



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
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Year Built	2001
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Code	API 12F MOD
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Edition	NA
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Diameter 15.3'

Height 24'

Bottom Thickness	0.250"
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Roof Thickness	0.188"
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Shell Course 1	0.188"
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Shell Course 2 & Up	0.188"
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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: _____ Sign off _____ Date _____

EXTERNAL TANK

Nameplate

(API 650 10.1)

Nameplate is Legible and Readily Accessible

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

Double Wall Tank

(AER G55 5.3.3)

Interstitial Leak Detection

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

EXTERNAL ATTACHMENTS

Appurtenances

Gauge Board
Envirovault
Ladder and Platforms

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

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

☒ Yes

☐ No

INTERNAL INSPECTION

Roof Internal

Roof

(API 653 4.2)

	As New	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
General Corrosion, Holes, Other Damage						No corrosion evident
Scaling Evident						
Rafters and Girders						
Internal Supports						
Inspection Performed from Tank Floor	Yes					

Shell Internal

Shell

(API 653 4.3)

	As New	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
Internal Manway Condition						Holidays in coating
Floor to Shell Interface						
General Corrosion Evident						No corrosion evident
Pitting Corrosion Evident						
Dents or Other Mechanical Defects						
Weld Seams - Corrosion, Weld Quality						
Nozzles Back Welded						
Internal Attachments (Supports, Baffles)						
Nozzle Inspection						Holidays in coating
Internal Coating Condition						Holidays in coating
Internal Piping (Bolting, Supports)						
Internal Float						
Envirovault						
Portion of Tank Clean for Internal Inspection						
Bottom Course						

Bottom Internal

Bottom

(API 653 4.4)

	As New	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
General Corrosion						No corrosion evident
Pitting Corrosion						
Welds						
Internal Coating Condition						Holidays in coating
UT Results						Spot UT performed

Burner Tube

Tube Cleaned for Inspection

☐ Yes ☐ No ☒ NA

Tube Removed During Inspection

☒ NA

Burner Tube

Condition
Burner Tube Throat
Burner Tube Supports

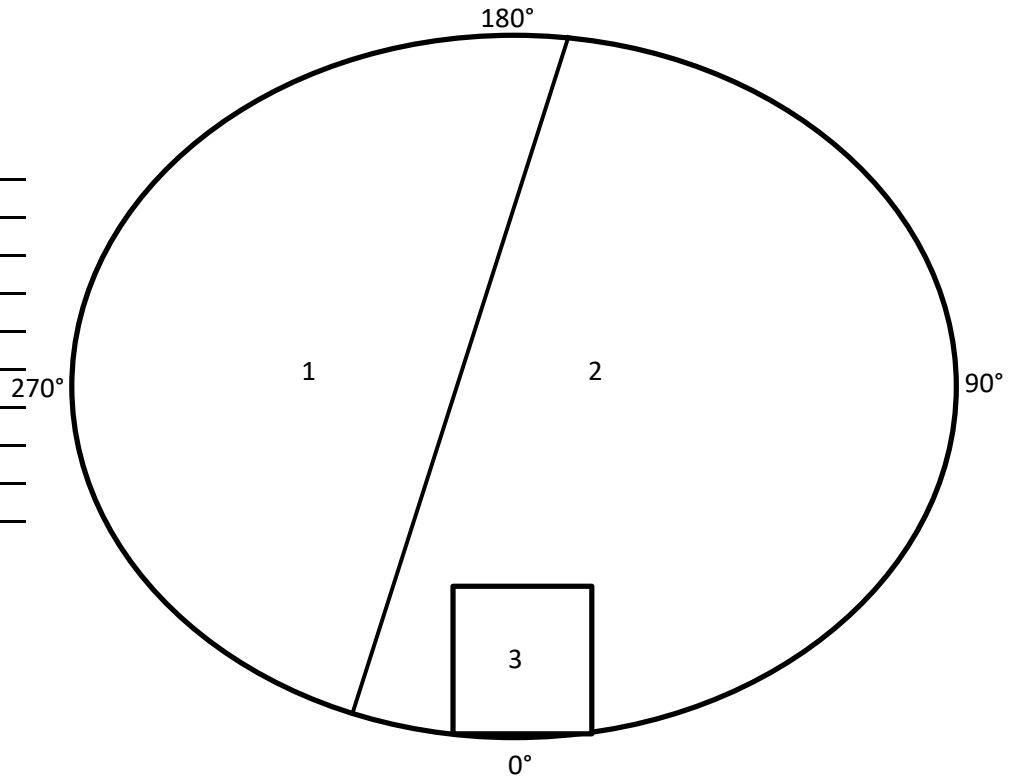
	As New	Acceptable In-Service Condition	Continue to Monitor	Requires Repair	NA	Comments
Condition						No burner tube
Burner Tube Throat						
Burner Tube Supports						

