

						File No. N	1A20003/18/0014
Project No.	CKL 1 - Flat 12	21 Cha Kwo Ling	Village			_	
Date:	5-M	ay-22	Next Due Date:	5-3	Jul-22	Operator:	SK
Equipment No.:)1-18	_		E 5170		
1 1			-			·	
			Ambient	Condition			
Temperatu	re, Ta (K)	297.2	Pressure, Pa	ı (mmHg)		759.3	
g : 1	127		rifice Transfer Sta				0.02420
Serial		3864	Slope, mc	0.05922	Intercep oc = $[\Delta H \times (Pa/76)]$		-0.02420
Last Calibra		31-Jan-22			к (Pa/760) x (298		
Next Calibr	ation Date:	31-Jan-23		Qstu = {[ΔII 2	X (F a/ / 00) X (290	/1a)] -DC}/III	
		•	Calibration of	f TSP Sampler			
Colibration		Or	·fice	1		HVS	
Calibration Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	· ·) x (298/Ta)] ^{1/2} Y axis
1	13.2		3.64	61.81	10.2	,	3.20
2	10.4		3.23	54.91	8.3	,	2.88
3	8.7		2.95	50.26	6.1	,	2.47
4	6.4	:	2.53	43.17	4.3		2.08
5	3.7		1.93	32.92	2.0		1.42
By Linear Regr Slope , mw =	ression of Y on 2	X		Intercept, bw :	-0.640) 5	
Correlation	coefficient* =	0.	.9975	_			
*If Correlation C	Coefficient < 0.9	90, check and rec	calibrate.	_			
- 4 map n		0		Calculation			
		Curve, take Qstd					
From the Regres	ssion Equation, t	he "Y" value acco	ording to				
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W}]$	x (Pa/760) x (2	$[298/Ta)]^{1/2}$		
FF1 6 G			2 (55) (5)	T. (200)			
Therefore, Se	et Point; $W = (n$	nw x Qstd + bw)	² x (760 / Pa) x (Ta / 298) =	4.22		
Remarks:							
				h	1		
Conducted by:	Wong Sl	ning Kwai	Signature	·	<u>/\-</u>	Date:	5-May-22
				1 -	γ. s. r		
Checked by:	Henry	Leung	Signature:	\-le-	2 Xon	Date:	5-May-22



File No. MA20003/55/0014

Project No.	CKL 2 - Flat 10	3 Cha Kwo Ling	Village			i	
Date:	5-M	ay-22	Next Due Date:	5	Jul-22	Operator:	SK
Equipment No.:	A-0	01-55	Model No.:	TE	E 5170	Serial No.	1956
			Ambient C	ondition			
Temperatu	re, Ta (K)	297.2	Pressure, Pa			759.3	
		Or	ifice Transfer Star	I	ation		
Serial		3864	Slope, mc	0.05922	Intercept		-0.02420
Last Calibra		31-Jan-22			$c = [\Delta H \times (Pa/760)]$		
Next Calibr	ation Date:	31-Jan-23		$Qstd = \{ [\Delta H \ x]$	(Pa/760) x (298/7	[a)]bc} / mc	
			Calibration of 7	TSP Sampler			
		Or	fice	151 Samplei		HVS	
Calibration Point	ΔH (orifice), in. of water		50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/76	0) x (298/Ta)] ^{1/2}
1	13.1		3.62	61.58	10.1		3.18
2	11.1		3.33	56.72	7.8	2	2.80
3	8.8		2.97	50.55	6.2	2	2.49
4	5.5		2.35	40.05	3.5	1	.87
5	3.1		1.76	30.17	2.0	1	.42
By Linear Regr	ression of Y on 2	X					
Slope, mw =]	Intercept, bw :	-0.304	12	
Correlation	coefficient* =	0	.9972	-			
*If Correlation C	Coefficient < 0.9	90, check and rec	ealibrate.				
Enough the TCD E	iald Calibration (Cumus tales Oatel	Set Point Ca	alculation			
		Curve, take Qstd					
From the Regres	ssion Equation, ti	ne "Y" value acco	ording to				
		mw x Q	$\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) x (29	$[0.8]^{1/2}$		
Therefore S	ot Doint: W = (m	ovy v Octd + boy)	² x (760 / Pa) x (7	Γο / 208) =	4.34		
Therefore, Se	et i Omi, w = (n	iw x Qsiu + ow)	x (700 / 1 a) x (1	14 / 290) =	4.34		
Remarks:							
Conducted by:	Wong Sl	ning Kwai	Signature:	<u> </u>	<u></u>	Date:	5-May-22
Checked by:	Henry	Leung	Signature:	10	N~ 9~ 4	Date:	5-May-22
checked by.			. Signature.	- Ten	7000	Dutc.	5 may 22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA20003/04/0012

