Date: June 11th, 2012 Equipment ID: 62019972 Report #: IR120611DHb Bar Code #: BC-169609

Facility: 11 / 03-31-050-25W3 - 0

Plant	03-31 Well Site	Op Unit Tan	ngle Flags		System N/A			
Asset #	169609	Equipment ID	62019972		Asset Type	Vessel		
Description Glycol Contactor			Prov. Insp. # A3		3102871	Serial #	94210-AA	
Manufactu	rer Propack Syste	ms Ltd.	CRN	CRN M-5722.23			1995	
MAWP	9032	KPag	@ 66	°C		MDMT	-29	°C
Code	UW11A5B	Fluid Service	Gas / Glyco	ol / H2O	Sweet	PWHT	N/S	
Internal Ad	ccess None	Insulated	No			Internal Coa	ating N/S	
Operating	Pressure 0		KPag		Operating Temp	18.5		°C

PSV DATA

PSV ID#	Location	Size		Set	Capacity	Manufacturer	Model	Last
		Inlet	Outlet	Pressure	SCFM/			Service
					Lbs/Hr / GPM			
01328	6' Up Alongside Vessel	19.05	25.4	9032 kPa	2,421 SCFM	Consolidated	1990C	May 30,
		mm	mm					2006

INSPECTION SUMMARY

M. Lafontaine, 2013-04-02:

allowance stated on nameplate

- all measured thicknesses were greater than or

within manufacturer's mil tolerance or corrosion

- Entire well site down at time of inspection.
- Anchors are secure and most piping is well-supported (photo).
- PSV is not well supported (photo).
- Inlet piping appears to be pressurized to ball valve which is closed (photo).
- PSV service date has expired May 2006 (photo).
- Limited visual access to vessel above roof line of shack due to safe work practices (heights).
- House-cleaning issues inside shack and vessel shell lots of staining, rubbish, mice nests, and even a dead mouse underneath
- Vessel-roof interface seal appears to be intact but there is staining on the vessel shell.

RECOMMENDATIONS

- Service PSV. before use
- Install some sort of support for the PSV. reduce PSV inlet piping length
- Confirm that vessel to roof interface is well sealed from the top of the roof.

Perform housekeeping and clear out mice nesting (hanta virus exposure is possible). **NONCONFORMANCES / INSPECTION DEFICIENCIES** Expired PSV service date. INSPECTION PLANNING Availability Inspection Strategy Inspection Interval **Inspection Date** June 11, 2012 **Date of Last Inspect Date of Next Inspect** before service

REPORT CERTIFICATION

The signatures below certify that inspections/tests have been completed in accordance with the identified inspection strategy and that the specified equipment is considered fit for service until the date of next inspection.								
Inspected by	Deston Henson	AL.	Date	June.11, 2012				
Reviewed and Approved by			Date					
Criticality Assessment Rerun		Inspection Planning Rerun	=					
Assessed Next Inspection Date		_						



Date: June 11th, 2012 Equip Report #: IR120611DHb Bar C Facility: 11 / 03-31-050-25W3 - 0 Equipment ID: 62019972 Bar Code #: BC-169609

