Date: 24-Dec-13 Pump No.: 763 Tof3 Verified Against: 24-Feb-14 Durby No.: 20-Msy-14 Equipment No.: A-001-64T Ambient Condition Equipment No.: 289 Kelvin Pressure, Pa 756.9 mmHg Orifice Transfer Standard Information Equipment No.: 988 Slope, me 1.94727 Intercept, bo 0.02332 Last Calibration Date: 20-Msy-13 mc x Qstd + be = [H x (Pa/760) x (298/Ta)]^{1/2} Next Calibration of TSP Sampler Calibration of TSP Sampler Calibration of Water [H x (Pa/760) x (298/Ta)]^{1/2} Qostd W(na/min) W (na/min) W (na/mi	Station	n Kwun Tong Go	overnment Sec	ondary School (ID	1A)	Operator	: Choi Wi	ng Ho
Expiration Date: 20-May-14 20-May-14 20-May-14 20-May-14 20-May-13 20-May-14 20-May-13 20-May-14 20-May-14 20-May-14 20-May-14	Date	: 24-Dec-13				Next Due Date	:24-Fel	o-14
Calibration H	Pump No.	:763	e e		7	Verified Against	O.T.S	- 0988
Temperature, Ta 289 Kelvin Pressure, Pa 756.9 mmHg	Equipment No.	:A-001-64T	i i			Expiration Date:	20-Ma	y-14
Temperature, Ta 289 Kelvin Pressure, Pa 756.9 mmHg								
Calibration Date: 20-May-13				Ambient	Condition			
Equipment No.: 988 Slope, mc 1.94727 Intercept, bc 0.02332 Last Calibration Date: $20\text{-May-}14$ mc x Qstd + bc = [H x (Pa/760) x (298/Ta)]^{1/2} $(298/Ta)]^{1/2}$ Calibration of TSP Sampler Calibration of TSP Sampler Calibration Point in. of water in. of wa	Tempera	ature, Ta	289	Kelvin	Press	ure, Pa	756.9	mmHg
Equipment No.: 988 Slope, mc 1.94727 Intercept, bc 0.02332 Last Calibration Date: $20\text{-May-}14$ mc x Qstd + bc = [H x (Pa/760) x (298/Ta)]^{1/2} $(298/Ta)]^{1/2}$ Calibration of TSP Sampler Calibration of TSP Sampler Calibration Point in. of water in. of wa		20-100						
Last Calibration Date: 20-May-13			O	rifice Transfer Sta	ndard Informa	tion		
Next Calibration Date: 20-May-14 mc x Qstd + bc = [H x (Pa/760) x (298/Ta)]^{1/2} Calibration of TSP Sampler Calibration H in. of water [H x (Pa/760) x (298/Ta)]^{1/2} Qstd (m³/min) X - axis Min. of oil Y-axis Y-axis 1 9.0 3.04 1.55 5.8 2.44 2 8.1 2.88 1.47 5.0 2.27 3 6.4 2.56 1.30 3.5 1.90 3.04 4.3 2.10 1.07 2.2 1.50 3.5 1.90 3.04 4.3 2.10 1.07 2.2 1.50 3.5 1.16 3.5 3.8 3.16 3.5	Equipm	ent No.:	988	Slope, mc	1.94	1727	Intercept, bc	0.02332
Next Calibration Date: 20-May-14	Last Calibr	ation Date:	20-May-13	,	me v Ostd + he	= [H v (Pa/760)	v (208/Ta)1 ^{1/2}	
Calibration Point In. of water $[H \times (Pa/760) \times (298/Ta)]^{1/2}$ $\frac{Ostd}{(m^3/min)}$ $\frac{W}{X - axis}$ $\frac{[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}}{Y - axis}$ $\frac{1}{2}$ $\frac{9.0}{2}$ $\frac{3.04}{2}$ $\frac{1.55}{2}$ $\frac{5.8}{2}$ $\frac{2.44}{2}$ $\frac{2.88}{3}$ $\frac{1.47}{2}$ $\frac{5.0}{2}$ $\frac{2.27}{2}$ $\frac{3}{2}$ $\frac{6.4}{2}$ $\frac{2.56}{2}$ $\frac{1.30}{2}$ $\frac{3.5}{2}$ $\frac{1.90}{2}$ $\frac{1.90}{2}$ $\frac{3.5}{2}$ $\frac{1.90}{2}$ $\frac{1.90}{2}$ $\frac{5}{2}$ $\frac{2.8}{2}$ $\frac{1.70}{2}$ $\frac{0.86}{2}$ $\frac{1.3}{2}$ $\frac{1.16}{2}$ $\frac{1.16}{2}$ $\frac{1.16}{2}$ $\frac{Set\ Point\ Calculation}{2}$ From the TSP Field Calibration Curve, take Qstd = 1.21 m ³ /min (43 CFM) From the Regression Equation, the "Y" value according to $\frac{1.21}{2}$ $\frac{1.22}{2}$ 1.2	Next Calibr	ration Date:	20-May-14	,	ine x Qstu + be	- [11 x (1 a/ /00)	x (290/1a)j	
Calibration Point In. of water $[H \times (Pa/760) \times (298/Ta)]^{1/2}$ $\frac{Ostd}{(m^3/min)}$ $\frac{W}{X - axis}$ $\frac{[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}}{Y - axis}$ $\frac{1}{2}$ $\frac{9.0}{2}$ $\frac{3.04}{2}$ $\frac{1.55}{2}$ $\frac{5.8}{2}$ $\frac{2.44}{2}$ $\frac{2.88}{3}$ $\frac{1.47}{2}$ $\frac{5.0}{2}$ $\frac{2.27}{2}$ $\frac{3}{2}$ $\frac{6.4}{2}$ $\frac{2.56}{2}$ $\frac{1.30}{2}$ $\frac{3.5}{2}$ $\frac{1.90}{2}$ $\frac{1.90}{2}$ $\frac{3.5}{2}$ $\frac{1.90}{2}$ $\frac{1.90}{2}$ $\frac{5}{2}$ $\frac{2.8}{2}$ $\frac{1.70}{2}$ $\frac{0.86}{2}$ $\frac{1.3}{2}$ $\frac{1.16}{2}$ $\frac{1.16}{2}$ $\frac{1.16}{2}$ $\frac{Set\ Point\ Calculation}{2}$ From the TSP Field Calibration Curve, take Qstd = 1.21 m ³ /min (43 CFM) From the Regression Equation, the "Y" value according to $\frac{1.21}{2}$ $\frac{1.22}{2}$ 1.2								
Calibration Point in. of water [H x (Pa/760) x (298/Ta)]			·	Calibration of				
2 8.1 2.88 1.47 5.0 2.27 3 6.4 2.56 1.30 3.5 1.90 4 4.3 2.10 1.07 2.2 1.50 5 2.8 1.70 0.86 1.3 1.16 By Linear Regression of Y on X Slope, mw = 1.8562 Intercept, bw = -0.4662 Correlation Coefficient* = 0.9980 Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 1.21 m³/min (43 CFM) From the Regression Equation, the "Y" value according to m x Qstd + b = [W x (Pa/760) x (298/Ta)]^{1/2} Therefore, Set Point W = (m x Qstd + b)^2 x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.	ESPECIAL CONTROL CONTROL CONTROL CONTROL	1000000	[H x (Pa/7	60) x (298/Ta)] ^{1/2}	(m³/min)		[15] NO.	
3 6.4 2.56 1.30 3.5 1.90 4 4.3 2.10 1.07 2.2 1.50 5 2.8 1.70 0.86 1.3 1.16 By Linear Regression of Y on X Slope, mw = 1.8562 Intercept, bw = -0.4662 Correlation Coefficient* = 0.9980 Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 1.21 m³/min (43 CFM) From the Regression Equation, the "Y" value according to m x Qstd + b = [W x (Pa/760) x (298/Ta)] ^{1/2} Therefore, Set Point W = (m x Qstd + b) ² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.	1	9.0		3.04	1.55	5.8	2.44	1
4 4.3 2.10 1.07 2.2 1.50 5 2.8 1.70 0.86 1.3 1.16 By Linear Regression of Y on X Slope, mw = 1.8562 Intercept, bw = -0.4662 Correlation Coefficient* = 0.9980 Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 1.21 m³/min (43 CFM) From the Regression Equation, the "Y" value according to m x Qstd + b = [W x (Pa/760) x (298/Ta)] 1/2 Therefore, Set Point W = (m x Qstd + b)² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.	2	8.1		2.88	1.47	5.0	2.27	7
	3	6.4		2.56	1.30	3.5	1.90)
By Linear Regression of Y on X Slope , mw = 1.8562	4	4.3		2.10	1.07	2.2	1.50)
Slope , mw = 1.8562 Intercept, bw = -0.4662 Correlation Coefficient* = 0.9980 Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 1.21 m³/min (43 CFM) From the Regression Equation, the "Y" value according to m x Qstd + b = [W x (Pa/760) x (298/Ta)]^{1/2} Therefore, Set Point W = (m x Qstd + b)^2 x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.	5	2.8		1.70	0.86	1.3	1.16	j
Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 1.21 m³/min (43 CFM) From the Regression Equation, the "Y" value according to m x Qstd + b = [W x (Pa/760) x (298/Ta)] ^{1/2} Therefore, Set Point W = (m x Qstd + b)² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.	By Linear Regr	ession of Y on 2	X					
Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 1.21 m³/min (43 CFM) From the Regression Equation, the "Y" value according to m x Qstd + b = [W x (Pa/760) x (298/Ta)] ^{1/2} Therefore, Set Point W = (m x Qstd + b) ² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.	Slope, mw =	1.8562	_		Intercept, bw =		-0.460	62
From the TSP Field Calibration Curve, take Qstd = 1.21 m³/min (43 CFM) From the Regression Equation, the "Y" value according to m x Qstd + b = [W x (Pa/760) x (298/Ta)] ^{1/2} Therefore, Set Point W = (m x Qstd + b)² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.	Correlation C	coefficient* =	0.	.9980				
From the TSP Field Calibration Curve, take Qstd = 1.21 m³/min (43 CFM) From the Regression Equation, the "Y" value according to m x Qstd + b = [W x (Pa/760) x (298/Ta)] ^{1/2} Therefore, Set Point W = (m x Qstd + b)² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.		15.00						
From the TSP Field Calibration Curve, take Qstd = 1.21 m³/min (43 CFM) From the Regression Equation, the "Y" value according to m x Qstd + b = [W x (Pa/760) x (298/Ta)] ^{1/2} Therefore, Set Point W = (m x Qstd + b)² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.	V					***		
From the Regression Equation, the "Y" value according to $\mathbf{m} \times \mathbf{Q} \times \mathbf{M} + \mathbf{b} = [\mathbf{W} \times (\mathbf{Pa}/760) \times (298/\mathbf{Ta})]^{1/2}$ Therefore, Set Point W = (m x Qstd + b) ² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again.				Set Point C	alculation		1100	
$m \times Qstd + b = [W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point W = $(m \times Qstd + b)^2 \times (760 / Pa) \times (Ta / 298) = 3.08$ *If Correlation Coefficient < 0.990, check and recalibrate again.	From the TSP Fi	eld Calibration (Curve, take Qs	$td = 1.21 \text{ m}^3/\text{min}$ (4)	43 CFM)			
Therefore, Set Point W = (m x Qstd + b) ² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again. Remarks:	From the Regres	sion Equation, th	ne "Y" value a	ccording to				
Therefore, Set Point W = (m x Qstd + b) ² x (760 / Pa) x (Ta / 298) = 3.08 *If Correlation Coefficient < 0.990, check and recalibrate again. Remarks:				0-44 LL DW 0	- IE (0) (000 IT	1/2		
*If Correlation Coefficient < 0.990, check and recalibrate again. Remarks:			m x (QSta + b = [W X (I	ra//60) x (298/1	a)]		
*If Correlation Coefficient < 0.990, check and recalibrate again. Remarks:	Therefore, S	Set Point W = (n	$(x + b)^2$	x (760 / Pa) x (7	(a / 298) =	3.	.08	
Remarks:	,		()	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	*If Correlation C	Coefficient < 0.99	00, check and	recalibrate again.				
QC Reviewer: Date: H-11-13	Remarks:							
QC Reviewer: The Date: Figure D								
QC Reviewer: Signature: Date: 4-11-13	¥.						27	
	QC Reviewer:	1 lena		Signature:	6	Date:	SH-12-13	
				-		•		

