Halliburton TSS Yard, Western Buriesia, Oil Street, District 29, Zubair-South Iraq,

Date of Issue : April 5, 2024

HALL-TSS-4-5-24-01

Work Order Number: 326418683

APPROVED BY LAB INCHARGE HALL

**DEVIATION FROM STANDARD METHOD:** 

REMARK (S):

**Ahmed Fouad** 

Page 1

None

1. No adjustments were made prior to calibration.

2. Overload test was not performed.

4. Values were rounded in computation.

0

3. No accessories were fitted.

**CUSTOMER DETAILS** 

Name

Certifcate Number :

: TSS Halliburton Worldwide IRAQ

Address : Western Burjesia, Oil Street, District 29, Zubair-South Iraq

**EQUIPMENT IDENTIFICATION AND SPECIFICATIONS** 

Description : SSV Valve Pressure Gauge
Manufacturer : MC DANIEL

Manufacturer : MC DANIEL Model : 316 S.S TUBE

Equip Serial No : ESD Panel 12004800-1

Type :

 $\begin{array}{cccc} \text{Range} & : 0 & \text{to} \\ \text{Calibrated Range} & : 0 & \text{to} \end{array}$ 

Readability : 100 PSI
Calibrated By : Muntadher Nazar
Calibration Date : April 5, 2024
Calibration Due : April 4, 2025

Calibration Site : Halliburton TSS Yard. Burjesia Area Iraq.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature :  $22.5 \pm 1^{\circ}$ C Humidity:  $40.6 \pm 5$  % RH Atm. Pressure  $1013.6 \pm 10$  hPa

**CALIBRATION METHOD** 

The above equipment has been calibrated in accordance with DKD R6-1

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.

#### TRACEABILITY

The measurements made by TSS Halliburton Labs are traceable to TPI Certificate #

 $The \ measurements\ made\ by\ TSS\ Halliburton\ Labs,\ realize\ the\ physical\ units\ of\ measurements\ (SI),\ through\ its\ state\ of\ the\ art$ 

calibration standards that are controlled and maintained by TSS Halliburton.

DESCRIPTION	SERIAL NO.	SOURCE OF TRACEABILITY
Digital Pressure Gauge	468080	QC Basra IRAQ
CALIBRATION TEST RESU	LTS	

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Expanded Uncertainty (U)
PSI	PSI	PSI	± PSI
0	0	0.00	100
1000	1000	-0.30	100
3000	3000	0.00	100
6000	6001	-0.80	100
9000	9001	-0.60	100
12000	12000	0.00	100
15000	15000	0.00	100

Halliburton TSS Yard, Western Buriesia, Oil Street, District 29, Zubair-South Irag,

April 5, 2024 Date of Issue APPROVED BY LAB INCHARGE HALL Page 1 Certifcate Number : HALL-TSS-4-5-24-02 **Ahmed Fouad** 

Work Order Number: 326418683

**CUSTOMER DETAILS** 

Name : TSS Halliburton Worldwide IRAQ

Address : Western Burjesia, Oil Street, District 29, Zubair-South Iraq

**EQUIPMENT IDENTIFICATION AND SPECIFICATIONS** 

ATION AND SPECIFICATIONS

: SSV Valve HYD Pressure Gauge ce Well Tess Description Manufacturer : MC DANIEL

: 316 S.S TUBE Model

: ESD Panel 12004800-2 Equip Serial No

Type

: 0 Range to Calibrated Range : 0 to

Readability : 100 PSI : Muntadher Nazar Calibrated By Calibration Date : April 5, 2024

: April 4, 2025 Calibration Site : Halliburton TSS Yard. Burjesia Area Iraq.

**ENVIRONMENTAL CONDITIONS DURING TEST** 

22.5 ± 1°C 1013.6 ± 10 hPa Ambient Temperature : Humidity: 40.6 ± 5 % RH Atm. Pressure

15000 LPSP

**CALIBRATION METHOD** 

The above equipment has been calibrated in accordance with DKD R6-1

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.

