

File No. MA16034/05/0041

Project No.	AM1 - Tin Hau	Temple							
Date:	12-A	.pr-23	Next Due Date:	13-	Jun-23	Operator:	SK		
Equipment No.:	A-0	1-05	Model No.:	GS	52310	Serial No.	10599		
			Ambient C	ondition					
Temperatur	re, Ta (K)	298	Pressure, Pa			759.3			
		Or	ifice Transfer Star	ndard Informa	ation				
Serial	No.	3864	Slope, mc	0.05928	Intercept		-0.03491		
Last Calibration Date:16-Jan-23 $\mathbf{mc} \mathbf{x} \mathbf{Qstd} + \mathbf{bc} = [\Delta \mathbf{H} \mathbf{x} (\mathbf{Pa}/760) \mathbf{x} (298/\mathbf{Ta})]^{1/2}$ $\mathbf{C} \mathbf{x} \mathbf{U} \mathbf{x} \mathbf{U} \mathbf{x} \mathbf{U} \mathbf{x} \mathbf{U} \mathbf{x} \mathbf{U} \mathbf{x} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} U$									
Next Calibration Date: 16-Jan-24 $Qstd = \{ [\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2} - bc \} / mc$									
		•							
		0	Calibration of Z	ISP Sampler		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} -axis		
1	13.2		3.63	61.85	9.9	3	3.14		
2	10.3		3.21	54.70	7.3	2	2.70		
3	7.5		2.74	46.77	5.4	2	2.32		
4	5.6		2.37	40.49	3.4	1	1.84		
5	3.2		1.79	30.75	1.8	1	1.34		
By Linear Regr Slope , mw =	0.0583	_		Intercept, bw =	-0.463	9			
Correlation of		-	.9982						
*If Correlation C	0 = 0.9	90, check and red	calibrate.						
			Set Point Ca	alculation					
From the TSP Fie	eld Calibration (Curve, take Qstd							
From the Regress	sion Equation, tl	ne "Y" value acc	ording to						
					a m a 1/2				
		mw x Q	$\mathbf{b}\mathbf{x} = [\Delta \mathbf{W} \mathbf{x}]$	(Pa/760) x (29	98/Ta)]"2				
Therefore, Se	t Point; W = (n	w x Qstd + bw)	² x (760 / Pa) x (1	Га / 298) =	4.18				
Remarks:									
				1	1				
Conducted by:	Wong Sh	ing Kwai	Signature:	R	·//-	Date:	12-Apr-23		
Checked by:	Henry	Leung	Signature:	\-lem	7 X-7	Date:	12-Apr-23		



