

AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq



MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-001
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	GATE VALVE: 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-1-1

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

(a) Normal condition: Large reflection echo / Detector, Target. Small reflection echo / Surface.

(b) Corroded condition: Corroded condition. Reflection echo become wide small by diffused reflection caused by corroded irregular surface.

A: 12'O CLOCK / FORWARD
B: 3'O CLOCK / CENTER
C: 6'O CLOCK / AFT

* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTMER

ONLINE TRACEABILITY

POINTS	THICKNESS AT POSITION				MINIMUM THICKNESS		
	SECTION-1 A	SECTION-1 B	SECTION-2	SECTION-3	SECTION-1	SECTION-2	SECTION-3
0°	1.192	1.260	2.138	2.155	1.060	1.450	1.250
90°	1.199	1.202	2.055	2.107	1.060	1.450	1.250
180°	1.209	1.254	2.167	2.201	1.060	1.450	1.250
270°	1.215	1.223	2.120	2.149	1.060	1.450	1.250

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3578 lux						

PERSON DETAILS

INSPECTOR NAME:	M. Shanzad Ali	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	SI, UT, MPI, PT, UT, VT	INSPECTION SUPERVISOR:	HANI ALI	HR&SIGN	
SIGNATURE & STAMP:				DATE:	

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AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq



MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-002
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	GATE VALVE: 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-1-2

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

(a) Normal condition
Underside
Corroded condition
Reflection echo become wide small by diffused reflection caused by corroded irregular surface.

A:12'O CLOCK / FORWARD
B:3'O CLOCK / CENTER
C:6'O CLOCK / AFT

* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTMER

ONLINE TRACEABILITY

POINTS	THICKNESS AT POSITION				MINIMUM THICKNESS		
	SECTION-1 A	SECTION-1 B	SECTION-2	SECTION-3	SECTION-1	SECTION-2	SECTION-3
0°	1.213	1.281	2.159	2.176	1.060	1.450	1.250
90°	1.220	1.223	2.076	2.128	1.060	1.450	1.250
180°	1.230	1.275	2.188	2.222	1.060	1.450	1.250
270°	1.236	1.244	2.141	2.170	1.060	1.450	1.250

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3578 lux						

PERSON DETAILS

INSPECTOR NAME:	M. Shanzad Ali	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	SI, UT, MPI, PT, UT, VT	INSPECTION SUPERVISOR:	HANI ALI	HR&SIGN	
SIGNATURE & STAMP:				DATE:	

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AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq



MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-003
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	GATE VALVE: 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-1-3

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

(a) Normal condition
Underside
Corroded condition
Reflection echo become wide small by diffused reflection caused by corroded irregular surface.

A:12'O CLOCK / FORWARD
B:3'O CLOCK / CENTER
C:6'O CLOCK / AFT

* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTMER

ONLINE TRACEABILITY

POINTS	THICKNESS AT POSITION				MINIMUM THICKNESS		
	SECTION-1 A	SECTION-1 B	SECTION-2	SECTION-3	SECTION-1	SECTION-2	SECTION-3
0°	1.203	1.271	2.149	2.166	1.060	1.450	1.250
90°	1.210	1.213	2.066	2.118	1.060	1.450	1.250
180°	1.220	1.265	2.178	2.212	1.060	1.450	1.250
270°	1.224	1.232	2.129	2.158	1.060	1.450	1.250

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTUR E	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACT URE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3578 lux						

PERSON DETAILS

INSPECTOR NAME:	M. Shanzad Ali	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	SI, UT, MPI, PT, UT, VT	INSPECTION SUPERVISOR:	HANI ALI	HR&SIGN	
SIGNATURE & STAMP:				DATE:	

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CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-004
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	GATE VALVE: 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-1-4

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

(a) Normal condition: Shows a valve seat with a 'Large reflection echo' and 'Area of diffused echo'.
 (b) Corroded condition: Shows a valve seat with a 'Small reflection echo' and 'Area of diffused echo'.
 Note: Reflection echo become wide small by diffused reflection caused by corroded seat surface.

A: 12'O CLOCK / FORWARD
 B: 3'O CLOCK / CENTER
 C: 6'O CLOCK / AFT

* ALL READINGS IN INCH
 **MINIMUM THICKNESS PROVIDED BY CUSTMER

ONLINE TRACEABILITY

POINTS	THICKNESS AT POSITION				MINIMUM THICKNESS		
	SECTION-1 A	SECTION-1 B	SECTION-2	SECTION-3	SECTION-1	SECTION-2	SECTION-3
0°	1.228	1.296	2.174	2.191	1.060	1.450	1.250
90°	1.235	1.238	2.091	2.143	1.060	1.450	1.250
180°	1.242	1.287	2.203	2.237	1.060	1.450	1.250
270°	1.245	1.253	2.150	2.179	1.060	1.450	1.250

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3578 lux						

PERSON DETAILS

INSPECTOR NAME:	M. Shanzad Ali	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	SI, UT, MPI, PT, UT, VT	INSPECTION SUPERVISOR:	HANI ALI	HR&SIGN	
SIGNATURE & STAMP:				DATE:	

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Basra, North Rumaila, Quality Control Yard - Iraq



MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-005
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	GATE VALVE: 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-1-5

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

(a) Normal condition: Large reflection echo from detector to target.

(b) Corroded condition: Small reflection echo from detector to surface, wide small reflection echo from surface to target.

