



Client:
CNRL

PRESSURE EQUIPMENT DATA REPORT

EQUIPMENT GENERAL INFORMATION

District:	Medicine Hat		
Facility:	Grand Forks Central		
Location /LSD:	07-32-012-13W4	Operating Province:	Alberta
Equipment Name:	GROUP TREATER		
Equipment Status:	Operating	Orientation:	Horizontal
Skid No.:	GROUP TREATER	Unit:	

EQUIPMENT STATIC DATA

AB Registration No.:	0164522		Serial No.:	80-12-44	
Registration No./Other:			Equipment No.:	N/S	
CRN NO.:	D-9230.2		Unique ID No.:		
National Board No.:	N/S		Oncor ID No.:	159601	
Manufacturer:	PROCESS INDUSTRIES		Year Built:	1990	
MAWP:	75.00 (psi)	517.11 (Kpa)	Temperature:	350.00 (F)	176.67 (C)
Diameter.:	96.000 (In)	2438.40 (mm)	Length:	420.00 (In)	10668.00 (mm)
Radiography:	Spot		Heat Treatment:	No	
Corrosion allowance:	0.125 (In)	3.175 (mm)	MDMT:	-20.00	
Lining Or Coated:			Painted:	Yes	
Insulated:	Yes		Internally Clad:		
Hand Hole:	No		Support Type:	Saddle	
Manway:	Yes		Manway Size(In):	24.00	
Capacity/Volume(m3):	52.00		Nozzle Rating:	150.00	

MATERIALS/COMPONENTS

Name	Joint Efficiency	Outside Diameter(in.)	Head Type	Material Type	Stress Value (PSI)	Nominal Thickness(In.)
SHELL	1.00	96.000		SA-516 70	17500	0.38
HEAD	1.00	96.000	Ellipsoidal	SA-516 70	17500	0.38
BOOT SHELL	1.00	24.000		SA-516 70	17500	0.38
BOOT HEAD	1.00	24.000	Ellipsoidal	Unknown	17500	
HEAD (FT)	1.00	96.000	Ellipsoidal	SA-516 70	17500	0.63

PIPING STATIC DATA

Primary Flange Rating:	150	ASME B16.5 - Table 2-1.1 @ 150F:	285 (psi)
Pressure Use For TMin:	Vess Design Press	Piping Operating Press:	75 (psi)
Stress Value:	20000 (psi)	E Value:	1.00 Joint: SMLS

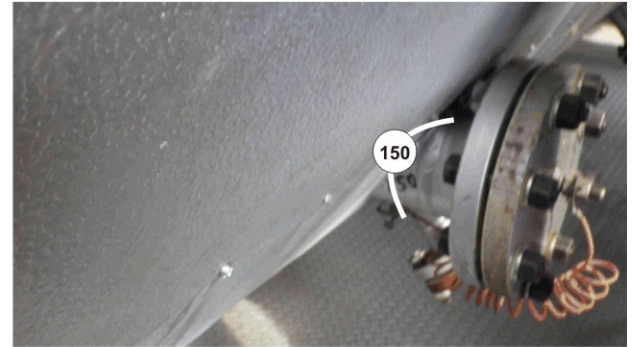
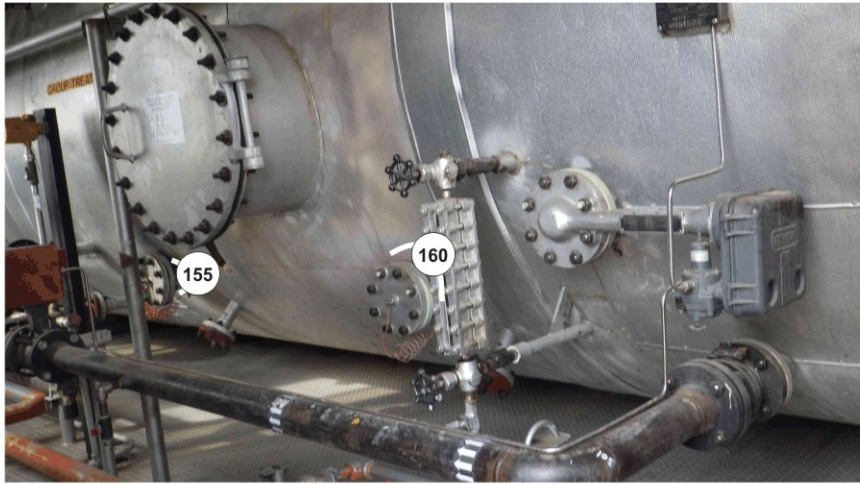
SERVICE CONDITIONS

