

**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 & WITNESS PRESSURE TEST**

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

<b>CLIENT:</b>	<b>HALLIBURTON</b>	<b>REPORT No.:</b>	HAL.23-05-TSS-031
<b>LOCATION:</b>	TSS (Burjesia Halliburton Camp)	<b>STANDARD:</b>	ASTM E709,ASTM E797/ ASME SECTION V ARTICLE 5,10 & 27
<b>DATE:</b>	23-May-23	<b>SPECIFICATION:</b>	<b>Halliburton Acceptance Criteria H2S STANDARD NACE MQ-01-75</b>
<b>W.No.:</b>	-	<b>INSP. DUE DATE:</b>	22-May-24
<b>TYPE OF INSPECTION:</b>	<b>VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING AND WITNESSING PRESSURE TEST</b>		

<b>DESCRIPTION:</b>	<b>3" 600 BALON VALVE</b>	<b>MFG SERIAL NO:</b>	5KML, 5FOX
<b>Pump S.N.:</b>	13119220 Cal DUE. JULY.2023	<b>Pressure Gauge NO:</b>	468066 Cal DUE. JULY.2023

**INSPECTION DETAILS**

ONLINE TRACEABILITY

(a) Normal condition  
Under side: (b) Corrosion present on back surface.  
Reflection echo become wide small by diffused reflection caused by corroded substrate 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

SECTION NO.	Thickness at Position				Minimum Thickness (INCH)
	0°	90°	180°	270°	
A	0.381	0.374	0.398	0.354	0.180 INCH
B	0.387	0.361	0.379	0.363	

**INSPECTION RESULT**

<b>VT &amp; MPI</b>	Accepted	* ACCORDING TO ASM E709(70.94158).
<b>UT</b>	Accepted	** According to Halliburton Procedure H2S STANDARD NACE MQ-01-75 (ASTM E 797)
<b>BODY</b>	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-01-75 (ASTM E 797)  
**Pressure Test**-The Above Item was Inlet, Outlet & Body Pressure Tested to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 1440 psi Hold 15 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

<b>AC YOKE S.N:</b>	201504048	<b>CAL DUE DATE</b>	18-Aug-23	<b>White Contrast WCP-2</b>	<b>MANUFACTURE</b>	<b>BATCH NO</b>	<b>EXPIRE DATE</b>
<b>Digital Lux Meter WHITE LIGHT</b>	2722003	<b>CAL DUE DATE</b>	20-Aug-23		Magnaflux	220602	JUN.2025
<b>UT THICKNESS GAUGE:</b>	5202746	<b>CAL DUE DATE</b>	18-Aug-23	<b>Black Magnetic Ink 7HF</b>	<b>MANUFACTURE</b>	<b>BATCH NO</b>	<b>EXPIRE DATE</b>
<b>UT TEST BLOCK:</b>	NoBo5087	<b>CAL DUE DATE</b>	20-Aug-23		Magnaflux	220605	JULY.2025
<b>ASTM Test Block:</b>	1657	<b>CAL DUE DATE</b>	18-Aug-23	<b>Fluorescent Magnetic Ink 7HF</b>	<b>1.2 to 2.4 ml/100 ml</b>		
<b>WHITE LIGHT INTENSITY:</b>	3415 lux						
<b>INSPECTOR NAME:</b>	M. Shekhar Ahmed	<b>SENIOR INSPECTOR:</b>	NAVEED HUSSAIN	<b>CLIENT:</b>			
<b>QUALIFICATION:</b>	ASNT CP-105, UT-PT-UV	<b>INSPECTION SUPERVISOR:</b>	HANI ALI	<b>HR SIGN:</b>			
<b>SIGNATURE &amp; STAMP:</b>				<b>DATE:</b>			

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