



ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 14-18-075-10W6	Dwg: 116	Vessel Number: A0459821	Manufacturer: PETRO FIELD IND. INC.	Survey Date: 1/31/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER - PIPING	Serial Number: 01016	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 2001	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: SKD0228		Tag Number: -	Tube MAWP PSI: 2025 MAWT F: 200	Project #: C70099
		CRN: P3390.2/L9080.2	Vessel CA: 0.1250	

Band	Description		Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
			1	2	3	4	5	6								
116-05	Piping	Baseline	0.422	0.421	0.422	0.422	0.420	0.427	2006	0.422	0.420	0.4360	0.0545	0.1848	2012	2031
Shape	45° Elbow	Shell Side	Previous	0.422	0.421	0.422	0.422	0.420	0.427	2006	0.422	0.420	Comments-->			
OD	2.375		Current	0.422	0.421	0.422	0.422	0.420	0.427	2011	0.422	0.420				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
116-10	Piping	Baseline	0.422	0.422	0.426	0.432	0.433	0.440	2006	0.429	0.422	0.4360	0.0545	0.1848	2012	2031
Shape	45° Elbow	Shell Side	Previous	0.422	0.422	0.426	0.432	0.433	0.440	2006	0.429	0.422	Comments-->			
OD	2.375		Current	0.422	0.422	0.426	0.432	0.433	0.440	2011	0.429	0.422				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
116-15	Piping	Baseline	0.567	0.568	0.569	0.568	0.572	0.575	2006	0.570	0.567	0.6000	0.0750	0.2723	2012	2031
Shape	Cylindrical	Shell Side	Previous	0.567	0.568	0.569	0.568	0.572	0.575	2006	0.570	0.567	Comments-->			
OD	3.5		Current	0.567	0.568	0.569	0.568	0.572	0.575	2011	0.570	0.567				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 106 - B			LT Loss MPY						0.000						
116-20	Piping	Baseline	0.560	0.557	0.559	0.558	0.562	0.559	2006	0.559	0.557	0.6000	0.0750	0.2723	2012	2031
Shape	Cylindrical	Shell Side	Previous	0.560	0.557	0.559	0.558	0.562	0.559	2006	0.559	0.557	Comments-->			
OD	3.5		Current	0.560	0.557	0.559	0.558	0.562	0.559	2011	0.559	0.557				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 106 - B			LT Loss MPY						0.000						



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Band	Description		Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
			1	2	3	4	5	6								
116-25	Piping	Baseline	0.286	0.285	0.284	0.287	0.288	0.291	2006	0.287	0.284	0.3000	0.0375	0.1686	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.286	0.285	0.284	0.287	0.288	2006	0.287	0.284	Comments-->				
OD	3.5		Current	0.286	0.284	0.284	0.287	0.285	2011	0.285	0.284					
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
116-30	Piping	Baseline	0.290	0.283	0.284	0.283	0.285	0.286	2006	0.285	0.283	0.3000	0.0375	0.1686	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.290	0.283	0.284	0.283	0.285	2006	0.285	0.283	Comments-->				
OD	3.5		Current	0.285	0.283	0.281	0.283	0.282	2011	0.282	0.280					
Spec.	B31.3			ST Loss MPY						0.001	OK					
Material	A 234 - WPB			LT Loss MPY						0.001						
116-35	Piping	Baseline	0.294	0.286	0.280	0.277	0.274	0.276	2006	0.281	0.274	0.3000	0.0375	0.1686	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.294	0.286	0.280	0.277	0.274	2006	0.281	0.274	Comments-->				
OD	3.5		Current	0.290	0.283	0.280	0.277	0.274	2011	0.280	0.274					
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
116-40	Piping	Baseline	0.252	0.254	0.259	0.264	0.265	0.270	2006	0.261	0.252	0.3000	0.0375	0.1686	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.252	0.254	0.259	0.264	0.265	2006	0.261	0.252	Comments-->				
OD	3.5		Current	0.252	0.254	0.259	0.262	0.262	2011	0.258	0.252					
Spec.	B31.3			ST Loss MPY						0.000	Caution					
Material	A 234 - WPB			LT Loss MPY						0.000						



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			1	2	3	4	5	6								
116-45	Piping	Baseline	0.286	0.277	0.277	0.276	0.276	0.277	2006	0.278	0.276	0.3000	0.0375	0.1686	2012	2031
Shape	Cylindrical	Tube Side	Previous	0.286	0.277	0.277	0.276	0.276	0.277	2006	0.278	0.276	Comments-->			
OD	3.5		Current	0.286	0.277	0.277	0.276	0.276	0.277	2011	0.278	0.276				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 106 - B			LT Loss MPY						0.000						
116-50	Piping	Baseline	0.294	0.294	0.291	0.288	0.291	0.297	2006	0.293	0.288	0.3000	0.0375	0.1686	2012	2031
Shape	Cylindrical	Tube Side	Previous	0.294	0.294	0.291	0.288	0.291	0.297	2006	0.293	0.288	Comments-->			
OD	3.5		Current	0.294	0.292	0.290	0.288	0.291	0.297	2011	0.292	0.288				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 106 - B			LT Loss MPY						0.000						
116-55	Piping	Baseline	0.286	0.285	0.283	0.284	0.288	0.296	2006	0.287	0.283	0.3000	0.0375	0.1686	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.286	0.285	0.283	0.284	0.288	0.296	2006	0.287	0.283	Comments-->			
OD	3.5		Current	0.286	0.285	0.283	0.284	0.288	0.290	2011	0.286	0.283				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
116-60	Piping	Baseline	0.296	0.306	0.293	0.291	0.293	0.296	2006	0.296	0.291	0.3000	0.0375	0.1686	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.296	0.306	0.293	0.291	0.293	0.296	2006	0.296	0.291	Comments-->			
OD	3.5		Current	0.296	0.300	0.293	0.291	0.293	0.296	2011	0.295	0.291				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						