

**CERTIFICATE OF VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING**

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

<b>CLIENT:</b>	<b>HALLIBURTON</b>	<b>REPORT No.:</b>	QC-24-03-TSS-HALL-NDT-077
<b>LOCATION:</b>	TSS WORKSHOP & INSPECTION TEST AREA	<b>JOB NO :</b>	QC-24-03-TSS-NDT-HALL-03
<b>WORK ORDER #</b>	326362800	<b>SPECIFICATION:</b>	ASME SECTION VIII DIV 1 Latest Edition Manufacturing Date Book
<b>INSPECTION DATE:</b>	Monday, March 18, 2024	<b>INSP. DUE DATE:</b>	<b>Monday, March 17, 2025</b>
<b>TYPE OF INSPECTION:</b>	VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		
<b>DESCRIPTION:</b>	STORAGE TANK RELIEF LINE	<b>SAP NO.:</b>	13336975
<b>MANUFACTURER:</b>	AL SHIRAWI EQUIPMENT COMPANY LLC	<b>MANUFACTURER SERIAL NO:</b>	10567-2

**INSPECTION DETAILS**

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

(a) Normal condition  
(b) Concavities present on tank surface  
(c) Reflection echo technique used to detect concavities

ANGLE	THICKNESS AT POSITION				NOMINAL THICKNESS	CORROSION ALLOWANCE	FINAL REMARKS
	0°	90°	180°	270°			
A	0.271	0.277	0.274	0.280	8.56 MM 0.337 INCH	3.18 MM 0.125 INCH	SATISFACTORY
B	0.264	0.270	0.277	0.279			
C	0.254	0.258	0.287	0.280			
D	0.277	0.284	0.290	0.273			
E	0.267	0.275	0.273	0.282			
F	0.260	0.267	0.277	0.260			
G	0.273	0.281	0.272	0.278			
H	0.273	0.280	0.284	0.271			

**INSPECTION RESULT**

<b>VT &amp; MPI</b>	Accepted	* ACCORDING TO ASTM E709(70.94158).
<b>UT</b>	Accepted	According to ASTM E797 & ASME SECTION VIII DIV 1 Latest Edition & Manufacturing Date Book
<b>BODY</b>	Accepted	*** These Are The Actual Readings Need To Follow As Per Manufacturing Date Book

**Inspection Evaluation**

(MPI) The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable Accordance To ASTM E709 (70.94158)  
 U.T-The Above Item Was Found Acceptable As Per ASTM E797 & ASME SECTION VIII DIV 1 Latest Edition & Manufacturing Date Book

**INSPECTION EQUIPMENT DETAILS**

**TECHNICAL DETAILS**

INSPECTION EQUIPMENT DETAILS	TECHNICAL DETAILS
AC YOKE S.N: 201504052 CAL DUE DATE: 12-Aug-24	White Contrast WCP-2 MANUFACTURE: Magnaflux BATCH NO: 220602 EXPIRE DATE: JUN,2025
Digital Lux Meter WHITE LIGHT: 2722003 CAL DUE DATE: 14-Aug-24	
UT THICKNESS GAUGE: 3997 CAL DUE DATE: 14-Aug-24	Black Magnetic Ink 7HF MANUFACTURE: Magnaflux BATCH NO: 220605 EXPIRE DATE: JULY,2025
UT TEST BLOCK: NoBo5087 CAL DUE DATE: 14-Aug-24	
ASTM Test Block: 1657 CAL DUE DATE: 12-Aug-24	Fluorescent Magnetic Ink 7HF 1.2 to 2.4 ml/100 ml
WHITE LIGHT INTENSITY: 3630 lux	

**PERSON DETAILS**

**REVIEW BY**

<b>INSPECTOR NAME:</b> M. Shahrad Ahmed	<b>SENIOR INSPECTOR:</b> NAVEED HUSSAIN	<b>CLIENT:</b>
<b>QUALIFICATION:</b> [Stamp]	<b>INSPECTION SUPERVISOR:</b> HANI ALI	<b>HB&amp;SIGN:</b>
<b>SIGNATURE &amp; STAMP:</b> [Stamp]	<b>DATE:</b>	

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