Station	On Yat House	(ID2)			Operator:	Choi Wii	ng Ho
Date:	24-Dec-13				Next Due Date:	24-Feb	o-14
Pump No.:	1654			V	erified Against:	O.T.S	0988
Equipment No.:	A-001-61T			I	Expiration Date:	20-May	y-14
					1900		
			Ambient (Condition	20.00		6 20
Tempera	ture, Ta	289	Kelvin	Pressu	ıre, Pa	756.9	mmHg
		Or	ifice Transfer Sta	ndard Informat	tion		
Equipme	ent No.:	988	Slope, mc	1.94	727	Intercept, bc	0.02332
Last Calibra	ation Date:	20-May-13		mc x Qstd + bc =	= [H v (Pa/760)	v (208/Ta)1 ^{1/2}	
Next Calibra	ation Date:	20-May-14		ine x Qsta + be -	- [II X (I a//00)	x (298/14)]	
		•					
			Calibration of				
Calibration	Н	FTY (D /FT	(200 / 77) 71/2	Qstd	W	[ΔW x (Pa/760) >	x (298/Ta)] ^{1/2}
Point	in. of water	[H x (Pa//6	50) x (298/Ta)] ^{1/2}	(m ³ /min) X - axis	in. of oil	Y-axi	
1	8.9		3.02	1.54	6.1	2.50	
2	6.9		2.66	1.35	4.1	2.05	
3	5.4		2.35	1.19	3.0	1.76	
4	4.1	†	2.05	1.04	2.3	1.54	
5	2.7	†	1.67	0.85	1.3	1.16	
By Linear Regro		X	1.07	0.05	1.5	1.10	
Slope, mw =	1.8928	•		Intercept, bw =		-0.458	80
Correlation Co		- 0.	9970	intercept, 5 "	,	01100	
	_		5570				
			AB (4.4)	W 92 12			
	Miles		Set Point C	alculation			
From the TSP Fie	eld Calibration (Curve, take Ost	$d = 1.21 \text{ m}^3/\text{min}$ (4)			10000000	
From the Regress		620	25	,			
C	1 /						
		m x (Qstd + b = [W x (I	Pa/760) x (298/T	a)] ^{1/2}		
TT1 C C	. D. 1 . W. 7	0 1 1 1 2	(500/5) (5	. / * * * * * * * * * * * * * * * * * *			
Therefore, S	et Point $W = (n$	n x Qstd + b)	x (760 / Pa) x (7	(a/298) =	3.	.27	
*If Correlation Co	oefficient < 0.90	00 check and 1	ecalibrate again		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		o, oncon and i	countries again.				
Remarks:							
_							
-							
QC Reviewer:	41 1000		Signature:		Date:	27-12-13	
_	· (Vivia)						

