Station	Sheung Wun Yiu	(AM1A)		Operator:	Gary	ry Choi		
Cal. Date:	19-Jul-13			Next Due Date:	19-Se	ep-13		
Equipment No.:	A-001-53T			Serial No.	102	116	_	
			Ambient	Condition		-		
Temperatu	ire, Ta (K)	301	Pressure, I	Pa (mmHg)		753.2		
		(Orifice Transfer S	tandard Informatio	n			
Seria	l No:	843	Slope, mc	1.99238	Interce		-0.0035	
Last Calibra	ation Date:	6-Dec-12		mc x Qstd + bc	= [DH x (Pa/760) x	(298/Ta)] ^{1/2}		
Next Calibra	ation Date:	6-Dec-13		Qstd = {[DH x (F	Pa/760) x (298/Ta)]	^{/2} -bc} / mc		
		A.	Calibration	of TSP Sampler				
		0	rfice	or ror sampler	HVS	Flow Recorde	r	
Resistance		т —		2				
Plate No. DH (orifice), in. of water		[DH x (Pa/760) x (298/Ta)] ^{1/2}		Qstd (m³/min) X - axis	Flow Recorder Reading (CFM)		low Recorder CFM) Y-axis	
18 8.8			2.94	1.48	45.0	44.57		
13	6.3		2.49	1.25	38.0	37	.64	
10	4.5		2.10	1.06	31.0	30	.71	
7	3.5		1.85	0.93	26.0	25	.75	
5	2.2		1.47	0.74	21.0	20	.80	
By Linear Regression of Y on X Blope , mw = 33.0773 Correlation Coefficient* = 0.9963 If Correlation Coefficient < 0.990, check and recalibrate.				Intercept, bw =	-4.1	832	÷	
			Set Point	Calculation				
From the TSP Fi	eld Calibration Cu	rve, take Qstd =						
			1.30m ³ /min					
	eld Calibration Cu ssion Equation, the		1.30m ³ /min					
		e "Y" value accord	1.30m ³ /min ding to	х [(Pa/760) x (298/	「a)] ^{1/2}			
From the Regres	ssion Equation, the	e "Y" value accord	1.30m ³ /min ding to x Qstd + bw = IC		Га)] ^{1/2}			
From the Regres	ssion Equation, the	e "Y" value accord	1.30m ³ /min ding to		「a)] ^{1/2}	39.19		
From the Regres	ssion Equation, the	e "Y" value accord	1.30m ³ /min ding to x Qstd + bw = IC		Γa)] ^{1/2}	39.19		
From the Regres	ssion Equation, the	e "Y" value accord	1.30m ³ /min ding to x Qstd + bw = IC		「a)] ^{1/2}	39.19		
From the Regres	ssion Equation, the	e "Y" value accord	1.30m ³ /min ding to x Qstd + bw = IC			39.19		
From the Regres	ssion Equation, the	e "Y" value accord	1.30m ³ /min ding to x Qstd + bw = IC			39.19		
From the Regres	ssion Equation, the	e "Y" value accord	1.30m ³ /min ding to x Qstd + bw = IC			39.19	_	
From the Regres Therefore, Set P	ssion Equation, the	e "Y" value accord mw Qstd + bw) x [(76	1.30m ³ /min ding to x Qstd + bw = IC		-4	39.19	12/12	

