

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

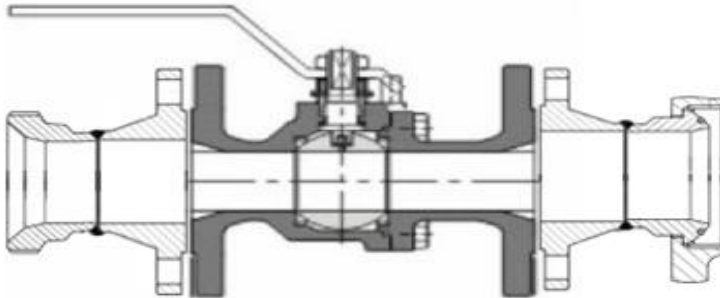
Basra, North Rumaila, Quality Control Yard - Iraq



CERTIFICATE OF QUALIFICATION VISUAL AND WITNESS PRESSURE TEST

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

CLIENT:	HALLIBURTON	REPORT No.:	QC-25-02-TSS-NDT-071
LOCATION:	TSS WORKSHOP & INSPECTION TEST AREA	JOB NO :	11022025
WORK ORDER #	***	SPECIFICATION:	ASME B31.1 / CUSTOMER SPECIFICATION
DATE OF INSPECTION :	Tuesday, February 11, 2025	INSP. DUE DATE:	Sunday, August 10, 2025
TYPE OF INSPECTION:	VISUAL INSPECTION AND WITNESS PRESSURE TEST		
DESCRIPTION:	3" 600 CL BALON VALVE	SERIAL NO:	5FOX
LOW PRESSURE TEST	100 psi	HOLDING TIME:	05 MINUTES
MAXIMUM WORKING PRESSURE TEST	1440 psi	HOLDING TIME:	15 MINUTES
Pump NO.:	EQ NO:13119220	CAL DUE DATE:	19.AUG.2025
Pressure Gauge NO.:	218230280019	CAL DUE DATE:	06.MAR.2025



ONLINE TRACEABILITY

INSPECTION RESULT

PRESSURE TEST 1:

The Above Body Tested up to 100 PSI A low Pressure Hold for 5 min And Maximum Working pressure 1440 psi Hold 15 min no Leak was Realized while testing & Pressure Was Stable Accordance To Chart Recorder Attached

PERSON DETAILS

REVIEW BY

INSPECTOR NAME:	M. Shalhad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	ASNT CP-105, MPTP, PT IV	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

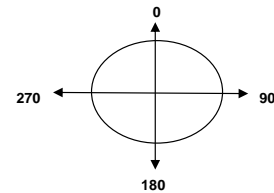
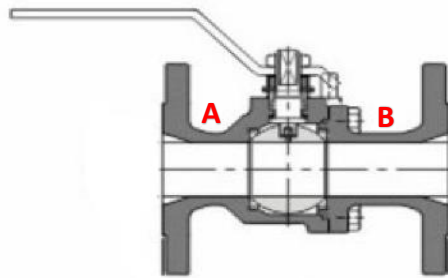


CERTIFICATE OF QUALIFICATION VISUAL AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING INSPECTION

THIS REPORT COMPLIES WITH RECOGNIZED INTERNATIONAL STANDARDS & TECHNICAL REQUIREMENTS

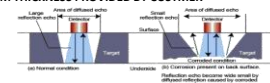
CLIENT:	HALLIBURTON	REPORT NO.:	QC-25-02-TSS-NDT-072
LOCATION:	TSS YARD	JOB NO:	11022025
WORK ORDER #	*****	STANDARD:	ASTM E709 & ASTM E797 & API 6A
DATE OF INSPECTION:	Tuesday, February 11, 2025	NEXT INSPECTION DATE:	Sunday, August 10, 2025
TYPE OF INSPECTION:	VISUAL INSPECTION AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	3" 600 CL BALON VALVE	SERIAL NO:	5FOX
--------------	-----------------------	------------	------



ONLINE TRACEABILITY

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



ANGLE	THICKNESS AT POSITION		MINIMUM THICKNESS IN MM
	A	B	
0°	11.69	11.78	5.61 MM
90°	11.56	11.63	
180°	11.84	11.72	
270°	11.86	11.67	

INSPECTION RESULT

VT & MPI	Accepted	According to ASTM E709
UT	Accepted	According to ASTM E 797

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 E797

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504052	CAL DUE DATE	11-Apr-25	White Contrast WCP-2	MANUFACTURE	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	13-Apr-25		Magnaflux	230408	APRIL,2026
UT THICKNESS GAUGE:	3997	CAL DUE DATE	11-Apr-25	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	12-Apr-25		Magnaflux	230604	JUNE, 2026
ASTM Test Block:	1657	CAL DUE DATE	11-Apr-25	Concentration of 7HF:		1.2 to2.4 ml/100 ml	
WHITE LIGHT INTENSITY:	3620 lux						

