

**AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED**

Basra, North Rumaila, Quality Control Yard - Iraq



**CERTIFICATE OF QUALIFICATION VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING INSPECTION & PRESSURE TEST**  
THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	<b>HALLIBURTON</b>	REPORT No.:	QC-24-01-TSS-004-NDT-18
LOCATION:	<b>TSS WORKSHOP &amp; INSPECTION TEST AREA</b>	STANDARD:	ASTM E709 & ASTM E797 & ASME SECTION V ARTICLE 5,10 & 27 & ASME B31.1
WORK ORDER #	326115740	SPECIFICATION:	Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-76
DATE OF INSP:	13-Jan-2024	INSP. DUE DATE:	<b>12-Jan-2025</b>
TYPE OF INSPECTION:	<b>VISUAL INSPECTION, PRESSURE TEST AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING</b>		

DESCRIPTION:	DATE HEADER 10K 3" 1502 WING X THREAD	CHOKE MANIFOLD #	12405205
MANUFACTURER:	PETROFAC	SERIAL NO:	12405457

**INSPECTION DETAILS**

Max. Working Pressure:	10,000 PSI	Holding Time:	15 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, Area of diffused echo, Detector, Surface, Target.

(b) Corroded condition: Small reflection echo, Area of diffused echo, Detector, Corroded condition, Underside, Target. Reflection echo become very 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
	0°	90°	180°	270°	
A	1.456	1.424	1.413	1.435	1.190
B	1.487	1.471	1.431	1.416	

**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 15 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	Black Magnetic Ink 7HF	Magnaflux	220602	JUN,2025
UT THICKNESS GAUGE:	3997	CAL DUE DATE	16-Feb-24	Fluorescent 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				
WHITE LIGHT INTENSITY:	3670 lux						1.2 to 2.4 ml/100 ml

**PERSON DETAILS**

INSPECTOR NAME:	M.Shahzad Ali	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	ISO 9001, 14001, 45001, UT, VT,	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	

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