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Certificate of Calibration - Wind Monitoring Station

Yau Lai Estate, Bik Lai House
Davis Instruments
<u>Davis7440</u>
<u>MC01010A44</u>
<u>SA-03-04</u>
<u>17-Feb-2025</u>
<u>17-Aug-2025</u>

1. Performance check of Wind Speed

Wind Sp	beed, m/s	Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V2)	D = V1 - V2
0.0	0.0	0.0
1.5	1.4	0.1
2.5	2.4	0.1
4.0	3.8	0.2

2. Performance check of Wind Direction

Wind Di	rection (°)	Difference D (°)
Wind Direction Reading (W1)	Marine Compass Value (W2)	$\mathbf{D} = \mathbf{W}1 - \mathbf{W}2$
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



RECALIBRATION

DUE DATE:

January 7, 2026

Certificate of Calibration

			Calibration	Certificati	on Informat	ion		
Cal. Date:	January 7, 2025 Rootsmeter S/N: 438320 Ta: 293							
Operator:	Jim Tisch					Pa:	759.0	mm Hg
Calibration	Model #:	TE-5025A	Calil	brator S/N:	3864			•
								1
		Vol. Init	Vol. Final	ΔVol.	ΔTime	ΔΡ	ΔΗ	
	Run	(m3)	(m3)	(m3)	(min)	(mm Hg)	(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	/ م	0 10	1	0.8800	8.8 12.7	5.50	
		9	10	⊥ 	0.7270	12.7	8.00	
		T	[Data Tabula	tion			
			Au/ Pa	\/ Tstd \			$\int \frac{1}{1 + 1} = \frac{1}{1 + 1}$	
	Vstd	Qstd	√ ^{∆H} (Pstd	/ Ta /		Qa	√ΔH(Ta/Pa)	
	(m3)	(x-axis)	(y-ax	is)	Va	(x-axis)	(y-axis)	
	1.0114	0.6932	1.42	52	0.9958	0.6825	0.8787	
	1.0071	0.9721	2.01	56	0.9916	0.9571	1.2427	
	1.0050	1.0971	2.253	35	0.9895	1.0802	1.3893	
	1.0039	1.1408	2.363	35	0.9884	1.1232	1.4572	
	0.9987	1.3737	2.850	05	0.9833	1.3525	1.7574	
	OCTD	m=	2.089	69		m=	1.30853	
	USID		-0.023	5/4 0E	QA	=d	-0.01464	
		-]	0.999	60		r=	0.99985	
				Calculatio	ns			
	Vstd=	$\Delta Vol((Pa-\Delta P)$	/Pstd)(Tstd/Ta	a)	Va=	∆Vol((Pa-∆I	P)/Pa)	
	Qstd=	Vstd/∆Time			Qa=	Va/∆Time		
			For subsequ	ent flow ra	te calculatio	าร:		
	Qstd=	1/m ((\\ \ \ \ \ \ \ H (Pa Pstd Tstd))-b)	Qa=	1/m ((√ΔH	(Та/Ра))-ь)	
	Standard	Conditions	1					
Tstd:	298.15	°K		[RECA	IBRATION	
Pstd:	760	mm Hg						4000
Alle onlikest	K	ey			US EPA reco	mmends ar	inual recalibratio	on per 1998
AP: rooteme	or manomet	er reading (II	n H2O)		40 Code	of Federal F	egulations Part 5	ou to 51,
Ta: actual al	solute tem	perature (°K)	(11111 rg)		Appendix E	το Part 50,	Reference Meth	od for the
Pa: actual ba	arometric pr	essure (mm	Hg)		Determinat	ion of Susp	ended Particulate	e Matter in
b: intercept					the	e Atmosphe	re, 9.2.17, page 3	30
m: slope				L				

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

<u>www.tisch-env.com</u> TOLL FREE: (877)263-7610 FAX: (513)467-9009



File No. MA20003/18/031

Project No.	CKL 1 - Flat 12						
Date:	6-N	Iar-25	Next Due Date:	6-May-25	Operator:	SK	
Equipment No.:	A-0	01-18	Model No.:	TE 5170	Serial No.	0723	
			Ambient Condi	ition			
Temperatu	ure, Ta (K)	287.5	Pressure, Pa (mml	Hg)	764.8		

Orifice Transfer Standard Information								
Serial No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377			
Last Calibration Date:	7-Jan-25		mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					
Next Calibration Date:	7-Jan-26	Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc						

