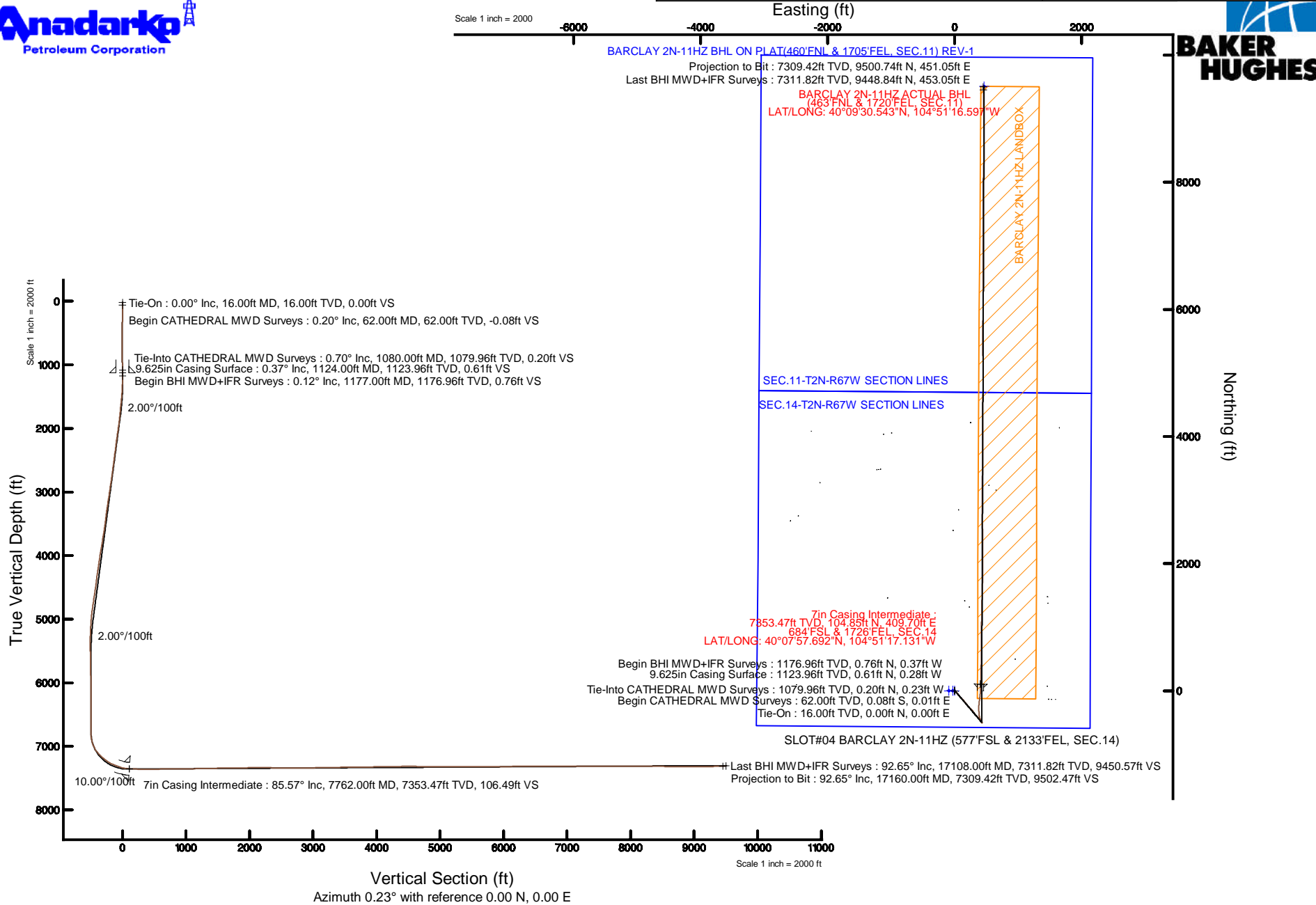


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14)
 Field: WELD COUNTY (KERR MCGEE) Well: BARCLAY 2N-11HZ
 Facility: SEC.14-T2N-R67W Wellbore: BARCLAY 2N-11HZ PWB



Plot reference wellpath is BARCLAY 2N-11HZ (REV-B.0) PWP	
True vertical depths are referenced to XTREME 23 (16'KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 23 (16'KB) (RKB)	North Reference: True north
XTREME 23 (16'KB) to Mean Sea Level: 4948 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	
Created by: precain on 5/11/2015	



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 2N-11HZ AWB <17160>
Facility	SEC.14-T2N-R67W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Precain
Scale	0.999959	Report Generated	5/11/2015 at 10:07:28 AM
Convergence at slot	0.42° East	Database/Source file	WellArchitectDB/BARCLAY_2N-11HZ_AWB__17160_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.61	90.02	3180004.45	1291732.08	40°07'56.656"N	104°51'22.406"W
Facility Reference Pt			3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	XTREME 23 (16'KB) (RKB) to Facility Vertical Datum	4948.00ft
Horizontal Reference Pt	Slot	XTREME 23 (16'KB) (RKB) to Mean Sea Level	4948.00ft
Vertical Reference Pt	XTREME 23 (16'KB) (RKB)	XTREME 23 (16'KB) (RKB) to Mud Line at Slot (SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14))	4948.00ft
MD Reference Pt	XTREME 23 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.23°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 2N-11HZ AWB <17160>
Facility	SEC.14-T2N-R67W		

WELLPATH DATA (169 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	175.300	0.00	0.00	0.00	0.00	40°07'56.656°N	104°51'22.406°W	0.00	
16.00	0.000	175.300	16.00	0.00	0.00	0.00	40°07'56.656°N	104°51'22.406°W	0.00	Tie-On
62.00	0.200	175.300	62.00	-0.08	-0.08	0.01	40°07'56.655°N	104°51'22.406°W	0.43	Begin CATHEDRAL MWD Surveys
172.00	0.200	205.600	172.00	-0.44	-0.44	-0.06	40°07'56.652°N	104°51'22.407°W	0.10	
250.00	0.300	150.800	250.00	-0.75	-0.75	-0.02	40°07'56.649°N	104°51'22.406°W	0.32	
331.00	0.400	197.600	331.00	-1.20	-1.20	0.00	40°07'56.644°N	104°51'22.406°W	0.36	
411.00	0.500	192.500	410.99	-1.81	-1.81	-0.16	40°07'56.638°N	104°51'22.408°W	0.13	
491.00	0.600	199.800	490.99	-2.54	-2.54	-0.38	40°07'56.631°N	104°51'22.411°W	0.15	
571.00	1.000	191.700	570.98	-3.62	-3.62	-0.66	40°07'56.620°N	104°51'22.415°W	0.52	
651.00	0.400	24.100	650.98	-4.05	-4.05	-0.69	40°07'56.616°N	104°51'22.415°W	1.74	
