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

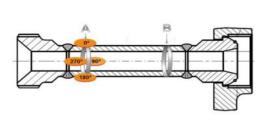
Basra, North Rumaila, Quality Control Yard - Iraq

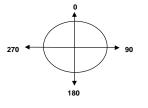


## CERTIFICATE OF QUALIFICATION VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING INSPECTION & WITNESS PRESSURE TEST

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIEREMENTS

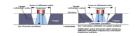
CLIENT:	HALLIBURTON	REPORT NO.:	QC-24-05-TSS-NDT-017					
LOCATION:	TSS YARD	STANDARD:	ASTM E709 & ASTM E797 & ASME B31.1					
WORK ORDER #	*****	HALLIBURTON DOC	Halliburton Acceptance Criteria WM-GL-HAL-SWT-501					
DATE OF INSPECTION:	Saturday, May 25, 2024	NEXT INSPECTION DATE:	Saturday, May 24, 2025					
TYPE OF INSPECTION: VISUAL INSPECTION AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING & WITNESS PRESSURE TEST								
DESCRIPTION:	4" STRAIGHT JOINT 3FT H2S 4" 206 WING X THREAD	SERIAL NO:	495016					
Pump NO:	13119220 CAL DUE DATE 27.AUG.2024	Pressure Gauge NO:	486066 CAL DUE DATE 02.AUG.2024					







\* ALL READINGS IN INCHS
\*\*MINIMUM THICKNESS PROVIDED BY CUSTMER



THICKNESS POINTS AREA	WALL THICKNESS RESULT				MINIMUM THICKNESS		
	0°	90°	180°	270°	IN INCHES		
A	0.317	0.321	0.310	0.315	0.218 INCH		
В	0.313	0.306	0.325	0.321	U.218 INCH		
INSPECTION RESULT							
VT & MPI	Accepted	According to ASTM E709					
UT	Accepted	According to ASTM E 797 & Halliburton Procedure WM-GL-SWT-501					
BODY	Accepted	*** These Are The Actual Readings Need To Follow The Halliburton Procedure					

## Inspection Evaluation

MPI -The Above Item Has No Significant Discontinuous At The Time Of Inspection And Found Acceptable According to ASTM E709

Note:MPI Wet Fluorescent inspection Thread With UltraViolet Light

Magnetic Particle Inspection With A/C Hand Yoke Welds & Avaliable Areas

U.T-The Above Item Was Found Acceptable As Per ASTM E797 & Halliburton Procedure WM-GL-SWT-501

Pressure TestWitness-The Above Item was Pressure Tested up to 300 PSI A low Pressure Hold for 5 min And Maximum Working pressure 2.000 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-Oct-24	White Contrast WCP-2	MANUFACTURE	BATCH NO	EXPIRE DATE	
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	16-Oct-24		Magnaflux	220602	JUN,2025	
UT THICKNESS GAUGE:	3997	CAL DUE DATE	14-Oct-24	Black Magnetic Ink 7HF	MANUFACT URE	BATCH NO	EXPIRE DATE	
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	15-Oct-24		Magnaflux	220605	JULY.2025	
ASTM Test Block:	1657	CAL DUE DATE	14-Oct-24	Fluorescent Magnetic Ink 14HF	MANUFACT URE	BATCH NO	EXPIRE DATE	
DC COIL:	22650	CAL DUE DATE	15-Oct-24		Magnaflux	220306	March.2025	
UV BLACK LIGHT:	1898977	CAL DUE DATE	14-Oct-24	Concentration of 14HF:		0.1 to 0.4 ml/100 ml		
WHITE LIGHT INTENSITY:	3620 lux	UV BLACK LIGHT INTENSITY:	3140 μw/cm <sup>2</sup>	Concentration of 7HF:		1.2 to2.4 ml/100 ml		
PERSON DETAILS REVIEW BY								
INSPECTOR NAME:	M.Shabzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN		CLIENT:			
QUALIFICATION:	TA ALLE ST'T	INSPECTION SUPERVISOR:	HANI ALI		HB&SIGN			
SIGNATURE & STAMP:								
Original - Client Files Copy - Area Office 7 OCTNIP 1997 Rev.00 DATED 07.NOV. 2021								



















