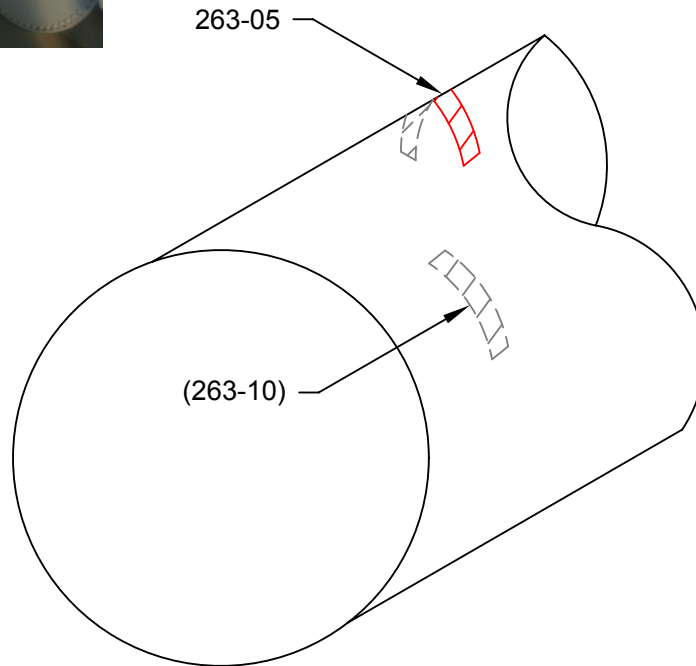


ITEM:

LINE HEATER

A0557248



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 # **263**

CLIENT: **CNRL**

LSD: **08-34-073-10-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 # : **A0557248**

CRN # : T1546.231

SERIAL # : 147-60-06

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: 08-34-073-10W6	Dwg: 263	Vessel Number: A0557248	Manufacturer: MAR-QUINN INDUSTRIES	Survey Date: 1/31/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 147-60-06	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								
263-05	Shell	Baseline	0.240	0.236	0.239	0.244	0.239	0.239	2011	0.240	0.236	0.2500	0.0630	0.0061	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	42	Current	0.240	0.236	0.239	0.244	0.239	0.239	2011	0.240	0.236	CALCULATED @ 5 PSI					
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 333 - 6			LT Loss MPY						0.000							
263-10	Shell	Baseline	0.258	0.257	0.251	0.249	0.249	0.250	2011	0.252	0.249	0.2500	0.0630	0.0061	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	42	Current	0.258	0.257	0.251	0.249	0.249	0.250	2011	0.252	0.249	CALCULATED @ 5 PSI					
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 333 - 6			LT Loss MPY						0.000							
263-15	Piping	Baseline	0.569	0.565	0.568	0.566	0.570	0.570	2011	0.568	0.565	0.6000	0.0750	0.2723	2012	2031	
Shape	90° Elbow	Shell Side	Previous	Comments-->													
OD	3.5	Current	0.569	0.565	0.568	0.566	0.570	0.570	2011	0.568	0.565	CALCULATED @ 5 PSI					
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0.000							
263-20	Piping	Baseline	0.619	0.612	0.604	0.566	0.569	0.575	2011	0.591	0.566	0.6000	0.0750	0.2723	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	3.5	Current	0.619	0.612	0.604	0.566	0.569	0.575	2011	0.591	0.566	CALCULATED @ 5 PSI					
Spec.	B31.3			ST Loss MPY									OK				
Material	A 106 - B			LT Loss MPY						0.000							



ULTRASONIC CORROSION SURVEY

Survey Name: **CNRL**

LSD: 08-34-073-10W6	Dwg: 263	Vessel Number: A0557248	Manufacturer: MAR-QUINN INDUSTRIES	Survey Date: 1/31/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 147-60-06	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								
263-25	Piping	Baseline	0.569	0.578	0.579	0.583	0.576	0.567	2011	0.575	0.567	0.6000	0.0750	0.2723	2012	2031
Shape	Cylindrical	Shell Side	Previous													
OD	3.5	Current	0.569	0.578	0.579	0.583	0.576	0.567	2011	0.575	0.567	Comments-->				
Spec.	B31.3		ST Loss MPY									OK				
Material	A 106 - B		LT Loss MPY						0.000							
263-30	Piping	Baseline	0.266	0.267	0.267	0.263	0.267	0.269	2011	0.267	0.263	0.3000	0.0375	0.1143	2012	2031
Shape	90° Elbow	Tube Side	Previous													
OD	3.5	Current	0.266	0.267	0.267	0.263	0.267	0.269	2011	0.267	0.263	Comments-->				
Spec.	B31.3		ST Loss MPY									OK				
Material	A 234 - WPB		LT Loss MPY						0.000							
263-35	Piping	Baseline	0.281	0.266	0.264	0.263	0.264	0.265	2011	0.267	0.263	0.3000	0.0375	0.1143	2012	2031
Shape	90° Elbow	Tube Side	Previous													
OD	3.5	Current	0.281	0.266	0.264	0.263	0.264	0.265	2011	0.267	0.263	Comments-->				
Spec.	B31.3		ST Loss MPY									OK				
Material	A 234 - WPB		LT Loss MPY						0.000							
263-40	Piping	Baseline	0.284	0.284	0.287	0.288	0.287	0.289	2011	0.287	0.284	0.3000	0.0375	0.1143	2012	2031
Shape	Cylindrical	Tube Side	Previous													
OD	3.5	Current	0.284	0.284	0.287	0.288	0.287	0.289	2011	0.287	0.284	Comments-->				
Spec.	B31.3		ST Loss MPY									OK				
Material	A 106 - B		LT Loss MPY						0.000							



ULTRASONIC CORROSION SURVEY

Survey Name: **CNRL**

LSD: 08-34-073-10W6	Dwg: 263	Vessel Number: A0557248	Manufacturer: MAR-QUINN INDUSTRIES	Survey Date: 1/31/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 147-60-06	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								
263-45	Piping	Baseline	0.296	0.295	0.290	0.289	0.291	0.298	2011	0.293	0.289	0.3000	0.0375	0.1143	2012	2031	
Shape	Cylindrical	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.296	0.295	0.290	0.289	0.291	0.298	2011	0.293	0.289						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 106 - B			LT Loss MPY						0.000							
263-50	Piping	Baseline	0.264	0.229	0.260	0.260	0.260	0.263	2011	0.256	0.229	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.264	0.229	0.260	0.260	0.260	0.263	2011	0.256	0.229						
Spec.	B31.3			ST Loss MPY						Caution							
Material	A 234 - WPB			LT Loss MPY						0.000							
263-55	Piping	Baseline	0.240	0.242	0.243	0.246	0.247	0.247	2011	0.244	0.240	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.240	0.242	0.243	0.246	0.247	0.247	2011	0.244	0.240						
Spec.	B31.3			ST Loss MPY						Caution							
Material	A 234 - WPB			LT Loss MPY						0.000							
263-60	Piping	Baseline	0.302	0.291	0.285	0.287	0.283	0.280	2011	0.288	0.280	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.302	0.291	0.285	0.287	0.283	0.280	2011	0.288	0.280						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0.000							