INTERNAL INSPECTION

Bottom Details/ Comments

Comments

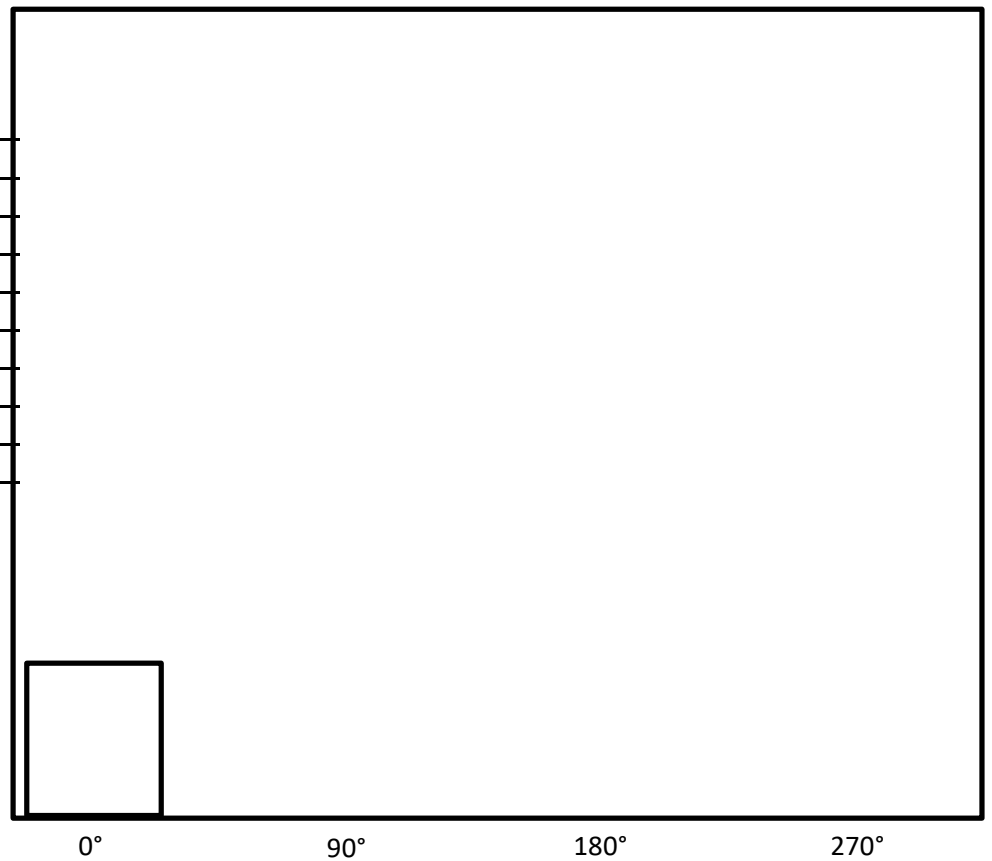
- 1 Plate 1
- 2 Plate 2
- 3 Manway
- 4
- 5
- 6
- 7
- 8
- 9
- 10