Station	Sau Nga House	<u>e (</u> ID3)			Operator:	Choi Wi	ng Ho
Date:	24-Dec-13				Next Due Date:	24-Feb	o-14
Pump No.:	1272	a		V	erified Against:	O.T.S	- 0988
Equipment No.:	A-001-31T	i)]	Expiration Date:	20-Ma	y-14
			Ambient (Condition		r	
Tempera	ture, Ta	289	Kelvin	Pressu	ıre, Pa	756.9	mmHg
		Or	rifice Transfer Sta	ındard Informa	tion		
Equipme	ent No.:	988	Slope, mc	1.94		Intercept, bc	0.02332
Last Calibra	ation Date:	20-May-13		0.11.1	FIX (D. (E(A))	(200/77 >1/2	
Next Calibra	ation Date:	20-May-14]	mc x Qstd + bc =	= [H x (Pa//60)	x (298/Ta)]	
		•					
			Calibration of	TSP Sampler			
Calibration Point	H in. of water	[H x (Pa/76	60) x (298/Ta)] ^{1/2}	Qstd (m³/min) X - axis	W in. of oil	[ΔW x (Pa/760) : Y-ax	
1	8.9		3.02	1.54	6.4	2.56	5
2	7.0		2.68	1.36	4.4	2.13	3
3	5.6		2.40	1.22	3.5	1.90)
4	4.3		2.10	1.07	2.6	1.63	3
5	3.3		1.84	0.93	1.6	1.28	3
By Linear Regr	ession of Y on 2	X					
Slope, $mw = $	2.0291	_		Intercept, bw =		-0.583	37
Correlation C	oefficient* = _	0.	9974				
		(Maxil					

e d man ri	110 11 1	2 1 0	Set Point C				
			$d = 1.21 \text{ m}^3/\text{min}$ (4	43 CFM)			
From the Regress	sion Equation, th	ne "Y" value ad	ccording to				
		m x (Qstd + b = [W x (I	Pa/760) x (298/T	a)] ^{1/2}		
		(-					
Therefore, S	et Point W = (r	n x Qstd + b) ²	x (760 / Pa)x(7	(a/298) =	3.	.41	8
*If Correlation C	oefficient < 0.99	90, check and 1	ecalibrate again.				
Remarks:							
-							
	1			1		7	
QC Reviewer:	71 bling		Signature:	be	Date:	94-12-13	
	\vee						

Station	n Sau Ming Prin	nary School (II	04)		Operator	: Shum Kar	n Yuen
Date	: 18-Dec-13				Next Due Date	: 18-Feb	-14
Pump No.	: 1275	_		7	Verified Against	O.T.S	0988
Equipment No.	: <u>A-001-28T</u>	-			Expiration Date:	:20-May	<i>i</i> -14
			Ambient (Condition		4-86	
Tempera	ature, Ta	289	Kelvin	Press	ure, Pa	756.9	mmHg
		0:	rifice Transfer Sta	ndard Informa	tion		
Equipm	ent No ·	988	Slope, mc		1727	Intercept, bc	0.02332
Last Calibr		20-May-13	Slope, me	1.5	721	intercept, be	0.02332
Next Calibr		20-May-19	n	nc x Qstd + bc	= [H x (Pa/760)	x (298/Ta)] ^{1/2}	
	3		Calibration of	TCD Canadan			
	Γ		Calibration of	Qstd	I	I	
Calibration Point	H in. of water	[H x (Pa/76	60) x (298/Ta)] ^{1/2}	(m³/min) X - axis	W in. of oil	[ΔW x (Pa/760) x Y-ax i	
1	9.1		3.06	1.56	6.1	2.50	
2	7.6		2.79	1.42	4.8	2.22	
3	6.0		2.48	1.26	3.7	1.95	
4	4.6		2.17	1.10	3.0	1.76	
5	3.3		1.84	0.93	2.0	1.43	
By Linear Regr	ession of Y on	X					
Slope, mw =	1.6440	_]	Intercept, bw =	:	-0.089	5
Correlation C	oefficient* =	0.	9970				
			Set Point Ca				
		20 5070	$d = 1.21 \text{ m}^3/\text{min } (4)$	3 CFM)			
From the Regress	sion Equation, the	he "Y" value a	ecording to				
		m x (Qstd + b = [W x (P	a/760) x (298/T	[a)] ^{1/2}		
Therefore, S	Set Point W = (1	n x Qstd + b)²	x (760 / Pa) x (T	a / 298) =	3.	.51	
If Correlation C	coefficient < 0.9	90, check and i	recalibrate again.				
emarks:							
-							
3.7 -	1 - 1					,	
QC Reviewer:	11 lang		Signature:	do .	Date:	27-12-13	

Station	Sau Mau Ping	Catholic Prima	ry School (ID5)		Operator:	: Shum Kan	n Yuen	
Date:	18-Dec-13				Next Due Date: 18-Feb-14			
Pump No.:	10088	r		V	erified Against:	O.T.S	0988	
Equipment No.:	A-001-13T			1	Expiration Date:	20-May	y-14	
					5000			
			Ambient (Condition				
Tempera	ture, Ta	289	Kelvin	Pressu	ıre, Pa	756.9	mmHg	
			W					
		Oı	ifice Transfer Sta	ındard Informa	tion			
Equipme	ent No.:	988	Slope, mc	1.94	727	Intercept, bc	0.02332	
Last Calibra	ation Date:	20-May-13		mc x Qstd + bc =	- (II v (Do/760)	T (209/Ta)1/2		
Next Calibra	ation Date:	20-May-14		ine x Qstu + be -	- [H X (Fa//00)	x (296/1a)j		
			Calibration of	TSP Sampler				
Calibration Point	H in. of water	[H x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (m³/min) X - axis	W in. of oil	[ΔW x (Pa/760) x Y-ax i		
1	8.8		3.01	1.53	6.2	2.52		
2	7.6		2.79	1.42	5.0	2.27		
3	5.3		2.33	1.18	3.5	1.90		
4	4		2.03	1.03	2.6	1.63		
5	2.8		1.70	0.86	1.6	1.28		
By Linear Regre	ession of Y on 2	X						
Slope, mw =	1.7950	_		Intercept, bw =		-0.241	.2	
Correlation Co	oefficient* =	0.	9984					
				300			100 E	
	10.18.19		Set Point Ca	alculation				
From the TSP Fie	eld Calibration C	Curve, take Qst	$d = 1.21 \text{ m}^3/\text{min}$ (4)	43 CFM)				
From the Regress	sion Equation, th	ne "Y" value ac	ecording to					
		m x (Qstd + b = [W x (F	Pa/760) x (298/T	a)] ^{1/2}			
TI C C	. D M /	0 . 1 . 1 . 2	(5(0)) (5	. (200)	_		1	
Therefore, S	et Point $W = (n$	n x Qstd + b)	x (760 / Pa)x(T	(a / 298) =	3.	.63		
*If Correlation Co	oefficient < 0.00	00 check and	recolibrate again	10 100000000000000000000000000000000000				
ii conciation c	ocificient < 0.99	o, check and i	ecanorate again.					
Remarks:								
Ciliai KS.								
-								
QC Reviewer:	I lan		Signature:	L	Date:	27-12-13		

