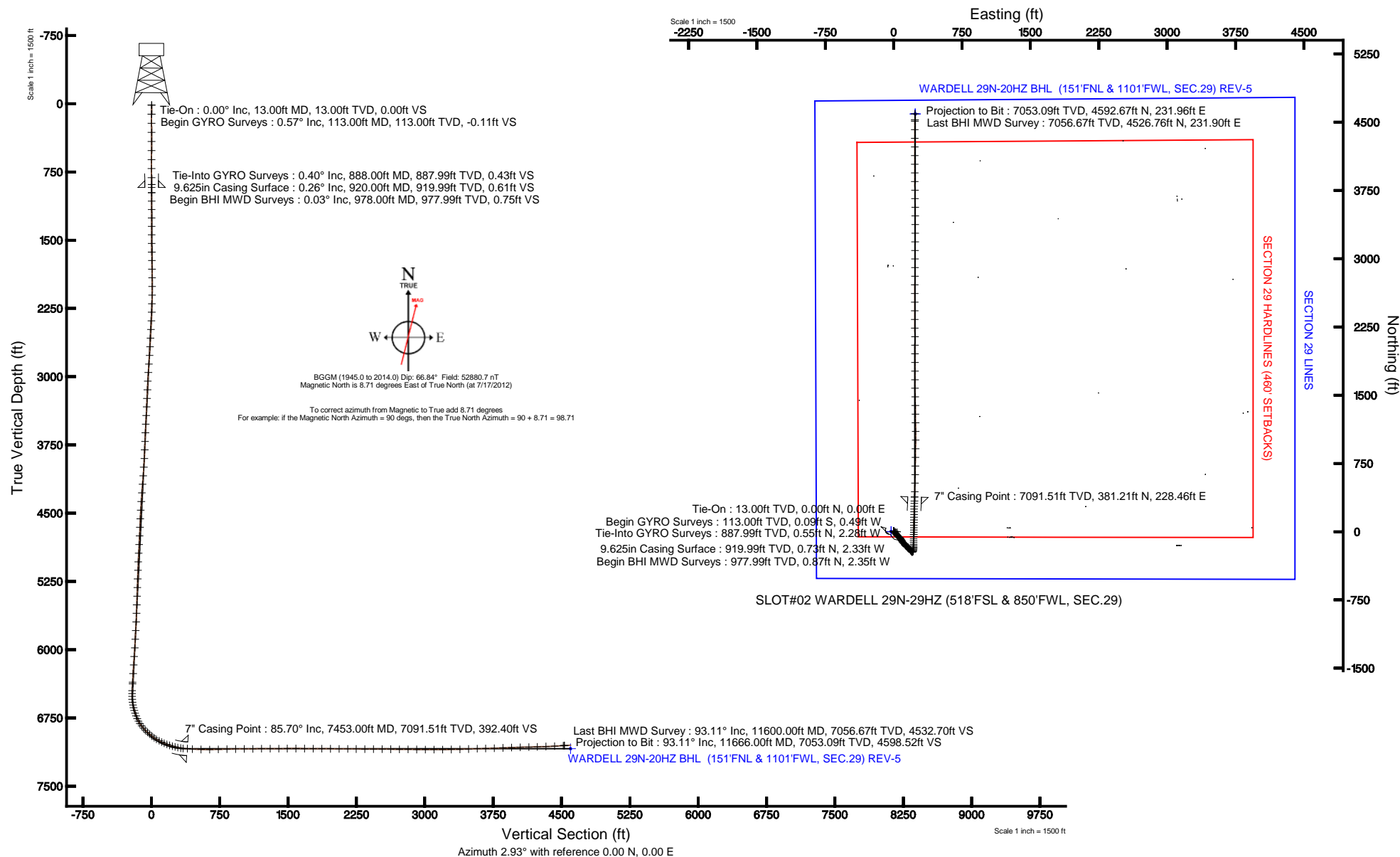


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29)
 Field: WELD COUNTY (KERR MCGEE) Well: WARDELL 29N-29HZ
 Facility: SEC.29-T3N-R65W Wellbore: WARDELL 29N-29HZ PWB

Plot reference wellpath is WARDELL 29N-29HZ (REV-E.0) PWP

True vertical depths are referenced to ENSIGN 145 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSIGN 145 (RKB)	North Reference: True north
ENSGIN 145 (RKB) to Mean Sea Level: 4915 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsjel02 on 8/7/2012





