

ATMOSPHERIC STORAGE TANK INSPECTION FORM



An Integrity Focused Inspection Company

P.O. Box 3278, Wainwright, AB T9W 1T2

Phone 780 842-6264 Fax 780 842 6248

Date 2020-05-14

Brias Job Number 2530

CLIENT Calroc Industries

LSD Calroc Industires Yard RR 14 Lloydminster

ATMOSPHERIC STORAGE TANK STATIC INFORMATION

Manufacturer G.L.M. Tanks & Equipment

Serial Number F01 128 S4

Capacity 750 BBL

Year Built 2001

Code API 12F MOD

Edition NA

Diameter 15.3'

Height 24'

Bottom Thickness 0.250"

Roof Thickness 0.188"

Shell Course 1 0.188"

Shell Course 2 & Up 0.188"

At Time of Inspection tank was

In Service Out of Service

Tank going back into service after inspection No

Surplus Yes No

Construction Steel Fiberglass Plastic Seal Welded Bolted Riveted Double Wall

INSPECTION SUMMARY

- A VE, VI and Spot UT was performed on tank only. Tank was found to be acceptable

- Ladder / Platforms are disconnected

- Holidays in coating on bottom, shell, manway and nozzles

- 2 anodes 10% consumed

RECOMMENDATIONS

- Patch coat holidays in coating

- Install new anodes

INSPECTION TYPE PERFORMED, INTERVAL AND SIGN OFF

Inspection Type VE VI LFET MFL UT MT HOLIDAY EXAM

Inspection Interval 5 Years Next Inspection Due May 2025

Next Inspection Type VE VI LFET MFL UT MT HOLIDAY EXAM

Inspector: Derek Pfisterer 653 Cert # 58760 Sign off _____ Date 2020-05-14

Report Reviewed By: _____ Date _____

EXTERNAL TANK

Nameplate (API 650 10.1)

Nameplate is Legible and Readily Accessible

	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
As New					

Double Wall Tank (AER G55 5.3.3)

Interstitial Leak Detection

	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
As New					

EXTERNAL ATTACHMENTS

Appurtenances

Gauge Board

Envirovault

Ladder and Platforms

	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
As New					Unable to read numbers
					Disconnected

EXTERNAL SHELL

Shell

(API 653 4.3)

Dents or Other Physical Defects

Corrosion Evident

Coating Condition

Percent of Shell that is Insulated

Condition of Spray on Insulation

Condition of Clad Insulation

Condition Around Openings and Manway

Floor Plate Extends Past Shell

Manway Condition

Manway Door Removed for Inspection

	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
As New					Tank is insulated
					95% insulated

Yes

No

INTERNAL INSPECTION

Roof Internal

Roof (API 653 4.2)	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
General Corrosion, Holes, Other Damage					
Scaling Evident					
Rafters and Girders					
Internal Supports					
Inspection Performed from Tank Floor					

Yes	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA

Shell Internal

Shell (API 653 4.3)	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
Internal Manway Condition					
Floor to Shell Interface					
General Corrosion Evident					
Pitting Corrosion Evident					
Dents or Other Mechanical Defects					
Weld Seams - Corrosion, Weld Quality					
Nozzles Back Welded					
Internal Attachments (Supports, Baffles)					
Nozzle Inspection					
Internal Coating Condition					
Internal Piping (Bolting, Supports)					
Internal Float					
Envirovault					
Portion of Tank Clean for Internal Inspection					

Bottom Course

Bottom (API 653 4.4)	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
General Corrosion					
Pitting Corrosion					
Welds					
Internal Coating Condition					
UT Results					

Bottom Internal

General Corrosion	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
Pitting Corrosion					
Welds					
Internal Coating Condition					
UT Results					

No corrosion evident

Holidays in coating

Holidays in coating

Holidays in coating

Spot UT perfomed

Burner Tube

Tube Cleaned for Inspection	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	Tube Removed During Inspection	<input checked="" type="checkbox"/> NA
Burner Tube	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
Condition	As New				

Burner Tube Throat	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA
Burner Tube Supports				