Station	Kwun Tong G	overnment Sec	ondary School (ID:	1A)	Operator:	Leung Yi	u Ting		
Date:	19-Feb-14	19-Feb-14 Next Due Date: 19-May-14							
Pump No.:	763	_		V	erified Against:	O.T.S	0988		
Equipment No.:	A-001-64T	•		20-May	y-14				
	550 00 000		Ambient (Condition					
Tempera	ture. Ta	283	Kelvin		ıre, Pa	766.2	mmHg		
1011110111	, 14	200	11017111	110000	110, 1 u	STATE OF THE STATE			
		Oı	rifice Transfer Sta	ndard Informa	tion				
Equipme	ent No.:	988	Slope, mc	1.94	727	Intercept, bc	0.02332		
Last Calibra	ation Date:	20-May-13		0.41.1	III (D. (5(0))	(200/75.)1/2			
Next Calibra	ation Date:	20-May-14	I	nc x Qstd + bc =	= [H x (Pa/760)	x (298/1a)]			
		•	Calibration of	TCD Campley					
	. Sano	T	Calibration of	Qstd					
Calibration	H	[H x (Pa/7)	50) x (298/Ta)] ^{1/2}	(m ³ /min)	W	[ΔW x (Pa/760) :	. 15		
Point	in. of water			X - axis	in. of oil	Y-ax	is		
1	8.9		3.07	1.56	5.9	2.50)		
2	8.0		2.91	1.48	5.1	2.33	}		
3	6.2		2.57	1.31	3.5	1.93	}		
4	4.4		2.16	1.10	2.3	1.56			
5	2.9		1.75	0.89	1.4	1.22			
By Linear Regr	ession of Y on	X				-			
Slope, mw =	1.9196			Intercept, bw =		-0.520	50		
Correlation C	oefficient* =		9970						
		- 10.5 - 10.5			2-88		0.00		
Enough the TCD Eig	ald Calibration	Cumus tales Os	Set Point C						
From the Regress			td = 1.21 m ³ /min (4	+3 CFM)					
From the Regress	sion Equation, t	ne i value a	ecording to						
		m x	Qstd + b = [W x (I	Pa/760) x (298/T	$[a]^{1/2}$				
7F1	D W (0.(1.1.)	? (7(0 / P) (7	F /000 \	2	0.4			
I nerefore, S	et Point w = (m x Qsta + b)	² x (760 / Pa) x (T	(a/298) =	3	.04			
*If Correlation C	oefficient < 0.9	90, check and	recalibrate again.						
Remarks:			119						
-					3 - 19 SWE-199				
QC Reviewer:	LY Com		Signature:	11	Data	21-2-14			
QC REVIEWEL.	11/ 2001		Digitature.	-VO	Date.	01 2 1			

Station	On Yat House	<u>(I</u> D2)			Operator:	Leung Y	u Ting	
Date	19-Feb-14				Next Due Date:	19-Ma	19-May-14	
Pump No.:	1654			V	erified Against:	O.T.S	O.T.S 0988	
Equipment No.:	A-001-61T			1	Expiration Date:	20-Ma	y-14	
			Ambient (Condition				
Tempera	iture, Ta	283	Kelvin	Pressu	ıre, Pa	766.2	mmHg	
						15		
		Oı	ifice Transfer Sta	ndard Informa	tion			
Equipme	ent No.:	988	Slope, mc	1.94	727	Intercept, bc	0.02332	
Last Calibra	ation Date:	20-May-13		mc x Qstd + bc =	- III v (Do/760)	w (209/Ta)1/2		
Next Calibr	ation Date:	20-May-14		ine x Qstu + be -	= [H X (Pa//00)	x (298/1a)]		
			Calibration of	TSP Sampler				
Calibration Point	H in. of water	[H x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (m³/min) X - axis	W in. of oil	[ΔW x (Pa/760) Y-ax		
1	8.7		3.04	1.55	6.0	2.52	2	
2	6.6		2.65	1.35	4.3	2.14	1	
3	5.3		2.37	1.21	3.0	1.78	3	
4	4.2		2.11	1.07	2.4	1.60)	
5	2.8		1.72	0.87	1.4	1.22	2	
By Linear Regr	ession of Y on	X						
Slope, mw =	1.9142			Intercept, bw =		-0.46	42	
Correlation C	oefficient* =	0.	9967				3257	
	•							
			Set Point C	alculation	18-15	- Wile - 55-H	V V V	
From the TSP Fi	eld Calibration	Curve, take Qs	$d = 1.21 \text{ m}^3/\text{min}$ (4)					
From the Regres		18 197	3	8.5.				
		m x	Qstd + b = [W x (I	Pa/760) x (298/T	(a)] ^{1/2}			
					12	Carrier .		
Therefore, S	Set Point $W = (1$	$m \times Qstd + b$)	x (760 / Pa) x (7	$\Gamma(a/298) = -$	3.	.23		
*If Correlation C	'aafficient < 0.0	00 abook and	ecalibrate again.					
TI Correlation C	oemcient < 0.9	90, check and	ecanorate again.					
D								
Remarks:							-	
					10.4			
	1. 1.				00:00 do	i aa a		
QC Reviewer:	HY Com		Signature:	ng	Date:	21-2-14		

