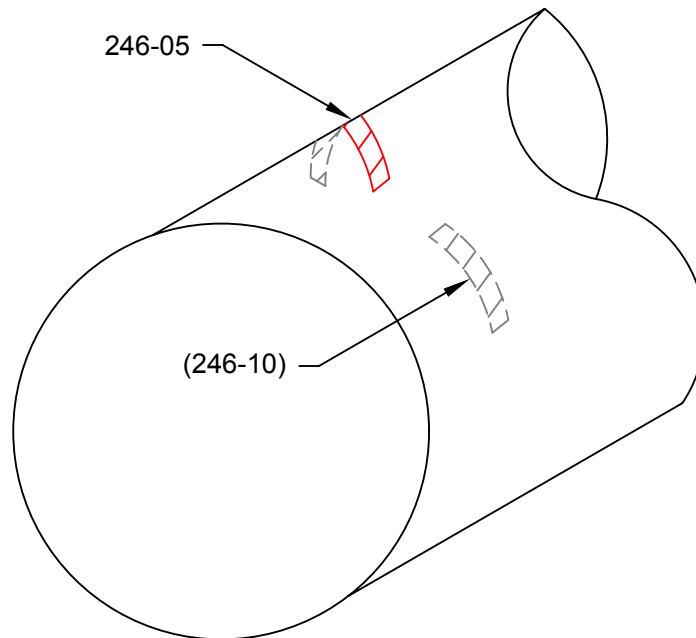


ITEM:

LINE HEATER

A0480572



STETTLER, AB (403) 742-4868
 LACOMBE, AB (403) 782-7855
 BROOKS, AB (403) 501-8029
 GRANDE PRAIRIE, AB (866) 422-9732

TECHNICIAN:

STEVE GILLINGHAM
 SNT LEVEL II
 CGSB 48.9712
 LEVEL II # 11441

DATE: **01/29/11**

DWG # **246**

CLIENT: **CNRL**

LSD: **11-15-075-11-W6M**

INSPECTOR : RAJ KHAN

LOCATION : VALHALLA

DISTRICT UNIT : WEST COUNTY

BLDG/SKID : -

PROCESS : SOUR

CODE : ASME SEC VIII DIV 1

SPECIFICATION : AS PER ASME SE 797

TECHNIQUE : UT 1-1, REV .1

METHOD : UT CONTINUOUS / A SCAN

SURFACE COND : PAINTED

SURFACE TEMP : AMBIENT

VESSEL INFORMATION

VESSEL # : **A0480572**

CRN # : L5831.28

SERIAL # : 42632-52C

MANUFACTURER : NATCO CANADA

DATE BUILT : 2001

CLIENT ID / TAG : -

M.A.W.P. : SHELL 5 PSI/COIL 1 3375 PSI/COIL 2 2025 PSI

M.A.W.T. : 200 °F

JOINT EFFICIENCY/RT : RT 1

STRESS RELIEVED : YES

INSULATED : YES

MANWAY : NO

VESSEL SPECIFICATIONS

	OD	NOMINAL	MATERIAL	CA
VESSEL HEAD	-	-	-	-
VESSEL SHELL	42"	.250"	SA-53-B	.063"
BOOT HEAD	-	-	-	-
BOOT SHELL	-	-	-	-

COMMENTS:

PROJECT:

C70099



ULTRASONIC CORROSION SURVEY

Survey Name: **CNRL**

LSD: 11-15-075-11W6	Dwg: 246	Vessel Number: A0480572	Manufacturer: NATCO CANADA LTD.	Survey Date: 1/29/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 42632-52C	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 2001	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: -		Tag Number: -	Tube MAWP PSI: 2025 MAWT F: 200	Project #: C70099
		CRN: L5831.28	Vessel CA: 0.0630	

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
246-05		Shell	Baseline	0.263	0.258	0.258	0.261	0.259	0.258	2011	0.260	0.258	0.2500	0.0630	0.0061	2012	2031
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	42		Current	0.263	0.258	0.258	0.261	0.259	0.258	2011	0.260	0.258	CALCULATED @ 5 PSI				
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 53 - B			LT Loss MPY						0.000							
246-10		Shell	Baseline	0.265	0.259	0.259	0.259	0.262	0.261	2011	0.261	0.259	0.2500	0.0630	0.0061	2012	2031
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	42		Current	0.265	0.259	0.259	0.259	0.262	0.261	2011	0.261	0.259	CALCULATED @ 5 PSI				
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 53 - B			LT Loss MPY						0.000							
246-15		Piping	Baseline	0.456	0.461	0.456	0.446	0.445	0.444	2011	0.451	0.444	0.4380	0.0548	0.2723	2012	2031
Shape	90° Elbow	Shell Side	Previous	Comments-->													
OD	3.5		Current	0.456	0.461	0.456	0.446	0.445	0.444	2011	0.451	0.444	CALCULATED @ 5 PSI				
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0.000							
246-20		Piping	Baseline	0.466	0.463	0.470	0.459	0.459	0.460	2011	0.463	0.459	0.4380	0.0548	0.2723	2012	2031
Shape	90° Elbow	Shell Side	Previous	Comments-->													
OD	3.5		Current	0.466	0.463	0.470	0.459	0.459	0.460	2011	0.463	0.459	CALCULATED @ 5 PSI				
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0.000							



