

AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq



MAJOR INSPECTION CERTIFICATE

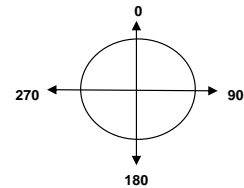
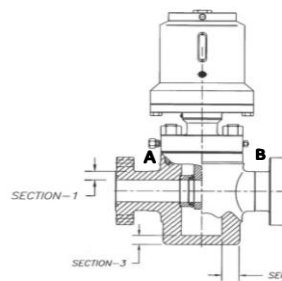
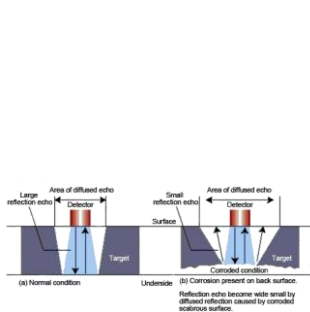
THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-25-05-TSS-NDT-MAJ-001
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	SPECIFICATION:	ASTM E709 & ASTM E797 & ASME B31.1
WORK ORDER #	326631916		
DATE OF INSP:	Thursday, May 23, 2024	INSP. DUE DATE:	ANNUAL INSPECTION
TYPE OF INSPECTION:	VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	SSV 3 1/16" 10K/H2S	SAP NO:	11483046
MANUFACTURER:	WORLD WIDE OIL FIELD	SERIAL NO:	106275-2

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		
	SECTION-1 A	SECTION-1 B		SECTION-2	SECTION-3	SECTION-1	SECTION-2	SECTION-3
0°	1.282	1.285	1.345	1.945	1.815	1.060"	1.450"	1.250"
90°	1.275	1.252	1.325	1.954	1.821	1.060"	1.450"	1.250"
180°	1.269	1.245	1.315	1.955	1.825	1.060"	1.450"	1.250"
270°	1.267	1.229	1.317	1.956	1.825	1.060"	1.450"	1.250"

INSPECTION RESULT

VT & MPI	Accepted	* ACCORDING TO ASTM E709	
UT	Accepted	According to 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 ASTM E709

U.T-The Above Item Was Found Acceptable As Per 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-Oct-24		White Contrast	MANUFACTUR E	BATCH NO	EXPIRE DATE
Digital Lux Meter	2722003	CAL DUE DATE	16-Oct-24		WCP-2	Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	14-Oct-24		Black Magnetic	MANUFACT URE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	15-Oct-24		Ink 7HF	Magnaflux	220605	JULY.2025
ASTM Test Block:	1657	CAL DUE DATE	14-Oct-24		Fluorescent Magnetic Ink 7HF			
WHITE LIGHT INTENSITY:	3480 lux							



PERSON DETAILS

INSPECTOR NAME:	M. SHAZAD	SENIOR INSPECTOR:	M. SHAZAD	CLIENT:	
QUALIFICATION:	NDT Level II UT, PT, 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



MAJOR INSPECTION CERIFICATE

Client:	HALLIBURTON (TSS)	Report No:	QC-25-05-TSS-NDT-MAJ-002												
Location:	TSS WORKSHOP & INSPECTION TEST AREA	WORK ORDER	326631916												
Date:	Thursday, May 23, 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:	M29520												
		SSV S/N:	11483046												
		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 :	ASTM Test Block	EQUIPMENT :	UV BLACK LIGHT: 3140 $\mu\text{w}/\text{cm}^2$	INSPECTOR NAME:	Usman Shabbir	SENIOR INSPECTOR:	M.SHAZAD						
S.NO:	201504048	S.NO:	1657	S.NO:	1898977			SUPERVISOR:	HANI ALI						
Cal Due Date:	14.OCT.2024	Cal Due Date:	14.OCT.2024	Cal Due Date:	14.OCT.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		STAMP & SIGNATURE:													
Digital Lux Meter WHITE LIGHT INTENSITY:															
3570 Lux/S.NO:2722003															
Cal Due Date:16.OCT2024															