Station	Sau Nga House	<u>e (</u> ID3)			Operator:	Leung Yi	u Ting	
Date:	Date:19-Feb-14 Next Due Date: 19-May-14							
Pump No.:	1272	-		V	erified Against:	O.T.S	- 0988	
Equipment No.:	A-001-31T			Ι	Expiration Date:	20-Ma	y-14	
			Ambient C	Condition				
Tempera	ture, Ta	283	Kelvin	Pressu	ire, Pa	766.2	mmHg	
		Or	ifice Transfer Sta	ndard Informat	tion			
Equipme	ent No.:	988	Slope, mc	1.94	727	Intercept, bc	0.02332	
Last Calibra	ntion Date:	20-May-13		O-41 1 -	III - (D. /7(0)	- (200/JE-)1 ^{1/2}		
Next Calibra	ation Date:	20-May-14	I	nc x Qstd + bc =	= [H x (Pa/760)	x (298/Ta)]		
	m.s	190	Calibration of	TSP Sampler				
Calibration	Н		West 2	Qstd	W	[ΔW x (Pa/760)	v (208/Ta)1 ^{1/2}	
Point	in. of water	[H x (Pa/76	50) x (298/Ta)] ^{1/2}	(m³/min)	in. of oil	Y-ax	, , , , ,	
				X - axis			22040	
1	9.0	-	3.09	1.57	6.6	2.65		
2	7.2		2.76	1.41	4.5	2.19		
3	5.8		2.48	1.26	3.5	1.93	3	
4	4.4		2.16	1.10	2.5	1.63	3	
5	3.5		1.93	0.98	1.7	1.34	1	
By Linear Regre	ession of Y on 2	X						
Slope, mw =	2.1348	<u> </u>		Intercept, bw =		-0.75	04	
Correlation Co	oefficient* =	0	9959					
	91 -32 -31-1-13							
			Set Point C	alculation				
From the TSP Fie	eld Calibration (Curve, take Qs	$td = 1.21 \text{ m}^3/\text{min}$ (4)	43 CFM)				
From the Regress	sion Equation, tl	he "Y" value a	ccording to					
			0.41.1.000.4	N (500) (500)	11/2			
		m x	Qstd + b = [W x (I	² a//60) X (298/1	a)]			
Therefore S	Set Point W = (r	n x Ostd + h)	²x(760/Pa)x(7	Ta / 298) =	3	.16		
morerore, s	ot I omt W	n'n Qua · o)	x(700714)x(1				•	
*If Correlation C	oefficient < 0.99	90, check and	recalibrate again.		- 20 To 000-	WORLDWARD HARRY II EU		
			_					
Remarks:								
-	15-110		Use at					
QC Reviewer:	4 Sun		Signature:	M	Date:	21-2-14		

Station	Sau Ming Prim	ary School (ID	04)		Operator:	Shum Kan	n Yuen
Date:	13-Feb-14				Next Due Date:	13-May	<i>y</i> -14
Pump No.:	1275			V	erified Against:	O.T.S	0988
Equipment No.:	A-001-28T			I	Expiration Date:	20-May	_/ -14
			Ambient C	andition			
Tempera	ture To	281.7	Kelvin	Pressu	ire Da	766.0	mmHg
Tempera	ture, ra	201.7	Reiviii	110550	пс, га	700.0	mining
		Oı	ifice Transfer Sta	ndard Informat	tion		
Equipme	ent No.:	988	Slope, mc	1.94	727	Intercept, bc	0.02332
Last Calibra	ation Date:	20-May-13	,	nc x Qstd + bc =	= [H v (Pa/760)	v (208/Ta)1 ^{1/2}	
Next Calibr	ation Date:	20-May-14	1	iic x Qstu + bc -	- [II X (I &/ 700)	X (296/14)]	
			C-12 C C	TCD Cl			
		T	Calibration of	Qstd			
Calibration Point	H in. of water	[H x (Pa/76	60) x (298/Ta)] ^{1/2}	(m ³ /min) X - axis	W in. of oil	[ΔW x (Pa/760) : Y-ax	
1	9.0		3.10	1.58	6.2	2.57	7
2	7.5		2.83	1.44	5.0	2.31	
3	6.0		2.53	1.29	3.6	1.96)
4	4.5		2.19	1.11	2.9	1.76	Ò
5	3.4		1.90	0.96	1.9	1.42	!
By Linear Regr	ession of Y on	X					
Slope, $mw =$	1.8090	_		Intercept, bw =		-0.304	43
Correlation C	oefficient* =	0	.9948				
1000					0000		
			Set Point C	alculation			
From the TSP Fi	eld Calibration	Curve, take Qs	$std = 1.21 \text{ m}^3/\text{min}$ (4)	13 CFM)			
From the Regres	sion Equation, t	he "Y" value a	ccording to				
		m x	Qstd + b = [W x (I	Pa/760) x (298/T	[a)] ^{1/2}		
Therefore, S	Set Point W = (m x Qstd + b)	² x (760 / Pa) x (T	Ta/298)=	3	.33	
*If Correlation C	Coefficient < 0.9	90, check and	recalibrate again.				
Remarks:							
QC Reviewer:	HY Sien		Signature:	M	Date:	21-2-14	

Station	Sau Mau Ping	Catholic Prima	ry School (ID5)		Operator:	Shum Kan	n Yuen
	13-Feb-14	_			Next Due Date:	13-May	7-14
Pump No.:	10088	-		V	erified Against:	O.T.S	0988
Equipment No.:	A-001-13T			I	Expiration Date:	20-May	<i>y</i> -14
	× MIN IN CO.						
			Ambient C			7660	TY.
Tempera	ture, Ta	281.7	Kelvin	Pressu	ire, Pa	766.0	mmHg
		Or	ifice Transfer Sta	ndard Informat	tion		
Equipme	ent No.:	988	Slope, mc	1.94	727	Intercept, bc	0.02332
Last Calibra	ation Date:	20-May-13		nc x Qstd + bc =	- III v (Da/760)	v (209/Ta)1 ^{1/2}	
Next Calibra	ation Date:	20-May-14	1	ne x Qsta + be -	- [H X (Fa//00)	1 (296/14)]	
	****	•		man a			
		T	Calibration of	TSP Sampler Qstd			
Calibration H Point in. of water		[H x (Pa/76	60) x (298/Ta)] ^{1/2}	(m³/min) X - axis	(m ³ /min) w in of oil		k (298/Ta)] ^{1/2} is
1	8.6		3.03	1.54	6.0	2.53	
2	7.4		2.81	1.43	4.8	2.26	
3	5.3		2.38	1.21	3.4	1.90	
4	4.2		2.12	1.08	2.6	1.66	i
5	2.9		1.76	0.89	1.6	1.31	
By Linear Regr	ession of Y on	X					
Slope, $mw =$	1.8350	_		Intercept, bw =		-0.325	51
Correlation C	oefficient* =	0	.9987				
		100				-	
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration	Curve, take Qs	$td = 1.21 \text{ m}^3/\text{min}$ (4)	43 CFM)			
From the Regress	sion Equation, t	he "Y" value a	ccording to				
		m x	Qstd + b = [W x (I	Pa/760) x (298/T	[a)] ^{1/2}		
Therefore, S	Set Point W = (m x Qstd + b)	² x (760 / Pa) x (T	Ta / 298) =	3	.37	
*If Correlation C	Coefficient < 0.9	90, check and	recalibrate again.				
Remarks:							
QC Reviewer:	HY Sun		Signature:	n	Date:	21-2-14	



