



Tank Inspection Report

Location: 100/5-27-48-2W4 Tank Type: Tank 1 Date: Sept 12, 2018
Mfg: Universal Year blt: 2011 S/N: 023378-10 CAP: 1000 bbl
Floor Thk: 1/4" Shell Thk: 1/4" 3/16 Roof Thk: 3/16"
Requisitioned by: Mike Hein Approver: Mike Hein Approver Code: 2Z-02020569
WO #: 80041309 PO#: 8401285686 CC: _____ SAP #: 66179309

EXTERNAL INSPECTION:

ID	Item	Yes	Good	N/A	See Notes
	GENERAL				
T1	Other (Please Explain)				
T2	Corrosion			✓	
T3	Leaks			✓	1
T4	Vibration			✓	
T5	Dissimilar Flange Rating			✓	
T6	Ladder/Stairway	✓	✓		
T7	Platform	✓	✓		
T8	Electrical Ground	✓	✓		
T9	Cathodic Protection			✓	
T10	Painted Inactive Corrosion			✓	
T11	Coating/Painting			✓	
T12	Level Gauge	✓	✓		
T13	Bottom	✓	✓		2
T14	Secondary Containment	✓	✓		
T15	Shell	✓	✓		
T16	Roof	✓	✓		
T17	Agitator/ Mixer			✓	
	SUPPORTS				
T31	Other (Please Explain)				
T32	Foundation			✓	
T33	Anchor Bolts			✓	
T34	Windgirders			✓	
	CONNECTIONS				
T41	Other (Please explain)				
T42	Small Branches			✓	
T43	Nozzles	✓	✓		
T44	Pipe Manifolds			✓	
T45	Swing Lines			✓	
T46	Manways/Hatches	✓	✓		
T47	Reinforcing Pads			✓	
T48	Inadequate Thread Engagement			✓	
T49	Bolting			✓	
T50	Flanges	✓	✓		
T51	Leak Clamps			✓	
	INSULATION				
T61	Other (Please explain)			✓	
T62	Damage			✓	
T63	Penetrations	✓	✓		
T64	Jacket			✓	
T65	Banding			✓	
T66	Seals/Joints			✓	
	RELIEF DEVICE				
T7t	Other (Please explain)				
T72	Corrosion			✓	
T73	Leaks			✓	
T74	Restricted InleUOutlet			✓	
T75	Manual Operation Lever			✓	

INTERNAL INSPECTION:

ID	Item	Yes	Good	N/A	See Notes
	GENERAL				
T1	Other (Please Explain)				
T2	Corrosion	✓			4
T3	Erosion			✓	
T4	Distortion			✓	
T5	Blisters			✓	
T6	Deposits	✓			3
T7	Welds	✓	✓		
T8	Nozzles	✓	✓		
T9	Shell	✓	✓		
T10	Roof	✓	✓		
T11	Floor	✓	✓		
	GENERAL				
T21	Other - Firetube	✓			
T21	Other - Anodes			✓	
T22	Annular Ring			✓	
T23	Sump			✓	
T24	Roof Supports			✓	
T25	Thermowells	✓	✓		
T26	Metallic Linings			✓	
T27	Non Metallic Linings			✓	
T28	Internal Steam Coil / other Piping			✓	
T29	Level Gauge	✓	✓		
T30	Other Welded Attachements	✓	✓		
	Backwelding Req'd			✓	

[illegible]



Without MFE		
.170 - up	5 yr	✓
.160 - .169	4 yr	
.150 - .159	3 yr	
.140 - .149	2 yr	
.130 - .139	1 yr	
under .130	Patch	
	Replace	
	Floor	
	Shell	