Station	Shan Tong New	Village (AM2)		Operator:		thoi Wing Ho		
Cal. Date:	25-Jun-13			Next Due Date:	25-A	ug-13	-	
equipment No.:	A-001-29T			Serial No. 10202				
			Ambient	t Condition				
Temperatu	re, Ta (K)	303	Pressure,	Pa (mmHg)		753.7		
		(Orifice Transfer S	tandard Information	on			
Serial	No:	988	Slope, mc	1.94727		ept, bc	0.0233	
Last Calibra	ation Date:	20-May-13		mc x Qstd + bc	= [DH x (Pa/760) x	(298/Ta)] ^{1/2}		
Next Calibra	ation Date:	20-May-14		Qstd = {[DH x (I	Pa/760) x (298/Ta)]	1/2 -bc} / mc		
			Calibration	of TSP Sampler				
		0	rfice	or ror cumpler	HV	S Flow Recorder		
Resistance Plate No.	ance DH (crifico)			Qstd (m³/min) X -	Flow Recorder Reading (CFM)	Continuous Flow Reco		
18 8.8			2.93	1.49	46.0	45.43	1	
13	6.9		2.59	1.32	40.0	39.50		
10	5.3	-	2.27	1.16	33.0	32.59		
7	3.9		1.95	0.99	27.0	26.67		
5	2.5		1.56	0.79	21.0	20.74		
ly Linear Regre llope , mw =	ssion of Y on X 35.7719	- 00	9966	Intercept, bw =	-8.1372			
	efficient < 0.990,		117	-				
			Set Point	Calculation				
rom the TSP Fie	eld Calibration Cu	rve, take Qstd =	1.30m ³ /min					
rom the Regress	sion Equation, the	"Y" value accord	ling to					
					46			
		mw	x Qstd + bw = IC	x [(Pa/760) x (298/1	Γa)] ^{1/2}			
h 6 0-4 D-	:-4:10 - /	Satel 1 h \ [/ 76	20 / Da) v / Ta / 20	00 11/2_		20.05		
herefore, Set Po	oint; IC = (mw x C	asta + bw) x [(/6	60 / Pa) x (Ta / 29	98)] =		38.85	- 1	
Remarks:								
omano.								

Cal. Date:	Shan Tong New	Village (AM2)		Operator:	Choi W	Choi Wing Ho		
A STATE OF THE PARTY OF THE PAR	23-Aug-13			Next Due Date:	23-00			
Equipment No.:	A-001-29T			Serial No.	Serial No 10202			
	·		Ambient	Condition				
Temperatur	re, Ta (K)	301	Pressure, F	Pa (mmHg)		748.3		
				tandard Informatio			T 0 0000	
Serial		988	Slope, mc	1.94727	Interce		0.02332	
Last Calibra		20-May-13			= [DH x (Pa/760) x			
Next Calibra	ation Date:	20-May-14		Qstd = {[DH x (F	Pa/760) x (298/Ta)]	"-bc} / mc		
			Calibration of	f TSP Sampler				
		0	rfice		HVS	Flow Recorder		
Resistance Plate No. DH (orifice), in. of water [DH x (Pa/760)		60) x (298/Ta)] ^{1/2}	Qstd (m³/min) X -	Flow Recorder Reading (CFM)	Continuous Flor Reading IC (CF			
18 8.7			2.91	1.48	47.0	46.40	0	
13	6.8		2.57	1.31	40.0	39.49	9	
10	5.2		2.25	1.14	34.0	33.5	7	
7	3.8		1.92	0.98	27.0	26.6	6	
5	2.6		1.59	0.81	22.0	21.7	2	
By Linear Regression of Y on X Slope , mw = 36.8110			9972	Intercept, bw =	-8.5424			
		0						
Correlation Coe		check and recalit		-				
Correlation Coe		check and recalit	orate.	_				
Correlation Coe *If Correlation Co	pefficient < 0.990,		orate. Set Point	Calculation				
Correlation Coe *If Correlation Co	pefficient < 0.990,	urve, take Qstd =	Set Point 1.30m³/min	Calculation				
Correlation Coe *If Correlation Co	pefficient < 0.990,		Set Point 1.30m³/min	Calculation				
Correlation Coe *If Correlation Co	pefficient < 0.990,	urve, take Qstd = e "Y" value accord	Set Point 1.30m³/min ding to		To V ^{1/2}			
Correlation Coe *If Correlation Co	pefficient < 0.990,	urve, take Qstd = e "Y" value accord	Set Point 1.30m³/min ding to	Calculation x [(Pa/760) x (298/	Ta)] ^{1/2}			
Correlation Coe *If Correlation Co From the TSP Fig From the Regres	eld Calibration Cusion Equation, th	urve, take Qstd = e "Y" value accord mw	Set Point 1.30m³/min ding to x Qstd + bw = IC	x [(Pa/760) x (298/	Ta)] ^{1/2}	39.82		
*If Correlation Coe *If Correlation Co From the TSP Fig. From the Regres	eld Calibration Cusion Equation, th	urve, take Qstd = e "Y" value accord mw	Set Point 1.30m³/min ding to	x [(Pa/760) x (298/	Ta)] ^{1/2}	39.82		
*If Correlation Coe *If Correlation Co From the TSP Fig. From the Regres	eld Calibration Cusion Equation, th	urve, take Qstd = e "Y" value accord mw	Set Point 1.30m³/min ding to x Qstd + bw = IC	x [(Pa/760) x (298/	Ta)] ^{1/2}	39.82		
*If Correlation Coe *If Correlation Co From the TSP Fig. From the Regres	eld Calibration Cusion Equation, th	urve, take Qstd = e "Y" value accord mw	Set Point 1.30m³/min ding to x Qstd + bw = IC	x [(Pa/760) x (298/	Ta)] ^{1/2}	39.82		
*If Correlation Coe *If Correlation Co From the TSP Fig. From the Regres	eld Calibration Cusion Equation, th	urve, take Qstd = e "Y" value accord mw	Set Point 1.30m³/min ding to x Qstd + bw = IC	x [(Pa/760) x (298/	Ta)] ^{1/2}	39.82		
*If Correlation Coe *If Co	eld Calibration Cusion Equation, th	urve, take Qstd = e "Y" value accord mw	Set Point 1.30m³/min ding to x Qstd + bw = IC	x [(Pa/760) x (298/	Ta)] ^{1/2}	39.82		