A: 12'O CLOCK / FORWARD
B: 3'O CLOCK / CENTER
C: 6'O CLOCK / AFT

* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTMER

ONLINE TRACEABILITY

POINTS	THICKNESS AT POSITION				MINIMUM THICKNESS		
	SECTION-1 A	SECTION-1 B	SECTION-2	SECTION-3	SECTION-1	SECTION-2	SECTION-3
0°	1.186	1.254	2.132	2.149	1.060	1.450	1.250
90°	1.193	1.196	2.049	2.101	1.060	1.450	1.250
180°	1.200	1.245	2.161	2.195	1.060	1.450	1.250
270°	1.203	1.211	2.108	2.137	1.060	1.450	1.250

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3578 lux						

PERSON DETAILS

INSPECTOR NAME:	M. Shanzad Ali	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	SI, UT, MPI, PT, UT, VT	INSPECTION SUPERVISOR:	HANI ALI	HR&SIGN	
SIGNATURE & STAMP:				DATE:	

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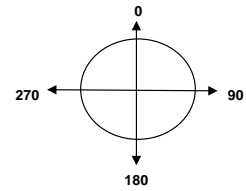
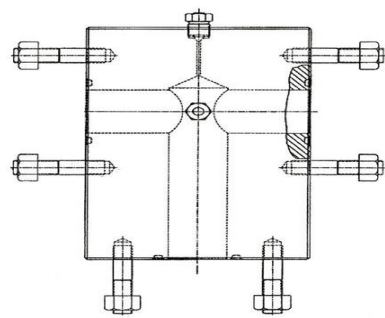
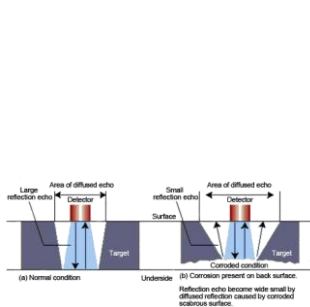


MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-006
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	BLOCK 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-6-2
INSPECTION DETAILS			
Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024



A:12'O CLOCK / FORWARD
B:3'O CLOCK / CENTER
C:6'O CLOCK / AFT
* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTMER

POINTS	THICKNESS AT POSITION			MINIMUM THICKNESS
	A	B	C	
0°	4.538	4.606	4.619	4.320
90°	4.545	4.548	4.549	
180°	4.559	4.582	4.639	
270°	4.577	4.585	4.594	

INSPECTION RESULT		
VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURER	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3578 lux						

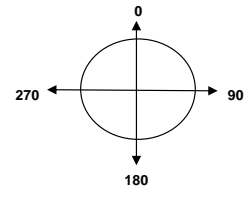
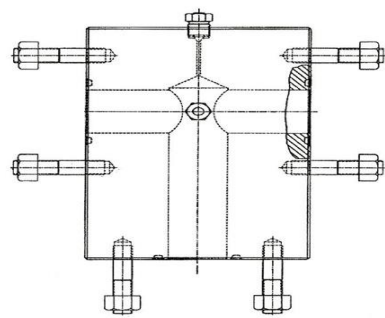
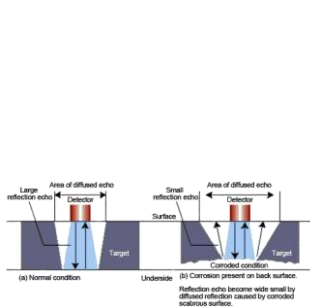
PERSON DETAILS				
INSPECTOR NAME:	M. Shahzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:
QUALIFICATION:	NDT Level 2, UT, VT, MPI	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN
SIGNATURE & STAMP:				DATE:

MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-007
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	BLOCK 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-6-1
INSPECTION DETAILS			
Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024



* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTMER

POINTS	THICKNESS AT POSITION			MINIMUM THICKNESS
	A	B	C	
0°	4.518	4.586	4.599	4.320
90°	4.525	4.528	4.529	
180°	4.539	4.562	4.619	
270°	4.557	4.565	4.574	

INSPECTION RESULT		
VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURER	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3578 lux						

PERSON DETAILS				
INSPECTOR NAME:	M. Shahzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:
QUALIFICATION:	NDT Level 2, UT, VT, MPI	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN
SIGNATURE & STAMP:				DATE:

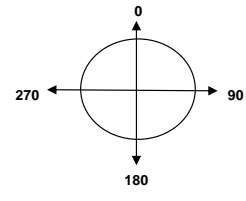
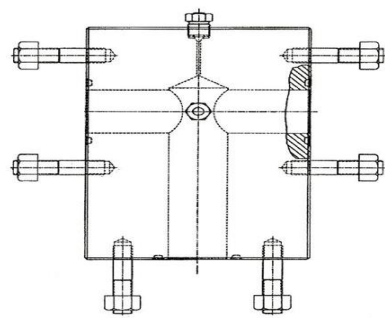
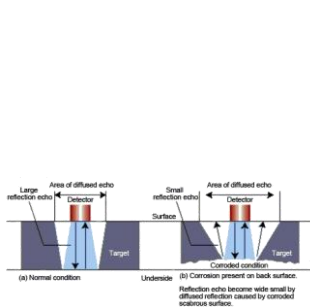


MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-008
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	BLOCK 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-11-1
INSPECTION DETAILS			
Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024



A:12'O CLOCK / FORWARD
B:3'O CLOCK / CENTER
C:6'O CLOCK / AFT
* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTMER

POINTS	THICKNESS AT POSITION			MINIMUM THICKNESS
	A	B	C	
0°	4.487	4.555	4.568	4.320
90°	4.494	4.497	4.498	
180°	4.508	4.531	4.588	
270°	4.526	4.534	4.543	

