





# ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 08-27-074-11W6	Dwg: 242	Vessel Number: A0561697	Manufacturer: MOSS FABRICATION	Survey Date: 1/28/11
District Unit: WEST COUNTY		Vessel Name: LINE HEATER	Serial Number: 3876-C1B	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 2007	Shell MAWP PSI: 3375 MAWT F: 200	Process: SOUR
Skid: SKD0854		Tag Number: -	Tube MAWP PSI: 1350 MAWT F: 200	Project #: C70099
		CRN: L9111.21	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								
242-05	Piping	Baseline	0.525	0.517	0.499	0.504	0.501	0.494	2011	0.507	0.494	0.5310	0.0664	0.0004	2012	2031	
Shape	90° Elbow	Shell Side	Previous	Comments-->													
OD	3.5	Current	0.525	0.517	0.499	0.504	0.501	0.494	2011	0.507	0.494						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0.000							
242-10	Piping	Baseline	0.585	0.577	0.578	0.587	0.587	0.590	2011	0.584	0.577	0.5310	0.0664	0.0004	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	3.5	Current	0.585	0.577	0.578	0.587	0.587	0.590	2011	0.584	0.577						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0.000							
242-15	Piping	Baseline	0.607	0.604	0.587	0.579	0.575	0.588	2011	0.590	0.575	0.5310	0.0664	0.0004	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->													
OD	3.5	Current	0.607	0.604	0.587	0.579	0.575	0.588	2011	0.590	0.575						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0.000							
242-20	Piping	Baseline	0.555	0.567	0.563	0.574	0.569	0.565	2011	0.566	0.555	0.5310	0.0664	0.0004	2012	2031	
Shape	90° Elbow	Shell Side	Previous	Comments-->													
OD	3.5	Current	0.555	0.567	0.563	0.574	0.569	0.565	2011	0.566	0.555						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0.000							



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Skid: SKD0854		Tag Number: -	Tube MAWP PSI: 1350 MAWT F: 200	Project #: C70099
		CRN: L9111.21	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								
242-25	Piping	Baseline	0.263	0.263	0.263	0.264	0.263	0.264	2011	0.263	0.263	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.263	0.263	0.263	0.264	0.263	0.264	2011	0.263	0.263						
Spec.	B31.3			ST Loss MPY								OK					
Material	A 234 - WPB			LT Loss MPY						0.000							
242-30	Piping	Baseline	0.263	0.263	0.265	0.272	0.267	0.268	2011	0.266	0.263	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.263	0.263	0.265	0.272	0.267	0.268	2011	0.266	0.263						
Spec.	B31.3			ST Loss MPY								OK					
Material	A 234 - WPB			LT Loss MPY						0.000							
242-35	Piping	Baseline	0.257	0.262	0.270	0.263	0.263	0.264	2011	0.263	0.257	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.257	0.262	0.270	0.263	0.263	0.264	2011	0.263	0.257						
Spec.	B31.3			ST Loss MPY								Caution					
Material	A 234 - WPB			LT Loss MPY						0.000							
242-40	Piping	Baseline	0.297	0.291	0.303	0.296	0.294	0.299	2011	0.297	0.291	0.3000	0.0375	0.1143	2012	2031	
Shape	Cylindrical	Tube Side	Previous	Comments-->													
OD	3.5	Current	0.297	0.291	0.303	0.296	0.294	0.299	2011	0.297	0.291						
Spec.	B31.3			ST Loss MPY								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									
242-45	Piping	Baseline		0.295	0.296	0.299	0.290	0.292	0.299	2011	0.295	0.290	0.3000	0.0375	0.1143	2012	2031	
Shape	Cylindrical	Tube Side	Previous	Comments-->														
OD	3.5		Current	0.295	0.296	0.299	0.290	0.292	0.299	2011	0.295	0.290						
Spec.	B31.3			ST Loss MPY						OK								
Material	A 106 - B			LT Loss MPY						0.000								
242-50	Piping	Baseline		0.305	0.305	0.306	0.300	0.257	0.299	2011	0.295	0.257	0.3000	0.0375	0.1143	2012	2031	
Shape	90° Elbow	Tube Side	Previous	Comments-->														
OD	3.5		Current	0.305	0.305	0.306	0.300	0.257	0.299	2011	0.295	0.257						
Spec.	B31.3			ST Loss MPY						Caution								
Material	A 234 - WPB			LT Loss MPY						0.000								
242-55	Shell	Baseline		0.483	0.483	0.482	0.485	0.485	0.483	2011	0.484	0.482	0.5000	0.0630	0.0060	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->														
OD	42		Current	0.483	0.483	0.482	0.485	0.485	0.483	2011	0.484	0.482	C.A. ASSUMED CALCULATED @ 5 PSI					
Spec.	VIII Div 1			ST Loss MPY						OK								
Material	SA 53 - B			LT Loss MPY						0.000								
242-60	Shell	Baseline		0.485	0.485	0.485	0.486	0.483	0.484	2011	0.485	0.483	0.5000	0.0630	0.0060	2012	2031	
Shape	Cylindrical	Shell Side	Previous	Comments-->														
OD	42		Current	0.485	0.485	0.485	0.486	0.483	0.484	2011	0.485	0.483	C.A. ASSUMED CALCULATED @ 5 PSI					
Spec.	VIII Div 1			ST Loss MPY						OK								
Material	SA 53 - B			LT Loss MPY						0.000								