Choi Wi	Choi Wing Ho		
25-Au	ıg-13		
710	6		
	753.7		
Interce		0.02332	
OH x (Pa/760) x (
760) x (298/Ta)] ^{1/}	^{/2} -bc} / mc		
HVS	Flow Recorder		
low Recorder eading (CFM)	Continuous Flow Recor Reading IC (CFM) Y-a		
45.0	44.44		
40.0	39.50		
34.0	33.58		
29.0	28.64		
23.0	22.71		
-7.48	843		
1/2			
-	37.93		
		37.93	

	Riverain Bayside	(,)		Operator:	Choi Wing Ho 23-Oct-13			
Cal. Date:	23-Aug-13			Next Due Date:				
Equipment No.:	A-001-69T	Serial No. 716						
			Ambient	Condition				
Temperatu	re, Ta (K)	301	Pressure,	Pa (mmHg)		748.3		
			Prifice Transfer S	tandard Informatio				
Serial	No:	988	Slope, mc	1.94727	Interce			
Last Calibra	ition Date:	20-May-13			= [DH x (Pa/760) x			
Next Calibra	ation Date:	20-May-14		Qstd = {[DH x (I	Pa/760) x (298/Ta)]	-bc} / mc		
			Calibration of	of TSP Sampler				
		0	rfice		HVS	S Flow Recorder		
Resistance Plate No.	DH (orifice)		60) x (298/Ta)] ^{1/2}	Qstd (m³/min) X -	Flow Recorder Reading (CFM)	Continuous Flow Recorde Reading IC (CFM) Y-axis		
18 8.6			2.90	1.47	45.0	44,43		
13			2.67	1.36	41.0	40.48		
10	5.6		2.34	1.19	35.0	34.56		
7	4.2		2.02	1.03	29.0	28.63		
5	3.1		1.74	0.88	22.0	21.72		
By Linear Regre Slope, mw = Correlation Coe *If Correlation Co	37.7138 fficient* =		9957 prate.	Intercept, bw =	-10.	7541		
	-		Set Point	Calculation				
From the TSP Fi	eld Calibration C	urve, take Qstd =	The state of the s	t Calculation				
		urve, take Qstd = ne "Y" value accor mw	1.30m ³ /min ding to	t Calculation x [(Pa/760) x (298/	Ta)] ^{1/2}			
From the Regres	sion Equation, th	ne "Y" value accor mw	1.30m ³ /min ding to	x [(Pa/760) x (298/	Ta)] ^{1/2}	38.77		