PERSON DETAILS

REVIEW BY

INSPECTOR NAME:	M.Shahzad Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:	
QUALIFICATION:	SNT-TC-1, Level 1, ASNT	INSPECTION SUPERVISOR:	HANI ALI	HR&SIGN	
SIGNATURE & STAMP:				DATE:	

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



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-25-02-TSS-NDT-073
LOCATION:	TSS YARD	JOB NO:	11022025
WORK ORDER #	*****	STANDARD:	ASTM E709 & ASTM E797 & API 6A
DATE OF INSPECTION:	Tuesday, February 11, 2025	NEXT INSPECTION DATE:	Sunday, August 10, 2025
TYPE OF INSPECTION:	VISUAL INSPECTION AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		

DESCRIPTION:	FLANGE: 3" 600 CL X 3" 206 WING	SERIAL NO:	HAH 20067-5-5
--------------	---------------------------------	------------	---------------

(a) Normal condition: Large reflection echo from target surface. Area of diffused echo is small.

(b) Corrosion present on back surface: Reflection echo becomes wide and small due to diffused reflection caused by corroded subsurface surface. Area of diffused echo is large.

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

ONLINE TRACEABILITY

ANGLE	THICKNESS AT POSITION		MINIMUM THICKNESS IN MM
	A		
0°	7.72		3.15 MM
90°	7.84		
180°	7.52		
270°	7.65		

INSPECTION RESULT		
VT & MPI	Accepted	According to ASTM E709
UT	Accepted	According to ASTM E 797

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 & Availiable Areas
 U.T-The Above Item Was Found Acceptable As Per ASTM E797

INSPECTION EQUIPMENT DETAILS				TECHNICAL DETAILS			
AC YOKE S.N:	201504052	CAL DUE DATE	11-Apr-25	White Contrast WCP-2	MANUFACTURE	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	13-Apr-25		Magnaflux	230408	APRIL,2026
UT THICKNESS GAUGE:	5500391	CAL DUE DATE	11-Apr-25	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	12-Apr-25		Magnaflux	230604	JUNE, 2026
ASTM Test Block:	1657	CAL DUE DATE	11-Apr-25	Fluorescent Magnetic Ink 14HF	MANUFACTURE	BATCH NO	EXPIRE DATE
DC COIL:	22650	CAL DUE DATE	12-Apr-25		Magnaflux	230503	MAY.2026
UV BLACK LIGHT:	1898977	CAL DUE DATE	11-Apr-25	Concentration of 14HF:		0.1 to 0.4 ml/100 ml	
WHITE LIGHT INTENSITY:	3620 lux	UV BLACK LIGHT INTENSITY:	3160 µw/cm²	Concentration of 7HF:		1.2 to2.4 ml/100 ml	

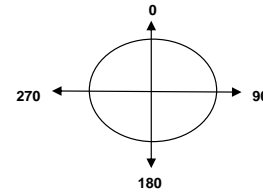
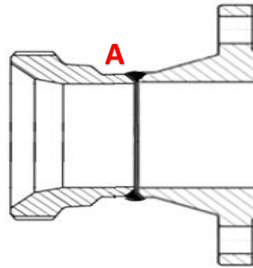
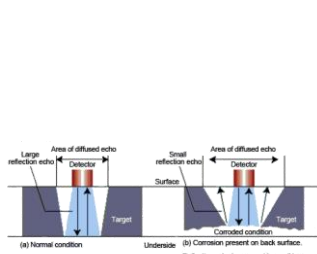
PERSON DETAILS		REVIEW BY		
INSPECTOR NAME:	M. Shalwan Ahmed	SENIOR INSPECTOR:	NAVEED HUSSAIN	CLIENT:
QUALIFICATION:	SNPTA, 25.11.2020	INSPECTION SUPERVISOR:	HANI ALI	HB&SIGN
SIGNATURE & STAMP:				DATE:



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-25-02-TSS-NDT-074
LOCATION:	TSS YARD	JOB NO:	11022025
WORK ORDER #	*****	STANDARD:	ASTM E709 & ASTM E797 & API 6A
DATE OF INSPECTION:	Tuesday, February 11, 2025	NEXT INSPECTION DATE:	Sunday, August 10, 2025
TYPE OF INSPECTION:	VISUAL INSPECTION AND MAGNETIC PARTICLE INSPECTION AND ULTRASONIC THICKNESS GAUGING		
DESCRIPTION:	FLANGE: 3" 600 CL X 3" 206 THREAD	SERIAL NO:	HAH 18483-14-6