Project No.	KER 1 - Future	Residential Deve	elopment at Kerry (Godown		_	
Date:	11-May-22		Next Due Date:	11-	11-Jul-22		SK
Equipment No.:			_	TE	E 5170	Serial No.	10595
			Ambient C	ondition			
Temperatur	re, Ta (K)	298	Pressure, Pa			755.7	
	, , , ,			<i>\ \ \ \ \ \ \ \ \ \</i>			
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05922	Intercept	t, bc	-0.02420
Last Calibra	ntion Date:	31-Jan-22			$c = [\Delta H \times (Pa/760]]$		
Next Calibra	ation Date:	31-Jan-23		$Qstd = \{ [\Delta H \ x] \}$	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / m	c
			Calibration of	TSP Sampler			
Calibration		Or	fice	Т		HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		50) x (298/Ta)] ^{1/} -axis
1	13.3		3.64	61.82	9.7		3.11
2	10.6	3.25		55.23	7.3		2.69
3	8.4		2.89	49.21	5.8	2.40	
4	5.4		2.32	39.54	3.3	1.81	
5	3.2		1.78	30.53	2.1		1.45
By Linear Regr Slope , mw =		(]	Intercept, bw :	-0.240)2	
	coefficient* =	- 0	.9976	1 1 1			
*If Correlation C				•			
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration C	Curve, take Qstd					
From the Regress	sion Equation, th	e "Y" value acco	ording to				
_	-		-		1/2		
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\mathbf{\Delta W} \ \mathbf{x}]$	(Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (m	w x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	4.28		
Remarks:							
a			~.	X)	λ	-	44.35
Conducted by:	Wong Sh	ing Kwai	Signature:			Date:	11-May-22
Checked by	Henry	Leung	Signature:	1-0	- Mari	Data	11-May-22

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA20003/44/0013

Project No.	KTD1 - Centre	of Excellence in	Paediatrics (Childr	en's Hospital)		_	
Date:	11-M	11-May-22 Next Due		11-Jul-22		Operator:	SK
Equipment No.:	A-0	01-44	Model No.:	TE	E-5170	Serial No.	1316
			Ambient C	ondition			
Temperatu	re, Ta (K)	298	Pressure, Pa			755.7	
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05922	Intercept		-0.02420
Last Calibra	ation Date:	31-Jan-22			$c = [\Delta H \times (Pa/760)]$		
Next Calibra	ation Date:	31-Jan-23	($Qstd = \{ [\Delta H \ x] $	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / m	ıc
	I		Calibration of 7	TSP Sampler	T		
Calibration	ΔH (orifice),		fice	Ostd (CEM)	AM (IBIO) :	HVS	(0) (200 /FL) 1/
Point	in. of water	[ΔH x (Pa/76	$(50) \times (298/\text{Ta})^{1/2}$	Qstd (CFM) X - axis	Δ W (HVS), in. of water		60) x (298/Ta)] ^{1/} /-axis
1	13.2		3.62	61.59	9.9		3.14
2	11.1		3.32	56.51	7.6	2.75	
3	8.6		2.92	49.79	5.7	2.38	
4	5.8		2.40	40.96	3.5	1.87	
5	3.3		1.81	31.00	1.9		1.37
	0.0570 coefficient* =		.9978	Intercept, bw :	-0.433	32	
*If Correlation C	Coefficient < 0.9	90, check and rec	ealibrate.				
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration (Curve, take Qstd					
From the Regres	sion Equation, tl	ne "Y" value acco	ording to				
-		_		(B) (F) (C)	20/m \2-1/2		
		mw x Q	$\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) x (29	98/Ta)]" ²		
Therefore, Se	et Point; W = (n	nw x Qstd + bw)	2 x (760 / Pa) x (7	Γa / 298) =	4.10		
Remarks:							
				h			
Conducted by:	Wong Sl	ning Kwai	Signature:		<u> </u>	Date:	11-May-22
				1 0			
Checked by:	Henry	Leung	Signature:	1-Pa	2 Xon	Date:	11-May-22



