

AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

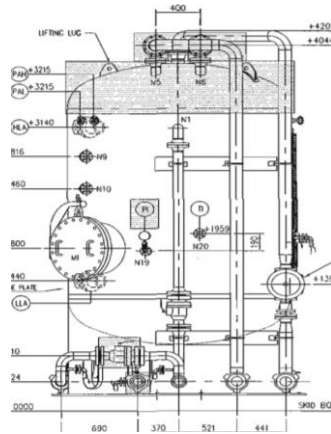
Basra, North Rumaila, Quality Control Yard - Iraq



CERTIFICATE OF QUALIFICATION VISUAL AND WITNESS PRESSURE TEST

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-05-TSS-HALL-NDT-001
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	JOB NO :	QC-24-05-TSS-HALL-006
WORK ORDER #	326589887	SPECIFICATION:	ASME B31.1/ CUSTOMER SPECIFICATION
DATE OF INSPECTION :	Tuesday, May 28, 2024	INSP. DUE DATE:	Tuesday, May 27, 2025
TYPE OF INSPECTION:	VISUAL INSPECTION AND WITNESS PRESSURE TEST		
DESCRIPTION:	SURGE TANK 50 PSI 50 BBL	SAP EQ.NO	11484046
BODY PRESSURE TEST	50 psi	HOLDING TIME:	15 MINUTES
INLET AND BYPASS PRESSURE TEST	1440 Psi	HOLDING TIME:	15 MINUTES
BODY PRESSURE TEST WITH PRV :	45 psi	HOLDING TIME:	15 MINUTES
Pump S.N.::	13119220	CAL DUE DATE:	AUG.2024
Pressure Gauge NO.:	468066	CAL DUE DATE:	AUG.2024



ONLINE TRACEABILITY

INSPECTION RESULT

PRESSURE TEST 1:	The Above SurgeTank Body Was Tested Up to 50 PSI Maximum Working pressure, Hold For 15 min no Leak was Found while testing & Pressure Was Stable According To Chart Recorder
PRESSURE TEST 2:	The Above Inlet And Bypass Was Tested Up to 300 PSI A low Pressure Hold for 5 min And 1440 PSI Maximum Working pressure, Hold For 15 min no Leak was Found while testing & Pressure Was Stable According To Chart Recorder
PRESSURE TEST 3:	The Above Surge Tank Body With PRV Was Tested Up to 225 PSI Maximum Working pressure, Hold For 15 min no Leak was Found while testing & Pressure Was Stable According To Chart Recorder

PERSON DETAILS

INSPECTOR NAME:	M.Shahzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	ASNT CP-105	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	

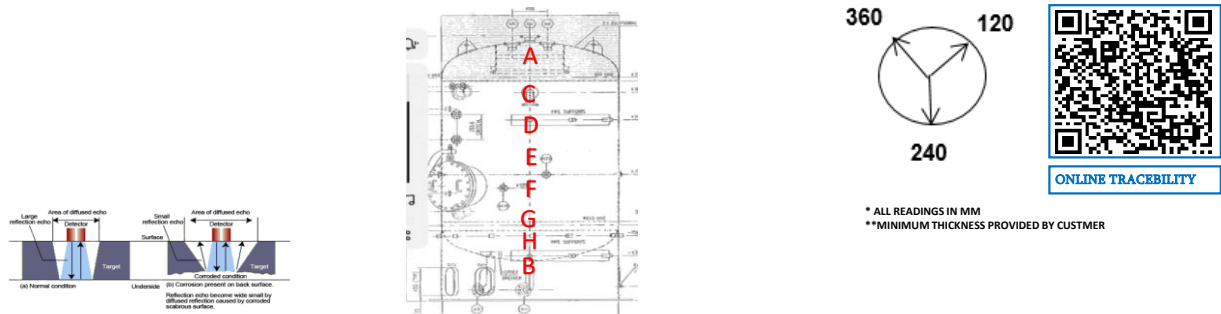
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Basra, North Rumaila, Quality Control Yard - Iraq



THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIEREMENTS

CLIENT:	HALLIBURTON		REPORT No.:	QC-24-05-TSS-HALL-NDT-002				
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA		JOB NO :	QC-24-05-TSS-NDT-HALL-006				
WORK ORDER #	326589887		SPECIFICATION:	ASTM E709 & ASTM E 797				
INSPECTION DATE:	Monday, May 27, 2024		INSP. DUE DATE:	Monday, May 26, 2025				
TYPE OF INSPECTION:	VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING							
DESCRIPTION:	SURGE TANK 50BBL 50PSI		SAP EQ.NO:	11484046				
MANUFACTURER:	SPECIALIST SERVICES		MANUFACTURER SERIAL NO:	FFZ-253				
TOP & BOTTOM MINIMUM THICKNESS	6 MM		TOP & BOTTOM CORROSION ALLOWANCE	3 MM				
SHELL NOMINAL THICKNESS	8 MM		SHELL CORROSION ALLOWANCE	3 MM				
INSPECTION DETAILS								
			* ALL READINGS IN MM **MINIMUM THICKNESS PROVIDED BY CUSTMER					
ANGLE	THICKNESS AT POSITION			MINIMUM THICKNESS	CORROSION ALLOWANCE	FINAL REMARKS		
	120°	240°	360°					
SURGE TANK TOP A1	8.43	8.52	8.54	6 MM	3 MM	SATISFACTORY		
SURGE TANK TOP A2	8.57	8.58	8.61					
SURGE TANK TOP A3	8.70	8.77	8.53					
SURGE TANK BOTTOM B1	8.43	8.44	8.52					
SURGE TANK BOTTOM B2	8.58	8.59	8.58					
SURGE TANK BOTTOM B3	8.84	8.83	8.79					
ANGLE	THICKNESS AT POSITION			NOMINAL THICKNESS				
	120°	240°	360°					
SURGE TANK SHELL C	8.07	8.19	8.25	8 MM				
SURGE TANK SHELL D	8.18	8.30	8.37					
SURGE TANK SHELL E	8.27	8.34	8.20					
SURGE TANK SHELL F	8.14	8.15	8.23					
SURGE TANK SHELL G	8.19	8.20	8.29					
SURGE TANK SHELL H	8.31	8.09	8.00					
INSPECTION RESULT								
VT & MPI	Accepted		ACCORDING TO ASTM E709					
UT	Accepted		ACCORDING TO ASTM E 797 & Manufacturing Date Book					
BODY	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 According To ASTM E709								
U.T-The Above Item Was Found Acceptable As Per ASTM E 797 & Manufacturing Date Book								
INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS				
AC YOKE S.N:	201504052	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	MANUFACTURE	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	Flourescent Magnetic Ink 7HF				
WHITE LIGHT INTENSITY:	3680 lux				1.2 to 2.4 ml/100 ml			
PERSON DETAILS		REVIEW BY						
INSPECTOR NAME:	M.Shahzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN		CLIENT:			
QUALIFICATION:	S.A.L.E.P.T.S.I.	INSPECTION SUPERVISOR:	HANI ALI		HS&SIGN			
SIGNATURE & STAMP:					DATE:			

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Basra, North Rumaila, Quality Control Yard - Iraq

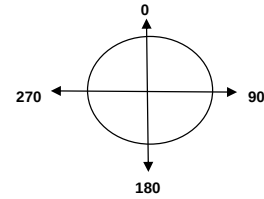
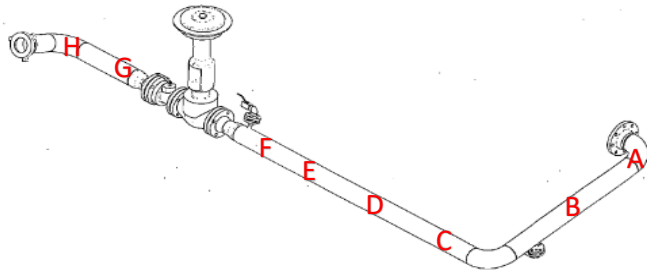


CERTIFICATE OF QUALIFICATION VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING INSPECTION

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-05-TSS-HALL-NDT-003
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	JOB NO :	QC-24-05-TSS-NDT-HALL-006
WORK ORDER #	326589887	SPECIFICATION:	ASTM E709 & ASTM E 797
INSPECTION DATE:	Monday, May 27, 2024	INSP. DUE DATE:	Monday, May 26, 2025
TYPE OF INSPECTION:	VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		
DESCRIPTION:	SURGE TANK GAS OUTLET LINE	SAP EQ.NO:	11484046
MANUFACTURER:	SPECIALIST SERVICES	MANUFACTURER SERIAL NO:	FFZ-253

INSPECTION DETAILS



ONLINE TRACEABILITY

* ALL READINGS IN MM
**MINIMUM THICKNESS PROVIDED BY CUSTMER



ANGLE	THICKNESS AT POSITION				CORROSION ALLOWANCE	FINAL REMARKS
	0°	90°	180°	270°		
A	7.34	7.42	7.47	7.59	3 MM	SATISFACTORY
B	7.27	7.34	7.36	7.41		
C	7.33	7.41	7.49	7.37		
D	7.38	7.47	7.50	7.43		
E	7.40	7.48	7.39	7.46		
F	7.36	7.42	7.38	7.50		
G	7.45	7.49	7.52	7.43		
H	7.40	7.42	7.46	7.39		