TISCH ENVIROMENTAL, INC.
145 SOUTH MIAMI AVE.
VILLAGE OF CLEVES, OH 45002
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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 - Ma Operator		Rootsmeter Orifice I.		438320 0988	Ta (K) - Pa (mm) -	297 - 751.84
PLATE OR Run # 1 2 3 4 5	VOLUME START (m3) NA NA NA NA	VOLUME STOP (m3) NA NA NA NA NA	DIFF VOLUME (m3) 1.00 1.00 1.00 1.00 1.00	DIFF TIME (min) 1.3900 0.9720 0.8670 0.8270 0.6800	METER DIFF Hg (mm) 3.2 6.4 7.9 8.7 12.6	ORFICE DIFF H2O (in.) 2.00 4.00 5.00 5.50 8.00

DATA TABULATION

Vstd (x axis)	(y axis)		Va	(x axis) Qa	(y axis)
0.98840.71100.98421.01250.98211.13270.98111.18630.97591.4352	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 slope (m) = intercept (b) = coefficient (r) = y axis = SQRT[H2O	1.94727 0.02332 0.99998		Qa slope intercept coefficie	= $(b) =$	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: Manufacturer/Brand: Model No.: Equipment No.: Sensitivity Adjustment Scale Setting: Operator: Standard Equipment Equipment: Venue: Venue: Model No.: Serial No: Control: Sensor:			nt & Pa t (Pui) 100AB 140 120		TEOM®	М)	00		
	alibration Date*:	· · · · · · · · · · · · · · · · · · ·	May 2		re calibrat	ion is 1 v	voor.		
	tion Result	eu interve		aruwar	- Calibrai	.101115 1	yeai		
	ivity Adjustment ivity Adjustment		- ,					CPM CPM	
Hour	Date (dd-mm-yy)	٦	Γime		Amb Cond Temp (°C)		Concentration ¹ (mg/m ³) Y-axis	Total Count ²	Count/ Minute ³ X-axis
1	18-05-13	12:30	- 1	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	- 1	6:30	28.1	78	0.05083	2026	33.77
Slope (Correla	2. Total Count 3. Count/minut ar Regression of K-factor): ation coefficient:	was logg e was cal Y or X	ed by l culate 0.00	_aser [Oust Moni otal Cour	tor	shnick TEOM [®]		
Remarks	5:						/		
QC Rev	viewer: YW F	ung		Signati	ure:	4/	Dat	e: _20 May	/ 2013

Type: Manufacturer/Brand: Model No.: Equipment No.: Sensitivity Adjustment Scale Setting:			Laser Dust Monitor SIBATA LD-3 A.005.08a 702 CPM					
Operate	or:			Mike Sh	ek (MSh	(M)		
Standar	d Equipment							
				Ying Sec 20AB2198 200C1436	ondary 3 899803 59803	School) K _o : _12	500	
	on Result		or manarro					- 73 - 73 - 74 - 75 - 75 - 75 - 75 - 75 - 75 - 75
Sensitiv	vity Adjustment vity Adjustment					702 702	CPM CPM	
Hour	Date (dd-mm-yy)	Tim	е	Amb Cond Temp (°C)		Concentration ¹ (mg/m ³) Y-axis	Total Count ²	Count/ Minute ³ X-axis
1	18-05-13	12:30 -	13:30	28.1	78	0.04714	1764	29.40
2	18-05-13	13:30 -	14:30	28.1	78	0.04932	1846	30.77
3	18-05-13	14:30 -	15:30	28.2	77	0.05156	1935	32.25
4	18-05-13	15:30 -	16:30	28.1	78	0.05083	1899	31.65
Slope (ł Correlat	1. Monitoring of 2. Total Count 3. Count/minut Regression of K-factor): tion coefficient: of Calibration F	was logged e was calcu Y or X - -	by Laser	Dust Mor Total Cou	nitor	tashnick TEOM [®]		
Remarks								
						,		

Type:			8_	-	ust Moni	tor		
	facturer/Brand:		_	SIBATA				
Mode			ş .	LD-3 A.005.09				
	ment No.: tivity Adjustment	Scale Setti	- -	797 CPI	100,700,00			
061131	tivity Adjustificht	ocale octili	··g	131 011	71			
Opera	ator:		_	Mike She	ek (MSKN	И)		
Standa	rd Equipment							
Equip	ment:	Runn	recht & Pa	tashnick	TFOM®			
Venue			rport (Pui `			chool)		
Mode			s 1400AB	J				
Serial	No:	Contr	ol: 140	DAB2198	99803	and the second s		
		Sens	or: 120	00C1436	59803	K _o : 12500)	
Last C	Calibration Date*:	_18 M	ay 2013					
*Remar	ks: Recommend	ed interval t	for hardwa	re calibra	tion is 1 y	year		
Calibra	tion Result	100.15					5000 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	
Sensit	tivity Adjustment	Scale Settir	na (Before	Calibratio	on).	797 CF	PM	
	tivity Adjustment					797 CF		
								77
Hour	Date	Tin	ne		pient	Concentration ¹	Total	Count/
	(dd-mm-yy)				dition	(mg/m ³)	Count ²	Minute ³
				Temp (°C)	R.H. (%)	Y-axis		X-axis
1	18-05-13	12:30 -	13:30	28.1	78	0.04714	1885	31.42
2	18-05-13	13:30 -	14:30	28.1	78	0.04932	1965	32.75
3	18-05-13	14:30 -	15:30	28.2	77	0.05156	2059	34.32
4	18-05-13	15:30 -	16:30	28.1	78	0.05083	2024	33.73
Note:	1. Monitoring of	lata was me	easured by	Rupprec	ht & Pata	shnick TEOM®	Marie Colonia	
	Total Count	was logged	by Laser I	Dust Mon	itor			
	Count/minut	e was calcu	ılated by (1	otal Cou	nt/60)			
Dy Lino	or Dograssian of	VorV						
	ar Regression of (K-factor):	1017	0.0015					
	ation coefficient:	-	0.9973					
Conei	ation coemcient.	-	0.9970					
Validit	y of Calibration F	Record:	17 May 2	014				
Domorle								
Remark	.5.						11 38 38 - 123-	
					, /			
QC Re	eviewer: YW F	una	Signa	ture:	4/	Date	e: 20 May	v 2013

Type:	facture v/Drawd		_	Laser Do	ıst Moni	itor		
Manut Model	facturer/Brand:		-	SIBATA LD-3				
Equipment No.:			=	A.005.10	а			
	tivity Adjustment	Scale Set	tina:	753 CPI				
0011011	arriy / tajaotimom		_	, , , , , , , , , , , , , , , , , , , ,				
Opera	ator:		_	Mike She	k (MSKI	М)		
Standa	rd Equipment		38					
					20			
Equip			precht & Pa					
Venue			erport (Pui	Ying Seco	ndary S	chool)		<u> </u>
Model			ies 1400AB	0400400	20000			
Serial	No:			0AB2198		I/ . 405	200	
1+ 0	Salibuation Data*			00C1436	9803	K _o : 125	00	
Last C	Calibration Date*:	_181	May 2013					
*Remar	ks: Recommend	ed interva	l for hardwa	re calibra	tion is 1	year		
Calibra	tion Result		2000					
Consit	tivity Adjustment	Soolo Sot	tina (Poforo	Calibratic	m).	753	СРМ	
	tivity Adjustment tivity Adjustment						CPM	
Serisit	livity Adjustinent	Scale Set	ting (After C	alibration).		CFIVI	
Hour	Date	Т	ime	Aml	pient	Concentration	1 Total	Count/
Tioui	(dd-mm-yy)		Condition			(mg/m ³)	Count ²	Minute ³
	(dd iiiii yy)			Temp	R.H.	Y-axis	Joann	X-axis
				(°C)	(%)			71 63110
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	- 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
Note:	1. Monitoring of	lata was n	neasured by	Rupprec	ht & Pata	ashnick TEOM®	1	
	2. Total Count							
	3. Count/minut							
	ar Regression of	Y or X						
	(K-factor):		0.0015					
Correl	ation coefficient:		0.9983	1000				
Validit	y of Calibration F	Record:	_17 May 2	014				
Remark	s:	(4)						

					6			
OC Re	eviewer: YW F	- una	Signa	ture:	1	/ n	ate: 20 Ma	y 2013
~ · · · · ·		9				/		,

Type: Manufacturer/Brand:		Laser Du SIBATA LD-3	ıst Moni	tor		
Model No.:	Equipment No.:					
Sensitivity Adjustment S	Scale Setting:	A.005.11 799 CPI				
	Jodio Colling.	Mike She		4)		
Operator:		IVIIKE SHE	K (WONN	<i>n</i>)		
Standard Equipment						
Equipment:		& Patashnick				
Venue:		Pui Ying Seco	ndary So	chool)		
Model No.:	Series 1400		20000	***		
Serial No:	Control:	140AB21989		V . 40500		
Last Calibration Date*:	Sensor: 18 May 201	1200C14365	9803	K _o : <u>12500</u>	**	
Last Galibration Date .	10 May 201	0			To the state of th	300 300 300
*Remarks: Recommende	ed interval for har	dware calibrat	ion is 1 y	year		
Calibration Result					Art Services	
Sensitivity Adjustment S Sensitivity Adjustment S				799 CP		
Hour Date (dd-mm-yy)	Time	Amb Cond Temp (°C)		Concentration ¹ (mg/m ³) Y-axis	Total Count ²	Count/ Minute ³ X-axis
1 18-05-13	12:15 - 13.	:15 28.1	78	0.04685	1871	31.18
2 18-05-13		:15 28.1	78	0.04941	1979	32.98
3 18-05-13		:15 28.2	77	0.05127	2055	34.25
4 18-05-13	15:15 - 16.	:15 28.1	78	0.05060	2021	33.68
2. Total Count v 3. Count/minute By Linear Regression of Slope (K-factor): Correlation coefficient:	0.001 0.997	ser Dust Mon by (Total Coul	itor	ashnick TEOM [®]		
Validity of Calibration Ro	ecord. 17 ivi	ay 2014				
QC Reviewer: YW Fu	ung S	ignature:	4/	Date	e:20 Ma	y 2013

Type:				Laser D	ust Moni	itor		
	facturer/Brand:			SIBATA				
Model			6	LD-3B	N. C.			
Equipment No.: Sensitivity Adjustment Scale Setting:			ut.	A.005.13				
Sensi	tivity Adjustment	Scale Set	tting:	643 CP	VI			
Operator:				Mike She	ek (MSKI	M)		
Standa	rd Equipment							
Equip	ment:	Pur	oprecht & Pa	atachnick	TEOM®			
Venue			perport (Pui			chool)		
Model			ies 1400AB		maary O	unouij	M2 97	
Serial		100000000000000000000000000000000000000	County Co	OAB2198	99803		8.0	
Contai	110.			200C1436		K _o : 12500)	
Last C	Calibration Date*:		May 2013					
*Remar	ks: Recommend	led interva	al for hardwa	are calibra	tion is 1	year		
Calibra	tion Result	25m2						man suuressa
C'	ii. ii A ali ii a t	CI- C-4	utin a /D a fa u a	Calibuati		640 05	21.4	
	tivity Adjustment					643 CF		
Serisit	tivity Adjustment	Scale Sel	ung (Anter C	alibi ation).		IVI	
Hour	Date	Т	ime	Aml	pient	Concentration ¹	Total	Count/
1.00	(dd-mm-yy)			Condition Temp R.H.		(mg/m ³)	Count ²	Minute
	(, , , , , , , , , , , , , , , , , , ,					Y-axis		X-axis
		e.		(°C)	(%)			
1	18-05-13	12:15	- 13:15	28.1	78	0.04685	1867	31.12
2	18-05-13	13:15	- 14:15	28.1	78	0.04941	1975	32.92
3	18-05-13	14:15	- 15:15	28.2	77	0.05127	2048	34.13
4	18-05-13	15:15	- 16:15	28.1	78	0.05060	2017	33.62
Note:	1. Monitoring of	data was n	neasured by	/ Rupprec	ht & Pata	ashnick TEOM®		
	2. Total Count							
	3. Count/minut	te was cal	culated by (Total Cou	nt/60)			
By Line	or Dograssian of	VorV						
	ar Regression of (K-factor):	1 01 7	0.0015					
	ation coefficient:		0.9986					
Corre	ation coemcient.		0.9900					
Validit	y of Calibration F	Record:	17 May 2	2014				
Sand And Barrier State of	•		1					
Remark	e.							
Kemark								
								à
					. /			
OC Ba	eviewer: YW F	Tuna	Signa	aturo:	4/	Date	o. 20 Ma	y 2013
QU RE	TVV F	ung	Signa		V	Date	5. <u>20 IVIA</u>	y 2013

Type:				-	Laser Du	ıst Moni	tor		
Manu Mode	facturer/Brand:			_	SIBATA LD-3B				
	ment No.:			-	A.005.14	a	- CONTROL - CO		
Sensitivity Adjustment Scale Setting:				_	786 CPI				
Operator:					Mike She	k (MSKN	1)		
Standa	rd Equipment								
							380 4 5		
Equip					ashnick		-,,		
Venue					ing Seco	ndary So	chool)		
Model			es 1400		A DO400	20000	1.3930	1 113	
Serial	No:	Con			AB2198		V . 4050	10	
Loct C	Calibration Date*:	Sen	sor: <i>1ay 201</i>		0C1436	9803	K _o : _1250	10	
Lasic	dibration bate .		nay 201	3					
*Remar	ks: Recommend	led interval	for har	dwar	e calibra	tion is 1 y	/ear		
Calibra	tion Result				***				
	tivity Adjustment							PM PM	
100000000000000000000000000000000000000	300.000 € 0 000 € 000.000000000000000000								
Hour	Date	Т	ime			pient	Concentration ¹	Total	Count/
	(dd-mm-yy)		Condition				(mg/m³)	Count ²	Minute ³
	35. 35. 35.				Temp	R.H.	Y-axis		X-axis
	10.05.10	10.15	40	4.5	(°C)	(%)	0.04005	0005	00.40
1	18-05-13	12:15		:15	28.1	78	0.04685	2005	33.42
2	18-05-13	13:15		:15	28.1	78	0.04941	2121	35.35
3	18-05-13 18-05-13	14:15 15:15		:15 :15	28.2 28.1	77 78	0.05127 0.05060	2194 2167	36.57 36.12
Note:							shnick TEOM®	2107	30.12
	Total Count Count/minut	was logge te was calc	d by La	ser D	oust Mon	itor	ISTITICK TEOW		
	ar Regression of	Y or X	0.00						
	(K-factor):		0.001						
Correi	ation coefficient:		0.998	57					
Validit	y of Calibration F	Record:	17 M	ay 20)14				
Remark	s:								
							<i>y</i>		
QC Re	eviewer: YW F	ung	_ s	ignati	ure:	1	Da	te: _20 Ma	y 2013