INSPECTION RESULT		
VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURER	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3578 lux						

PERSON DETAILS				
INSPECTOR NAME:	M. Shahzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:
QUALIFICATION:	NDT Level 2, UT, VT, MPI	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN
SIGNATURE & STAMP:				DATE:

MAJOR INSPECTION CERTIFICATE

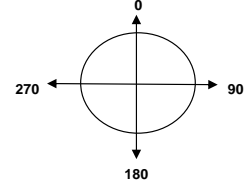
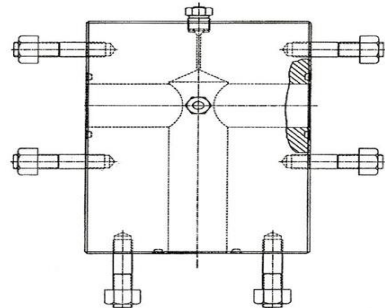
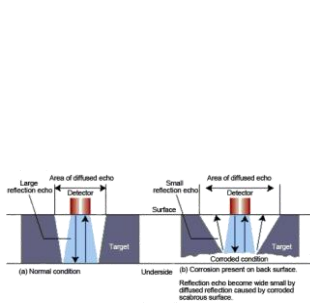
THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-009
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	BLOCK 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-11-2

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024



ONLINE TRACEABILITY

A:12'O CLOCK / FORWARD
 B:3'O CLOCK / CENTER
 C:6'O CLOCK / AFT
 * ALL READINGS IN INCH
 **MINIMUM THICKNESS PROVIDED BY CUSTMER

POINTS	THICKNESS AT POSITION			MINIMUM THICKNESS
	A	B	C	
0°	4.491	4.559	4.572	4.320
90°	4.519	4.522	4.523	
180°	4.528	4.551	4.592	
270°	4.515	4.523	4.532	

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS

TECHNICAL DETAILS

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURER	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY,2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3578 lux						

PERSON DETAILS

INSPECTOR NAME:	M. Shahbaz Ahme	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	NTL 125130 01-04-VT	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	



MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-010
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	ADJUSTABLE CHOKE 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-2-1

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

ONLINE TRACEABILITY

A: 12'O CLOCK / FORWARD
B: 3'O CLOCK / CENTER
C: 6'O CLOCK / AFT

* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTOMER

POINTS	THICKNESS AT POSITION		MINIMUM THICKNESS	
	SECTION 1	SECTION 2	SECTION 1	SECTION 2
0°	1.257	1.325	1.060"	1.060"
90°	1.264	1.267		
180°	1.278	1.301		
270°	1.296	1.304		

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS

TECHNICAL DETAILS

AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURER	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3570 lux						

PERSON DETAILS

INSPECTOR NAME:	M.Shahid Ali	SENIOR INSPECTOR:	NAVERD HUSSAIN	CLIENT:	
QUALIFICATION:	ASNT Level III MT,PT,UT,VT,	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	



MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-011
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	POSITIVE CHOKE 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120874-3-1

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

(a) Normal condition
(b) Corrosion present on back surface. Reflection echo become wide and small by diffused reflection caused by corroded scabrous surface.

A: 12'O CLOCK / FORWARD
B: 3'O CLOCK / CENTER
C: 6'O CLOCK / AFT

* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTOMER

ONLINE TRACEABILITY

POINTS	THICKNESS AT POSITION		MINIMUM THICKNESS	
	SECTION 1	SECTION 2	SECTION 1	SECTION 2
0°	1.268	1.316	1.060"	1.060"
90°	1.275	1.303		
180°	1.289	1.296		
270°	1.307	1.315		

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)
U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)
Pressure Test-The Above Item was Pressure Tested up to 300 PSI a low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS

TECHNICAL DETAILS

AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURER	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURER	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3570 lux						

PERSON DETAILS

INSPECTOR NAME:	M.Shahid Ali	SENIOR INSPECTOR:	NAVED HUSSAIN	CLIENT:	
QUALIFICATION:	ASNT Level III MT,PT,UT,VT,	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	

Original - Client Files Copy - Area Office QC/FN/PT/077 Rev.00 DATED 07.NOV. 2021



AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq



MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-012
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	SPOOL 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	M7316-1

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

(a) Normal condition
(b) Underside
Reflection echo become wide small by diffused reflection caused by corroded eroded surface.

A:12'O CLOCK / FORWARD
B:3'O CLOCK / CENTER
C:6'O CLOCK / AFT

* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTOMER

ONLINE TRACEABILITY

POINTS	THICKNESS AT POSITION			MINIMUM THICKNESS
	A	B	C	
0°	1.292	1.360	1.373	1.190
90°	1.299	1.302	1.303	
180°	1.313	1.336	1.393	
270°	1.331	1.339	1.348	

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 18 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURE	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3570 lux						

PERSON DETAILS

INSPECTOR NAME:	M.Shahzad Ali	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	ASNT CP, UT, VT,	INSPECTION SUPERVISOR:	HANI ALI	HR&SIGN	
SIGNATURE & STAMP:				DATE:	

Original - Client Files Copy - Area Office QC/FN/PT/077 Rev.00 DATED 07.NOV. 2021



AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq



MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-013
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326102061	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	SPOOL 3 1/16" 10K	CHOKE MANIFOLD #	12516007
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	M67914-5

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

(a) Normal condition
(b) Underside
Reflection echo become wide small by diffused reflection caused by corroded roughness surface.

A:12'O CLOCK / FORWARD
B:3'O CLOCK / CENTER
C:6'O CLOCK / AFT

* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTOMER

ONLINE TRACEABILITY

POINTS	THICKNESS AT POSITION			MINIMUM THICKNESS
	A	B	C	
0°	1.287	1.355	1.368	1.190
90°	1.294	1.297	1.298	
180°	1.308	1.331	1.388	
270°	1.326	1.334	1.343	

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 19 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURE	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3570 lux						



PERSON DETAILS


INSPECTOR NAME:	M. Shuhzad Ali	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	ASNT CP, UT, VT,	INSPECTION SUPERVISOR:	HANI ALI	HS&SIGN	
SIGNATURE & STAMP:				DATE:	

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MAJOR INSPECTION CERIFICATE


Client:	HALLIBURTON (TSS)	Report No:	QC-24-01-TSS-013-NDT-MAJ-014
Location:	TSS WORKSHOP & INSPECTION TEST AREA	WORK ORDER	326102061
Date:	Thursday, January 25, 2024	Next Inspection Date:	ANNUAL INSPECTION
Type Of Inspection:	VISUAL , THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION	Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019) & API 6A
		UNIT DESCRIPTION:	BLIND FLANGE 3 1/16" 10K
		UNIT S/N:	M78015-41
		CHOKE MANIFOLD S/N:	12516007
		INSPECTION RESULT :	
		VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION
		MAGNETIC PARTICLE INSPECTION	Groove areas inspected and found free from cracks and other defects
		FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED
COMMENT:			
Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast			

EQUIPMENT DETAILS						PERSON DETAILS		REVIEW BY	
EQUIPMENT :	AC/DC HAND Yoke	EQUIPMENT :	ASTM Test Block	EQUIPMENT :	UV BLACK LIGHT: 3140 µw/cm ²	INSPECTOR NAME: M.SHAHZAD AHMED QUALIFICATION: ASNT LEVEL II MT & PT & VT STAMP & SIGNATURE: 	SENIOR INSPECTOR:	NAVEED HUSSAIN	
S.NO:	201504048	S.NO:	1657	S.NO:	1932401		SUPERVISOR:	HANI ALI	
Cal Due Date:	14.FEB.2024	Cal Due Date:	14.FEB.2024	Cal Due Date:	14.FEB.2024		CLIENT:		
FLUORESCENT 14HF		Magnaflux	Batch No:	220306	EXPIRE DATE:	MARCH,2025			
Whie Contrast Paint Manufacture:		Magnaflux	Batch No:	220602	EXPIRE DATE:	JUN,2025			
TECHNICAL DETAILS									
Digital Lux Meter WHITE LIGHT INTENSITY:		Wet FLUORESCENT Particle Concentration 14 HF		0.1 to 0.4 ml/100 ml		Black Magnetic Ink Manufacture:7HF Batch No:220605			
3490 Lux/S.NO:2722003		Black Magnetic Ink Concentration 7 HF		1.2 to 2.4 ml/100 ml		EXPIRE DATE: Jul-25			
Cal Due Date:16.FEB.2024									

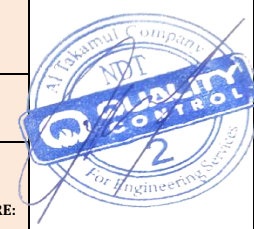
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MAJOR INSPECTION CERIFICATE

Client:	HALLIBURTON (TSS)	Report No:	QC-24-01-TSS-013-NDT-MAJ-015
Location:	TSS WORKSHOP & INSPECTION TEST AREA	WORK ORDER	326102061
Date:	Thursday, January 25, 2024	Next Inspection Date:	ANNUAL INSPECTION
Type Of Inspection:	VISUAL , THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION	Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019) & API 6A

	UNIT DESCRIPTION:	BLIND FLANGE 3 1/16" 10K
	UNIT S/N:	M78015-40
	CHOKE MANIFOLD S/N:	12516007
	INSPECTION RESULT :	
	VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION
	MAGNETIC PARTICLE INSPECTION	Groove areas inspected and found free from cracks and other defects
	FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED
	COMMENT:	

Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast

EQUIPMENT DETAILS						PERSON DETAILS		REVIEW BY		
EQUIPMENT :	AC/DC HAND Yoke	EQUIPMENT :	ASTM Test Block	EQUIPMENT :	UV BLACK LIGHT: 3140 µw/cm ²	INSPECTOR NAME:		SENIOR INSPECTOR:	NAVEED HUSSAIN	
S.NO:	201504048	S.NO:	1657	S.NO:	1932401			SUPERVISOR:	HANI ALI	
Cal Due Date:	14.FEB.2024	Cal Due Date:	14.FEB.2024	Cal Due Date:	14.FEB.2024		QUALIFICATION:		CLIENT:	
FLUORESCENT 14HF		Magnaflux	Batch No:	220306	EXPIRE DATE:		MARCH,2025			
Whie Contrast Paint Manufacture:		Magnaflux	Batch No:	220602	EXPIRE DATE:		JUN,2025			
Digital Lux Meter WHITE LIGHT INTENSITY:		TECHNICAL DETAILS				Black Magnetic Ink Manufacture:7HF		STAMP & SIGNATURE:		
3490 Lux/S.NO:2722003		Wet FLUORESCENT Particle Concentration 14 HF		0.1 to 0.4 ml/100 ml		Batch No:220605				
Cal Due Date:16.FEB.2024		Black Magnetic Ink Concentration 7 HF		1.2 to 2.4 ml/100 ml		EXPIRE DATE:		Jul-25		

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MAJOR INSPECTION CERIFICATE

Client:	HALLIBURTON (TSS)	Report No:	QC-24-01-TSS-013-NDT-MAJ-016
Location:	TSS WORKSHOP & INSPECTION TEST AREA	WORK ORDER	326102061
Date:	Thursday, January 25, 2024	Next Inspection Date:	ANNUAL INSPECTION
Type Of Inspection:	VISUAL , THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION	Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019) & API 6A


	UNIT DESCRIPTION:	FLANGE 3 1/16" 10K X 3" 1502 THREAD
	UNIT S/N:	M64291-4
	CHOKE MANIFOLD S/N:	12516007
	INSPECTION RESULT :	
	VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION
	MAGNETIC PARTICLE INSPECTION	Thread & Groove areas inspected and found free from cracks and other defects
	FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED
	COMMENT: (MPI Wet Fluorescent inspection Thread With UltraViolet Light) Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast	


EQUIPMENT DETAILS						PERSON DETAILS		REVIEW BY		
EQUIPMENT :	AC/DC HAND Yoke	EQUIPMENT :	Shooting Coil DC	EQUIPMENT :	UV BLACK LIGHT: 3070 µw/cm ²	INSPECTOR NAME:		SENIOR INSPECTOR:	NAVEED HUSSAIN	
S.NO:	201504048	S.NO:	22650	S.NO:	1932401	QUALIFICATION:		SUPERVISOR:	HANI ALI	
Cal Due Date:	14.FEB.2024	Cal Due Date:	14.FEB.2024	Cal Due Date:	14.FEB.2024	MT & PT & VT		CLIENT:		
FLUORESCENT 14HF		Magnaflux	Batch No:	220306	EXPIRE DATE:	MARCH,2025				
Whie Contrast Paint Manufacture:		Magnaflux	Batch No:	220602	EXPIRE DATE:	JUN,2025				
Digital Lux Meter WHITE LIGHT INTENSITY:		TECHNICAL DETAILS				STAMP & SIGNATURE:				
3490 Lux/S.NO:2722003		Wet FLUORESCENT Particle Concentration 14 HF		0.1 to 0.4 ml/100 ml				Black Magnetic Ink Manufacture:7HF		
Cal Due Date:16.FEB.2024		Black Magnetic Ink Concentration 7 HF		1.2 to 2.4 ml/100 ml				Batch No:220605		
				EXPIRE DATE:		Jul-25				

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MAJOR INSPECTION CERIFICATE

Client:	HALLIBURTON (TSS)	Report No:	QC-24-01-TSS-013-NDT-MAJ-017
Location:	TSS WORKSHOP & INSPECTION TEST AREA	WORK ORDER	326102061
Date:	Thursday, January 25, 2024	Next Inspection Date:	ANNUAL INSPECTION
Type Of Inspection:	VISUAL , THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION	Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019) & API 6A

	UNIT DESCRIPTION:	FLANGE 3 1/16" 10K X 3" 1502 WING
	UNIT S/N:	M64291-3
	CHOKE MANIFOLD S/N:	12516007
	INSPECTION RESULT :	
	VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION
	MAGNETIC PARTICLE INSPECTION	Thread & Groove areas inspected and found free from cracks and other defects
	FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED
	COMMENT: (MPI Wet Fluorescent inspection Thread With UltraViolet Light) Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast	

EQUIPMENT DETAILS						PERSON DETAILS		REVIEW BY		
EQUIPMENT :	AC/DC HAND Yoke	EQUIPMENT :	Shooting Coil DC	EQUIPMENT :	UV BLACK LIGHT: 3070 µw/cm ²	INSPECTOR NAME:	M.SHAHZAD AHMED	SENIOR INSPECTOR:	NAVEED HUSSAIN	
S.NO:	201504048	S.NO:	22650	S.NO:	1932401		QUALIFICATION: ASNT LEVEL II MT & PT & VT	SUPERVISOR: HANI ALI	CLIENT:	
Cal Due Date:	14.FEB.2024	Cal Due Date:	14.FEB.2024	Cal Due Date:	14.FEB.2024					
FLUORESCENT 14HF		Magnaflux	Batch No:	220306	EXPIRE DATE:			MARCH,2025		
Whie Contrast Paint Manufacture:		Magnaflux	Batch No:	220602	EXPIRE DATE:			JUN,2025		
TECHNICAL DETAILS						STAMP & SIGNATURE:				
Digital Lux Meter WHITE LIGHT INTENSITY:					Black Magnetic Ink Manufacture:7HF					
3490 Lux/S.NO:2722003		Wet FLUORESCENT Particle Concentration 14 HF		0.1 to 0.4 ml/100 ml			Batch No:220605			
Cal Due Date:16.FEB.2024		Black Magnetic Ink Concentration 7 HF		1.2 to 2.4 ml/100 ml		EXPIRE DATE:		Jul-25		

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AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq



MAJOR INSPECTION CERTIFICATE

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-01-TSS-013-NDT-MAJ-018
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326171799	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	Thursday, January 25, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	DATE HEADER 3 1/16" 10K	SAP NO:	11653884
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	10120876-12-1

INSPECTION DETAILS

Max. Working Pressure:	10,000 PSI	Holding Time:	19 Min
Low pressure:	300 PSI	Holding Time:	05 Min
Pump S.N.:	13119220 Cal DUE. AUG.2024	Pressure Gauge NO.:	468066 Cal DUE. AUG.2024

(a) Normal condition
Underside
Reflection echo become wide small by diffused reflection caused by conoidal roughness surface.

A:12'O CLOCK / FORWARD
B:3'O CLOCK / CENTER
C:6'O CLOCK / AFT

* ALL READINGS IN INCH
**MINIMUM THICKNESS PROVIDED BY CUSTOMER

ONLINE TRACEABILITY

POINTS	THICKNESS AT POSITION			MINIMUM THICKNESS
	A	B	C	
0°	1.311	1.379	1.766	1.190
90°	1.318	1.321	1.686	
180°	1.332	1.355	1.789	
270°	1.350	1.358	1.752	

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709(70.94158).
UT	Accepted	According to Halliburton Procedure (H2S STANDERD NACE MQ-01-76) ASME SECTION V ARTICLE 5 (ASTM E 797)
BODY	Accepted	*** These Are The Actual Readings Need To Follow As Per Halliburton Acceptance Criteria

Inspection Evaluation

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To The Halliburton Specification ASTM E709 (70.94158)

U.T-The Above Item Was Found Acceptable As Per Halliburton Procedure H2S STANDARD NACE MQ-01-76 ASME SECTION V ARTICLE 5 (ASTM E 797)

Pressure Test-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 10.000 psi Hold 18 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504048	CAL DUE DATE	14-Feb-24	White Contrast WCP-2	MANUFACTURE	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Feb-24		Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	16-Feb-24		Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Feb-24	Fluorescent Magnetic Ink 7HF	1.2 to 2.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3570 lux						

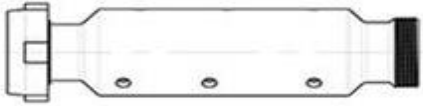


PERSON DETAILS

INSPECTOR NAME:	M.Shahzad Ali	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	ASNT CP, UT, VT,	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	

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MAJOR INSPECTION CERIFICATE

Client:	HALLIBURTON (TSS)	Report No:	QC-24-01-TSS-013-NDT-MAJ-017
Location:	TSS WORKSHOP & INSPECTION TEST AREA	WORK ORDER	326171797
Date:	Thursday, January 25, 2024	Next Inspection Date:	ANNUAL INSPECTION
Type Of Inspection:	VISUAL , THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION	Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019)
		UNIT DESCRIPTION:	DATE HEADER 10K 3" 1502 WING X THREAD
		SAP NO:	12010596
		INSPECTION RESULT :	
		VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION
		MAGNETIC PARTICLE INSPECTION	Thread & Available critical areas inspected and found free from cracks and other defects
		FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED
COMMENT:			
(MPI Wet Fluorescent inspection Thread With UltraViolet Light) Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast			
EQUIPMENT DETAILS			
EQUIPMENT :	AC/DC HAND Yoke	EQUIPMENT :	Shooting Coil DC
S.NO:	201504048	S.NO:	22650
Cal Due Date:	14.FEB.2024	Cal Due Date:	14.FEB.2024
FLUORESCENT 14HF	Magnaflux	Batch No:	220306
Whie Contrast Paint Manufacture:	Magnaflux	Batch No:	220602
UV BLACK LIGHT: 3070 μw/cm²		EXPIRE DATE:	MARCH,2025
EXPIRE DATE:		EXPIRE DATE:	JUN,2025
TECHNICAL DETAILS	Black Magnetic Ink Manufacture:7HF	STAMP & SIGNATURE:	
Digital Lux Meter WHITE LIGHT INTENSITY:	Wet FLUORESCENT Particle Concentration 14 HF	Batch No:220605	
3480 Lux/S.NO:2722003	0.1 to 0.4 ml/100 ml	EXPIRE DATE:	
Cal Due Date:16.FEB.2024	Black Magnetic Ink Concentration 7 HF	Jul-25	
	1.2 to 2.4 ml/100 ml		

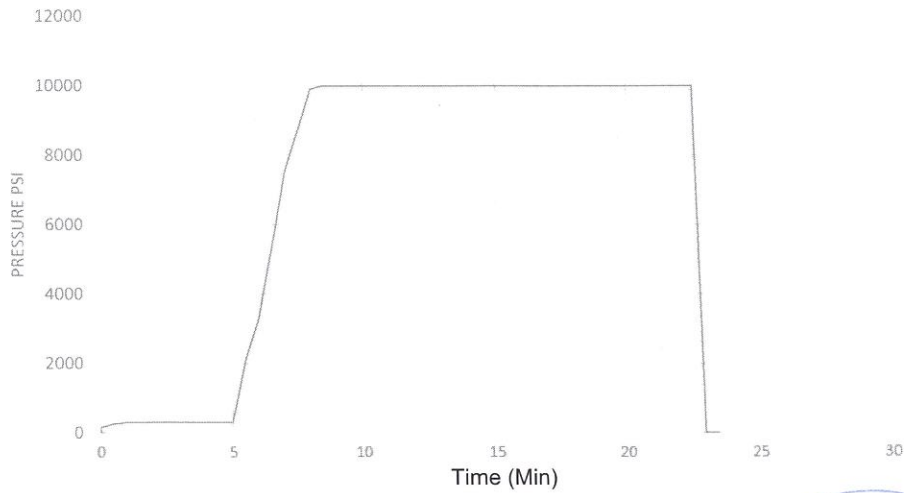
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Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	9:55 AM
Stop Time	10:18 AM
Test Date	27-Jan-24
EQ NUMBER	12516007
LAST CALIB	2.Aug.2023