#### TRACEABILITY

Calibration Due

The measurements made by TSS Halliburton Labs are traceable to TPI Certificate #

SOURCE OF TRACEABILITY

QC Basra IRAQ

1. No adjustments were made prior to calibration.

2. Overload test was not performed.

4. Values were rounded in computation.

3. No accessories were fitted.

None

DEVIATION FROM STANDARD METHOD:

NREMARK (S):

The measurements made by TSS Halliburton Labs, realize the physical units of measurements (SI), through its state of the art calibration standards that are controlled and maintained by TSS Halliburton.

SERIAL NO.

468080

#### **REFERENCE EQUIPMENT USED:**

DESCRIPTION

Digital Pressure Gauge

CALIBRATION TEST RESULTS				
Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Expanded Uncertainty (U)	
PSI	PSI	PSI	± PSI	
0	0	0.00	100	
1000	1000	0.00	100	
3000	3000	0.00	100	
6000	6001	-0.70	100	
9000	9000	0.00	100	
12000	12000	0.00	100	
15000	15000	0.00	100	

Halliburton TSS Yard. Western Burjesia, Oil Street, District 29, Zubair-South Iraq.

**Date of Issue** : April 5, 2024

: HALL-TSS-4-5-24-03

Work Order Number: 326418683

APPROVED BY LAB INCHARGE HALL

Page 1

**Ahmed Fouad** 

DEVIATION FROM STANDARD METHOD:

REMARK (S):

**CUSTOMER DETAILS** 

Certifcate Number

Name : TSS Halliburton Worldwide IRAQ

Address : Western Burjesia, Oil Street, District 29, Zubair-South Iraq

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS Well Tes

Description : MASTER SYSTEM HYD VALVE

Manufacturer : MC DANIEL
Model : 316 S.S TUBE

Equip Serial No : **ESD Panel 12004800-3** 

Type :

Range : 0 to Calibrated Range : 0 to

Readability : 20 PSI
Calibrated By Muntadher Nazar
Calibration Date : April 5, 2024
Calibration Due : April 4, 2025

Calibration Site Halliburton TSS Yard. Burjesia Area Iraq.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature :  $22.5 \pm 1^{\circ}$ C Humidity:  $40.6 \pm 5 \%$  RH Atm. Pressure  $1013.6 \pm 10$  hPa

6000 PSI

**CALIBRATION METHOD** 

The above equipment has been calibrated in accordance with DKD R6-1

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.

### TRACEABILITY

The measurements made by TSS Halliburton Labs are traceable to TPI Certificate #

0

SOURCE OF TRACEABILITY

1. No adjustments were made prior to calibration.

2. Overload test was not performed.

4. Values were rounded in computation.

3. No accessories were fitted.

The measurements made by TSS Halliburton Labs, realize the physical units of measurements (SI), through its state of the art calibration standards that are controlled and maintained by TSS Halliburton.

SERIAL NO.

### REFERENCE EQUIPMENT USED:

DESCRIPTION

Digital Pressure Gauge	468080		QC Basra IRAQ			
CALIBRATION TEST RE	CALIBRATION TEST RESULTS					
Measured Value Unit Under Calibi (M)		Ref. Standard Values (A)	Deviation (D=M-A)	Expanded Uncertainty (U)		
PSI		PSI	PSI	± PSI		
0		0	0.00	20		
1000		1000	-0.30	20		

2000 2001 -1.20 20 3000 3001 -1.20 20 4000 4001 -1.00 20 5000 5000 0.00 20 6000 6006 -6.00 20

Halliburton TSS Yard. Western Burjesia, Oil Street, District 29, Zubair-South Iraq.

Date of Issue : April 5, 2024

HALL-TSS-4-5-24-04

Work Order Number: 326418683

APPROVED BY LAB INCHARGE HALL

**DEVIATION FROM STANDARD METHOD:** 

REMARK (S):

Page 1

**Ahmed Fouad** 

**CUSTOMER DETAILS** 

Certifcate Number

Name : TSS Halliburton Worldwide IRAO

Address : Western Burjesia, Oil Street, District 29, Zubair-South Iraq

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS Well To

Description : Master Valve Perssure Gauge

Manufacturer : MC DANIEL
Model : 316 S.S TUBE

Equip Serial No : **ESD Panel 12004800-4** 

Type

Range : 0 to Calibrated Range : 0 to

Readability : 20 PSI
Calibrated By Muntadher Nazar
Calibration Date : April 5, 2024
Calibration Due : April 4, 2025

Calibration Site Halliburton TSS Yard. Burjesia Area Iraq.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature :  $22.5 \pm 1^{\circ}$ C Humidity :  $40.6 \pm 5$  % RH Atm. Pressure  $1013.6 \pm 10$  hPa

6000 PSI

**CALIBRATION METHOD** 

The above equipment has been calibrated in accordance with DKD R6-1

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.