ULTRASONIC CORROSION SURVEY

Survey Name: **CNRL**

LSD: 11-15-075-11W6	Dwg: 246	Vessel Number: A0480572	Manufacturer: NATCO CANADA LTD.	Survey Date: 1/29/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 42632-52C	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 2001	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: -		Tag Number: -	Tube MAWP PSI: 2025 MAWT F: 200	Project #: C70099
		CRN: L5831.28	Vessel CA: 0.0630	

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
246-25	Piping	Baseline	0.448	0.442	0.444	0.458	0.454	0.436	2011	0.447	0.436	0.4380	0.0548	0.2723	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	3.5	Current	0.448	0.442	0.444	0.458	0.454	0.436	2011	0.447	0.436						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 106 - B			LT Loss MPY						0.000							
246-30	Piping	Baseline	0.457	0.447	0.436	0.436	0.449	0.443	2011	0.445	0.436	0.4380	0.0548	0.2723	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	3.5	Current	0.457	0.447	0.436	0.436	0.449	0.443	2011	0.445	0.436						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 106 - B			LT Loss MPY						0.000							
246-35	Piping	Baseline	0.274	0.270	0.269	0.268	0.270	0.270	2011	0.270	0.268	0.3000	0.0375	0.1686	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.274	0.270	0.269	0.268	0.270	0.270	2011	0.270	0.268						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0.000							
246-40	Piping	Baseline	0.285	0.270	0.284	0.293	0.290	0.290	2011	0.285	0.270	0.3000	0.0375	0.1686	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.285	0.270	0.284	0.293	0.290	0.290	2011	0.285	0.270						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0.000							



ULTRASONIC CORROSION SURVEY

Survey Name: **CNRL**

LSD:	11-15-075-11W6	Dwg: 246	Vessel Number: A0480572	Manufacturer: NATCO CANADA LTD.	Survey Date: 1/29/11
District Unit:	WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 42632-52C	Inspector: RAJ KHAN
Location:	VALHALLA		Year Built: 2001	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid:	-		Tag Number: -	Tube MAWP PSI: 2025 MAWT F: 200	Project #: C70099
			CRN: L5831.28	Vessel CA: 0.0630	

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
246-45	Piping	Baseline	0.278	0.280	0.275	0.283	0.281	0.283	2011	0.280	0.275	0.3000	0.0375	0.1686	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5		Current	0.278	0.280	0.275	0.283	0.281	0.283	2011	0.280	0.275					
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0.000							
246-50	Piping	Baseline	0.295	0.284	0.270	0.266	0.264	0.266	2011	0.274	0.264	0.3000	0.0375	0.1686	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5		Current	0.295	0.284	0.270	0.266	0.264	0.266	2011	0.274	0.264					
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0.000							
246-55	Piping	Baseline	0.317	0.312	0.310	0.315	0.313	0.312	2011	0.313	0.310	0.3000	0.0375	0.1686	2012	2031	
Shape	Cylindrical	Tube Side	Previous	Comments-->													
OD	3.5		Current	0.317	0.312	0.310	0.315	0.313	0.312	2011	0.313	0.310					
Spec.	B31.3			ST Loss MPY						OK							
Material	A 106 - B			LT Loss MPY						0.000							
246-60	Piping	Baseline	0.318	0.328	0.323	0.318	0.317	0.314	2011	0.320	0.314	0.3000	0.0375	0.1686	2012	2031	
Shape	Cylindrical	Tube Side	Previous	Comments-->													
OD	3.5		Current	0.318	0.328	0.323	0.318	0.317	0.314	2011	0.320	0.314					
Spec.	B31.3			ST Loss MPY						OK							
Material	A 106 - B			LT Loss MPY						0.000							



ULTRASONIC CORROSION SURVEY

Survey Name: **CNRL**

LSD: 11-15-075-11W6	Dwg: 246	Vessel Number: A0480572	Manufacturer: NATCO CANADA LTD.	Survey Date: 1/29/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 42632-52C	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 2001	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: -		Tag Number: -	Tube MAWP PSI: 2025 MAWT F: 200	Project #: C70099
		CRN: L5831.28	Vessel CA: 0.0630	

Band	Description	Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date		
		1	2	3	4	5	6										
246-65	Piping	Baseline	0.275	0.268	0.265	0.269	0.267	0.275	2011	0.270	0.265	0.3000	0.0375	0.1686	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.275	0.268	0.265	0.269	0.267	0.275	2011	0.270	0.265						
Spec.	B31.3		ST Loss MPY						OK								
Material	A 234 - WPB		LT Loss MPY						0.000								