

## Storage Tank External Visual Inspection Report



Organization: Husky

Plant: Heavy Oil & Gas

Inspection Date: 03/05/2011 12:00:00AM

Equipment ID: 66143442

Asset No: 66143442

System: 00365 100/08-27-048-02W4/00 SWB

Operating Unit: L7-02-001 Blackfoot/Lloyd

### Background

Description: TANK, UNIVERSAL 160M3

### Inspection

Inspector: IRIS NDT

Company:

Insulated:

Y

### External Location Categories

Barrier Penetrations:

Damaged Insulation:

Shell to Floor Joint Insulated:

Insulation Rings:

### Inspection Comments

ID	Description	Condition	Location	NCR	Comments
T6	Ladder/Stairway	Fair			Acceptable
T7	Platform	Fair			Acceptable
T15	Shell	Fair			Acceptable
T16	Roof	Fair			Acceptable
T32	Foundation	Fair			Pad has settled.
T41	Connections Other (Please explain)	N/A			Associated Piping - Disconnected
T61	Insulation Other (Please explain)	Fair			Acceptable

### 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 and suitable for continued service.

The tanks external surfaces were visually inspected and found to be in fair condition.

The tank base is in fair condition although there is evidence to the pad settling.

The tank's associated piping was disconnected at time of inspection.

See attached Internal Visual Inspection report for additional details and recommendations.

## 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: 2018-05-03

### Approved by:

Signature: Ray Trask Date: 2011-05-08

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Storage Tank Internal Visual Inspection Report



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Operating Unit: L7-02-001 Blackfoot/Lloyd

## 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	Poor			To be repaired.
V8	Nozzles	Fair			Acceptable
V9	Shell	Fair			Acceptable
V10	Roof	Fair			Acceptable
V21	Internals Other (Please explain)	Poor			Firetube to be repaired.
T11	Floor	Fair			Severe bulges observed.

## Inspection Summary

Generally the internal surfaces and components of the tank appeared to be in fair condition however visual inspection of the tanks internal surfaces revealed some severe bulges in the tank floor. Mag Particle inspection revealed cracking in the floor to shell weld. An area 18" x 84" was marked out to be patched. in addition the firetube was found to be in need of repair.

Random locations of the tank's floor and lower shell were UT thickness tested with some metal loss identified. The lowest thickness reading was found to be 0.240 inch. See attached IRIS NDT field report for thicknesses found and approximate locations of tests.

### Recommendations:

Patchg the tank shell as marked out and discussed.

Repair the firetube as required.

The inspection interval can be set at seven years (84 months) provided all requirements of Directive 55/S-01 are met and maintained.

## Storage Tank Internal Visual Inspection Report

### Inspection Planning

Date of Inspection: \_\_\_\_\_ Date of last Inspection: \_\_\_\_\_ Date of Next Inspection: \_\_\_\_\_

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### **Reviewed and Accepted by:**

Next Inspection Date: 2018-05-03

### **Approved by:**

Signature: \_\_\_\_\_  \_\_\_\_\_ Date: 2011-05-08

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



L7-02-001-00438

Kitscoty (AN)

Ref 2

**TANK INSPECTION REPORT**SR. Operator: Ken PopeApprover Code: 72-0713560Requisitioned by: DerekWork Order: 4067645

LOCATION 8-27-48-2nd DATE May 3. 11 TANK TYPE Production  
 MFG Universal YEAR 2008 S/N 15628-22 CAP 1000 BBL AFE/CC 25183  
 FLOOR THK. 1/4 SHELL THK. 1/4 - 3/16 ROOF THK. 3/16

SAP# 66143442**EXTERNAL SURFACE**

INSULATION:

GOOD FAIR POOR

CLADDING:

GOOD FAIR POOR N/A

BASE/LAND SCAPING:

GOOD FAIR POOR Settled

LINER/CONTAINMENT:

YES NO

GROUND CABLE:

YES NO

LADDER/STAIRS:

GOOD FAIR POOR

PLATFORM

GOOD FAIR POOR

PIPING ALIGNMENT:

GOOD FAIR POOR unhooked

SHELL:

GOOD FAIR POOR

ENVIROVAULT:

YES NO CONDITION: Good

ROOF:

GOOD FAIR POOR

PAINT:

GOOD FAIR POOR**FIRETUBE:**\* Requires Repair

INTERNAL CONDITION:

GOOD BOWED OVALLEDFLANGE (LEAKING) Yes No

REGULATOR:

Yes No

RATING:

**INTERNAL SURFACE:**

FLOOR CONDITION:

GOOD FAIR POOR

SHELL CONDITION:

GOOD FAIR POOR

ROOF CONDITION:

GOOD FAIR POOR

FIRETUBE:

GOOD FAIR POOR \* Repair

PIPING/NOZZLE CONDITION:

GOOD FAIR POOR

BACKWELDING REQ:

YES NO

ANODES:

