#### Storage Tank External Visual Inspection Report



Organization:	Husky	Inspection Date:	02/05/2011 12:00:00AM
Plant:	Heavy Oil & Gas	Equipment ID:	66117759
		Asset No:	66117759
		System:	00244 100/13-21-048-02W4/00 SWB
		Operating Unit:	L7-02-001 Blackfoot/Lloyd

#### **Background**

Description:	TANK, UNIVERSAL 160M3	

#### Inspection

Inspector: IRIS NDT	Company:		Insulated:	Υ	
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#### **External Location Categories**

arrier Penetrations: 0 Damaged Insula	on: 0 Shell to Floor Join	nt Insulated: Insulation Ring	s: 0
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#### **Inspection Comments**

ΙD	Description	Condition	Location	NCR	Comments
T6	Ladder/Stairway	Fair			Acceptable
T7	Platform	Fair			Acceptable
T15	Shell	Fair			Acceptable
T16	Roof	Fair			Acceptable
T32	Foundation	N/A			Tank to be moved.
T41	Connections Other (Please explain)	N/A			Disconnected - Tank to be moved.
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 and associated piping were not of concern as the tank is scheduled to be moved.

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

Print date/time: 05/08/2011 10:04:26AM

## Storage Tank External Visual Inspection Report

Inspection Planning		
Date of Inspection:	Date of last Inspection:	Date of Next Inspection:
The signature below certify the consider fit for service until the		nspection / test of the equipment specified and
Competent Inspector:		Report Generation Date:
Reviewed and Accepted by:		
Next Inspection Date: 20	17-05-02	
Approved by:	11	
Signature:	Kay Trackall	Date: 2011-05-68
Signature:		Date:

#### Storage Tank Internal Visual Inspection Report



 Organization:
 Husky
 Inspection Date:
 02/05/2011
 12:00:00AM

 Plant:
 Heavy Oil & Gas
 Equipment ID:
 66117759

 Asset No:
 66117759

 System:
 00244 100/13-21-048-02W4/00 SWB

 Operating Unit:
 L7-02-001 Blackfoot/Lloyd

#### **Background**

Description: TANK, UNIVERSAL 160M3

#### Inspection

Inspector: IRIS NDT Comp	pany:	Internal Lining/Coating:	N
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#### **Inspection Comments**

ID	Description	Condition	Location	NCR	Comments
V7	Welds	Fair			Acceptable
V8	Nozzles	Fair			Acceptable
V9	Shell	Fair			Acceptable
V10	Roof	Fair			Acceptable
V21	Internals Other (Please explain)	Fair			Firetube - To be cleaned of soot - Acceptable
T11	Floor	Fair	_ =		Acceptable

#### Inspection Summary

Generally the internal surfaces and components of the tank appeared to be in fair condition and suitable for continued service although the firetube should be cleared of the soot bult up on it's internal surfaces.

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 0.221 inch. See attached IRIS NDT field report for thicknesses found and approximate locations of tests.

Recommendations:

Cleanout firetube.

The inspection interval can be set at six years (72 months) provided all requirements of Directive 55/S-01 are met and maintained.

Print date/time: 08/05/2011 10:12:54AM Page 1 of 2

## Storage Tank Internal Visual Inspection Report

Inspection Planning		
Date of Inspection:	Date of last Inspection:	Date of Next Inspection:
The signature below certify the consider fit for service until the		nspection / test of the equipment specified and
Competent Inspector:		Report Generation Date:
Reviewed and Accepted by:		
Next Inspection Date: 201	17-05-02	
Approved by:		
Signature:	Hay Markall	Date: 2011-05-08
Signature:		Date:

