

#### File No. MA20003/18/0012

Project No.	CKL 1 - Flat 12	21 Cha Kwo Lin				
Date:	6-J	an-22	Next Due Date:	6-Mar-22	Operator:	SK
Equipment No.:	A-	01-18	Model No.:	TE 5170	Serial No.	0723
			Ambient Condi	tion		
Temperatu	ire, Ta (K)	294	Pressure, Pa (mmł	Hg)	763	

Orifice Transfer Standard Information							
Serial No.         3864         Slope, mc         0.05846         Intercept, bc         -0.00313							
Last Calibration Date:	11-Jan-21		mc x Qstd + b	oc = [ΔH x (Pa/760) x (298/Ta	a)] <sup>1/2</sup>		
Next Calibration Date:	11-Jan-22		Qstd = $\{[\Delta H]$	x (Pa/760) x (298/Ta)] <sup>1/2</sup> -bc}	/ mc		

		Calibration of	TSP Sampler					
Calibration		Orfice			HVS			
Point	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] <sup>1/2</sup>	Qstd (CFM) X - axis	$\Delta W$ (HVS), in. of water	$\frac{[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}}{axis} \ Y-$			
1	13.0	3.64	62.27	9.8	3.16			
2	10.3	3.24	55.43	8.0	2.85			
3	8.5	2.94	50.36	5.9	2.45			
4	6.2	2.51	43.02	4.0	2.02			
5	3.4	1.86	31.87	1.9	1.39			
Slope, mw =	By Linear Regression of Y on X Slope , mw = <u>0.0595</u> Intercept, bw : <u>-0.5157</u> Correlation coefficient* = 0.9980							
		0, check and recalibrate.	-					
	0.99	o, check and recambrate.						
		Set Point (	Calculation					
From the TSP Fi	eld Calibration C	urve, take Qstd = 43 CFM						
From the Regres	sion Equation, the	e "Y" value according to						
		$\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W}]$ v x Qstd + bw ) <sup>2</sup> x ( 760 / Pa ) x (			<u> </u>			
Remarks:								
Conducted by:	Wong Shi	ng Kwai Signature:	k	X.	Date: 6-Jan-22			
Checked by:	Henry 1	Leung Signature:	lem	j Xorj_	Date: 6-Jan-22			



File No. MA20003/55/0012

Project No.	CKL 2 - Flat 10	03 Cha Kwo Lir					
Date:	6-J	an-22	Next Due Date:	6-Mar-22	Operator:	SK	
Equipment No.:	A-0	01-55	Model No.:	TE 5170	Serial No.	1956	
			<b>Ambient Conditio</b>	n			
Temperatu	Temperature, Ta (K)294Pressure, Pa (mmHg)762						
			) wifi an Tunnafan Standaud I	(nfarmation			

Orifice Transfer Standard Information							
Serial No.	3864	Slope, mc         0.05846         Intercept, bc         -0.00313					
Last Calibration Date:	11-Jan-21	1	mc x Qstd + bo	$c = [\Delta H x (Pa/760) x (298/Ta)]$	] <sup>1/2</sup>		
Next Calibration Date:	11-Jan-22	Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc					

	Calibration of TSP Sampler							
Calibration		Orfice		HVS				
Point	$\Delta H$ (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] <sup>1/2</sup>	Qstd (CFM) X - axis	$\Delta W$ (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis			
1	12.9	3.62	61.99	10.0	3.19			
2	10.7	3.30	56.46	7.6	2.78			
3	8.4	2.92	50.03	6.0	2.47			
4	5.5	2.36	40.50	3.6	1.91			
5	2.9	1.72	29.42	1.9	1.39			
By Linear Regression of Y on X Slope , mw = 0.0546 Intercept, bw : -0.2557 Correlation coefficient* = 0.9977 *If Correlation Coefficient < 0.990, check and recalibrate.								
		Set Point C urve, take Qstd = 43 CFM e "Y" value according to	alculation					
Therefore, Se	et Point; W = ( mv	$\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \mathbf{x}]$ v x Qstd + bw ) <sup>2</sup> x ( 760 / Pa ) x (	. , .					
Remarks:				1				
Conducted by:	Wong Shi		<u> </u>	N- z Xroz	Date: 6-Jan-22			
Checked by:	Henry I	Leung Signature:	len	g dag	Date: 6-Jan-22			