Station	168 Shek Kwu Lu	ng Village (AM4)	A)	Operator:	Gary	Choi	_			
Cal. Date:	19-Jul-13			Next Due Date:	19-Se	p-13	7			
Equipment No.:	A-001-70T			Serial No.	10273					
		-346	Ambient	Condition						
Temperatu	ire, Ta (K)	301	Pressure, I	Pa (mmHg)		753.2				
		(Orifice Transfer S	tandard Informatio	n					
Seria	l No:	843	Slope, mc	Slope, mc 1.99238 Intercept, bc -0.0035						
Last Calibra	ation Date:	6-Dec-12		mc x Qstd + bc	= [DH x (Pa/760) x	(298/Ta)] ^{1/2}				
Next Calibr	ation Date:	6-Dec-13		Qstd = {[DH x (F	Pa/760) x (298/Ta)] ¹	^{/2} -bc} / mc				
		4								
			Calibration of	of TSP Sampler	3000					
		C	rfice		HVS	Flow Recorder				
Plate No. DH (orifice), in. of water [DH x (Pa/760) x (2			60) x (298/Ta)] ^{1/2}	Qstd (m³/min) X - axis	Flow Recorder Reading (CFM)	Continuous Flo Reading IC (CF				
18 9.1 2.99			2.99	1.50	46.0	45.5	6			
13	7.6		2.73	1.37	41.0	40.6	1			
10	5.1		2.24	1,12	34.0	33.6	8			
7	3.5		1.85	0.93	29.0	28.73				
5	2.4		1.53	0.77	23.0	22.78				
Slope , mw = Correlation Coe	_		9961	Intercept, bw =	-0.0	572	_			
*If Correlation Co	pefficient < 0.990,	check and recali	brate.							
			Set Point	Calculation						
From the TSP Fi	ield Calibration Cu	rve, take Qstd =	1.30m³/min							
From the Regres	ssion Equation, the	e "Y" value accor	ding to							
		mw	x Qstd + bw = IC	x [(Pa/760) x (298/	Γa)] ^{1/2}					
				1/2		52.52				
Therefore, Set P	Point; IC = (mw x 0	Qstd + bw) x [(7	60 / Pa) x (Ta / 2	98)]''²=		39.45	_			
Damarka										
Remarks:										
Remarks:										



TISCH ENVIROMENTAL, INC. 145 SOUTH MIAMI AVE. VILLAGE OF CLEVES, OH 45002 513.467.9000 877.263.7610 TOLL FREE 513.467.9009 FAX WWW.TISCH-ENV.COM

AIR POLLUTION MONITORING EQUIPMENT

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - M Operator		Rootsmeter Orifice I.I		438320 0988	Ta (K) - Pa (mm) -	297 751.84
PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1 2 3 4 5	NA NA NA NA NA	NA NA NA NA NA	1.00 1.00 1.00 1.00	1.3900 0.9720 0.8670 0.8270 0.6800	3.2 6.4 7.9 8.7 12.6	2.00 4.00 5.00 5.50 8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
0.9884 0.9842 0.9821 0.9811 0.9759	0.7110 1.0125 1.1327 1.1863 1.4352	1.4090 1.9926 2.2278 2.3365 2.8179	0.9957 0.9915 0.9894 0.9884 0.9832	0.7163 1.0201 1.1412 1.1952 1.4459	0.8889 1.2570 1.4054 1.4740 1.7777
Qstd slo intercep coeffici	ot (b) = ent (r) =	1.94727 0.02332 0.99998 	Qa slop intercep coeffici v axis =	t (b) =	1.21935 0.01471 0.99998

CALCULATIONS

Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta)

Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa]

Qa = Va/Time

For subsequent flow rate calculations:

Qstd = $1/m\{[SQRT(H2O(Pa/760)(298/Ta))] - b\}$ $Qa = 1/m\{[SQRT H2O(Ta/Pa)] - b\}$

Type:	facturer/Brand:			Laser D	ust Mon	itor		
Mode	Transferred and the same of			LD-3				
	ment No.:			A.005.07	a			
	tivity Adjustment	Scale Set	ting:	557 CP				
Opera	ator:			Mike She	ek (MSK)	M)		
Standa	rd Equipment							
Equip	ment [,]	Pun	precht & Pa	otochnick	TEOM®			
Venue			erport (Pui			chool)		
Mode			ies 1400AB	ring occe	niual y 3	criooij		
Serial		-		OAB2198	99803			
233.50		Sen	The second secon	00C1436		K _o : 12500)	_
Last C	Calibration Date*		May 2013		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	11672000		
*Remar	ks: Recommend	led interval	l for hardwa	re calibra	tion is 1	year		
Calibra	tion Result			14,22				
						15.7		
	tivity Adjustment tivity Adjustment					557 CF		
Hour	Date (dd-mm-yy)	Ti	ime	Amt		Concentration ¹ (mg/m ³)	Total Count ²	Count/ Minute ³
	(44 11111)			Temp (°C)	R.H.	Y-axis	Count	X-axis
1	18-05-13	12:30	- 13:30	28.1	(%) 78	0.04714	1887	31.45
2	18-05-13	13:30	- 14:30	28.1	78	0.04932	1970	32.83
3	18-05-13	14:30	- 15:30	28.2	77	0.05156	2056	34.27
4	18-05-13	15:30	- 16:30	28.1	78	0.05083	2026	33.77
Note:	Total Count Count/minut	was logge e was calc	d by Laser	Dust Moni	tor	ashnick TEOM [®]		
	ar Regression of	Y or X	Value					
	(K-factor):		0.0015					
Correla	ation coefficient:		0.9978					
Validity	y of Calibration F	Record:	17 May 2	014				
Remark	s:							
								4
						/		
					1/			
QC Re	viewer: YW F	ung	Signa	ture:	4/	Date	: _20 May	2013