File No. MA16034/08/0041

Date: 12-Apr-23 Next Due Date: 13-Jun-23 Operator: SK Equipment No: A-01-08 Model No.: GS2310 Serial No. 1287 Ambient Condition Temperature, Ta (K) 298 Pressure, Pa (mmHg) 759.3 Orifice Transfer Standard Information Serial No. 3864 Slope, mc 0.05928 Intercept, bc -0.03491 Last Calibration Date: 16-Jan-23 mc x Qstd + bc = [AH x (Pa/760) x (298/Ta)]^{1/2} Next Calibration Date: 16-Jan-24 Qstd = {[AH x (Pa/760) x (298/Ta)]^{1/2} - Next Calibration Date: 16-Jan-24 Qstd = [AH x (Pa/760) x (298/Ta)]^{1/2} Next Calibration of TSP Sampler Calibration of TSP Sampler Calibration of TSP Sampler Calibration AH (orifice), in. of water [AH x (Pa/760) x (298/Ta)]^{1/2} Qstd (CFM) AW (HVS), in. [AW x (Pa/760) x (298/Ta)]^{1/2} Qstd (294/Ta)] AV (Pa/760) x (298/Ta)]^{1/2} 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.22.5 55.49 7.0 2.64 3 7.8	Project No.	AM2 - Sai Tso	Wan Recreation	Ground						
Ambient ConditionTemperature, Ta (K)298Pressure, Pa (mmHg)759.3Orifice Transfer Standard InformationSerial No.3864Slope, mc0.05928Intercept, bc-0.03491Last Calibration Date:16-Jan-23mc x Qstd + be = [Δ H x (Pa/760) x (298/Ta)] ^{1/2} -0.03491Next Calibration Date:16-Jan-24Qstd = {[Δ H x (Pa/760) x (298/Ta)] ^{1/2} - bc] / mcCalibration Date:16-Jan-24Qstd = {[Δ H x (Pa/760) x (298/Ta)] ^{1/2} - bc] / mcCalibration of TSP SamplerCalibrationOrffceHVS Δ H (orifice), in of water[Δ H x (Pa/760) x (298/Ta)] ^{1/2} Qstd (CFM) X - axis113.53.6762.549.53.08210.63.2555.497.02.6437.82.7947.685.32.3045.42.3239.773.71.9253.21.7930.752.11.45By Linear Regression of Y on XSlope, mw =	Date:	12-4	Apr-23	Next Due Date:	13-	Jun-23	Operator:	SK		
Ambient ConditionTemperature, Ta (K)298Pressure, Pa (mmHg)759.3Orifice Transfer Standard InformationSerial No.3864Slope, mc0.05928Intercept, bc-0.03491Last Calibration Date:16-Jan-23mc x Qstd + be = [Δ H x (Pa/760) x (298/Ta)] ^{1/2} -0.03491Next Calibration Date:16-Jan-24Qstd = {[Δ H x (Pa/760) x (298/Ta)] ^{1/2} - bc] / mcCalibration Date:16-Jan-24Qstd = {[Δ H x (Pa/760) x (298/Ta)] ^{1/2} - bc] / mcCalibration of TSP SamplerCalibrationOrffceHVS Δ H (orifice), in of water[Δ H x (Pa/760) x (298/Ta)] ^{1/2} Qstd (CFM) X - axis113.53.6762.549.53.08210.63.2555.497.02.6437.82.7947.685.32.3045.42.3239.773.71.9253.21.7930.752.11.45By Linear Regression of Y on XSlope, mw =	Equipment No.:	A-	01-08	Model No.:	GS	52310	Serial No.	1287		
Temperature, Ta (K) 298 Pressure, Pa (mmHg) 759.3 Orifice Transfer Standard Information Serial No. 3864 Slope, mc 0.05928 Intercept, bc -0.03491 Last Calibration Date: 16-Jan-23 mc x Qstd + bc = [AH x (Pa/760) x (298/Ta)]^{1/2} Ostd = {[AH x (Pa/760) x (298/Ta)]^{1/2} - bc] / mc Next Calibration Date: 16-Jan-24 Qstd = {[AH x (Pa/760) x (298/Ta)]^{1/2} - bc] / mc Calibration of TSP Sampler Calibration Orifice HVS Óftice Jast (Pa/760) x (298/Ta)]^{1/2} Qstd (CFM) ΔW (HVS), in. [AW x (Pa/760) x (298/Ta)]^{1/2} + bc] / mc 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Set Point Calculation <	• •									
Orifice Transfer Standard Information Serial No. 3864 Slope, mc 0.05928 Intercept, bc -0.03491 Last Calibration Date: 16-Jan-23 mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$ Next Calibration Date: 16-Jan-24 Qstd = $\{[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$ - bc} / mc Calibration Date: 16-Jan-24 Qstd = $\{[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$ - bc} / mc Calibration of TSP Sampler Calibration of TSP Sampler Calibration Orfice HVS ΔH (orifice), in. of water $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$ Qstd (CFM) ΔW (HVS), in. of water $[\Delta W x (Pa/760) x (298/Ta)]^{1/2}$ 2 10.6 3.25 55.49 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X				Ambient C	Condition					
Serial No. 3864 Slope, mc 0.05928 Intercept, bc -0.03491 Last Calibration Date: 16-Jan-23 mc x Qstd + bc = [Δ H x (Pa/760) x (298/Ta)] ^{1/2} Qstd = [Δ H x (Pa/760) x (298/Ta)] ^{1/2} Mc Next Calibration Date: 16-Jan-24 Qstd = [[Δ H x (Pa/760) x (298/Ta)] ^{1/2} Mc Mc Calibration Point Δ H (orifice), in. of water [Δ H x (Pa/760) x (298/Ta)] ^{1/2} Qstd (CFM) Δ W (HVS), in. [Δ W x (Pa/760) x (298/Ta)] ^{1/2} Mc Mc 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 Set Point Calculation Calibration Coefficient < 0.990, check and recalibrate.	Temperatu	re, Ta (K)	298	Pressure, Pa	a (mmHg)		759.3			
Serial No. 3864 Slope, mc 0.05928 Intercept, bc -0.03491 Last Calibration Date: 16-Jan-23 mc x Qstd + bc = [Δ H x (Pa/760) x (298/Ta)] ^{1/2} Qstd = [Δ H x (Pa/760) x (298/Ta)] ^{1/2} Mc Next Calibration Date: 16-Jan-24 Qstd = [[Δ H x (Pa/760) x (298/Ta)] ^{1/2} Mc Mc Calibration Point Δ H (orifice), in. of water [Δ H x (Pa/760) x (298/Ta)] ^{1/2} Qstd (CFM) Δ W (HVS), in. [Δ W x (Pa/760) x (298/Ta)] ^{1/2} Δ Std (CFM) Δ W (HVS), in. [Δ W x (Pa/760) x (298/Ta)] ^{1/2} 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Slope , mw = 0.0502 Intercept, bw : -0.0940 Correlation Coefficient < 0.990, check and recalibrate.			0	···		- 4 •				
Last Calibration Date: 16-Jan-23 mc x Qstd + bc = [Δ H x (Pa/760) x (298/Ta)] ^{1/2} Next Calibration Date: 16-Jan-24 Qstd = {[Δ H x (Pa/760) x (298/Ta)] ^{1/2} -bc} / mc Calibration Date: (Calibration of TSP Sampler Calibration Orfice HVS Orfice U HVS 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Set Point Calculation Fort Calibration Coefficient < 0.990, check and recalibrate. Set Point Calculation Fort Calibration Calibration Curve, take Qstd = 43 CFM	Serial	No					t he	-0.03/91		
Next Calibration Date: 16-Jan-24 Qstd = {[Δ H x (Pa/760) x (298/Ta)] ^{1/2} -bc} / mc Calibration of TSP Sampler Calibration Orfice HVS Δ H (orifice), in. of water [Δ H x (Pa/760) x (298/Ta)] ^{1/2} Qstd (CFM) X - axis Δ W (HVS), in. [Δ W x (Pa/760) x (298/Ta)] ^{1/2} 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Set Point Calculation Correlation coefficient* = 0.9908 *If Correlation Coefficient < 0.990, check and recalibrate. Set Point Calculation Frend Kalibration Curve, take Qstd = 43 CFM										
Calibration of TSP Sampler Calibration Point AH (orifice), in. of water [AH x (Pa/760) x (298/Ta)] ^{1/2} Qstd (CFM) ΔW (HVS), in. of water [$\Delta W x (Pa/760) x (298/Ta)$] ^{1/2} 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Stope , mw =										
Orfice HVS Calibration 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 $[\Delta W x (Pa/760) x (298/Ta)]^{1/2}$ 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Slope , mw =										
Cambration Point ΔH (orifice), in. of water $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Qstd (CFM) X - axis ΔW (HVS), in. of water $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Stope, mw = 0.0502 Intercept, bw : -0.0940 Correlation coefficient* = 0.9988 *If Correlation Coefficient < 0.990, check and recalibrate. Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM				Calibration of	TSP Sampler					
Point ΔH (orifice), in. of water $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Qstd (CFM) X - axis ΔW (HVS), in. of water $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ 1 13.5 3.67 62.54 9.5 3.08 2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Slope , mw =	Calibration		Or	fice						
2 10.6 3.25 55.49 7.0 2.64 3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Slope , mw =0.0502 Intercept, bw :0.0940			[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}						
3 7.8 2.79 47.68 5.3 2.30 4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Slope , mw =0.0502 Correlation coefficient* =0.9988 *If Correlation Coefficient < 0.990, check and recalibrate.	1	13.5		3.67	62.54	9.5		3.08		
4 5.4 2.32 39.77 3.7 1.92 5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Slope , mw =0.0502 Intercept, bw :0.0940 Correlation coefficient* =0.9988 *If Correlation Coefficient < 0.990, check and recalibrate.	2	10.6		3.25	55.49	7.0		2.64		
5 3.2 1.79 30.75 2.1 1.45 By Linear Regression of Y on X Slope , mw =0.0502 Intercept, bw :0.0940 Correlation coefficient* =0.9988	3	7.8		2.79	47.68	5.3		2.30		
By Linear Regression of Y on X Slope , mw =0.0502 Intercept, bw :0.0940 Correlation coefficient* =0.9988 *If Correlation Coefficient < 0.990, check and recalibrate.	4	5.4		2.32	39.77	3.7		1.92		
Slope , mw =0.0502 Intercept, bw :0.0940 Correlation coefficient* =0.9988 *If Correlation Coefficient < 0.990, check and recalibrate.	5	3.2		1.79	30.75	2.1		1.45		
From the TSP Field Calibration Curve, take Qstd = 43 CFM	Slope , mw = Correlation	Slope , mw = 0.0502 Intercept, bw : -0.0940 Correlation coefficient* = 0.9988								
				Set Point C	alculation					
From the Regression Equation, the "Y" value according to	From the TSP Fi	eld Calibration	Curve, take Qstd	= 43 CFM						
	From the Regres	sion Equation, t	he "Y" value acco	ording to						
mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$			mw v (hard + har = [AW]	v (Da/760) v (20	(12) (1/2) (1/2)				
$\lim_{n \to \infty} x \operatorname{Qstu} + \operatorname{Dw} = [\Delta \operatorname{W} x (\operatorname{I} a / \operatorname{Vol}) x (230/\operatorname{I} a)]$			III w X Q	$z_{\text{stu}} + b_{\text{w}} = [\Delta w_{\text{st}}]^2$	X (1 a / 100) X (2)	70/1 a)]				
Therefore, Set Point; $W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) =$ 4.27	Therefore, Se	et Point; W = (1	mw x Qstd + bw)	² x (760 / Pa) x (Ta / 298) =	4.27				
	L									
Remarks:	Domarka									
	Kemarks.									
ml		W 7		C :	Xr	24	Dite	10 4		
Conducted by: Wong Shing Kwai Signature: ///// Date: 12-Apr-23	Conducted by:	wong S	mig k wal	Signature:			Date:	12-Apt-23		
Checked by: Wong Shing Kwai Signature: Image: Provide Signature: Checked by: Henry Leung Signature: Lewy Marging Date: 12-Apr-23	Checked by:	Henr	y Leung	Signature:	- \-lem	1 Xon	Date:	12-Apr-23		