731.00	0.500	11.500	730.98	-3.45	-3.45	-0.51	40°07'56.622°N	104°51'22.413°W	0.18	
811.00	0.500	353.300	810.97	-2.76	-2.76	-0.48	40°07'56.629°N	104°51'22.412°W	0.20	
891.00	0.600	7.800	890.97	-2.00	-2.00	-0.46	40°07'56.636°N	104°51'22.412°W	0.21	
971.00	0.700	14.800	970.97	-1.11	-1.11	-0.28	40°07'56.645°N	104°51'22.410°W	0.16	
1051.00	0.700	354.200	1050.96	-0.16	-0.15	-0.20	40°07'56.654°N	104°51'22.409°W	0.31	
1080.00	0.700	356.500	1079.96	0.20	0.20	-0.23	40°07'56.658°N	104°51'22.409°W	0.10	Tie-Into CATHEDRAL MWD Surveys
1177.00	0.120	251.130	1176.96	0.76	0.76	-0.37	40°07'56.663°N	104°51'22.411°W	0.76	Begin BHI MWD+IFR Surveys
1269.00	1.790	137.320	1268.94	-0.33	-0.33	0.52	40°07'56.653°N	104°51'22.399°W	2.00	
1361.00	4.140	135.610	1360.81	-3.75	-3.76	3.82	40°07'56.619°N	104°51'22.357°W	2.56	
1453.00	5.260	136.800	1452.50	-9.17	-9.21	9.03	40°07'56.565°N	104°51'22.290°W	1.22	
1546.00	7.050	137.250	1544.96	-16.44	-16.51	15.82	40°07'56.493°N	104°51'22.202°W	1.93	
1638.00	8.460	136.040	1636.12	-25.43	-25.52	24.35	40°07'56.404°N	104°51'22.093°W	1.54	
1730.00	7.770	132.570	1727.20	-34.47	-34.60	33.63	40°07'56.314°N	104°51'21.973°W	0.92	
1822.00	8.670	135.390	1818.25	-43.57	-43.75	43.08	40°07'56.224°N	104°51'21.851°W	1.07	
1914.00	9.400	141.600	1909.11	-54.36	-54.57	52.61	40°07'56.117°N	104°51'21.729°W	1.32	
2006.00	9.740	142.730	1999.83	-66.40	-66.65	61.99	40°07'55.997°N	104°51'21.608°W	0.42	
2098.00	10.890	139.220	2090.34	-79.14	-79.43	72.38	40°07'55.871°N	104°51'21.474°W	1.42	
2191.00	10.140	137.120	2181.78	-91.74	-92.08	83.69	40°07'55.746°N	104°51'21.329°W	0.91	
2375.00	10.340	136.840	2362.85	-115.57	-115.99	106.01	40°07'55.510°N	104°51'21.041°W	0.11	
2548.00	9.890	137.390	2533.16	-137.75	-138.25	126.69	40°07'55.290°N	104°51'20.775°W	0.27	
2720.00	9.940	139.840	2702.59	-159.88	-160.47	146.26	40°07'55.070°N	104°51'20.523°W	0.25	
2890.00	11.080	142.710	2869.74	-184.02	-184.68	165.62	40°07'54.831°N	104°51'20.274°W	0.74	
3063.00	10.430	142.940	3039.70	-209.66	-210.40	185.13	40°07'54.577°N	104°51'20.023°W	0.38	
3148.00	10.560	139.630	3123.28	-221.70	-222.48	194.81	40°07'54.457°N	104°51'19.898°W	0.73	
3235.00	11.850	139.220	3208.62	-234.49	-235.31	205.81	40°07'54.331°N	104°51'19.756°W	1.49	
3320.00	10.680	136.820	3291.98	-246.80	-247.67	216.90	40°07'54.209°N	104°51'19.614°W	1.48	
3407.00	10.350	132.700	3377.52	-257.93	-258.85	228.16	40°07'54.098°N	104°51'19.469°W	0.94	
3494.00	10.680	136.670	3463.06	-269.05	-270.01	239.44	40°07'53.988°N	104°51'19.323°W	0.91	