INSPECTION RESULT

VT & MPI	Accepted	ACCORDING TO ASTM E709
UT	Accepted	ACCORDING TO ASTM E 797 & Manufacturing Date Book
BODY	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 According To ASTM E709

U.T-The Above Item Was Found Acceptable As Per ASTM E 797 & Manufacturing Date Book

INSPECTION EQUIPMENT DETAILS

TECHNICAL DETAILS

AC YOKE S.N:	201504052	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	MANUFACTURE	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 7HF		1.2 to 2.4 ml/100 ml	
WHITE LIGHT INTENSITY:	3680 lux						

PERSON DETAILS

REVIEW BY

INSPECTOR NAME:	M.Shalazad Ahmad	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	ASNT Level II	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	

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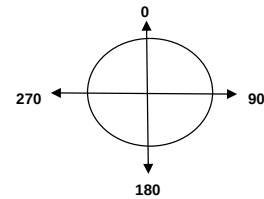
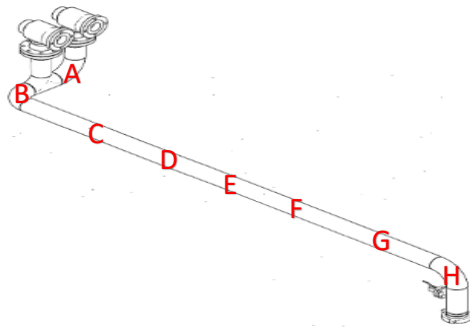


CERTIFICATE OF QUALIFICATION VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING INSPECTION

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-24-05-TSS-HALL-NDT-004
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	JOB NO :	QC-24-05-TSS-NDT-HALL-006
WORK ORDER #	326589887	SPECIFICATION:	ASTM E709 & ASTM E 797
INSPECTION DATE:	Monday, May 27, 2024	INSP. DUE DATE:	Monday, May 26, 2025
TYPE OF INSPECTION:	VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		
DESCRIPTION:	SURGE TANK RELIEF LINE	SAP EQ.NO:	11484046
MANUFACTURER:	SPECIALIST SERVICES	MANUFACTURER SERIAL NO:	FFZ-253

INSPECTION DETAILS



ONLINE TRACEABILITY

* ALL READINGS IN MM
**MINIMUM THICKNESS PROVIDED BY CUSTMER



ANGLE	THICKNESS AT POSITION				CORROSION ALLOWANCE	FINAL REMARKS
	0°	90°	180°	270°		
A	7.18	7.27	7.32	7.44	3 MM	SATISFACTORY
B	7.06	7.13	7.15	7.20		
C	7.09	7.17	7.34	7.22		
D	7.22	7.31	7.34	7.11		
E	7.13	7.21	7.18	7.25		
F	7.12	7.18	7.14	7.26		
G	7.29	7.33	7.36	7.27		
H	7.24	7.26	7.30	7.23		

INSPECTION RESULT

VT & MPI	Accepted	ACCORDING TO ASTM E709
UT	Accepted	ACCORDING TO ASTM E 797 & Manufacturing Date Book
BODY	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 According To ASTM E709

U.T-The Above Item Was Found Acceptable As Per ASTM E 797 & Manufacturing Date Book

INSPECTION EQUIPMENT DETAILS

TECHNICAL DETAILS

AC YOKE S.N:	201504052	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	MANUFACTURE	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 7HF		1.2 to 2.4 ml/100 ml	
WHITE LIGHT INTENSITY:	3680 lux						

PERSON DETAILS

REVIEW BY

INSPECTOR NAME:	M. Shahrad Ahmad	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:		INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	

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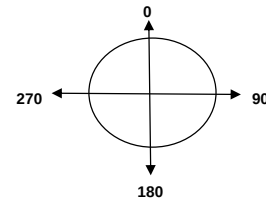


CERTIFICATE OF QUALIFICATION VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING INSPECTION

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

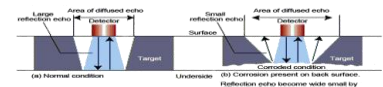
CLIENT:	HALLIBURTON	REPORT No.:	QC-24-05-TSS-HALL-NDT-005
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	JOB NO :	QC-24-05-TSS-NDT-HALL-006
WORK ORDER #	326589887	SPECIFICATION:	ASTM E709 & ASTM E 797
INSPECTION DATE:	Monday, May 27, 2024	INSP. DUE DATE:	Monday, May 26, 2025
TYPE OF INSPECTION:	VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		
DESCRIPTION:	SURGE TANK INLET LINE	SAP EQ.NO:	11484046
MANUFACTURER:	SPECIALIST SERVICES	MANUFACTURER SERIAL NO:	FFZ-253