#### TRACEABILITY

The measurements made by TSS Halliburton Labs are traceable to TPI Certificate #

0

1. No adjustments were made prior to calibration.

2. Overload test was not performed.

4. Values were rounded in computation.

3. No accessories were fitted.

The measurements made by TSS Halliburton Labs, realize the physical units of measurements (SI), through its state of the art calibration standards that are controlled and maintained by TSS Halliburton.

DESCRIPTION	SERIAL NO.	SOURCE OF TRACEABILITY			
Digital Pressure Gauge	468080	QC Basra IRAQ			
<b>CALIBRATION TEST RE</b>	CALIBRATION TEST RESULTS				

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Expanded Uncertainty (U)
PSI	PSI	PSI	± PSI
0	0	0.00	20
1000	1000	-0.10	20
2000	2000	-0.20	20
3000	3000	-0.30	20
4000	4000	-0.40	20
5000	5001	-0.50	20
6000	6001	-0.60	20

Halliburton TSS Yard. Western Burjesia, Oil Street, District 29, Zubair-South Iraq.

Date of Issue April 5, 2024

HALL-TSS-4-5-24-05 Certifcate Number

Work Order Number: 326418683 APPROVED BY LAB INCHARGE HALL

**Ahmed Fouad** 

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**DEVIATION FROM STANDARD METHOD:** 

REMARK (S):

#### **CUSTOMER DETAILS**

Name : TSS Halliburton Worldwide IRAQ

: Western Burjesia, Oil Street, District 29, Zubair-South Iraq Address

EQUIPMENT IDENTIFICATION AND SPECIFICATION & IL Test

Description : Air Supply Preesure

Manufacturer : MC DANIEL : 316 S.S TUBE Model

: ESD Panel 12004800-Equip Serial No

Type

Range : 0 to : 0 Calibrated Range to Readability : 5 PSI

Muntadher Nazar Calibrated By : April 5, 2024 Calibration Date : April 4, 2025 Calibration Due

Halliburton TSS Yard. Burjesia Area Iraq. Calibration Site

ENVIRONMENTAL CONDITIONS DURING TEST

 $22.5 \pm 1^{\circ}C$ Humidity:  $40.6 \pm 5 \% RH$ Atm. Pressure 1013.6 ± 10 hPa Ambient Temperature

#### **CALIBRATION METHOD**

The above equipment has been calibrated in accordance with DKD R6-1

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.

### **TRACEABILITY**

The measurements made by TSS Halliburton Labs are traceable to TPI Certificate #

1. No adjustments were made prior to calibration.

2. Overload test was not performed.

4. Values were rounded in computation.

3. No accessories were fitted.

The measurements made by TSS Halliburton Labs, realize the physical units of measurements (SI), through its state of the art calibration standards that are controlled and maintained by TSS Halliburton.

DESCRIPTION SERIAL NO.		SOURCE OF TRACEABILITY		
Digital Pressure Gauge 468080		QC Basra IRAQ		
CALIBRATION TEST RESULTS				
Measured Values Unit Under Calibra	i R	ef. Standard Values (A)	Deviation (D=M-A)	Expanded Uncertainty (U)

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Expanded Uncertainty (U)
PSI	PSI	PSI	± PSI
30	30	0.00	5
60	60	0.00	5
90	90	0.00	5
120	120	0.00	5
150	150	0.00	5
175	175	0.00	5
200	200	0.00	5

Halliburton TSS Yard. Western Burjesia, Oil Street, District 29, Zubair-South Iraq.