File No. MA20003/41/0012

Project No.	KTD 2D - Next	to the SOR Offi	ce of Trunk Road T	2 in Kai Tak A	area		
Date:	11-M	Iay-22	Next Due Date:	11-	-Jul-22	Operator:	SK
Equipment No.:		01-41	_		E 5170	Serial No.	5280
			Ambient C	ondition			
Temperatur	re, Ta (K)	298	Pressure, Pa			755.7	
_							
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05922	Intercept		-0.02420
Last Calibra	The state of the s	31-Jan-22	-		$c = [\Delta H \times (Pa/760)]$		
Next Calibra	ation Date:	31-Jan-23		$Qstd = \{ [\Delta H \ x]$	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / mc	
			Calibration of T	ISP Sampler	T	TTT IC	
Calibration	ΔH (orifice),		fice	Qstd (CFM)	AW (IIVS) in	HVS	0) x (298/Ta)] ^{1/2}
Point	in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	X - axis	Δ W (HVS), in. of water		axis
1	13.3		3.64	61.82	10.1		.17
2	10.5		3.23	54.97	8.3	2	.87
3	8.7		2.94	50.07	6.1	2	.46
4	6.3		2.50	42.67	4.3	2	.07
5	3.5		1.87	31.91	2.2	1	.48
By Linear Regr	ession of Y on Y	X					
Slope, $mw =$		_]	Intercept, bw :	-0.376	66	
	coefficient* =		.9973				
*If Correlation C	Coefficient < 0.9	90, check and red	calibrate.				
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration (Curve, take Qstd	= 43 CFM				
From the Regres	sion Equation, tl	ne "Y" value acce	ording to				
		mw v ()std + bw = [ΔW x	(Pa/760) x (29	08/Ta)1 ^{1/2}		
		mw x v	25tu 5W – <u>1</u> 277 A	(1 u/ 100) A (2)	70/ 1u /]		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	2 x (760 / Pa) x (7	$\Gamma a / 298) =$	4.46		
Remarks:							
				h	<u></u>		
Conducted by:	Wong Sl	ning Kwai	Signature:		<u>/\</u>	Date:	11-May-22
				1 ~			
Checked by:	Henry	Leung	Signature:	-len	Jan J	Date:	11-May-22
				•	J		



						File No.	MA20003/18/0015
Project No.	CKL 1 - Flat 12	21 Cha Kwo Ling	Village				
Date:	5-J	ul-22	Next Due Date:	4-5	Sep-22	Operator:	SK
Equipment No.:	A-()1-18	Model No.:	TE	E 5170		
			Ambient (Canditian			
Temperatu	re. Ta (K)	302	Pressure, Pa			753.2	
Temperatu	10, 14 (11)		11055010,10	(111111128)	l.	700.2	
		0:	rifice Transfer Sta	ındard Inform	nation		
Serial	l No.	3864	Slope, mc	0.05922	Intercep		-0.02420
Last Calibra	ation Date:	31-Jan-22		mc x Qstd + b	$\mathbf{c} = [\Delta \mathbf{H} \ \mathbf{x} \ (\mathbf{Pa}/76)]$	$(50) \times (298/Ta)]^{1}$	1/2
Next Calibr	ation Date:	31-Jan-23		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \ \mathbf{S}] \}$	x (Pa/760) x (298	/Ta)] ^{1/2} -bc} / n	nc
	ı		Calibration of	TSP Sampler			
Calibration		Oı	fice	I		HVS	1/2
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	Δ W (HVS), in. of water	[ΔW x (Pa/760)) x (298/Ta)] ^{1/2} Y -axis
1	12.8		3.54	60.15	9.9		3.11
2	10.1		3.14	53.48	7.8		2.76
3	8.4		2.87	48.81	5.6		2.34
4	6.1		2.44	41.65	3.8		1.93
5	3.4		1.82	31.20	1.8		1.33
By Linear Regr Slope , mw =	ression of Y on 0.0627	X	1	Intercept, bw :	-0.655	51	
Correlation	coefficient* =		.9975				
*If Correlation C	Coefficient < 0.9	90, check and rec	calibrate.	•			
			Set Point C	Calculation			
From the TSP Fi	ield Calibration	Curve, take Qstd	= 43 CFM				
From the Regres	ssion Equation, t	he "Y" value acc	ording to				
		mw x	$\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W}]$	x (Pa/760) x (2	298/Ta)] ^{1/2}		
Therefore, So	et Point; W = (r	mw x Qstd + bw)	2 x (760 / Pa) x (7	Γa / 298) =	4.25		
L							
Remarks:							
Conducted by:	Wong S	hing Kwai	Signature:	\(\frac{1}{2}\)	<u></u>	Date:	5-Jul-22
ar v · ·			~.	\ 0	~	~	
Checked by:	Henry	v Leung	Signature:	1-to-	1 WY	Date:	5-Jul-22



