



## ULTRASONIC CORROSION SURVEY

Survey Name: HARVEST ENERGY

Report Number: 978

Survey Date: 14/07/2011

LSD: 12-15-040-08W4 Dwg: 19 Vessel Number: 3055474 Manufacturer: PROCESS IND Inspector: G. MERCER  
District Unit: AMISK Vessel Name: FREE WATER KNOCKOUT Serial Number: 94-C2883-300 Process:  
Location: PLANT Year Built: 1994 Shell MAWP PSI: 100 MAWT F: 140  
Skid: Tag Number: V-130 Tube MAWP PSI: 0 MAWT F: 0  
CRN: M 6442.2 Vessel CA: 0.0000

Band	Description		Baseline	Previous	Current	Next Inspection Material	Nominal CA	TMIN	ST Loss MPY	LT Loss MPY	Recommended Retirement Date
00	- Piping	Ref	2011	0.1920	2011	0.1920	0.2160	0.0100			
Shape	90° Elbow	Min		0.1850		0.1850	A 234 - WPB	0.0270			
OD	3.5	Avg		0.2110		0.2110		Caution			
Spec.	B31.3						Comments:				
05	- Piping	Ref	2011	0.1990	2011	0.1990	0.2160	0.0100			
Shape	90° Elbow	Min		0.1850		0.1850	A 234 - WPB	0.0270			
OD	3.5	Avg		0.2070		0.2070		Caution			
Spec.	B31.3						Comments:				
10	- Piping	Ref	2011	0.1350	2011	0.1350	0.1540	0.0068			
Shape	90° Elbow	Min		0.1350		0.1350	A 234 - WPB	0.0192			
OD	2.375	Avg		0.1430		0.1430					
Spec.	B31.3						Comments:				
15	- Piping	Ref	2011	0.1530	2011	0.1530	0.1540	0.0068			
Shape	90° Elbow	Min		0.1320		0.1320	A 234 - WPB	0.0192			
OD	2.375	Avg		0.1450		0.1450		Caution			
Spec.	B31.3						Comments:				



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Skid: Tag Number: V-130 Tube MAWP PSI: 0 MAWT F: 0  
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Band	Description		Baseline	Previous	Current	Next Inspection Material	Nominal CA	TMIN	ST Loss MPY	LT Loss MPY	Recommended Retirement Date
20	- Piping	Ref	2011	0.3460	2011	0.3460	0.3370	0.0128			
Shape	90° Elbow	Min		0.3070		0.3070	A 234 - WPB	0.0421			
OD	4.5	Avg		0.3340		0.3340					
Spec.	B31.3						Comments:				
25	- Piping	Ref	2011	0.3370	2011	0.3370	0.3370	0.0128			
Shape	90° Elbow	Min		0.2990		0.2990	A 234 - WPB	0.0421			
OD	4.5	Avg		0.3240		0.3240					
Spec.	B31.3						Comments:				
30	- Piping	Ref	2011	0.2270	2011	0.2270	0.2370	0.0128			
Shape	90° Elbow	Min		0.2190		0.2190	A 234 - WPB	0.0296			
OD	4.5	Avg		0.2290		0.2290					
Spec.	B31.3						Comments:				
35	- Piping	Ref	2011	0.4100	2011	0.4100	0.3650	0.0306			
Shape	90° Elbow	Min		0.3660		0.3660	A 234 - WPB	0.0456			
OD	10.75	Avg		0.3930		0.3930					
Spec.	B31.3						Comments:				



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Band	Description		Baseline	Previous	Current	Next Inspection Material	Nominal CA	TMIN	ST Loss MPY	LT Loss MPY	Recommended Retirement Date
40	- Piping	Ref	2011	0.3930	2011	0.3930	0.3650	0.0306			
Shape	90° Elbow	Min		0.3500		0.3500	A 234 - WPB	0.0456			
OD	10.75	Avg		0.3930		0.3930					
Spec.	B31.3						Comments:				
45	- Piping	Ref	2011	0.2120	2011	0.2120	0.2160	0.0100			
Shape	90° Elbow	Min		0.1860		0.1860	A 234 - WPB	0.0270			
OD	3.5	Avg		0.2110		0.2110		Caution			
Spec.	B31.3						Comments:				
50	- Piping	Ref	2011	0.1350	2011	0.1350	0.1540	0.0068			
Shape	90° Elbow	Min		0.1330		0.1330	A 234 - WPB	0.0192			
OD	2.375	Avg		0.1490		0.1490		Caution			
Spec.	B31.3						Comments:				
55	- Piping	Ref	2011	0.2130	2011	0.2130	0.2160	0.0100			
Shape	90° Elbow	Min		0.2030		0.2030	A 234 - WPB	0.0270			
OD	3.5	Avg		0.2110		0.2110					
Spec.	B31.3						Comments:				



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Band Description		Baseline		Previous	Current	Next Inspection Material	Nominal CA	TMIN	ST Loss MPY	LT Loss MPY	Recommended Retirement Date
60	Column - Shell	Ref	2011	0.3500	2011	0.3500	0.2800	0.0222			
Shape	Cylindrical	Min		0.3260		0.3260	SA 285 - C	0.0000			
OD	6.625	Avg		0.3580		0.3580					
Spec.	VIII Div 1						Comments:				
65	Column - Head	Ref	2011	0.2930	2011	0.2930	0.2800	0.0221			
Shape	Ellipsoidal	Min		0.2440		0.2440	SA 285 - C	0.0000			
OD	6.625	Avg		0.2630		0.2630	Caution				
Spec.	VIII Div 1						Comments:				
70	- Piping	Ref	2011	0.1720	2011	0.1720	0.2180	0.0068			
Shape	90° Elbow	Min		0.1420		0.1420	A 234 - WPB	0.0272			
OD	2.375	Avg		0.1820		0.1820	Caution				
Spec.	B31.3						Comments:				
75	- Piping	Ref	2011	0.1740	2011	0.1740	0.2180	0.0068			
Shape	90° Elbow	Min		0.1520		0.1520	A 234 - WPB	0.0272			
OD	2.375	Avg		0.1720		0.1720	Caution				
Spec.	B31.3						Comments:				