3579.00	11.210	134.280	3546.51	-280.50	-281.51	250.76	40°07'53.874°N	104°51'19.178°W	0.82	
3664.00	11.980	137.210	3629.78	-292.70	-293.75	262.66	40°07'53.753°N	104°51'19.024°W	1.14	
3749.00	11.960	143.720	3712.93	-306.23	-307.32	273.87	40°07'53.619°N	104°51'18.880°W	1.59	
3836.00	10.900	138.700	3798.21	-319.63	-320.77	284.63	40°07'53.486°N	104°51'18.742°W	1.67	
3923.00	12.090	143.340	3883.46	-333.08	-334.26	295.50	40°07'53.353°N	104°51'18.602°W	1.73	
4010.00	11.550	147.170	3968.62	-347.66	-348.89	305.66	40°07'53.208°N	104°51'18.471°W	1.09	
4095.00	10.190	147.640	4052.09	-361.13	-362.39	314.30	40°07'53.075°N	104°51'18.360°W	1.60	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 2N-11HZ AWB <17160>
Facility	SEC.14-T2N-R67W		

WELLPATH DATA (169 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4181.00	10.710	138.030	4136.67	-373.46	-374.76	323.72	40°07'52.953"N	104°51'18.238"W	2.11	
4268.00	12.670	133.720	4221.87	-386.02	-387.36	336.02	40°07'52.828"N	104°51'18.080"W	2.46	
4353.00	11.070	133.630	4305.05	-398.04	-399.44	348.67	40°07'52.709"N	104°51'17.917"W	1.88	
4438.00	10.380	135.780	4388.56	-409.12	-410.56	359.91	40°07'52.599"N	104°51'17.772"W	0.94	
4525.00	11.200	130.650	4474.02	-420.19	-421.68	371.79	40°07'52.489"N	104°51'17.619"W	1.45	
4610.00	12.200	135.340	4557.26	-431.91	-433.45	384.37	40°07'52.373"N	104°51'17.458"W	1.62	
4697.00	11.300	137.650	4642.44	-444.69	-446.28	396.57	40°07'52.246"N	104°51'17.300"W	1.17	
4784.00	10.870	138.210	4727.81	-457.07	-458.70	407.78	40°07'52.123"N	104°51'17.156"W	0.51	
4870.00	10.530	144.080	4812.32	-469.44	-471.11	417.79	40°07'52.000"N	104°51'17.027"W	1.33	
4955.00	7.660	152.940	4896.25	-480.74	-482.45	424.93	40°07'51.888"N	104°51'16.935"W	3.75	
5042.00	5.730	155.600	4982.65	-489.85	-491.57	429.36	40°07'51.798"N	104°51'16.878"W	2.25	
5130.00	4.100	165.750	5070.32	-496.89	-498.62	431.95	40°07'51.729"N	104°51'16.845"W	2.09	
5216.00	2.150	177.490	5156.19	-501.48	-503.21	432.78	40°07'51.683"N	104°51'16.834"W	2.37	
5302.00	3.590	204.560	5242.09	-505.54	-507.27	431.73	40°07'51.643"N	104°51'16.848"W	2.26	
5387.00	1.540	274.960	5327.01	-507.87	-509.59	429.49	40°07'51.620"N	104°51'16.877"W	4.00	
5474.00	1.420	267.310	5413.98	-507.83	-509.54	427.24	40°07'51.621"N	104°51'16.906"W	0.27	
5559.00	2.220	328.530	5498.95	-506.48	-508.19	425.33	40°07'51.634"N	104°51'16.930"W	2.33	
5644.00	1.270	24.330	5583.91	-504.22	-505.92	424.86	40°07'51.656"N	104°51'16.936"W	2.16	
5815.00	0.940	15.260	5754.88	-501.14	-502.84	426.01	40°07'51.687"N	104°51'16.921"W	0.22	
