

45 %RH

# Al Takamul Company For Engineering Services

Quality Control – Iraq

#### **Certificate of Calibration** AlTakamul Yard, North Rumaila-South Iraq •Phone : +964 7810009138 • www.qualitycontrol-iraq.com • E-mail: op@qualitycontrol-Date of Issue: April 29, 2024 mul Com 1 of 1 REF NUMBER : By Contract RGE OC APPI AR : QC/JN/24/00195 Job No # : QC240429-02 CERTIFICATE NUMBER CUSTOMER DETAILS Honghua Oil & Gas Engineering Services Limited Name Address Basra, South Iraq HH029 Rig EOUIPMENT IDENTIFICATION AND SPECIFICATIONS Description : Multigas Detector Alarm Details Low High · Honeywell BW 19.5 23.5 Manufacturer Oxygen (O2) % · GasAlert Max XT II H2S-ppm 5 10 Model : MA222-000303 Serial Number CH4-%LEL 10 20 Type : Digital CO-ppm 35 200 : 25 PPM H2S 100 PPM CO Calibrated Range 18.0% O2 50% LEL Calibrated By : Asjad Rafiq Calibration Date : April 29, 2024 : July 28, 2024 **Calibration Due** ENVIRONMENTAL CONDITIONS DURING TEST 22.°C 2°C Ambient Temperature • ±

5 %RH

# **CALIBRATION METHOD**

A reference cylinder consisting of composition gases (O2, LEL, H2S, CO) is used , which are detected by gas detector by diffusion.

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### TRACEABILITY

Relative Humidity

The measurements made by QC Calibration & Testing Labs are traceable to NIST, vide CALGAZ Certificate of Analysis The measurements made by QC Calibration & Testing Labs, realize the physical units of measurements (SI), through its state of the art calibration standards that are controlled and maintained by QC.

### **REFERENCE EQUIPMENT USED :**

DESCRIPTION	SERIAL NO.	MAKE	GAS EXPIRY DATE
Multigas Calibration cylinder	950-106554	CALGAZ	21/08/2025

# CALIBRATION TEST RESULTS

Gas Name	Values of UUC	Values on Reference Standard	Error in Reading of UUC	Uncertainty of Measurement
Oxygen(O2)%	18.0	18.0	0	± 1
Methane(CH4) LEL	50	50	0	± 1
Carbon Monoxide(CO) ppm	100	100	0	± 1
Hydrogen Sulphide(H2S) ppm	25	25.0	0	± 1

#### Results :

The above Value Indicates That the Instrument complies with the Specified Maximum Permissible error tolerance. At The Time of Calibration. and ready for use.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with international practice.

# **DEVIATION FROM STANDARD METHOD :**

None

REMARK (S):

14001



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The results are as found (no adjustment done). The results are post adjustment.







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