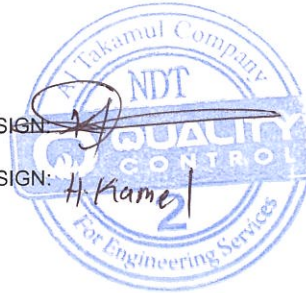
READING



TESTED BY : Khaldoon Asad
APPROVED BY: Hassan Kamel
COMMENTS: Body Test

SIGN: 

SIGN: 

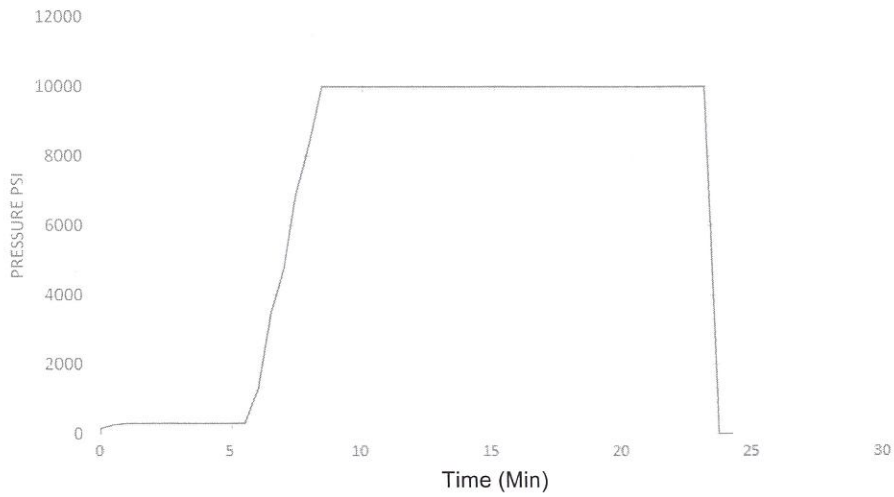


Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	10:22 AM
Stop Time	10:46 AM
Test Date	27-Jan-24
EQ NUMBER	12516007
LAST CALIB	2.Aug.2023

READING



TESTED BY : Khaldoon Asad
APPROVED BY: Hassan Kamel
COMMENTS: Upstream

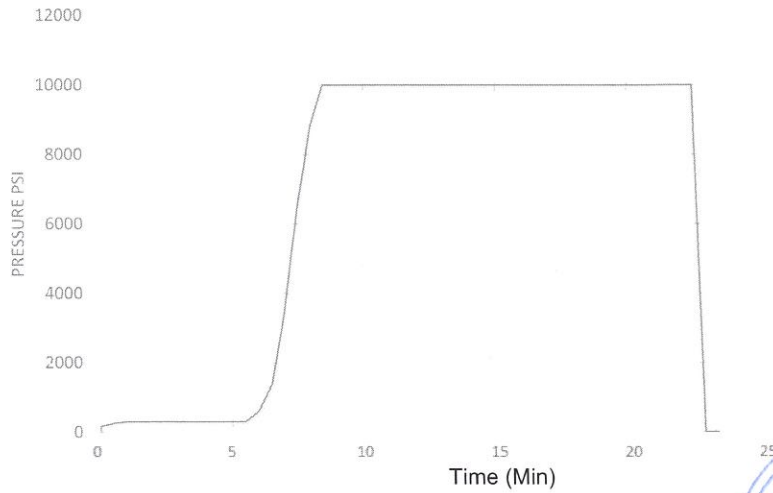


Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	10:50 AM
Stop Time	11:13 AM
Test Date	27-Jan-24
EQ NUMBER	12516007
LAST CALIB	2.Aug.2023

READING



TESTED BY : Khaldoon Asad
APPROVED BY: Hassan Kamel
COMMENTS: Downstream

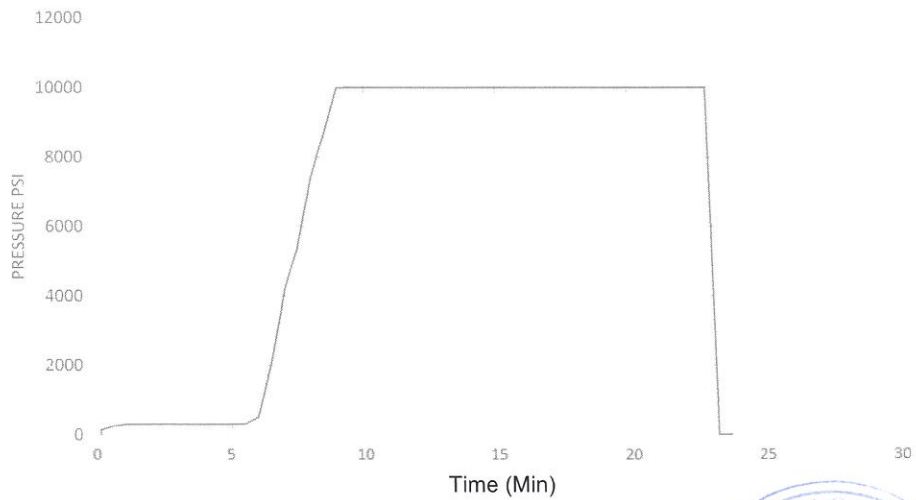


Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	11:20 AM
Stop Time	11:44 AM
Test Date	27-Jan-24
EQ NUMBER	12516007
LAST CALIB	2.Aug.2023