VISUAL EXTERNAL

ID	Description	Condition	Location	NCR	Comments
V1	General Other (Please Explain)	-			
V2	General Corrosion	Good			
V3	General Leaks	Good	None found		
V4	Vibration	N/A			Entire well site down at time of inspection.
V5	Dissimilar Flange Rating	None			
V6	Ladder/Stairway	N/A			
V7	Heads	Good	Top / Bottom		Photo of bottom – no access to Top
V8	Guy Wires	N/A			
V9	Electrical Ground	Poor	Not found		Needs electrical grounding.
V10	Painted Inactive Corrosion	Good			No known areas
V11	Coating/Painting	Good			In good condition
V12	Expansion Joint or Bellows	N/A			
V13	Gauge/Site Glass	Good	Bottom shell section		
V14	Shell	Good			
V15	Jacket	N/A			
V21	Support Other (Please explain)	N/A			
V22	Foundation	Good	Skirt to Shack		
V23	Anchor Bolts	Good	Skirt to Shack		
V24	Saddle/Skirt	Good	Bottom of vessel		
V25	Davit	N/A			
V26	Fireproofing	N/A			
V31	Connections Other (Please explain)	Good	Various nozzles / fittings		
V32	Small Branches	N/A			
V33	Nozzles	Good	Shell & Heads		
V34	Manways	None			
V35	Reinforcing Pads	None			
V36	Inadequate Thread Engagement	OK			
V37	Bolting	Good	Inlet / Outlet		
V38	Flanges	Good	Inlet / Outlet		
V39	Leak Clamps	N/A			
V41	Insulation Other (Please explain)	Good	Above roof line		
V42	Damage	None			
V43	Penetrations	Unknown	Vessel to roof		Looks good but water stains on shell
V44	Insulation Jacket	None			
V45	Banding	None			
V46	Seals/Joints	Good	Threaded fittings		
V51	Relief Devices Other (Please explain)	Poor	6' up alongside vessel		Service interval has expired
V52	Corrosion	None			None found
V53	Leaks	None			None found
V54	Restricted Inlet/Outlet	N/A			
V55	Manual Operation Lever	N/A			



Date: June 11th, 2012 Equipment ID: 62019972 Bar Code #: BC-169609 Report #: IR120611DHb Bar 0 Facility: 11 / 03-31-050-25W3 - 0

DETAILED INSPECTION VISUAL INTERNAL

ID	Description	Condition	Location	NCR	Comments
V1	General Other (Please Explain)	N/A			
V2	Corrosion (depth, length, width)	N/A			
V3	Erosion	N/A			
V4	Distortion	N/A			
V5	Blisters	N/A			
V6	Deposits	N/A			
V7	Heads	N/A			
V8	Welds	N/A			
V9	Nozzles	N/A			
V10	Shell	N/A			
V11	Gasket Surfaces	N/A			
V21	Internals Other (Please explain)	N/A			
V22	Demister	N/A			
V23	Baffle/Wier	N/A			
V24	Sparger	N/A			
V25	Thermowells	N/A			
V26	Metallic Linings	N/A			
V27	Nonmetallic Linings	N/A			
V28	Trays	N/A			
V29	Tray Rings	N/A			
V30	Other Welded Attachments	N/A			

DETAILED INSPECTION OTHER TECHNIQUES

ID	Location	Observation/Measurement	Acceptance Criteria	NCR	Comments
1	N/A				
2	N/A				
3	N/A				
4	N/A				
5	N/A				
6	N/A				
7	N/A				
8	N/A				
9	N/A				
10	N/A				

DETAILED INSPECTION UT THICKNESS

CML	Nom. Thk	Current Reading	Short Term Corr Rate	Long Term Corr Rate	Remaining Life	Comments
						See Attached UT Report



Date: June 11th, 2012 Equipment ID: 62019972 Report #: IR120611DHb Bar Code #: BC-169609

Facility: 11 / 03-31-050-25W3 - 0

PHOTOS



Vessel to Roof Interface



Date: June 11th, 2012 Equip Report #: IR120611DHb Bar 0 Facility: 11 / 03-31-050-25W3 - 0 Equipment ID: 62019972 Bar Code #: BC-169609





Date: June 11th, 2012 Equipment ID: 62019972 Report #: IR120611DHb Bar Code #: BC-169609

PSV Service Tag (2)

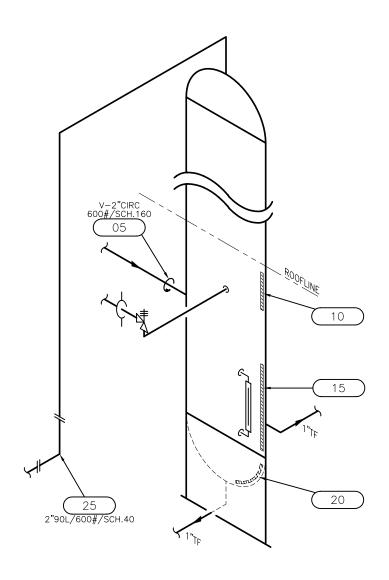
Facility: 11 / 03-31-050-25W3 - 0



PSV Service Tag







Code/Div.: N/S
PARA: UW11A5B
C. Stamp: U
Yr. Blt.: 1995
Manway: NO
•

Manufacturer: PROPAK SYSTEMS LTD.