6245.00	0.190	269.140	6184.86	-497.74	-499.45	426.23	40°07'51.720"N	104°51'16.919"W	0.23	
6672.00	0.520	124.740	6611.86	-498.86	-500.57	427.11	40°07'51.709"N	104°51'16.907"W	0.16	
6758.00	1.170	282.760	6697.85	-498.89	-500.60	426.57	40°07'51.709"N	104°51'16.914"W	1.93	
6843.00	1.020	299.580	6782.84	-498.33	-500.03	425.07	40°07'51.715"N	104°51'16.934"W	0.42	
6928.00	9.100	336.990	6867.44	-491.77	-493.46	421.78	40°07'51.780"N	104°51'16.976"W	9.78	
7013.00	20.390	334.440	6949.51	-472.20	-473.85	412.73	40°07'51.973"N	104°51'17.092"W	13.30	
7098.00	26.970	340.800	7027.32	-440.65	-442.25	399.99	40°07'52.286"N	104°51'17.256"W	8.29	
7185.00	41.190	350.940	7099.25	-393.49	-395.05	388.93	40°07'52.752"N	104°51'17.399"W	17.55	
7271.00	48.400	357.090	7160.27	-333.33	-334.86	382.82	40°07'53.347"N	104°51'17.477"W	9.77	
7358.00	52.460	359.980	7215.69	-266.32	-267.85	381.16	40°07'54.009"N	104°51'17.499"W	5.32	
7445.00	61.370	6.430	7263.17	-193.67	-195.21	385.43	40°07'54.727"N	104°51'17.444"W	11.97	
7533.00	68.000	7.960	7300.78	-114.76	-116.34	395.42	40°07'55.506"N	104°51'17.315"W	7.70	
7619.00	73.800	4.500	7328.91	-33.98	-35.60	404.19	40°07'56.304"N	104°51'17.202"W	7.74	
7704.00	81.190	1.350	7347.31	48.84	47.21	408.39	40°07'57.122"N	104°51'17.148"W	9.42	
7735.00	84.570	1.260	7351.15	79.59	77.96	409.09	40°07'57.426"N	104°51'17.139"W	10.91	
7762.00†	85.568	1.324	7353.47	106.49	104.85	409.70	40°07'57.692"N	104°51'17.131"W	3.71	7" Casing Point
7841.00	88.490	1.510	7357.57	185.36	183.71	411.65	40°07'58.471"N	104°51'17.106"W	3.71	
7926.00	88.740	1.360	7359.62	270.31	268.66	413.78	40°07'59.311"N	104°51'17.079"W	0.34	
8011.00	89.880	1.460	7360.64	355.29	353.63	415.87	40°08'00.151"N	104°51'17.052"W	1.35	
8096.00	90.770	0.990	7360.16	440.27	438.61	417.68	40°08'00.990"N	104°51'17.028"W	1.18	
8183.00	90.430	0.330	7359.25	527.26	525.59	418.69	40°08'01.850"N	104°51'17.016"W	0.85	
8269.00	90.120	0.090	7358.84	613.26	611.59	419.00	40°08'02.700"N	104°51'17.011"W	0.46	
8354.00	90.680	359.460	7358.24	698.26	696.59	418.67	40°08'03.540"N	104°51'17.016"W	0.99	
8439.00	91.050	0.210	7356.96	783.24	781.58	418.42	40°08'04.380"N	104°51'17.019"W	0.98	
8524.00	91.050	1.090	7355.40	868.23	866.56	419.39	40°08'05.219"N	104°51'17.006"W	1.04	
8611.00	90.190	1.490	7354.46	955.21	953.53	421.34	40°08'06.079"N	104°51'16.981"W	1.09	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 2N-11HZ AWB <17160>
Facility	SEC.14-T2N-R67W		

