



ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 14-21-074-11W6	Dwg: 148	Vessel Number: A0426279	Manufacturer: OPSCO	Survey Date: 2/01/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER - PIPING	Serial Number: HC.42.2000.2555.A.B	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 1996	Shell MAWP PSI: 3130 MAWT F: 250	Process: SOUR
Skid: SKD0239		Tag Number: -	Tube MAWP PSI: 1480 MAWT F: 250	Project #: C70099
		CRN: N0291.2/N0292.2	Vessel CA: 0.0000	

Band	Description		Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
			1	2	3	4	5	6								
148-05	Piping	Baseline	0.528	0.504	0.489	0.490	0.495	0.499	2006	0.501	0.489	0.4380	0.0548	0.2540	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.528	0.504	0.489	0.490	0.495	0.499	2006	0.501	0.489	Comments-->			
OD	3.5		Current	0.521	0.498	0.489	0.487	0.493	0.499	2011	0.498	0.487				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
148-10	Piping	Baseline	0.405	0.404	0.390	0.383	0.384	0.393	2006	0.393	0.383	0.4380	0.0548	0.2540	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.405	0.404	0.390	0.383	0.384	0.393	2006	0.393	0.383	Comments-->			
OD	3.5		Current	0.405	0.399	0.390	0.383	0.384	0.393	2011	0.392	0.383				
Spec.	B31.3			ST Loss MPY						0.000	Caution					
Material	A 234 - WPB			LT Loss MPY						0.000						
148-15	Piping	Baseline	0.413	0.402	0.394	0.386	0.397	0.395	2006	0.398	0.386	0.4380	0.0548	0.2540	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.413	0.402	0.394	0.386	0.397	0.395	2006	0.398	0.386	Comments-->			
OD	3.5		Current	0.403	0.394	0.394	0.386	0.397	0.395	2011	0.395	0.386				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
148-20	Piping	Baseline	0.434	0.429	0.431	0.437	0.432	0.432	2006	0.433	0.429	0.4380	0.0548	0.2540	2012	2031
Shape	Cylindrical	Shell Side	Previous	0.434	0.429	0.431	0.437	0.432	0.432	2006	0.433	0.429	Comments-->			
OD	3.5		Current	0.434	0.429	0.431	0.437	0.432	0.432	2011	0.433	0.429				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 106 - B			LT Loss MPY						0.000						



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				1	2	3	4	5	6								
148-25	Piping	Baseline	0.307	0.282	0.264	0.261	0.261	0.267	2006	0.274	0.261	0.2180	0.0272	0.0847	2012	2031	
Shape	90° Elbow	Tube Side	Previous	0.307	0.282	0.264	0.261	0.261	2006	0.274	0.261	Comments-->					
OD	2.375		Current	0.287	0.278	0.264	0.261	0.261	2011	0.269	0.261						
Spec.	B31.3			ST Loss MPY						0.000	OK						
Material	A 234 - WPB			LT Loss MPY						0.000							
148-30	Piping	Baseline	0.293	0.277	0.267	0.280	0.282	0.282	2006	0.280	0.267	0.3000	0.0375	0.1249	2012	2031	
Shape	90° Elbow	Tube Side	Previous	0.293	0.277	0.267	0.280	0.282	2006	0.280	0.267	Comments-->					
OD	3.5		Current	0.289	0.277	0.267	0.280	0.282	2011	0.280	0.267						
Spec.	B31.3			ST Loss MPY						0.000	OK						
Material	A 234 - WPB			LT Loss MPY						0.000							
148-35	Piping	Baseline	0.290	0.292	0.293	0.296	0.296	0.296	2006	0.294	0.290	0.3000	0.0375	0.1249	2012	2031	
Shape	90° Elbow	Tube Side	Previous	0.290	0.292	0.293	0.296	0.296	2006	0.294	0.290	Comments-->					
OD	3.5		Current	0.290	0.292	0.293	0.293	0.283	2011	0.289	0.282						
Spec.	B31.3			ST Loss MPY						0.002	OK						
Material	A 234 - WPB			LT Loss MPY						0.002							
148-40	Piping	Baseline	0.290	0.290	0.290	0.288	0.289	0.290	2006	0.290	0.288	0.3000	0.0375	0.1249	2012	2031	
Shape	Cylindrical	Tube Side	Previous	0.290	0.290	0.290	0.288	0.289	2006	0.290	0.288	Comments-->					
OD	3.5		Current	0.290	0.290	0.290	0.288	0.289	2011	0.290	0.288						
Spec.	B31.3			ST Loss MPY						0.000	OK						
Material	A 106 - B			LT Loss MPY						0.000							



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			1	2	3	4	5	6								
148-45	Piping	Baseline	0.292	0.278	0.278	0.267	0.266	0.272	2006	0.276	0.266	0.3000	0.0375	0.1249	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.292	0.278	0.278	0.267	0.266	0.272	2006	0.276	0.266	Comments-->			
OD	3.5		Current	0.270	0.274	0.270	0.267	0.266	0.272	2011	0.270	0.266				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
148-50	Piping	Baseline	0.299	0.291	0.295	0.301	0.305	0.300	2006	0.299	0.291	0.3000	0.0375	0.1249	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.299	0.291	0.295	0.301	0.305	0.300	2006	0.299	0.291	Comments-->			
OD	3.5		Current	0.299	0.291	0.295	0.301	0.295	0.298	2011	0.297	0.291				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						