		Calibration of	f TSP Sampler		
Callbard an		Orfice	--		HVS
Point	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y- axis
1	13.2	3.71	63.14	9.1	3.08
2	10.4	3.29	56.09	7.3	2.76
3	8.3	2.94	50.15	5.4	2.37
4	6.1	2.52	43.05	3.7	1.96
5	3.0	1.77	30.31	1.6	1.29
By Linear Regr Slope , mw = Correlation	ression of Y on X 0.0554 coefficient* =	0.9991	Intercept, bw :	-0.397	70
*If Correlation C	Coefficient < 0.99), check and recalibrate.	~ • • •		
		Set Point	Calculation		
From the TSP Fi	eld Calibration C	urve, take Qstd = 43 CFM			
From the Regres	sion Equation, the	www.x Ostd + bw = [ΔW]	x (Pa/760) x (2	$298/T_{9}$)] ^{1/2}	
Therefore, Se	et Point; W = (mv	$w x Qstd + bw)^2 x (760 / Pa) x ($	Ta / 298) =	3.78	
Remarks:					
Conducted by:	Wong Shi	ng Kwai Signature	k	火.	Date: 6-Mar-25
Checked by:	Henry I	Leung Signature	lem	y day	Date: 6-Mar-25



File No. MA20003/18/032

Project No.	roject No. CKL 1 - Flat 121 Cha Kwo Ling Village								
Date:	6-N	lay-25	Next Due Date:	6-Jul-25	Operator:	SK			
Equipment No.:	A-01-18		Model No.:	TE 5170	Serial No.	0723			
	Ambient Condition								
Temperatu	ıre, Ta (K)	300.7	Pressure, Pa (mmI	Hg)	759.1				

Orifice Transfer Standard Information								
Serial No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377			
Last Calibration Date:	7-Jan-25		mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					
Next Calibration Date:	7-Jan-26	Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc						

		Calibration of	f TSP Sampler							
Calibration		Orfice	F		HVS					
Point	ΔH (orifice), in. of water	$[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2} $ Y- axis					
1	13.3	3.63	61.75	9.0	2.98					
2	10.5	3.22	54.91	7.2	2.67					
3	8.4	2.88	49.16	5.2	2.27					
4	6.0	2.44	41.61	3.6	1.89					
5	3.0	1.72	29.54	1.5	1.22					
By Linear Regr Slope , mw = Correlation *If Correlation (By Linear Regression of Y on X Slope , mw = 0.0554 Intercept, bw : -0.4205 Correlation coefficient* = 0.9990									
		Set Point (Calculation							
From the TSP Fi	eld Calibration C	urve, take Qstd = 43 CFM								
From the Regres	From the Regression Equation, the "Y" value according to $\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \mathbf{x} (\mathbf{Pa}/760) \mathbf{x} (298/\mathbf{Ta})]^{1/2}$ Therefore, Set Point; W = (mw x Qstd + bw) ² x (760 / Pa) x (Ta / 298) = 3.89									
Remarks:										
Conducted by:	Wong Shi	ng Kwai Signature	k k	<u></u> Х.	Date: 6-May-25					
Checked by:	Henry I	Leung Signature	-lem	y day	Date: 6-May-25					

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File No. MA20003/55/031

Project No.	CKL 2 - Flat 10	03 Cha Kwo Lin	g Village			
Date:	6-N	Iar-25	Next Due Date:	6-May-25	Operator:	SK
Equipment No.:	uipment No.: A-01-55		Model No.:	TE 5170	E 5170 Serial No.	
			Ambient Condit	ion		
Temperature, Ta (K) 287.5		Pressure, Pa (mmHg)		764.8		

Orifice Transfer Standard Information								
Serial No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377			
Last Calibration Date:	7-Jan-25	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$						
Next Calibration Date:	7-Jan-26	Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc						

Calibration of TSP Sampler							
Calibration		Orfice			HVS		
Point	ΔH (orifice), in. of water	$[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis		
1	13.5	3.75	63.85	9.1	3.08		
2	11.0	3.39	57.68	7.2	2.74		
3	9.1	3.08	52.50	5.6	2.42		
4	5.1	2.31	39.40	2.6	1.65		
5	3.8	1.99	34.07	1.9	1.41		
By Linear Regression of Y on X Slope , mw = 0.0571 Intercept, bw = -0.5684 Correlation coefficient* = 0.9994 *If Correlation Coefficient < 0.990, check and recalibrate.							
From the TSP Fi From the Regres	eld Calibration Cu sion Equation, the	Set Point C urve, take Qstd = 43 CFM e "Y" value according to	alculation				
Therefore, Se	$mw \ x \ Qstd + bw = [\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Therefore, Set Point; W = (mw x Qstd + bw) ² x (760 / Pa) x (Ta / 298) =3.42						
Remarks:							
Conducted by:	Wong Shi	ng Kwai Signature:	<u>X</u>	Ŋ	Date: 6-Mar-25		
Checked by:	Henry I	Leung Signature:	-lem	g drag	Date: 6-Mar-25		