File No. MA16034/03/0041

Project No.	AM3 - Yau Lai	Estate, Bik Lai H	House						
Date:	12-A	pr-23	Next Due Date:	12-	Jun-23	Operator:	SK		
Equipment No.:	A-0	1-03	Model No.:	GS	52310	Serial No.	10379		
			Ambient C	ondition					
Temperatur	re, Ta (K)	298	Pressure, Pa	(mmHg)		759.3			
		Ori	ifice Transfer Star	ndard Informa	ation				
Serial	No.	3864	Slope, mc	0.05928	Intercept	t, bc	-0.03491		
Last Calibration Date:16-Jan-23 $mc x Qstd + bc = [\Delta H x (Pa/760) x (298/Ta)]^{1/2}$									
Next Calibration Date: 16-Jan-24 $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$									
		•	Calibration of [FSP Sampler					
		Or	fice	F		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/7	60) x (298/Ta)] ^{1/2} Z- axis		
1	13.1		3.62	61.62	9.0		3.00		
2	10.3		3.21	54.70	6.7		2.59		
3	8.2		2.86	48.87	5.1		2.26		
4	5.2		2.28	39.04	3.2		1.79		
5	2.9		1.70	29.30	1.9		1.38		
By Linear Regr Slope , mw = Correlation (*If Correlation C	0.0499 coefficient* =	0	.9973	Intercept, bw =	-0.131	1			
			Set Point Ca	alculation					
From the TSP Fi From the Regres Therefore, Se	sion Equation, tl	ne "Y" value acco mw x Q			98/Ta)] ^{1/2} 4.07				
Remarks:				1-	1				
Conducted by:	Wong Sł	ning Kwai	Signature:	X	<u>у</u> .	Date:	12-Apr-23		
Checked by:	Henry	Leung	Signature:	Flem	J Xm J	Date:	12-Apr-23		



File No. MA16034/05/0042

Project No.	AM1 - Tin Hau	Temple						
Date:	12-J	un-23	Next Due Date:	13-	Aug-23	Operator:	SK	
Equipment No.:	A-0	01-05	Model No.:	GS	\$2310	Serial No.	10599	
			Ambient C					
Tarrananatar	To (V)	202.2	Ambient C			751.5		
Temperatur	re, 1a (K)	303.2	Pressure, Pa	(mmHg)		751.5		
		Or	ifice Transfer Star	ndard Informa	ation			
Serial	No.	3864	Slope, mc	0.05928	Intercept	t, bc	-0.03491	
Last Calibration Date: 16-Jan-23 $\mathbf{mc} \mathbf{x} \mathbf{Qstd} + \mathbf{bc} = [\Delta \mathbf{H} \mathbf{x} (\mathbf{Pa/760}) \mathbf{x} (\mathbf{298/Ta})]^{1/2}$								
Next Calibration Date:16 Jan-24Qstd = { $[\Delta H x (Pa/760) x (298/Ta)]^{1/2} - bc} / mc$								
	[Calibration of Z	FSP Sampler				
Calibration	ALL (omifica)		fice	Oatd (CEM)	AW (TIVO)	HVS	$(200/T_{1})^{1/2}$	
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		0) x (298/Ta)] ^{1/2} axis	
1	13.0		3.55	60.55	9.6	3	.05	
2	10.1		3.13	53.44	7.1	2	.63	
3	7.4		2.68	45.83	5.1	2	.23	
4	5.5		2.31	39.59	3.2	1	.76	
5	3.0		1.71	29.39	1.6	1	.25	
Correlation	0.0586 coefficient* =	_	.9986	Intercept, bw =	-0.498	3		
			Set Point Ca	alculation				
From the TSP Fi	eld Calibration	Curve, take Qstd	= 43 CFM					
From the Regres	sion Equation, t	he "Y" value acco	ording to					
		mw x Q	$\mathbf{\hat{b}}\mathbf{x} = [\Delta \mathbf{W} \mathbf{x}]$	(Pa/760) x (29	98/Ta)] ^{1/2}			
Therefore, Se	et Point; W = (n	nw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	4.21			
Remarks:								
Conducted by:	Wong Sl	ning Kwai	Signature:	K	火.	Date:	12-Jun-23	
Checked by:	Henry	/ Leung	Signature:	-lem	J Xron J	Date:	12-Jun-23	



File No. MA16034/08/0042

Project No.	AM2 - Sai Tso	Wan Recreation	Ground				
Date:	12-Jı	un-23	Next Due Date:	: 13	Aug-23	Operator:	SK
Equipment No.:	A-0	1-08	Model No.:	: <u> </u>	52310	Serial No.	1287
				~			
Tomata	т. Т. (V)	202.2	Ambient (7515	
Temperatur	e, 1a (K)	303.2	Pressure, Pa	a (mmHg)		751.5	
		Or	ifice Transfer Sta	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05928	Intercept	t, bc	-0.03491
Last Calibra	tion Date:	16-Jan-23			$c = [\Delta H x (Pa/760)]$		
Next Calibra	ation Date:	16-Jan-24		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \mathbf{x}] \}$	(Pa/760) x (298/7	Γa)]^{1/2} -bc} / n	nc
		-	Calibration of	TSP Sampler		111/0	
Calibration	ΔH (orifice),		fice	Qstd (CFM)	ΔW (HVS), in.	HVS	(60) x (298/Ta)] ^{1/2}
Point	in. of water	[ΔH x (Pa/76	60) x (298/Ta)] ^{1/2}	X - axis	of water		Y-axis
1	13.2		3.58	61.01	9.1		2.97
2	10.3		3.16	53.96	6.7		2.55
3	7.5		2.70	46.13	5.0		2.20
4	5.2		2.25	38.51	3.3		1.79
5	3.0		1.71	29.39	1.7		1.29
		-					
By Linear Regr Slope , mw =		X		Intercent by	-0.248	20	
•	coefficient* =	- 0	.9992	Intercept, bw	-0.240		
*If Correlation C				-			
		,					
			Set Point C	alculation			
From the TSP Fi	eld Calibration (Curve, take Qstd	= 43 CFM				
From the Regress	sion Equation, th	ne "Y" value acco	ording to				
		mw x Q	Q std + bw = [ΔW 2	x (Pa/760) x (29	98/Ta] ^{1/2}		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	² x (760 / Pa) x (Ta / 298) =	4.17		
Remarks:							
•							
				Ь			
Conducted by:	Wong Sh	ning Kwai	Signature	: <u> </u>	火-	Date:	12-Jun-23
					- Xm		
Checked by:	Henry	Leung	Signature	: them	- may	Date:	12-Jun-23

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F:\Cinotech Solutions\Equipment\Calibration Cert\HVS\new\MA16034_20230612_AM2_(A-01-08)



File No. MA16034/03/0042

Project No.	AM3 - Yau Lai	Estate, Bik Lai H	Iouse				
Date: 12-Jun-23		Next Due Date:	12-4	Aug-23	Operator:	SK	
Equipment No.:	A-0	1-03	Model No.:	GS	\$2310	Serial No.	10379
			Ambient C	ondition			
Temperatu	re, Ta (K)	303.2	Pressure, Pa			751.5	
•	· · · ·			(<u> </u>			
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05928	Intercept		-0.03491
Last Calibration Date:16-Jan-23 $\mathbf{mc} \mathbf{x} \mathbf{Qstd} + \mathbf{bc} = [\Delta \mathbf{H} \mathbf{x} (\mathbf{Pa/760}) \mathbf{x} (\mathbf{298/Ta})]^{1/2}$							
Next Calibra	ation Date:	16-Jan-24	($Qstd = \{ [\Delta H x] \}$	(Pa/760) x (298/	Γa)] ^{1/2} -bc} / mo	:
			Calibration of T	FSP Sampler			
Calibration		01	fice			HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	60) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		0) x (298/Ta)] ^{1/2} • axis
1	12.8		3.53	60.09	8.7	2	91
2	10.1		3.13	53.44	6.5	2	2.51
3	8.0		2.79	47.63	4.7	2	
4	5.0		2.20	37.77	3.0	1	.71
5	2.7		1.62	27.91	1.7	1	.29
1 /	0.0501 coefficient* =	0	.9957 calibrate.	intercept, bw =	-0.161	7	
Enous the TSD E	ald Calibration (Comune dallas Octal	Set Point Ca	alculation			
From the TSP Fi		-					
From the Regres	sion Equation, t	ne "Y" value acc	braing to				
		mw x Q	$std + bw = [\Delta W x]$	(Pa/760) x (29	$98/Ta)]^{1/2}$		
Therefore, Se	et Point; W = (n	nw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	4.08		
Remarks:							
Conducted by:	Wong Sh	ning Kwai	Signature:	K	火.	Date:	12-Jun-23
Checked by:	Henry	Leung	Signature:	-lem	1 dran	Date:	12-Jun-23