WELLPATH DATA (169 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8699.00	91.050	0.980	7353.51	1043.19	1041.50	423.24	40°08'06.948"N	104°51'16.957"W	1.14	
8785.00	90.860	1.240	7352.08	1129.16	1127.47	424.91	40°08'07.798"N	104°51'16.935"W	0.37	
8960.00	91.940	1.220	7347.80	1304.08	1302.38	428.66	40°08'09.526"N	104°51'16.887"W	0.62	
9045.00	90.890	0.960	7345.70	1389.05	1387.34	430.28	40°08'10.366"N	104°51'16.866"W	1.27	
9130.00	90.150	1.550	7344.93	1474.03	1472.31	432.14	40°08'11.205"N	104°51'16.842"W	1.11	
9216.00	91.540	1.500	7343.66	1559.99	1558.27	434.43	40°08'12.055"N	104°51'16.813"W	1.62	
9303.00	90.210	1.750	7342.33	1646.96	1645.22	436.90	40°08'12.914"N	104°51'16.781"W	1.56	
9388.00	91.320	1.820	7341.20	1731.92	1730.17	439.54	40°08'13.754"N	104°51'16.747"W	1.31	
9475.00	90.150	1.030	7340.08	1818.89	1817.14	441.71	40°08'14.613"N	104°51'16.719"W	1.62	
9559.00	91.380	0.990	7338.96	1902.87	1901.11	443.19	40°08'15.443"N	104°51'16.700"W	1.47	
9646.00	90.550	0.370	7337.50	1989.85	1988.09	444.22	40°08'16.302"N	104°51'16.686"W	1.19	
9732.00	90.400	359.390	7336.78	2075.85	2074.09	444.04	40°08'17.152"N	104°51'16.689"W	1.15	
9819.00	89.880	359.220	7336.57	2162.84	2161.08	442.98	40°08'18.012"N	104°51'16.702"W	0.63	
9904.00	89.600	359.290	7336.96	2247.82	2246.08	441.88	40°08'18.852"N	104°51'16.717"W	0.34	
9989.00	89.380	359.730	7337.71	2332.81	2331.07	441.15	40°08'19.692"N	104°51'16.726"W	0.58	
10082.00	90.220	358.800	7338.04	2425.80	2424.06	439.96	40°08'20.611"N	104°51'16.741"W	1.35	
10174.00	89.510	359.340	7338.25	2517.78	2516.05	438.47	40°08'21.520"N	104°51'16.760"W	0.97	
10266.00	89.110	359.350	7339.36	2609.76	2608.03	437.41	40°08'22.429"N	104°51'16.774"W	0.43	
10359.00	89.690	359.030	7340.34	2702.74	2701.02	436.10	40°08'23.348"N	104°51'16.791"W	0.71	
10452.00	90.370	358.800	7340.29	2795.71	2794.00	434.34	40°08'24.267"N	104°51'16.813"W	0.77	
10544.00	90.250	0.170	7339.79	2887.70	2885.99	433.51	40°08'25.176"N	104°51'16.824"W	1.49	
10731.00	91.540	359.890	7336.87	3074.67	3072.97	433.61	40°08'27.023"N	104°51'16.823"W	0.71	
10823.00	91.540	1.180	7334.40	3166.64	3164.93	434.47	40°08'27.932"N	104°51'16.812"W	1.40	
10916.00	90.860	0.880	7332.45	3259.61	3257.89	436.14	40°08'28.851"N	104°51'16.790"W	0.80	
11100.00	90.150	0.910	7330.83	3443.59	3441.86	439.01	40°08'30.669"N	104°51'16.753"W	0.39	
11193.00	91.230	1.080	7329.71	3536.57	3534.84	440.63	40°08'31.588"N	104°51'16.732"W	1.18	
11370.00	90.460	359.810	7327.10	3713.54	3711.81	442.00	40°08'33.336"N	104°51'16.715"W	0.84	
