### Annex G2

Calibration Certificates for Landfill Gas Monitoring Equipment



#### ALS Technichem (HK) Pty Ltd

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# **CERTIFICATE OF ANALYSIS**

CONTACT: MR IVAN LEUNG WORK ORDER: HK2314660

**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:** 18-Apr-2023 **DATE OF ISSUE:** 26-Apr-2023

#### **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 are compared against a calibrated secondary source.

The "Instrument Specification" 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 principles 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: Landfill Gas Analyser Service Nature: Performance Check

Scope: Carbon dioxide, Methane and Oxygen

Brand Name/ Model No.: GA5000

Serial No./Equipment No.: G507306 (HK1935)
Date of Calibration: 26 April, 2023

#### **GENERAL COMMENTS**

This report superseded any previous report(s) with same work order number.

Ms Chan Ka Yu, Karen Manager - Organics

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# **REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION**

Work Order: HK2314660

Sub-Batch: (

Client: ALS TECHNICHEM (HK) PTY LTD

**Date of Issue:** 26-Apr-2023

Equipment Type: Landfill Gas Analyser

Brand Name/ Model No.:

Equipment No.:

GA5000

Serial No./

G507306 (HK1935)

Date of Calibration: 26 April, 2023 Date of next Calibration: 26 May, 2023

**Parameters:** 

Methane

| Calibrated Gas Standard, % | Monitor Readout, % | % error | Instrument<br>Specification, % |
|----------------------------|--------------------|---------|--------------------------------|
| 0.0 (Nitrogen)             | 0.0                | 0.0     | ± 0.3                          |
| 1.0                        | 1.0                | 0.0     | ± 0.3                          |
| 10.0                       | 9.9                | -0.1    | ± 0.5                          |

#### **Carbon Dioxide**

| Calibrated Gas Standard, % | Monitor Readout, % | % error | Instrument<br>Specification, % |
|----------------------------|--------------------|---------|--------------------------------|
| 0.0 (Nitrogen)             | 0.0                | 0.0     | ± 0.3                          |
| 1.0                        | 1.0                | 0.0     | ± 0.3                          |
| 10.0                       | 10.0               | 0.0     | ± 0.5                          |

#### Oxygen

| Calibrated Gas Standard, % | Monitor Readout, % | % error | Instrument<br>Specification, % |
|----------------------------|--------------------|---------|--------------------------------|
| 0.0 (Nitrogen)             | 0.0                | 0.0     | ± 1.0                          |
| 23.5                       | 23.8               | 0.3     | ± 1.0                          |

Ms Chan Ka Yu, Karen Manager - Organics

## PROMAT (HK) LTD

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# **Calibration Certificate**

**Customer Name** 

Als Technichem (HK) Pty Ltd

Model

Gasurveyor 512-Leak

Serial

554846

Tested On

10 August 2022

Cal Expires

10 August 2023

Calibrated For

**METHANE** 

100% LEL Equivalent

4.4% by VOL

Leak Test

**PASS** 

**Overall Results** 

**PASS** 

#### Calibration Result

| Gas Applied | Range    | Reading | Calibrated | Result |
|-------------|----------|---------|------------|--------|
| Zero Air    | % LEL    | -0.1    | 0.0        | PASS   |
| Zero Air    | % GAS    | 0.0     | 0.0        | PASS   |
| Zero Air    | Semi-Int | 0.0     | 0          | PASS   |

| Gas Applied     | Range    | Reading | Calibrated | Result |
|-----------------|----------|---------|------------|--------|
| 30 PPM Methane  | Semi-Int | 11      | 30         | PASS   |
| 50% LEL Methane | % LEL    | 60.8    | 50.0       | PASS   |
| 99% VOL Methane | % GAS    | 105.8   | 98.9       | PASS   |

Calibrated By: