

# AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq

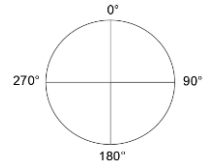
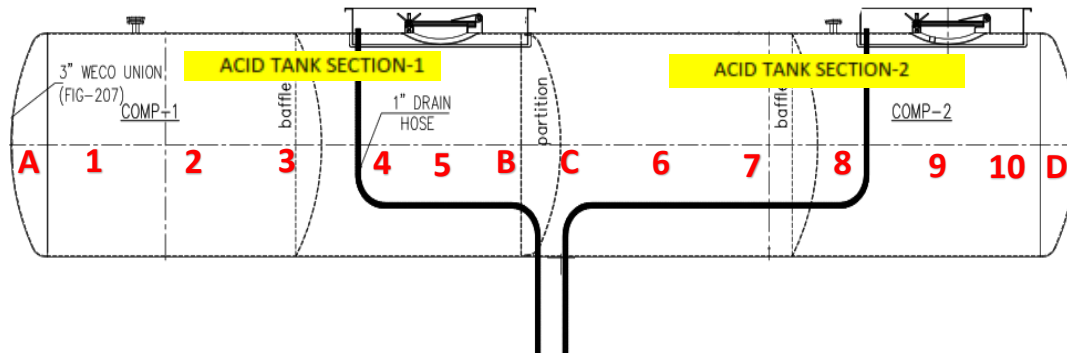


## CERTIFICATE OF QUALIFICATION VISUAL INSPECTION, LEAK TEST, LINING THICKNESS AND SPARK TESTING

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIEREMENTS

CLIENT:	<b>HALLIBURTON</b>	REPORT No.:	QC-TRANSPORT- ACID-24-MAY-001
LOCATION:	HPS HALLIBURTON YARD BASRA IRAQ	specification	WM-GL-HAL-PE-STIM-202
INSPECTION DATE:	Thursday, May 9, 2024	Due Date	<b>Thursday, May 8, 2025</b>
TYPE OF INSPECTION:	<b>*VISUAL TESTING (EXTERNAL &amp; INTERNAL) *LEAK TESTING *LINING THICKNESS * SPARK TESTING</b>		
DESCRIPTION:	6200 USG ( 2 COMP) ACID TANK	ACID TANK SAP NO:	<b>11873942</b>
MANUFACTURE :	AL SHIRAWI EQUIPMENT COMPANY	LINING COATING MATERLAL:	TIP TOP LINING 74 S
SPARK TESTER SR NO:	07155	CAL DUE DATE:	16-Oct-2024
MODEL:	PCWI DC30	TEST VOLTAGE:	0.70 KV
COATING THICKNESS INSTRUMENT SR.NO	373291	CAL DUE DATE:	15-Oct-2024

### INSPECTION DETAILS



SAP. NO:	POSITION	ACID TANK SECTION-1 LINING THICKNESS MEASUREMENTS IN MM							MINIMUM LINING THICKNESS IN MM
		HEAD A	BODY POINT 1	BODY POINT 2	BODY POINT 3	BODY POINT 4	BODY POINT 5	HEAD B	
11873942	0°	3.78	3.80	4.02	4.00	3.69	3.62	3.82	2.7 MM TO 3 MM
	90°	3.87	3.75	3.66	3.60	3.62	3.68	4.00	
	180°	3.90	3.60	3.71	3.78	3.80	3.71	3.83	
	270°	3.72	3.63	3.67	3.70	3.71	3.70	3.72	

SAP. NO:	POSITION	ACID TANK SECTION-2 LINING THICKNESS MEASUREMENTS IN MM							MINIMUM LINING THICKNESS IN MM
		HEAD C	BODY POINT 6	BODY POINT 7	BODY POINT 8	BODY POINT 9	BODY POINT 10	HEAD D	
11873942	0°	3.87	3.95	3.82	3.80	3.78	3.71	3.80	2.7 MM TO 3 MM
	90°	3.96	3.84	3.75	3.69	3.71	3.83	3.92	
	180°	4.08	3.78	3.86	3.93	3.95	3.86	3.98	
	270°	3.81	3.72	3.76	3.79	3.80	3.79	3.81	

### INSPECTION RESULT

**SPARK TESTING**-The Above Item Was Found Acceptable As Per Manufacture Acceptance Criteria.

**LINING THICKNESS**-The Above Item Was Found Acceptable As Per Manufacture Acceptance Criteria.

**LEAK TESTING**-The Above Item Was Found Acceptable As Per Manufacture Acceptance Criteria.

PERSONNEL DETAILS		REVIEW BY		
INSPECTOR NAME:	M. Shanzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT NAME:
QUALIFICATION:	ASNT Level III	INSPECTION SUPERVISOR:	HANI ALI	DATE:
STAMP & SIGNATURE:				SIGNATURE:

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



Tel: +9647810009138 / +9647834964657

Email: OP@qualitycontrol-iraq.com

hany.akafi@qualitycontrol-iraq.com

# AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq

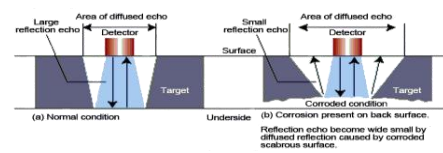
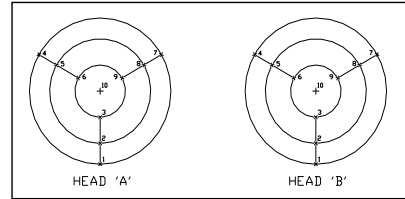
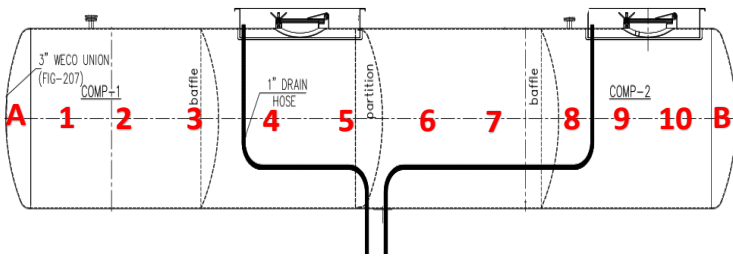


## CERTIFICATE OF QUALIFICATION VISUAL INSPECTION & ULTRASONIC WALL THICKNESS MEASUREMENT

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	<b>HALLIBURTON</b>	REPORT No.:	QC-TRANSPORT- ACID-24-MAY-002
LOCATION:	HPS HALLIBURTON YARD BASRA IRAQ	specification	WM-GL-HAL-PE-STIM-202
INSPECTION DATE:	Thursday, May 9, 2024	Due Date	<b>Friday, May 8, 2026</b>
TYPE OF INSPECTION:	<b>ULTRASONIC WALL THICKNESS MEASUREMENT</b>		
DESCRIPTION:	<b>6200 USG ( 2 COMP) ACID TANK</b>		
MANUFACTURE :	AL SHIRAWI EQUIPMENT COMPANY	ACID TANK SAP NO:	11873942
ULTRASONIC THICKNESS GAUGE S.NO:	5500391	CAL DUE DATE:	14-Oct-2024
UT Test Block S/N:	NoBo5087	CAL DUE DATE:	15-Oct-2024

### INSPECTION DETAILS



SAP NO:	POSITION	THICKNESS AT POSITION			MINIMUM WALL THICKNESS
		120°	180°	240°	
11873942	HEAD A1	0.324	0.312	0.319	4 MM 0.157 INCH
	HEAD A2	0.320	0.311	0.318	
	HEAD B1	0.322	0.320	0.324	
	HEAD B2	0.328	0.333	0.335	
	SHELL 1	0.248	0.256	0.239	
	SHELL 2	0.250	0.261	0.255	
	SHELL 3	0.246	0.238	0.248	
	SHELL 4	0.254	0.261	0.263	
	SHELL 5	0.257	0.262	0.259	
	SHELL 6	0.241	0.253	0.243	
SHELL 7	0.260	0.267	0.255		
SHELL 8	0.263	0.266	0.264		
SHELL 9	0.249	0.261	0.267		
SHELL 10	0.256	0.259	0.262		

### INSPECTION RESULT

ACID TANK WAS FOUND ACCEPTABLE WALL THICKNESS AS PER MANUFACTURE ACCEPTANCE CRITERIA.

PERSONNEL DETAILS		REVIEW BY			
INSPECTOR NAME:	M. Shanzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT NAME:	
QUALIFICATION:	ASNT	INSPECTION SUPERVISOR:	HANI ALI	DATE:	
STAMP & SIGNATURE:				SIGNATURE:	

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



Tel: +9647810009138 / +9647834964657

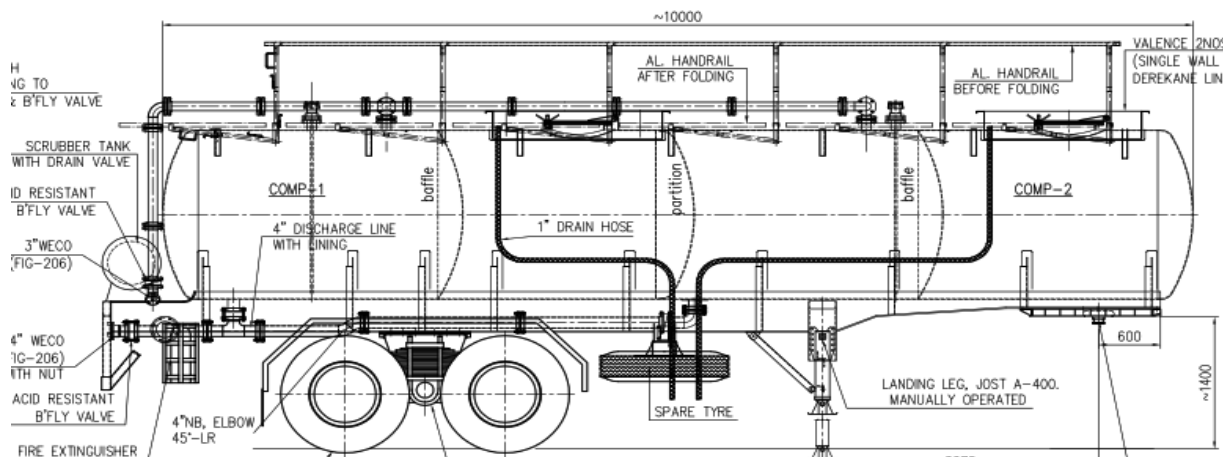
Email: OP@qualitycontrol-iraq.com  
hany.akafi@qualitycontrol-iraq.com

**CERTIFICATE OF QUALIFICATION HYDROSTATIC PRESSURE TEST WITNESS**

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	<b>HALLIBURTON</b>	REPORT No.:	QC-TRANSPORT- ACID-24-MAY-003
LOCATION:	HPS HALLIBURTON YARD BASRA IRAQ	specification	WM-GL-HAL-PE-STIM-202
INSPECTION DATE:	Thursday, May 9, 2024	NEXT INSPECTION DATE:	<b>Tuesday, May 8, 2029</b>
TYPE OF INSPECTION:	<b>HYDROSTATIC PRESSURE TEST WITNESS</b>		

DESCRIPTION:	6200 USG ( 2 COMP) ACID TANK
ACID TANK SAP NO:	11873942
MANUFACTURE :	AL SHIRAWI EQUIPMENT COMPANY
HOLDING TIME:	05 MINUTES
WORKING PRESSURE	10 PSI
TEST PRESSURE	15 PSI
PRESSURE TEST:	Hydrostatic Pressure Test carried out on 1.5 time of the Working Pressure with holding time 05 minutes.



**FINAL RESULT**

We hereby certify that the above equipment had been tested to the test pressure indicated above in a constant temperature and found satisfactory where no visible leak or pressure drop observed during the pressure test. Witness By QC Inspector.

PERSONNEL DETAILS		REVIEW BY		
INSPECTOR NAME:	M. Sina'ad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT NAME:
QUALIFICATION:	Level 1 W.T.P. 15 v.	INSPECTION SUPERVISOR:	HANI ALI	DATE:
STAMP & SIGNATURE:				SIGNATURE:

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