11543.00	90.920	359.440	7325.01	3886.52	3884.79	440.87	40°08'35.046"N	104°51'16.729"W	0.34	
11628.00	91.540	359.690	7323.19	3971.50	3969.77	440.23	40°08'35.886"N	104°51'16.737"W	0.79	
11713.00	90.830	359.910	7321.43	4056.48	4054.75	439.93	40°08'36.725"N	104°51'16.741"W	0.87	
11798.00	90.250	359.960	7320.63	4141.47	4139.74	439.83	40°08'37.565"N	104°51'16.742"W	0.68	
11883.00	91.260	359.920	7319.51	4226.46	4224.74	439.74	40°08'38.405"N	104°51'16.744"W	1.19	
11970.00	90.960	1.200	7317.82	4313.44	4311.71	440.59	40°08'39.265"N	104°51'16.733"W	1.51	
12056.00	90.400	0.660	7316.80	4399.43	4397.70	441.99	40°08'40.114"N	104°51'16.715"W	0.90	
12141.00	90.650	0.390	7316.02	4484.42	4482.69	442.77	40°08'40.954"N	104°51'16.705"W	0.43	
12226.00	89.230	0.940	7316.11	4569.42	4567.68	443.75	40°08'41.794"N	104°51'16.692"W	1.79	
12398.00	89.200	0.810	7318.47	4741.39	4739.64	446.38	40°08'43.494"N	104°51'16.658"W	0.08	
12569.00	89.850	0.730	7319.89	4912.38	4910.62	448.68	40°08'45.183"N	104°51'16.628"W	0.38	
12741.00	89.600	359.200	7320.71	5084.37	5082.61	448.57	40°08'46.883"N	104°51'16.630"W	0.90	
12913.00	90.180	358.640	7321.04	5256.32	5254.58	445.33	40°08'48.582"N	104°51'16.671"W	0.47	
13002.00	89.630	359.830	7321.19	5345.30	5343.57	444.14	40°08'49.462"N	104°51'16.687"W	1.47	
13087.00	90.620	359.400	7321.01	5430.30	5428.57	443.57	40°08'50.302"N	104°51'16.694"W	1.27	
13173.00	91.230	359.520	7319.62	5516.28	5514.55	442.76	40°08'51.151"N	104°51'16.704"W	0.72	
13258.00	90.580	0.100	7318.27	5601.27	5599.54	442.48	40°08'51.991"N	104°51'16.708"W	1.02	
13343.00	90.030	1.010	7317.82	5686.26	5684.54	443.30	40°08'52.831"N	104°51'16.697"W	1.25	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 2N-11HZ AWB <17160>
Facility	SEC.14-T2N-R67W		

WELLPATH DATA (169 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13428.00	90.740	0.620	7317.25	5771.25	5769.52	444.51	40°08'53.671"N	104°51'16.682"W	0.95	
13515.00	89.570	1.080	7317.02	5858.25	5856.51	445.80	40°08'54.531"N	104°51'16.665"W	1.45	
13600.00	89.970	1.130	7317.36	5943.24	5941.50	447.44	40°08'55.370"N	104°51'16.644"W	0.47	
13773.00	90.310	359.310	7316.93	6116.23	6114.49	448.11	40°08'57.080"N	104°51'16.635"W	1.07	
13860.00	91.170	359.270	7315.81	6203.21	6201.47	447.03	40°08'57.939"N	104°51'16.649"W	0.99	
13946.00	90.340	0.400	7314.68	6289.20	6287.46	446.78	40°08'58.789"N	104°51'16.652"W	1.63	
14031.00	90.950	0.140	7313.72	6374.19	6372.45	447.18	40°08'59.629"N	104°51'16.647"W	0.78	