# CIN@TECH 🤳

File No. MA20003/04/0010

Project No.	KER 1 - Future Residential Development at Kerry Godown							
Date:	11	Jan-22	Next Due Date:	11-Mar-22	Operator:	SK		
Equipment No.:	A-	01-04	Model No.:	TE 5170	Serial No.	10595		
	Ambient Condition							
Temperatu	ıre, Ta (K)	293	Pressure, Pa (mmI	Hg)	764			

Orifice Transfer Standard Information						
Serial No.         3864         Slope, mc         0.05846         Intercept, bc         -0.00313						
Last Calibration Date:	11-Jan-21	I	mc x Qstd + bo	$c = [\Delta H x (Pa/760) x (298/Ta)]$	] <sup>1/2</sup>	
Next Calibration Date:	11-Jan-22	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	$\Delta W$ (HVS), in. of water	$\frac{[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}}{Y-axis}$		
1	13.1	3.66	62.66	9.2	3.07		
2	10.4	3.26	55.83	7.0	2.68		
3	8.2	2.90	49.58	5.6	2.39		
4	5.2	2.31	39.50	3.2	1.81		
5	3.0	1.75	30.01	2.1	1.47		
By Linear Regression of Y on X Slope , mw =0.0497 Intercept, bw :0.0803 Correlation coefficient* =0.9970							
*If Correlation C	*If Correlation Coefficient < 0.990, check and recalibrate.						
		Set Point C	alculation				
		urve, take Qstd = 43 CFM					
From the Regres	sion Equation, the	e "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 ) <sup>2</sup> x ( 760 / Pa ) x (		98/Ta)] <sup>1/2</sup> 4.14			
Remarks:							
Conducted by:	Wong Shi	ng Kwai Signature		<u>Д</u> .	Date: 11-Jan-22		
Checked by:	Henry I	Leung Signature	- \-len	, May	Date:11-Jan-22		



File No. MA20003/44/0011

Project No.	KTD1 - Centre	of Excellence in					
Date:	11	Jan-22	Next Due Date:	11-Mar-22	Operator:	SK	
Equipment No.:	A-	01-44	Model No.:	TE-5170	Serial No.	1316	
			Ambient Condit	ion			
Temperatu	ıre, Ta (K)	294	Pressure, Pa (mml	Hg)	763		

Orifice Transfer Standard Information						
Serial No.         3864         Slope, mc         0.05846         Intercept, bc         -0.00313						
Last Calibration Date:	11-Jan-21	I	mc x Qstd + bo	$c = [\Delta H x (Pa/760) x (298/Ta)]$	] <sup>1/2</sup>	
Next Calibration Date:	11-Jan-22	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	[ΔH x (Pa/760) x (298/Ta)] <sup>1/2</sup>	Qstd (CFM) X - axis	$\Delta W$ (HVS), in. of water	$\frac{[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}}{Y-axis}$			
1	13.2	3.67	62.75	9.6	3.13			
2	11.0	3.35	57.28	7.4	2.74			
3	8.4	2.92	50.07	5.6	2.39			
4	5.6	2.39	40.89	3.3	1.83			
5	3.2	1.80	30.92	1.8	1.35			
Slope, mw =	By Linear Regression of Y on X Slope , mw = <u>0.0554</u> Intercept, bw : <u>-0.3926</u> Correlation coefficient* = 0.9985							
	*If Correlation Coefficient < 0.990, check and recalibrate.							
E I TODE'		Set Point C	alculation					
		urve, take Qstd = 43 CFM						
		e "Y" value according to <b>mw x Qstd + bw = [<math>\Delta W</math></b> : v x Qstd + bw ) <sup>2</sup> x ( 760 / Pa ) x (		98/Ta)] <sup>1/2</sup> 				
Remarks:								
Conducted by:	Wong Shi	ng Kwai Signature	K	<u>Д</u>	Date: 11-Jan-22			
Checked by:	Henry I	Leung Signature	-lem	, Xon	Date: 11-Jan-22			

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File No. MA20003/41/0010

Project No.	oject No. KTD 2D - Next to the SOR Office of Trunk Road T2 in Kai Tak Area							
Date:	11	Jan-22	Next Due Date:	11-Mar-22	Operator:	SK		
Equipment No.:	A-01-41		Model No.:	TE 5170	Serial No.	5280		
Ambient Condition								
Temperature, Ta (K) 293			Pressure, Pa (mmł	Hg)	764			
	Orifice Transfer Standard Information							

Orifice Transfer Standard Information							
Serial No.	3864	Slope, mc         0.05846         Intercept, bc         -0.00313					
Last Calibration Date:	11-Jan-21	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					
Next Calibration Date:	11-Jan-22	Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc					

Calibration of TSP Sampler								
Calibration		Orfice			HVS			
Point	$\Delta H$ (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] <sup>1/2</sup>	Qstd (CFM) X - axis	$\Delta W$ (HVS), in. of water	[ΔW x (Pa/760) x (29 <b>Y-axis</b>	8/Ta)] <sup>1/2</sup>		
1	13.1	3.66	62.66	9.2	3.07			
2	11.4	3.41	58.45	7.4	2.75			
3	8.2	2.90	49.58	5.9	2.46			
4	6.0	2.48	42.42	4.4	2.12			
5	3.0	1.75	30.01	2.3	1.53			
Correlation	Slope , mw =0.0452       Intercept, bw :0.1869         Correlation coefficient* =0.9966         *If Correlation Coefficient < 0.990, check and recalibrate.    Set Point Calculation							
		urve, take Qstd = 43 CFM						
From the Regres	sion Equation, the	e "Y" value according to						
$mw \ x \ Qstd + bw = [\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Therefore, Set Point; W = ( mw x Qstd + bw ) <sup>2</sup> x ( 760 / Pa ) x ( Ta / 298 ) =								
Remarks:								
Conducted by:	Wong Shi	ng Kwai Signature	:X	N. J Xoz	Date: 11-Ja	an-22		
Checked by:	Henry I	Leung Signature	: \-len	- May	Date: <u>11-Ja</u>	un-22		



File No. MA20003/18/0013

Project No.	CKL 1 - Flat 1								
Date:	5-N	1ar-22	Next Due Date:	5-May-22	Operator:	SK			
Equipment No.:	A-	01-18	Model No.:	TE 5170	Serial No.	0723			
	Ambient Condition								
Temperatu	ıre, Ta (K)	293.6	Pressure, Pa (mml	Hg)	760				

Orifice Transfer Standard Information							
Serial No.         3864         Slope, mc         0.05922         Intercept, bc         -0.02420							
Last Calibration Date:	31-Jan-22	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					
Next Calibration Date:	31-Jan-23	Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc					

1 1 2 3 4 5	ΔH (orifice), in. of water 13.0 10.3 8.5 6.2 3.4	Оrfice [ΔH x (Pa/760) x (2 3.63 3.23 2.94 2.51 1.86		X - axis           61.75           55.01           50.01	ΔW (HVS), in. of water 9.8 8.0		) x (298/Ta)] <sup>1/2</sup> Y- axis
Point	in. of water 13.0 10.3 8.5 6.2	[ΔH x (Pa/760) x (2 3.63 3.23 2.94 2.51	98/Ta)] <sup>1/2</sup>	<b>X - axis</b> 61.75 55.01	of water 9.8	[ΔW x (Pa/760	axis
2 3 4 5	10.3 8.5 6.2	3.23 2.94 2.51		55.01			
3 4 5	8.5 6.2	2.94 2.51			8.0		3.15
4 5	6.2	2.51		50.01			2.85
5				50.01	5.9		2.45
	3.4	1.86		42.77	4.0		2.01
				31.78	1.8		1.35
By Linear Regression of Y on X Slope , mw = <u>0.0614</u> Intercept, bw : <u>-0.5993</u> Correlation coefficient* = <u>0.9982</u>							
		), check and recalibrat	2	-			
II Conclation Coc		, check and recambrat	с.				
			Set Point C	Calculation			
From the TSP Field	d Calibration Cu	urve, take Qstd = 43 C					
From the Regressic	on Equation, the	"Y" value according	to				
	-			x (Pa/760) x (2	98/Ta)1 <sup>1/2</sup>		
		inw x Qstu +	υw – [Δw	x (1 a/700) x (2	<b>30/1</b> a)]		
Therefore, Set I	Point; W = ( mv	$(x + bw)^2 x (76)$	0 / Pa ) x ( 7	Γa / 298 ) =	4.10		
Remarks:							
_							
Conducted by:	Wong Shi	ng Kwai	Signature:	K	<u>у</u>	Date:	5-Mar-22
Checked by:	Henry I	Leung	Signature:	lem	1 1 No 7	Date:	5-Mar-22