File No. MA20003/55/019

Project No.	CKL 2 - Flat 103	3 Cha Kwo Ling	Village			. –	
Date:	04-M	ay-23	Next Due Date:		Jul-23	Operator:	SK
Equipment No.:	A-0	1-55	Model No.:	TE	2 5170	Serial No.	1956
			Ambient (Condition			
Temperatu	ire, Ta (K)	290.4	Pressure, Pa	u (mmHg)		767.6	
		Ori	fice Transfer Sta	ndard Informa	ation		
Seria	1 No.	3864	Slope, mc	0.05928	Intercept	t, bc	-0.03491
Last Calibra	ation Date:	16-Jan-23	1	mc x Qstd + bo	$c = [\Delta H x (Pa/760)]$) x (298/Ta)] ¹	2
Next Calibr	ation Date:	16-Jan-24		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \mathbf{x}] \}$	(Pa/760) x (298/	$[\Gamma a)]^{1/2} - bc\} / m$	C
		Or	Calibration of fice	15P Sampler		HVS	
Calibration Point	ΔH (orifice), in. of water		i0) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/76	50) x (298/Ta)] ^{1/2} 7 -axis
1	13.0		3.67	62.51	10.2		3.25
2	10.8		3.35	57.03	8.2		2.92
3	8.7		3.00	51.24	6.3		2.56
4	5.3		2.34	40.13	3.1		1.79
5	2.9		1.73	29.83	1.8		1.37
Slope, mw =	ression of Y on X 0.0592	-		Intercept, bw =	-0.473	34	
	<pre>coefficient* = Coefficient < 0.99</pre>		.9963 calibrate.	-			
			Set Point C	alculation			
	ield Calibration C ssion Equation, th	e "Y" value acco		x (Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, S	et Point; W = (m	w x Qstd + bw)	² x (760 / Pa) x (Ta / 298) =	4.14		
Remarks:							
Conducted by:	Wong Sh	ing Kwai	Signature:	k	X.	Date:	04-May-23
Checked by:	Henry	Leung	Signature:	1_0	Non 1	Date:	04-Mav-23

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Issue Date : 06 Jan 2023

Report No.:00319Application No.:HP00222

Certificate of Calibration

Applicant

 Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-08-07

Manufacturer: : SVANTEK

Other information	:	Model No.	SVAN 957
		Serial No.	21455
		Microphone No.	17204

Date Received	: 06 Jan 2023	
Test Period	: 06 Jan 2023 to 06 Jan 2023	
Test Requested	Performance checking for Sound Level Meter	
Test Method	The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.	
Test conditions	Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%	
Test Result	Refer to the test result(s) on page 2.	

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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Issue Date : 06 Jan 2023

Report No.:00319Application No.:HP00222

Certificate of Calibration

Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB Indication value, dB		Deviation, dB	Allowed deviation, dB
94.0 95.0		± 1.0	± 1.5
114.0	114.4	+ 0.4	± 1.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.

Report No.

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

: 00333



Issue Date : 20 Jan 2023

 Application No.
 :
 HP00212

 Applicant
 :
 Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong

 Sample Description
 :
 Submitted equipment stated to be Integrating Sound Level Meter.

 Equipment No.:
 :
 N-12-02

 Manufacturer:
 :
 BSWA Technology

Other information	:	Model No.	BSWA 308
		Serial No.	570187
		Microphone No.	590079

Date Received	:	18 Jan 2023
Test Period	:	20 Jan 2023 to 20 Jan 2023
Test Requested	:	Performance checking for Sound Level Meter
Test Method	:	The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.
Test conditions	:	Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%
Test Result	:	Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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:



Issue Date : 20 Jan 2023

Report No.:00333Application No.:HP00212

Certificate of Calibration

Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.0	± 0.0	± 1.5
114.0	114.2	+ 0.2	± 1.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.

Report No.

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

: 00361



Issue Date : 30 Mar 2023

: HP00236 Application No. **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Integrating Sound Level Meter. Equipment No.: : N-12-04 Manufacturer: : BSWA Technology Other information : Model No. **BSWA 308** Serial No. 580238 Microphone No. 570605 Data Bacalyad 77 Mar 2022

Test Period : 28 Mar 2023 to 28 Mar 2023	
Test Requested : Performance checking for Sound Level Meter	
Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.	
Test conditions : Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%	
Test Result : Refer to the test result(s) on page 2.	

: 1. Information of the sample description provided by the Applicant. Remark

2. The result(s) relate only to the items tested or calibrated.

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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Issue Date : 30 Mar 2023

Report No.:00361Application No.:HP00236

Certificate of Calibration

Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB	
94.0	94.2	+ 0.2	± 1.5	
114.0	114.3	+ 0.3	± 1.5	

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.

Report No.

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

: 00364



Issue Date : 03 Apr 2023

: HP00240 Application No. **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Integrating Sound Level Meter. Equipment No.: : N-12-05 Manufacturer: : BSWA Technology Other information : Model No. **BSWA 308** Serial No. 580287 Microphone No. 570610 ~~~~

Date Received	:	03 Apr 2023
Test Period	:	03 Apr 2023 to 03 Apr 2023
Test Requested	:	Performance checking for Sound Level Meter
Test Method	:	The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.
Test conditions	:	Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%
Test Result	:	Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.2. The result(s) relate only to the items tested or calibrated.

The result(s) relate only to the items tested or calibrated.

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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:



Issue Date : 03 Apr 2023

Report No.:00364Application No.:HP00240

Certificate of Calibration

Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.2	+ 0.2	± 1.5
114.0	114.2	+ 0.2	± 1.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.

Report No.