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File No. MA20003/55/032

Project No.	CKL 2 - Flat 1	03 Cha Kwo Lin	ig Village			
Date:	6-N	lay-25	Next Due Date:	6-Jul-25	Operator:	SK
Equipment No.:	A-	01-55	Model No.:	TE 5170	Serial No.	1956
			Ambient Condit	ion		
Temperatu	ıre, Ta (K)	300.7	Pressure, Pa (mmI	Hg)	759.1	

Orifice Transfer Standard Information								
Serial No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377			
Last Calibration Date:	7-Jan-25	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$						
Next Calibration Date:	Next Calibration Date: 7-Jan-26 $Qstd = \{ [\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2} - bc \} / mc$							

Calibration of TSP Sampler								
Calibration		Orfice			HVS			
Point	ΔH (orifice), in. of water	$[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis			
1	13.6	3.67	62.44	9.0	2.98			
2	11.1	3.31	56.45	7.0	2.63			
3	9.2	3.02	51.43	5.8	2.40			
4	5.2	2.27	38.76	2.8	1.66			
5	3.8	1.94	33.20	2.0	1.41			
By Linear Regression of Y on X Slope , mw =0.0543Intercept, bw :0.4130 Correlation coefficient* =0.9995 *If Correlation Coefficient < 0.990, check and recalibrate.								
From the TSP Fi From the Regres	eld Calibration Cu sion Equation, the	Set Point C urve, take Qstd = 43 CFM e "Y" value according to mw x Qstd + bw = [ΔW 3	alculation x (Pa/760) x (29	98/Ta)] ^{1/2}				
Therefore, Se	et Point; W = (mv	$(x + bw)^2 x (760 / Pa) x (760 / Pa)$	Ta / 298) =	3.73				
Remarks:								
Conducted by:	Wong Shi	ng Kwai Signature:	X	<u>у</u>	Date: 6-May-25			
Checked by:	Henry I	Leung Signature:	-lem	1 Xoz	Date: 6-May-25			

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File No. MA20003/04/0029

Project No.	KER 1 - Future	e Residential Dev				
Date:	13-1	Mar-25	Next Due Date:	13-May-25	Operator:	SK
Equipment No.:	A-	01-04	Model No.:	TE 5170	Serial No.	10595
			Ambient Condit	ion		
Temperatu	re, Ta (K)	297.3	Pressure, Pa (mml	Hg)	760.1	

Orifice Transfer Standard Information							
Serial No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377		
Last Calibration Date:	ast Calibration Date: 7-Jan-25 $mc x Qstd + bc = [\Delta H x (Pa/760) x (298/Ta)]^{1/2}$						
Next Calibration Date: 7-Jan-26 $Qstd = \{ [\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2} - bc \} / mc$							

		Calibration of	TSP Sampler		
Calibration			HVS		
Point	ΔH (orifice), in. of water	$[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis
1	13.0	3.61	61.44	8.5	2.92
2	10.8	3.29	56.04	7.2	2.69
3	8.7	2.95	50.34	5.6	2.37
4	5.1	2.26	38.64	3.2	1.79
5	3.9	1.98	33.84	2.2	1.49
By Linear Regr Slope , mw = Correlation	ession of Y on X 0.0518 coefficient* =	0.9990	Intercept, bw -	-0.238	2
*If Correlation C	Coefficient < 0.990), check and recalibrate.	alculation		
From the TSP Fi	eld Calibration C	$rve_{take Octd} = 43 \text{ CFM}$			
From the Regres	sion Equation the	v''' value according to			
Therefore, Se	et Point; W = (mv	$\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\mathbf{\Delta W} \mathbf{x}]$ v x Qstd + bw) ² x (760 / Pa) x (x (Pa/760) x (2 9 Ta / 298) =	98/Ta)] ^{1/2} 	
Remarks:					
Conducted by:	Wong Shi	ng Kwai Signature	<u> </u>	入-	Date: 13-Mar-25
Checked by:	Henry I	Leung Signature	- len	, May	Date: 13-Mar-25