Actual Wellpath Report

WARDELL 29N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 29N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 29N-29HZ AWB
Facility	SEC.29-T3N-R65W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Wilsjef02
Scale	0.999957	Report Generated	8/7/2012 at 11:30:47
Convergence at slot	0.52° East	Database/Source file	WellArchitectDB/WARDELL_29N-29HZ_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	29.88	3225258.44	1313304.57	40°11'26.182"N	104°41'37.255"W
Facility Reference Pt			3225228.56	1313304.30	40°11'26.182"N	104°41'37.640"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	ENSIGN 145 (RKB) to Facility Vertical Datum	4915.00ft
Horizontal Reference Pt	Slot	ENSIGN 145 (RKB) to Mean Sea Level	4915.00ft
Vertical Reference Pt	ENSIGN 145 (RKB)	ENSIGN 145 (RKB) to Mud Line at Slot (SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29))	4915.00ft
MD Reference Pt	ENSIGN 145 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	2.89°



Actual Wellpath Report

WARDELL 29N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 29N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 29N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH DATA (148 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	259.570	0.00	0.00	0.00	0.00	40°11'26.182"N	104°41'37.255"W	0.00	
13.00	0.000	259.570	13.00	0.00	0.00	0.00	40°11'26.182"N	104°41'37.255"W	0.00	Tie-On
113.00	0.570	259.570	113.00	-0.11	-0.09	-0.49	40°11'26.181"N	104°41'37.261"W	0.57	Begin GYRO Surveys
213.00	0.230	290.660	213.00	-0.17	-0.11	-1.17	40°11'26.181"N	104°41'37.270"W	0.39	
313.00	0.250	296.310	312.99	-0.02	0.06	-1.55	40°11'26.183"N	104°41'37.275"W	0.03	
413.00	0.380	281.520	412.99	0.12	0.22	-2.07	40°11'26.184"N	104°41'37.282"W	0.15	
513.00	0.430	239.770	512.99	-0.04	0.10	-2.72	40°11'26.183"N	104°41'37.290"W	0.29	
613.00	0.200	118.140	612.99	-0.32	-0.17	-2.89	40°11'26.180"N	104°41'37.292"W	0.56	
713.00	0.190	67.060	712.99	-0.32	-0.19	-2.58	40°11'26.180"N	104°41'37.288"W	0.17	
813.00	0.310	27.020	812.99	0.00	0.12	-2.31	40°11'26.183"N	104°41'37.285"W	0.20	
888.00	0.400	344.790	887.99	0.43	0.55	-2.28	40°11'26.187"N	104°41'37.284"W	0.36	Tie-Into GYRO Surveys
978.00	0.030	35.840	977.99	0.75	0.87	-2.35	40°11'26.191"N	104°41'37.285"W	0.42	Begin BHI MWD Surveys
1070.00	0.390	36.860	1069.99	1.03	1.14	-2.15	40°11'26.193"N	104°41'37.283"W	0.39	
1163.00	0.150	2.680	1162.98	1.42	1.52	-1.95	40°11'26.197"N	104°41'37.280"W	0.30	
1255.00	0.200	132.590	1254.98	1.43	1.53	-1.83	40°11'26.197"N	104°41'37.279"W	0.35	