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

: 00288



Issue Date : 10 Nov 2022

Application No. : HP00176 **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Sound Level Calibrator. Equipment No.: : N-13-03 Manufacturer: : SOUNDTEK Other information : Model No. ST-120 Serial No. 181001637 : 10 Nov 2022 Date Received Test Period : 10 Nov 2022 to 10 Nov 2022 : Performance checking for Sound Level Calibrator **Test Requested** Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent. **Test conditions** : Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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:



Issue Date : 10 Nov 2022

Report No.:00288Application No.:HP00176

<u>Certificate of Calibration</u>

Measuring equipment

Description	Sound Calibrator	
Manufacturer	Brüel & Kjær	
Model No.	TYPE 4231	
Serial No.	2326353	
Equipment No.	N-02-01	
Description	Sound Meter	
Manufacturer	BSWA Technology	
	DOWNTEEnnology	
Model No.	BSWA 308	
Model No. Serial No.	81	
	BSWA 308	
Serial No.	BSWA 308 570183	

Test Result

Reference value, dB	Indication value, dB Deviation, d		Allowed deviation, dB	
94.0	94.1	+ 0.1	± 0.3	
114.0	114.2	+ 0.2	± 0.5	

- Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.



Certificate of Calibration

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

Description:	Laser Dust Monitor			Date o	31-May-23		
Manufacturer:	Sibata Scientif	ic Technology LTD.		Validity of Calibra	tion Record	31-Jul-23	
Model No.:	LD-3B	<u>.</u>					
Serial No.:	2Y6194	<u>-</u>					
Equipment No.:	SA-01-02	<u>-</u>	Sensitivity	0.001 mg/m3			
High Volume Sa	ampler No.:	A-01-03	Before Sensi	tivity Adjustment	578		
Tisch Calibration	n Orifice No.:	3864	After Sensitivity Adjustment 578				
		Calibra	tion of 1 hr T	SP			
Calibration		Laser Dust Monitor		HVS			
Point Total Count		Count / Minute X-axis		Mass concentration (µg/m ³) Y-axis			
1	4080	71.0	136.0				
2	3600	62.0			118.0		
3	2880	51.0			97.0		
Aver	rage	61.3		117.0			
By Linear Regr Slope , mw =	By Linear Regression of Y on X Slope , mw = <u>1.9485</u> Intercept, bw = <u>-2.5083</u>						
Correls	Correlation coefficient* = 0.9999						
	Set Correlation Factor, SCF SCF = [K=High Volume Sampler / Dust Meter, (μg/m3)] 1.9						

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 Limited)

Calibrated by:

Approved by: ~ Ar Project Manager (Henry Leung)



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	31-May-23
Manufacturer:	Sibata Scientific Technology LTD.	Validity of Calibr	ration Record	31-Jul-23
Model No.:	LD-5R			
Serial No.:	8Y2374			
Equipment No.:	SA-01-04	Sensitivity 0.001 mg/m3	-	
High Volume Sa	mpler No.: <u>A-01-03</u>	Before Sensitivity Adjustment	652	
Tisch Calibration	o Orifice No.: 3864	After Sensitivity Adjustment	652	

	Calibration of	I nr ISP
Calibration	Laser Dust Monitor	HVS
Point	Mass Concentration (µg/m3)	Mass concentration ($\mu g/m^3$)
1 oline	X-axis	Y-axis
1	72.0	133.0
2	65.0	120.0
3	52.0	98.0
Average	63.0	117.0
By Linear Regress Slope , mw = Correlation coeff	1.7427 Int	ercept, bw = <u>7.2087</u>
Slope , mw =	<u>1.7427</u> Int icient* = <u>0.9997</u>	
Slope , mw = Correlation coeff	1.7427 Int "icient* = 0.9997 Set Correlation	n Factor
Slope , mw = Correlation coeff Particaulate Concer	1.7427 Int "icient* = 0.9997 Set Correlation tration by High Volume Sampler (μg/m³)	1 Factor 117.0
Slope , mw = Correlation coeff Particaulate Concer Particaulate Concer	1.7427 Integration icient* = 0.9997 Set Correlation tration by High Volume Sampler ($\mu g/m^3$) tration by Dust Meter ($\mu g/m^3$)	n Factor 117.0 63.0
Slope , mw = Correlation coeff Particaulate Concer Particaulate Concer Measureing time, (r	1.7427 Int icient* = 0.9997 Set Correlation tration by High Volume Sampler ($\mu g/m^3$) tration by Dust Meter ($\mu g/m^3$) nin)	1 Factor 117.0
Slope , mw = Correlation coeff Particaulate Concer Particaulate Concer Measureing time, (r Set Correlation Fac	1.7427 Int icient* = 0.9997 Set Correlation tration by High Volume Sampler ($\mu g/m^3$) tration by Dust Meter ($\mu g/m^3$) nin)	n Factor 117.0 63.0

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:



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	31-May-23
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calib	ration Record	31-Jul-23
Model No.:	LD-5R				
Serial No.:	8Y2373				
Equipment No.:	SA-01-05	Sensitivity	0.001 mg/m3	_	
High Volume Sa	ampler No.: A-01-03	Before Sensiti	ivity Adjustment	657	
Tisch Calibration	n Orifice No.: 3864	After Sensitiv	ity Adjustment	657	
Calibration of 1 br TSP					

	Calibration of 1	
Calibration	Laser Dust Monitor	HVS
Point	Mass Concentration (µg/m3)	Mass concentration ($\mu g/m^3$)
T O IIII	X-axis	Y-axis
1	73.0	134.0
2	64.0	115.0
3	53.0	97.0
Average	63.3	115.3
By Linear Regressio Slope , mw = Correlation coeffic	1.8422 Int	ercept, bw = -1.3389
Slope , mw =	1.8422 Int	ercept, bw =
Slope , mw = Correlation coeffic	1.8422 Int cient* = 0.9973	ercept, bw =
Slope , mw = Correlation coeffic Particaulate Concent	1.8422 Int cient* = 0.9973 Set Correlation	ercept, bw =
Slope , mw = Correlation coeffic Particaulate Concent	1.8422 Int cient* = 0.9973 Set Correlation ration by High Volume Sampler (μ g/m ³) ration by Dust Meter (μ g/m ³)	ercept, bw = -1.3389
Slope , mw = Correlation coeffice Particaulate Concent Particaulate Concent	1.8422 Int cient* = 0.9973 Set Correlation ration by High Volume Sampler ($\mu g/m^3$) ration by Dust Meter ($\mu g/m^3$) in)	ercept, bw = -1.3389