14116.00	90.090	0.540	7312.95	6459.19	6457.45	447.69	40°09'00.469"N	104°51'16.641"W	1.12	
14201.00	90.120	0.430	7312.79	6544.19	6542.45	448.41	40°09'01.309"N	104°51'16.631"W	0.13	
14289.00	90.120	0.470	7312.61	6632.18	6630.44	449.10	40°09'02.179"N	104°51'16.623"W	0.05	
14374.00	90.710	0.190	7311.99	6717.18	6715.44	449.59	40°09'03.018"N	104°51'16.616"W	0.77	
14459.00	89.600	0.250	7311.76	6802.18	6800.44	449.91	40°09'03.858"N	104°51'16.612"W	1.31	
14633.00	90.580	0.410	7311.49	6976.18	6974.43	450.91	40°09'05.578"N	104°51'16.599"W	0.57	
14803.00	89.350	359.560	7311.59	7146.17	7144.43	450.87	40°09'07.258"N	104°51'16.600"W	0.88	
14974.00	90.400	359.430	7311.97	7317.15	7315.42	449.36	40°09'08.948"N	104°51'16.619"W	0.62	
15145.00	90.710	0.290	7310.31	7488.14	7486.41	448.95	40°09'10.637"N	104°51'16.624"W	0.53	
15230.00	89.380	0.060	7310.24	7573.14	7571.40	449.20	40°09'11.477"N	104°51'16.621"W	1.59	
15317.00	89.600	359.910	7311.02	7660.13	7658.40	449.18	40°09'12.337"N	104°51'16.621"W	0.31	
15402.00	90.220	359.590	7311.15	7745.13	7743.40	448.81	40°09'13.177"N	104°51'16.626"W	0.82	
15487.00	89.500	358.980	7311.36	7830.12	7828.39	447.75	40°09'14.017"N	104°51'16.640"W	1.11	
15574.00	90.150	0.500	7311.62	7917.11	7915.39	447.36	40°09'14.876"N	104°51'16.645"W	1.90	
15660.00	89.570	2.140	7311.84	8003.09	8001.36	449.34	40°09'15.726"N	104°51'16.619"W	2.02	
15745.00	90.830	2.440	7311.54	8088.04	8086.29	452.73	40°09'16.565"N	104°51'16.575"W	1.52	
15832.00	89.420	1.620	7311.35	8174.99	8173.23	455.81	40°09'17.424"N	104°51'16.536"W	1.87	
15917.00	89.780	1.600	7311.94	8259.96	8258.20	458.20	40°09'18.264"N	104°51'16.505"W	0.42	
16003.00	89.750	1.240	7312.29	8345.94	8344.17	460.33	40°09'19.114"N	104°51'16.477"W	0.42	
16088.00	88.180	0.070	7313.83	8430.92	8429.15	461.31	40°09'19.953"N	104°51'16.465"W	2.30	
16262.00	88.890	0.100	7318.28	8604.86	8603.09	461.56	40°09'21.672"N	104°51'16.462"W	0.41	
16435.00	89.410	0.060	7320.85	8777.84	8776.07	461.81	40°09'23.382"N	104°51'16.458"W	0.30	
16605.00	90.000	359.540	7321.72	8947.84	8946.06	461.21	40°09'25.062"N	104°51'16.466"W	0.46	
16776.00	90.650	359.500	7320.75	9118.82	9117.05	459.78	40°09'26.751"N	104°51'16.484"W	0.38	
16950.00	91.480	358.990	7317.52	9292.76	9291.01	457.49	40°09'28.470"N	104°51'16.514"W	0.56	
17108.00	92.650	357.790	7311.82	9450.57	9448.84	453.05	40°09'30.030"N	104°51'16.571"W	1.06	Last BHI MWD+IFR Surveys
17160.00	92.650	357.790	7309.42	9502.47	9500.74	451.05	40°09'30.543"N	104°51'16.597"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: BARCLAY 2N-11HZ AWB <17160> Ref Wellpath: BARCLAY 2N-11HZ AWP										
