

SHAMS POWER COMPANY
ENGINEERING DIVISION
INSPECTION & CORROSION SECTION
SHAMS 1

LOCATION : R1LCA10BB001
KKS : R1LCA10BB001
GRADE & CLASSIFICATION : 2

CERTIFICATE OF INSPECTION

The equipment detailed below was examined in accordance with the SHAMS code of practice for plant inspection,

ITEM : Atmospheric tank

LOCATION : SHAMS Plant

TYPE OF INSPECTION : Major

DATE OF INSPECTION : March, 2020 outage

PLACE OF INSPECTION : IN-SITU

DATE OF LAST INSPECTION : Jan, 2019

REPORT :

1.0. SUMMARY

The above tank was taken off line, isolated, opened, vented & cleaned for major external & internal inspections.

2.0. SUBJECT

2.1. This is a vertical, cylindrical, ASTM A-516 Gr.60 tank with one inlet and outlet of condensate water.

Size	
Design pressure	
Design temperature	
Operation pressure	ATM
Operation temperature	
Fluid characteristics @	
Flanges	
Piping	
Shell minimum thickness	
Head minimum thickness	

.....
The above equipment is/ ~~is not~~ considered suitable for further service under the present operating conditions

NEXT MAJOR INSPECTION DUE : March 2024

INSPECTED: Osman Ismail

ENDORSEMENT: 48 MONTHS

REVIEWED: Ali Al Masabai

3.0 History

This tank was commissioned in 2013. Periodical inspection records since Oct.'2014 are available.

4.0. Scope of Inspection

4.1. Visual Inspection

4.2 Ultrasonic Thickness survey

5.0. Conditions Found

5.1. External

5.1.1 All painting and insulation found intact without any evidence of painting peel off or blistering and no evidence of any damage for insulation or insulation cover aluminum sheet.

5.1.2 All ladders, stairways and handrails found in satisfactory condition.

5.1.3 All concrete support found in satisfactory condition without evidence of cracking or spalling.

5.1.4 All external piping insulation found in satisfactory condition.

5.1.5 All earthing lugs found in satisfactory condition.

5.2. Internal

5.2.1 All internals found in satisfactory condition without evidence of fallen down, damage or corrosion.

5.2.2 All internal surfaces of shell and heads found in satisfactory condition, apart from normal carbon steel very thin hydroxide layer with scattered corrosion deposits spots.

6.0 NDT

- Ultrasonic thickness measurement was carried out on the internal shell courses and heads found satisfactory. See attached thickness measurement report.

6.0. Recommendations

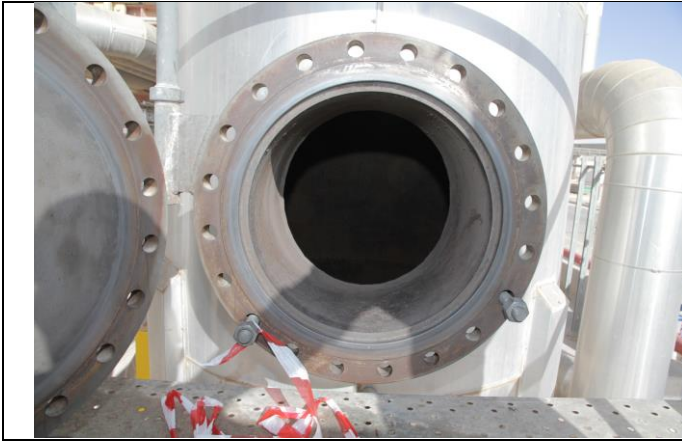
Atmospheric Tank to be open for inspection after four years as per SHAMS code of practice.

10. Inspection Grade and Interval

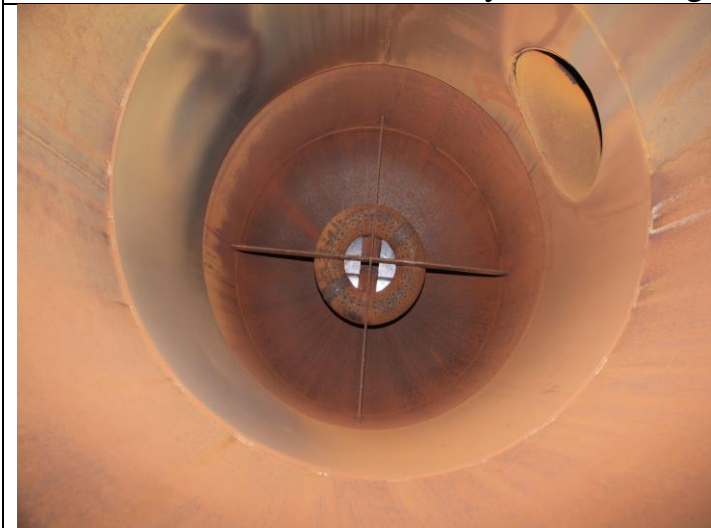
In accordance with the latest revision of SHAMS Code of Practice, this **Deaerator** was endorsed for 48 months under class 2, for next Major Inspection.