CLIENT	SKY ENERGY						
FACILITY SASKATCHEWAN	N — TANGLEFL	AGS FIELD					
LSD 03-31-050-25W3M							
GLYCOL CONTACTOR							
BY: D.H.	DATE: 2012/06	DWG.#: 016					

Size: 24" X 348" EST	Radiography: RT-2
Service: SWEET	Insulated: NO
PWHT: NO	N.B. No.: N/S

_ Design & Materials Data

Comments: __

HEAD: Material: N/S	Nom.: _14.3mm	C.A.: 1.6mm
Material:	Nom.:	C.A.:
SHELL Material: N/S	Nom.: 17.5mm	C.A.: 1.6mm
Material:	Nom.:	C.A.:
BOOT Head Mat'l.:		
Shell Mat'l.:	Nom.:	C.A.:
CHANNEL Material:	Nom:	_ C.A.:
MAWP Shell Side: 9032 KPA	@ Temp	:: 66°C/-29°C
MAWP Tube Side:	@ Temp	··



Husky Energy
Unit: T-064

FACILITY: TANGLEFLAGS FIELD MANUFACTURER: PROPAK SYSTEMS LTD.
LSD: 03-31-050-25W3M DESIGN PRESSURE: 9032 kPa / 1310 psi
ITEM DESC.: GLYCOL CONTACTOR DESIGN TEMP.: 66 C / 151 F

EQUIP / OIP#: BC-169609

PROV. REG. #: A3102871 VESSEL CORROSION ALLOWANCE: 1.60 mm.

SERIAL #: 94210-AA

CRN.: M-5722.23 TOTAL CAUTION / ACTION TML: 5

Item # 016

COMMENTS:

2012/06 - BELOW NOMINAL READINGS CONFIRMED. NO EVIDENCE OF EROSION OR CORROSION

TML No.: 5 2"CIRC NOZ 600#

DATE BUILT: 01/1995 AVERAGE THICKNESS MEASURED: 9.55 mm. MATERIAL: MINIMUM THICKNESS MEASURED: 9.33 mm.

Pts.	Nom. Thick. mm.	CA + Steel Mfg.Tol. mm.	Nom. -CA -Toll. mm.	B/L Survey Thick. mm.	Prev. Survey Thick. mm.	Last Survey Thick. mm.	Short Term CR mm/yr	Long Term CR mm/yr	Rem. Half Life yr	Future UT Reading mm-yyyy mm.	Action/Caution Required Item
5.01	8.71	1.60	7.11	8.71	N/A	9.73	0.0000	0.0000	100.00		NO
5.02	8.71	1.60	7.11	8.71	N/A	9.58	0.0000	0.0000	100.00		NO
5.03	8.71	1.60	7.11	8.71	N/A	9.33	0.0000	0.0000	100.00		NO
5.04	8.71	1.60	7.11	8.71	N/A	9.55	0.0000	0.0000	100.00		NO

TML No.: 10 SH OPP I/L T-B

DATE BUILT: 01/1995 AVERAGE THICKNESS MEASURED: 18.80 mm.
MATERIAL: MINIMUM THICKNESS MEASURED: 18.68 mm.

Pts.	Nom. Thick. mm.	CA + Steel Mfg.Tol. mm.	Nom. -CA -Toll. mm.	B/L Survey Thick. mm.	Prev. Survey Thick. mm.	Last Survey Thick. mm.	Short Term CR mm/yr	Long Term CR mm/yr	Rem. Half Life yr	Future UT Reading mm-yyyy mm.	Action/Caution Required Item
				01/1995		06/2012					
10.01	17.45	1.60	15.85	17.45	N/A	18.81	0.0000	0.0000	100.00		NO
10.02	17.45	1.60	15.85	17.45	N/A	18.78	0.0000	0.0000	100.00		NO
10.03	17.45	1.60	15.85	17.45	N/A	18.81	0.0000	0.0000	100.00		NO
10.04	17.45	1.60	15.85	17.45	N/A	18.68	0.0000	0.0000	100.00		NO
10.05	17.45	1.60	15.85	17.45	N/A	18.75	0.0000	0.0000	100.00		NO
10.06	17.45	1.60	15.85	17.45	N/A	18.97	0.0000	0.0000	100.00		NO

(*) and GREEN Represent 25% of the last thickness readings, which have the shortest remaining half life.