Date of Issue April 5, 2024

HALL-TSS-4-5-24-06

Work Order Number: 326418683 APPROVED BY LAB INCHARGE HALL

Page 1

**Ahmed Fouad** 

REMARK (S):

VIATION FROM STANDARD METHOD:

2. Overload test was not performed.

4. Values were rounded in computation.

3. No accessories were fitted.

**CUSTOMER DETAILS** 

Certifcate Number

Name : TSS Halliburton Worldwide IRAQ

: Western Burjesia, Oil Street, District 29, Zubair-South Iraq Address

Description : MASTER VALVE AIR GAUGE

Manufacturer : MC DANIEL : 316 S.S TUBE Model

: ESD Panel 12004800-6 Equip Serial No

Type

Range : 0 to : 0 Calibrated Range to

Readability : 5 PSI Muntadher Nazar Calibrated By

: April 5, 2024 Calibration Date : April 4, 2025 Calibration Due

Halliburton TSS Yard. Burjesia Area Iraq. Calibration Site

ENVIRONMENTAL CONDITIONS DURING TEST

 $22.5 \pm 1^{\circ}C$ Humidity:  $40.6 \pm 5 \% RH$ Atm. Pressure 1013.6 ± 10 hPa Ambient Temperature

160 PSI

**CALIBRATION METHOD** 

The above equipment has been calibrated in accordance with DKD R6-1

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.

### **TRACEABILITY**

The measurements made by TSS Halliburton Labs are traceable to TPI Certificate #

1. No adjustments were made prior to calibration.

The measurements made by TSS Halliburton Labs, realize the physical units of measurements (SI), through its state of the art calibration standards that are controlled and maintained by TSS Halliburton.

DESCRIPTION	SERIAL NO.	SOURCE OF TRACEABILITY		
Digital Pressure Gauge	468080	QC Basra IRAQ		
CALIBRATION TEST RESULTS				

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Expanded Uncertainty (U)
PSI	PSI	PSI	± PSI
20	20	0.00	5
40	40	0.00	5
60	60	0.00	5
80	80	0.00	5
100	100	0.00	5
130	130	0.00	5
160	160	0.00	5

Halliburton TSS Yard. Western Burjesia, Oil Street, District 29, Zubair-South Iraq.

Date of Issue April 5, 2024 Certifcate Number

HALL-TSS-4-5-24-07

Work Order Number: 326418683 APPROVED BY LAB INCHARGE HALL

Page 1

**Ahmed Fouad** 

TRUE TO NO EVIATION FROM STANDARD METHOD:

REMARK (S):

**CUSTOMER DETAILS** 

Name : TSS Halliburton Worldwide IRAQ

: Western Burjesia, Oil Street, District 29, Zubair-South Iraq Address

EQUIPMENT IDENTIFICATION AND SPECIFICATION See Well Tes

Description : SSV VALVE AIR GAUGE

Manufacturer : MC DANIEL : 316 S.S TUBE Model

: ESD Panel 12004800-7 Equip Serial No

Type

Range : 0 to : 0 Calibrated Range to

Readability : 5 PSI Muntadher Nazar Calibrated By

: April 5, 2024 Calibration Date : April 4, 2025 Calibration Due

Halliburton TSS Yard. Burjesia Area Iraq. Calibration Site

ENVIRONMENTAL CONDITIONS DURING TEST

 $22.5 \pm 1^{\circ}C$ Humidity:  $40.6 \pm 5 \% RH$ Atm. Pressure 1013.6 ± 10 hPa Ambient Temperature

160 PSI

**CALIBRATION METHOD** 

The above equipment has been calibrated in accordance with DKD R6-1

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.

### **TRACEABILITY**

The measurements made by TSS Halliburton Labs are traceable to TPI Certificate #

1. No adjustments were made prior to calibration.

2. Overload test was not performed.

4. Values were rounded in computation.

3. No accessories were fitted.

The measurements made by TSS Halliburton Labs, realize the physical units of measurements (SI), through its state of the art calibration standards that are controlled and maintained by TSS Halliburton.

DESCRIPTION	SERIAL NO.	SOURCE OF TRACEABILITY		
Digital Pressure Gauge	468080	QC Basra IRAQ		
CALIBRATION TEST RESULTS				

Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Expanded Uncertainty (U)
PSI	PSI	PSI	± PSI
20	20	0.00	5
40	40	0.00	5
60	60	0.00	5
80	80	0.10	5
100	100	0.00	5
130	130	0.00	5
160	160	-0.10	5

Halliburton TSS Yard. Western Burjesia, Oil Street, District 29, Zubair-South Iraq.

