd ne "Y" value acco		t (Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (m		² x (760 / Pa) x (7		3.64		
Remarks:							
Conducted by:	Wong Sh	ning Kwai	Signature:	<u> </u>	<u></u> 火-	Date:	11-Jan-25
			. 0	1			-
Checked by:	Henry	Leung	Signature:	1-Pa	2 Kon	Date:	11-Jan-25



						File No.	MA20003/41/0026
Project No.	KTD 2D - Next t	to the SOR Offic	ce of Trunk Road T	'2 in Kai Tak A	area		
Date:	11-Nov-24				Jan-25	Operator:	SK
	A-01		•	TE		Serial No.	
Equipment 110	71-01	1-41	Wiodel 140		23170	Scriai 140.	3200
			Ambient C	ondition			
Temperatu	re, Ta (K)	297.9	Pressure, Pa (mmHg)			760.8	
	T		ifice Transfer Star				
Serial		3864	Slope, mc	0.05976	Intercept		-0.05018
Last Calibra		15-Jan-24	mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Qstd = $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc\} / mc$				
Next Calibra	ation Date:	14-Jan-25	($Qstd = \{ [\Delta H \ x]$	(Pa/760) x (298/7	[a)]" -bc} /	mc
			G 19 41 65	EGD G			
		Or	Calibration of T	1SP Sampler		HVS	
Calibration	AH (orifica)			Qstd (CFM)	ΔW (HVS), in.		/760) x (298/Ta)] ^{1/2}
Point	in. of water	[ΔH x (Pa/76	$(50) \times (298/Ta)]^{1/2}$	X - axis	of water	[2 11 A (1 W)	Y-axis
1	14.3	,	3.78	64.16	9.6		3.10
2	11.5		3.39	57.63	8.1		2.85
3	9.7		3.12	52.99	6.1		2.47
4	7.1		2.67	45.46	4.3		2.08
5	4.0	2.00		34.33	2.0		1.42
By Linear Regr	ession of Y on X						
Slope, $mw =$	0.0577	-]	Intercept, bw :	-0.553	6	•
Correlation	coefficient* =	0	.9973				
*If Correlation C	Coefficient < 0.99	0, check and rec	alibrate.				
E 4 TCD E	-14 C-17	(-1 O-(-1	Set Point Ca	alculation			
	eld Calibration C sion Equation, the	_					
From the Regres	sion Equation, the	e i value acco	ording to				
		mw x Q	$\mathbf{pstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) x (29	$[98/Ta]^{1/2}$		
			7				
Therefore, Se	et Point; $W = (mv)$	w x Qstd + bw)	2 x (760 / Pa) x (7	$\Gamma a / 298) =$	3.70		
_							
Remarks:							
				10	ما		
Conducted by:	Wong Shi	ing Kwai	Signature:		<u> </u>	Date:	11-Nov-24
				\	- M27		
Checked by:	Henry 1	Leung	Signature:	1-P-	- Mars	Date:	11-Nov-24



File No. MA20003/41/0027 KTD 2D - Next to the SOR Office of Trunk Road T2 in Kai Tak Area Project No. 11-Jan-25 Next Due Date: 13-Mar-25 Operator: SK Date: Equipment No.: A-01-41 Model No.: TE 5170 Serial No. 5280 **Ambient Condition** Temperature, Ta (K) 289.6 Pressure, Pa (mmHg) 771.8 **Orifice Transfer Standard Information** 0.05976 Intercept, bc 3864 Slope, mc Serial No. -0.05018 $mc \times Ostd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 15-Jan-24 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 14-Jan-25 Next Calibration Date: **Calibration of TSP Sampler** Orfice Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ ΔH (orifice), Ostd (CFM) ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 1 13.9 3.81 64.61 9.5 3.15 11.7 8.2 2.93 2 3.50 59.35 3.20 54.39 6.2 2.55 4 7.2 2.74 46.74 4.3 2.12 2.1 5 4.3 2.12 36.31 1.48 By Linear Regression of Y on X Slope , mw = 0.0600 Intercept, bw : -0.6898 Correlation coefficient* = 0.9985 *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.41 Remarks: Conducted by: Wong Shing Kwai

Checked by: Henry Leung