



Ultrasonic Corrosion Survey

Survey Name: BARRICK ENERGY INC.

LSD: 03-03-072-26W5 **Dwg#:**72 **Vessel Number:** A0578137 **Manufacturer:** LARSEN & D'AMICO **Survey Date:** 5/1/2012
Survey Name: BARRICK ENERGY INC. **Vessel Name:** 3PH SEPARATOR **Serial Number:** HS-13824 **Inspector:** MWS
District Unit: PUSKWA PLANT **Year Built:** 2007 **Shell MAWP PSI:** 1440 **MAWT_F:** 129 **Process:** SWEET
Location: NORTHERN AB **Tag Number:** V-111 **Tube MAWP PSI:** 0 **MAWT_F:** 0 **Project Number:** C50102
Skid: PKG62369 **CRN:** U1422.213 **Vessel CA:** 0.125
[\[Click here for Vessel Drawing -- 03-03-072-26W5 -72.pdf\]](#)
[\[Click here for Piping Drawing -- 03-03-072-26W5 -72A.pdf\]](#)

Band	Description		Readings						Year	Avg	Min	Recommended Next Inspection	Nominal	CA	T-Min	Recommended Retirement Date
			1	2	3	4	5	6								
72-05	Head	Baseline	1.995	2.000	1.995	2.002	2.006	1.998	2012	1.999	1.995	2013	1.8800	0.125	1.6042	2032
Shape	Ellipsoidal Shell	Previous										Comments:				
OD	48	Current	1.995	2.000	1.995	2.002	2.006	1.998	2012	1.999	1.995					
Spec	VIII Div 1	Short Term Loss MPY:														
Material	SA 516 - 70	Long Term Loss MPY:						0.000	OK							
72-10	Shell	Baseline	2.037	2.039	2.039	2.040	2.040	2.039	2012	2.039	2.037	2013	2.0000	0.125	1.6555	2032
Shape	Cylindrical Shell	Previous										Comments:				
OD	48	Current	2.037	2.039	2.039	2.040	2.040	2.039	2012	2.039	2.037					
Spec	VIII Div 1	Short Term Loss MPY:														
Material	SA 516 - 70	Long Term Loss MPY:						0.000	OK							
72-15	Shell	Baseline	2.042	2.042	2.042	2.043	2.041	2.042	2012	2.042	2.041	2013	2.0000	0.125	1.6555	2032
Shape	Cylindrical Shell	Previous										Comments:				
OD	48	Current	2.042	2.042	2.042	2.043	2.041	2.042	2012	2.042	2.041					
Spec	VIII Div 1	Short Term Loss MPY:														
Material	SA 516 - 70	Long Term Loss MPY:						0.000	OK							
72-20	Shell	Baseline	2.034	2.028	2.032	2.026	2.033	2.040	2012	2.032	2.026	2013	2.0000	0.125	1.6555	2032
Shape	Cylindrical Shell	Previous										Comments:				
OD	48	Current	2.034	2.028	2.032	2.026	2.033	2.040	2012	2.032	2.026					
Spec	VIII Div 1	Short Term Loss MPY:														
Material	SA 516 - 70	Long Term Loss MPY:						0.000	OK							
72-25	Shell	Baseline	2.049	2.046	2.041	2.046	2.043	2.043	2012	2.045	2.041	2013	2.0000	0.125	1.6555	2032
Shape	Cylindrical Shell	Previous										Comments:				
OD	48	Current	2.049	2.046	2.041	2.046	2.043	2.043	2012	2.045	2.041					
Spec	VIII Div 1	Short Term Loss MPY:														
Material	SA 516 - 70	Long Term Loss MPY:						0.000	OK							
72-30	Shell	Baseline	2.052	2.054	2.054	2.054	2.032	2.021	2012	2.045	2.021	2013	2.0000	0.125	1.6555	2032