Yes No

Total BLOCK

CYLINDRICAL

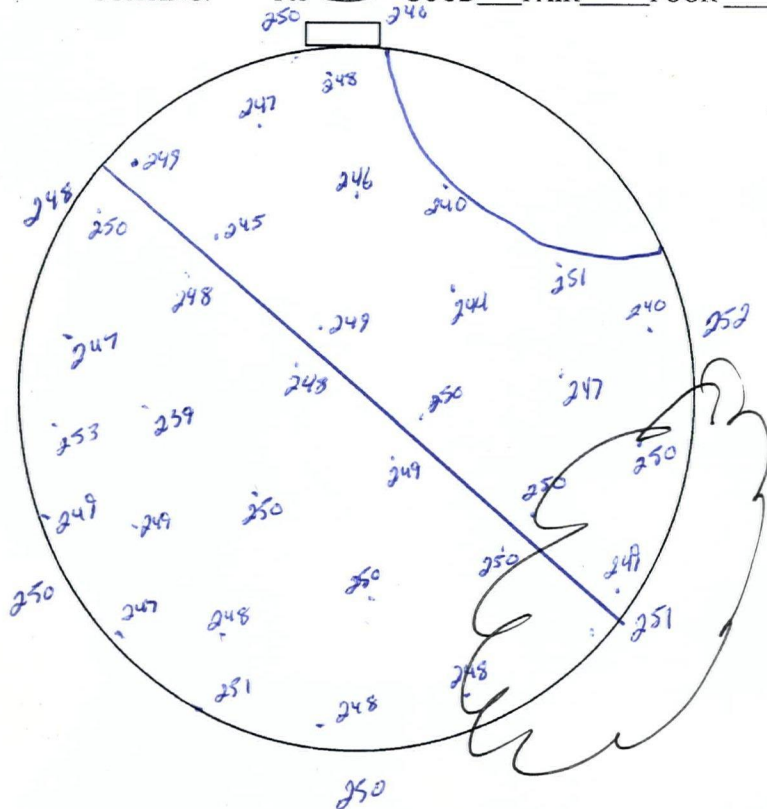
CONSUMED %

COATING:

Yes No

GOOD FAIR POOR

TYPE:

**NOTES:**

250 = severe bulges in floor  
W@ Floor-to-Shell seam  
across INT'd and crack  
evident. Area 1 1/2' x 7'  
marked for Patch

\* Firetube Requires Repair

74115

CONTACT:

Wellhead

Procedures: MT 2V IRISNDT 5.15.2

Code: API -650 sec.8.2.4

Job / P.O. #: wo#4067645

Client: Husky Operations

Location: 8-27-48-2W4

Item Inspected: Tank Items as listed

IRISNDT #: 149293

Date: 03-May-11

Surface Condition: Painted ☐ Sandblasted ☐ Machined ☐ As Cast ☐ As Forged ☐ Weldment ☒ Other ☐

Material: P-1

Thickness: N/A

Heat Treatment: As Welded

Magnetizing Equipment: Yoke ☒ Coil ☐ Prod ☐ Bench: Headshot ☐ Central Conductor ☐ Coil ☐

IRISNDT #: 40105

Mfg: Contour

Calibration Date: 16-Feb-11

Blacklight: ☐  
☐

IRISNDT #: N/A

Mfg:

Calibration Date: --10

Verification per ASME V Art 7 T.777.2

Whitelight:

Battery Powered Min. 3V  
110V Power Min. 60W Bulb

☒ }  
☐ }

Held within 30 cm (12in) of the inspection surface  
provides minimum 1000 Lx (100fc)

Method of Magnetization: AC ☒ DC ☐ Continuous ☒ Residual ☒

Magnetic Particles: Dry ☐ Wet ☒

Red ☐ Grey ☐ Black ☒ Fluorescent ☐

Batch #: 907

Mfg: Magnaflux

Type: 7C

Background: ☒

Batch #: 1080

Mfg: Ardrex

Type: 8901W

A magnetic particle inspection was carried out on the following items

On 1- 1000BBL tank @ 8-27-48-2W4

Tank sn# 15628-22

- 1 - 1" Collar fillet welds in vault (in&out)
- 2 - Tailing lug Re-Pad fillet welds
- 4 - Gas line Re-Pad fillet welds
- 1 - 4" Nozzle/Re-Pad fillet welds (in&out)
- 1 - 3" Nozzle fillet weld (in&out)
- 1 - Shell patch fillet weld (in&out)

Results: All items inspected ACCEPTABLE TO CODE.

ATT: Ken Pope 2Z-0713560 PO#8400315694 wo#4067645

Req. Derek @ L&L Oilfield

#### Inspection Limitation(s):

Unit#: 568 Kilometers: 40  
In: 1700 Out: 1830 Hrs: 1.5  
In: Out: Hrs:

Personnel:  
Sheldon Trachuk  
Lance Goorts

Consumables:  
--MIN--

Interpretation by:  
Sheldon Trachuk

SNT-TC-1A 2

C.G.S.B. 2

(Print)

(Level)

C.G.S.B. # 11405

(Signature)

Client Representative:

(Print)

I am in full  
agreement with  
report contents

(Sign)