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:



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		31-May-23	
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibration Record		31-Jul-23
Model No.:	LD-5R				
Serial No.:	972777				
Equipment No.:	SA-01-06	Sensitivity	0.001 mg/m3	-	
High Volume Sa	ampler No.: A-01-03	Before Sensiti	vity Adjustment	645	
Tisch Calibratio	Tisch Calibration Orifice No.: 3864 Af		ity Adjustment	645	
	Ca	libration of 1 h	r TSP		
Calibration	Laser Dust Monitor			HVS	
Point	Mass Concentration (µg/	′m3)	Mas	ss concentration ($\mu g/m^3$)
1 Onit	X-axis			Y-axis	
1	72.0			138.0	
2	64.0			119.0	
3	52.0			100.0	
Average	62.7			119.0	

By Linear Regre	ession of Y on X			
Slope , mw =	1.8750		Intercept, bw =	1.5000
Correlation co	efficient* =	0.9934		

Set Correlation Factor				
Particaulate Concentration by High Volume Sampler $(\mu g/m^3)$	119.0			
Particaulate Concentration by Dust Meter (µg/m ³)	62.7			
Measureing time, (min)	60.0			
Set Correlation Factor , SCF				
SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)]	1.9			

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)

Calibrated by:

Approved by: Project Manager (Henry Leung)



Certificate of Calibration

1

2

3

Average

By Linear Regression of Y on X Slope , mw = 2.0440

Correlation coefficient* =

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

Description:	Digital Dust Indicator		Date	of Calibration	31-May-23
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibr	ration Record	31-Jul-23
Model No.:	LD-5R				
Serial No.:	972778				
Equipment No.:	SA-01-07	Sensitivity	0.001 mg/m3	-	
High Volume Sa	ampler No.: A-01-03	Before Sensiti	vity Adjustment	735 CPM	
Tisch Calibration	n Orifice No.: <u>3864</u>	After Sensitivi	ity Adjustment	735 CPM	
	Ca	libration of 1 h	r TSP		
Calibration	Laser Dust Monitor	r		HVS	
Point	Mass Concentration (µg/	m3)	Mas	ss concentration (µ	ıg/m ³)
	X-axis			Y-axis	

Set Correlation Fac	tor
Particaulate Concentration by High Volume Sampler (µg/m ³)	117.0
Particaulate Concentration by Dust Meter (µg/m ³)	59.0
Measureing time, (min)	60.0
Set Correlation Factor, SCF	
SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)]	2.0

Intercept, bw =

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)

68.0

60.0

49.0

59.0

0 9989

Calibrated by:

Approved by: _______ Project Manager (Henry Leung)

136.0

118.0

97.0

117.0

-3.5934



<u>Certificate of Calibration</u>

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	31-May-23
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibr	ation Record	31-Jul-23
Model No.:	LD-5R				
Serial No.:	972779				
Equipment No.:	SA-01-08	Sensitivity	0.001 mg/m3	_	
High Volume Sa	ampler No.: A-01-03	Before Sensit	tivity Adjustment	744 CPM	
Tisch Calibration	n Orifice No.: <u>3864</u>	After Sensitiv	vity Adjustment	744 CPM	
Calibration of 1 br TSP					

	Calibratio	
Calibration	Laser Dust Monitor	HVS
Point	Mass Concentration (µg/m3)	Mass concentration ($\mu g/m^3$)
T OHIC	X-axis	Y-axis
1	70.0	137.0
2	59.0	118.0
3	50.0	97.0
Average	59.7	117.3
By Linear Regree Slope , mw = _ Correlation coe	1.9900	Intercept, bw =
Slope , mw =	<u>1.9900</u> fficient* = <u>0.9963</u>	Intercept, bw = <u>-1.4053</u>
Slope , mw = Correlation coe	<u>1.9900</u> fficient* = <u>0.9963</u>	elation Factor
Slope , mw = Correlation coe	1.9900 fficient* = 0.9963 Set Corre	elation Factor
Slope , mw = Correlation coe	1.9900 fficient* = 0.9963 Set Correction entration by High Volume Sampler (μ g/m ³) entration by Dust Meter (μ g/m ³)	elation Factor
Slope , mw = Correlation coe Particaulate Conce Particaulate Conce	1.9900 fficient* = 0.9963 Set Correction of the set of the se	elation Factor 117.3 59.7

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)

Calibrated by:



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	31-May-23
Manufacturer:	Sibata Scientific Technology LTD.	Validity of Calibr	ration Record	31-Jul-23
Model No.:	LD-5R			
Serial No.:	972780			
Equipment No.:	SA-01-09	Sensitivity 0.001 mg/m3	_	
High Volume Sa	mpler No.: <u>A-01-03</u>	Before Sensitivity Adjustment	739 CPM	
Tisch Calibration	n Orifice No.: 3864	After Sensitivity Adjustment	739 CPM	

