





# ULTRASONIC CORROSION SURVEY

Survey Name: **CNRL**

LSD: 06-25-074-11W6	Dwg: 132	Vessel Number: A0432702	Manufacturer: RUSHTON	Survey Date: 2/01/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER - PIPING	Serial Number: C550A.CB	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 1997	Shell MAWP PSI: 3134 MAWT F: 200	Process: SOUR
Skid: SKD0235		Tag Number: -	Tube MAWP PSI: 1350 MAWT F: 200	Project #: <b>C70099</b>
		CRN: N5217.2	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								
<b>132-05</b>	Piping	<b>Baseline</b>	0.201	0.199	0.199	0.197	0.197	0.204	2006	0.200	0.197	0.2180	0.0272	0.1726	2012	2031
Shape	90° Elbow	Shell Side	<b>Previous</b>	0.201	0.199	0.199	0.197	0.197	0.204	2006	0.200	0.197	Comments-->			
OD	2.375		<b>Current</b>	0.201	0.199	0.199	0.197	0.197	0.204	2011	0.200	0.197				
Spec.	B31.3			<b>ST Loss MPY</b>						0.000	OK					
Material	A 234 - WPB			<b>LT Loss MPY</b>						0.000						
<b>132-10</b>	Piping	<b>Baseline</b>	0.211	0.201	0.203	0.206	0.205	0.211	2006	0.206	0.201	0.2180	0.0272	0.1726	2012	2031
Shape	90° Elbow	Shell Side	<b>Previous</b>	0.211	0.201	0.203	0.206	0.205	0.211	2006	0.206	0.201	Comments-->			
OD	2.375		<b>Current</b>	0.211	0.201	0.203	0.206	0.205	0.206	2011	0.205	0.201				
Spec.	B31.3			<b>ST Loss MPY</b>						0.000	OK					
Material	A 234 - WPB			<b>LT Loss MPY</b>						0.000						
<b>132-15</b>	Piping	<b>Baseline</b>	0.223	0.223	0.223	0.222	0.224	0.222	2006	0.223	0.222	0.2180	0.0272	0.1726	2012	2031
Shape	90° Elbow	Shell Side	<b>Previous</b>	0.223	0.223	0.223	0.222	0.224	0.222	2006	0.223	0.222	Comments-->			
OD	2.375		<b>Current</b>	0.223	0.220	0.221	0.222	0.224	0.222	2011	0.222	0.220				
Spec.	B31.3			<b>ST Loss MPY</b>						0.000	OK					
Material	A 234 - WPB			<b>LT Loss MPY</b>						0.000						
<b>132-20</b>	Piping	<b>Baseline</b>	0.327	0.334	0.321	0.331	0.331	0.335	2006	0.330	0.321	0.3430	0.0429	0.1726	2012	2031
Shape	Cylindrical	Shell Side	<b>Previous</b>	0.327	0.334	0.321	0.331	0.331	0.335	2006	0.330	0.321	Comments-->			
OD	2.375		<b>Current</b>	0.327	0.334	0.321	0.331	0.331	0.335	2011	0.330	0.321				
Spec.	B31.3			<b>ST Loss MPY</b>						0.000	OK					
Material	A 106 - B			<b>LT Loss MPY</b>						0.000						



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Location: VALHALLA		Year Built: 1997	Shell MAWP PSI: 3134 MAWT F: 200	Process: SOUR
Skid: SKD0235		Tag Number: -	Tube MAWP PSI: 1350 MAWT F: 200	Project #: C70099
		CRN: N5217.2	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								
132-25	Piping	Baseline	0.200	0.201	0.199	0.199	0.203	0.200	2006	0.200	0.199	0.2180	0.0272	0.0775	2012	2031	
Shape	90° Elbow	Tube Side	Previous	0.200	0.201	0.199	0.199	0.203	2006	0.200	0.199	Comments-->					
OD	2.375		Current	0.200	0.201	0.199	0.199	0.201	2011	0.200	0.199						
Spec.	B31.3			ST Loss MPY						0.000	OK						
Material	A 234 - WPB			LT Loss MPY						0.000							
132-30	Piping	Baseline	0.187	0.175	0.174	0.177	0.177	0.180	2006	0.178	0.174	0.2180	0.0272	0.0775	2012	2031	
Shape	90° Elbow	Tube Side	Previous	0.187	0.175	0.174	0.177	0.177	2006	0.178	0.174	Comments-->					
OD	2.375		Current	0.184	0.175	0.174	0.177	0.177	2011	0.178	0.174						
Spec.	B31.3			ST Loss MPY						0.000	Caution						
Material	A 234 - WPB			LT Loss MPY						0.000							
132-35	Piping	Baseline	0.191	0.193	0.198	0.199	0.197	0.190	2006	0.195	0.190	0.2180	0.0272	0.0775	2012	2031	
Shape	90° Elbow	Tube Side	Previous	0.191	0.193	0.198	0.199	0.197	2006	0.195	0.190	Comments-->					
OD	2.375		Current	0.191	0.193	0.198	0.197	0.194	2011	0.194	0.190						
Spec.	B31.3			ST Loss MPY						0.000	Caution						
Material	A 234 - WPB			LT Loss MPY						0.000							
132-40	Piping	Baseline	0.218	0.215	0.217	0.217	0.215	0.218	2006	0.217	0.215	0.2180	0.0272	0.0775	2012	2031	
Shape	Cylindrical	Tube Side	Previous	0.218	0.215	0.217	0.217	0.215	2006	0.217	0.215	Comments-->					
OD	2.375		Current	0.218	0.215	0.217	0.217	0.215	2011	0.217	0.215						
Spec.	B31.3			ST Loss MPY						0.000	OK						
Material	A 106 - B			LT Loss MPY						0.000							



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Skid: SKD0235		Tag Number: -	Tube MAWP PSI: 1350 MAWT F: 200	Project #: C70099
		CRN: N5217.2	Vessel CA: 0.0000	

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			1	2	3	4	5	6								
132-45	Piping	Baseline	0.320	0.314	0.310	0.314	0.328	0.329	2006	0.319	0.310	0.3430	0.0429	0.0775	2012	2031
Shape	Cylindrical	Tube Side	Previous	0.320	0.314	0.310	0.314	0.328	0.329	2006	0.319	0.310	Comments-->			
OD	2.375		Current	0.320	0.314	0.310	0.314	0.328	0.329	2011	0.319	0.310				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 106 - B			LT Loss MPY						0.000						
132-50	Piping	Baseline	0.306	0.306	0.307	0.304	0.305	0.310	2006	0.306	0.304	0.3430	0.0429	0.0775	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.306	0.306	0.307	0.304	0.305	0.310	2006	0.306	0.304	Comments-->			
OD	2.375		Current	0.306	0.304	0.304	0.303	0.305	0.308	2011	0.305	0.303				
Spec.	B31.3			ST Loss MPY						0.000	OK					
Material	A 234 - WPB			LT Loss MPY						0.000						