Sweet	Sour ✓	Oil ✓	Gas ✓	Water ✓
Amine	LPG	Condensate	Air	Glycol

COMMENTS

MODIFICATIONS BY PROCESS INDUSTRIES INC AUG 1990

NO SAFE ACCESS TO P.S.V



NOTES:

A0164522



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ULTRASONIC CORROSION SURVEY REPORT

DISTRICT:	Medicine Hat	FACILITY:	Grand Forks Central	LOCATION/LSD:	07-32-012-13W4
EQUIP NAME:	GROUP TREATER	PROV REG No.:	0164522		
SERIAL No.:	80-12-44	Equip No.:	N/S	National Board No.:	N/S

SUMMARY

TYPE	LAST INSPECTIONS	INSPECTION INTERVAL (YEARS)	CORROSION RATE (IN/YR)		REMAINING LIFE (YEARS)	NEXT INSPECTION DATE
			SHORT TERM	LONG TERM		
VESSEL	Feb 20, 2019	5.0	0.0015	0.0015	198.0	Feb 20, 2024
PIPING	Apr 26, 2019	5.0	0.0077	0.0077	30.4	

VESSEL SURVEY READINGS

POINT NUMBER	TYPE	POINT DATA (INCH)			DATE	SURVEY READINGS			CALCULATIONS			Flag
		NOM.	C.A.	NOM-CA		LOW	AVG	T Req (inch)	short term corr	long term	remaining life	
005	HEAD	0.3750	0.1250	0.2500	Feb 20/19	0.684	0.693	0.205	0.0000	0.0000	198.0	
					Jun 1/16	0.684	0.695	0.205				
010	SHELL	0.3750	0.1250	0.2500	Feb 20/19	0.366	0.373	0.205	0.0000	0.0000	198.0	
					Jun 1/16	0.366	0.370	0.205				
015	SHELL	0.3750	0.1250	0.2500	Feb 20/19	0.366	0.375	0.205	0.0000	0.0000	198.0	
					Jun 1/16	0.363	0.370	0.205				
020	SHELL	0.3750	0.1250	0.2500	Feb 20/19	0.373	0.383	0.205	0.0000	0.0000	198.0	
					Jun 1/16	0.372	0.375	0.205				
025	SHELL	0.3750	0.1250	0.2500	Feb 20/19	0.381	0.395	0.205	0.0000	0.0000	198.0	
					Jun 1/16	0.381	0.390	0.205				
030	HEAD	0.3750	0.1250	0.2500	Feb 20/19	0.454	0.462	0.205	0.0000	0.0000	198.0	
					Jun 1/16	0.454	0.465	0.205				
035	HEAD	0.3750	0.1250	0.2500	Feb 20/19	0.457	0.466	0.205	0.0000	0.0000	198.0	
					Jun 1/16	0.455	0.470	0.205				
040	BOOT SHELL	0.3750	0.1250	0.2500	Feb 20/19	0.371	0.380	0.051	0.0015	0.0015	217.6	
					Jun 1/16	0.375	0.385	0.051				

PIPING SURVEY READINGS

POINT NUMBER	TYPE	POINT DATA (INCH)			DATE	SURVEY READINGS			CALCULATIONS			Flag	
		SIZE	SCH	NOM.		Mill Tol./CA	NOM-CA	LOW	AVG	T Req (inch)	short term corr		long term corr rate
045	90L 3 160	3.00	160	0.4380	0.0548	0.3833	Apr 26/19			0.007	0.0011	0.0011	384.4
							Feb 20/19	0.430	0.443	0.007			
							Jun 1/16	0.433	0.450	0.007			
050	90L 3 STD	3.00	STD	0.2160	0.0270	0.1890	Apr 26/19			0.007	0.0000	0.0000	198.0
							Feb 20/19	0.177	0.185	0.007			
							Jun 1/16	0.177	0.190	0.007			
055	90L 3 STD	3.00	STD	0.2160	0.0270	0.1890	Apr 26/19			0.007	0.0000	0.0000	198.0
							Feb 20/19	0.198	0.207	0.007			
							Jun 1/16	0.194	0.205	0.007			
060	90L 2 XS	2.00	XS	0.2180	0.0273	0.1908	Apr 26/19			0.004	0.0000	0.0000	198.0
							Feb 20/19	0.196	0.200	0.004			
							Jun 1/16	0.191	0.200	0.004			
065	90L 3 80	3.00	80	0.3000	0.0375	0.2625	Apr 26/19			0.007	0.0000	0.0000	198.0
							Feb 20/19	0.290	0.300	0.007			