Date of Issue : April 5, 2024

Certifcate Number : HALL-TSS-4-5-24-08

Work Order Number: 326418683

APPROVED BY LAB INCHARGE HALL

Page 1

**Ahmed Fouad** 

**DEVIATION FROM STANDARD METHOD:** 

REMARK (S):

**CUSTOMER DETAILS** 

Name : TSS Halliburton Worldwide IRAQ

Address : Western Burjesia, Oil Street, District 29, Zubair-South Iraq

EQUIPMENT IDENTIFICATION AND SPECIFICATION &CE Well

Description : **Pressure Gauge**Manufacturer : MC DANIEL
Model : 316 S.S TUBE

Equip Serial No : **ESD Panel 12004800-8** 

Type

Range : 0 to
Calibrated Range : 0 to
Readability : 1 PSI

Calibrated By Muntadher Nazar
Calibration Date : April 5, 2024
Calibration Due : April 4, 2025

Calibration Site Halliburton TSS Yard. Burjesia Area Iraq.

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature :  $22.5 \pm 1^{\circ}$ C Humidity :  $40.6 \pm 5$  % RH Atm. Pressure  $1013.6 \pm 10$  hPa

**CALIBRATION METHOD** 

The above equipment has been calibrated in accordance with DKD R6-1

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.

### TRACEABILITY

The measurements made by TSS Halliburton Labs are traceable to TPI Certificate #

0

1. No adjustments were made prior to calibration.

2. Overload test was not performed.

4. Values were rounded in computation.

3. No accessories were fitted.

The measurements made by TSS Halliburton Labs, realize the physical units of measurements (SI), through its state of the art calibration standards that are controlled and maintained by TSS Halliburton.

DESCRIPTION	SERIAL NO.	SOURCE OF TRACEABILITY
Digital Pressure Gauge	468080	QC Basra IRAQ
Bigital Fressare Sauge		\$0 Dubin 11 1 1

CALIBRATION TEST RESULTS					
Measured Values on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Expanded Uncertainty (U)		
PSI	PSI	PSI	± PSI		
0	0	0.00	1		
30	30	0.00	1		
60	60	0.00	1		
90	90	0.00	1		
120	120	0.00	1		
140	140	0.00	1		
160	160	0.00	1		



# Al Takamul Company For Engineering Services Quality Control – Iraq

### 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: April 5, 2024 Page 1 of 1

WORK ORDER NUMBER : 326418683 CUSTOMER DETAILS

JOB NUMBER : QC/JN/24/00194 Name : Halliburton Worldwide IRAQ (TSS)

CERTIFICATE NUMBER : QC240405-01 Address : Western Burjesia, Oil Street, District Zubair-South Iraq

### EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Relief Valve

Manufacturer : BIS Valves Ltd.

Model : NA

 Serial Number
 : 12004800-9

 Location
 : ESD#12004800

 Set/Pressure
 : 4000 psi

 Tolerance
 : ± 3%

 As Found
 : Good

As Found : Good
Calibration Date : April 5, 2024
Calibration Due : 04 April 2025

Last Calibration : NA

### ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature :  $22.0 \pm 2^{\circ}$ C Humidity:  $30.0 \pm 5$  % RH Atm. Pressure  $1011.0 \pm 10$  hPa

### CALIBRATION METHOD

Standard Method API 527 was used to test the unit under test. Test pressure was applied on inlet of unit under test and test was

repeated 3 times. Identical repeatings were carried out as recommended in used standard

#### REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	1505119397	Sino Instruments / HS108	20 Nov, 2023	19 Nov, 2024

### CALIBRATION TEST RESULTS

Set Pressure on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Tolerance Limit
psi	psi	psi	± psi
4000	3986	14	120.0

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

**DEVIATION FROM STANDARD METHOD:** None

REMARK (S):

 $\ensuremath{\square}$  The results are as found (no adjustment done).

☐ The results are post adjustment.