FREQUENCY : 48 MONTHS.
ENDORSEMENT : 48 MONTHS,
GRADE : 2
Next Major Insp. due : March, 2024

Photos



Manway nozzle, flange and devoid



Shell, dished end internal surfaces and internal

Form No.: IN-QSF-36 Rev. 05E Dtd.: 20-10-2018

ULTRASONIC THICKNESS GAUGING REPORT


Client:	SHAMS POWER COMPANY		
Date:	03.03.2020	Report No.:	AD / 454
Project:	SHAMS OUTAGE MARCH 2020	Job No.:	N/A
Location:	MADINAT ZAYED	Drawing No.:	N/A
Item ID:	ATMOSPHERIC TANK - R1HAN10 BB010	Material:	CS
Ref/ Procedure No:	INSPEC/UTG/001 Rev.10	Ref. Standard:	ASME SEC V
UTG Equipment Model/ Manufacturer:	USM 35 X DAC / GE	Serial No.:	7292a
Calibration Block No.:	STEP WEDGE, IIW V2 BLOCK	EQPT Calibration Certificate & Due Date:	INS/UT/CAL-043/19/AUH
Probe Type/ Size/Frequency:	WK TR 0° PROBE/ 10mm DIA / 5 MHz	Couplant Brand Name & Type:	POLYCELL + WATER
Connecting Cable Type & Length:	LEMO TO MICRODOT & 2 MTR	Special Attachment/ Equipment/ Block:	STEP WEDGE BLOCK (SL NO : AZB270)
Test Temperature:	AMBIENT	Surface Condition:	AS CLEANED
Inspection Date:	03.03.2020	Page:	1 of 1

Description:

ULTRASONIC THICKNESS GAUGING WAS CARRIED OUT ON THE FOLLOWING ITEM

LOCATION	ORIENTATION	MEASURED THICKNESS (mm)
1	12 O'CLOCK	15.82
1	3 O'CLOCK	15.60
1	6 O'CLOCK	15.82
1	9 O'CLOCK	15.83
2	12 O'CLOCK	13.19
2	3 O'CLOCK	13.29
2	6 O'CLOCK	13.38
2	9 O'CLOCK	13.32
3	12 O'CLOCK	12.74
3	3 O'CLOCK	12.90
3	6 O'CLOCK	12.98
3	9 O'CLOCK	13.20

REPORT FORMAT APPLICABLE ONLY FOR AUH & FUJ FACILITY

LEVEL II TECHNICIAN		CLIENT REPRESENTATIVE		AI / TPI
Name :	SHYMAL PAUL	Name :		Name :
Sign :		Sign :		Sign :
Date :	03.03.2020	Date :		Date :

Dubai Branch
Sharjah Branch
Abu Dhabi Branch
Fujairah Branch
Oman Branch
Registered Office

INSPEC
Level II No. 660
Date: 03.03.2020

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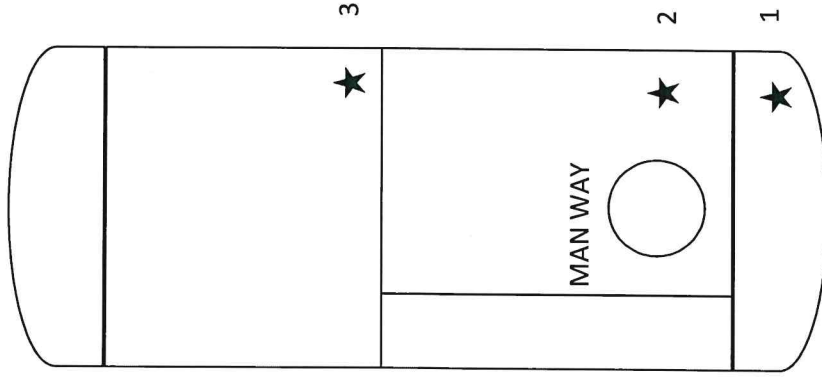
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For Complaints & Suggestions:
Please email to: suggestions.inspec@intertek.com

Please see terms & conditions. This report is valid only if signed and stamped (Numbered Stamp) by Level II / Level III.

ULTRASONIC THICKNESS SCANNING DRAWING SHEET

ATMOSPHERIC TANK



BOTTOM

★ UTG LOCATION

LEVEL II TECHNICIAN

Name :- SHYAMAL PAUL

Sign :-

Date :- 03.03.2020