17-02-001-00244 TANK INSPECTION REPORT SR. Operator: Approver Code:  $\partial Z \sim \mathcal{O}$ Requisitioned by: Work Order: 406 Ay. 2. / TANK TYPE CAP 'OO BBL AFE/CC ROOF THK. FLOOR THK. SHELL THK. SAP# **EXTERNAL SURFACE** GOOD INSULATION: FAIR **POOR** CLADDING: GOOD **FAIR POOR** GOOD BASE/LAND SCAPING: **FAIR POOR** LINER/CONTAINMENT: YES NO **GROUND CABLE:** YES (NO) LADDER/STAIRS: GOOD FAIR **POOR POOR** PLATFORM GOOD FAIR PIPING ALIGNMENT: GOOD **FAIR POOR** GOOD FAIR SHELL: **POOR** ENVIROVAULT:  $\supset$ NO CONDITION: GOOD ROOF: **FAIR POOR** PAINT: GOOD FAIR POOR sout sent build-un FIRETUBE: \* GOOD BOWED INTERNAL CONDITION: FLANGE (LEAKING) Yes No OVALLED REGULATOR: Yes No RATING: **INTERNAL SURFACE:** FLOOR CONDITION: GOOD **FAIR POOR** SHELL CONDTION: GOOD **POOR FAIR** ROOF CONDITION: GOOD **POOR FAIR** FIRETUBE: GOOD **POOR** FAIR PIPING/NOZZLE CONDITION: GOOD **FAIR POOR BACKWELDING REQ:** YES NO WHERE Yes No ANODES: CYLINDRICAL CONSUMED Total **BLOCK** Yes and COATING: GOOD FAIR **POOR** TYPE: 243 238 **NOTES:** 249 240 242 245 236 239 240 248 243 238 245 245 245 221 245 243 246 241

246 242 248 ,250 240 243 842 242 222 245 241 241 :249 246

CONTACT: 1/cl/head

# TONZ

### MAGNETIC PARTICLE INSPECTION REPORT

MT-149283-01

Page 1 of 1

Procedures: MT 2V IRISNDT 5.15.2  Code: API -650 sec.8.2.4	Job / P.O. #: wo#406764 Client: Husky Operations Location: 100/ 13D-21- Item Inspected: Tank It	48-2W4 erms as listed	Date: 02-May-11
Surface Condition: Painted  Sandblasted	☐ Machined ☐ As Cas	t As Forged Weldment 🛭	Other 🗌
Material: P-1		Thickness: N/A	Heat Treatment: As Welded
Magnetizing Equipment: Yoke ⊠ Coil ☐ IRISNDT #: 40105	Prod  Bench:	Headshot ☐ Central Conductor ☐ ontour Calibr	Coil Cate: 16-Feb-11
Blacklight:   IRISNDT #: N/A   Verification per ASME	Mfg: V Art 7 T.777.2	Calibra	tion Date:10
Whitelight: Battery Powered Min. 31 110V Power Min. 60W B	,	Held within 30 cm (12in) of the in provides minimum 1000 Lx (100f	
Method of Magnetization: AC ⊠ DC □	Continuous 🛛 Residual	⊠	
Magnetic Particles: Dry ☐ Wet ☑ Batch #: 907	Red ☐ Mfg: Ma	Grey ☐ Black ☑ Fluorescent agnaflux Type:	
Background: ⊠ Batch #: 1080	Mfg: Ar	drox Type:	8901W
Ön 1- 1-	Tank sn# 73  - 1" Collar fillet welds i 2 - Tailing lug Re-Pa 4 - Gas line Re-Pad 4" Nozzle/Re-Pad fillet 1 - 3" Nozzle fillet w 1 - Shell patch fillet v	42-23 in vault (in&out) id fillet welds if fillet welds it welds (in&out) eld (in&out) veld (in&out)	@ L&L Oilfield
Inspection Limitation(s):			
	consumables: -MIN	Interpretation by: Sheldon Trachuk  (Print)  (Signature) Ellent Representative: (Print) I am in full agreement with report contents (Sign)	SNT-TC-1A 2 C.G.S.B. 2 (Level) 11405
5311 – 86 Street Edmonton, Alberta, T6E 5T8 Phone: (780) 437-2022 Fax: (780 Calgary (403) 279-6121 Lloydminster (780) 875-8455 Barrhead (780) 674-3018 Nisku (780) 955-7616	Cold Lake (78 Fort McMurray (78 High Level (78 Red Deer (40	0) 743-1536 D 0) 956-4094 M 3) 347-1742 To	orpus Christi, TX (361) 888-4700 eer Park, TX (281) 478-4444 attiv, Houston, TX (713) 722-7177 exas City, TX (490) 945-2282 ulsa, OK (918) 448-8773 IRISNDT E-2003F