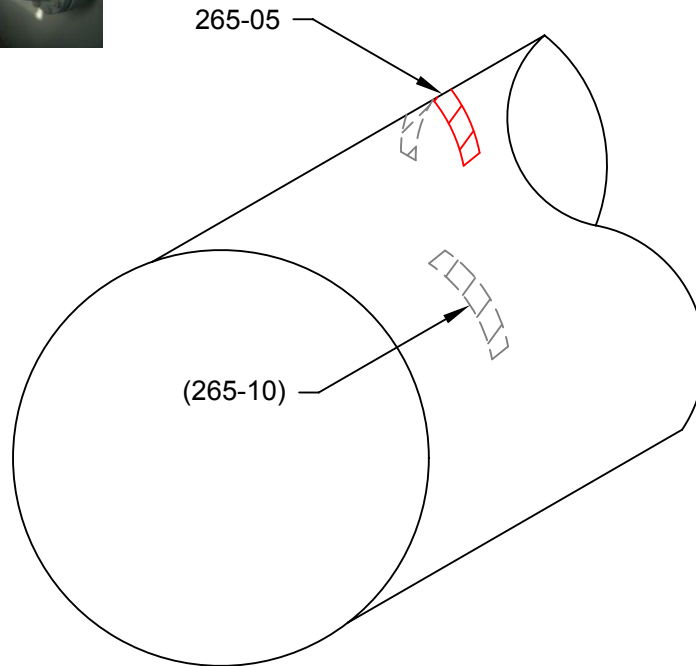


ITEM:

LINE HEATER

A0557230



COMMENTS:

PROJECT:
C70099



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: **01/31/11**

DWG # **265**

CLIENT: **CNRL**

LSD: **09-34-073-10-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 # : **A0557230**

CRN # : T1546.231

SERIAL # : 147-59-06

MANUFACTURER : MAR-QUINN IND. LTD.

DATE BUILT : 2006

CLIENT ID / TAG : -

M.A.W.P. : SHELL 5 PSI/COIL 1 3375 PSI/COIL 2 1350 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-333-6	.063"
BOOT HEAD	-	-	-	-
BOOT SHELL	-	-	-	-



ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 09-34-073-10W6	Dwg: 265	Vessel Number: A0557230	Manufacturer: MAR-QUINN INDUSTRIES	Survey Date: 1/31/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 147-59-06	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 2006	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: -		Tag Number: -	Tube MAWP PSI: 1350 MAWT F: 200	Project #: C70099
		CRN: T1546.231	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									
265-05		Shell	Baseline	0.244	0.245	0.245	0.244	0.244	0.245	2011	0.245	0.244	0.2500	0.0630	0.0061	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->														
OD	42		Current	0.244	0.245	0.245	0.244	0.244	0.245	2011	0.245	0.244	CALCULATED @ 5 PSI					
Spec.	VIII Div 1			ST Loss MPY									OK					
Material	SA 333 - 6			LT Loss MPY						0.000								
265-10		Shell	Baseline	0.257	0.253	0.253	0.252	0.254	0.257	2011	0.254	0.252	0.2500	0.0630	0.0061	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->														
OD	42		Current	0.257	0.253	0.253	0.252	0.254	0.257	2011	0.254	0.252	CALCULATED @ 5 PSI					
Spec.	VIII Div 1			ST Loss MPY									OK					
Material	SA 333 - 6			LT Loss MPY						0.000								
265-15		Piping	Baseline	0.611	0.581	0.578	0.578	0.572	0.579	2011	0.583	0.572	0.6000	0.0750	0.2723	2012	2031	
Shape	90° Elbow	Shell Side	Previous	Comments-->														
OD	3.5		Current	0.611	0.581	0.578	0.578	0.572	0.579	2011	0.583	0.572						
Spec.	B31.3			ST Loss MPY									OK					
Material	A 234 - WPB			LT Loss MPY						0.000								
265-20		Piping	Baseline	0.601	0.593	0.590	0.584	0.585	0.591	2011	0.591	0.584	0.6000	0.0750	0.2723	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->														
OD	3.5		Current	0.601	0.593	0.590	0.584	0.585	0.591	2011	0.591	0.584						
Spec.	B31.3			ST Loss MPY									OK					
Material	A 106 - B			LT Loss MPY						0.000								



ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 09-34-073-10W6	Dwg: 265	Vessel Number: A0557230	Manufacturer: MAR-QUINN INDUSTRIES	Survey Date: 1/31/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 147-59-06	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 2006	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: -		Tag Number: -	Tube MAWP PSI: 1350 MAWT F: 200	Project #: C70099
		CRN: T1546.231	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									
265-25	Piping	Baseline	0.600	0.580	0.579	0.577	0.579	0.579	2011	0.582	0.577	0.6000	0.0750	0.2723	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	3.5	Current	0.600	0.580	0.579	0.577	0.579	0.579	2011	0.582	0.577						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 106 - B			LT Loss MPY						0.000							
265-30	Piping	Baseline	0.272	0.272	0.277	0.279	0.281	0.285	2011	0.278	0.272	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.272	0.272	0.277	0.279	0.281	0.285	2011	0.278	0.272						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0.000							
265-35	Piping	Baseline	0.290	0.290	0.286	0.287	0.281	0.290	2011	0.287	0.281	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.290	0.290	0.286	0.287	0.281	0.290	2011	0.287	0.281						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0.000							
265-40	Piping	Baseline	0.305	0.295	0.283	0.288	0.283	0.285	2011	0.290	0.283	0.3000	0.0375	0.1329	2012	2031	
Shape	Cylindrical	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.305	0.295	0.283	0.288	0.283	0.285	2011	0.290	0.283						
Spec.	B31.3			ST Loss MPY						OK							
Material	SA 106 - B			LT Loss MPY						0.000							



ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 09-34-073-10W6	Dwg: 265	Vessel Number: A0557230	Manufacturer: MAR-QUINN INDUSTRIES	Survey Date: 1/31/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 147-59-06	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 2006	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: -		Tag Number: -	Tube MAWP PSI: 1350 MAWT F: 200	Project #: C70099
		CRN: T1546.231	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								
265-45	Piping	Baseline	0.294	0.296	0.281	0.282	0.284	0.281	2011	0.286	0.281	0.3000	0.0375	0.1143	2012	2031	
Shape	Cylindrical	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.294	0.296	0.281	0.282	0.284	0.281	2011	0.286	0.281						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 106 - B			LT Loss MPY						0.000							
265-50	Piping	Baseline	0.307	0.301	0.303	0.302	0.303	0.302	2011	0.303	0.301	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.307	0.301	0.303	0.302	0.303	0.302	2011	0.303	0.301						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0.000							
265-55	Piping	Baseline	0.279	0.273	0.272	0.272	0.274	0.293	2011	0.277	0.272	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.279	0.273	0.272	0.272	0.274	0.293	2011	0.277	0.272						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0.000							
265-60	Piping	Baseline	0.293	0.287	0.282	0.290	0.290	0.289	2011	0.289	0.282	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.293	0.287	0.282	0.290	0.290	0.289	2011	0.289	0.282						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0.000							