CALIBRATED BY	REVIWED & APPROMUD BY, R INCHARGE	CLIENT
Ahol	CAL PARTIES OF THE PA	
Mahdi Halim	LAB INCHARGE Asjad Rafiq	















Address: North Rumaila, Al Takamul Yard



### Al Takamul Company For Engineering Services Quality Control - Iraq

### Certificate of Calibration

Al Takamul Yard, North Rumailah South Iraq

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April 5, 2024 Date of Issue: Page 1 of 1

WORK ORDER NUMBER : 326418683 **CUSTOMER DETAILS** JOB NUMBER : QC/JN/24/00194 Name : Halliburton Worldwide IRAQ (TSS)

: QC240405-02 CERTIFICATE NUMBER : Western Burjesia, Oil Street, District Zubair-South Iraq Address

### EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Relief Valve

: BIS Valves Ltd. Manufacturer

: NA Model

Serial Number : 12004800-10 Location : ESD#12004800 Set/Pressure · 4000 psi Tolerance : ± 3% As Found : Good : April 5, 2024 Calibration Date

Last Calibration : NA

### ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature 22.0 ± 2°C  $1011.0 \pm 10 \text{ hPa}$ Humidity:  $30.0 \pm 5 \% RH$ Atm. Pressure

### **CALIBRATION METHOD**

**Calibration Due** 

Standard Method API 527 was used to test the unit under test. Test pressure was applied on inlet of unit under test and test was

repeated 3 times. Identical repeatings were carried out as recommended in used standard

: 04 April 2025

#### REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	1505119397	Sino Instruments / HS108	20 Nov, 2023	19 Nov, 2024

### CALIBRATION TEST RESULTS

Set Pressure on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Tolerance Limit
psi	psi	psi	± psi
4000	4008	-8	120.0

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

**DEVIATION FROM STANDARD METHOD:** None

REMARK (S):

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

☐ The results are post adjustment.

CALIBRATED BY	REVIWED & APPROMUDENTAL INCHARGE	CLIENT
Mahal	CAL  CONTROL  CONTROL	
Mahdi Halim	LAB INCHARGE Engineering Asjad Rafiq	

















Address: North Rumaila, Al Takamul Yard



# Al Takamul Company For Engineering Services Quality Control – Iraq

### Certificate of Calibration

Al Takamul Yard, North Rumailah South Iraq

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Date of Issue: April 5, 2024 Page 1 of 1

WORK ORDER NUMBER : 326418683 CUSTOMER DETAILS

JOB NUMBER : QC/JN/24/00194 Name : Halliburton Worldwide IRAQ (TSS)

CERTIFICATE NUMBER : QC240405-03 Address : Western Burjesia, Oil Street, District Zubair-South Iraq

### EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Relief Valve

Manufacturer : BIS Valves Ltd.

Model : NA

 Serial Number
 : 12004800-11

 Location
 : ESD#12004800

 Set/Pressure
 : 10000 psi

 Tolerance
 : ± 3%

 As Found
 : Good

Calibration Date : April 5, 2024
Calibration Due : 04 April 2025

Last Calibration : NA

### ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature :  $22.0 \pm 2^{\circ}\text{C}$  Humidity:  $30.0 \pm 5\%$  RH Atm. Pressure  $1011.0 \pm 10$  hPa

### **CALIBRATION METHOD**

Standard Method API 527 was used to test the unit under test. Test pressure was applied on inlet of unit under test and test was

repeated 3 times. Identical repeatings were carried out as recommended in used standard

#### REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	1505119397	Sino Instruments / HS108	20 Nov, 2023	19 Nov, 2024

### CALIBRATION TEST RESULTS

Set Pressure on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Tolerance Limit
psi	psi	psi	± psi
10000	10017	-17	300.0

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

**DEVIATION FROM STANDARD METHOD:** None

REMARK (S):

 $\ensuremath{\square}$  The results are as found (no adjustment done).

☐ The results are post adjustment.