File No. MA20003/55/0015

Project No.	CKL 2 - Flat 103	Cha Kwo Ling	Village				
Date:	5-Jul-22		Next Due Date:	4-5	Sep-22	Operator:	SK
Equipment No.:	A-01	-55			E 5170		1956
			Ambient C	Condition			
Temperatur	re, Ta (K)	302	Pressure, Pa			753.2	
	T	Ori	fice Transfer Sta	ndard Informa	tion		
Serial	No.	3864	Slope, mc	0.05922	Intercept		-0.02420
Last Calibra		31-Jan-22			$c = [\Delta H \times (Pa/760)]$		
Next Calibra	ation Date:	31-Jan-23		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \ \mathbf{x}]$	(Pa/760) x (298/7	[a)] ^{1/2} -bc} / mc	
	Ι		Calibration of	TSP Sampler		******	
Calibration	ΔH (orifice),		fice	Octd (CEM)	AW (IIVE) :-	HVS	0) x (298/Ta)] ^{1/2}
Point	in. of water	[ΔH x (Pa/76	(0) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	Δ W (HVS), in. of water		axis
1	12.8		3.54	60.15	9.8		.10
2	10.8		3.25	55.29	7.6		.73
3	8.6	,	2.90	49.38	5.9	2	.40
4	5.3		2.28	38.85	3.2	1	.77
5	2.9		1.68	28.85	1.8	1	.33
Ry Linear Regr	ression of Y on X						
Slope, mw =				Intercept, bw =	-0.354	1	
_ :	coefficient* =	0.	.9968	1 /			
*If Correlation C	Coefficient < 0.99	0, check and rec	alibrate.	_			
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration C	urve, take Qstd	= 43 CFM				
From the Regres	sion Equation, the	e "Y" value acco	ording to				
		mw v C	$\mathbf{pstd} + \mathbf{bw} = [\mathbf{\Delta W} \ \mathbf{x}]$	(Po/760) v (20	08/Ta)] ^{1/2}		
		mw x Q		(1 a/ 700) X (2)	76/ 1 a)]		
Therefore, Se	et Point; W = (my	$w \times Qstd + bw$	2 x (760 / Pa) x ($^{\prime}$	Ta / 298) =	4.37		
Remarks:							
Conducted by	Wara Chi	a V	C: atrana	X)	Ͻ ∤ _	Dotor	5-Jul-22
Conducted by:	Wong Shi	ing K wai	Signature:			Date:	J-Jul-22
Charles d k	II	Launa	C:	\ 0	V	Data	5 Jul 22
спескей бу:	Henry 1	Leung	Signature:	ten	1 mont	Date:	5-Jul-22



11-Jul-22

File No. MA20003/04/0013 Project No. KER 1 - Future Residential Development at Kerry Godown 11-Jul-22 Next Due Date: 10-Sep-22 Date: Operator: SK Equipment No.: A-01-04 TE 5170 Serial No. 10595 Model No.: **Ambient Condition** 303.9 755.4 Temperature, Ta (K) Pressure, Pa (mmHg) **Orifice Transfer Standard Information** 0.05922 Serial No. 3864 Slope, mc Intercept, bc -0.02420 $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 31-Jan-22 Ostd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 31-Jan-23 **Calibration of TSP Sampler** Orfice HVS Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Ostd (CFM) ΔH (orifice), ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 13.5 9.9 3.63 61.66 3.11 1 10.8 55.19 2.70 2 3.24 7.5 3 8.6 2.90 49.30 5.9 2.40 1.85 4 5.6 2.34 39.86 3.5 5 3.4 1.82 31.15 1.46 By Linear Regression of Y on X Intercept, bw :_____ -0.2605 Slope, mw = 0.0541Correlation coefficient* = *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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.37 Remarks: Signature: Lem X27 Conducted by: ____ Wong Shing Kwai