If Baseline (B/L) Survey Thickness Measurement was not taken at the time of Manufacture, then Nominal Thickness is used as Baseline Thickness. Minimum Thickness is calculated

Design Minimum Thickness = Nom. Thick. - CA - Manufacturing Steel Tolerance.

Manufacturing Tolerance of pipe and forged fittings is + or -12.5% (May or may not apply dependent upon the Client's Owner-User Integrity Management System).

Manufacturing Tolerance of plate is + or - 0.25mm (0.010") (May or may not apply dependent upon the Client's Owner-User Integrity Management System).

BLUE (Caution TML Point) - if Corrosion Rate exceed a 0.250mm / 0.009 in. per yr. or Half Life is less than 15 years.



Husky Energy
Unit: T-064

1.60 mm.

NO

NO

FACILITY: TANGLEFLAGS FIELD MANUFACTURER: PROPAK SYSTEMS LTD.
LSD: 03-31-050-25W3M DESIGN PRESSURE: 9032 kPa / 1310 psi
ITEM DESC.: GLYCOL CONTACTOR DESIGN TEMP.: 66 C / 151 F

EQUIP / OIP#: BC-169609

PROV. REG. #: A3102871 VESSEL CORROSION ALLOWANCE:

SERIAL #: 94210-AA

CRN.: M-5722.23 TOTAL CAUTION / ACTION TML: 5

Item # 016

COMMENTS:

15.07

15.08

17.45

17.45

DATE BUILT: 01/1995

2012/06 - BELOW NOMINAL READINGS CONFIRMED. NO EVIDENCE OF EROSION OR CORROSION

TML No.: 15 BTM SH @ L/L T-B

17.06 mm. MATERIAL: MINIMUM THICKNESS MEASURED: Pts. CA +B/L Prev. Rem. Future UT Nom. Nom. Last Short Long -CA Survey Survey Survey Term Term Action/Caution Thick. Steel Half Reading -Toll. mm. Mfg.Tol. Thick. Thick. Thick. CR CR Life mm-yyyy Required Item mm. mm. mm. mm. mm. mm/yr mm/yr mm. yr 01/1995 06/2012 15.01 17.45 1.60 15.85 17.45 N/A 18.18 0.0000 0.0000 100.00 NO 15.02 17.45 1.60 15.85 17.45 N/A 18.02 0.0000 0.0000 100.00 NO 15.03 17.45 1.60 15.85 17.45 N/A 17.93 0.0000 0.0000 100.00 NO 15.04 17.45 15.85 17.45 17.12 0.0000 1.60 N/A 0.0178 35.72 NO 15.05 17.45 1.60 15.85 17.45 N/A 17.87 0.0000 0.0000 100.00 NO 15.85 17.45 17.06 0.0000 15.06 17.45 1.60 N/A 0.0229 26.47 NO

17.49

17.34

0.0000

0.0000

AVERAGE THICKNESS MEASURED:

17.63 mm.

100.00

100.00

0.0000

0.0051

TML No.: 20 BTM HEAD T-B

1.60

1.60

15.85

15.85

DATE BUILT: 01/1995 AVERAGE THICKNESS MEASURED: 17.05 mm.
MATERIAL: MINIMUM THICKNESS MEASURED: 16.39 mm.

