

Certificate of Calibration

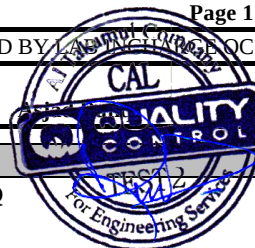
Al Takamul Yard, North Rumailah South Iraq

• Phone : +964 7810009138 • www.qualitycontrol-iraq.com • E-mail: op@qualitycontrol-iraq.com

Date of Issue: May 20, 2024

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REQUEST NUMBER	: By Contract	APPROVED BY	LABORATORY IN CHARGE
JOB NUMBER	: QC/JN/24/00217		
CERTIFICATE NUMBER	: QC240520-195		



CUSTOMER DETAILS

Name : HONGHUA OIL & GAS ENGINEERING SERVICES LTD. IRAQ
Address : Majnoon Oil Field , Basra - Iraq
Location : HH008

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Gauge
Manufacturer : WIKA
Model : NA
Serial Number : 900097D9
Type : Analog
Location : Choke Manifold
Range : 0 to 350 psi
Calibrated Range : 0 to 350 psi
Resolution : NA
Tolerance : ±1 % of Full Scale
As found : In Tolerance
Calibrated By : Asjad Rafiq
Calibration Date : May 20, 2024
Calibration Due : 19 May 2025
Last Calibration Date : NA



DEVIATION FROM STANDARD METHOD : None
REMARK (S) :

1. No adjustments were made prior to calibration.
2. Overload test was not performed.
3. No accessories were fitted.
4. Values were rounded in computation.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature : 25.0 ± 2°C **Humidity** : 44.0 ± 5 % RH **Atm. Pressure** : 1011.0 ± 10 hPa

CALIBRATION METHOD

The above equipment has been calibrated in accordance with Calibration Procedure QC/CP/R/03 Rev. 01

The above instrument has been calibrated in increasing and decreasing pressure mode using a Digital Pressure Calibrator as the reference standard having traceability to Internationally recognised standards.

REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	468802	AMETEK / XP2i	20 Nov, 2023	19 Nov, 2024

CALIBRATION TEST RESULTS

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Error Percentage
psi	psi	psi	±
0	0.00	0.00	0.0
50	50.19	-0.19	-0.1
100	100.24	-0.24	-0.1
200	200.80	-0.80	-0.2
300	301	-1.20	-0.3
350	351	-1.40	-0.4

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

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

Certificate of Calibration

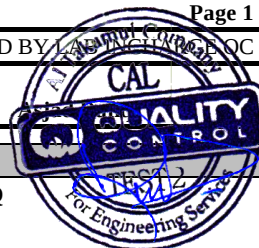
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REQUEST NUMBER	: By Contract	APPROVED BY	LABORATORY NO. QC
JOB NUMBER	: QC/JN/24/00217		
CERTIFICATE NUMBER	: QC240520-196		



CUSTOMER DETAILS

Name : HONGHUA OIL & GAS ENGINEERING SERVICES LTD. IRAQ
Address : Majnoon Oil Field , Basra - Iraq
Location : HH008

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Gauge
Manufacturer : MC
Model : NA
Serial Number : 1883080
Type : Analog
Location : Crane BOP
Range : 0 to 6000 psi
Calibrated Range : 0 to 6000 psi
Resolution : NA
Tolerance : ±1 % of Full Scale
As found : In Tolerance
Calibrated By : Asjad Rafiq
Calibration Date : May 20, 2024
Calibration Due : 19 May 2025
Last Calibration Date : NA



DEVIATION FROM STANDARD METHOD : None
REMARK (S) :

1. No adjustments were made prior to calibration.
2. Overload test was not performed.
3. No accessories were fitted.
4. Values were rounded in computation.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature : 25.0 ± 2°C **Humidity** : 44.0 ± 5 % RH **Atm. Pressure** : 1011.0 ± 10 hPa

CALIBRATION METHOD

The above equipment has been calibrated in accordance with Calibration Procedure QC/CP/R/03 Rev. 01

The above instrument has been calibrated in increasing and decreasing pressure mode using a Digital Pressure Calibrator as the reference standard having traceability to Internationally recognised standards.

REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	468802	AMETEK / XP2i	20 Nov, 2023	19 Nov, 2024

CALIBRATION TEST RESULTS

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Error Percentage
psi	psi	psi	±
0	0	0.00	0.0
1000	1012	-12.30	-0.2
3000	3017	-16.70	-0.3
4000	4021	-21.30	-0.4
5000	5025	-25.10	-0.4
6000	6029	-29.20	-0.5

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

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

Certificate of Calibration

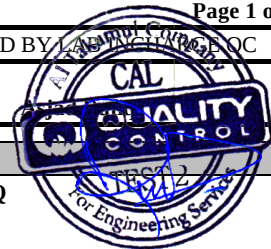
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REQUEST NUMBER : By Contract
JOB NUMBER : QC/JN/24/00217
CERTIFICATE NUMBER : QC240520-197

APPROVED BY:  CAL

CUSTOMER DETAILS

Name : HONGHUA OIL & GAS ENGINEERING SERVICES LTD. IRAQ
Address : Majnoon Oil Field , Basra - Iraq
Location : HH008

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Gauge
Manufacturer : WIKA
Model : NA
Serial Number : CAL-H008-29
Type : Analog
Location : Cascade Manifold
Range : 0 to 300 psi
Calibrated Range : 0 to 300 psi
Resolution : NA
Tolerance : ± 1 % of Full Scale
As found : In Tolerance
Calibrated By : Asjad Rafiq
Calibration Date : May 20, 2024
Calibration Due : 19 May 2025
Last Calibration Date : NA



DEVIATION FROM STANDARD METHOD : None
REMARK (S) :

1. No adjustments were made prior to calibration.
2. Overload test was not performed.
3. No accessories were fitted.
4. Values were rounded in computation.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature : $25.0 \pm 2^{\circ}\text{C}$ Humidity : $44.0 \pm 5\% \text{ RH}$ Atm. Pressure : $1011.0 \pm 10 \text{ hPa}$

CALIBRATION METHOD

The above equipment has been calibrated in accordance with Calibration Procedure QC/CP/R/03 Rev. 01

The above instrument has been calibrated in increasing and decreasing pressure mode using a Digital Pressure Calibrator as the reference standard having traceability to Internationally recognised standards.

REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	468802	AMETEK / XP2i	20 Nov, 2023	19 Nov, 2024

CALIBRATION TEST RESULTS

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Error Percentage
psi	psi	psi	$\pm$
0	0.00	0.00	0.0
50	50.17	-0.17	-0.1
100	100.22	-0.22	-0.1
150	150.81	-0.81	-0.3
200	200.70	-0.70	-0.2
300	301.00	-1.00	-0.3

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

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

Certificate of Calibration

Al Takamul Yard, North Rumailah South Iraq

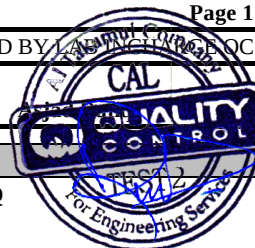
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REQUEST NUMBER : By Contract
JOB NUMBER : QC/JN/24/00217
CERTIFICATE NUMBER : QC240520-198

APPROVED BY: [Signature]



CUSTOMER DETAILS

Name : HONGHUA OIL & GAS ENGINEERING SERVICES LTD. IRAQ
Address : Majnoon Oil Field , Basra - Iraq
Location : HH008

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Gauge
Manufacturer : MC
Model : NA
Serial Number : CAL-H008-30
Type : Analog
Location : Wash Gun
Range : 0 to 25 Mpa
Calibrated Range : 0 to 25 Mpa
Resolution : NA
Tolerance : ± 1 % of Full Scale
As found : In Tolerance
Calibrated By : Asjad Rafiq
Calibration Date : May 20, 2024
Calibration Due : 19 May 2025
Last Calibration Date : NA



DEVIATION FROM STANDARD METHOD : None
REMARK (S) :

1. No adjustments were made prior to calibration.
2. Overload test was not performed.
3. No accessories were fitted.
4. Values were rounded in computation.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature : $25.0 \pm 2^{\circ}\text{C}$ Humidity : $44.0 \pm 5\% \text{ RH}$ Atm. Pressure : $1011.0 \pm 10 \text{ hPa}$

CALIBRATION METHOD

The above equipment has been calibrated in accordance with Calibration Procedure QC/CP/R/03 Rev. 01

The above instrument has been calibrated in increasing and decreasing pressure mode using a Digital Pressure Calibrator as the reference standard having traceability to Internationally recognised standards.

REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	468802	AMETEK / XP2i	20 Nov, 2023	19 Nov, 2024

CALIBRATION TEST RESULTS

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Error Percentage
Mpa	Mpa	Mpa	$\pm$
0	0.00	0.00	0.0
5	5.03	-0.03	-0.1
10	10.07	-0.07	-0.3
15	15.05	-0.05	-0.2
20	20.09	-0.09	-0.4
25	25.10	-0.10	-0.4

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

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

Certificate of Calibration

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REQUEST NUMBER	: By Contract	APPROVED BY	AL TAKAMUL COMPANY FOR ENGINEERING SERVICES
JOB NUMBER	: QC/JN/24/00217		
CERTIFICATE NUMBER	: QC240520-199		

CUSTOMER DETAILS

Name : HONGHUA OIL & GAS ENGINEERING SERVICES LTD. IRAQ
Address : Majnoon Oil Field , Basra - Iraq
Location : HH008

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Gauge
Manufacturer : DAHO
Model : NA
Serial Number : CAL-H008-31
Type : Analog
Location : Fire Tank
Range : 0 to 1.6 Mpa
Calibrated Range : 0 to 1.6 Mpa
Resolution : NA
Tolerance : ± 1 % of Full Scale
As found : In Tolerance
Calibrated By : Asjad Rafiq
Calibration Date : May 20, 2024
Calibration Due : 19 May 2025
Last Calibration Date : NA



DEVIATION FROM STANDARD METHOD : None
REMARK (S) :

1. No adjustments were made prior to calibration.
2. Overload test was not performed.
3. No accessories were fitted.
4. Values were rounded in computation.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature : 25.0 $\pm$ 2°C Humidity : 44.0 $\pm$ 5 % RH Atm. Pressure : 1011.0 $\pm$ 10 hPa

CALIBRATION METHOD

The above equipment has been calibrated in accordance with Calibration Procedure QC/CP/R/03 Rev. 01

The above instrument has been calibrated in increasing and decreasing pressure mode using a Digital Pressure Calibrator as the reference standard having traceability to Internationally recognised standards.

REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	468802	AMETEK / XP2i	20 Nov, 2023	19 Nov, 2024

CALIBRATION TEST RESULTS

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Error Percentage
Mpa	Mpa	Mpa	$\pm$
0	0.00	0.00	0.0
0.3	0.30	0.00	-0.1
0.6	0.60	0.00	-0.3
1.0	1.00	0.00	-0.1
1.2	1.21	-0.01	-0.4
1.6	1.61	0.00	-0.3

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

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

Certificate of Calibration

Al Takamul Yard, North Rumailah South Iraq

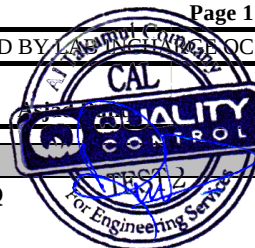
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Date of Issue: May 20, 2024

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REQUEST NUMBER : By Contract
JOB NUMBER : QC/JN/24/00217
CERTIFICATE NUMBER : QC240520-200

APPROVED BY: [Signature]



CUSTOMER DETAILS

Name : HONGHUA OIL & GAS ENGINEERING SERVICES LTD. IRAQ
Address : Majnoon Oil Field , Basra - Iraq
Location : HH008

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Gauge
Manufacturer : DAHO
Model : NA
Serial Number : CAL-H008-32
Type : Analog
Location : Fire Tank
Range : 0 to 600 psi
Calibrated Range : 0 to 600 psi
Resolution : NA
Tolerance : ± 1 % of Full Scale
As found : In Tolerance
Calibrated By : Asjad Rafiq
Calibration Date : May 20, 2024
Calibration Due : 19 May 2025
Last Calibration Date : NA



DEVIATION FROM STANDARD METHOD : None
REMARK (S) :

1. No adjustments were made prior to calibration.
2. Overload test was not performed.
3. No accessories were fitted.
4. Values were rounded in computation.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature : $25.0 \pm 2^{\circ}\text{C}$ Humidity : $44.0 \pm 5\% \text{ RH}$ Atm. Pressure : $1011.0 \pm 10 \text{ hPa}$

CALIBRATION METHOD

The above equipment has been calibrated in accordance with Calibration Procedure QC/CP/R/03 Rev. 01

The above instrument has been calibrated in increasing and decreasing pressure mode using a Digital Pressure Calibrator as the reference standard having traceability to Internationally recognised standards.

REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	468802	AMETEK / XP2i	20 Nov, 2023	19 Nov, 2024

CALIBRATION TEST RESULTS

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Error Percentage
psi	psi	psi	$\pm$
0	0	0.00	0.0
100	101	-0.80	-0.1
300	301	-1.10	-0.2
400	402	-1.50	-0.3
500	501	-1.30	-0.2
600	602	-1.80	-0.3

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

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