Next Calibration Date:

31-Jan-23



File No. MA20003/55/0013

Project No.	CKL 2 - Flat							
Date:	5-Mar-22		Next Due Date: 5-May-22		May-22 Operat	or: SK		
Equipment No.:	A-01-55		Model No.:	TE	E 5170 Serial N	No. 1956		
			Ambient C	ondition				
Temperatu	Temperature, Ta (K) 293.6		Pressure, Pa	(mmHg)	760	760		
		Ori	fice Transfer Sta	ndard Informa	ation			
Seria	l No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420		
Last Calibr	ation Date:	31-Jan-22	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					

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

	Calibration of TSP Sampler							
Calibration		Orfice	<u> </u>		HVS			
Point	ΔH (orifice), in. of water	$[\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	$\Delta W$ (HVS), in. of water	$\frac{[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}}{Y-axis}$			
1	12.8	3.60	61.27	9.8	3.15			
2	10.8	3.31	56.32	7.6	2.78			
3	8.4	2.92	49.71	6.0	2.47			
4	5.5	2.36	40.31	3.4	1.86			
5	2.9	1.72	29.38	1.8	1.35			
By Linear Regression of Y on X Slope , mw =0.0563 Intercept, bw =0.3460 Correlation coefficient* =0.9973 *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 $\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \mathbf{x} (\mathbf{Pa}/760) \mathbf{x} (298/\mathbf{Ta})]^{1/2}$ Therefore, Set Point; W = ( mw x Qstd + bw ) <sup>2</sup> x ( 760 / Pa ) x ( Ta / 298 ) =								
Remarks:								
Conducted by:	Wong Shi	ng Kwai Signature:	k	<u>у</u>	Date: 5-Mar-22			
Checked by:	Henry I	Leung Signature:		j Xoz j	Date: 5-Mar-22			

## CIN@TECH &

File No. MA20003/04/0011

Project No.	KER 1 - Future	e Residential Dev	<i>N</i> n			
Date:	<u> </u>	Mar-22	Next Due Date:	11-May-22	Operator:	SK
Equipment No.:	A-	01-04	Model No.:	TE 5170	Serial No.	10595
			Ambient Condit	ion		
Temperatu	ure, Ta (K)	295.1	Pressure, Pa (mmF	Hg)	760.4	

Orifice Transfer Standard Information							
Serial No.	3864	Slope, mc 0.05922 Intercept, bc -0.02420					
Last Calibration Date:	31-Jan-22	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					
Next Calibration Date:	31-Jan-23	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	$\Delta W$ (HVS), in. of water	$\frac{[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}}{Y-axis}$			
1	13.0	3.62	61.61	9.4	3.08			
2	10.4	3.24	55.15	7.0	2.66			
3	8.2	2.88	49.01	5.6	2.38			
4	5.2	2.29	39.11	3.2	1.80			
5	3.0	1.74	29.81	2.0	1.42			
Slope , mw = Correlation	coefficient < 0.99	<b>0.9972</b> 0, check and recalibrate.	Intercept, bw	-0.187	73			
			Calculation					
From the Regres	sion Equation, the	e "Y" value according to <b>mw x Qstd + bw = [<math>\Delta W</math></b> v x Qstd + bw ) <sup>2</sup> x (760 / Pa) x		98/Ta)] <sup>1/2</sup> 4.21				
Remarks:								
Conducted by:	Wong Shi	ng Kwai Signature	<u> </u>	<u>у</u>	Date: 11-Mar-22			
Checked by:	Henry I	Leung Signature	. \-len	, day	Date: 11-Mar-22			

## CIN@TECH 🤳

File No. MA20003/44/0012

Project No.	KTD1 - Centre	of Excellence in				
Date:	11-N	Mar-22	Next Due Date:	11-May-22	Operator:	SK
Equipment No.:	A-	01-44	Model No.:	TE-5170	Serial No.	1316
			Ambient Conditi	on		
Temperatu	re, Ta (K)	295.1	Pressure, Pa (mmF	Ig)	760.4	