Type: Manufacturer/Brand: Model No.; Equipment No.: Sensitivity Adjustment Scale Setting: Operator:					Laser Dust Monitor SIBATA LD-3 A.005.08a 702 CPM					
or:			_	Mike Sh	ek (MSF	(M)				
d Equipment										
Venue:CyberModel No.:SerierSerial No:Contr				berport (Pui Ying Secondary School) ries 1400AB						
Sensor:						K _o : _12	500			
s: Recommend	ed interv	al for h	nardwa	re calibra	ition is 1	year				
on Result										
						702 702	CPM CPM			
Date (dd-mm-yy)		Time		Ambient Condition Temp R.H.		Concentration ¹ (mg/m ³) Y-axis	Total Count ²	Count/ Minute ³ X-axis		
18-05-13	12:30	- 1	3:30	28.1	78	0.04714	1764	29.40		
18-05-13	13:30			28.1	78	0.04932	1846	30.77		
					77	0.05156	1935	32.25		
18-05-13	15:30	- 1	6:30	28.1	78	0.05083	1899	31.65		
 Total Count Count/minut Regression of (-factor): 	was logg e was ca	ged by alculate	Laser ed by (Dust Mon	itor					
of Calibration F	Record:	_17	May 2	014						
1										
	No.: No: No: No: No: No: No: No: No: No: No	No.: See No: S	Cyberpol Series 1: No: Series 1: No: Control: Sensor: 18 May 2: s: Recommended interval for Non Result Find Adjustment Scale Setting (Vity Adjustment Scal	Cyberport (Pui Series 1400AB Control: 14 Sensor: 12 18 May 2013 Series 1400AB Sensor: 12 18 May 2013 Series 1400AB Sensor: 12 18 May 2013 Series 14 May 2013 Series 14 Sensor: 12 Sensor: 13 Sensor: 14 Sensor: 14 Sensor: 14 Sensor: 15 Sensor: 14 Sensor: 16 Sensor: 16 Sensor: 17 Sensor: 17	Cyberport (Pui Ying Section	Cyberport (Pui Ying Secondary Series 1400AB Control: 140AB219899803 Sensor: 1200C143659803 Sensor: 1200C1436598	Cyberport (Pui Ying Secondary School) Series 1400AB	Cyberport (Pui Ying Secondary School)		

r/Brand: o.: ljustment S ipment	cale Se	tting		SIBATA LD-3 A.005.09 797 CPM Mike She								
ljustment S	cale Se	tting		A.005.09 797 CPN								
ljustment S	cale Se	tting		797 CPN								
ipment				Miles Obs	797 CPM							
ipment	Operator: Standard Equipment					М)						
	Ruj	opre	cht & Pa	tashnick 1	ΓΕΟΜ [®]							
	Cyl	berpo	ort (Pui \	ing Seco	ndary So	chool)						
Venue: Model No.:				or harden								
	Cor	ntrol:	-									
Serial No: Control: Sensor:					9803	K _o : 12500						
on Date*:	_18	May	2013					-				
commended	d interva	al for	hardwa	e calibrat	ion is 1	year						
esult												
	7	ime		Cond	ition	Concentration ¹ (mg/m ³)	Total Count ²	Count/ Minute ³				
				Temp (°C)		Y-axis		X-axis				
05-13	12:30	-	13:30	28.1	78	0.04714	1885	31.42				
05-13	13:30	121	14:30	28.1	78	0.04932	1965	32.75				
		+			77	0.05156	2059	34.32				
		÷				0.05083	2024	33.73				
tal Count w unt/minute ession of Y or):	as logge was cal	ed by culat	Laser I ted by (T	Dust Moni	tor	ISNNICK LEOM						
ibration Re	cord:	_1	7 May 20	014								
					6/	/						
	djustment S djustment S Date mm-yy) 05-13 05-13 05-13 05-13 onitoring datal Count wount/minute ression of Yor): pefficient:	commended intervales ult commended intervales commended interv	Control: Sensor: 18 May commended interval for esult dijustment Scale Setting dijustment Scale Setting Oate Time mm-yy) 05-13 12:30 - 05-13 13:30 - 05-13 15:30 - onitoring data was meastal Count was logged by bunt/minute was calculated ession of Y or X or): oefficient: 0.0 0.1 0.1 0.1 0.1 0.1 0.1 0.	Sensor: 120 18 May 2013 commended interval for hardware sult dijustment Scale Setting (Before dijustment Scale Setting (After Catalogue Time) Oute Time Oute Time	Control:	Control: 140AB219899803 Sensor: 1200C143659803 1200C143659803 1200C143659803 1200C143659803 18 May 2013 18 May 2013 18 May 2013 18 may 2014 19 may 2014 18 may 201	Control: 140AB219899803 Sensor: 1200C143659803 Ko: 12500 K	Control: 140AB219899803 Sensor: 1200C143659803 Koopen Koopen				