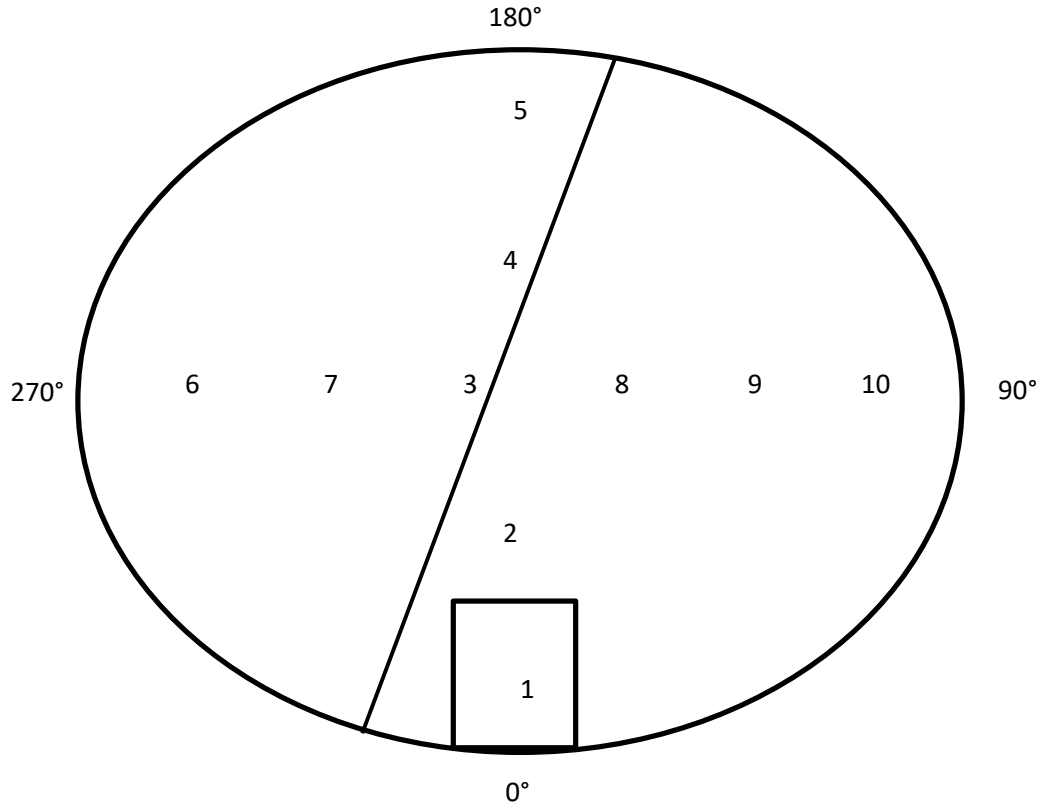
Shell Details/ Comments

Comments

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



Bottom UT CORROSION SURVEY

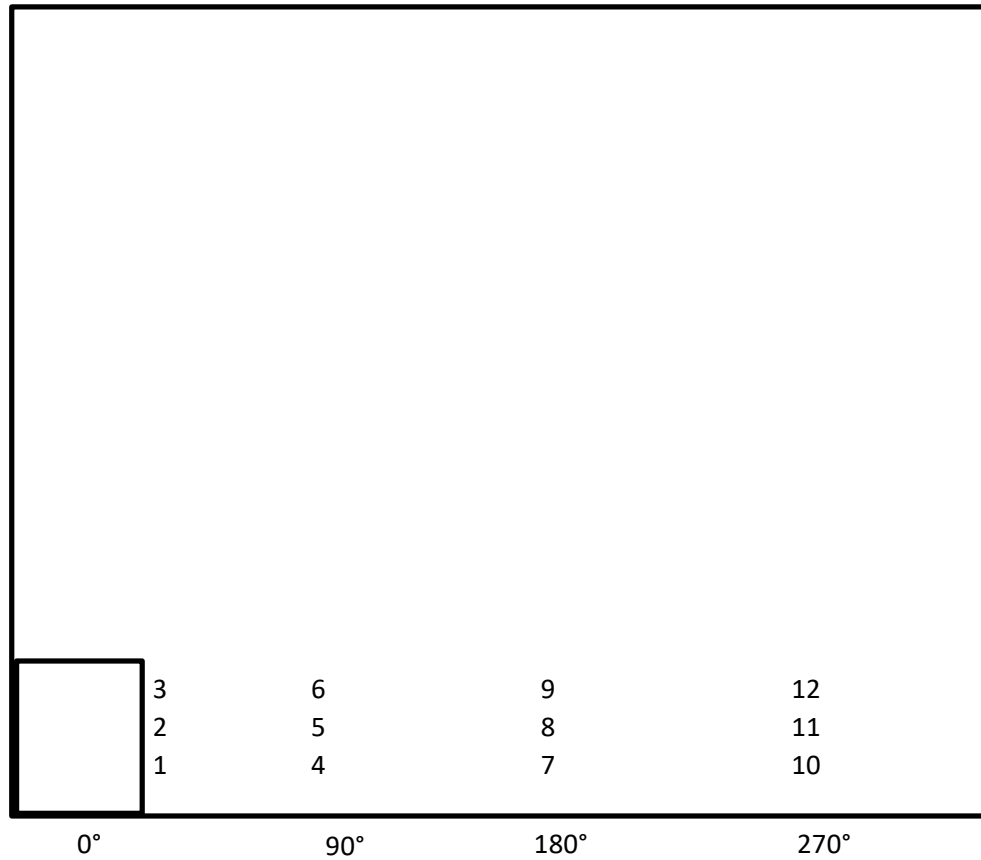


TML #	First Survey Thickness	First Survey Date	Previous Survey Thickness	Previous Survey Date	Last Survey Thickness	Last Survey Date	Corrosion Rate (Inches/Years)	Remaining Life of Bottom(Years)
1	0.250	2001	NA	NA	0.246	2020	0.0002	693.50
2	0.250	2001	NA	NA	0.247	2020	0.0002	931.00
3	0.250	2001	NA	NA	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

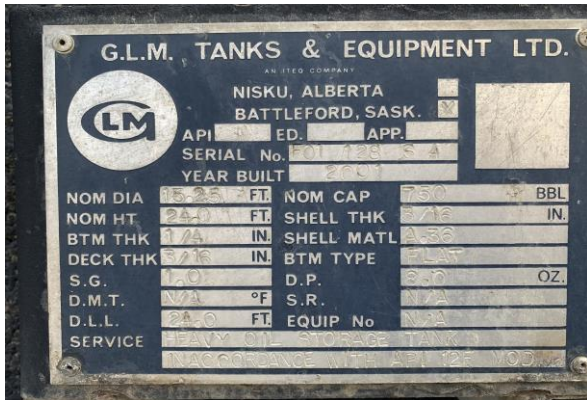
