

### ALS Technichem (HK) Pty Ltd

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# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR IVAN LEUNG WORK ORDER: HK1923829

CLIENT: ALS TECHNICHEM (HK) PTY LTD

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

1-3 WING YIP STREET, LABORATORY: HONG KONG KWAI CHUNG, N.T. DATE RECEIVED: 05-Jun-2019 HONG KONG DATE OF ISSUE: 05-Jun-2019

### **COMMENTS**

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 ALS Hong Kong laboratory or quoted from relevant international standards.

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

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

Equipment Type: Multifunctional Meter

Brand Name: YSI

Model No.: Professional Plus

Serial No.: JC024046 Equipment No.: HK1274

Date of Calibration: 05-Jun-2019

#### NOTES

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

Mr Chan Siu Ming, Vico Manager - Inorganic

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## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK1923829

SUB-BATCH: (

DATE OF ISSUE: 05-Jun-2019

CLIENT: ALS TECHNICHEM (HK) PTY LTD

Equipment Type: Multifunctional Meter

Brand Name: YSI

Model No.: Professional Plus

Serial No.: JC024046 Equipment No.: HK1274

Date of Calibration: 05-Jun-2019 Date of Next Calibration: 05-Sep-2019

PARAMETERS:

Conductivity Method Ref: APHA (21st edition), 2510B

Expected Reading (µS/cm)	Displayed Reading (μS/cm)	Tolerance (%)
146.9	141.6	-3.6
6667	6150	-7.8
12890	12730	-1.2
58670	57983	-1.2
	Tolerance Limit (%)	±10.0

Dissolved Oxygen

Method Ref: APHA (21st edition), 4500-O: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
2.28	2.28	+0.00
5.26	5.22	-0.04
7.53	7.60	+0.07
	Tolerance Limit (mg/L)	±0.20

pH Value Method Ref: APHA (21st edition), 4500H:B

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)
4.0	4.09	+0.09
7.0	7.05	+0.05
10.0	9.90	-0.10
	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 - Inorganic

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SUB-BATCH: C

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CLIENT: ALS TECHNICHEM (HK) PTY LTD

Equipment Type: Multifunctional Meter

Brand Name: YSI

Model No.: Professional Plus

Serial No.: JC024046 Equipment No.: HK1274

Date of Calibration: 05-Jun-2019 Date of Next Calibration: 05-Sep-2019

PARAMETERS:

Salinity Method Ref: APHA (21st edition), 2520B

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.00	
10	9.84	-1.6
20	19.79	-1.1
30	30.58	+1.9
	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.

Expected Reading (°C)	Displayed Reading (°C)	Tolerance (°C)
9.5	9.7	+0.2
23.0	22.7	-0.3
40.5	39.7	-0.8
	Tolerance Limit (°C)	±2.0

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Mr Chan Siu Ming, Vico Manager - Inorganic

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