INSPECTION DETAILS



ONLINE TRACEABILITY

* ALL READINGS IN MM
**MINIMUM THICKNESS PROVIDED BY CUSTOMER



ANGLE	THICKNESS AT POSITION				CORROSION ALLOWANCE	FINAL REMARKS
	0°	90°	180°	270°		
A	7.23	7.32	7.37	7.49	3 MM	SATISFACTORY
B	7.16	7.23	7.25	7.30		
C	7.22	7.30	7.39	7.27		
D	7.27	7.36	7.39	7.32		
E	7.29	7.37	7.28	7.35		
F	7.25	7.31	7.27	7.39		

INSPECTION RESULT

VT & MPI	Accepted	ACCORDING TO ASTM E709
UT	Accepted	ACCORDING TO ASTM E 797 & Manufacturing Date Book
BODY	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 According To ASTM E709

U.T-The Above Item Was Found Acceptable As Per ASTM E 797 & Manufacturing Date Book

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504052	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	MANUFACTURE	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 7HF		1.2 to 2.4 ml/100 ml	
WHITE LIGHT INTENSITY:	3680 lux						

PERSON DETAILS

REVIEW BY

INSPECTOR NAME:	M.Shahrad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	NDT Level II	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	

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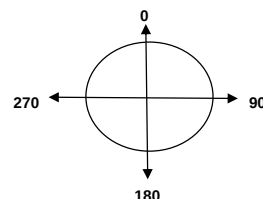
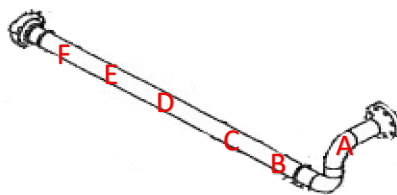


CERTIFICATE OF QUALIFICATION VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING INSPECTION

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

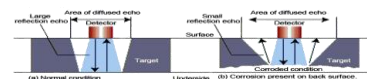
CLIENT:	HALLIBURTON	REPORT No.:	QC-24-05-TSS-HALL-NDT-006
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	JOB NO :	QC-24-05-TSS-NDT-HALL-006
WORK ORDER #	326589887	SPECIFICATION:	ASTM E709 & ASTM E 797
INSPECTION DATE:	Monday, May 27, 2024	INSP. DUE DATE:	Monday, May 26, 2025
TYPE OF INSPECTION:	VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		
DESCRIPTION:	SURGE TANK BYPASS LINE	SAP EQ.NO:	11484046
MANUFACTURER:	SPECIALIST SERVICES	MANUFACTURER SERIAL NO:	FFZ-253

INSPECTION DETAILS



ONLINE TRACEABILITY

* ALL READINGS IN MM
**MINIMUM THICKNESS PROVIDED BY CUSTOMER



ANGLE	THICKNESS AT POSITION				CORROSION ALLOWANCE	FINAL REMARKS
	0°	90°	180°	270°		
A	6.87	6.96	7.01	7.13	3 MM	SATISFACTORY
B	6.75	6.82	6.84	6.89		
C	6.81	6.89	7.03	6.91		
D	6.71	6.80	6.83	6.76		
E	6.88	6.96	6.87	6.94		
F	7.03	7.09	7.05	7.17		

INSPECTION RESULT

VT & MPI	Accepted	ACCORDING TO ASTM E709
UT	Accepted	ACCORDING TO ASTM E 797 & Manufacturing Date Book
BODY	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 According To ASTM E709

U.T-The Above Item Was Found Acceptable As Per ASTM E 797 & Manufacturing Date Book

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504052	CAL DUE DATE	14-Oct-24	White Contrast WCP-2	MANUFACTURE	BATCH NO	EXPIRE DATE
Digital Lux Meter	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	MANUFACTURE	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 7HF		1.2 to 2.4 ml/100 ml	
WHITE LIGHT INTENSITY:	3680 lux						

PERSON DETAILS

REVIEW BY

INSPECTOR NAME:	M.Shahzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	AI TAKAMUL	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	

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Basra, North Rumaila, Quality Control Yard - Iraq

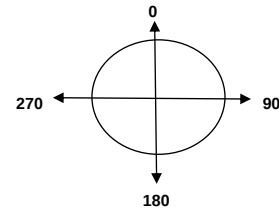


CERTIFICATE OF QUALIFICATION VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING INSPECTION

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

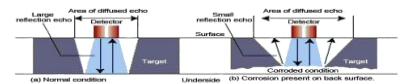
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LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	JOB NO :	QC-24-05-TSS-NDT-HALL-006
WORK ORDER #	326589887	SPECIFICATION:	ASTM E709 & ASTM E 797
INSPECTION DATE:	Monday, May 27, 2024	INSP. DUE DATE:	Monday, May 26, 2025
TYPE OF INSPECTION:	VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		
DESCRIPTION:	SURGE TANK OIL OUTLET LINE	SAP EQ.NO:	11484046
MANUFACTURER:	SPECIALIST SERVICES	MANUFACTURER SERIAL NO:	FFZ-253

INSPECTION DETAILS



ONLINE TRACEABILITY

* ALL READINGS IN MM
**MINIMUM THICKNESS PROVIDED BY CUSTMER



ANGLE	THICKNESS AT POSITION				CORROSION ALLOWANCE	FINAL REMARKS
	0°	90°	180°	270°		
A	6.65	6.74	6.79	6.91	3 MM	SATISFACTORY
B	6.51	6.58	6.60	6.65		
C	6.57	6.65	6.81	6.69		
D	6.77	6.86	6.89	6.82		

INSPECTION RESULT

VT & MPI	Accepted	ACCORDING TO ASTM E709
UT	Accepted	ACCORDING TO ASTM E 797 & Manufacturing Date Book
BODY	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 According To ASTM E709

U.T-The Above Item Was Found Acceptable As Per ASTM E 797 & Manufacturing Date Book

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504052	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	MANUFACTURE	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 7HF		1.2 to 2.4 ml/100 ml	
WHITE LIGHT INTENSITY:	3680 lux						

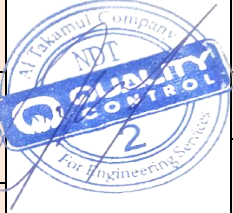
PERSON DETAILS

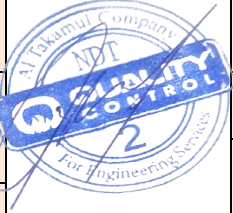
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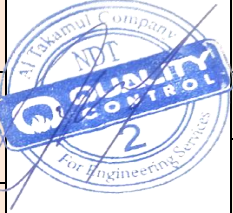
INSPECTOR NAME:	M.Shahzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	LEVEL 2	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN	
SIGNATURE & STAMP:				DATE:	

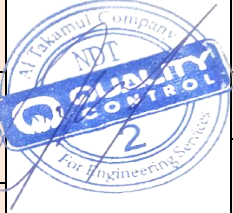
Original - Client Files Copy - Area Office QC/FN/PT/077 Rev.00 DATED 07.NOV. 2021

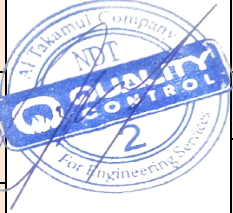


CERTIFICATION OF VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION									
Client:	HALLIBURTON (TSS)			Report No:	QC-24-05-TSS-NDT-008				
Location:	TSS WORKSHOP & INSPECTION TEST AREA			WORK ORDER	326589887				
Inspection Date:	Monday, May 27, 2024			Next Inspection Date:	Monday, May 26, 2025				
Type Of Inspection:	VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION			Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019)				
				UNIT DESCRIPTION:	3" BALON VALVE 600				
				UNIT S/N:	4 FMQ				
				SURGE TANK SAP NO:	11484046				
				INSPECTION RESULT :					
				VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION				
				MAGNETIC PARTICLE INSPECTION	Available critical areas inspected and found free from cracks and other defects				
				FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED				
COMMENT:									
Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast									
EQUIPMENT DETAILS						PERSON DETAILS		REVIEW BY	
Equipment:	AC-Yoke Test Block	Equipment:	Digital Lux Meter	Equipment:	AC/DC Yoke	INSPECTOR NAME:		SENIOR INSPECTOR:	NAVEED HUSSAIN
S.No:	1657	S.No:	2722003	S.No:	201504052	QUALIFICATION		SUPERVISOR:	HANI ALI
Cal Due Date:	14-Oct-24	Cal Due Date:	16-Oct-24	Cal Due Date:	14-Oct-24	ASNT LEVEL II		CLIENT:	
Black Magnetic Ink Manufacture:	Magnaflux	Batch No:	220605	Expiry Date:	JULY,2025	MT & PT & VT			
White Contrast Paint Manufacture:	Magnaflux	Batch No:	220602	Expiry Date:	JUN,2025	STAMP & SIGNATURE:			
Technical Details:		Magnetic Partical Concentration		Method		WMPT Light Intensity			
		1.2 to 2.4 ml/100 ml		Wet Magnetic Particle Testing (WMPT)		3620 Lux			
Original - Client Files		Copy - Area Office		QC/FN/MP/065 Rev.00		DATED 07 Nov 2021			

CERTIFICATION OF VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION									
Client:	HALLIBURTON (TSS)			Report No:	QC-24-05-TSS-NDT-009				
Location:	TSS WORKSHOP & INSPECTION TEST AREA			WORK ORDER	326589887				
Inspection Date:	Monday, May 27, 2024			Next Inspection Date:	Monday, May 26, 2025				
Type Of Inspection:	VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION			Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019)				
				UNIT DESCRIPTION:	3" BALON VALVE 600				
				UNIT S/N:	3 FMP				
				SURGE TANK SAP NO:	11484046				
				INSPECTION RESULT :					
				VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION				
				MAGNETIC PARTICLE INSPECTION	Available critical areas inspected and found free from cracks and other defects				
				FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED				
COMMENT:									
Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast									
EQUIPMENT DETAILS						PERSON DETAILS		REVIEW BY	
Equipment:	AC-Yoke Test Block	Equipment:	Digital Lux Meter	Equipment:	AC/DC Yoke	INSPECTOR NAME:		SENIOR INSPECTOR:	NAVEED HUSSAIN
S.No:	1657	S.No:	2722003	S.No:	201504052	QUALIFICATION		SUPERVISOR:	HANI ALI
Cal Due Date:	14-Oct-24	Cal Due Date:	16-Oct-24	Cal Due Date:	14-Oct-24	ASNT LEVEL II		CLIENT:	
Black Magnetic Ink Manufacture:	Magnaflux	Batch No:	220605	Expiry Date:	JULY,2025	MT & PT & VT			
White Contrast Paint Manufacture:	Magnaflux	Batch No:	220602	Expiry Date:	JUN,2025				
Technical Details:	Magnetic Partical Concentration		Method		WMPT Light Intensity	STAMP & SIGNATURE:			
	1.2 to 2.4 ml/100 ml		Wet Magnetic Particle Testing (WMPT)		3620 Lux				
Original - Client Files Copy - Area Office QC/FN/MP/065 Rev.00 DATED 07 Nov 2021									

CERTIFICATION OF VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION									
Client:	HALLIBURTON (TSS)				Report No:	QC-24-05-TSS-NDT-010			
Location:	TSS WORKSHOP & INSPECTION TEST AREA				WORK ORDER	326589887			
Inspection Date:	Monday, May 27, 2024				Next Inspection Date:	Monday, May 26, 2025			
Type Of Inspection:	VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION				Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019)			
					UNIT DESCRIPTION:	3" BALON VALVE 150 CL			
					UNIT S/N:	4 GZL			
					SURGE TANK SAP NO:	11484046			
					INSPECTION RESULT :				
					VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION			
					MAGNETIC PARTICLE INSPECTION	Available critical areas inspected and found free from cracks and other defects			
					FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED			
COMMENT:									
Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast									
EQUIPMENT DETAILS						PERSON DETAILS		REVIEW BY	
Equipment:	AC-Yoke Test Block	Equipment:	Digital Lux Meter	Equipment:	AC/DC Yoke	INSPECTOR NAME:		SENIOR INSPECTOR:	NAVEED HUSSAIN
S.No:	1657	S.No:	2722003	S.No:	201504052	QUALIFICATION		SUPERVISOR:	HANI ALI
Cal Due Date:	14-Oct-24	Cal Due Date:	16-Oct-24	Cal Due Date:	14-Oct-24	ASNT LEVEL II		CLIENT:	
Black Magnetic Ink Manufacture:	Magnaflux	Batch No:	220605	Expiry Date:	JULY,2025	MT & PT & VT			
White Contrast Paint Manufacture:	Magnaflux	Batch No:	220602	Expiry Date:	JUN,2025	STAMP & SIGNATURE:			
Technical Details:		Magnetic Partical Concentration		Method		WMPT Light Intensity			
		1.2 to 2.4 ml/100 ml		Wet Magnetic Particle Testing (WMPT)		3620 Lux			
Original - Client Files Copy - Area Office QC/FN/MP/065 Rev.00 DATED 07 Nov 2021									

CERTIFICATION OF VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION										
Client:	HALLIBURTON (TSS)			Report No:	QC-24-05-TSS-NDT-011					
Location:	TSS WORKSHOP & INSPECTION TEST AREA			WORK ORDER	326589887					
Inspection Date:	Monday, May 27, 2024			Next Inspection Date:	Monday, May 26, 2025					
Type Of Inspection:	VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION			Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019)					
				UNIT DESCRIPTION:	3" BALON VALVE 150 CL					
				UNIT S/N:	9 GZM					
				SURGE TANK SAP NO:	11484046					
				INSPECTION RESULT :						
				VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION					
				MAGNETIC PARTICLE INSPECTION	Available critical areas inspected and found free from cracks and other defects					
				FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED					
COMMENT:										
Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast										
EQUIPMENT DETAILS						PERSON DETAILS		REVIEW BY		
Equipment:	AC-Yoke Test Block	Equipment:	Digital Lux Meter	Equipment:	AC/DC Yoke	INSPECTOR NAME:	M.Shahzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	
S.No:	1657	S.No:	2722003	S.No:	201504052					
Cal Due Date:	14-Oct-24	Cal Due Date:	16-Oct-24	Cal Due Date:	14-Oct-24		QUALIFICATION	ASNT LEVEL II MT & PT & VT	SUPERVISOR:	HANI ALI
Black Magnetic Ink Manufacture:	Magnaflux	Batch No:	220605	Expiry Date:	JULY,2025					
White Contrast Paint Manufacture:	Magnaflux	Batch No:	220602	Expiry Date:	JUN,2025					
Technical Details:	Magnetic Partical Concentration		Method		WMPT Light Intensity	STAMP & SIGNATURE:		CLIENT:		
	1.2 to 2.4 ml/100 ml		Wet Magnetic Particle Testing (WMPT)		3620 Lux					
Original - Client Files Copy - Area Office QC/FN/MP/065 Rev.00 DATED 07 Nov 2021										

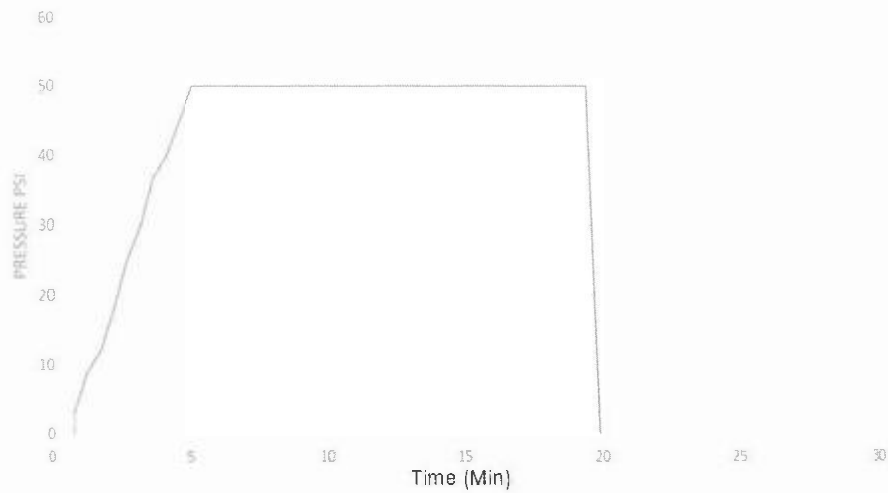
CERTIFICATION OF VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION									
Client:	HALLIBURTON (TSS)				Report No:	QC-24-05-TSS-NDT-012			
Location:	TSS WORKSHOP & INSPECTION TEST AREA				WORK ORDER	326589887			
Inspection Date:	Monday, May 27, 2024				Next Inspection Date:	Monday, May 26, 2025			
Type Of Inspection:	VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION				Specification:	ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019)			
					UNIT DESCRIPTION:	3" BALON VALVE 150 CL			
					UNIT S/N:	1 OZL			
					SURGE TANK SAP NO:	11484046			
					INSPECTION RESULT :				
					VISUAL , THOROUGH EXAMINATION	VISUAL & MAGNETIC PARTICLE INSPECTION (M.P.I.) HAD BEEN DONE ON THE AVAILABLE AREAS FOR THE ABOVE DESCRIPTION			
					MAGNETIC PARTICLE INSPECTION	Available critical areas inspected and found free from cracks and other defects			
					FINAL RESULTS	THE ABOVE INSPECTED AREAS WAS ACCEPTED			
COMMENT:									
Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast									
EQUIPMENT DETAILS						PERSON DETAILS		REVIEW BY	
Equipment:	AC-Yoke Test Block	Equipment:	Digital Lux Meter	Equipment:	AC/DC Yoke	INSPECTOR NAME:		SENIOR INSPECTOR:	NAVEED HUSSAIN
S.No:	1657	S.No:	2722003	S.No:	201504052	QUALIFICATION		SUPERVISOR:	HANI ALI
Cal Due Date:	14-Oct-24	Cal Due Date:	16-Oct-24	Cal Due Date:	14-Oct-24	ASNT LEVEL II		CLIENT:	
Black Magnetic Ink Manufacture:	Magnaflux	Batch No:	220605	Expiry Date:	JULY,2025	MT & PT & VT			
White Contrast Paint Manufacture:	Magnaflux	Batch No:	220602	Expiry Date:	JUN,2025				
Technical Details:		Magnetic Partical Concentration		Method		WMPT Light Intensity		STAMP & SIGNATURE:	
		1.2 to 2.4 ml/100 ml		Wet Magnetic Particle Testing (WMPT)		3620 Lux			
Original - Client Files		Copy - Area Office		QC/FN/MP/065 Rev.00		DATED 07 Nov 2021			

Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	8:30 AM
Stop Time	8:50 AM
Test Date	28-May-24
EQ NUMBER	11484046
LAST CALIB	2.Aug.2023

READING



TESTED BY: Tarek Bekhit
APPROVED BY: Hassan Kamel
COMMENTS: Body Test

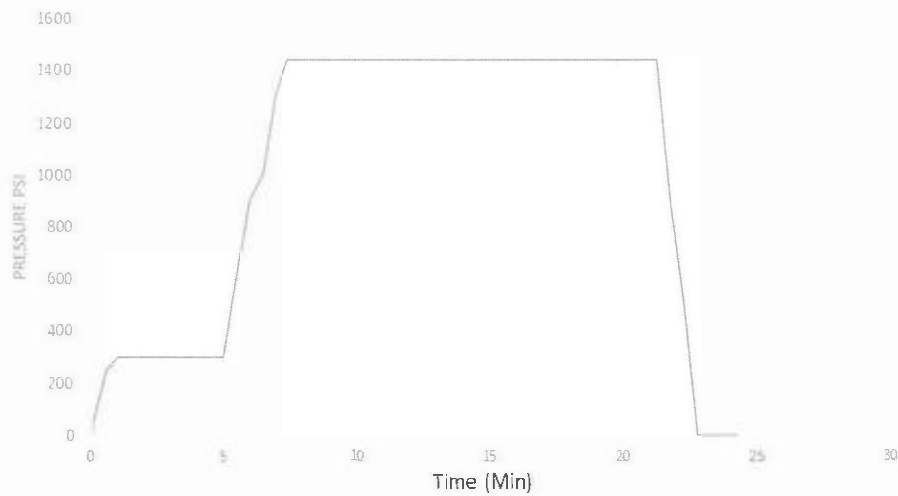


Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	8:55 AM
Stop Time	9:18 AM
Test Date	28-May-24
EQNUMBER	11484046
LAST CALIB	2.Aug.2023

READING



TESTED BY: Tarek Bekhit
APPROVED BY: Hassan Kamel
COMMENTS: Inlet and bypass

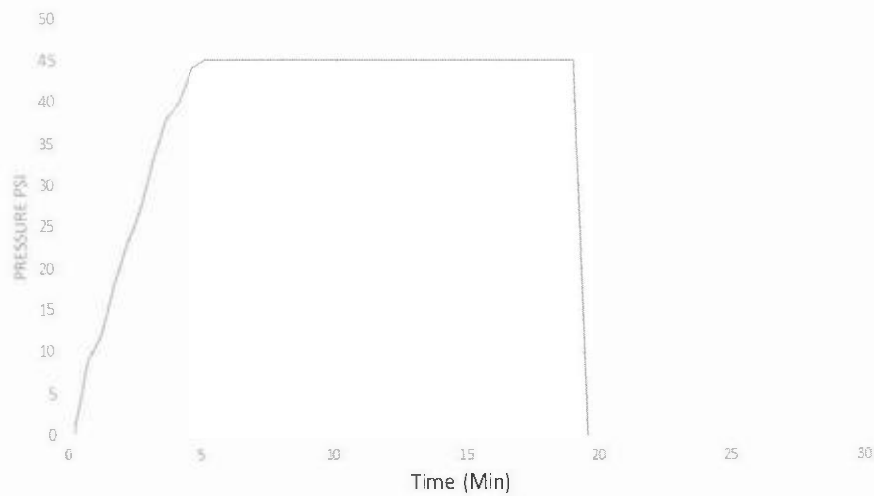


Data Collection Report

Gauge Information	
Serial Number	468066
Model	XP2I
Message Store	TSS test area
Units	PSI
SCALE	15000 PSI

Run Info	
Start Time	10:00 AM
Stop Time	10:19 AM
Test Date	28-May-24
EQNUMBER	11484046
LAST CALIB	2.Aug.2023

READING



TESTED BY: Tarek Bekhit
APPROVED BY: Hassan Kamel
COMMENTS: Body Test with PRVs