CALIBRATED BY	REVIWED & APPROMED BY DOOR INCHARGE	CLIENT
Mahah	CAL CONTROL CONTROL	
Mahdi Halim	LAB INCHARGE Engineering Asjad Rafiq	















Address: North Rumaila, Al Takamul Yard



### Al Takamul Company For Engineering Services Quality Control - Iraq

: Western Burjesia, Oil Street, District Zubair-South Iraq

### Certificate of Calibration

Al Takamul Yard, North Rumailah South Iraq

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April 5, 2024 Date of Issue: Page 1 of 1

WORK ORDER NUMBER : 326418683 **CUSTOMER DETAILS** JOB NUMBER : QC/JN/24/00194 Name : Halliburton Worldwide IRAQ (TSS)

: QC240405-04 CERTIFICATE NUMBER

### EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Address

Description : Pressure Relief Valve

: BIS Valves Ltd. Manufacturer

: NA Model

Serial Number : 12004800-12 Location : ESD#12004800 Set/Pressure : 10000 psi Tolerance : ± 3% As Found : Good

: April 5, 2024 Calibration Date : 04 April 2025 **Calibration Due** 

Last Calibration : NA

### ENVIRONMENTAL CONDITIONS DURING TEST

22.0 ± 2°C  $1011.0 \pm 10 \text{ hPa}$ Ambient Temperature Humidity:  $30.0 \pm 5 \% RH$ Atm. Pressure

### **CALIBRATION METHOD**

Standard Method API 527 was used to test the unit under test. Test pressure was applied on inlet of unit under test and test was

repeated 3 times. Identical repeatings were carried out as recommended in used standard

#### REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	1505119397	Sino Instruments / HS108	20 Nov, 2023	19 Nov, 2024

### CALIBRATION TEST RESULTS

Set Pressure on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Tolerance Limit
psi	psi	psi	± psi
10000	10059	-59	300.0

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

**DEVIATION FROM STANDARD METHOD:** None

REMARK (S):

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

☐ The results are post adjustment.

CALIBRATED BY	REVIWED & APPROMUD BY, R INCHARGE	CLIENT
Ahol	CAL PARTIES OF THE PA	
Mahdi Halim	LAB INCHARGE Asjad Rafiq	















Address: North Rumaila, Al Takamul Yard



### Al Takamul Company For Engineering Services Quality Control - Iraq

### Certificate of Calibration

Al Takamul Yard, North Rumailah South Iraq

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April 5, 2024 Date of Issue: Page 1 of 1

WORK ORDER NUMBER **CUSTOMER DETAILS** JOB NUMBER : QC/JN/24/00194 Name : Halliburton Worldwide IRAQ (TSS)

: 326418683

: QC240405-05 CERTIFICATE NUMBER : Western Burjesia, Oil Street, District Zubair-South Iraq Address

### EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : Pressure Relief Valve

: BIS Valves Ltd. Manufacturer

: NA Model

Serial Number : 12004800-13 Location : ESD#12004800 Set/Pressure : 175 psi Tolerance : ± 3%

As Found : Good : April 5, 2024 Calibration Date : 04 April 2025 **Calibration Due** 

Last Calibration : NA

### ENVIRONMENTAL CONDITIONS DURING TEST

22.0 ± 2°C  $1011.0 \pm 10 \text{ hPa}$ Ambient Temperature Humidity:  $30.0 \pm 5 \% RH$ Atm. Pressure

### **CALIBRATION METHOD**

Standard Method API 527 was used to test the unit under test. Test pressure was applied on inlet of unit under test and test was

repeated 3 times. Identical repeatings were carried out as recommended in used standard

#### REFERENCE EQUIPMENT USED

DESCRIPTION	SERIAL NO.	MAKE / MODEL	CALIBRATION DATE	CALIBRATION DUE DATE
Digital Pressure Gauge	1505119397	Sino Instruments / HS108	20 Nov, 2023	19 Nov, 2024

### CALIBRATION TEST RESULTS

Set Pressure on Unit Under Calibration (M)	Ref. Standard Values (A)	Deviation (D=M-A)	Tolerance Limit
psi	psi	psi	± psi
175	177.8	-2.8	5.3

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

**DEVIATION FROM STANDARD METHOD:** None

REMARK (S):

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

☐ The results are post adjustment.

CALIBRATED BY	REVIWED & APPROMUD BY, R INCHARGE	CLIENT
Ahol	CAL PARTIES OF THE PA	
Mahdi Halim	LAB INCHARGE Asjad Rafiq	

















Address: North Rumaila, Al Takamul Yard