

## Certificate of Calibration

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**Date of Issue:** April 29, 2024

|                    |                  |                              |
|--------------------|------------------|------------------------------|
| REF NUMBER         | : By Contract    | APPROVED BY LAB IN CHARGE QC |
| Job No #           | : QC/JN/24/00195 |                              |
| CERTIFICATE NUMBER | : QC240429-04    |                              |



### CUSTOMER DETAILS

Name: **Honghua Oil & Gas Engineering Services Limited**  
 Address: Basra, South Iraq  
 Rig: HH029

### EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description: **Multigas Detector**  
 Manufacturer: Honeywell BW  
 Model: GasAlert Max XT II  
 Serial Number: MA221-020442  
 Type: Digital  
 Calibrated Range: 25 PPM H2S, 100 PPM CO, 18.0% O2, 50% LEL  
 Calibrated By: Asjad Rafiq  
 Calibration Date: April 29, 2024  
**Calibration Due: July 28, 2024**

| Alarm Details | Low  | High |
|---------------|------|------|
| Oxygen (O2) % | 19.5 | 23.5 |
| H2S-ppm       | 5    | 10   |
| CH4-%LEL      | 10   | 20   |
| CO-ppm        | 35   | 200  |



### ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature: 22 °C ± 2 °C  
 Relative Humidity: 45 %RH ± 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.

### TRACEABILITY

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) :

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