



Ultrasonic Inspection Report

Job #:

Report #:

Inspection Date:

-

--UT-BV-01

08/29/2013

Client: CNRL

Location: Hays, Alberta

Procedure: UT-0001

Item Inspected: Vessel Dehy Tower LSD10-22-012-14W4M

Code: ASME Section VIII

Surface Condition:

Painted Sandblasted Machined As Cast As Forged
Weldment Other Material: C.S.

Scanning Surface:

OD ID Other: Surface Temp (°C): > 5° / < 60°

Method:

Contact Immersion Other

Type:

P/E T/T Dual Automated TOFD

Application:

Laminar Shear Wave Volumetric Thickness

Instrumentation:

Mfg: G.E. Type: Krautkramer Equip #: DMS2 Serial #: 020XP6

Calibration:

Date: 01/04/2013 Reference Flaw Size: Backwall

Calibration Block (s):

Type: Block#: Type: Block#:

Type: .5" Stepwedge Block#: 10-2192 Type: Block#:

Couplant:

Brand: Sono Tech Type: Echogel Cable: Type: Coaxial Length: 36"

PROBE

Settings - dB

Range - IN. MM

Manufacturer	Type	Serial #	Angle	Frequency	Size	Ref Level	Scan Level	Transfer Value	Screen Size	Skip Value	Beam Travel
G.E.	Dual	0200LL	0	7.5Mhz	0	6db					

Scope and Inspection Results

Carry out UT examination of the Dehy Tower A0437520 LSD10-22-012-14W4M. Check for corrosion of the Heads, Shell and Associated piping to verify integrity for service and identify any areas of concern.

Results:

UT examination was carried out; all readings taken were 10" band scans with three readings per TML location/band. Minimum, Maximum and Average readings were taken and recorded in each location. Readings were found to at or above nominal. See attached Pictures, drawing and UTM Readings for locations and thicknesses recorded.

Recommendation:

Continue to carry out UT corrosion survey and Visual inspections at the required inspection frequency.

Final Comment:

Dehy Tower was found to be fit for continued service.

Inspection Limitation(s): None

Time and Billing Information:

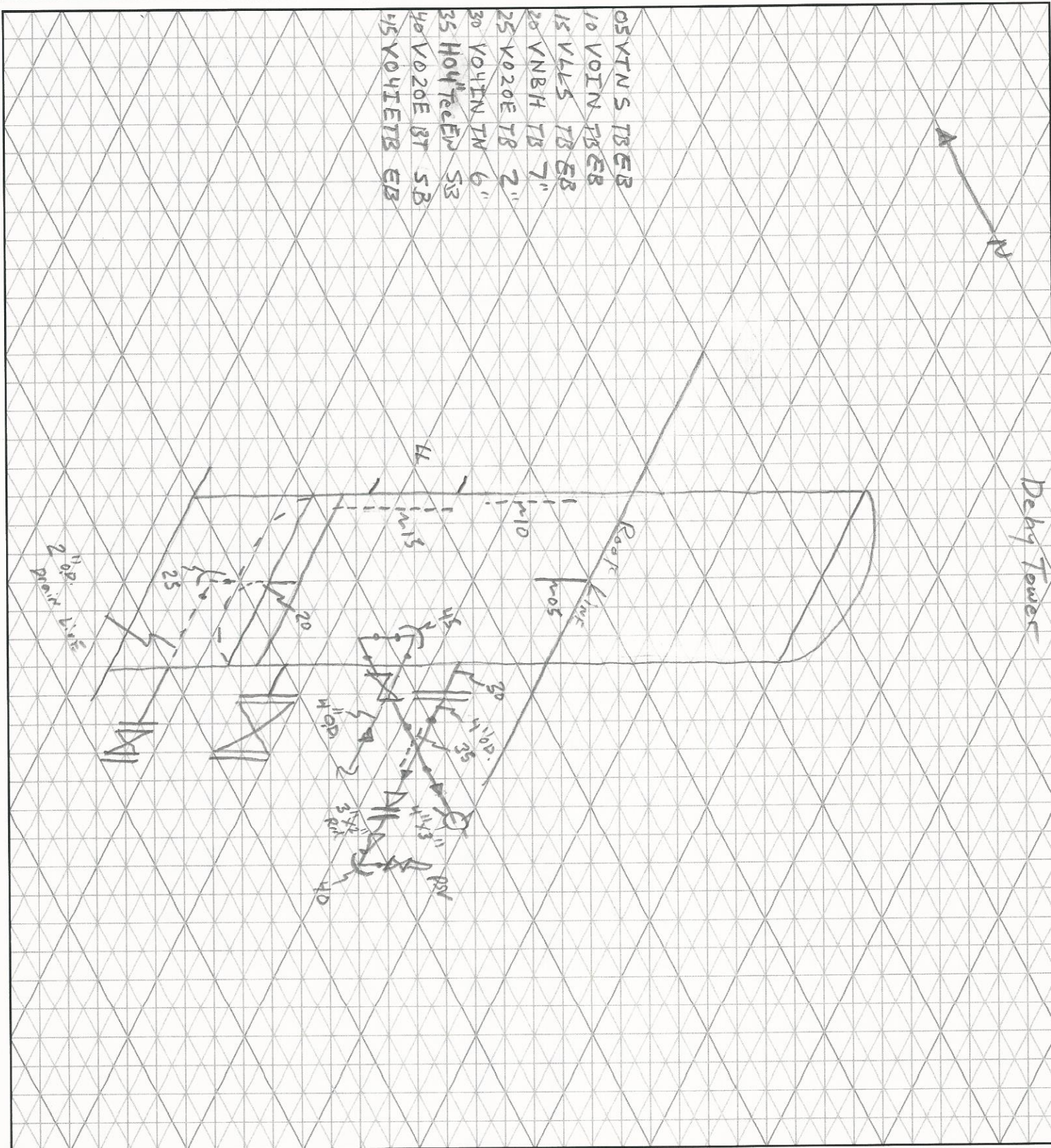
Vehicle #:	001	Kms:		Hrs	Tech. (Name):	Blair Verge	SNT-TC-1A:	1
Time In:	00:00	Time Out:	00:00		Tech. (Sign):		CGSB Level:	I
Time In:	00:00	Time Out:	00:00		Client (Name):		CGSB #:	5586
Personnel:	Mike Ratzlaff Blair Verge				Client (Sign):			

