

# AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

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## ULTRASONIC FLAW DETECTION & MAGNETIC PARTICLE INSPECTION CERTIFICATE OF 8" SCREEN SUBS

<b>Client Name:</b>	ZHONGMAN PETROLEUM ENGINEERING TECHNOLOGY (HONG KONG) CO LIMITED IRAQ	<b>Report No.:</b>	ZPEC-16-QC-24-08-RS-012
<b>Acceptance Createra.</b>	DS-1 Fifth Edition, Volume 3 CAT 5-3	<b>Date of Inspection:</b>	07.AUG.2024
<b>Work Location:</b>	PO-64	<b>RIG NAME:</b>	ZPEC-16(DD)
<b>TEST EQUIPMENT &amp; CONSUMABLE DETAILS</b>			
<b>EQ. Manufacturer/ Model:</b>	Sonatest/ D-50	<b>EQ. Serial No:</b>	I017374
<b>Calibration Due Date:</b>	15.OCT.2024	<b>Couplant:</b>	UT Gel
<b>Calibration Block Type:</b>	V1 (SR # 506233)	<b>Calibration Due Date:</b>	15.OCT.2024
<b>Transducer Angle:</b>	90 DEG, 60 DEG, 45 DEG	<b>Transducer Frequency:</b>	4 MHz/ SR. 13737
<b>Range:</b>	100 mm	<b>Reference dB:</b>	42 dB
<b>Area Scanned:</b>	Connections	<b>Material Velocity:</b>	3250 m/s, 5900 m/s
<b>White Contrast WCP-2</b>	Batch #: 220602 Manufacture: Magnaflux Exp Date: JUN.2025	<b>Technical Details</b>	Wet Visible Continuous
<b>Black Ink 7HF</b>	Batch#: 220605 Manufacture: Magnaflux Exp Date: JULY.2025	<b>Coil 1200 Amp-Turns/in</b>	SC 22713 Cal.15.FEB.2024 Cal Due14.AUG.2024
<b>Fluorescent 14HF</b>	Batch #: 220306 Manufacture: Magnaflux Exp Date: March.2025	<b>A.C Hand Yoke</b>	201504053 Cal.15.FEB.2024 Cal Due14.AUG.2024
<b>Intensity Meter</b>	SR#1608000134 CAL.Date Cal. 15.FEB.2024 Cal Due 14.AUG.2024	<b>UV Black Light</b>	SR#1900084 Cal.15.FEB.2024 Cal Due14.AUG.2024
<b>LEAD GAGE</b>	SR#AH07KF0027 GAEMAKER LG-5003 Cal. 13.FEB.2024 Cal Due 12.AUG.2024	<b>THREAD PROFILE GAGE</b>	SR#21336 Cal. 13.FEB.2024 Cal Due 12.AUG.2024 SR#21335 Cal. 15.FEB.2024 Cal Due 14.AUG.2024
<b>Magnetic Particle Fluorescent 14HF Concentration:</b>	0.1 To 0.4 ML / 100 ML	<b>WMPT Light Intensity:</b>	3500 LUX
<b>Methodology:</b>	<ul style="list-style-type: none"> <li>Through Visual inspection</li> <li>Dimensional 3</li> <li>Ultrasonic Flaw Detection</li> <li>MPI inspection with Ultraviolet Light</li> </ul>		

Serial No.	Description	Connection		Result Inspection			Dimensional-3 Inspection													
		Pin	Box	Pin	Box	Body	Pin					Box					Body			
							OD(In)	ID(In)	SRG φ(In)	SRG ω(In)	Pin λ(In)	Bevel φ(In)	OD(In)	CB φ(In)	CB δ(In)	FBD φ(In)		FBL δ(In)	Bevel φ(In)	Overall λ(In)
MJS1903526	8" SCREEN SUB	6 5/8 REG	6 5/8 REG	Acc.	Acc.	Acc.	8"	3 1/2"	5 3/8"	15/16"	5"	7 5/8"	8"	6 1/16"	5/8	-	-	7 5/8"	69 1/4"	
MJS19092553	8" SCREEN SUB	6 5/8 REG	6 5/8 REG	Acc.	Acc.	Acc.	8"	3 1/2"	5 3/8"	1"	5"	7 11/16"	8"	6 1/16"	5/8	-	-	7 11/16"	69 3/8"	
<b>Conclusion :</b>		<b>* 02 SCREEN SUBS Were Found "Accepted" At The Time Of Inspection Ready To Use.</b>																		

<b>OD</b> Outside Diameter	<b>ID</b> Inside Diameter	<b>SRG</b> Stress Relief Groove	<b>CB</b> Counter Bore	<b>BB</b> Bore Back	<b>FB</b> Float Bore
<b>φ</b> Diameter	<b>λ</b> Length	<b>ω</b> Width	<b>δ</b> Depth	<b>NP.</b> Not Present	<b>NA.</b> Not Applicable
<b>EGR</b> Elevator Groove Recess	<b>SGR</b> Slip Groove Recess	<b>CR</b> Crack	<b>B</b> Bent	<b>PC</b> Premium Class	<b>RF</b> Reface
<b>GT</b> Galled Thread	<b>TP</b> Thread Pitting	<b>SP</b> Seal Pitting	<b>TD</b> Thread Damage	<b>SD</b> Seal Damage	<b>M</b> Mashed
<b>1</b> 100 % Coating	<b>2</b> 99-71 % Coating	<b>3</b> 70-40 % Coating	<b>4</b> Up to 40 %	<b>5</b> Nil	<b>WT</b> Wall Thickness
<b>Colors Code:</b>	<b>White</b> No Defects	<b>Red</b> Crack or Extreme	<b>Blue</b> Damage	<b>Green</b> Seal Damage	<b>Yellow</b> ACFM

<b>Inspector Name:</b>	RAO SOHAIL	<b>Review By</b>			
<b>Qualification:</b>	ASNT Level II (MT PT)	<b>Senior Inspector:</b>	M.USMAN	<b>Supervisor:</b>	M.SARWAR
<b>Signature:</b>				<b>Customer Name:</b>	
				<b>Customer Signature:</b>	
Original - Client Files		Copy - Area Office		QC/FN/DJ-PB/029 Rev.00 dated 07.Nov2021	

