

Cerificate of Calibration

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

Description:	Digital Dust Indicator	Date	Date of Calibration 5-O		
Manufacturer:	Sibata Scientific Technology LTD.	Validity of Calib	ration Record	5-Dec-20	
Model No.:	LD-5R				
Serial No.:	972781				
Equipment No.:	SA-01-10	Sensitivity 0.001 mg/m3	_		
High Volume Sa	ampler No.: A-01-01A	Before Sensitivity Adjustment	734 CPM		
Tisch Calibration	n Orifice No.: 3607	After Sensitivity Adjustment	734 CPM		
	C	alibration of 1 hr TSP			
Calibration Laser Dust Monitor		or	HVS		
Point Mass Concentration (µg/r X-axis		z/m3) Ma	ss concentration (μ Y-axis	ug/m³)	
1	48.0		78.9		
2	39.0		75.2		
3	30.0		70.8		
Average	39.0		75.0		
By Linear Regr	ression of Y on X				
Slope, mw =	0.4500	Intercept, bw =	57.4167		
Correlation co	oefficient* = 0.998	8			
	S	et Correlation Factor			
Particaulate Con	ncentration by High Volume Sampler	$(\mu g/m^3)$	75.0		
Particaulate Concentration by Dust Meter (μg/m³)			39.0		
Measureing time, (min)			60.0		
Set Correlation 1	Factor, SCF				
SCF = [K=Hig	h Volume Sampler / Dust Meter, (ug/m3)] 1.9			
In-house method	d in according to the instruction manu	ıal:			
The Dust Monito	or was compared with a calibrated H	igh Volume Sampler and The result	was used to gener	rate the Correlation	

Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (Wellab Litimed)

Calibrated by: Approved by: \leftrightarrow \



Date of Calibration 5-Oct-20

Cerificate of Calibration

Digital Dust Indicator

Description:

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

Manufacturer:	Sibata Scientific Technology LTD.	_ Validity of Calib	ration Record	5-Dec-20
Model No.:	LD-5R			
Serial No.:	<u>8Y2374</u>			
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	n Orifice No.: <u>3607</u>	After Sensitivity Adjustment	652	
	Ca	libration of 1 hr TSP		
Calibration	Laser Dust Monitor		HVS	
Point	Mass Concentration (μg/ X-axis	m3) Ma	ss concentration (μ Y-axis	g/m³)
1	48.0		78.9	
2	44.0		75.2	
3	40.0		70.8	
Average	44.0		75.0	
By Linear Regr Slope , mw = Correlation co	ression of Y on X	Intercept, bw =	30.4167	
	Se	t Correlation Factor		
	centration by High Volume Sampler ($(\mu g/m^3)$	75.0	
Particaulate Con	centration by Dust Meter (µg/m ³)		44.0	
Measureing time	e, (min)		60.0	
Set Correlation I SCF = [K=High	Factor , SCF h Volume Sampler / Dust Meter, (μ	g/m3) 1.7		
	in according to the instruction manual or was compared with a calibrated Hig		was used to gener	ate the Correlation

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 (Wellab Litimed)

Calibrated by: Approved by: Very Leung

Wong Shing Kwai

Approved by: Henry Leung



Date of Calibration 5-Oct-20

Cerificate of Calibration

Digital Dust Indicator

Description:

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

Manufacturer:	Sibata Scien	tific Technology LTD.	_	Validity of Calib	ration Record	5-Dec-20		
Model No.:	LD-5R	_						
Serial No.:	972778	_						
Equipment No.:	SA-01-07	_	Sensitivity	0.001 mg/m3	_			
High Volume Sa	mpler No.:	A-01-01A	Before Sensit	ivity Adjustment	735 CPM			
Tisch Calibration	n Orifice No.:	3607	After Sensitiv	vity Adjustment	735 CPM			
		Ca	alibration of 1	hr TSP				
Calibration		Laser Dust Monito	r		HVS			
Point	N	Mass Concentration (μg X-axis	/m3)	Mas	Mass concentration (μg/m³) Y-axis			
1		45.0		78.9				
2		34.0		75.2				
3	23.0		70.8					
Average		34.0			75.0			
By Linear Regr Slope , mw = Correlation co	0.30			rcept, bw = _	62.4485	<u>: </u>		
		Se	et Correlation	Factor				
Particaulate Con	centration by	High Volume Sampler	$(\mu g/m^3)$		75.0			
Particaulate Concentration by Dust Meter (μg/m³)		34.0						
Measureing time	, (min)				60.0			
Set Correlation I	Factor, SCF							
SCF = [K=Higl	h Volume Sa	mpler / Dust Meter, (µ	ıg/m3)]	2.2				
	_	to the instruction manu		npler and The result	was used to gene	rate the Correlation		

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 (Wellab Litimed)

Calibrated by: Approved by: Very Leung

Wong Shing Kwai

Approved by: Henry Leung



Date of Calibration 5-Oct-20

Cerificate of Calibration

Digital Dust Indicator

Description:

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

Manufacturer:	Sibata Scientific Technology LTD.	_ Validity of Calib	ration Record	5-Dec-20	
Model No.:	LD-5R				
Serial No.:	972779				
Equipment No.:	SA-01-08	Sensitivity 0.001 mg/m3	_		
High Volume Sa	mpler No.: <u>A-01-01A</u>	Before Sensitivity Adjustment	744 CPM		
Tisch Calibration	n Orifice No.: <u>3607</u>	After Sensitivity Adjustment	744 CPM		
	Cal	libration of 1 hr TSP			
Calibration	Laser Dust Monitor		HVS		
Point	Mass Concentration (μg/s X-axis	m3) Ma	Mass concentration (μg/m³) Y-axis		
1	49.0		78.9		
2	38.0		75.2		
3	28.0		70.8		
Average	38.3		75.0		
By Linear Regr Slope , mw = Correlation co	ression of Y on X	Intercept, bw =	60.2124		
	Se	t Correlation Factor			
	centration by High Volume Sampler ($(\mu g/m^3)$	75.0		
Particaulate Con	centration by Dust Meter (μg/m ³)		38.3		
Measureing time	e, (min)		60.0		
Set Correlation I SCF = [K=High	Factor , SCF h Volume Sampler / Dust Meter, (μ	g/m3)]			
	in according to the instruction manual		t was used to genera	ate the Correlation	

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 (Wellab Litimed)

Calibrated by: Approved by: Veny Kenry Leung

Wong Shing Kwai

Henry Leung



Cerificate of Calibration

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

Description:	Digital Dust Indicator	Date	Date of Calibration		
Manufacturer:	Sibata Scientific Technology LTD.	Validity of Calib	ration Record	5-Dec-20	
Model No.:	LD-5R				
Serial No.:	972780				
Equipment No.:	SA-01-09	Sensitivity 0.001 mg/m3	_		
High Volume Sa	mpler No.: <u>A-01-01A</u>	Before Sensitivity Adjustment	739 CPM		
Tisch Calibration	n Orifice No.: <u>3607</u>	After Sensitivity Adjustment	739 CPM		
	C	alibration of 1 hr TSP			
Calibration	Laser Dust Monito	or	HVS		
Point	Mass Concentration (μ _ξ X-axis	g/m3) Ma	ss concentration (μ Y-axis	ıg/m³)	
1	48.0		78.9		
2	41.0		75.2		
3	30.0		70.8		
Average	39.7		75.0		
By Linear Regr Slope , mw = Correlation co	ression of Y on X 	Intercept, bw =	57.2933		
	S	et Correlation Factor			
Particaulate Con	centration by High Volume Sampler	· (µg/m³)	75.0		
Particaulate Con	centration by Dust Meter (μg/m³)		39.7		
Measureing time	e, (min)		60.0		
Set Correlation I	Factor, SCF				
SCF = [K=Higl	h Volume Sampler / Dust Meter, (μg/m3)] 1.9			
The Dust Monito	in according to the instruction man or was compared with a calibrated H ween the Dust Monitor and High Vol	igh Volume Sampler and The result	was used to gener	rate the Correlation	

Those filter papers are weighted by HOKLAS laboratory (Wellab Litimed)

Calibrated by: Wong Shing Kwai

5-POINT CALIBRATION DATA SHEET

CIN@TECH & File No. MA16034/05/0026

10 October 2020

Date:

Project No.	AM1 - Tin Hau	Temple					
Date:	10-O	oct-20	Next Due Date:	10-	Dec-20	Operator:	SK
Equipment No.:				G	S2310	Serial No.	10599
						•	
			Ambient C	ondition			
Temperatu	re, Ta (K)	299.5	Pressure, Pa	(mmHg)		759.5	
		Ori	fice Transfer Star	ndard Informa	ation		
Serial	l No.	3746	Slope, mc	0.0592	Intercept	•	-0.02740
Last Calibra	ation Date:	17-Jan-20			$c = [\Delta H \times (Pa/760)]$		
Next Calibr	ation Date:	17-Jan-21	($Qstd = \{ [\Delta H \ x] \}$	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} /	mc
	I		Calibration of	ΓSP Sampler			
Calibration	ATL ('C')		fice	0.41/0755	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	HVS	/7.co) (222/m >1/2
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	0) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa	/760) x (298/Ta)] ^{1/2} Y-axis
1	13.0	3	3.60	61.19	8.6		2.92
2	9.5	3	3.07	52.38	6.4		2.52
3	7.6		2.75	46.90	4.8		2.18
4	4.8		2.18	37.37	3.2		1.78
5	2.6		1.61	27.62	1.8		1.34
Slope, mw =		_		Intercept, bw	0.012	9	
	coefficient* =		9988				
*If Correlation C	Coefficient < 0.99	90, check and rec	alibrate.				
			Set Point Ca	alaulatian			
From the TSP Fi	ield Calibration C	Surve_take Ostd :		ilculation			
	sion Equation, th	_					
Trom the regres	sion Equation, th		_				
		mw x Q	$\mathbf{pstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point: W = (m	w x Ostd + bw)	² x (760 / Pa) x (1	Γa / 298) =	4.23		
Therefore, St	201 Omit, 11 (m	in a qua · on)	n (700 / 14) n (1	250)	—————————————————————————————————————		•
Damanlage							
Remarks:							
Conducted by:	SK Wong	Signature:	例			Date:	10 October 2020
CI L L	TT T	G :	j o	^/		D.	10 October 2020

F:\Cinotech Solutions\Equipment\Calibration Cert\HVS\new\MA16034 20201010 AM1 (A	-01-05).xls

Checked by: Henry Leung Signature:

5-POINT CALIBRATION DATA SHEET



10 October 2020

Date:

File No. MA16034/08/0026 Project No. AM2 - Sai Tso Wan Recreation Ground 10-Oct-20 Next Due Date: 10-Dec-20 Operator: SK Date: Equipment No.: <u>A-01</u>-08 GS2310 Serial No. 1287 Model No.: **Ambient Condition** 299.5 759.5 Temperature, Ta (K) Pressure, Pa (mmHg) **Orifice Transfer Standard Information** Serial No. 3746 Slope, mc 0.0592 Intercept, bc -0.02740 mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ 17-Jan-20 Last Calibration Date: Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 17-Jan-21 **Calibration of TSP Sampler** Orfice HVS Calibration ΔH (orifice), $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Qstd (CFM) ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 2.92 1 13.0 3.60 61.19 8.6 2 9.9 3.14 53.46 6.2 2.48 7.9 2.80 47.81 4.8 2.18 3 4.8 3.0 1.73 4 2.18 37.37 5 2.8 1.67 28.65 1.9 1.37 By Linear Regression of Y on X Slope , mw = _____0.0472 Intercept, bw -0.0191 Correlation coefficient* = *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.07 Remarks: Conducted by: SK Wong Signature: 10 October 2020 Date:

Checked by: Henry Leung Signature:

5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0026

Project No.	AM3 - Yau Lai	Estate, Bik Lai I	House				
Date:	10-0	Oct-20	Next Due Date:	10-	Dec-20	Operator:	SK
Equipment No.:	A-()1-03	Model No.:	G	S2310	Serial No.	10379
			Ambient C	ondition			
Temperatu	re, Ta (K)	299.5	Pressure, Pa	(mmHg)		759.5	
0 :	137		ifice Transfer Star		l	. 1	0.02740
Serial Last Calibra		3746	Slope, mc	0.0592	Intercept		-0.02740
Last Calibration Date: 17-Jan-20 $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Next Calibration Date: 17-Jan-21 $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc$							
Next Callor	ation Date:	1 / -Jan-21	ļ ·	Qstu – _{{[} ΔII x	(1 a/ /00) X (290/	1 a)	inc .
		•	Calibration of T	ΓSP Sampler			
Calibration		Oı	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	[ΔW x (Pa/	(760) x (298/Ta)] ^{1/2} Y-axis
1	13.1		3.61	61.43	8.7		2.94
2	9.5		3.07	52.38	6.5		2.54
3	7.7		2.77	47.20	5.2		2.27
4	5.2		2.27	38.87	3.4		1.84
5	2.6		1.61	27.62	2.0		1.40
Slope , mw = Correlation	coefficient* =	_	.9984	Intercept, bw =	0.091	5	
			Set Point Ca	laulation			
From the TSP Fi	ield Calibration	Curve, take Qstd		aculation			
		he "Y" value acc					
110111 1110 110 110	seren zquanen, e		-				
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, So	et Point; W = (n	nw x Qstd + bw)	² x (760 / Pa) x (7	Га / 298) =	4.37		
Remarks:							
Conducted by:	SK Wong	Signature:	<u> </u>		-	Date:	10 October 2020
Checked by:	Henry Leung	Signature:	-leng 0	hon	-	Date:	10 October 2020

Equipment No.: <u>A-01</u>-54

Temperature, Ta (K)

Serial No.

Last Calibration Date:

Next Calibration Date:

Project No.

Date:

5-POINT CALIBRATION DATA SHEET

10-Oct-20

299.5

3746

17-Jan-20

17-Jan-21



File No. MA16034/54/0026 AM4(A) - Cha Kwo Ling Public Cargo Working Area Administrative Office Next Due Date: 10-Dec-20 Operator: _____ SK TE-5170 Serial No. _____1536 Model No.: **Ambient Condition** Pressure, Pa (mmHg) 759.5 **Orifice Transfer Standard Information** 0.0592 Intercept, bc Slope, mc -0.02740 mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Calibration of TSP Sampler

Calibration		Orfice	HVS			
Point	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (P	a/760) x (298/Ta)] ^{1/2} Y-axis
1	12.9	3.58	60.96	8.7		2.94
2	9.9	3.14	53.46	6.4		2.52
3	7.5	2.73	46.59	5.1		2.25
4	5.4	2.32	39.60	3.3		1.81
5	3.0	1.73	29.64	1.9		1.37
Slope , mw = Correlation of		0.9982), check and recalibrate.	Intercept, bw =	-0.130)2	_
TI Correlation C	0.990 × 0.990	o, check and recamorate.				
		Set Point C	alculation			
From the TSP Fi	eld Calibration Co	urve, take Qstd = 43 CFM				
From the Regress	sion Equation, the	"Y" value according to				
		$\mathbf{m}\mathbf{w} \times \mathbf{Q}\mathbf{s}\mathbf{t}\mathbf{d} + \mathbf{b}\mathbf{w} = [\Delta \mathbf{W}]$	x (Pa/760) x (29	98/Ta)l ^{1/2}		
Therefore, Se	et Point; W = (my	$v \times Qstd + bw)^2 \times (760 / Pa) \times ($		4.13		-
Remarks:						
Conducted by:	SK Wong	Signature: Signature:			Date:	10 October 2020
Checked by:	Henry Leung	Signature: \length length	Xoy		Date:	10 October 2020
F:\Cinotech Solution	ns\Equipment\Calibration	Cert\HVS\new\MA16034_20201010_AM4(A)	_(A-01-54).xls			

5-POINT CALIBRATION DATA SHEET



10 October 2020

Date:

File No. MA16034/37/0026 AM5(A) - Tseung Kwan O DSD Desilting Compound Project No. 10-Oct-20 Next Due Date: 10-Dec-20 Operator: SK Date: Equipment No.: A-01-37 Model No.: GS2310 Serial No. 1704 **Ambient Condition** 299.5 759.5 Temperature, Ta (K) Pressure, Pa (mmHg) **Orifice Transfer Standard Information** Serial No. 3746 Slope, mc 0.0592 Intercept, bc -0.02740 mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ 17-Jan-20 Last Calibration Date: Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 17-Jan-21 **Calibration of TSP Sampler** Orfice HVS Calibration ΔH (orifice), $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Qstd (CFM) ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 2.96 1 13.2 3.62 61.66 8.8 2 9.7 3.11 52.92 6.4 2.52 8.1 2.84 48.40 5.4 2.32 3 2.30 5.3 3.3 1.81 4 39.24 5 3.0 1.73 29.64 2.0 1.41 By Linear Regression of Y on X Slope , mw = _____0.0489 Correlation coefficient* = *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.18 Remarks: Conducted by: SK Wong Signature: 10 October 2020 Date:

Checked by: Henry Leung Signature:

5-POINT CALIBRATION DATA SHEET



05 November 2020

Date:

File No. MA16034/07/0026 Project No. AM6 - Park Central 5-Nov-20 Next Due Date: 5-Jan-21 Operator: SK Date: Equipment No.: A-01-07 GS2310 Serial No. 10592 Model No.: **Ambient Condition** 297.7 761.9 Temperature, Ta (K) Pressure, Pa (mmHg) **Orifice Transfer Standard Information** Serial No. 3746 Slope, mc 0.0592 Intercept, bc -0.02740 mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 17-Jan-20 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 17-Jan-21 **Calibration of TSP Sampler** Orfice HVS Calibration ΔH (orifice), $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Qstd (CFM) ΔW (HVS), in. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 7.7 1 12.7 3.57 60.77 2.78 2 8.9 2.99 50.94 5.7 2.39 7.2 2.69 45.87 4.5 2.13 3 3.0 1.74 4 4.6 2.15 36.76 5 3.0 1.74 29.77 1.9 1.38 By Linear Regression of Y on X Slope , mw = <u>0.0452</u> Correlation coefficient* = *If Correlation Coefficient < 0.990, check and recalibrate. **Set Point Calculation** From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.99 Remarks: Conducted by: SK Wong Signature: 05 November 2020 Date:

Checked by: Henry Leung Signature:



0023001

Customer: Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong		Object 1 : B&K4231 sound calibrator Serial No. /Ref. No. : 2326353 / N-02-01 Object 2 : Serial No. /Ref. No. :
Customer Code: SVEC09005		Manufacturer: Bruel & Kjaer
Date of calibration: Date of the recommended re-calibration:	19/12/2019 19/12/2020	Certificate No.: 0023001 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.2dB	+0.2dB	+/- 0.2dB	1
114.0dB	114.1dB	+0.1dB	+/- 0.2dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Level Meter and 1kHz Sound Source .

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

within the allowable devis	ation.
Performed by	Approved by
Calibration Technician	Quality Manager



0023000

Customer: Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong		Object 1: SVAN957 SLM Serial No. /Ref. No.: 23852 / N-08-11 Object 2: Microphone Serial No. /Ref. No.: 35989
Customer Code: SVEC09005		Manufacturer: Svantek
Date of calibration: Date of the recommended re-calibration:	19/12/2019 19/12/2020	Certificate No.: 0023000 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.4dB	-0.6dB	+/- 1.5dB	1
114.0dB	113.4dB	-0.6dB	+/- 1.5dB	1

Measuring equipment

index		Calibrator / Master	Traceability
	1	Master Sound Meter, SVAN949,sn:8571	IEC61672
	2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measured value(s)	within	the allowable deviation
, ,	TY A CAAAAA	1

Performed by

Calibration Technician

Approved by



0022999

Customer: Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong		Object 1 : Serial No. /Ref. No. : Object 2 : Serial No. /Ref. No. :	Microphone
Customer Code : SVEC09005		Manufacturer: Svar	ntek
Date of calibration: Date of the recommended re-calibration:	19/12/2019 19/12/2020	Certificate No.: Handle by:	0022999 E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object	
94.0dB	94.0dB	0.0dB	+/- 1.5dB	1	
114.0dB	114.0dB	0.0dB	+/- 1.5dB	1	

Measuring equipment

	index	Calibrator / Master	Traceability
C Description	1	Master Sound Meter, SVAN949,sn:8571	IEC61672
	2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measured value(s)	within	the allowable deviation.
(-/	AA TCTTTTT	

Performed by

Calibration Technician

Approved by



0023002

Customer: Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong	Object 1: SV30A sound calibrator Serial No. /Ref. No.: 10965 / N-09-02 Object 2: Serial No. /Ref. No.:
Customer Code : SVEC09005	Manufacturer: Svantek
Date of calibration: 19/12/2019 Date of the recommended re-calibration: 19/12/2020	002002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.9dB	-0.1dB	+/- 0.3dB	1
114.0dB	114.2dB	+0.2dB	+/- 0.3dB	1

Measuring equipment

index	Calibrator / Master	Traceability	
1	Master Sound Meter, SVAN949,sn:8571	IEC61672	
2	Sound Calibrator, SV30A sn:32580	IEC60942	

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Level Meter and 1kHz Sound Source .

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measured value(s)	within	the allowable deviation
-------------------	--------	-------------------------

Performed by

Calibration Technician

Approved by



Equipment no.: N-12-01

Calibration Certificate

0024993

Customer:

Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street, Shatin, N.T.

Hong Kong

Customer Code:

SVEC09005

Date of calibration:

Date of the recommended re-calibration:

Object 1:

BSWA 308 SLM

Serial No. /Ref. No. :

570183 / 550233

Object 2:

Serial No. /Ref. No. :

Manufacturer:

BSWAtech

Certificate No.:

Handle by:

0024993 E0002

Measuring results

Reference	value	Indication value	Deviation	Allowed deviation	Object
94.0	dB	93.4dB	-0.6dB	+/- 1.5dB	1
114.0)dB	113.2dB	-0.8dB	+/- 1.5dB	1

07/10/2020

07/10/2021

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measured value(s)

within

the allowable deviation.

Performed by

Calibration Technician

Mr. K.L. Ng

Approved by

Mr. K.S. N

Quality Manager

Appleone Calibration Laboratory Ltd.

Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR



Equipment no.: N-12-02

Calibration Certificate

0024995

Customer :: Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Object 1: Serial No. /Ref. No. :

BSWA 308 SLM 570187 / 550841

Object 2:

Serial No. /Ref. No.

Hong Kong

SVEC09005

Manufacturer:

BSWAtech

Customer Code Date of calibration:

07/10/2020

Certificate No.:

0024995

Date of the recommended re-calibration:

07/10/2021

Handle by:

E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.1dB	-0.9dB	+/- 1.5dB	1
114.0dB	113.1dB	-0.9dB	+/- 1.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measured value(s)

the allowable deviation.

Performed by

Mr. K.L. Ng

Approved by

Mr. K.S. Na

Calibration Technician



Equipment no.: N-12-03

Calibration Certificate

0024996

Customer:

Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street, Shatin, N.T.

Hong Kong

Customer Code: SVEC09005

Date of calibration:

Date of the recommended re-calibration:

Object 1:

BSWA 308 SLM

Serial No. /Ref. No. : 570188 / 550850

Object 2:

Serial No. /Ref. No. :

Manufacturer: **BSWAtech**

Certificate No.:

0024996

Handle by:

E0002

Measuring results

 Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	92.9dB	-1.1dB	+/- 1.5dB	1
114.0dB	112.8dB	-1.2dB	+/- 1.5dB	1

07/10/2020

07/10/2021

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measu	ıred	val	اعيرا	(e)

(s) within

the allowable deviation.

Performed by

Calibration Technician

Mr. K.L. Ng

Approved by

Mr. K.S. Ng

Quality Manager

Appleone Calibration Laboratory Ltd.

Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR



0022673

Customer:		Object 1 : ST-120 sound calibrator
Cinotech Consultants Limited		Serial No. /Ref. No.: 181001608
RM 1710, Technology Park,		Object 2:
18 On Lai Street, Shatin, N.T.		Serial No. /Ref. No. :
Hong Kong		
Customer Code: SVEC09005		Manufacturer : Soundtek
Date of calibration:	24/10/2019	Certificate No.: 0022673
Date of the recommended re-calibration:	24/10/2020	Handle by: F0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.0dB	0.0dB	+/- 0.3dB	1
114.0dB	114.1dB	+0.1dB	+/- 0.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability	
1	Master Sound Meter, SVAN949,sn:8571	IEC61672	
2	Sound Calibrator, SV30A sn:32580	IEC60942	

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Level Meter and 1kHz Sound Source .

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

iation.	
Approved by	
Ouglity Manager	_

Appleone Calibration Laboratory Ltd.

Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR



0022676

Customer: Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong		Object 1: ST-120 sound calibrator Serial No. /Ref. No.: 181001636 Object 2: Serial No. /Ref. No.:
Customer Code: SVEC09005		Manufacturer: Soundtek
Date of calibration: Date of the recommended re-calibration:	24/10/2019 24/10/2020	Certificate No.: 0022676 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.7dB	-0.3dB	+/- 0.3dB	1
114.0dB	113.7dB	-0.3dB	+/- 0.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Level Meter and 1kHz Sound Source .

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measured value(s)	within	the allowable deviation.
-------------------	--------	--------------------------

Performed by

Calibration Technician

Quality Manager

Approved by

Appleone Calibration Laboratory Ltd. Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR



0022675

Customer:		Object 1: ST-120 sound calibrator
Cinotech Consultants Limited		Serial No. /Ref. No.: 181001637
RM 1710, Technology Park,		Object 2:
18 On Lai Street, Shatin, N.T.		Serial No. /Ref. No. :
Hong Kong		
Customer Code : SVEC09005		Manufacturer: Soundtek
Date of calibration:	24/10/2019	Certificate No.: 0022675
Date of the recommended re-calibration:	24/10/2020	Handle by: F0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.0dB	0.0dB	+/- 0.3dB	1
114.0dB	114.0dB	0.0dB	+/- 0.5dB	1

Measuring equipment

index	index Calibrator / Master	
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Level Meter and 1kHz Sound Source ..

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measured value(s)	vithin	the allowable deviation.
-------------------	--------	--------------------------

Performed by

Approved by

Calibration Technician

Quality Manager

Appleone Calibration Laboratory Ltd.

Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR



0023155

Customer: Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong	Object 1: SVAN979 SLM Serial No. /Ref. No.: 27189 / SN-01-01 Object 2: Microphone Serial No. /Ref. No.: 25204
Customer Code: SVEC09005	Manufacturer: BSWAtech
Date of calibration: 08/01/2020 Date of the recommended re-calibration: 08/01/2021	Certificate No.: 0023155 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.7dB	-0.3dB	+/- 1.5dB	1
114.0dB	113.6dB	-0.4dB	+/- 1.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measured value(s)	within	the allowable	deviation.

Performed by

Approved by

Calibration Technician



0023156

Customer: Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong	Object 1: SVAN979 SLM Serial No. /Ref. No.: 27190 / SN-01-02 Object 2: Microphone Serial No. /Ref. No.: 25202
Customer Code: SVEC09005	Manufacturer: BSWAtech
Date of calibration: 08/01/2020 Date of the recommended re-calibration: 08/01/2021	Certificate No.: 0023156 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.0dB	0.0dB	+/- 1.5dB	1
114.0dB	113.9dB	-0.1dB	+/- 1.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C

Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

- 1. The resulted values were those obtained at the time of test and applies only to the item calibrated.
- 2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
- 3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
- 4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
- 5. The calibrations certificate may not be reproduced.

Measured value(s)	within	the allowable deviation

Performed by

Calibration Technician

Approved by

Calibration Item: Minimate Plus Unit (Calibration with Geophone

12 March 2021

BG14852)

Model No.: 716A0403

Serial No.: BE15890

Calibration Date: 12 March 2020

Method Used: In-house Method B3-001

In-house Testing Procedure No.: B3-001

Next Calibration Date:

Test References	Model	Serial No.
Blastmate III	714A0801	BA15521
ISEE Triaxial Geophone	714A9701	BG14463
GLOBAL SPECIALISTS 3MHz*	2030	256812
Stanford Spectrum Analyzer	SR760	41550
Aglient Multimeter*	34410A	MY47011119
HP Distortion Meter*	339A	810699
Bruel & Kjaer Accelerometer*	4370	30323
Bruel & Kjaer Charge Amplifier*	2647	2518810
Bruel & Kjaer Conditional Amplifier*	269	2152173
LDS Air Cooled Vibrator	V556	92794/1
LDS Field Power Supply	FPS10L	ARA 04/05
LDS Power Amplifier	PA1000L	ARA 07/06

^{*}References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: TRIAXIAL GEOPHONE (Calibration with

main unit BE15890)

Part Number:

714A9701

Serial No.:

BG14852

Calibration Date:

12 March 2020

Next Calibration Date:

12 March 2021

Method Used:

In-house Method B3-001

In-house Testing Procedure No.: B3-001

Test References	Model	Serial No.
Blastmate III	714A0801	BA15521
ISEE Triaxial Geophone	714A9701	BG14463
GLOBAL SPECIALISTS 3MHz*	2030	256812
Stanford Spectrum Analyzer	SR760	41550
Aglient Multimeter*	34410A	MY47011119
HP Distortion Meter*	339A	810699
Bruel & Kjaer Accelerometer*	4370	30323
Bruel & Kjaer Charge Amplifier*	2647	2518810
Bruel & Kjaer Conditional Amplifier*	269	2152173
LDS Air Cooled Vibrator	V556	92794/1
LDS Field Power Supply	FPS10L	ARA 04/05
LDS Power Amplifier	PA1000L	ARA 07/06

^{*}References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: Linear Microphone (Calibration with main unit

BE15890)

Model No.: 714A9801

Serial No.: BH11455

Galibration Date: 12 March 2020

ext Calibration Date: 12 March 2021

Method Used: In-house Method MM-002

In-house Testing Procedure No.: MM-002

Test References	Model	Serial No.
Blastmate III	714A0801	BA15521
Linear Microphone	714A9801	BH11561
GLOBAL SPECIALISTS 3MHz*	2030	256812
stanford Spectrum Analyzer	SR760	41550
Aglient Multimeter*	34410A	MY47011119
P Distortion Meter*	339A	810699
Bruel & Kjaer Microphone*	4193	2677340
ow Frequency Calibrator*	42AE	105366
Bruel & Kjaer Conditional Amplifier*	269	2152173
XIII		

References are traceable to NIST or equivalent.

STANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized ervice center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: Minimate Plus Unit (Calibration with Geophone

BG16955)

Model No.: 716A0403

Serial No.: BE16223

Calibration Date: 12 March 2020

Next Calibration Date: 12 March 2021

Method Used: In-house Method B3-001

In-house Testing Procedure No.: B3-001

Test References	Model	Serial No.
Blastmate III	714A0801	BA15521
ISEE Triaxial Geophone	714A9701	BG14463
GLOBAL SPECIALISTS 3MHz*	2030	256812
Stanford Spectrum Analyzer	SR760	41550
Aglient Multimeter*	34410A	MY47011119
HP Distortion Meter*	339A	810699
Bruel & Kjaer Accelerometer*	4370	30323
Bruel & Kjaer Charge Amplifier*	2647	2518810
Bruel & Kjaer Conditional Amplifier*	269	2152173
LDS Air Cooled Vibrator	V556	92794/1
LDS Field Power Supply	FPS10L	ARA 04/05
LDS Power Amplifier	PA1000L	ARA 07/06

^{*}References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: TRIAXIAL GEOPHONE (Calibration with

main unit BE16223)

Part Number: 714A9701

Serial No.: BG16955

Calibration Date: 12 March 2020

Next Calibration Date: 12 March 2021
Method Used: In-house Method B3-001

In-house Testing Procedure No.: B3-001

Test References	Model	Serial No.
Blastmate III	714A0801	BA15521
ISEE Triaxial Geophone	714A9701	BG14463
GLOBAL SPECIALISTS 3MHz*	2030	256812
Stanford Spectrum Analyzer	SR760	41550
Aglient Multimeter*	34410A	MY4701111
HP Distortion Meter*	339A	810699
Bruel & Kjaer Accelerometer*	4370	30323
Bruel & Kjaer Charge Amplifier*	2647	2518810
Bruel & Kjaer Conditional Amplifier*	269	2152173
LDS Air Cooled Vibrator	V556	92794/1
LDS Field Power Supply	FPS10L	ARA 04/05
LDS Power Amplifier	PA1000L	ARA 07/06

^{*}References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item:

Linear Microphone (Calibration with main unit

BE16223)

Model No.:

714A9801

Serial No.:

BH11458

Calibration Date:

12 March 2020

Next Calibration Date:

12 March 2021

Method Used:

In-house Method MM-002

In-house Testing Procedure No.:

MM-002

714A0801 714A9801	BA15521
714A9801	
711110001	BH11561
2030	256812
SR760	41550
34410A	MY47011119
339A	810699
4193	2677340
42AE	105366
269	2152173
	SR760 34410A 339A 4193 42AE

References are traceable to NIST or equivalent.

NSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized ervice center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: Minimate Plus Unit (Calibration with Geophone

BG15353)

Model No.:

716A0403

Serial No.:

BE15891

Calibration Date:

26 February 2020

Next Calibration Date:

26 February 2021

Method Used:

In-house Method B3-001

In-house Testing Procedure No.: B3-001

\mathcal{Z}_{i}	Test References	Model	Serial No.
I	Blastmate III	714A0801	BA15521
類	SEE Triaxial Geophone	714A9701	BG14463
	LOBAL SPECIALISTS 3MHz*	2030	256812
	tanford Spectrum Analyzer	SR760	41550
	glient Multimeter*	34410A	MY47011119
ŀ	IP Distortion Meter*	339A	810699
Ž.	Bruel & Kjaer Accelerometer*	4370	30323
XE	Bruel & Kjaer Charge Amplifier*	2647	2518810
Ì	Bruel & Kjaer Conditional Amplifier*	269	2152173
I	DS Air Cooled Vibrator	V556	92794/1
類	DS Field Power Supply	FPS10L	ARA 04/05
Ø	DS Power Amplifier	PA1000L	ARA 07/06

^{*}References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: TRIAXIAL GEOPHONE (Calibration with main

unit BE15891)

Part Number:

714A9701

Serial No.:

BG15353

Calibration Date:

26 February 2020

Next Calibration Date:

26 February 2021

Method Used:

In-house Method B3-001

In-house Testing Procedure No.: B3-001

	est References	Model	Serial No.
E	lastmate III	714A0801	BA15521
現	SEE Triaxial Geophone	714A9701	BG14463
X	LOBAL SPECIALISTS 3MHz*	2030	256812
	tanford Spectrum Analyzer	SR760	41550
1	glient Multimeter*	34410A	MY47011119
ŀ	IP Distortion Meter*	339A	810699
Ä	ruel & Kjaer Accelerometer*	4370	30323
ĶĒ	ruel & Kjaer Charge Amplifier*	2647	2518810
E	ruel & Kjaer Conditional Amplifier*	269	2152173
L	DS Air Cooled Vibrator	V556	92794/1
類	DS Field Power Supply	FPS10L	ARA 04/05
\langle	DS Power Amplifier	PA1000L	ARA 07/06

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is

sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to

INSTANTEL or an authorized service center for regular calibration.

References are traceable to NIST or equivalent.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: Minimate Plus Unit (Calibration with Geophone

BG15180)

Model No.: 716A0403

Serial No.: BE15894

Calibration Date: 24 February 2020 Next Calibration Date: 24 February 2021

Method Used: In-house Method B3-001

In-house Testing Procedure No.: B3-001

H	est References	Model	Serial No.
I	Blastmate III	714A0801	BA15521
#	SEE Triaxial Geophone	714A9701	BG14463
X	LOBAL SPECIALISTS 3MHz*	2030	256812
X	tanford Spectrum Analyzer	SR760	41550
7	glient Multimeter*	34410A	MY47011119
//1	IP Distortion Meter*	339A	810699
K.	ruel & Kjaer Accelerometer*	4370	30323
X	ruel & Kjaer Charge Amplifier*	2647	2518810
E	ruel & Kjaer Conditional Amplifier*	269	2152173
L	DS Air Cooled Vibrator	V556	92794/1
#	DS Field Power Supply	FPS10L	ARA 04/05
	DS Power Amplifier	PA1000L	ARA 07/06

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: TRIAXIAL GEOPHONE (Calibration with main

unit BE15894)

Part Number:

714A9701

Serial No.:

BG15180

Calibration Date:

24 February 2020

Next Calibration Date:

24 February 2021

Method Used:

In-house Method B3-001

In-house Testing Procedure No.:

B3-001

#	Test References	Model	Serial No.
	Blastmate III	714A0801	BA15521
#	ISEE Triaxial Geophone	714A9701	BG14463
	GLOBAL SPECIALISTS 3MHz*	2030	256812
B	Stanford Spectrum Analyzer	SR760	41550
	Aglient Multimeter*	34410A	MY47011119
	HP Distortion Meter*	339A	810699
及	Bruel & Kjaer Accelerometer*	4370	30323
	Bruel & Kjaer Charge Amplifier*	2647	2518810
H	Bruel & Kjaer Conditional Amplifier*	269	2152173
	LDS Air Cooled Vibrator	V556	92794/1
#	LDS Field Power Supply	FPS10L	ARA 04/05
\not	LDS Power Amplifier	PA1000L	ARA 07/06

References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: Minimate Plus Unit (Calibration with Geophone

BG20673)

Model No.: 716A0403

Serial No.: BE13849

Calibration Date: 26 February 2020 Next Calibration Date: 26 February 2021

Method Used: In-house Method B3-001

In-house Testing Procedure No.: B3-001

H	lest References	Model	Serial No.
	Blastmate III	714A0801	BA15521
現	SEE Triaxial Geophone	714A9701	BG14463
X	GLOBAL SPECIALISTS 3MHz*	2030	256812
X	stanford Spectrum Analyzer	SR760	41550
	Aglient Multimeter*	34410A	MY47011119
Į	IP Distortion Meter*	339A	810699
A	Bruel & Kjaer Accelerometer*	4370	30323
8	Bruel & Kjaer Charge Amplifier*	2647	2518810
	Bruel & Kjaer Conditional Amplifier*	269	2152173
I	DS Air Cooled Vibrator	V556	92794/1
猫	DS Field Power Supply	FPS10L	ARA 04/05
Ø	DS Power Amplifier	PA1000L	ARA 07/06

*References are traceable to NIST or equivalent.

NSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item:

Linear Microphone (Calibration with main unit

BE13849)

Model No.:

714A9801

Serial No.:

BH13154

Calibration Date:

26 February 2020

Next Calibration Date:

26 February 2021

Method Used:

In-house Method MM-002

In-house Testing Procedure No.:

MM-002

Test References	Model	Serial No.
Blastmate III	714A0801	BA15521
Linear Microphone	714A9801	BH11561
GLOBAL SPECIALISTS 3MHz*	2030	256812
Stanford Spectrum Analyzer	SR760	41550
Aglient Multimeter*	34410A	MY47011119
HP Distortion Meter*	339A	810699
Bruel & Kjaer Microphone*	4193	2677340
Low Frequency Calibrator*	42AE	105366
Bruel & Kjaer Conditional Amplifier*	269	2152173

^{*}References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

Au

(Au Yeung Hang Chuen, Isaac)

Calibration Item: TRIAXIAL GEOPHONE (Calibration with main

unit BE13849)

Part Number:

714A9701

Serial No.:

BG20673

Calibration Date:

26 February 2020

Next Calibration Date:

26 February 2021

Method Used:

In-house Method B3-001

In-house Testing Procedure No.: B3-001

	est References	Model	Serial No.
Ε	lastmate III	714A0801	BA15521
現	SEE Triaxial Geophone	714A9701	BG14463
X	LOBAL SPECIALISTS 3MHz*	2030	256812
	tanford Spectrum Analyzer	SR760	41550
	glient Multimeter*	34410A	MY47011119
ŀ	IP Distortion Meter*	339A	810699
Ä	ruel & Kjaer Accelerometer*	4370	30323
()E	ruel & Kjaer Charge Amplifier*	2647	2518810
E	ruel & Kjaer Conditional Amplifier*	269	2152173
L	DS Air Cooled Vibrator	V556	92794/1
類	DS Field Power Supply	FPS10L	ARA 04/05
Á	DS Power Amplifier	PA1000L	ARA 07/06

^{*}References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: Minimate Plus Unit (Calibration with Geophone

BG16512)

Model No.: 716A0403

Serial No.: BE13853

Calibration Date: 24 February 2020 Next Calibration Date: 24 February 2021

Next Calibration Date: 24 February 2021
Method Used: In-house Method B3-001

In-house Testing Procedure No.: B3-001

Test References	Model	Serial No.
Blastmate III	714A0801	BA15521
ISEE Triaxial Geophone	714A9701	BG14463
GLOBAL SPECIALISTS 3MHz*	2030	256812
Stanford Spectrum Analyzer	SR760	41550
Aglient Multimeter*	34410A	MY47011119
HP Distortion Meter*	339A	810699
Bruel & Kjaer Accelerometer*	4370	30323
Bruel & Kjaer Charge Amplifier*	2647	2518810
Bruel & Kjaer Conditional Amplifier*	269	2152173
LDS Air Cooled Vibrator	V556	92794/1
LDS Field Power Supply	FPS10L	ARA 04/05
LDS Power Amplifier	PA1000L	ARA 07/06

References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: TRIAXIAL GEOPHONE (Calibration with main

unit BE13853)

Part Number:

714A9701

Serial No.:

BG16512

Calibration Date:

24 February 2020

Next Calibration Date:

24 February 2021

Method Used:

In-house Method B3-001

In-house Testing Procedure No.: B3-001

Test References	Model	Serial No.
Blastmate III	714A0801	BA15521
ISEE Triaxial Geophone	714A9701	BG14463
GLOBAL SPECIALISTS 3MHz*	2030	256812
Stanford Spectrum Analyzer	SR760	41550
Aglient Multimeter*	34410A	MY47011119
HP Distortion Meter*	339A	810699
Bruel & Kjaer Accelerometer*	4370	30323
Bruel & Kjaer Charge Amplifier*	2647	2518810
Bruel & Kjaer Conditional Amplifier*	269	2152173
LDS Air Cooled Vibrator	V556	92794/1
LDS Field Power Supply	FPS10L	ARA 04/05
LDS Power Amplifier	PA1000L	ARA 07/06

References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: Minimate Plus Unit (Calibration with Geophone

BG17240)

Model No.: 716A0403

Serial No.: BE20015

Calibration Date: 26 February 2020
Next Calibration Date: 26 February 2021

Method Used: In-house Method B3-001

n-house Testing Procedure No.: B3-001

H	Test References	Model	Serial No.
	Blastmate III	714A0801	BA15521
#	ISEE Triaxial Geophone	714A9701	BG14463
$\langle \! \rangle$	GLOBAL SPECIALISTS 3MHz*	2030	256812
R	Stanford Spectrum Analyzer	SR760	41550
	Aglient Multimeter*	34410A	MY47011119
$\overset{>}{\not\sim}$	HP Distortion Meter*	339A	810699
THE REPORT OF THE PROPERTY OF	Bruel & Kjaer Accelerometer*	4370	30323
X	Bruel & Kjaer Charge Amplifier*	2647	2518810
#	Bruel & Kjaer Conditional Amplifier*	269	2152173
	LDS Air Cooled Vibrator	V556	92794/1
4	LDS Field Power Supply	FPS10L	ARA 04/05
otan	LDS Power Amplifier	PA1000L	ARA 07/06
N P /	ATT		

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: TRIAXIAL GEOPHONE (Calibration with main

unit BE20015)

Part Number:

714A9701

Serial No.:

BG17240

Calibration Date:

26 February 2020

Next Calibration Date:

26 February 2021

Method Used:

In-house Method B3-001

In-house Testing Procedure No.: B3-001

j	est References	Model	Serial No.
В	lastmate III	714A0801	BA15521
費	SEE Triaxial Geophone	714A9701	BG14463
K	LOBAL SPECIALISTS 3MHz*	2030	256812
X	tanford Spectrum Analyzer	SR760	41550
A	glient Multimeter*	34410A	MY47011119
H	P Distortion Meter*	339A	810699
43	ruel & Kjaer Accelerometer*	4370	30323
(B	ruel & Kjaer Charge Amplifier*	2647	2518810
В	ruel & Kjaer Conditional Amplifier*	269	2152173
L	DS Air Cooled Vibrator	V556	92794/1
先	DS Field Power Supply	FPS10L	ARA 04/05
Ø.	DS Power Amplifier	PA1000L	ARA 07/06

^{*}References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Calibration Item: Linear Microphone (Calibration with main unit

BE20015)

Model No.:

714A9801

Serial No.:

BH12658

Calibration Date:

26 February 2020

Next Calibration Date:

26 February 2021

Method Used:

In-house Method MM-002

In-house Testing Procedure No.:

MM-002

est References	Model	Serial No.
astmate III	714A0801	BA15521
near Microphone	714A9801	BH11561
LOBAL SPECIALISTS 3MHz*	2030	256812
anford Spectrum Analyzer	SR760	41550
glient Multimeter*	34410A	MY47011119
P Distortion Meter*	339A	810699
ruel & Kjaer Microphone*	4193	2677340
ow Frequency Calibrator*	42AE	105366
uel & Kjaer Conditional Amplifier*	269	2152173
	astmate III near Microphone LOBAL SPECIALISTS 3MHz* anford Spectrum Analyzer glient Multimeter* P Distortion Meter* ruel & Kjaer Microphone* ow Frequency Calibrator*	astmate III 714A0801 near Microphone 714A9801 LOBAL SPECIALISTS 3MHz* 2030 anford Spectrum Analyzer SR760 glient Multimeter* 34410A P Distortion Meter* 339A nuel & Kjaer Microphone* 4193 ow Frequency Calibrator* 42AE

^{*}References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Au Yeung Hang Chuen, Isaac)

Date: 26 February 2020

R:\Service Dept\Calibration\Instantel\BH12658 (26-02-20)

Calibration Item: TRIAXIAL GEOPHONE (Calibration with main

unit UM12907)

Part Number: 721A2901

Serial No.: UM12907

Calibration Date: 24 February 2020 Next Calibration Date: 24 February 2021

Method Used: In-house Method MM-001

In-house Testing Procedure No.: MM-001

Model	Serial No.
714A0801	BA15521
714A9701	BG14463
2030	256812
SR760	41550
34410A	MY47011119
339A	810699
4370	30323
2647	2518810
269	2152173
V556	92794/1
FPS10L	ARA 04/05
PA1000L	ARA 07/06
	714A0801 714A9701 2030 SR760 34410A 339A 4370 2647 269 V556 FPS10L

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Leung Man Hin, Eric)

Calibration Item: Micromate Linear Microphone (Calibration with

main unit UM12907)

Model No.:

721A0201

Serial No.:

UL3398

Calibration Date:

24 February 2020

Next Calibration Date:

24 February 2021

Method Used:

In-house Method MM-002

in-house Testing Procedure No.:

MM-002

Tes	st References	Model	Serial No.
Bla	astmate III	714A0801	BA15521
Lin	ear Microphone	714A9801	BH11561
GL	OBAL SPECIALISTS 3MHz*	2030	256812
Sta	nford Spectrum Analyzer	SR760	41550
Åg	lient Multimeter*	34410A	MY47011119
XHP	Distortion Meter*	339A	810699
Bru	uel & Kjaer Microphone*	4193	2677340
Įξον	w Frequency Calibrator*	42AE	105366
Bru	el & Kjaer Conditional Amplifier*	269	2152173

References are traceable to NIST or equivalent.

STANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Leung Man Hin, Eric)

Calibration Item: Micromate Unit (Calibration with Geophone

UM12907)

Model No.:

721A2501

Serial No.:

UM12907

Calibration Date:

24 February 2020

Next Calibration Date:

24 February 2021

Method Used:

In-house Method MM-001

In-house Testing Procedure No.:

MM-001

Test References	Model	Serial No.
Blastmate III	714A0801	BA15521
ISEE Triaxial Geophone	714A9701	BG14463
GLOBAL SPECIALISTS 3MHz*	2030	256812
Stanford Spectrum Analyzer	SR760	41550
Aglient Multimeter*	34410A	MY47011119
HP Distortion Meter*	339A	810699
Bruel & Kjaer Accelerometer*	4370	30323
Bruel & Kjaer Charge Amplifier*	2647	2518810
Bruel & Kjaer Conditional Amplifier*	269	2152173
LDS Air Cooled Vibrator	V556	92794/1
LDS Field Power Supply	FPS10L	ARA 04/05
LDS Power Amplifier	PA1000L	ARA 07/06

References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by:

(Leung Man Hin, Eric)



WELLAB LIMITED Room 1701, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong.

Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

APPLICANT: Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Test Report No.: 33981 Date of Issue:

2020-09-01

Date Received: Date Tested:

2020-08-27 2020-08-27 to

2020-09-01

Date Completed:

2020-09-01

ATTN:

Mr. Henry Leung

Page:

1 of 2

Certificate of Calibration

Item for calibrati

YSI EXO1 Multiparameter Sondes	Equipment No.:	SW-08-06
Manufacturer:	YSI Incorporated, a Xy	ylem brand
Description:	Model No.	Serial No.
- EXO1 Sonde, 100 meter Depth, 4 Sensor ports	599501-02	16J100680
- EXO Optical DO Sensor, Ti	599100-01	16H102985
- EXO conductivity/Temperature Sensor, Ti	599870	16G102307
- EXO Turbidity Sensor, Ti	599101-01	16H102463
- EXO pH Sensor Assembly, Guarded, Ti	599701	17B103615

Test conditions:

Room Temperature

: 17-22 degree Celsius

Relative Humidity

: 40-70%

Test Specifications:

Performance checking for Conductivity, Temperature, pH, Dissolved oxygen (D.O.)

and Turbidity

Methodology:

According to manufacturer instruction manual, APHA 20e 4500-O C

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.

PATRICK TSE

General Manager



WELLAB LIMITED
Room 1701, Technology Park,
18 On Lai Street, Shatin,
N.T., Hong Kong.

Tel: 2898 7388 Fax: 2898 7076 Website: www.wellab.com.hk

TEST REPORT

Test Report No.: Date of Issue:

33981 2020-09-01

Date Received:

2020-08-27

Date Tested:

2020-08-27 to

Date Completed:

2020-09-01 2020-09-01

Page:

2 of 2

Certificate of Calibration

Results:

Conductivity performance checking

		Instrument Readings (µS/cm)	Accetance Criteria	Comment
KCl sto	ck solution	13000	12246-13534	Pass
(1289	0 μS/cm)			

Temperature performance checking

Reference thermometer-	Instrument Readings (°C)	Correction (°C)	Comment
E431 Readings (°C)			
20.0	20.001	-0.001	N/A

pH performance checking

	Instrument Readings	Accetance Criteria	Comment
	(pH unit)		
pH QC buffer 4.00	4.06	4.00 <u>+</u> 0.10	Pass
pH QC buffer 6.86	6.84	6.86 <u>+</u> 0.10	Pass
pH QC buffer 9.18	9.16	9.18 <u>+</u> 0.10	Pass

D.O. performance checking

	Instrument Readings (mg/L)	Accetance Criteria	Comment
Zero DO soultion	0.09	<0.1mg/L	Pass

Winkler Titration value	Instrument Readings (mg/L)	Accetance Criteria	Comment
(mg/L)			
8.00	8.12	Difference between	Pass
		Titration value and	
		instrument reading	
		<0.2mg/L	

Turbidity performance checking

Turbidity stock solution	Instrument Readings (NTU)	Accetance Criteria	Comment
10 NTU	10.08	9.0-11.0	Pass
50 NTU	49.67	45.0-55.0	Pass
100 NTU	100.6	90.0-110.0	Pass

Depth performance checking

Water Depth	Instrument Readings (m)	Accetance Criteria	Comment
0.5 meter	0.50	0.45-0.55	Pass