N/A

N/A

17.45

17.45

Pts.	Nom. Thick. mm.	CA + Steel Mfg.Tol. mm.	Nom. -CA -Toll. mm.	B/L Survey Thick. mm.	Prev. Survey Thick. mm.	Last Survey Thick. mm.	Short Term CR mm/yr	Long Term CR mm/yr	Rem. Half Life yr	Future UT Reading mm-yyyy mm.	Action/Caution Required Item
20.01	14.29	1.60	12.69	14.29	N/A	18.84	0.0000	0.0000	100.00		NO
20.02	14.29	1.60	12.69	14.29	N/A	16.39	0.0000	0.0000	100.00		NO
20.03	14.29	1.60	12.69	14.29	N/A	16.54	0.0000	0.0000	100.00		NO
20.04	14.29	1.60	12.69	14.29	N/A	16.63	0.0000	0.0000	100.00		NO
20.05	14.29	1.60	12.69	14.29	N/A	16.84	0.0000	0.0000	100.00		NO

If Baseline (B/L) Survey Thickness Measurement was not taken at the time of Manufacture, then Nominal Thickness is used as Baseline Thickness. Minimum Thickness is calculated

RED (Action TML Point) - If Remaining Half Life is 0 and Last Survey Thickness is below Nominal-CA-Tolerance Thickness.

Design Minimum Thickness = Nom. Thick. - CA - Manufacturing Steel Tolerance.

Manufacturing Tolerance of pipe and forged fittings is + or -12.5% (May or may not apply dependent upon the Client's Owner-User Integrity Management System).

Manufacturing Tolerance of plate is + or - 0.25mm (0.010") (May or may not apply dependent upon the Client's Owner-User Integrity Management System).

^(*) and GREEN Represent 25% of the last thickness readings, which have the shortest remaining half life.

 $BLUE \ (Caution \ TML \ Point) - if \ Corrosion \ Rate \ exceed \ a \ 0.250mm \ / \ 0.009 \ in. \ per \ \ yr. \ or \ Half \ Life \ is \ less \ than \ 15 \ years.$



Husky Energy
Unit: T-064

FACILITY: TANGLEFLAGS FIELD MANUFACTURER: PROPAK SYSTEMS LTD.
LSD: 03-31-050-25W3M DESIGN PRESSURE: 9032 kPa / 1310 psi
ITEM DESC.: GLYCOL CONTACTOR DESIGN TEMP.: 66 C / 151 F

EQUIP / OIP#: BC-169609

PROV. REG. #: A3102871 VESSEL CORROSION ALLOWANCE: 1.60 mm.

SERIAL #: 94210-AA

CRN.: M-5722.23 TOTAL CAUTION / ACTION TML: 5

Item # 016

COMMENTS:

2012/06 - BELOW NOMINAL READINGS CONFIRMED. NO EVIDENCE OF EROSION OR CORROSION

TML No.: 25 2"90L 600# T-B

DATE BUILT: 01/1995 AVERAGE THICKNESS MEASURED: 3.62 mm. 3.52 mm. MATERIAL: MINIMUM THICKNESS MEASURED: Pts. CA +Nom. B/L Prev. Rem. Future UT Nom. Last Short Long Action/Caution -CA Survey Survey Survey Term Term Thick. Steel Half Reading -Toll. mm. Mfg.Tol. Thick. Thick. Thick. CR CR Life mm-yyyy Required Item mm. mm. mm. mm. mm. mm/yr mm/yr mm. 01/1995 06/2012 25.01 3.91 0.49 3.42 3.91 N/A 3.64 0.0000 0.0152 7.22 **CAUTION** 25.02 3.91 0.49 3.42 3.91 N/A 3.52 0.0000 0.0229 2.19 **CAUTION** 25.03 3.91 0.49 3.42 3.91 N/A 3.58 0.0000 0.0178 4.50 **CAUTION** 25.04 3.91 3.42 3.91 7.22 0.49 N/A 3.64 0.0000 0.0152 **CAUTION** 25.05 3.91 0.49 3.42 3.91 N/A 3.71 0.0000 0.0127 11.42 **CAUTION**

If Baseline (B/L) Survey Thickness Measurement was not taken at the time of Manufacture, then Nominal Thickness is used as Baseline Thickness. Minimum Thickness is calculated

Design Minimum Thickness = Nom. Thick. - CA - Manufacturing Steel Tolerance.

Manufacturing Tolerance of pipe and forged fittings is + or -12.5% (May or may not apply dependent upon the Client's Owner-User Integrity Management System).

Manufacturing Tolerance of plate is + or - 0.25mm (0.010") (May or may not apply dependent upon the Client's Owner-User Integrity Management System).