Shape	Cylindrical Shell	Previous															Comments:
OD	48	Current	2.052	2.054	2.054	2.054	2.032	2.021	2012	2.045	2.021						
Spec	VIII Div 1	Short Term Loss MPY:															
Material	SA 516 - 70	Long Term Loss MPY:										0.000	OK				
72-35	Head	Baseline	1.977	1.981	1.978	1.989	1.986	1.985	2012	1.983	1.977	2013	1.8800	0.125	1.6042	2032	
Shape	Ellipsoidal Shell	Previous															Comments:
OD	48	Current	1.977	1.981	1.978	1.989	1.986	1.985	2012	1.983	1.977						
Spec	VIII Div 1	Short Term Loss MPY:															
Material	SA 516 - 70	Long Term Loss MPY:										0.000	OK				
72-40	Nozzle	Baseline	0.336	0.341	0.341	0.328	0.326	0.345	2012	0.336	0.326	2013	0.3430	0.125	0.0749	2032	
Shape	Cylindrical Shell	Previous															Comments:
OD	2.375	Current	0.336	0.341	0.341	0.328	0.326	0.345	2012	0.336	0.326						
Spec	VIII Div 1	Short Term Loss MPY:															
Material	SA 106 - B	Long Term Loss MPY:										0.000	OK				
72-45	Piping	Baseline	0.313	0.308	0.314	0.316	0.319	0.314	2012	0.314	0.308	2013	0.2800	0.035	0.2302	2032	
Shape	90° Elbow Shell	Previous															Comments:
OD	6.625	Current	0.313	0.308	0.314	0.316	0.319	0.314	2012	0.314	0.308						
Spec	B31.3	Short Term Loss MPY:															
Material	A 234 - WPB	Long Term Loss MPY:										0.000	OK				
72-50	Piping	Baseline	0.338	0.336	0.346	0.338	0.342	0.341	2012	0.340	0.336	2013	0.2800	0.035	0.2302	2032	
Shape	90° Elbow Shell	Previous															Comments:
OD	6.625	Current	0.338	0.336	0.346	0.338	0.342	0.341	2012	0.340	0.336						
Spec	B31.3	Short Term Loss MPY:															
Material	A 234 - WPB	Long Term Loss MPY:										0.000	OK				
72-55	Piping	Baseline	0.211	0.209	0.207	0.200	0.205	0.204	2012	0.206	0.200	2013	0.2180	0.0272	0.0825	2032	
Shape	90° Elbow Shell	Previous															Comments:
OD	2.375	Current	0.211	0.209	0.207	0.200	0.205	0.204	2012	0.206	0.200						
Spec	B31.3	Short Term Loss MPY:															
Material	A 234 - WPB	Long Term Loss MPY:										0.000	OK				
72-60	Piping	Baseline	0.212	0.212	0.212	0.212	0.212	0.212	2012	0.212	0.212	2013	0.2180	0.0272	0.0825	2032	
Shape	90° Elbow Shell	Previous															Comments:
OD	2.375	Current	0.212	0.212	0.212	0.212	0.212	0.212	2012	0.212	0.212						
Spec	B31.3	Short Term Loss MPY:															
Material	A 234 - WPB	Long Term Loss MPY:										0.000	OK				
72-65	Piping	Baseline	0.206	0.206	0.206	0.205	0.206	0.207	2012	0.206	0.205	2013	0.2180	0.0272	0.0825	2032	
Shape	90° Elbow Shell	Previous															Comments:
OD	2.375	Current	0.206	0.206	0.206	0.205	0.206	0.207	2012	0.206	0.205						
Spec	B31.3	Short Term Loss MPY:															
Material	A 234 - WPB	Long Term Loss MPY:										0.000	OK				
72-70	Piping	Baseline	0.272	0.268	0.268	0.268	0.273	0.279	2012	0.271	0.268	2013	0.3000	0.0375	0.1216	2032	
Shape	90° Elbow Shell	Previous															Comments:
OD	3.5	Current	0.272	0.268	0.268	0.268	0.273	0.279	2012	0.271	0.268						
Spec	B31.3	Short Term Loss MPY:															

Material	A 234 - WPB	Long Term Loss MPY: 0.000										OK				
72-75	Piping	Baseline	0.280	0.280	0.279	0.285	0.288	0.293	2012	0.284	0.279	2013	0.3000	0.0375	0.1216	2032
Shape	90° Elbow Shell	Previous										Comments:				
OD	3.5	Current	0.280	0.280	0.279	0.285	0.288	0.293	2012	0.284	0.279					
Spec	B31.3	Short Term Loss MPY:														
Material	A 234 - WPB	Long Term Loss MPY: 0.000										OK				
72-80	Piping	Baseline	0.325	0.322	0.324	0.326	0.332	0.345	2012	0.329	0.322	2013	0.3430	0.0429	0.0825	2032
Shape	90° Elbow Shell	Previous										Comments:				
OD	2.375	Current	0.325	0.322	0.324	0.326	0.332	0.345	2012	0.329	0.322					
Spec	B31.3	Short Term Loss MPY:														
Material	A 234 - WPB	Long Term Loss MPY: 0.000										OK				
72-85	Piping	Baseline	0.200	0.194	0.196	0.199	0.203	0.209	2012	0.200	0.194	2013	0.2180	0.0272	0.0825	2032
Shape	90° Elbow Shell	Previous										Comments:				
OD	2.375	Current	0.200	0.194	0.196	0.199	0.203	0.209	2012	0.200	0.194					
Spec	B31.3	Short Term Loss MPY:														
Material	A 234 - WPB	Long Term Loss MPY: 0.000										OK				
72-90	Piping	Baseline	0.268	0.274	0.249	0.250	0.259	0.275	2012	0.263	0.249	2013	0.3000	0.0375	0.1216	2032
Shape	90° Elbow Shell	Previous										Comments:				
OD	3.5	Current	0.268	0.274	0.249	0.250	0.259	0.275	2012	0.263	0.249					
Spec	B31.3	Short Term Loss MPY:														
Material	A 234 - WPB	Long Term Loss MPY: 0.000										Caution				
72-92	Piping	Baseline	0.263	0.260	0.252	0.251	0.247	0.252	2012	0.254	0.247	2013	0.3000	0.0375	0.1216	2032
Shape	90° Elbow Shell	Previous										Comments:				
OD	3.5	Current	0.263	0.260	0.252	0.251	0.247	0.252	2012	0.254	0.247					
Spec	B31.3	Short Term Loss MPY:														
Material	A 234 - WPB	Long Term Loss MPY: 0.000										Caution				
72-94	Piping	Baseline	0.334	0.322	0.327	0.331	0.331	0.333	2012	0.330	0.322	2013	0.3370	0.0421	0.1564	2032
Shape	90° Elbow Shell	Previous										Comments:				
OD	4.5	Current	0.334	0.322	0.327	0.331	0.331	0.333	2012	0.330	0.322					
Spec	B31.3	Short Term Loss MPY:														
Material	A 234 - WPB	Long Term Loss MPY: 0.000										OK				
72-96	Piping	Baseline	0.322	0.330	0.329	0.335	0.333	0.332	2012	0.330	0.322	2013	0.3370	0.0421	0.1564	2032
Shape	90° Elbow Shell	Previous										Comments:				
OD	4.5	Current	0.322	0.330	0.329	0.335	0.333	0.332	2012	0.330	0.322					
Spec	B31.3	Short Term Loss MPY:														
Material	A 234 - WPB	Long Term Loss MPY: 0.000										OK				
72-98	Piping	Baseline	0.313	0.309	0.307	0.303	0.315	0.319	2012	0.311	0.303	2013	0.3370	0.0421	0.1564	2032
Shape	90° Elbow Shell	Previous										Comments:				
OD	4.5	Current	0.313	0.309	0.307	0.303	0.315	0.319	2012	0.311	0.303					
Spec	B31.3	Short Term Loss MPY:														
Material	A 234 - WPB	Long Term Loss MPY: 0.000										OK				