Model	Type: Manufacturer/Brand: Model No.: Equipment No.: Sensitivity Adjustment Scale Setting:				Laser De SIBATA LD-3 A.005.10		itor		
		Scale Se	tting:		753 CPI				
Opera	itor:				Mike She	k (MSKI	M)		
Standa	rd Equipment								
Equip	ment:	Ruj	opred	cht & Pa	tashnick	TEOM®			
Venue	30			Ying Seco	ndary S	chool)			
Model			400AB						
Serial	No:		ntrol:		DAB2198				
Last C	alibration Date*:		nsor: May	<u>120</u> 2013	00C1436	59803	K _o : 12500)	_
*Remar	ks: Recommend	ed interva	al for	hardwai	re calibra	tion is 1	year		
Calibra	tion Result								
	ivity Adjustment ivity Adjustment						753 CF		
Hour	Date (dd-mm-yy)	Ţ	Time		Ambient Condition Temp R.H. (°C) (%)		Concentration ¹ (mg/m ³) Y-axis	Total Count ²	Count/ Minute X-axis
1	18-05-13	12:30	-	13:30	28.1	78	0.04714	1886	31.43
2	18-05-13	13:30	-	14:30	28.1	78	0.04932	1968	32.80
3	18-05-13	14:30	141	15:30	28.2	77	0.05156	2061	34.35
4	18-05-13	15:30	-	16:30	28.1	78	0.05083	2026	33.77
Slope	1. Monitoring d 2. Total Count 3. Count/minut ar Regression of (K-factor): ation coefficient:	was logge e was cal	ed by culat _0.	Laser [Dust Mon	itor	ashnick TEOM [®]		
Validity	of Calibration R	Record:	17	7 May 20	014				
Remarks	s:								
						*			

