

Storage Tank External Visual Inspection Report



Organization: Husky

Inspection Date: 09/05/2011 12:00:00AM

Plant: Heavy Oil & Gas

Equipment ID: 62037250

Asset No: 62037250

System: 00031 102/14-12-045-01W4/00 SWB

Operating Unit: L7-01-004 Edgerton/Dina

Background

Description:	TANK, UNIVERSAL 160M3
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Inspection

Inspector:	IRIS NDT	Company:	Husky Energy	Insulated:	Y
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External Location Categories

Barrier Penetrations:	0	Damaged Insulation:	0	Shell to Floor Joint Insulated:		Insulation Rings:	0
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Inspection Comments

ID	Description	Condition	Location	NCR	Comments
T6	Ladder/Stairway	Fair			Loose bolts at top of ladder.
T7	Platform	Fair			Acceptable
T15	Shell	Fair			Acceptable
T16	Roof	Fair			Acceptable
T32	Foundation	Poor			Tank base should be rebuilt.
T41	Connections Other (Please explain)	Fair			Associated Piping - Acceptable

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Inspection Summary

This tank was inspected by IRIS NDT of Lloydminster. Recommendations and Inspection Intervals are the results of interpreting the data IRIS collected (UT readings) and comments made.

Generally the tank is considered to be in fair condition although some immediate repairs are required prior to re-commissioning the tank.

The tanks external surfaces were visually inspected with some areas of the tank's insulation found to be blistered and disbonded from the tank shell at a few locations.

The tank base is in poor condition and should be rebuilt.

The tank's associated piping was found to be properly aligned and well supported.

The bolts on top of the ladder were found to be loose.

Recommendations:

Rebuild the tank base.

Tighten the bolts at the top of the ladder.

Monitor the condition of the insulation for further deterioration.

cc: Larry Kingswood

Storage Tank External Visual Inspection Report

Inspection Planning

Date of Inspection: _____ Date of last Inspection: _____ Date of Next Inspection: _____

The signature below certify that the above is a true report of the inspection / test of the equipment specified and consider fit for service until the date of next inspection.

Competent Inspector: _____ Report Generation Date: _____

Reviewed and Accepted by:

Next Inspection Date: 2016-05-09

Approved by:

Signature:  Date: 2011-05-12

Signature: _____ Date: _____

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Inspection Date: 09/05/2011 12:00:00AM

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Background

Description:	TANK, UNIVERSAL 160M3
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Inspection

Inspector:	IRIS NDT	Company:		Internal Lining/Coating:	N
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Inspection Comments

ID	Description	Condition	Location	NCR	Comments
V7	Welds	Fair			Acceptable
V8	Nozzles	Poor			Two 4" stinging nozzles must be replaed.
V9	Shell	Fair			Acceptable
V10	Roof	Fair			Acceptable
V21	Internals Other (Please explain)	Fair			Firetube - Internal surfaces to be cleaned.
V30	Other Welded Attachments	Poor			The 8" riser requires a brace.
T11	Floor	Fair			Underside corrosion identified.

Inspection Summary

Generally the internal surfaces and components of the tank appeared to be in fair condition however UT thickness tests revealed some concerns.
In addition two 4" stinging nozzles must be replaced, The 8" riser requires a brace and the firetubes internal surfaces must be cleaned.

Recommendations:

Monitor the underside corrosion identified in the tank floor.
Replace the two stinging nozzles.
Brace the 8" riser.
Clean the firetubes internal surfaces.

Due to metal loss identified on the floor the inspection interval remain at five years (60 months).

cc: Larry Kingswood

Storage Tank Internal Visual Inspection Report

Inspection Planning

Date of Inspection: _____ Date of last Inspection: _____ Date of Next Inspection: _____

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Competent Inspector: _____ Report Generation Date: _____

Reviewed and Accepted by:

Next Inspection Date: 2016-05-09

Approved by:

Signature:  Date: 2011-05-12

Signature: _____ Date: _____

DINA (AS)

P3 of 3

TANK INSPECTION REPORT

SR. Operator: Larry Kingswood Approver Code: 22-0495036
 Requisitioned by: Ray T Work Order: 25000772

LOCATION 02/14-12-45-Int DATE May 9.11 TANK TYPE Sales TK#2
 MFG Universal YEAR 2001 S/N 01-04-2511513 CAP 1000 BBL AFE/CC 71/22
 FLOOR THK. 1/4 SHELL THK. 1/4 - 3/16 ROOF THK. 3/16
 SAP# 6203-7250