1347.00	0.330	156.620	1346.98	1.09	1.18	-1.61	40°11'26.194"N	104°41'37.276"W	0.18	
1439.00	0.400	124.270	1438.98	0.69	0.75	-1.24	40°11'26.189"N	104°41'37.271"W	0.23	
1534.00	0.780	35.990	1533.98	1.06	1.09	-0.58	40°11'26.193"N	104°41'37.263"W	0.91	
1629.00	0.860	21.210	1628.97	2.28	2.28	0.05	40°11'26.204"N	104°41'37.254"W	0.24	
1723.00	0.920	33.050	1722.96	3.60	3.57	0.72	40°11'26.217"N	104°41'37.246"W	0.21	
1818.00	1.040	27.720	1817.94	5.04	4.97	1.54	40°11'26.231"N	104°41'37.235"W	0.16	
1913.00	0.300	345.930	1912.94	6.06	5.97	1.88	40°11'26.241"N	104°41'37.231"W	0.88	
2008.00	0.430	155.500	2007.94	5.98	5.89	1.97	40°11'26.240"N	104°41'37.230"W	0.77	
2103.00	0.460	140.840	2102.93	5.38	5.27	2.36	40°11'26.234"N	104°41'37.225"W	0.12	
2198.00	0.880	151.930	2197.93	4.47	4.33	2.94	40°11'26.225"N	104°41'37.217"W	0.46	
2292.00	2.220	146.210	2291.89	2.39	2.18	4.29	40°11'26.204"N	104°41'37.200"W	1.43	
2387.00	3.740	151.720	2386.76	-1.73	-2.08	6.78	40°11'26.161"N	104°41'37.168"W	1.63	
2482.00	2.930	151.390	2481.60	-6.45	-6.94	9.41	40°11'26.113"N	104°41'37.134"W	0.85	
2577.00	4.380	143.580	2576.40	-11.33	-11.99	12.73	40°11'26.064"N	104°41'37.091"W	1.61	
2672.00	4.560	135.740	2671.11	-16.71	-17.61	17.52	40°11'26.008"N	104°41'37.029"W	0.67	
2767.00	4.590	144.760	2765.81	-22.26	-23.42	22.35	40°11'25.951"N	104°41'36.967"W	0.76	
2862.00	5.340	142.540	2860.46	-28.62	-30.04	27.23	40°11'25.885"N	104°41'36.904"W	0.81	
2956.00	5.280	143.480	2954.05	-35.30	-36.98	32.46	40°11'25.817"N	104°41'36.837"W	0.11	
3051.00	4.850	129.310	3048.68	-41.06	-43.04	38.17	40°11'25.757"N	104°41'36.763"W	1.39	
3146.00	3.890	131.610	3143.41	-45.46	-47.73	43.69	40°11'25.710"N	104°41'36.692"W	1.03	
3241.00	4.760	132.290	3238.14	-49.98	-52.52	49.02	40°11'25.663"N	104°41'36.623"W	0.92	
3336.00	4.000	128.180	3332.86	-54.39	-57.22	54.54	40°11'25.617"N	104°41'36.552"W	0.87	
3431.00	3.850	134.270	3427.64	-58.42	-61.49	59.42	40°11'25.574"N	104°41'36.489"W	0.47	
3526.00	4.250	137.590	3522.40	-63.00	-66.32	64.08	40°11'25.527"N	104°41'36.429"W	0.49	
3621.00	3.910	135.980	3617.16	-67.69	-71.25	68.71	40°11'25.478"N	104°41'36.370"W	0.38	
3716.00	3.280	138.040	3711.97	-71.83	-75.60	72.78	40°11'25.435"N	104°41'36.317"W	0.68	
3810.00	2.540	137.690	3805.85	-75.20	-79.14	75.98	40°11'25.400"N	104°41'36.276"W	0.79	
3905.00	3.500	152.140	3900.72	-79.18	-83.26	78.75	40°11'25.359"N	104°41'36.240"W	1.28	
4000.00	4.610	150.640	3995.48	-84.90	-89.15	81.97	40°11'25.301"N	104°41'36.199"W	1.17	
4095.00	4.690	155.270	4090.16	-91.57	-96.00	85.47	40°11'25.233"N	104°41'36.154"W	0.40	



Actual Wellpath Report

WARDELL 29N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 29N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 29N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH DATA (148 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4189.00	6.030	150.620	4183.75	-99.15	-103.80	89.50	40°11'25.156"N	104°41'36.102"W	1.50	
4284.00	5.010	142.230	4278.31	-106.52	-111.42	94.49	40°11'25.081"N	104°41'36.037"W	1.37	
4379.00	4.690	142.310	4372.97	-112.61	-117.78	99.41	40°11'25.018"N	104°41'35.974"W	0.34	
4474.00	4.330	145.630	4467.68	-118.42	-123.81	103.80	40°11'24.959"N	104°41'35.917"W	0.47	
4569.00	4.100	131.860	4562.42	-123.41	-129.04	108.36	40°11'24.907"N	104°41'35.859"W	1.09	
4663.00	4.100	130.870	4656.18	-127.59	-133.48	113.40	40°11'24.863"N	104°41'35.794"W	0.08	
4758.00	3.730	139.830	4750.96	-131.93	-138.06	117.96	40°11'24.818"N	104°41'35.735"W	0.75	
4853.00	3.020	152.110	4845.80	-136.34	-142.63	121.13	40°11'24.772"N	104°41'35.694"W	1.06	
4948.00	3.640	154.910	4940.64	-141.16	-147.58	123.58	40°11'24.724"N	104°41'35.663"W	0.67	
5043.00	3.520	131.210	5035.46	-145.63	-152.23	127.05	40°11'24.678"N	104°41'35.618"W	1.55	
5137.00	3.410	133.880	5129.28	-149.25	-156.07	131.24	40°11'24.640"N	104°41'35.564"W	0.21	
5232.00	2.860	134.030	5224.14	-152.66	-159.67	134.98	40°11'24.604"N	104°41'35.516"W	0.58	
5327.00	3.420	122.120	5319.00	-155.61	-162.83	139.08	40°11'24.573"N	104°41'35.463"W	0.90	
5422.00	4.490	124.690	5413.77	-158.95	-166.45	144.54	40°11'24.537"N	104°41'35.393"W	1.14	
5517.00	4.130	122.030	5508.50	-162.57	-170.38	150.50	40°11'24.498"N	104°41'35.316"W	0.43	
5611.00	3.560	112.940	5602.29	-165.22	-173.31	156.05	40°11'24.469"N	104°41'35.244"W	0.89	
5706.00	3.680	134.970	5697.11	-168.28	-176.62	160.93	40°11'24.437"N	104°41'35.181"W	1.46	
5801.00	4.790	140.070	5791.85	-173.23	-181.82	165.63	40°11'24.385"N	104°41'35.121"W	1.23	
5896.00	4.300	148.090	5886.55	-179.06	-187.88	170.06	40°11'24.325"N	104°41'35.064"W	0.84	
5991.00	4.500	140.390	5981.27	-184.74	-193.78	174.32	40°11'24.267"N	104°41'35.009"W	0.66	
6086.00	5.130	142.580	6075.93	-190.72	-200.02	179.27	40°11'24.205"N	104°41'34.945"W	0.69	
6180.00	4.530	146.980	6169.60	-196.93	-206.47	183.85	40°11'24.142"N	104°41'34.886"W	0.75	
6275.00	4.870	134.650	6264.28	-202.66	-212.45	188.76	40°11'24.083"N	104°41'34.823"W	1.12	
6370.00	4.250	141.960	6358.98	-208.00	-218.06	193.80	40°11'24.027"N	104°41'34.758"W	0.89	
6389.00	4.210	142.090	6377.93	-209.06	-219.16	194.66	40°11'24.016"N	104°41'34.747"W	0.22	
6464.00	4.470	136.270	6452.72	-213.15	-223.44	198.38	40°11'23.974"N	104°41'34.699"W	0.68	
6496.00	5.050	98.140	6484.61	-214.14	-224.55	200.63	40°11'23.963"N	104°41'34.670"W	9.86	
6527.00	6.060	83.720	6515.47	-214.00	-224.56	203.61	40°11'23.963"N	104°41'34.631"W	5.53	
6559.00	6.840	57.810	6547.27	-212.64	-223.36	206.90	40°11'23.975"N	104°41'34.589"W	9.33	
6591.00	9.660	40.120	6578.94	-209.40	-220.29	210.25	40°11'24.005"N	104°41'34.546"W	11.76	
6622.00	11.660	22.530	6609.42	-204.38	-215.41	213.12	40°11'24.053"N	104°41'34.509"W	12.25	
6654.00	13.450	9.590	6640.65	-197.64	-208.75	214.98	40°11'24.119"N	104°41'34.485"W	10.39	
6685.00	15.830	5.480	6670.65	-189.83	-200.98	215.99	40°11'24.196"N	104°41'34.472"W	8.37	
6717.00	17.840	3.430	6701.27	-180.57	-191.74	216.70	40°11'24.287"N	104°41'34.463"W	6.55	
6749.00	20.770	3.270	6731.47	-169.99	-181.18	217.31	40°11'24.392"N	104°41'34.455"W	9.16	
6780.00	24.930	2.730	6760.03	-157.96	-169.17	217.94	40°11'24.510"N	104°41'34.447"W	13.44	
6812.00	28.620	1.520	6788.60	-143.55	-154.76	218.46	40°11'24.653"N	104°41'34.440"W	11.66	
6843.00	32.250	0.950	6815.32	-127.85	-139.07	218.80	40°11'24.808"N	104°41'34.436"W	11.75	
6875.00	37.070	0.620	6841.63	-109.67	-120.87	219.04	40°11'24.988"N	104°41'34.433"W	15.07	
6907.00	40.900	359.510	6866.50	-89.57	-100.75	219.06	40°11'25.186"N	104°41'34.432"W	12.17	
6938.00	45.570	359.770	6889.08	-68.37	-79.52	218.93	40°11'25.396"N	104°41'34.434"W	15.08	
6970.00	48.600	1.350	6910.87	-44.96	-56.09	219.17	40°11'25.628"N	104°41'34.431"W	10.14	
7001.00	49.350	1.330	6931.22	-21.58	-32.71	219.71	40°11'25.859"N	104°41'34.424"W	2.42	
7033.00	50.970	0.460	6951.72	2.97	-8.14	220.09	40°11'26.102"N	104°41'34.419"W	5.48	
7065.00	54.260	1.090	6971.15	28.38	17.28	220.44	40°11'26.353"N	104°41'34.415"W	10.40	



Actual Wellpath Report

WARDELL 29N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 29N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 29N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH DATA (148 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7096.00	58.650	1.060	6988.27	54.19	43.11	220.93	40°11'26.608"N	104°41'34.408"W	14.16	
7128.00	63.010	0.600	7003.86	82.11	71.04	221.33	40°11'26.884"N	104°41'34.403"W	13.68	
7159.00	65.030	0.410	7017.44	109.95	98.90	221.57	40°11'27.159"N	104°41'34.400"W	6.54	
7191.00	65.570	0.470	7030.82	139.00	127.97	221.80	40°11'27.447"N	104°41'34.397"W	1.70	
7223.00	67.900	0.320	7043.45	168.37	157.37	222.00	40°11'27.737"N	104°41'34.394"W	7.29	
7254.00	72.120	0.920	7054.05	197.47	186.49	222.32	40°11'28.025"N	104°41'34.390"W	13.73	
7286.00	74.640	1.470	7063.20	228.12	217.15	222.96	40°11'28.328"N	104°41'34.382"W	8.05	
7317.00	75.540	1.380	7071.18	258.06	247.09	223.70	40°11'28.624"N	104°41'34.372"W	2.92	
7349.00	77.350	2.010	7078.68	289.16	278.19	224.62	40°11'28.931"N	104°41'34.361"W	5.97	
7381.00	81.380	2.650	7084.58	320.61	309.60	225.90	40°11'29.242"N	104°41'34.344"W	12.75	
7407.00	84.820	2.010	7087.71	346.41	335.39	226.95	40°11'29.496"N	104°41'34.331"W	13.45	
7453.00†	85.700	1.773	7091.51	392.25	381.21	228.46	40°11'29.949"N	104°41'34.311"W	1.98	7" Casing Point
7510.00	86.790	1.480	7095.24	449.11	438.06	230.08	40°11'30.511"N	104°41'34.290"W	1.98	
7605.00	88.330	1.590	7099.28	543.99	532.94	232.62	40°11'31.448"N	104°41'34.258"W	1.63	
7699.00	90.670	1.160	7100.10	637.95	626.90	234.87	40°11'32.377"N	104°41'34.228"W	2.53	
7794.00	91.660	0.860	7098.17	732.88	721.87	236.55	40°11'33.315"N	104°41'34.207"W	1.09	
7889.00	91.290	0.690	7095.73	827.78	816.83	237.83	40°11'34.254"N	104°41'34.190"W	0.43	
7984.00	90.550	0.870	7094.20	922.71	911.80	239.13	40°11'35.192"N	104°41'34.174"W	0.80	
8079.00	90.490	0.090	7093.34	1017.62	1006.80	239.92	40°11'36.131"N	104°41'34.163"W	0.82	
8173.00	90.740	359.810	7092.33	1111.49	1100.79	239.84	40°11'37.060"N	104°41'34.164"W	0.40	
8268.00	90.430	359.490	7091.36	1206.33	1195.78	239.26	40°11'37.999"N	104°41'34.172"W	0.47	
8363.00	90.060	359.630	7090.95	1301.17	1290.78	238.53	40°11'38.937"N	104°41'34.181"W	0.42	
8458.00	90.800	358.720	7090.24	1395.96	1385.77	237.16	40°11'39.876"N	104°41'34.199"W	1.23	
8553.00	90.220	358.830	7089.40	1490.71	1480.74	235.13	40°11'40.815"N	104°41'34.225"W	0.62	
8648.00	90.060	359.630	7089.16	1585.52	1575.73	233.86	40°11'41.753"N	104°41'34.241"W	0.86	
8742.00	89.540	359.720	7089.49	1679.37	1669.73	233.32	40°11'42.682"N	104°41'34.248"W	0.56	
8837.00	89.380	0.590	7090.39	1774.26	1764.72	233.58	40°11'43.621"N	104°41'34.245"W	0.93	
8932.00	90.120	359.870	7090.80	1869.15	1859.72	233.96	40°11'44.560"N	104°41'34.240"W	1.09	
9027.00	88.890	359.810	7091.62	1964.01	1954.71	233.70	40°11'45.498"N	104°41'34.243"W	1.30	
9121.00	89.780	359.430	7092.71	2057.85	2048.70	233.07	40°11'46.427"N	104°41'34.251"W	1.03	
9216.00	89.170	359.610	7093.58	2152.68	2143.70	232.28	40°11'47.366"N	104°41'34.262"W	0.67	
9311.00	89.940	358.990	7094.32	2247.49	2238.68	231.12	40°11'48.305"N	104°41'34.277"W	1.04	
9406.00	89.480	0.360	7094.80	2342.34	2333.68	230.58	40°11'49.243"N	104°41'34.284"W	1.52	
9501.00	89.660	359.590	7095.52	2437.21	2428.68	230.54	40°11'50.182"N	104°41'34.284"W	0.83	
9596.00	89.470	359.730	7096.24	2532.06	2523.67	229.97	40°11'51.121"N	104°41'34.291"W	0.25	
9690.00	89.780	0.450	7096.85	2625.94	2617.67	230.12	40°11'52.050"N	104°41'34.289"W	0.83	
9785.00	89.690	1.230	7097.29	2720.88	2712.66	231.51	40°11'52.988"N	104°41'34.272"W	0.83	
9880.00	89.130	0.480	7098.27	2815.82	2807.64	232.93	40°11'53.927"N	104°41'34.253"W	0.99	
9975.00	89.410	359.890	7099.48	2910.70	2902.63	233.24	40°11'54.866"N	104°41'34.249"W	0.69	
10070.00	89.380	359.670	7100.48	3005.56	2997.63	232.87	40°11'55.804"N	104°41'34.254"W	0.23	
10164.00	90.090	0.860	7100.92	3099.45	3091.62	233.31	40°11'56.733"N	104°41'34.248"W	1.47	
10259.00	90.640	0.580	7100.31	3194.38	3186.61	234.50	40°11'57.672"N	104°41'34.233"W	0.65	
10354.00	90.580	0.070	7099.30	3289.28	3281.60	235.04	40°11'58.611"N	104°41'34.226"W	0.54	
10449.00	91.630	0.130	7097.47	3384.15	3376.58	235.20	40°11'59.549"N	104°41'34.224"W	1.11	
10544.00	92.000	359.790	7094.46	3478.98	3471.54	235.14	40°12'00.488"N	104°41'34.225"W	0.53	



Actual Wellpath Report

WARDELL 29N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 29N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 29N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH DATA (148 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10639.00	91.850	359.730	7091.27	3573.78	3566.48	234.74	40°12'01.426"N	104°41'34.230"W	0.17	
10733.00	91.410	359.260	7088.60	3667.58	3660.44	233.91	40°12'02.354"N	104°41'34.240"W	0.68	
10828.00	92.400	358.860	7085.44	3762.31	3755.37	232.35	40°12'03.293"N	104°41'34.261"W	1.12	
10923.00	91.910	0.060	7081.87	3857.07	3850.30	231.46	40°12'04.231"N	104°41'34.272"W	1.36	
11018.00	92.220	359.240	7078.44	3951.86	3945.24	230.88	40°12'05.169"N	104°41'34.280"W	0.92	
11113.00	91.970	0.490	7074.97	4046.66	4040.17	230.66	40°12'06.107"N	104°41'34.282"W	1.34	
11208.00	91.020	359.850	7072.49	4141.52	4135.14	230.94	40°12'07.045"N	104°41'34.279"W	1.21	
11302.00	91.880	359.060	7070.11	4235.32	4229.10	230.04	40°12'07.974"N	104°41'34.290"W	1.24	
11397.00	91.790	0.560	7067.07	4330.13	4324.05	229.73	40°12'08.912"N	104°41'34.294"W	1.58	
11492.00	93.450	0.790	7062.73	4424.96	4418.94	230.85	40°12'09.850"N	104°41'34.280"W	1.76	
11587.00	93.020	0.420	7057.37	4519.73	4513.78	231.85	40°12'10.787"N	104°41'34.267"W	0.60	
11600.00	93.110	0.050	7056.67	4532.70	4526.76	231.90	40°12'10.915"N	104°41'34.266"W	2.93	Last BHI MWD Survey
11666.00	93.110	0.050	7053.09	4598.52	4592.67	231.96	40°12'11.567"N	104°41'34.266"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: WARDELL 29N-29HZ AWB Ref Wellpath: WARDELL 29N-29HZ 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	13.00	920.00	907.00	13.00	919.99	0.00	0.00	0.73	-2.33
9.625in Casing Surface	13.00	920.00	907.00	13.00	919.99	0.00	0.00	0.73	-2.33
8.75in Open Hole	920.00	7460.00	6540.00	919.99	7092.02	0.73	-2.33	388.19	228.68
7in Casing Intermediate	13.00	7453.00	7440.00	13.00	7091.51	0.00	0.00	381.21	228.46
6.125in Open Hole	7453.00	11166.00	3713.00	7091.51	7073.39	381.21	228.46	4093.15	230.94



Actual Wellpath Report

WARDELL 29N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 29N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 29N-29HZ AWB
Facility	SEC.29-T3N-R65W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 29 LINES		-3.00	0.00	-29.88	3225228.56	1313304.30	40°11'26.182"N	104°41'37.640"W	polygon
WARDELL 29N-20HZ BHL ON PLAT (460'FNL & 1160'FWL, SEC.20) REV-1		7047.00	9586.85	280.13	3225451.37	1322893.14	40°13'00.919"N	104°41'33.644"W	point
WARDELL 29N-20HZ BHL (151'FNL & 1101'FWL, SEC.20) REV-3		7062.03	4593.18	235.46	3225452.11	1317899.49	40°12'11.572"N	104°41'34.220"W	point
WARDELL 29N-20HZ BHL (151'FNL & 1101'FWL, SEC.20) REV-4		7070.00	4593.18	235.46	3225452.11	1317899.49	40°12'11.572"N	104°41'34.220"W	point
WARDELL 29N-20HZ BHL (151'FNL & 1101'FWL, SEC.29) REV-5		7091.00	4593.18	235.46	3225452.11	1317899.49	40°12'11.572"N	104°41'34.220"W	point
WARDELL 29N-20HZ BHL ON PLAT (01'FNL & 1160'FWL, SEC.20) REV-2		7097.00	4743.18	294.15	3225509.43	1318050.01	40°12'13.054"N	104°41'33.464"W	point
SECTION 29 HARDLINES (460' SETBACKS)		7197.00	0.00	-29.88	3225228.56	1313304.30	40°11'26.182"N	104°41'37.640"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: WARDELL 29N-29HZ AWB					Ref Wellpath: WARDELL 29N-29HZ AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore	
13.00	888.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <113-888>		WARDELL 29N-29HZ AWB	
888.00	7407.00	NaviTrak (Standard)	BHI MWD SURVEYS 8 3/4" HOLE <978-7407>		WARDELL 29N-29HZ AWB	
7407.00	11600.00	OnTrak (Standard)	BHI MWD SURVEYS 6 1/8" HOLE <7510-11600>		WARDELL 29N-29HZ AWB	
11600.00	11666.00	Blind Drilling (std)	Projection to bit		WARDELL 29N-29HZ AWB	



Actual Wellpath Report

WARDELL 29N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 WARDELL 29N-29HZ (518'FSL & 850'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 29N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 29N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	259.570	13.00	Tie-On
113.00	0.570	259.570	113.00	Begin GYRO Surveys
888.00	0.400	344.790	887.99	Tie-Into GYRO Surveys
978.00	0.030	35.840	977.99	Begin BHI MWD Surveys
7453.00	85.700	1.773	7091.51	7" Casing Point
11600.00	93.110	0.050	7056.67	Last BHI MWD Survey
11666.00	93.110	0.050	7053.09	Projection to Bit