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POINT NUMBER	TYPE	SIZE	SCH	POINT DATA (INCH)			SURVEY READINGS			CALCULATIONS			Flag		
				NOM.	Mill Tol./CA	NOM-CA	DATE	LOW	AVG	T Req (inch)	short term corr	long term corr rate		remaining life	
150	Strip 4	120	4.00	120	0.4380	0.0548	0.3833	Apr 26/19	0.456	0.460	0.008	0.0000	0.0000	198.0	NO COMMENTS
155	Strip 4	120	4.00	120	0.4380	0.0548	0.3833	Apr 26/19	0.436	0.440	0.008	0.0001	0.0001	6,270.9	NO COMMENTS
160	Strip 4	120	4.00	120	0.4380	0.0548	0.3833	Apr 26/19	0.423	0.430	0.008	0.0005	0.0005	810.7	NO COMMENTS
165	Strip 4	120	4.00	120	0.4380	0.0548	0.3833	Apr 26/19	0.427	0.430	0.008	0.0004	0.0004	1,116.2	NO COMMENTS

INSPECTOR-EQUIPMENT DATA

Inspected By	Signature	CGSB Level	CGSB No.	Survey Dat	UT Equipment	Due Date OF Calibration	NDE Procedure #
Lawrence Hoffort		SNT LV 2		04/26/2019	106_61457706_EPOCH 4	04/30/2019	WQS UT-001

PHOTOGRAPHS

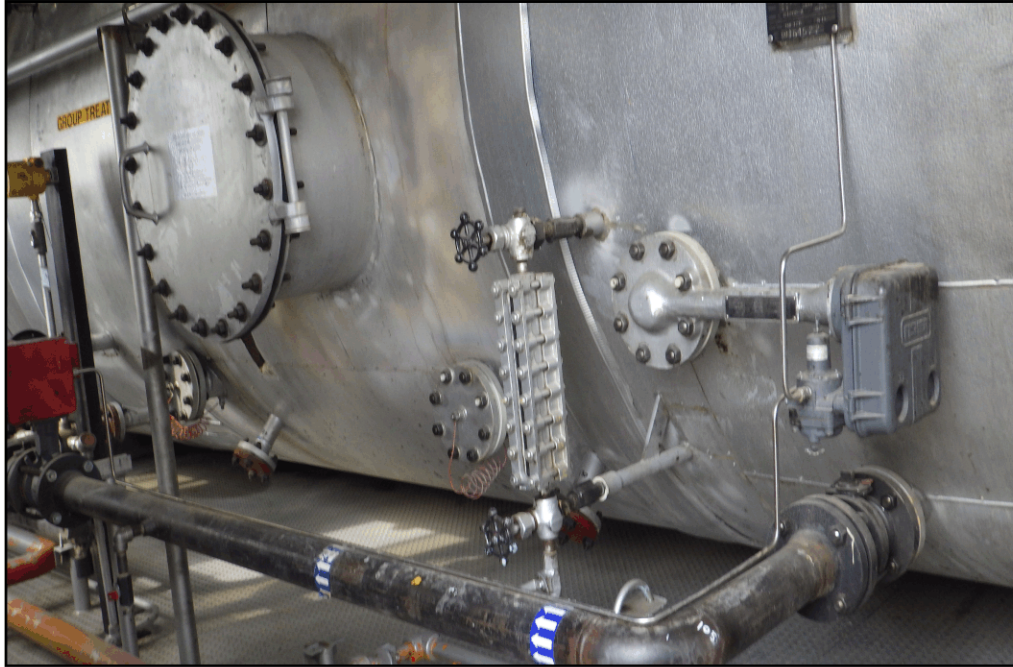


LSD



NAMEPLATE

PHOTOGRAPHS



OVERALL



OVERALL