



ULTRASONIC CORROSION SURVEY

Survey Name: **CNRL**

LSD: 08-13-075-11W6	Dwg: 130	Vessel Number: A0489589	Manufacturer: RJV	Survey Date: 2/01/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER - PIPING	Serial Number: CO-100	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 2003	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: SKD0234		Tag Number: -	Tube MAWP PSI: 1600 MAWT F: 200	Project #: C70099
		CRN: R0573.2/R0564.2	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								
130-05	Piping	Baseline	0.589	0.576	0.581	0.579	0.577	0.589	2006	0.582	0.576	0.6000	0.0750	0.2723	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.589	0.576	0.581	0.579	0.577	0.589	2006	0.582	0.576	Comments-->			
OD	3.5		Current	0.589	0.576	0.576	0.579	0.577	0.589	2011	0.581	0.576				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
130-10	Piping	Baseline	0.617	0.598	0.596	0.597	0.601	0.613	2006	0.604	0.596	0.6000	0.0750	0.2723	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.617	0.598	0.596	0.597	0.601	0.613	2006	0.604	0.596	Comments-->			
OD	3.5		Current	0.597	0.598	0.596	0.597	0.601	0.607	2011	0.599	0.596				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
130-15	Piping	Baseline	0.615	0.612	0.593	0.595	0.607	0.626	2006	0.608	0.593	0.6000	0.0750	0.2723	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.615	0.612	0.593	0.595	0.607	0.626	2006	0.608	0.593	Comments-->			
OD	3.5		Current	0.606	0.603	0.582	0.585	0.583	0.579	2011	0.590	0.579				
Spec.	B31.3			ST Loss MPY						0.003	OK					
Material	A 234 - WPB			LT Loss MPY						0.003						
130-20	Piping	Baseline	0.573	0.576	0.582	0.578	0.572	0.577	2006	0.576	0.572	0.6000	0.0750	0.2723	2012	2031
Shape	Cylindrical	Shell Side	Previous	0.573	0.576	0.582	0.578	0.572	0.577	2006	0.576	0.572	Comments-->			
OD	3.5		Current	0.573	0.576	0.582	0.578	0.572	0.577	2011	0.576	0.572				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 106 - B			LT Loss MPY						0.000						



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Location: VALHALLA		Year Built: 2003	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: SKD0234		Tag Number: -	Tube MAWP PSI: 1600 MAWT F: 200	Project #: C70099
		CRN: R0573.2/R0564.2	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								
130-25	Piping	Baseline	0.266	0.259	0.254	0.256	0.256	0.260	2006	0.259	0.254	0.3000	0.0375	0.1346	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.266	0.259	0.254	0.256	0.256	2006	0.259	0.254	Comments-->				
OD	3.5		Current	0.266	0.259	0.254	0.256	0.256	2011	0.259	0.254					
Spec.	B31.3			ST Loss MPY						0.000	Caution					
Material	A 234 - WPB			LT Loss MPY						0.000						
130-30	Piping	Baseline	0.274	0.274	0.270	0.271	0.269	0.274	2006	0.272	0.269	0.3000	0.0375	0.1346	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.274	0.274	0.270	0.271	0.269	2006	0.272	0.269	Comments-->				
OD	3.5		Current	0.274	0.274	0.270	0.271	0.269	2011	0.272	0.269					
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						
130-35	Piping	Baseline	0.283	0.279	0.281	0.285	0.285	0.287	2006	0.283	0.279	0.3000	0.0375	0.1346	2012	2031
Shape	Cylindrical	Tube Side	Previous	0.283	0.279	0.281	0.285	0.285	2006	0.283	0.279	Comments-->				
OD	3.5		Current	0.283	0.279	0.281	0.285	0.285	2011	0.283	0.279					
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 106 - B			LT Loss MPY						0.000						
130-40	Piping	Baseline	0.277	0.280	0.280	0.287	0.273	0.276	2006	0.279	0.273	0.3000	0.0375	0.1346	2012	2031
Shape	Cylindrical	Tube Side	Previous	0.277	0.280	0.280	0.287	0.273	2006	0.279	0.273	Comments-->				
OD	3.5		Current	0.277	0.280	0.280	0.287	0.273	2011	0.279	0.273					
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 106 - B			LT Loss MPY						0.000						



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Skid: SKD0234		Tag Number: -	Tube MAWP PSI: 1600 MAWT F: 200	Project #: C70099
		CRN: R0573.2/R0564.2	Vessel CA: 0.0000	

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			1	2	3	4	5	6								
130-45	Piping	Baseline	0.274	0.271	0.269	0.268	0.267	0.268	2006	0.270	0.267	0.3000	0.0375	0.1346	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.274	0.271	0.269	0.268	0.267	0.268	2006	0.270	0.267	Comments-->			
OD	3.5		Current	0.274	0.271	0.269	0.268	0.267	0.268	2011	0.270	0.267				
Spec.	B31.3									ST Loss MPY	0.000	OK				
Material	A 234 - WPB									LT Loss MPY	0.000					
130-50	Piping	Baseline	0.280	0.273	0.268	0.269	0.270	0.269	2006	0.272	0.268	0.3000	0.0375	0.1346	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.280	0.273	0.268	0.269	0.270	0.269	2006	0.272	0.268	Comments-->			
OD	3.5		Current	0.280	0.273	0.268	0.269	0.270	0.269	2011	0.272	0.268				
Spec.	B31.3									ST Loss MPY	0.000	OK				
Material	A 234 - WPB									LT Loss MPY	0.000					
130-55	Piping	Baseline	0.269	0.271	0.271	0.271	0.273	0.278	2006	0.272	0.269	0.3000	0.0375	0.1346	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.269	0.271	0.271	0.271	0.273	0.278	2006	0.272	0.269	Comments-->			
OD	3.5		Current	0.269	0.271	0.271	0.271	0.273	0.278	2011	0.272	0.269				
Spec.	B31.3									ST Loss MPY	0.000	OK				
Material	A 234 - WPB									LT Loss MPY	0.000					
130-60	Piping	Baseline	0.271	0.265	0.268	0.270	0.273	0.271	2006	0.270	0.265	0.3000	0.0375	0.1346	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.271	0.265	0.268	0.270	0.273	0.271	2006	0.270	0.265	Comments-->			
OD	3.5		Current	0.271	0.265	0.268	0.270	0.273	0.271	2011	0.270	0.265				
Spec.	B31.3									ST Loss MPY	0.000	OK				
Material	A 234 - WPB									LT Loss MPY	0.000					



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		1	2	3	4	5	6									
130-65	Piping	Baseline	0.290	0.276	0.276	0.277	0.274	0.283	2006	0.279	0.274	0.3000	0.0375	0.1346	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.290	0.276	0.276	0.277	0.274	0.283	2006	0.279	0.274	Comments-->			
OD	3.5	Current	0.290	0.276	0.276	0.277	0.274	0.283	2011	0.279	0.274					
Spec.	B31.3							ST Loss MPY	0.000		OK					
Material	A 234 - WPB							LT Loss MPY	0.000							