CIN@TECH 4

File No. MA20003/04/0030

Project No.	KER 1 - Future	e Residential Dev				
Date:	<u> </u>	May-25	Next Due Date:	14-Jul-25	Operator:	SK
Equipment No.:	A-0	01-04	Model No.:	TE 5170	Serial No.	10595
			Ambient Conditi	on		
Temperatu	ure, Ta (K)	300.2	Pressure, Pa (mmF	lg)	759.6	

Orifice Transfer Standard Information							
Serial No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377		
Last Calibration Date:	7-Jan-25	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					
Next Calibration Date: 7-Jan-26 $Qstd = \{ [\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2} - bc \} / mc \}$							

Calibration of TSP Sampler								
Calibration		Orfice			HVS			
Point	ΔH (orifice), in. of water	$[\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis			
1	12.8	3.56	60.66	8.2	2.85			
2	10.6	3.24	55.24	7.0	2.64			
3	8.6	2.92	49.79	5.1	2.25			
4	5.0	2.23	38.06	2.9	1.70			
5	3.8	1.94	33.23	2.0	1.41			
By Linear Regr Slope , mw = Correlation	ression of Y on X 0.0529 coefficient* =	0.9981	Intercept, bw	-0.340	0			
*If Correlation C	Coefficient < 0.990), check and recalibrate.	_					
		Set Point (Calculation					
From the TSP Fi	eld Calibration Cu	rve, take Qstd = 43 CFM						
From the Regres	sion Equation, the	"Y" value according to						
Therefore, Se	et Point; W = (mv	$\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W}]$ v x Qstd + bw) ² x (760 / Pa) x (x (Pa/760) x (2 9 Ta / 298) =	98/Ta)] ^{1/2} 3.78				
Remarks:								
Conducted by:	Wong Shi	ng Kwai Signature	<u> </u>	Л .	Date: 14-May-25			
Checked by:	Henry I	Leung Signature	: Len	, Xng	Date: 14-May-25			



File No. MA20003/44/0028

Project No.	KTD1 - Centre of Excellence in Paediatrics (Children's Hospital)						
Date:	13-1	Mar-25	Next Due Date:	13-May-25	Operator:	SK	
Equipment No.:	A-4	01-44	Model No.:	TE-5170	Serial No.	1316	
			Ambient Condit	tion			
Temperatu	ure, Ta (K)	297.3	Pressure, Pa (mm	Hg)	760.1		

Orifice Transfer Standard Information							
Serial No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377		
Last Calibration Date:	7-Jan-25	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					
Next Calibration Date: 7-Jan-26 $Qstd = \{ [\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2} - bc \} / mc$							

Calibration of TSP Sampler								
Calibration		Orfice			HVS			
Point	ΔH (orifice), in. of water	$[\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis			
1	13.5	3.68	62.61	9.1	3.02			
2	11.4	3.38	57.56	7.5	2.74			
3	9.3	3.05	52.03	5.7	2.39			
4	6.0	2.45	41.87	3.6	1.90			
5	3.6	1.90	32.52	2.0	1.42			
By Linear Regr Slope , mw =	ression of Y on X 0.0531		Intercept, bw :	-0.324	14			
Correlation	coefficient* =	0.9991	_					
*If Correlation C	Coefficient < 0.990), check and recalibrate.	N 1 1 4					
Enous the TSD E	ald Calibration C	Set Point C						
From the Deeree	aion Equation the	V = 45 CFM						
From the Regres	sion Equation, the	Y value according to						
		mw x Qstd + bw = $[\Delta W]$	x (Pa/760) x (29	$98/Ta)]^{1/2}$				
Therefore, Se	et Point; W = (mv	x = x + 2x	Ta / 298) =	3.83				
Remarks:								
Conducted by:	Wong Shi	ng Kwai Signature	: <u> </u>	火.	Date: 13-Mar-25			
Checked by:	Henry I	Leung Signature	: \-lem	, May	Date: 13-Mar-25			



File No. MA20003/44/0029

Project No.	KTD1 - Centre	of Excellence in					
Date:	<u>14-N</u>	May-25	Next Due Date:	14-Jul-25	Operator:	SK	
Equipment No.:	A-4	01-44	Model No.:	TE-5170	Serial No.	1316	
			Ambient Condit	ion			
Temperatu	ure, Ta (K)	300.2	Pressure, Pa (mmł	-Ig)	759.6		