^(*) and GREEN Represent 25% of the last thickness readings, which have the shortest remaining half life.



ULTRASONIC EXAMINATION REPORT (Vessel / Piping)								No.: UT -			
Oliante	Harley France						ITO Jah Na	Page:	of		
Client:	Husky Energ			100.14			ITS Job No.:		1 151 0010		
District:	Saskatchew			LSD: Vario	LSD: Various				June 15th, 2012		
Facility:	Tangleflags			_	9:00 AM						
Item(s) Examined:	Corrosion S	Surveys (as per clie	nt request) Indica	_	(as per DTRs	<u></u>					
	·				.		_	(as per DTRs	·		
Acceptance Criteria:		w Only)		Rev. / Date:		0 1 0011	_	(as per DTRs			
Procedure No.:	ITS-UT02				Date: Rev. 1, Oct 2011 Rev. 1, Oct 2011			N/S			
Technique No.:	Technique 02	- Corrosion / Erosion S	Survey	Rev. / Date:	Rev. 1, 0	Oct 2011	Other:	N/S			
Equipment Data:											
PRN: (A)	N/S	Serial No.:	N/S	Equip. N	lo.:	N/S	CRN:		N/S		
Material:	Car	bon Steel	Thickne:	SS:	N/S		Other:	N/S	N/S		
Surface Condition:											
☐ Base Metal ☐ I	Machined	☐ Shot Blasted	☐ Wire Wheeled	d 🔲 As Groui	nd 🔲 A	As Welded	Painted Co	oated Other:			
☐ < 0°C (32°F)		■ 0°C (32°F) to 54°	°C (130°F)	☐ 55°C	(131°F)	to 100°C (212°	F)	☐ > 100°C	(212°F)		
Ultrasonic Equipment											
Instrument:	Sonates	st Mod	el: Sitescan D-2	20+ BNC Seria	al No.:	10066	S82 Ca	al. Due Date:	15-Jan-13		
Cal. Block:	2.5	mm - 12.5mm Step V	Vedge C.S.	Seria	al No.:	A007	65 Co	ouplant:	UTX		
Cal. Block:		N/A		Seria	al No.:	N/A	١				
Transducer Cable(s)	; Type:	CB-RG	1742 RG-174/U	Leng	ıth:	72'	·				
Transducer:											
		uency Size	Туре	Primary Refer		Scanning Se	nsitivity T	ransfer Value	Range		
(X		-lz): (mm):	Single Dual	(db) (%FSI		(db):		(db):	(mm):		
0257DJ	0 5	.0 6.3		BWE @ 80%		+6 dB, maint.	80% FSH	(none)	25		
				IB according to t	nickness)					
Examination Details:											
SCOPE:		a corrosion survey u June 15th, 2012.	sing the ultrasonic	thickness techn	ique on t	he above menti	oned equipment	at the above lo	ocations - from		
RESULTS:		obtained from the cor g of the equipment w					Festing Services	Inc. A report a	ccompanied by a		
CONCLUSION:		sting Services Inc. sh determine a course o			ensive re	port depicting a	ll pertinent inforr	mation required	for the client to		
Client Representative	Sign:				Date:						
Technician(s):		-2									
Sign: Print: Let Certification N	1 st Te CGSB /el: 2	h Henson · schnician SNT ACCI	P/ASNT	2 nd 7	drianna N echnician / A	Assistant SNT ACC	Repo	rt Review:<	le Mini		
Scope of Services				***************************************			***************************************				

cope or or services.

In agreement of Implity Testing Services Inc. to perform services extends only to those services provided for in writing. Under no discussations and such services setend beyond the performance of the requested inspection of specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection data obtained or the opinion of inspection of specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection data obtained or the opinion or determined on the specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection of specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection of specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or descriptions. It is not assuming any responsibilities of the comercing-many and responsi

another to caver resources provided, Integrity Testing Services Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by IT