ONLINE TRACEABILITY

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

ANGLE	THICKNESS AT POSITION		MINIMUM THICKNESS IN MM
	A		
0°	7.84		3.15 MM
90°	7.77		
180°	7.65		
270°	7.75		

INSPECTION RESULT

VT & MPI	Accepted	According to ASTM E709
UT	Accepted	According to ASTM E 797

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 & Available Areas

U.T-The Above Item Was Found Acceptable As Per ASTM E797

INSPECTION EQUIPMENT DETAILS

TECHNICAL DETAILS

AC YOKE S.N:	201504052	CAL DUE DATE	11-Apr-25	White Contrast WCP-2	MANUFACTURE	BATCH NO	EXPIRE DATE
Digital Lux Meter WHITE LIGHT	2722003	CAL DUE DATE	13-Apr-25		Magnaflux	230408	APRIL,2026
UT THICKNESS GAUGE:	5500391	CAL DUE DATE	11-Apr-25	Black Magnetic Ink 7HF	MANUFACTURE	BATCH NO	EXPIRE DATE
UT TEST BLOCK:	NoBo5087	CAL DUE DATE	12-Apr-25		Magnaflux	230604	JUNE, 2026
ASTM Test Block:	1657	CAL DUE DATE	11-Apr-25	Fluorescent Magnetic Ink 14HF	MANUFACTURE	BATCH NO	EXPIRE DATE
DC COIL:	22650	CAL DUE DATE	12-Apr-25		Magnaflux	230503	MAY.2026
UV BLACK LIGHT:	1898977	CAL DUE DATE	11-Apr-25	Concentration of 14HF:		0.1 to 0.4 ml/100 ml	
WHITE LIGHT INTENSITY:	3620 lux	UV BLACK LIGHT INTENSITY:	3160 µw/cm ²	Concentration of 7HF:		1.2 to2.4 ml/100 ml	

PERSON DETAILS

REVIEW BY

INSPECTOR NAME:	M. Shalwaz Ahmed	SENIOR INSPECTOR:	NAVERD HUSSAIN	CLIENT:	
QUALIFICATION:		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

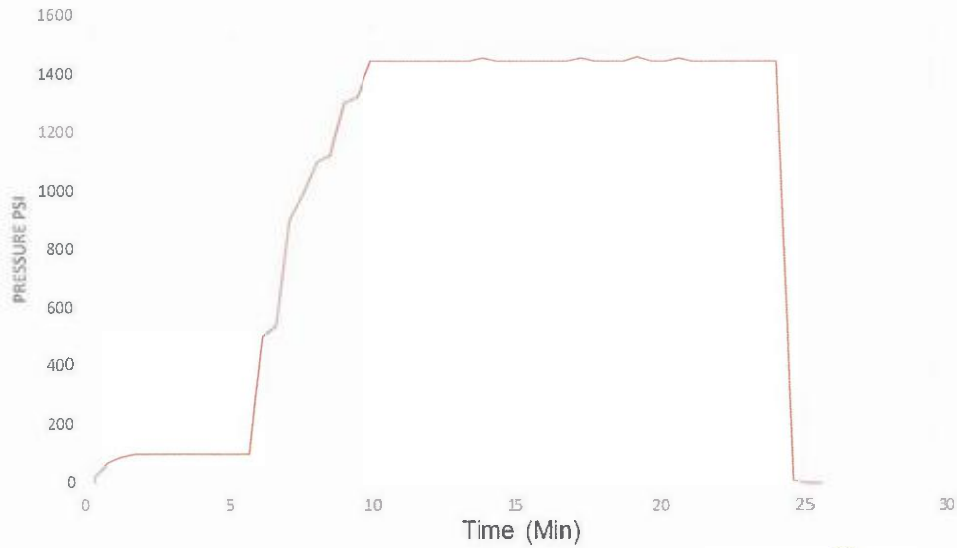


Data Collection Report

Gauge Information	
Serial Number	218230280019
Model	ADT680W-25-GP30K-PSI-AM
Calibration Date	07-Mar-24
Range	30000 PSI

Run Info	
Start Time	8:34 AM
Stop Time	8:59 AM
Test Date	11-Feb-25
EQ NUMBER	5FOX

READING



TESTED BY: Feras Abbas
APPROVED BY: Khaldoon Asad
COMMENTS: Body Test