Orifice Transfer Standard Information								
Serial No. 3864 Slope, mc 0.05914 Intercept, bc -0.02377								
Last Calibration Date:	7-Jan-25	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$						
Next Calibration Date:	7-Jan-26	Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc						

Calibration of TSP Sampler									
Colibration		Orfice			HVS				
Point	ΔH (orifice), in. of water	$[\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis				
1	13.6	3.67	62.51	9.0	2.99				
2	11.5	3.38	57.52	7.4	2.71				
3	9.4	3.05	52.04	5.6	2.36				
4	6.0	2.44	41.66	3.5	1.86				
5	3.7	1.92	32.80	2.0	1.41				
By Linear Regression of Y on X Slope , mw =0.0528 Intercept, bw :0.3396 Correlation coefficient* =0.9988 *If Correlation Coefficient < 0.990, check and recalibrate.									
		Set Point C	alculation						
From the TSP Fi	eld Calibration Cu	urve, take Qstd = 43 CFM							
From the Regres	sion Equation, the	e "Y" value according to							
Therefore, Se	$mw x Qstd + bw = [\Delta W x (Pa/760) x (298/Ta)]^{1/2}$ Therefore, Set Point; W = (mw x Qstd + bw) ² x (760 / Pa) x (Ta / 298) =3.76								
Remarks:									
Conducted by:	Wong Shi	ng Kwai Signature	. <u>X</u>	入-	Date: 14-May-25				
Checked by:	Henry I	Leung Signature	: \-lem	, Xon	Date: 14-May-25				

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File No. MA20003/41/0028

Project No.	roject No. KTD 2D - Next to the SOR Office of Trunk Road T2 in Kai Tak Area								
Date:	13-1	Mar-25	Next Due Date:	13-May-25	Operator:	SK			
Equipment No.:	A-	01-41	Model No.:	TE 5170	Serial No.	5280			
			Ambient Condit	tion					
Temperatu	re, Ta (K)	297.3	Pressure, Pa (mm	Hg)	760.1				
Orifice Transfer Standard Information									

Orifice Transfer Standard Information									
Serial No. 3864 Slope, mc 0.05914 Intercept, bc -0.02377									
Last Calibration Date:	7-Jan-25	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$							
Next Calibration Date:	7-Jan-26	Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc							

Calibration of TSP Sampler							
Calibration		Orfice			HVS		
Point	ΔH (orifice),	[ΔH x (Pa/760) x (298/Ta)] ^{1/2}	Qstd (CFM)	ΔW (HVS), in.	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$		
	III. OI water		A - axis	of water	Y-axis		
1	13.8	3.72	63.29	9.6	3.10		
2	11.6	3.41	58.06	8.5	2.92		
3	9.6	3.10	52.86	6.3	2.51		
4	7.1	2.67	45.51	4.4	2.10		
5	4.1	2.03	34.68	2.3	1.52		
By Linear Regression of Y on X Slope , mw =0.0570 Intercept, bw :0.4710 Correlation coefficient* =0.9972 *If Correlation Coefficient < 0.990, check and recalibrate.							
From the TSP Fi	eld Calibration Cu	Set Point C urve, take Qstd = 43 CFM	alculation				
From the Regression Equation, the "Y" value according to $\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \mathbf{x} (\mathbf{Pa}/760) \mathbf{x} (298/\mathbf{Ta})]^{1/2}$ Therefore, Set Point; W = (mw x Qstd + bw) ² x (760 / Pa) x (Ta / 298) =3.92							
Remarks:							
Conducted by:	Wong Shi	ng Kwai Signature:	<u> </u>	火.	Date: 13-Mar-25		
Checked by:	Henry I	Leung Signature:	len	- May	Date: 13-Mar-25		

7-Jan-25

7-Jan-26

Last Calibration Date:

Next Calibration Date:



File No. MA20003/41/0029

Project No.	Project No. KTD 2D - Next to the SOR Office of Trunk Road T2 in Kai Tak Area								
Date:	14-]	May-25	Next Due Date:	14-	Jul-25 Operator	: SK			
Equipment No.:	A-	01-41	Model No.:	TE	E 5170 Serial No	. 5280			
Ambient Condition									
Temperatu	ire, Ta (K)	300.2	Pressure, Pa	(mmHg)	759.6				
Orifice Transfer Standard Information									
Seria	l No.	3864	Slope, mc	0.05914	Intercept, bc	-0.02377			
Last Calibra	Calibration Date: 7-Jan-25 $\operatorname{mc} \mathbf{x} \operatorname{Qstd} + \mathbf{bc} = [\Delta \mathbf{H} \mathbf{x} (\mathbf{Pa}/760) \mathbf{x} (298/Ta)]^{1/2}$								

Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc

1

		Calibration of	TSP Sampler		
Calibration		Orfice			HVS
Point	ΔH (orifice), in. of water	$[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis
1	13.7	3.69	62.74	9.3	3.04
2	11.5	3.38	57.52	8.0	2.82
3	9.5	3.07	52.31	6.2	2.48
4	7.0	2.64	44.96	4.3	2.07
5	4.0	1.99	34.09	2.0	1.41
Slope , mw = Correlation *If Correlation (0.0577 coefficient* = Coefficient < 0.99	0.9989 0, check and recalibrate.	Intercept, bw _	-0.540	<u> </u>
		Set Point C	alculation		
From the TSP Fi	eld Calibration C	urve, take Qstd = 43 CFM			
From the Regres	sion Equation, the	e "Y" value according to			
Therefore, So	et Point; W = (my	$\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \mathbf{x}]$ $\mathbf{w} \mathbf{x} \mathbf{Qstd} + \mathbf{bw})^{2} \mathbf{x} (760 / Pa) $	x (Pa/760) x (2) Ta / 298) =	98/Ta)] ^{1/2} 	
Remarks:					
Conducted by:	Wong Shi	ng Kwai Signature:	X	火.	Date: 14-May-25
Checked by:	Henry	Leung Signature:	1-Par	Mar	Date: 14-May-25

CINOTECH CONSULTANTS LIMITED



Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description:	Digital Dust Indicator		Date	of Calibration	17-Apr-25
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibr	ation Record	17-Jun-25
Model No.:	LD-5R				
Serial No.:	4X7590				
Equipment No.:	SA-01-14	Sensitivity	1 CPM = 0.001 mg	g/m3	
High Volume Sa	mpler No.: <u>A-01-03</u>	Before Sensi	tivity Adjustment	548 CPM	
Tisch Calibration	n Orifice No.: 3864	After Sensiti	vity Adjustment	548 CPM	

Calibration of 1 hr TSP							
Colibration	Laser Dust Monitor	HVS					
Point	Mass Concentration (µg/m3)	Mass concentration ($\mu g/m^3$)					
Tohh	X-axis	Y-axis					
1	31.0	53.0					
2	28.0	51.0					
3	62.0	104.0					
Average	40.3	69.3					
Slope , mw = Correlation co	<u>1.5941</u> pefficient* = <u>0.9989</u>	Intercept, bw =5.0390					
	Set Corre	lation Factor					
Particaulate Con	centration by High Volume Sampler (µg/m ³)	69.3					
Particaulate Con	centration by Dust Meter (μ g/m ³)	40.3					
Measureing time	e, (min)	60.0					
Set Correlation H	Factor, SCF						
SCF = [K=Higl	h Volume Sampler / Dust Meter, (μg/m3)]	1.7					

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Technical Officer (Wong Shing Kwai)

Calibrated by:

CINOTECH CONSULTANTS LIMITED



Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description:	Digital Dust Indicator		Date of	of Calibration	17-Apr-25
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibra	ation Record	17-Jun-25
Model No.:	LD-5R				
Serial No.:	4X7585				
Equipment No.:	SA-01-15	Sensitivity	1 CPM = 0.001 mg	/m3	
High Volume Sa	mpler No.: <u>A-01-03</u>	Before Sensit	ivity Adjustment	669 CPM	
Tisch Calibration	n Orifice No.: 3864	After Sensitiv	vity Adjustment	669 CPM	

	Calibration	n of 1 hr TSP
Calibration Point	Laser Dust Monitor	HVS
	Mass Concentration (µg/m3)	Mass concentration ($\mu g/m^3$)
	X-axis	Y-axis
1	32.0	54.0
2	28.0	53.0
3	62.0	104.0
Average	40.7	70.3
Slope , mw = Correlation co	<u>1.5627</u> efficient* = <u>0.9959</u>	Intercept, bw = <u>6.7819</u>
Set Correlation Factor		
Particaulate Concentration by High Volume Sampler (µg/m ²)		70.3
Particaulate Concentration by Dust Meter (µg/m ³)		40.7
Measureing time, (min)		60.0
Set Correlation H	Factor, SCF	
SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)]		1.7

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Technical Officer (Wong Shing Kwai)

Calibrated by: