# Annex F7

Calibration Certificates for Groundwater Monitoring Equipment



### ALS Technichem (HK) Pty Ltd

11/F, Chung Shun Knitting Centre 1-3 Wing Yip Street, Kwai Chung N.T., Hong Kong T: +852 2610 1044 | F: +852 2610 2021

# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR IVAN LEUNG WORK ORDER: HK2238446

CLIENT: ALS TECHNICHEM (HK) PTY LTD

ADDRESS: 11/F., CHUNG SHUN KNITTING CENTRE, SUB-BATCH: 0

1-3 WING YIP STREET, KWAI CHUNG, N.T. LABORATORY: HONG KONG

DATE RECEIVED: 30-Sep-2022
DATE OF ISSUE: 07-Oct-2022

### **SPECIFIC COMMENTS**

Equipment information (Brand name, Model No., Serial No. and Equipment No.) is provided by client.

The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

The "Tolerance Limit" quoted is the acceptance criteria applicable for similar equipment used by the laboratory or quoted from relevant international standards.

The "Next Calibration Date" is recommended according to best practice principle as practised by the laboratory or quoted from relevant international standards.

The validity of equipment/ meter performance only applies to the result(s) stated in the report.

Equipment Type: Multifunctional Meter Service Nature: Performance Check

Scope: Conductivity, Dissolved Oxygen, pH Value, Salinity and Temperature

Brand Name/ Model No.: [YSI]/ [Professional Plus]

Serial No./ Equipment No.: [15G100349/JC024046]/ [HK1274]

Date of Calibration: 06-October-2022

### **GENERAL COMMENTS**

This report superseded any previous report(s) with same work order number.

Mr Chan Siu Ming, Vico Manager - Inorganics

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## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2238446

SUB-BATCH: (

DATE OF ISSUE: 07-Oct-2022

CLIENT: ALS TECHNICHEM (HK) PTY LTD

Equipment Type: Multifunctional Meter

Brand Name/ Model No.:

[YSI]/ [Professional Plus]

Serial No./ Equipment No.: [15G1

[15G100349/JC024046]/ [HK1274]

Date of Calibration: 06-October-2022 Date of Next Calibration: 06-January-2023

PARAMETERS:

Conductivity Method Ref: APHA (23rd edition), 2510B

Expected Reading (µS/cm)	Displayed Reading (μS/cm)	Tolerance (%)
146.9	152.4	+3.7
6667	6563	-1.6
12890	11992	-7.0
58670	54068	-7.8
	Tolerance Limit (%)	±10.0

Dissolved Oxygen

Method Ref: APHA (23rd edition), 45000: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.06	3.05	-0.01
5.12	5.07	-0.05
7.65	7.50	-0.15
	Tolerance Limit (mg/L)	±0.20

pH Value Method Ref: APHA (23rd edition), 4500H: B

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)
4.0	3.98	-0.02
7.0	6.92	-0.08
10.0	10.04	+0.04
	Tolerance Limit (pH unit)	±0.20

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Mr Chan Siu Ming, Vico Manager - Inorganics

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### REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2238446

SUB-BATCH: 0

DATE OF ISSUE: 07-Oct-2022

CLIENT: ALS TECHNICHEM (HK) PTY LTD

Equipment Type: Multifunctional Meter

Brand Name/ Model No.:

[YSI]/ [Professional Plus]

Serial No./ Equipment No.: [15G100349/JC024046]/ [HK1274]

Date of Calibration: 06-October-2022 Date of Next Calibration: 06-January-2023

PARAMETERS:

Salinity Method Ref: APHA (23rd edition), 2520B

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.00	
10	9.15	-8.5
20	18.55	-7.3
30	28.30	-5.7
	Tolerance Limit (%)	±10.0

Temperature

Method Ref: Section 6 of International Accreditation New Zealand Technical

Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

<u> </u>		
Expected Reading (°C)	Displayed Reading (°C)	Tolerance (°C)
11.00	11.30	+0.3
23.50	23.10	-0.4
38.50	38.00	-0.5
	Tolerance Limit (°C)	±2.0

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Mr Chan Siu Ming, Vico Manager - Inorganics

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