Original - Client Files

Copy - Area Office

QC/FN/MPI/065 Rev.00 DATED 07 NOV 2021



Address: Noth Rumaila, Al Takamul Yard
Contact: +9647810009138

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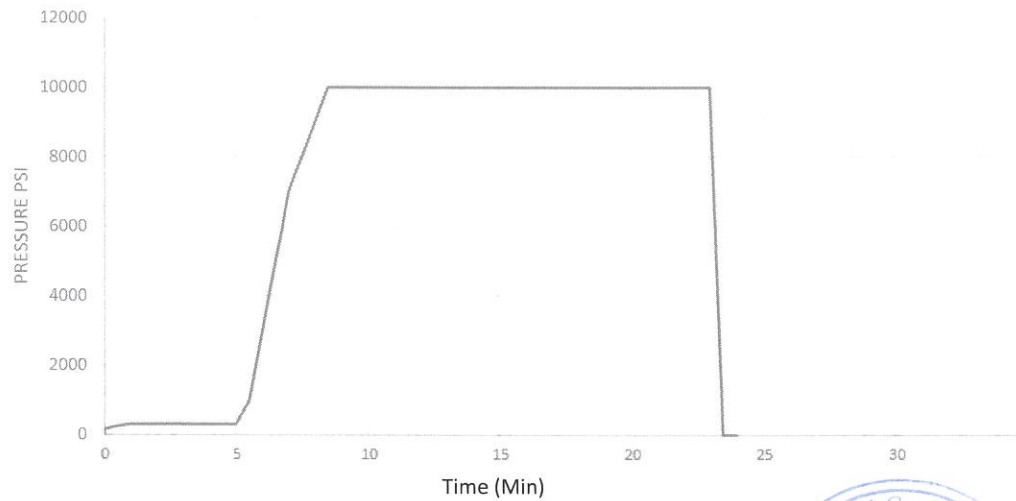
Email: OP@qualitycontrol-iraq.com / hany.akafi@qualitycontrol-iraq.com

Data Collection Report

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

Run Info	
Start Time	1:30 PM
Stop Time	1:54 PM
Test Date	25-May-24
EQ NUMBER	11483046
LAST CALIB	2.Aug.2023

READING



TESTED BY : Haider Emad
APPROVED BY: Hassan Kamel
COMMENTS: Body Test

SIGN: 

SIGN: 

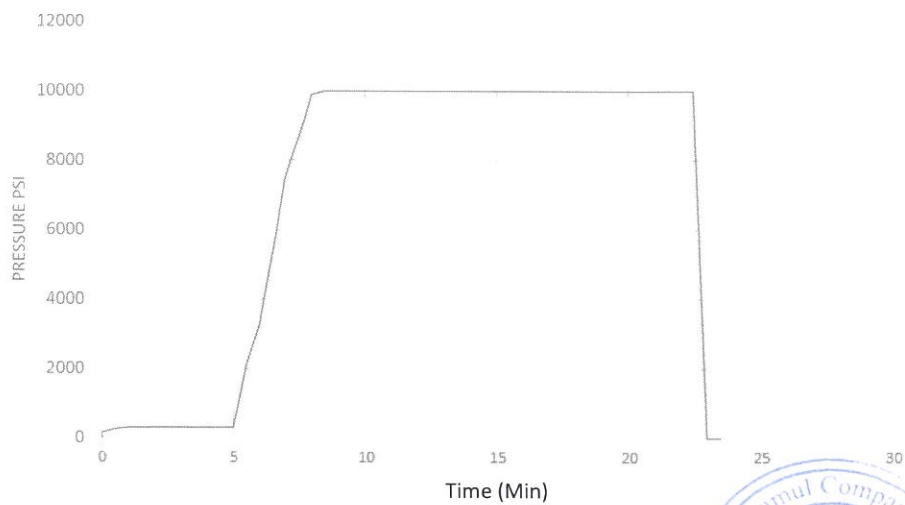


Data Collection Report

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

Run Info	
Start Time	2:00 PM
Stop Time	2:24 PM
Test Date	25-May-24
EQ NUMBER	11483046
LAST CALIB	2.Aug.2023

READING



TESTED BY : Haider Emad
APPROVED BY: Hassan Kamel
COMMENTS: Upstream Test

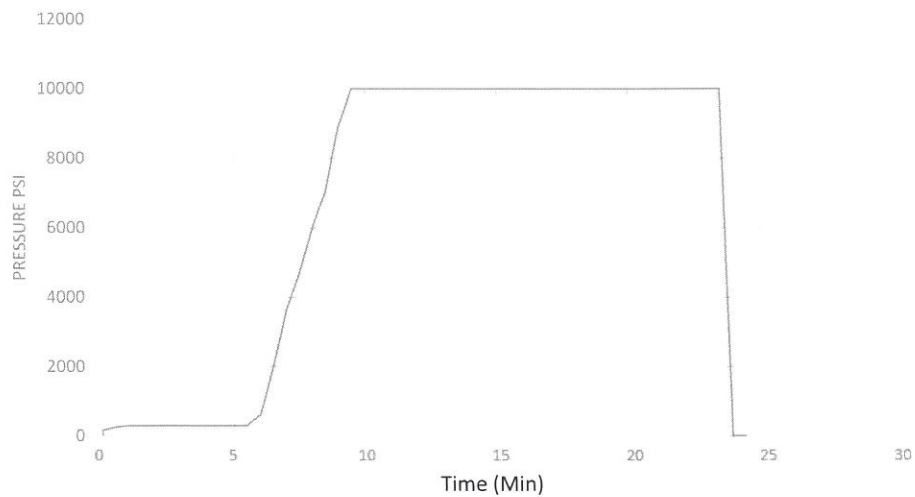


Data Collection Report

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

Run Info	
Start Time	2:30 PM
Stop Time	2:54 PM
Test Date	25-May-24
EQ NUMBER	11483046
LAST CALIB	2.Aug.2023

READING



TESTED BY : Haider Emad
APPROVED BY: Hassan Kamel
COMMENTS: Downstream Test