Orifice Transfer Standard Information							
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420		
Last Calibration Date:	31-Jan-22	1	mc x Qstd + bo	$c = [\Delta H x (Pa/760) x (298/Ta)]$	] <sup>1/2</sup>		
Next Calibration Date:	31-Jan-23		Qstd = {[∆H x	(Pa/760) x (298/Ta)] <sup>1/2</sup> -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	$\Delta W$ (HVS), in. of water		50) x (298/Ta)] <sup>1/2</sup> Z-axis			
1	13.0	3.62	61.61	9.6		3.11			
2	11.0	3.33	56.70	7.4		2.73			
3	8.4	2.91	49.60	5.6		2.38			
4	5.6	2.38	40.58	3.3		1.83			
5	3.2	1.80	30.77	1.8		1.35			
By Linear Regression of Y on X Slope , mw = <u>0.0567</u> Intercept, bw = <u>-0.4326</u>									
	coefficient* =	0.9979	_						
*If Correlation (	Coefficient < 0.99	0, check and recalibrate.							
		Set Point (	Calculation						
From the TSP Fi	eld Calibration C	urve, take Qstd = 43 CFM							
From the Regres	sion Equation, the	e "Y" value according to							
$mw \ x \ Qstd + bw = [\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Therefore, Set Point; W = ( mw x Qstd + bw ) <sup>2</sup> x ( 760 / Pa ) x ( Ta / 298 ) =3.98									
Remarks:									
Conducted by:	Wong Shi	ng Kwai Signature		入	Date:	11-Mar-22			
Checked by:	Henry I	Leung Signature	: \-lem	, Xor	Date:	11-Mar-22			



File No. MA20003/41/0011

Project No.	Project No. KTD 2D - Next to the SOR Office of Trunk Road T2 in Kai Tak Area								
Date:	11-Mar-22		Next Due Date:	Next Due Date: 11-May-22		: SK			
Equipment No.:	A-01-41		Model No.:	TE	5170 Serial No	. 5280			
Temperatu	re, Ta (K)	295.1	Ambient Condition Pressure, Pa (mmHg)		760.4				
	Orifice Transfer Standard Information								
Serial	No.	3864	Slope, mc         0.05922         Intercept, bc         -0.02420						
Last Calibra	ation Date:	31-Jan-22	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$						
Next Calibra	ation Date:	31-Jan-23	Qstd = { $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ -bc} / mc						

	Calibration of TSP Sampler								
Calibration		Orfice		HVS					
Point	$\Delta H$ (orifice), in. of water	$[\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	$\Delta W$ (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis				
1	13.0	3.62	61.61	9.8	3.15				
2	10.3	3.23	54.88	8.0	2.84				
3	8.5	2.93	49.89	5.9	2.44				
4	6.2	2.50	42.67	4.0	2.01				
5	3.4	1.85	31.71	2.0	1.42				
Slope , mw = Correlation	cession of Y on X 0.0591 coefficient* = Coefficient < 0.99		Intercept, bw = _	-0.474	13				
		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, Se	$mw \ x \ Qstd + bw = [\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Therefore, Set Point; W = ( mw x Qstd + bw ) <sup>2</sup> x ( 760 / Pa ) x ( Ta / 298 ) =								
Remarks:									
Conducted by:	Wong Shi	ng Kwai Signature	<i>k</i>	N. - Jan J.	Date: 11-Mar-22				
Checked by:	Henry I	Leung Signature	- \-len	- Jan -	Date: 11-Mar-22				



