HONG KONG OFFSHORE LNG TERMINAL PROJECT Monthly Environmental Monitoring and Audit (EM&A) Report for August 2021
ANNEX H
CALIBRATION CERTIFICATES FOR MARINE WATER QUALITY MONITORING EQUIPMENT

www.erm.com Version: 0 Project No.: 0505354 Client: CAPCO, HK Electric, HKLTL 13 September 2021
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ALS Technichem (HK) Pty Ltd

HONG KONG

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T: +852 2610 1044 | F: +852 2610 2021

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

SAMUEL LAI **CONTACT: WORK ORDER:** HK2121764

CLIENT: EGS (ASIA) LTD

15/F., NORTH POINT INDUSTRIAL BUILDING, **ADDRESS:** SUB- BATCH:

499 KING'S ROAD,

NORTH POINT, HONG KONG DATE RECEIVED: 31- May- 2021

DATE OF ISSUE: 01-Jun-2021

LABORATORY:

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

Multifunctional Meter Equipment Type: Service Nature: Performance Check

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

Brand Name/ Model No.: [YSI]/ [6820- V2- M] Serial No./ Equipment No.: [09H101347]/ [MPP37]

Date of Calibration: 31- May- 2021

GENERAL COMMENTS

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

Mr Chan Siu Ming, Vico Manager - Inorganic

Ma Ali

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WORK ORDER: HK2121764

SUB- BATCH: 0

DATE OF ISSUE: 01- Jun- 2021 **CLIENT**: EGS (ASIA) LTD

Equipment Type: Multifunctional Meter Brand Name/ [YSI]/ [6820- V2- M]

Serial No./ Equipment No.: [09H101347]/ [MPP37]

Date of Calibration: 31- May- 2021

PARAMETERS:

Dissolved Oxygen Method Ref: APHA (21st edition), 45000: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
2.94	3.09	+ 0.15
5.27	5.39	+0.12
7.03	7.03	+0.00
	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	3.95	- 0.05
7.0	6.89	- 0.11
10.0	10.00	+0.00
	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

Ma Sig

WORK ORDER: HK2121764

SUB- BATCH: 0

DATE OF ISSUE: 01- Jun- 2021 **CLIENT**: EGS (ASIA) LTD

Equipment Type: Multifunctional Meter Brand Name/ [YSI]/ [6820- V2- M]

Serial No./ Equipment No.: [09H101347]/ [MPP37]

Date of Calibration: 31- May- 2021

PARAMETERS:

Turbidity Method Ref: APHA (21st edition), 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.0	
4	3.6	- 10.0
40	37.5	- 6.3
80	80.7	+0.9
	Tolerance Limit (%)	±10.0

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

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.04	
10	9.01	- 9.9
20	20.01	+ 0.1
30	29.04	- 3.2
	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)
11.8	12.15	+0.4
20.4	20.88	+ 0.5
39.9	40.25	+0.4
	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 - Inorganic



ALS Technichem (HK) Pty Ltd

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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

SAMUEL LAI **CONTACT: WORK ORDER:** HK2128567

CLIENT: EGS (ASIA) LTD

15/F., NORTH POINT INDUSTRIAL BUILDING, **ADDRESS:** SUB- BATCH:

499 KING'S ROAD, NORTH POINT, HONG KONG LABORATORY:

HONG KONG DATE RECEIVED: 15-Jul-2021 DATE OF ISSUE: 16-Jul-2021

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

Multifunctional Meter Equipment Type: Performance Check Service Nature:

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

Brand Name/ Model No.: [YSI]/ [6920V2-M] Serial No./ Equipment No.: [16L100579]/ [MPP56]

Date of Calibration: 15-July-2021

GENERAL COMMENTS

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

Ms. Lin Wai Yu, Iris

Assistant Manager - Inorganic

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WORK ORDER: HK2128567

SUB- BATCH: 0

DATE OF ISSUE: 16-Jul-2021 **CLIENT**: EGS (ASIA) LTD

Equipment Type: Multifunctional Meter Brand Name/

Model No.: [YSI]/ [6920V2-M]

Serial No./ Equipment No.: [16L100579]/ [MPP56]

Date of Calibration: 15-July-2021

PARAMETERS:

Dissolved Oxygen Method Ref: APHA (21st edition), 45000: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
2.82	2.81	-0.01
4.46	4.48	+0.02
7.30	7.31	+0.01
	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	3.96	-0.04
7.0	7.02	+0.02
10.0	9.91	-0.09
	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.

Ms. Lin Wai Yu, Iris

Assistant Manager - Inorganic

WORK ORDER: HK2128567

SUB- BATCH: (

DATE OF ISSUE: 16-Jul-2021 **CLIENT**: EGS (ASIA) LTD

Equipment Type: Brand Name/

Multifunctional Meter

Model No.:

[YSI]/[6920V2-M]

Serial No./ Equipment No.:

[16L100579]/[MPP56]

Date of Calibration:

15-July-2021

PARAMETERS:

Turbidity Method Ref: APHA (21st edition), 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.0	
4	4.0	+0.0
40	40.2	+0.5
80	80.0	+0.0
	Tolerance Limit (%)	±10.0

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

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.03	
10	10.63	+6.3
20	20.41	+2.1
30	29.76	-0.8
	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)
ı	10.0	10.06	+0.1
1	20.0	20.25	+0.3
1	40.5	39.09	-1.4
ı		Tolerance Limit (°C)	±2.0

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless

of equipment precision or significant figures.

Ms. Lin Wai Yu. Iris

Assistant Manager - Inorganic