

Certificate of Calibration

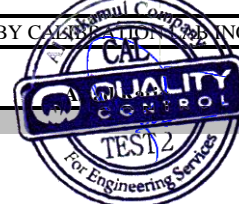
Al Takamul Yard, North Rumailah South Iraq

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Date of Issue:

August 13, 2024

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| | | |
|--------------------|------------------|---|
| REF NUMBER | : By Contract | APPROVED BY  INCHARGE QC |
| Job No # | : QC/JN/24/00322 | |
| CERTIFICATE NUMBER | : QC240813-04 | |

CUSTOMER DETAILS

Name: **Daqing Drilling Company Iraq**
 Address: DPAB Co.Ltd Iraq Branch Block-9
 Rig: DQ043(Mudlogging)

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description: **7 Fixed Gas System & Gases Monitoring Controller**

Type: Digital
 Calibrated Range: 25 PPM H2S 50% LEL
 Calibrated By: Hussein Alaa
 Calibration Date: August 13, 2024
 Calibration Due: **February 12, 2025**

REMARK (S) :

- 1 The results relate to measurements taken at nominal value only.
- 2 No adjustments were made prior to calibration.
- 3 No accessories were fitted.
- 4 Calibration were carried out for all the Sensors

| Serial Number | Sensor Type | Manufacturer | Location |
|---------------|-------------|--------------|---------------|
| 200312X-044 | H2S | OLDHAM | Shale shacker |
| 200312X-047 | H2S | OLDHAM | Rig Floor |
| 9006035 | H2S | OLDHAM | Rig Floor |
| 8227892 | H2S | OLDHAM | Cellar |
| D0410071AB | LEL | RAE SYSTEMS | Shale shacker |
| D0410189A6 | LEL | RAE SYSTEMS | Rig Floor |
| D0410025A3 | LEL | RAE SYSTEMS | Cellar |



| Alarm Details | Low | High |
|---------------|-----|------|
| H2S-ppm | 5 | 10 |
| CH4-%LEL | 10 | 20 |

Tested and found OK

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature : 28°C ± 2°C ± 2 Relative Humidity 40 %RH ± 10 %RH

CALIBRATION METHOD

Reference cylinders consisting of gases LEL & H2S is used , which are detected by gas detector by diffusion.

TRACEABILITY

The measurements made by Quality Control, 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 | Valid Until |
|--|------------|--------|--------------|
| Calibration Gas Cylinder (25PPM H2S) & (50% LEL) | 950-092876 | CALGAZ | 27-June-2025 |

CALIBRATION TEST RESULTS

| Applied Gas | Values of UUC | Values on Reference Standard | Error in Reading of UUC | Uncertainty of Measurement |
|---------------|---------------|------------------------------|-------------------------|----------------------------|
| H2S PPM | 25.1 | 25.0 | 0.1 | ± 1 |
| H2S PPM | 25.0 | 25.0 | 0.0 | ± 1 |
| H2S PPM | 24.8 | 25.0 | -0.2 | ± 1 |
| H2S PPM | 25.0 | 25.0 | 0.0 | ± 1 |
| Methane(LEL)% | 50.4 | 50 | 0.4 | ± 1 |
| Methane(LEL)% | 50.0 | 50 | 0.0 | ± 1 |
| Methane(LEL)% | 50.0 | 50 | 0.0 | ± 1 |

Calibration results were found to conform as per specified accuracy requirements. Above Instrument has **PASSED** its Calibration.