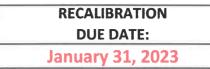


Certificate of Calibration

			Calibration	Certificati	on Informat	tion		
Cal. Date:	January 11	anuary 11, 2021 Rootsmet			438320 <b>Ta:</b> 297			°К
Operator:	Jim Tisch					Pa:	750.1	mm Hg
Calibration	Model #:	Nodel #: TE-5025A Calibrator 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	1.4470	3.2	2.00	
	2	3	4	1	1.0210	6.4	4.00	
	3	5	6	1	0.9140	8.0	5.00	
	4	<u>7</u>	8 10	1	0.8670	8.8	5.50 8.00	
	5	9	10	1	0.7140	12.9	8.00	]
				Data Tabula	tion			
			// Pa	V Tstd \				
	Vstd	Qstd	√ <sup>∆H</sup> ( <u>Pstd</u>	)( <u>Tstd</u> )		Qa	√∆H(Ta/Pa)	
	(m3)	(x-axis)	(y-ax	is)	Va	(x-axis)	(y-axis)	
	0.9860	0.6814	1.40		0.9957	0.6881	0.8899	
	0.9818	0.9616	1.990	02	0.9915	0.9711	1.2585	1
	0.9797	1.0719	2.22!		0.9893	1.0824	1.4071	
	0.9786	1.1288	2.333		0.9883	1.1399	1.4757	
	0.9732	1.3630	2.814		0.9828	1.3765	the state of the s	
		<u>m=</u>	2.065			m=	1.29348	
	QSTD	b=	0.003		QA	b=	0.00199	
		r=	0.999	90		r=	0.99996	1
				Calculatio	ns			
			/Pstd)(Tstd/Ta	a)	Va= ΔVol((Pa-ΔP)/Pa)			
	Qstd=	Vstd/∆Time			<b>Qa=</b> Va/ΔTime			
			For subsequ	ent flow ra	te calculatio	ns:		
	Qstd=	<b>Qstd=</b> $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b$			Qa=	$1/m\left(\sqrt{\Delta H}\right)$	H(Ta/Pa))-b)	
	Standard	Conditions	1					
Tstd						RECA	LIBRATION	
Pstd	760	mm Hg					named an and the set	400
A11		(ey	- 1120)				nnual recalibrations	-
		ter reading (i eter reading					Regulations Part	
		perature (°K)					, Reference Meth ended Particulat	
		ressure (mm				1	ended Particulat ere, 9.2.17, page	
b: intercept	the second s	,	0.		th	e Aunosphe	sie, 3.2.17, page	50
m: slope								

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Certificate of Calibration

			Calibration	Certificatio	on Informat	ion		
Cal. Date:	January 31	, 2022	Rootsi	meter S/N:	: 438320 <b>Ta:</b> 294 °I			°K
Operator:	Jim Tisch					Pa:	752.6	mm Hg
Calibration	Model #:	TE-5025A	Calik	prator S/N:	3864			0
								1
		Vol. Init	Vol. Final	ΔVol.	ΔTime	ΔΡ	ΔΗ	
	Run	(m3)	(m3)	(m3)	(min)	(mm Hg)	(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 8.00	
		9				1.2.7	8.00	]
	L			Data Tabula	tion			
	Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right)}$	)( <u>Tstd</u> ) Ta)		Qa	$\sqrt{\Delta H (Ta/Pa)}$	
	(m3)	(x-axis)	(y-ax	is)	Va	(x-axis)	(y-axis)	
	0.9995	0.6898	1.416		0.9957	0.6872	0.8839	
	0.9952	0.9643	2.003		0.9915	0.9608	1.2500	
	0.9932	1.0843	2.240		0.9895	1.0802	1.3976	
	0.9920	1.1363	2.3496		0.9883	1.1321	1.4658	
	0.9868	1.3649	2.833		0.9831	1.3598	1.7678	
			2.09281 -0.02426 0.99993			m=	1.31048	
	QSTD	b=			QA	b=	-0.01514	
		L=	0.999	993		ľ=	0.99993	I
				Calculatio				
			/Pstd)(Tstd/Ta	a)	Va= ΔVol((Pa-ΔP)/Pa)			
	Qstd=	Vstd/∆Time			Qa= Va/∆Time			
			For subsequ	ent flow ra	te calculatio	ns:		
	<b>Qstd=</b> $1/m \left( \sqrt{\Delta H \left( \frac{Pa}{Pstd} \right) \left( \frac{Tstd}{Ta} \right)} \right)$			)-ь)	Qa=	1/m ((√∆H	l(Та/Ра))-b)	
	Standard	Conditions						
Tstd:	td: 298.15 °K					RECA	LIBRATION	
Pstd:		mm Hg			LIS EDA room	mmonde	nnual recalibratio	on ner 1000
Key ΔH: calibrator manometer reading (in H2O)				US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51,				
		eter reading (i			-			
		perature (°K)			Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter i			
		ressure (mm					erided Particulation erided Particulation erided Particulation erided eride	
b: intercept					LTI(	e Aunosphe	sie, 3.2.17, page	50
m· slone	slope							

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illage of Cleves, OH 45002

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#### **Certificate of Calibration - Wind Monitoring Station**

Description:	Yau Lai Estate, Bik Lai House
Manufacturer:	Davis Instruments
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	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	1.5	0.0
2.5	2.5	0.0
4.2	4.3	-0.1

#### 2. Performance check of Wind Direction

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