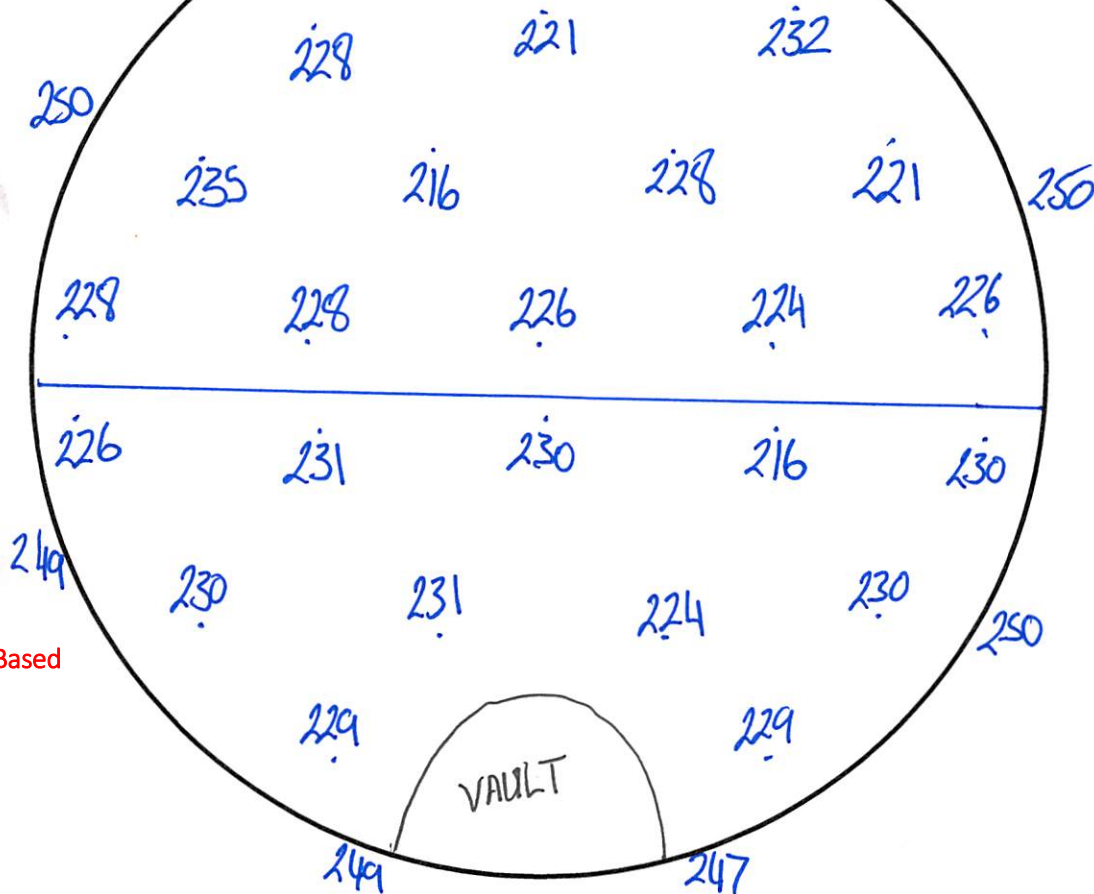
S/N: 023378-10 TANK 1

Location: 100 / 5-27-48-2W4

242 247 246

250 250

With MFE		
.140 - .150	5 yr	
.130 - .139	4 yr	
.120 - .129	3 yr	
.110 - .119	2 yr	
.100 - .109	1 yr	
under .100	Patch	
	Replace	
	Floor	
	Shell	



Inspection Interval Based
on Assumption that
Recommendations
were Completed

Comments:

Replace the Finetube (oval)
Tank in Good overall Condition, 5YR Turnaround
with New Finetube.

Inspected by: Stephen Bryan

Date: Sept 12, 2018

Husky Inspector: [Signature]

Date: 11-Dec-2018

Report reviewed. No major concerns. Inspection interval set at 5 years.

Type of Inspection: VT Rev: 3.0

Test Technique: UT thickness(4.2)