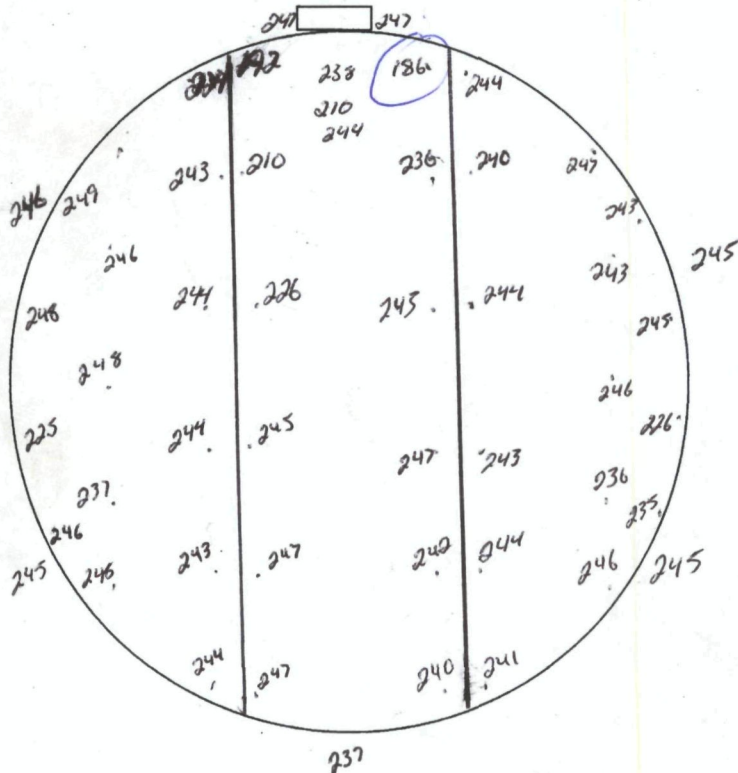
EXTERNAL SURFACE

INSULATION:	<u>GOOD</u>	FAIR	POOR	<u>Minor blister</u>
CLADDING:	<u>GOOD</u>	FAIR	POOR	<u>N/A</u>
BASE/LAND SCAPING:	<u>GOOD</u>	FAIR	POOR	<u>*Requires new base</u>
LINER/CONTAINMENT:	<u>YES</u>	NO		
GROUND CABLE:	<u>YES</u>	NO		
LADDER/STAIRS:	<u>GOOD</u>	FAIR	POOR	<u>*Top ladder has loose bolts</u>
PLATFORM	<u>GOOD</u>	FAIR	POOR	
PIPING ALIGNMENT:	<u>GOOD</u>	FAIR	POOR	
SHELL:	<u>GOOD</u>	FAIR	POOR	
ENVIROVAULT:	<u>YES</u>	NO	CONDITION:	
ROOF:	<u>GOOD</u>	FAIR	POOR	
PAINT:	<u>GOOD</u>	FAIR	POOR	

FIRETUBE: *Requires clean & re-inspect (scot & debris build-up)
 INTERNAL CONDITION: GOOD BOWED NO OVALLED NO FLANGE (LEAKING) Yes NO
 REGULATOR: Yes No RATING: 0-30

INTERNAL SURFACE:

FLOOR CONDITION:	<u>GOOD</u>	<u>FAIR</u>	POOR	<u>U.S corrosion evident</u>
SHELL CONDITION:	<u>GOOD</u>	FAIR	POOR	
ROOF CONDITION:	<u>GOOD</u>	FAIR	POOR	
FIRETUBE:	<u>GOOD</u>	FAIR	POOR	
PIPING/NOZZLE CONDITION:	<u>GOOD</u>	FAIR	POOR	<u>Brace 8" Riser/replace 2.4" string</u>
BACKWELDING REQ:	<u>YES</u>	NO	WHERE	
ANODES: Yes <u>NO</u>	Total	BLOCK	CYLINDRICAL	CONSUMED %
COATING: Yes <u>NO</u>	GOOD	FAIR	POOR	TYPE:



NOTES:

- * Monitor U.S corrosion
- * Brace 8" riser
- * Replace 2.4" String Nozzles
- * Tighten Ladder bolts
- * Replace Tank base
- * Clean inside firetube and re-inspect

Sigs

CONTACT:

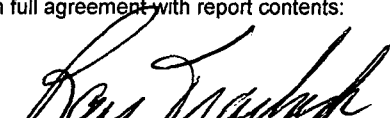
TK#1

Type of Inspection: VT / UT	Job/P.O.#: wo#25000772	IRISNDT #: 149368	Date: 09-May-11
Test Technique:	Client: Husky Operations		
Equipment:	Location: 02/14-12-45-1W4		
Grinder, Generator, DMS 2	Item Inspected: 750 & 1000 BBL Tanks		
	Code: API-650		

A Visual / UT inspection was carried out on 1 – 750BBL tank
 And 1 – 1000BBL Tank
 @ 02/14-12-45-1W4.
 750BBL Tank #1 sn#12-12 5885
 1000BBL Tank #2 sn#01-04-25 11513

For inspection results see pages #2 & #3.

ATT: Larry Kingswood 2Z-0495036
 Po#8400301416 wo#25000772
 REQ: Ray Trachuk w/ Husky Energy

Unit #: 568	Kilometers: 60	Consumables:	Technician: Sheldon Trachuk	SNT-TC-1A 2
In: 0700	Out: 1000	Hrs: 3.0	---MIN---	C.G.S.B 2
In:	Out:	Hrs:		C.G.S.B.# 11405
Personnel: Sheldon Trachuk, Lance Goorts		2 - 4 Head monitors	I am in full agreement with report contents: Client: 	

Edmonton (780) 437-4747	Fort McMurray (780) 743-1536	Cold Lake (780) 594-1114	Mailing Address
Calgary (403) 279-6121	Medicine Hat (403) 527-6284	Red Deer (403) 347-1742	5311-86 Street
Nisku (780) 955-7616	High Level (780) 841-0470	Tulsa, OK (918) 446-8773	Edmonton, Alberta
Barrhead (780) 674-3018	Lloydminster (780) 875-6455	Houston, TX (713) 722-7177	T6E 5T8