Minimum Bottom Plate Thickness at Next Inspection (in.)	Tank Bottom/ Foundation Design
0.1	Tank bottom/foundation design with no means for detection and containment of a bottom leak.

SHELL UT CORROSION SURVEY

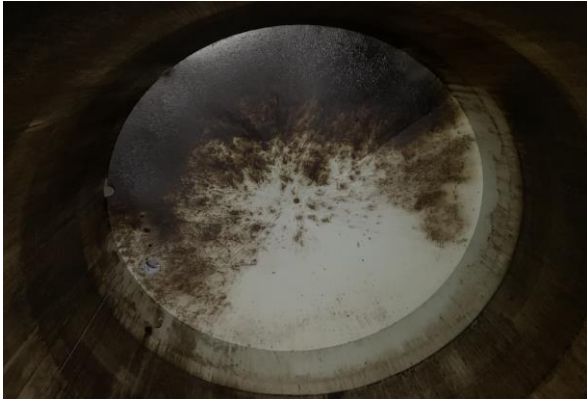


TML #	First Survey Thickness	First Survey Date	Previous Survey Thickness	Previous Survey Date	Last Survey Thickness	Last Survey Date	Corrosion Rate (In./Years)	Remaining Life of Shell(Years)
1	0.188	2001	NA	NA	0.186	2020	0.0001	1767.00
2	0.188	2001	NA	NA	0.183	2020	0.0003	695.40
3	0.188	2001	NA	NA	0.182	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.