Model N	aturar/Drand.	Type:			Laser Dust Monitor						
	Manufacturer/Brand: Model No.: Equipment No.:			_	SIBATA						
Fauldinge				_	LD-3						
Equipment No.: Sensitivity Adjustment Scale Setting: Operator:			_	A.005.11a 799 CPM							
			-	A second							
			<u> </u>	Mike Shek (MSKM)							
Standard	Equipment										
Equipme	Ruj	pprec	ht & Pai	tashnick '	TEOM®						
Venue: Model No.: Serial No:			Cyberport (Pui Ying Secondary School)								
			Series 1400AB								
			Control: 140AB219899803								
			Sensor: 1200C143659803 K _o : 12500								
Last Cali	ibration Date*		May 2	2013					_		
*Remarks	: Recommend	led interva	al for l	hardwar	e calibrat	ion is 1	year				
Calibratio	on Result										
Sensitivit	ty Adjustment	Scale Se	tting (Before	Calibratio	n):	799 CP	PM			
Sensitivi	ty Adjustment	Scale Se	tting (After Ca	alibration)	;	799 CP	M			
Hour	Date		Time		Ambient		Concentration ¹	Total	Count		
	(dd-mm-yy)				Cond		(mg/m ³)	Count ²	Minute		
					Temp	R.H.	Y-axis	7	X-axis		
	18-05-13	12:15	-	13:15	(°C) 28.1	(%) 78	0.04685	1071	24.40		
1	10-00-13			14:15	28.1	78	0.04941	1871 1979	31.18 32.98		
1		12.15		14.10	20.1			1979	32.90		
2	18-05-13	13:15		15.15	28.2	//	0.05127	2055			
2 3	18-05-13 18-05-13	14:15	2	15:15	28.2	77	0.05127	2055	34.25		
2 3 4 Note: 1	18-05-13 18-05-13 18-05-13 1. Monitoring o	14:15 15:15 data was r	- - meası	16:15 ured by	28.1 Rupprech	78 nt & Pata	0.05127 0.05060 ashnick TEOM®	2055 2021	34.25		
2 3 4 Note: 1	18-05-13 18-05-13 18-05-13 1. Monitoring of 2. Total Count 3. Count/minut Regression of 5-factor):	14:15 15:15 data was r was logg te was cal	- measu ed by lculate	16:15 ured by Laser E ed by (T	28.1 Rupprectoust Moni	78 nt & Pata tor	0.05060		34.25		
2 3 4 Note: 1 3 By Linear I Slope (K Correlation	18-05-13 18-05-13 18-05-13 1. Monitoring of 2. Total Count 3. Count/minut Regression of i-factor): on coefficient:	14:15 15:15 data was r was logg te was cal	measured by lculate	16:15 ured by Laser E ed by (T 0015 9976	28.1 Rupprect Just Moni otal Cour	78 nt & Pata tor	0.05060		34.25 33.68		
2 3 4 Note: 1 3 By Linear I Slope (K Correlation	18-05-13 18-05-13 18-05-13 1. Monitoring of 2. Total Count 3. Count/minut Regression of 5-factor):	14:15 15:15 data was r was logg te was cal	measured by lculate	16:15 ured by Laser E ed by (T	28.1 Rupprect Just Moni otal Cour	78 nt & Pata tor	0.05060		34.25		

Manu	Type:			_	Laser Dust Monitor					
Manufacturer/Brand: Model No.: Equipment No.:			_	SIBATA LD-3B A.005.14a 786 CPM Mike Shek (MSKM)						
			_							
Sensitivity Adjustment Scale Setting: Operator:										_
Standa	rd Equipment									
Equipment:			ippre	cht & Pa	tashnick	TEOM®				
Venue:		Cy	Cyberport (Pui Ying Secondary School)							
Model No.:		Se	Series 1400AB							
Serial	No:	Co	Control: 140AB219899803							
	T-10/EV /15EE		Sensor: 1200C143659803 K _o : 12500							
Last C	Calibration Date*	18	May	2013						
*Remar	ks: Recommend	led interv	al for	hardwar	e calibra	tion is 1 y	year			
Calibra	tion Result									
	ivity Adjustment ivity Adjustment						786 CF			
Hour	Date (dd-mm-yy)		Time			dition	Concentration ¹ (mg/m ³) Y-axis	Total Count ²	Count Minute X-axis	
1	18-05-13	12:15		13:15	28.1	(%) 78	0.04685	2005	33.42	
2	18-05-13	13:15	/4/	14:15	28.1	78	0.04941	2121	35.35	
	18-05-13	14:15		15:15	28.2	77	0.05127	2194	36.57	
13	18-05-13	15:15	-	16:15	28.1	78	0.05060	2167	36.12	
3 4	1 Monitorina		III Ha:							
4 Note: By Linea Slope	1. Monitoring of 2. Total Count 3. Count/minuter Regression of (K-factor):	was logg te was ca	ged b alcula	y Laser E ted by (T	Dust Mon	itor	STITION TEOM			
4 Note: By Linea Slope	Total Count Count/minut Regression of	was logg te was ca	ged b alcula	y Laser E ted by (T	Dust Mon	itor	STITION TEOM			
4 Note: By Linea Slope Correl:	2. Total Count 3. Count/minut ar Regression of (K-factor):	was logg te was ca Y or X	ged balcula	y Laser E ted by (T	Oust Mon otal Cour	itor	STITION TEOM			



綜合試驗有限公司 SOILS & MATERIALS ENGINEERING CO., LTD.

G/F., 9/F., 12/F., 13/F. & 20/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 Website: www.cigismec.com E-mail: smec@cigismec.com

Tel : (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

Certificate No.:

12CA1115 01-01

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of

Item tested

Description:

Sound Level Meter (Type 1) B&K

Microphone B&K

Manufacturer: Type/Model No.:

2238

4188

Serial/Equipment No.:

2255680 / N.009.01

2250447

Adaptors used:

Item submitted by

Customer Name:

AECOM ASIA CO., LTD.

Address of Customer:

Request No .: Date of receipt:

15-Nov-2012

Date of test:

15-Nov-2012

Reference equipment used in the calibration

Description:

Model:

Serial No.

Expiry Date:

Traceable to:

Multi function sound calibrator Signal generator Signal generator

B&K 4226 DS 360 DS 360

2288444 33873 61227

22-Jun-2013 29-May-2013 29-May-2013 CIGISMEC **CEPREI** CEPREI

Ambient conditions

Temperature:

22 ± 1 °C 60 ± 10 %

Relative humidity: Air pressure:

1000 ± 5 hPa

Test specifications

- The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580; Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
- 2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of +20%.
- The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference 3, between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Huang Jian Min/Feng Jun Qi

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

17-Nov-2012

Company Chop:

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

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Form No.CARP152-1/Issue 1/Rev.C/01/02/2007



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G/F, 9/F, 12/F, 13/F & 20/F, Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong. 香港黃竹坑道37號利達中心地下,9樓,12樓,13樓及20樓 E-mail: smec@cigismec.com Website: www.cigismec.com





CERTIFICATE OF CALIBRATION

Certificate No.:

12CA1008 02

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Item tested

Description:

Sound Level Meter (Type 1)

Microphone Rion Co., Ltd. Preamp Rion Co., Ltd.

Manufacturer: Type/Model No.: Rion Co., Ltd. NL-31

UC-53A

Rion Co., Ltd NH-19

Serial/Equipment No.: Adaptors used:

00320528/NOOT. 03A

90565

75883

Item submitted by

Customer Name:

AECOM ASIA CO., LTD.

Address of Customer:

-

Request No.: Date of receipt:

08-Oct-2012

Date of test:

08-Oct-2012

Reference equipment used in the calibration

Description:

tor

Serial No.

Expiry Date:

Traceable to:

Multi function sound calibrator Signal generator Signal generator Model: B&K 4226 DS 360 DS 360

2288444 33873 61227 22-Jun-2013 29-May-2013 29-May-2013 CIGISMEC CEPREI CEPREI

Ambient conditions

Temperature:

(22 ± 1) °C

Relative humidity: Air pressure: (60 ± 10) % (1000 ± 5) hPa

Test specifications

 The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

 The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.

 The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Huang Jian Min/Feng Jun Qi

Actual Measurement data are documented on worksheets.

Approved Signatory:

Date:

08-Oct-2012

Company Chop:

SENGINEGO SENGINEGO SENGINEGO COMPANIOS ** OLIVER OF STREET OF ST

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

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Form No.CARP152-1/Issue 1/Rev.C/01/02/2007



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Tel: (852) 2873 6860 Fax: (852) 2555 7533



CERTIFICATE OF CALIBRATION

Certificate No.:

13CA0325 01-03

Page:

of

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Item tested

Description:

Acoustical Calibrator (Class 1)

Manufacturer:

Rion Co., Ltd.

Type/Model No.:

NC-73

Serial/Equipment No.:

10186482 / N.004.09

Adaptors used:

Item submitted by

Curstomer:

AECOM ASIA CO., LTD.

Address of Customer:

Request No .: Date of receipt:

25-Mar-2013

Date of test:

26-Mar-2013

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	2412857	29-May-2013	SCL
Preamplifier	B&K 2673	2239857	17-Dec-2013	CEPREI
Measuring amplifier	B&K 2610	2346941	17-Dec-2013	CEPREI
Signal generator	DS 360	61227	29-May-2013	CEPREI
Digital multi-meter	34401A	US36087050	10-Dec-2013	CEPREI
Audio analyzer	8903B	GB41300350	29-May-2013	CEPREI
Universal counter	53132A	MY40003662	29-May-2013	CEPREI

Ambient conditions

Temperature:

22 ± 1 °C

Relative humidity:

60 ± 10 %

Air pressure:

1000 ± 10 hPa

Test specifications

- 1, The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
- 2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
- The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference 3. pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on page 2 of this certificate.

Huang Jian Min/Feng Jun Qi

Approved Signatory:

Date:

26-Mar-2013

Company Chop:

Comments: The results reported in this certificate refer to the conditon of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument.

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Form No.CARP156-1/Issue 1/Rev.D/01/03/2007