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]	
13.5in Open Hole	16.00	1125.00	1109.00	16.00	1124.96	0.00	0.00	0.61	-0.28	
9.625in Casing Surface	16.00	1124.00	1108.00	16.00	1123.96	0.00	0.00	0.61	-0.28	
8.75in Open Hole	1125.00	7780.00	6655.00	1124.96	7354.76	0.61	-0.28	122.80	410.12	
7in Casing Intermediate	16.00	7762.00	7746.00	16.00	7353.47	0.00	0.00	104.85	409.70	
6.125in Open Hole	7780.00	17160.00	9380.00	7354.76	7309.42	122.80	410.12	9500.74	451.05	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 2N-11HZ AWB <17160>
Facility	SEC.14-T2N-R67W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.11-T2N-R67W SECTION LINES	-1.00	0.20	-29.98	3179974.47	1291732.06	40°07'56.658"N	104°51'22.792"W	polygon
SEC.14-T2N-R67W SECTION LINES	-1.00	0.61	-90.02	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W	polygon
BARCLAY 2N-11HZ BHL ON PLAT(460'FNL & 1705'FEL, SEC.11) REV-1	7303.00	9506.51	465.08	3180400.48	1301241.30	40°09'30.600"N	104°51'16.416"W	point
BARCLAY 2N-11HZ LANDBOX	7352.00	0.00	0.00	3180004.45	1291732.08	40°07'56.656"N	104°51'22.406"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: BARCLAY 2N-11HZ AWB <17160>				Ref Wellpath: BARCLAY 2N-11HZ AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model		Log Name/Comment		Wellbore	
16.00	1080.00	ISCWSA MWD, Rev. 2 (Standard)		CATHEDRAL MWD SURVEYS <62-1080>		BARCLAY 2N-11HZ AWB <17160>	
1080.00	7735.00	ISCWSA MWD, Rev. 2, axial magnetic correction (Standard) (MagVAR IFR Wattenberg)		BHI MWD+IFR SURVEYS 8 3/4" HOLE <1177-7735>		BARCLAY 2N-11HZ AWB <17160>	
7735.00	17108.00	ISCWSA MWD, Rev. 2, axial magnetic correction (Standard) (MagVAR IFR Wattenberg)		BHI MWD+IFR SURVEYS 6 1/8" HOLE <7841-17108>		BARCLAY 2N-11HZ AWB <17160>	
17108.00	17160.00	Blind Drilling (std)		Projection to bit		BARCLAY 2N-11HZ AWB <17160>	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BARCLAY 2N-11HZ (577'FSL & 2133'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 2N-11HZ AWB <17160>
Facility	SEC.14-T2N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	175.300	16.00	Tie-On
62.00	0.200	175.300	62.00	Begin CATHEDRAL MWD Surveys
1080.00	0.700	356.500	1079.96	Tie-Into CATHEDRAL MWD Surveys
1177.00	0.120	251.130	1176.96	Begin BHI MWD+IFR Surveys
7762.00	85.568	1.324	7353.47	7" Casing Point
17108.00	92.650	357.790	7311.82	Last BHI MWD+IFR Surveys
17160.00	92.650	357.790	7309.42	Projection to Bit