Type:	Facetown (Durando					ust Moni	tor		
Model	facturer/Brand:			_	SIBATA LD-3B		****		
					LD-3B A.005.16	3			
Equipment No.: Sensitivity Adjustment Scale Setting:				_	521 CP				
Operator:						ek (MSKN	1)		
Standa	rd Equipment								
		(iii				_		37 Year 100 100 100 100 100 100 100 100 100 10	
Equip					tashnick	201			
Venue					ing Seco	ondary So	chool)	22-20-20-00100000	
Model		-	es 1400	011777770111777	A DO 400	00000			
Serial	No:		trol:		AB2198		V . 4050	0	
Last	alibration Date*:	Sen	sor: ⁄/ay 201		00C1436	09803	K _o : _1250	0	
			8 1900 Po			7000 20 9000	in.		
*Remar	ks: Recommend	led interval	l for har	dwar	e calibra	tion is 1 y	/ear		
Calibra	tion Result						10 m	2.38	
C:	: .i.k A .dia k.a. a .a.k	Caala Catt	line (De	£ /	Calibaatia).	F24 C	DM	
	ivity Adjustment ivity Adjustment							PM PM	
Serisit	ivity Adjustifierit	Ocale Octi	ing (Ait	.61 06	alibration).	0	1 101	
Hour	Date	Т	ime		Aml	pient	Concentration ¹	Total	Count/
11001	(dd-mm-yy)		Conditio			(mg/m ³)	Count ²	Minute ³	
	, , , , ,		Temp			R.H.	Y-axis		X-axis
					(°C)	(%)			
1	27-07-13	11:00	- 12	:00	27.3	75	0.04734	1893	31.55
2	27-07-13	12:00	_	:00	27.3	75	0.04789	1915	31.92
3	27-07-13	13:00		:00	27.4	74	0.04953	1976	32.93
4	27-07-13	14:00		:00	27.4	75	0.04867	1949	32.48
Note:							shnick TEOM®		
	 Total Count Count/minut 								
	3. Courivillina	le was call	Julateu	Dy (1	olai Cou	11000)			
By Linea	ar Regression of	Y or X							
	(K-factor):		0.001	15					
	ation coefficient:		0.993	34					
Validit	y of Calibration F	Secord:	26 Ju	ılv 20	114				
valian	y or Cambration i	(COOTG.	2000	ny zo	11				
Remark	s:								
	**************************************		1000				W	888	
	TO UP TO THE TOTAL							W1556 - SE	
QC Re	eviewer: YW F	ung	_ s	ignat	ure:	N	Da	te: 29 Jul	y 2013
	4		_	50000	2		/		



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 E-mail: smec@cigismec.com Website: www.cigismec.com





CERTIFICATE OF CALIBRATION

Certificate No.:

13CA1107 01-01

Page

of

2

Item tested

Description: Manufacturer: Sound Level Meter (Type 1)

Rion Co., Ltd. NI -31

Microphone Rion Co., Ltd.

Type/Model No.: Serial/Equipment No.:

00320528 / N.007.03A

UC-53A 90565

Adaptors used:

Item submitted by

Customer Name: Address of Customer: AECOM ASIA CO., LTD.

Request No .:

Date of receipt:

07-Nov-2013

Date of test:

08-Nov-2013

Reference equipment used in the calibration

Description: Signal generator

Signal generator

Multi function sound calibrator

DS 360 DS 360

Model: Serial No. B&K 4226 2288444

33873 61227

Expiry Date:

22-Jun-2014 15-Apr-2014 15-Apr-2014

Traceable to:

CIGISMEC CEPREI CEPREI

Ambient conditions

Test specifications

Temperature:

Relative humidity: Air pressure:

22 ± 1 °C 60 ± 10 % 1000 ± 10 hPa

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%.

3, 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.

Actual Measurement data are documented on worksheets.

Approved Signatory:

Huang Jian Min/Feng Jun Qi

Date: 11-Nov-2013 Company Chop:

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 黄 竹 坑 道 3 7 號 利 達 中 心 地 下 , 9 樓 , 1 2 樓 , 1 3 樓 及 2 0 樓 E-mail: smec@cigismec.com Website: www.cigismec.com

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



CERTIFICATE OF CALIBRATION

Certificate No.:

13CA0305 01-01

Page

of

2

Item tested

Description: Manufacturer: Sound Level Meter (Type 1)

B&K

2250-L

B&K 4950

Type/Model No.: Serial/Equipment No.:

2681366 (~.011.01)

2665582

Microphone

Adaptors used:

Item submitted by

Customer Name:

AECOM ASIA CO LIMITED

Address of Customer:

Request No .: Date of receipt:

05-Mar-2013

Date of test:

05-Mar-2013

Reference equipment used in the calibration

Description:

Multi function sound calibrator

Signal generator Signal generator Model:

B&K 4226

DS 360 DS 360

Serial No. 2288444

33873 61227

Expiry Date:

23-May-2013 29-May-2013 29-May-2013 Traceable to:

CIGISMEC CEPREI CEPREI

Ambient conditions

Temperature: Relative humidity: 21 ± 1 °C 60 ± 10 %

Air pressure:

1000 ± 10 hPa

Test specifications

1, 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.

Actual Measurement data are documented on worksheets.

Approved Signatory:

Huang Jian N ng Jun Qi Date:

05-Mar-2013

Company Chop:

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.:

13CA1107 01-02

Page:

Item tested

Description:

Acoustical Calibrator (Class 1)

Manufacturer:

Rion Co., Ltd.

Type/Model No.:

NC-73

Serial/Equipment No.:

10307223 / N.004.08

Adaptors used:

Item submitted by

Curstomer:

AECOM ASIA CO., LTD.

Address of Customer:

Request No .:

Date of receipt:

07-Nov-2013

Date of test:

08-Nov-2013

Reference equipment used in the calibration

Description: Lab standard microphone Preamplifier Measuring amplifier Signal generator Digital multi-meter Audio analyzer	Model: B&K 4180 B&K 2673 B&K 2610 DS 360 34401A 8903B	Serial No. 2341427 2239857 2346941 61227 US36087050 GB41300350	Expiry Date: 17-Apr-2014 16-Apr-2014 24-Apr-2014 15-Apr-2014 10-Dec-2013 15-Apr-2014	Traceable to: SCL CEPREI CEPREI CEPREI CEPREI CEPREI CEPREI
Universal counter	53132A	MY40003662	15-Apr-2014	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.
- 3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference 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:

11-Nov-2013

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.

Soils & Materials Engineering Co., Ltd.

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

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