READING



TESTED BY : Khaldoon Asad
APPROVED BY: Hassan Kamel
COMMENTS: Downstream stream valve from Upstream

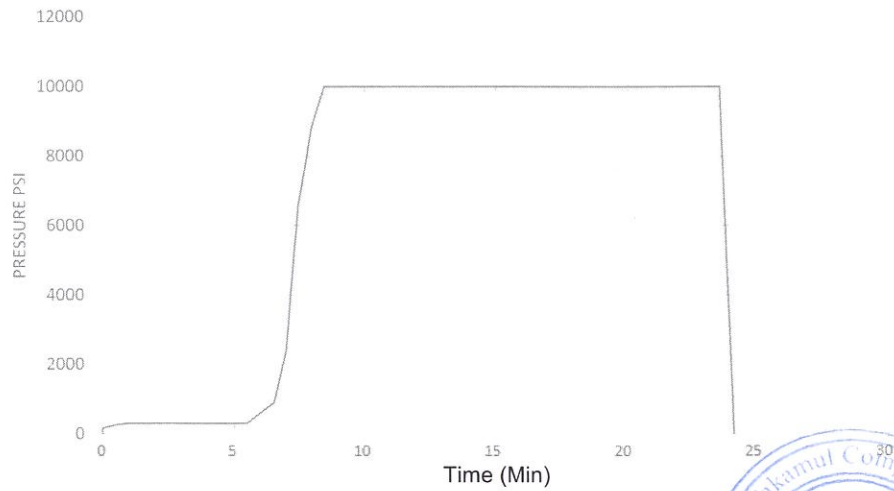


Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	11:50 AM
Stop Time	12:14 PM
Test Date	27-Jan-24
EQ NUMBER	12516007
LAST CALIB	2.Aug.2023

READING



TESTED BY : Khaldoon Asad
APPROVED BY: Hassan Kamel
COMMENTS: Upstream valve from Downstream

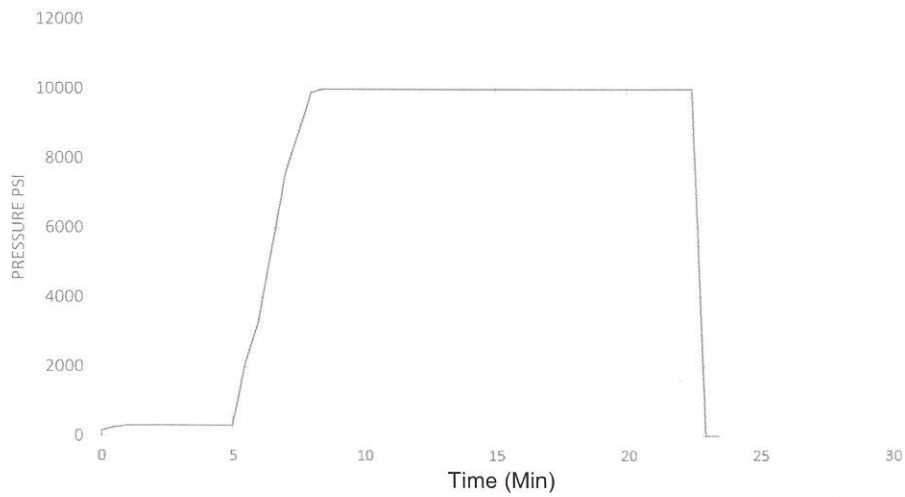


Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	12:20 PM
Stop Time	12:43 PM
Test Date	27-Jan-24
EQ NUMBER	11653884
LAST CALIB	2.Aug.2023

READING



TESTED BY : Khaldoon Asad
APPROVED BY: Hassan Kamel
COMMENTS: Data Header

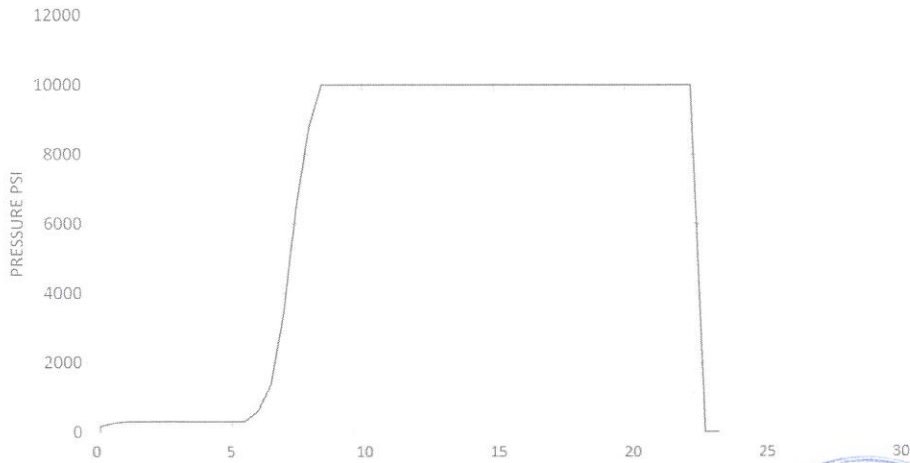


Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	12:50 PM
Stop Time	1:13 PM
Test Date	27-Jan-24
EQ NUMBER	12010596
LAST CALIB	2.Aug.2023

READING



TESTED BY : Khaldoon Asad
APPROVED BY: Hassan Kamel
COMMENTS: Data Header

