

## TANK INSPECTION REPORT

Field:	Drayton Valley	Inspection Date:	2017.03.07	yyyy.mm.dd	Assigned Inspection Interval:	12	mths
Equip Desc:	Storage Tank	Mfr.:	GLM	Mfr. Date:	2001	Shell Material	A36 or equivalent
Owner ID:	T-204	Mfr. S/N:	F-01-129-5	Construction Code	API 650 Modified	Shell Nominal Thickness	0.25 – 0.1875
Location:	12-28-048-07W5	Tank Type	Cone, Bottom	Configuration	Vertical	Roof/Top/Left Material	
Service		Length		Roof Girder System	No	Roof/Top/Left Thickness	0.25
UWI:		Diameter OD	4724.4 mm	Manway	Yes	Floor/Btm/Right Material	
Operating Status:	In-Service	Height	7315.2 mm	Elevated		Floor/Btm/Right Thickness	0.25
Suitable for continued service	Yes	Volume	625 bbl	Insulated	Yes	Internal Coated	



# TANK INSPECTION REPORT

Field: Drayton Valley	Inspector: Wade Stromquist
Equip Desc: Storage Tank	Credentials: IPVI#000847, API 510, API 653
Owner ID: T-204	Assessed By: Sam Han, API 653
Location: 12-28-048-07W5	
UWI:	1 = As New      2 = Some Wear – Fit for Service      3 = Measurable Deterioration – Consider Repair      4 = Severe Deterioration – Repair Required      5 = Not fit for Service – Follow-up Required      6 = N/A

Disposition		Comments	Disposition		Comments
<b>Tank Exterior</b>					
Nameplate	2		Platforms	2	
Floor	2		Supports	2	
Shell	2		Manways	2	
Roof	2		PVRs	2	
Roof Supports	6		Cathodic Protection	6	
Paint	2		Anchor Bolts	6	
Insulation	2		Foundation	2	
Cladding	3	Seals at protrusions are deteriorating	Grounding	6	Grounding cable not found
Fireproofing	6		Firetubes	6	
Piping	3	Evidence of past leakage from cone bottom drain fittings	Secondary Containment	2	
Bolting	3	Cone bottom drain valve flange missing bolts.			
Ladders	2				

**Comments and Recommendations:**

Recommend coating repair prior to placing tank back into service.

Measured areas of shell and bottom cone found to be above or near nominal thickness.

Missing valve flange bolts on discharge line replaced prior to placing tank back into service.

Tank fit for service. Next thorough inspection interval, consisting of both internal and external inspection, of 1 year.

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Disposition		Comments	Disposition		Comments
<b>Internal</b>					
Floor	3	Coating repairs required	Equipment	3	
Shell	2	Looks good	Manways	3	
Roof	2	Looks good	Ladders	6	
Roof Supports	6		Supports	2	
Coating	3	Repairs required floor	Other	6	
Piping	3		Interstitial Space	6	
Nozzles	2		<b>Fired Equipment</b>		
Flanges	2		Burner / Pilot Assembles	6	
Level Controls	2		Flame Arrestor	6	
Gauge Cables	2	Working	Tubes	6	
Cathodic Protection	6		<b>External Controls &amp; Safety Devices</b>		
Heat Coil	3	Baked on material should be removed	External Control Devices	6	
Sumps	2				
Drains	2				
Siphons	6				

**Comments and Recommendations:**  
 Internal - looks good, coating repairs on floor.

<b>Vessel Owner ID</b> T-204	<b>Vessel Description</b> Storage Tank	<b>Vessel Location</b> 12-28-048-07W5	<b>Survey Date</b> March 7, 2017
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## Tank Inspected Components

Inspected Component			Design Static Data				Survey Readings			Calculations			
ID	Description	Type	O.D.	Material Code	Nominal Thickness mm	Corrosion Allowance	Date	Reading Ave Inches	Reading Min	Code Tmin	Short Term Corrosion Rate (mm/yr)	Long Term Corrosion Rate (mm/yr)	Calculated Remaining Life
1	Bottom	Cone			0.25		2017.03.07	.255					
2	Bottom	Cone			0.25		2017.03.07	.250					
3	Bottom	Cone			0.25		2017.03.07	.255					
4	Bottom	Cone			0.25		2017.03.07	.257					
5	Bottom	Cone			0.25		2017.03.07	.263					
6	Bottom	Cone			0.25		2017.03.07	.257					
7	Bottom	Cone			0.25		2017.03.07	.258					
8	Bottom	Cone			0.25		2017.03.07	.255					
9	Bottom	Cone			0.25		2017.03.07	.260					
10	Bottom	Cone			0.25		2017.03.07	.230					
	Manway Top						2017.03.07	.216					
	Manway Side						2017.03.07	.218					
	Manway Bottom						2017.03.07	.281					
	Manway Side						2017.03.07	.208					
1	Nozzle 4 Inch	Piping	101.6 mm				2017.03.07	.311					
C1	Wall UT	Cylindrical	4724.4 mm	A36 or Eql	0.25 – 0.1875		2017.03.07	.205					



**Entrance to Bottom**



**Manway**



**Roof**



**Evidence of Past Leakage**





**Cone Bottom Drain Valve Flange Missing Bolts**



**Coating Holidays on Cone Bottom**



**Coating Holidays on Cone Bottom**



**Coating Holidays on Cone Bottom**



**Tank Internal Piping**



**Tank Heat Coils**



**Tank Roof**



**Tank Roof and Shell Interface**



**Tank Internal Piping**



**Tank Internal Piping**



**Tank Internal Steam Coils**



**Tank Internal Steam Coils**





**Coating Holidays on Manway**



**Coating Holidays on Manway**



**Coating Holidays on Manway**



**Evidence of Past Leakage of Bottom Cone**



**Tank External Piping**



**Missing Bolts on Drain Valve Flange**



**Tank External Piping**



**Tank External Piping**



**Tank Roof Overview**



**Tank Manway**