Checked by: Henry Leung



Date: 11-Jul-22

File No. MA20003/44/0013 Project No. KTD1 - Centre of Excellence in Paediatrics (Children's Hospital) 11-Jul-22 Next Due Date: 10-Sep-22 Date: Operator: SK Model No.: TE-5170 Serial No. 1316 Equipment No.: A-01-44 **Ambient Condition** 303.9 755.4 Temperature, Ta (K) Pressure, Pa (mmHg) **Orifice Transfer Standard Information** 0.05922 Serial No. 3864 Slope, mc Intercept, bc -0.02420 mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 31-Jan-22 Ostd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 31-Jan-23 **Calibration of TSP Sampler** Orfice HVS Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Ostd (CFM) ΔH (orifice), ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 13.4 3.61 61.43 10.1 3.14 1 11.3 56.45 2.76 2 3.32 7.8 3 8.8 2.93 49.86 5.9 2.40 3.7 1.90 4 6.0 2.42 41.24 1.43 5 3.5 1.85 31.60 2.1 By Linear Regression of Y on X Slope , mw = _____0.0566 Intercept, bw : -0.3983 Correlation coefficient* = *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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.25 Remarks: Signature: \\ \left(\)\)\reft(\reft(\left(\left(\left(\left(\left(\left(\left(\left(\left(\left(\left(\left(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\reft(\reft(\reft(\)\)\reft(\reft(\reft(\)\reft(\reft(\)\reft(\reft(\)\reft(\reft(\)\reft(\ref Conducted by: ____ Wong Shing Kwai Date: 11-Jul-22

Checked by: Henry Leung

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA20003/41/0013 KTD 2D - Next to the SOR Office of Trunk Road T2 in Kai Tak Area Project No. 11-Jul-22 Next Due Date: 10-Sep-22 Operator: SK Date: Model No.: TE 5170 Serial No. 5280 Equipment No.: A-01-41 **Ambient Condition** 303.9 755.4 Temperature, Ta (K) Pressure, Pa (mmHg) **Orifice Transfer Standard Information** Slope, mc 0.05922 Serial No. 3864 Intercept, bc -0.02420 mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 31-Jan-22 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 31-Jan-23 Next Calibration Date: **Calibration of TSP Sampler** Orfice Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ ΔH (orifice), Qstd (CFM) ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 13.5 10.4 3.18 3.63 61.66 2.90 10.7 3.23 54.94 8.6 49.86 2.48 3 8.8 2.93 6.3 4 6.4 2.50 42.58 4.5 2.09 2.4 1.53 5 3.6 1.87 32.04 By Linear Regression of Y on X Slope , mw = 0.0571 Intercept, bw : -0.3160 Correlation coefficient* = 0.9972 *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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) = 4.69$ Remarks: Signature: Date: 11-Jul-22

Signature: Date: 11-Jul-22 Conducted by: Wong Shing Kwai Checked by: Henry Leung





RECALIBRATION DUE DATE:

January 31, 2023

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 31, 2022

Rootsmeter S/N: 438320

Ta: 294 **Pa:** 752.6

°K

Operator: Jim Tisch

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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	1.4490	3.2	2.00
2	3	4	1	1.0320	6.4	4.00
3	5	6	1	0.9160	7.9	5.00
4	7	8	1	0.8730	8.8	5.50
5	9	10	1	0.7230	12.7	8.00

	Data Tabulation						
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	√∆H(Ta/Pa)		
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)		
0.9995	0.6898	1.4169	0.9957	0.6872	0.8839		
0.9952	0.9643	2.0037	0.9915	0.9608	1.2500		
0.9932	1.0843	2.2402	0.9895	1.0802	1.3976		
0.9920	1.1363	2.3496	0.9883	1.1321	1.4658		
0.9868	1.3649	2.8337	0.9831	1.3598	1.7678		
	m=	2.09281		m=	1.31048		
QSTD	b=	-0.02426	QA [b=	-0.01514		
	r=	0.99993	,	r=	0.99993		

	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: 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

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Certificate of Calibration - Wind Monitoring Station

Description: Yau Lai Estate, Bik Lai House

Manufacturer: <u>Davis Instruments</u>

Model No.: <u>Davis7440</u>

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

Equipment No.: <u>SA-03-04</u>

Date of Calibration <u>19-Feb-2022</u>

Next Due Date <u>19-Aug-2022</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	1.5	0.0
2.5	2.5	0.0
4.2	4.3	-0.1

2. Performance check of Wind Direction

Wind Direction (°)		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: Approved by: Approved by: Henry Leung