Equipment: DMS2 / FLASHLIGHT GRINDER

Code / Standard: client information

Client: HUSKY OIL OPERATIONS

IRIS NDT #: LYN1801417

Location: 100/ 5-27-48-2 W4M

Item Inspected: 1000 bbl tank 1 s/n# 023378-10

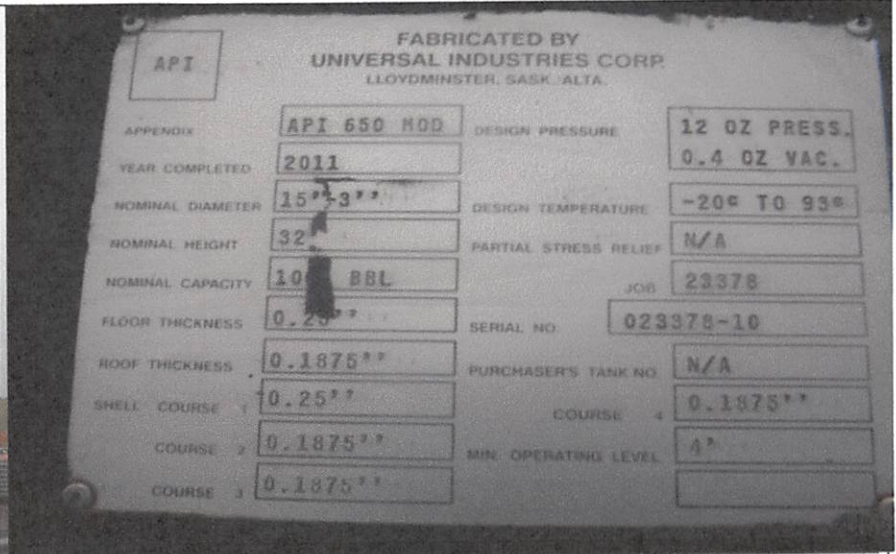
Date: 12-Sep-18

Other: 80041309

PO #: 8401285686

a UT and visual inspection was carried out as requested on 1000bbl tank, refer to attached pages for results:

1000bbl tank S/N# 023378-10: replace the firetube (oval) .tank in good overall condition for a 5yr turnaround.



DMS 2 S/N# 31074 CAL DATE : JAN3 2018.

F2HE PROBE S/N# SCA0690

Approver: Michael Hein 2Z-02020569

Requested by Michael Hein

Inspection Limitation(s): shale deposits on shell and piping.rusty floor and shell surface scale buildup.

Unit#: <u>767</u> Kilometers: <u>0</u> In: _____ Out: _____ Hrs: _____ In: _____ Out: _____ Hrs: _____ Personnel: STEPHEN BRYAN / BRAYDEN MCGINNIS	Consumables: MIN	Interpretation by: Stephen Bryan (Print) _____ (Sign) <i>[Signature]</i> Client Representative: (Print) Karen Hawryluk I am in full agreement with report contents (Sign) <i>[Signature]</i>	SNT-TC-1A: _____ C.G.S.B.: _____ (Level) C.G.S.B #: <u>12459</u>
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5311 - 86 Street NW, Edmonton, Alberta T6E 5T8 Phone (780) 437-4747 Fax (780) 436-4873
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Offices also located in USA and UK



DAILY LEM TIME-TICKET

IRISNDT DAILY TICKET#

CA1098-DT-289

Page 1 of 1

Customer: HUSKY OIL OPERATIONS

IRISNDT DISPATCH #: LYN1801417

Location: 5-27-48-2 W4M, AB

Date: 12-Sep-18

Technician 1: Stephen bryan Position: Senior Tech Technician 2: Brayden mcginnis Position: Assistant Primary Activity: Other

Technician 3: _____ Position: _____ Technician 4: _____ Position: _____ Report Prefix: CA1098

Time Start	Time Finish	Activity	Report #s	LOC	Total Hours	Total KMs	Description	PO / Cost Code / AFE		Job # / Work Order # / Other	
07:00	07:30	Travel	CA1098-NDT-316		0.5	30	travel	P.O.#:	8401285686	W.O.#:	80041309
07:30	09:00	Other (See Description)	CA1098-NDT-316		1.5	0	Inspect tank UT/ Visual	P.O.#:	8401285686	W.O.#:	80041309
09:00	10:30	Other (See Description)	CA1098-NDT-317		1.5	0	Inspect tank UT/ Visual	P.O.#:	8401285686	W.O.#:	80041309
10:30	11:00	Travel	CA1098-NDT-317		0.5	30	travel	P.O.#:	8401285686	W.O.#:	80041309

(Totals for this page only)

Totals:

4

60

Unit: 767

Work Location (LOC) Legend: 1) Inside Fab. Shop 2) Yard/Lay-down Area 3) Piping/Modular Fab. Area 4) Other

J.H.A. Carried Out & Documented: ☒ Yes ☐ No Safety Concerns: ☐ Yes ☒ No Safety Meeting: ☒ Yes ☐ No Living Out Allowance: ☒ N/A ☐ Full ☐ Bkfst ☐ Lunch ☐ Supper ☐ OT Meal ☐ Hotel

Equipment, Supplies, Consumables and Other Costs

approver: Michael Hein 2Z-02020569

Additional Site, Daily, and other relevant job notes

TECHNICIAN NAME: Stephen Bryan

(Print)

CLIENT NAME: Karen Hawryluk

(Print)

TECHNICIAN SIGNATURE: _____

(Sign)

Date: _____

CLIENT SIGNATURE: _____

(Sign)

Date: _____