Husky Energy

SWS-Marsden

Tank Inspection Report

Location: A9-7-46-25W3 Tank Type: Oil Storage Date: July 28.2015

Mfg: Universal Year blt: 2003 S/N: 03.09.24.12534 CAP: 1000 bbl

Floor Thk: 1/4" Shell Thk: 1/4" 3/16" Roof Thk: 3/16"

Requisitioned by: Kyle Forbes Approver: Kyle Forbes Approver Code: 2Z-02017604

WO #: 81025212 PO#: 8400982837 CC: SAP #: 62051553

EXTERNAL INSPECTION:

ID	Item	Yes	Good	N/A	See Notes
	GENERAL				
T1	Other (Please Explain)				
T2	Corrosion		✓		
T3	Leaks			✓	
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	✓			✓
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	✓	✓		✓
T3	Erosion			✓	
T4	Distortion	✓			✓
T5	Blisters	✓		✓	
T6	Deposits			✓	
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				✓	

ID	Notes
T13	TANK HAS LINER ONLY, NO PLANKS
T43	NOZZLES ARE FILLED with OILSAND.
T62	SMALL SECTION MISSING AROUND VAULT.
T11	FLOOR HAS moderate CORROSION AND Surface Scale. UT GOOD FOR 5 YR
T21	OILSAND BUILDUP ON Internal Tube.
T9	OILSAND BUILDUP ON SHELL
T8	OILSAND BUILDUP ON INTERNAL NOZZLES
T2	moderate CORROSION, SCALE ON FLOOR SURFACE.
T4	Bulges IN the FLOOR AS SHOWN

Husky Energy

S/N 03.09.24.12534

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	

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: Guide wires Are Stuck In VAULT Sting Nozzle.
* Cut out Guide wires.
Bulges In the Floor, Moderate Scale Buildup on the Floor Surface.
OILSAND BUILDUP ON Firetube.
Lowest Reading Recorded 0.183 → 5YR TURNAROUND.

Inspected by: Stephen Bryan

Date: July 29.2015

Husky Inspector: [signature]

Date: July 29/2015

62051553

IRISNDT

NONDESTRUCTIVE INSPECTION REPORT

SB382-NDT-336

Type of Inspection: UT/ VT	**Client:** HUSKY OPERATIONS	**Date:** 28-Jul-15
Test Technique: UT THICKNESS	**IRISNDT #:** LYD1500753	**WO #:** 81025212
Equipment: DMS2/ GRINDER/ SPOTLIGHT	**Location:** A9-7-46-25 W3M, SK	**PO #:** 8400982837
Code: CLIENT SPECS/ CLIENT INFO	**Item Inspected:** 1000 BBL TANK S/N# 03.09.24.12534	

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

REQ: KYLE FORBES

APP: KYLE FORBES 2Z-02017604

Unit#: 767 Kilometers: 60

In: 0700 Out: 0900 Hrs: 2.0

In: Out: Hrs:

Personnel:
STEPHEN BRYAN / LOGAN SKINNER

Consumables:
2 GAS MONITORS

Interpretation by:

STEPHEN BRYAN (Print) SNT-TC-1A: 2

C.G.S.B.: 2 (Level)

(Signature) C.G.S.B. #: 12459

Client Representative: (Print)

I am in full agreement with report contents (Sign)

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