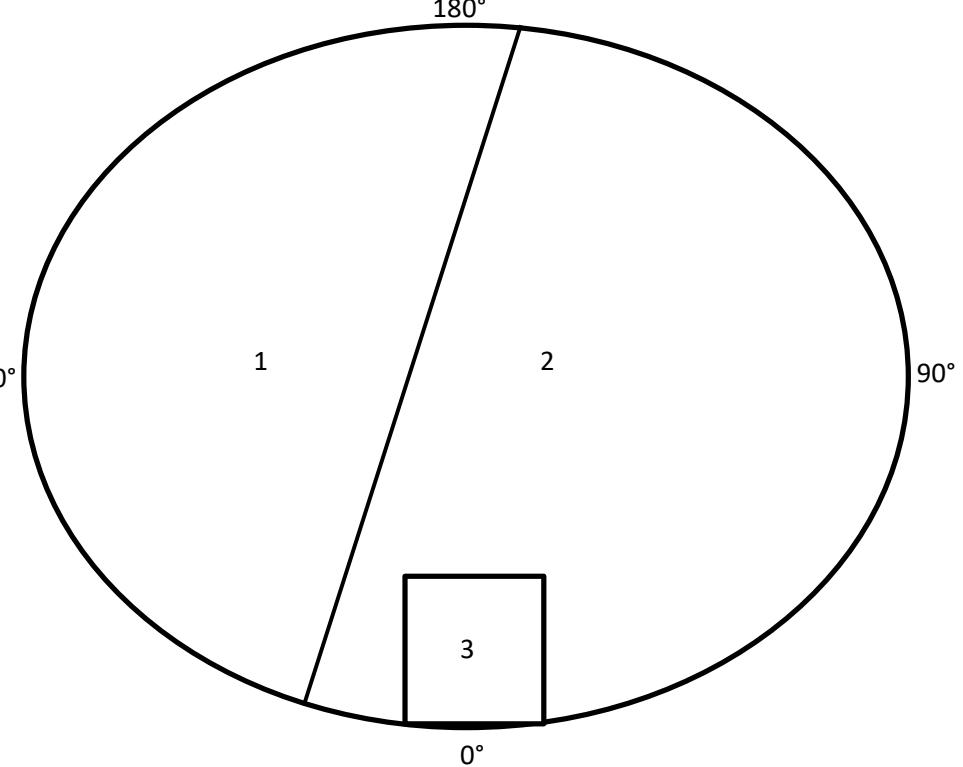
INTERNAL INSPECTION

Bottom Details/ Comments

Comments

- 1 Plate 1
- 2 Plate 2
- 3 Manway
- 4
- 5
- 6
- 7
- 8
- 9
- 10

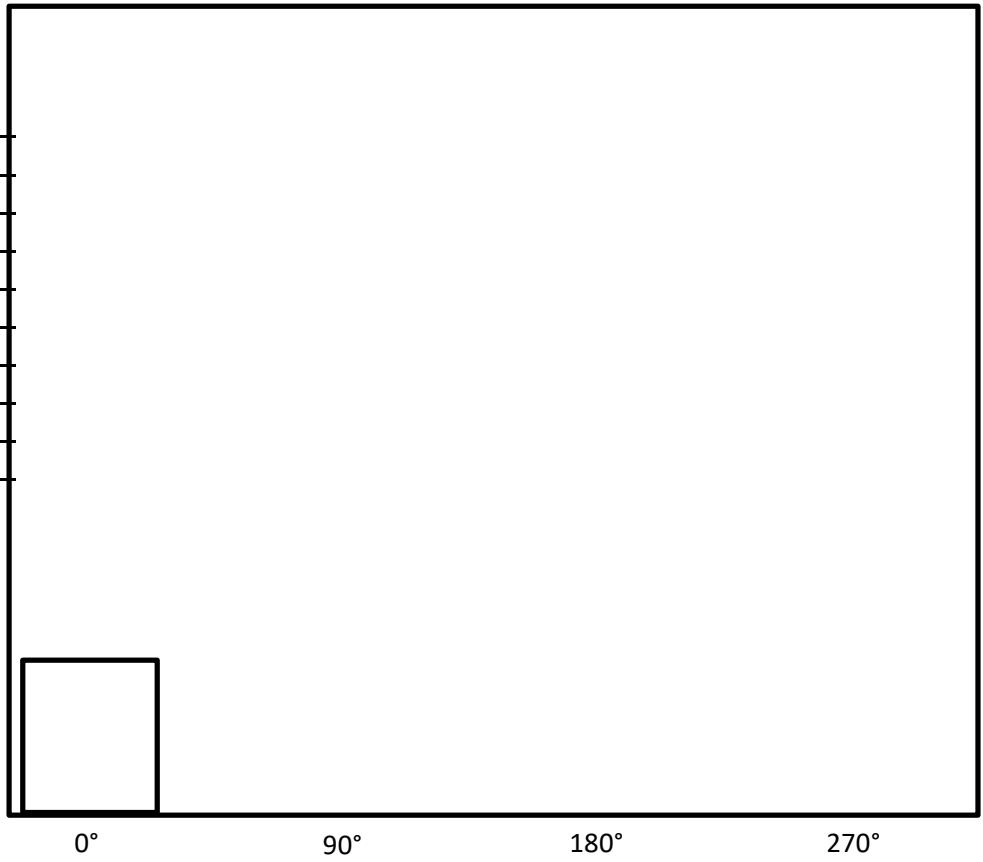
270°



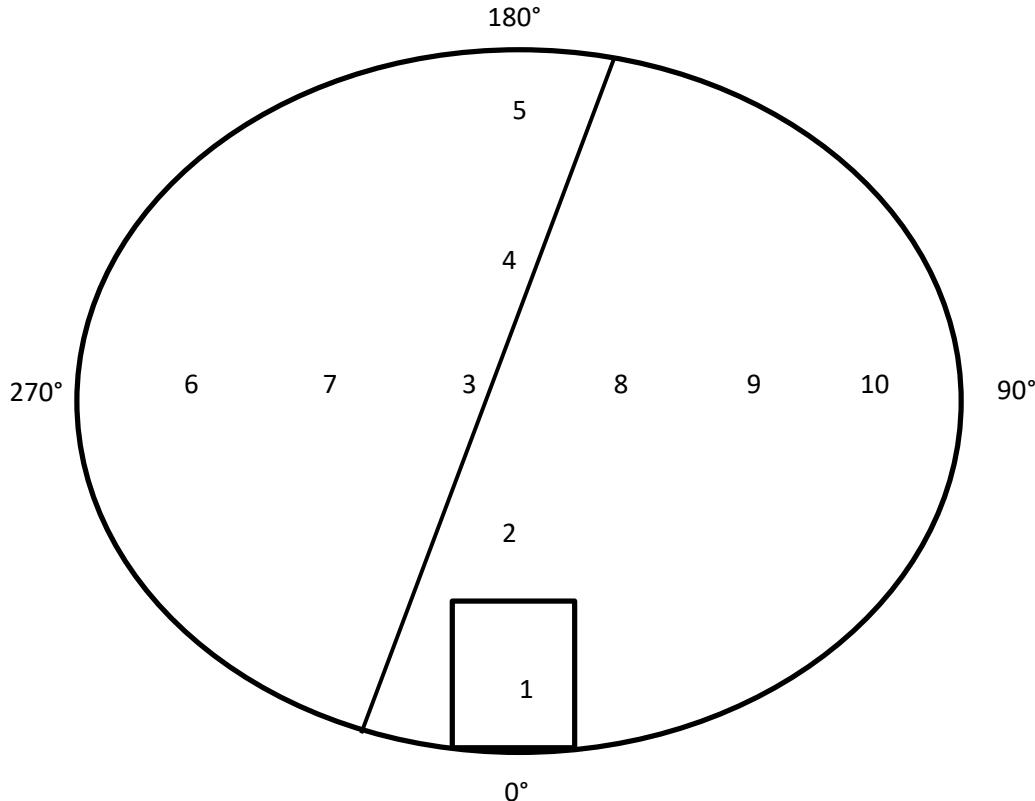
Shell Details/ Comments

Comments

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10



Bottom UT CORROSION SURVEY

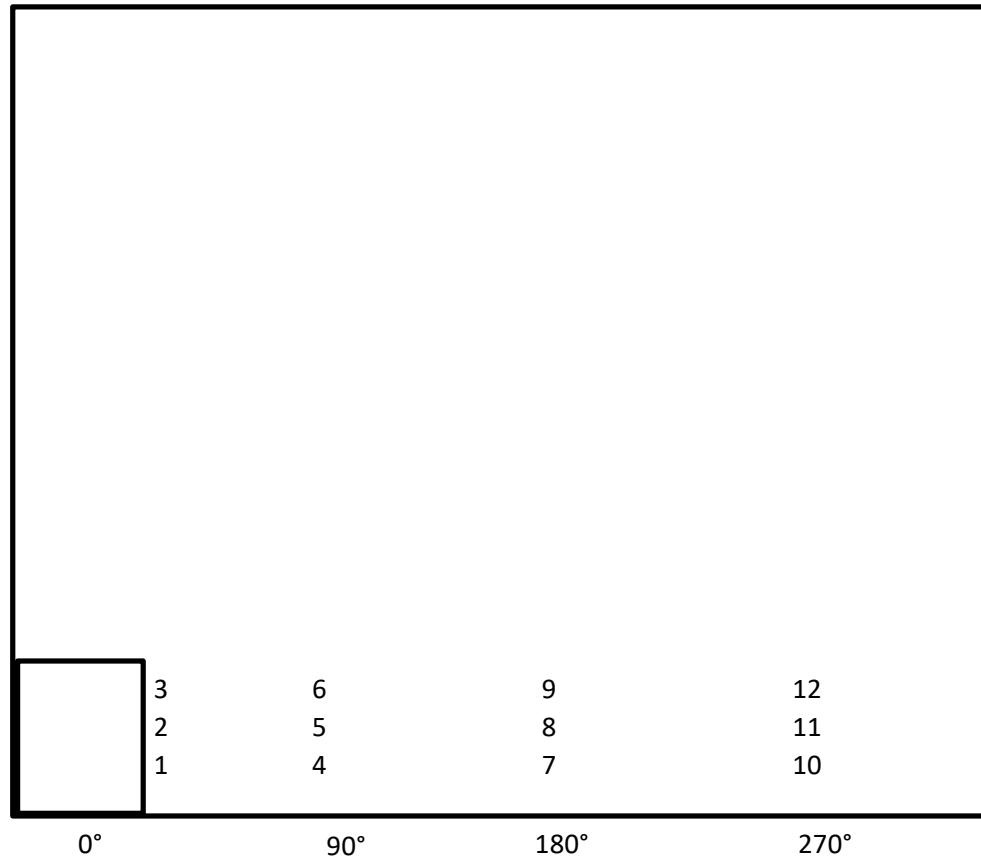


TML #	First Survey		Previous Survey		Last Survey		Corrosion Rate (Inches/Years)	Remaining Life of Bottom (Years)
	Thickness	Date	Thickness	Date	Thickness	Date		
1	0.250	2001	NA	NA	0.246	2020	0.0002	693.50
2	0.250	2001	NA	NA	0.247	2020	0.0002	931.00
3	0.250	2001	NA	NA	0.241	2020	0.0005	297.67
4	0.250	2001	NA	NA	0.244	2020	0.0003	456.00
5	0.250	2001	NA	NA	0.245	2020	0.0003	551.00
6	0.250	2001	NA	NA	0.245	2020	0.0003	551.00
7	0.250	2001	NA	NA	0.249	2020	0.0001	2831.00