Additional Billing Information: : -



CORROSION INSPECTION SERVICES

Page _____ of _____



- 05 VTN 5 TB EB
- 10 VOIN TB EB
- 15 VLL 5 TB EB
- 20 VNBH TB 7"
- 25 V020E TB 2"
- 30 VOHN TN 6"
- 35 HO4 TEL ED 5B
- 40 V020E BT 5B
- 45 VO4IETB EB

CUSTOMER: CNRL FACILITY: GRAND FORKS LSD: 10-22-012-14W4M
 P & ID: _____ DRAWN BY: B. VERGE DATE: Aug 29/13 DRAWING NO. _____

VESSEL INFORMATION:
 Equip. No. V-480 Pro. Reg. No. (A) A0437520 C.R.N. L0916.213 Serial No. V-2810A2 Yr. Inst. _____
 Code/Div. _____ Size: 24" ID / ODX: _____ Manufacturer: OPSCO INDUSTRIES LTD. Yr. Blt. 1998
 C. Stamp: YES Service: _____ PWHT: YES J.E.: _____ Radiography: RT-1 Insulated: NO

HEAD: **SHELL:**
 Top Mat'l. SAS16-70N Top Nom. 1.140" Top C.A. 0.125" Material: SAS16-70N Nominal: 1.125" C.A. 0.125"
 Btm Mat'l. _____ Btm Norm. _____ Btm C.A. _____

BOOT: **CHANNEL:**
 Head Mat'l.: _____ Head Nom. _____ Head C.A. _____ Top Mat'l. _____ Top Nom. _____ Top C.A. _____
 Shell Mat'l.: _____ Shell Nom. _____ Shell C.A. _____ Btm Mat'l. _____ Btm Nom. _____ Btm C.A. _____
 MAWP Shell Side: 1440 PSI @ Temp. 120°F MAWP Tube Side: _____ @ Temp. _____

PIPING INFORMATION: MDMT -20°F @ 1440 PSI
 Circuit. No. _____ Line No. (s) **(PLEASE PUT LINE NUMBERS ON APPLICABLE LINES ON THE DRAWING)**
 Piping Class: _____ Service: _____ Yr. Blt. _____
 MAWP: _____ @ Temp. _____ Size & Schedule of Piping **(PLEASE PUT APPROPRIATE SIZES AND SCHEDULES OF PIPING ON DRAWING)**

UT Readings for A0437520 Dehy Tower

	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>
LOC 5	1.139	1.14	1.14
LOC 10	1.138	1.143	1.142
LOC 15	1.136	1.144	1.14
LOC 20	1.155	1.272	1.198
LOC 25	0.364	0.399	0.366
LOC 30	1.056	1.06	1.06
LOC 35	0.495	0.63	0.54
LOC 40	0.304	0.314	0.313
LOC 45	0.303	0.314	0.31