ULTRASONI	C EXAMINAT	REPORT N	o.: UT - 17	90-A - 00 - DH				
						Page:	1 of 1	
Client:	Husky Energy		ITS Job No.:	No.: 1790-A				
District:	Saskatchewan		LSD: Various		Date:	e: June 11th to June 15th, 2012		
Facility:	Tangleflags Field		Time:	9:00 AM				
Item(s) Examined:	Corrosion Surveys	(as per client request) Indica	-	W.O. No.:	(as per DTRs)			
			P.O. No.:	(as per DTRs)				
Acceptance Criteria:	(Client Review Only)		Rev. / Date: N/A		Cost Code:	Cost Code: (as per DTRs)		
Procedure No.:	ITS-UT02		Rev. / Date: Rev. 1,	Rev. / Date: Rev. 1, Oct 2011				
Technique No.:	Technique 02 - Corrosio	on / Erosion Survey	Rev. / Date: Rev. 1,	Oct 2011	Other:	N/S		
Equipment Data:								
PRN: (A)	N/S Seri	al No.: N/S	Equip. No.:	N/S	CRN:		N/S	
Material:	Carbon Stee	Thicknes	ss: N/S		Other:	N/S		
Surface Condition:								
Base Metal	Machined	Blasted Wire Wheeled	I ☐ As Ground ☐ /	As Welded	Painted	ated Other:		
☐ < 0°C (32°F)		32°F) to 54°C (130°F)	_	to 100°C (212°F		□ > 100°C (2	212°F\	
Ultrasonic Equipment		32 1 / 10 34 0 (130 1)		10 100 0 (212 1	1		-12 1 /	
Instrument:	Sonatest	Model: Sitescan D-2	0+ BNC Serial No.:	100668	32 Cal	. Due Date:	15-Jan-13	
Cal. Block:		5mm Step Wedge C.S.	Serial No.:	A0076		iplant:	UTX	
Cal. Block:	2.011111 12.	N/A	Serial No.:	N/A				
Transducer Cable(s)	; Type:	CB-RG1742 RG-174/U	Length:	72"				
	, .,po.	33 1.6 1.1 1.2 1.0 1.1 1/6						
Transducer:	ralo Eroguanov	Size Type	Primary Reference	Scanning Sen	oitivity Tro	ansfer Value	Pongo	
Seriai No.: (X	ngle Frequency (°): (MHz):	(mm): Single Dual	(db) (%FSH):	(db):	ISILIVILY 112	(db):	Range (mm):	
3	0 5.0	6.3	BWE @ 80% FSH	+6 dB, maint. 8	0% FSH	(none)	25	
		□ □ [d	B according to thickness					
Examination Details:								
Examination Botano.								
SCOPE:	To carry out a corrosi	on survey using the ultrasonic	thickness technique on t	he above mentio	ned equipment a	at the above loc	ations - from	
	June 11th to June 15		, , , , , , , , , , , , , , , , , , , ,					
RESULTS:	The results obtained	from the corrosion survey shal	be collected and analyz	ed by Integrity To	esting Services I	nc. A report acc	companied by a	
	CAD drawing of the e	equipment will be assembled a	and sent to the client for f	urther review				
CONCLUSION:	Integrity Testing Ser	vices Inc. shall provide to the c	client a comprehensive re	port depicting all	pertinent inform	ation required f	or the client to	
		a course of action, if required						
Client Representative	e:		Sign:			Date:		
·								
Technician(s):								
Sign:	AHL	*						
Print:	Deston Henson	· -	Adrianna N	lauta	Repor	Review: 🤇	2	
	1 st Technician	IT ACCD/ASAIT	2 nd Technician / /		D/A CNIT		Intial	
Le		ACCP/ASNI	CGSB Level:	SNT ACCF	P/ASNT			
Certification N	lo.: 15387	E Cei	rtification No.:					

cope or or services.

In agreement of Implity Testing Services Inc. to perform services extends only to those services provided for in writing. Under no discussations and such services setend beyond the performance of the requested inspection of specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection data obtained or the opinion of inspection of specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection data obtained or the opinion or determined on the specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection of specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection of specific equipment provided for in writing and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or similar documents reflecting the inspection data or descriptions. It is not assuming any responsibilities of the comercing-many and the preparation of reports or descriptions. It is not assuming any responsibilities of the comercing-many and responsi

another to caver resources provided, Integrity Testing Services Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by IT