8	0.250	2001	NA	NA	0.243	2020	0.0004	388.14
9	0.250	2001	NA	NA	0.243	2020	0.0004	388.14
10	0.250	2001	NA	NA	0.246	2020	0.0002	693.50

API 653 - Table 4.4 - Bottom Plate Minimum Thickness

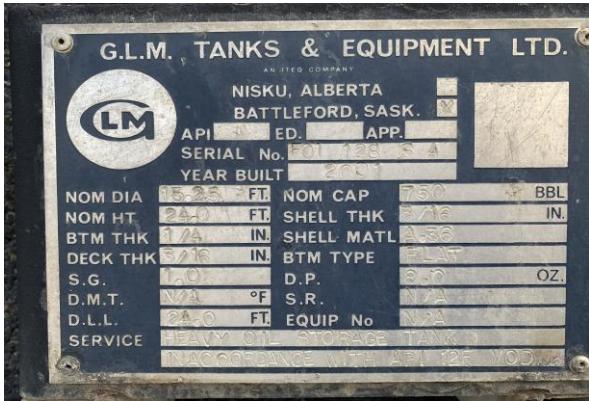
Minimum Bottom Plate Thickness at Next Inspection (in.)	Tank Bottom/ Foundation Design
0.1	Tank bottom/foundation design with no means for detection and containment of a bottom leak.

SHELL UT CORROSION SURVEY



TML #	First Survey	First Survey	Previous		Last Survey		Corrosion		Remaining Life of Shell (Years)
	Thickness	Date	Survey	Thickness	Previous Survey Date	Thickness	Last Survey Date	Rate (In./Years)	
1	0.188	2001	NA	NA	0.186	2020	0.0001	1767.00	
2	0.188	2001	NA	NA	0.183	2020	0.0003	695.40	
3	0.188	2001	NA	NA	0.182	2020	0.0003	576.33	
4	0.188	2001	NA	NA	0.182	2020	0.0003	576.33	
5	0.188	2001	NA	NA	0.184	2020	0.0002	874.00	
6	0.188	2001	NA	NA	0.186	2020	0.0001	1767.00	
7	0.188	2001	NA	NA	0.187	2020	0.0001	3553.00	
8	0.188	2001	NA	NA	0.183	2020	0.0003	695.40	
9	0.188	2001	NA	NA	0.186	2020	0.0001	1767.00	
10	0.188	2001	NA	NA	0.185	2020	0.0002	1171.67	
11	0.188	2001	NA	NA	0.184	2020	0.0002	874.00	
12	0.188	2001	NA	NA	0.183	2020	0.0003	695.40	

PICTURES







Scope of Services

The agreement of Brias Inc. to perform services extends only to those services provided for in writing. Under no circumstance shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Brias Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Brias Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Brias Inc. In no event shall, Brias Inc., liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care

In performing the services provided, Brias Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Brias Inc.