	Calibration of	hr TSP	
Calibration	Laser Dust Monitor	HVS Mass concentration (μg/m ³)	
Point	Mass Concentration (µg/m3)		
1 onit	X-axis	Y-axis	
1	72.0	139.0	
2	62.0	119.0	
3	51.0	98.0	
Average	61.7	118.7	
By Linear Regression Slope , mw = Correlation coeffice	1.9517 Int	ercept, bw = -1.6858	
Slope , mw =	<u>1.9517</u> Int cient* = <u>0.9999</u>	_	
Slope , mw = Correlation coeffic	1.9517 Int cient* = 0.9999 Set Correlation	_	
Slope , mw = Correlation coeffic Particaulate Concent	<u>1.9517</u> Int cient* = <u>0.9999</u>	Factor	
Slope , mw = Correlation coeffic Particaulate Concent	1.9517 Interpretended cient* = 0.9999 Set Correlation ration by High Volume Sampler ($\mu g/m^3$) ration by Dust Meter ($\mu g/m^3$)	1 Factor 118.7	
Slope , mw = Correlation coeffic Particaulate Concent Particaulate Concent	1.9517 Integration cient* = 0.9999 Set Correlation ration by High Volume Sampler (μ g/m ³) ration by Dust Meter (μ g/m ³) in) in)	118.7 61.7	

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)

Calibrated by:



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	31-May-23
Manufacturer:	Sibata Scientific Technology LTD.	Validity of Calibration Record		ration Record	31-Jul-23
Model No.:	LD-5R				
Serial No.:	972781				
Equipment No.:	SA-01-10	Sensitivity	0.001 mg/m3	_	
High Volume Sa	impler No.: A-01-03	Before Sensit	ivity Adjustment	734 CPM	
Tisch Calibration	n Orifice No.: <u>3864</u>	After Sensitiv	ity Adjustment	734 CPM	

	Calibration of 1	nr ISP
Calibration	Laser Dust Monitor	HVS
Point	Mass Concentration (µg/m3)	Mass concentration ($\mu g/m^3$)
rome	X-axis	Y-axis
1	79.0	131.0
2	69.0	113.0
3	58.0	96.0
Average	68.7	113.3
By Linear Regressi Slope , mw = Correlation coeffi	1.6647 Inte	ercept, bw =
Slope , mw =	<u>1.6647</u> Internet icient* = 0.9990	_
Slope , mw = Correlation coeffi	1.6647 Inte	_
Slope , mw = Correlation coeffi Particaulate Concern	1.6647 International icient* = 0.9990 Set Correlation	Factor
Slope , mw = Correlation coeffi Particaulate Concent Particaulate Concent	1.6647 Integration icient* = 0.9990 Set Correlation tration by High Volume Sampler (μ g/m ³) tration by Dust Meter (μ g/m ³)	Factor 113.3
Slope , mw = Correlation coeffi Particaulate Concern	1.6647 Interpretended icient* = 0.9990 Set Correlation tration by High Volume Sampler ($\mu g/m^3$) tration by Dust Meter ($\mu g/m^3$) nin)	Factor 113.3 68.7

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:

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Issue Date : 02 May 2023

Report No.:00370Application No.:HP00242

Certificate of Calibration

Applicant

 Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : SN-01-01

Manufacturer: : SVANTEK

Other information	:	Model No.	SVAN 979
		Serial No.	27189
		Microphone No.	25202

Date Received	:	02 May 2023
Test Period	:	02 May 2023 to 02 May 2023
Test Requested	:	Performance checking for Sound Level Meter
Test Method	:	The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.
Test conditions	:	Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%
Test Result	:	Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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Issue Date : 02 May 2023

Report No.:00370Application No.:HP00242

Certificate of Calibration

Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	93.9	- 0.1	± 1.5
114.0	114.0	± 0.0	± 1.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.



RECALIBRATION

DUE DATE:

January 16, 2024

Certificate of Calibration

			Calibration	Certificati	on Informat	tion		
Cal. Date:	January 16, 2023 Roots			meter S/N:	438320	Ta:	293	°К
Operator:	Jim Tisch					Pa: 749.0		mm Hg
Calibration	Model #:	TE-5025A	Calib	prator S/N:	3864			
		Vol. Init	Vol. Final	ΔVol.	ΔTime	ΔΡ	ΔН]
	Run	(m3)	(m3)	(m3)	(min)	(mm Hg)	(in H2O)	
	1	1	2	1	1.4440	3.2	2.00	4
	2	3	4	1	1.0220	6.4	4.00	
	3	5	6	1	0.9100	8.0	5.00	4
	4	7	8	1	0.8710	8.8	5.50	4
	5	9	10	1	0.7210	12.8	8.00	
			I	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)	
	0.9981	0.6912	1.41	59	0.9957	0.6896	0.8845	
	0.9938	0.9724	2.00	24	0.9915	0.9701	1.2509	
	0.9917	1.0898	2.23	88	0.9893	1.0872	1.3985	
	0.9906	1.1373	2.34	80	0.9883	1.1346	1.4668	
	0.9853	1.3665	2.83		0.9829	1.3633	1.7690	
	m= 2.0945				m=	1.31155		
	QSTD	b=	-0.034		QA	b=	-0.02182	
		r=	0.999					
				Calculatio				
)/Pstd)(Tstd/Ta	a)		∆Vol((Pa-∆	P)/Pa)	
	Qstd=	Vstd/∆Time		Qa= Va/∆Time uent flow rate calculations:				
	Qstd=	Qstd= $1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right)$			Qa=	1/m((√∆ŀ	l(Та/Ра))-b)	
		Conditions						
Tstd						RECA	LIBRATION	
Pstd		mm Hg			US EPA rec	ommends a	nnual recalibratio	on ner 1999
AH: calibrat		Key ter reading (i	n H2O)		US EPA recommends annual recalibration per 199 40 Code of Federal Regulations Part 50 to 51,			
		eter reading					, Reference Meth	
		perature (°K)					ended Particulat	
		ressure (mm				•	ere, 9.2.17, page	
b: intercept						ic Annosphi	, J.z.1/, page	
m: slope								

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

CINGTECH

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>18-Feb-2023</u>
Next Due Date	<u>18-Aug-2023</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
1.2	1.3	-0.1
2.5	2.5	0.0
3.8	3.9	-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

Calibrated by: ______ Approved by: _______ Henry/Leung