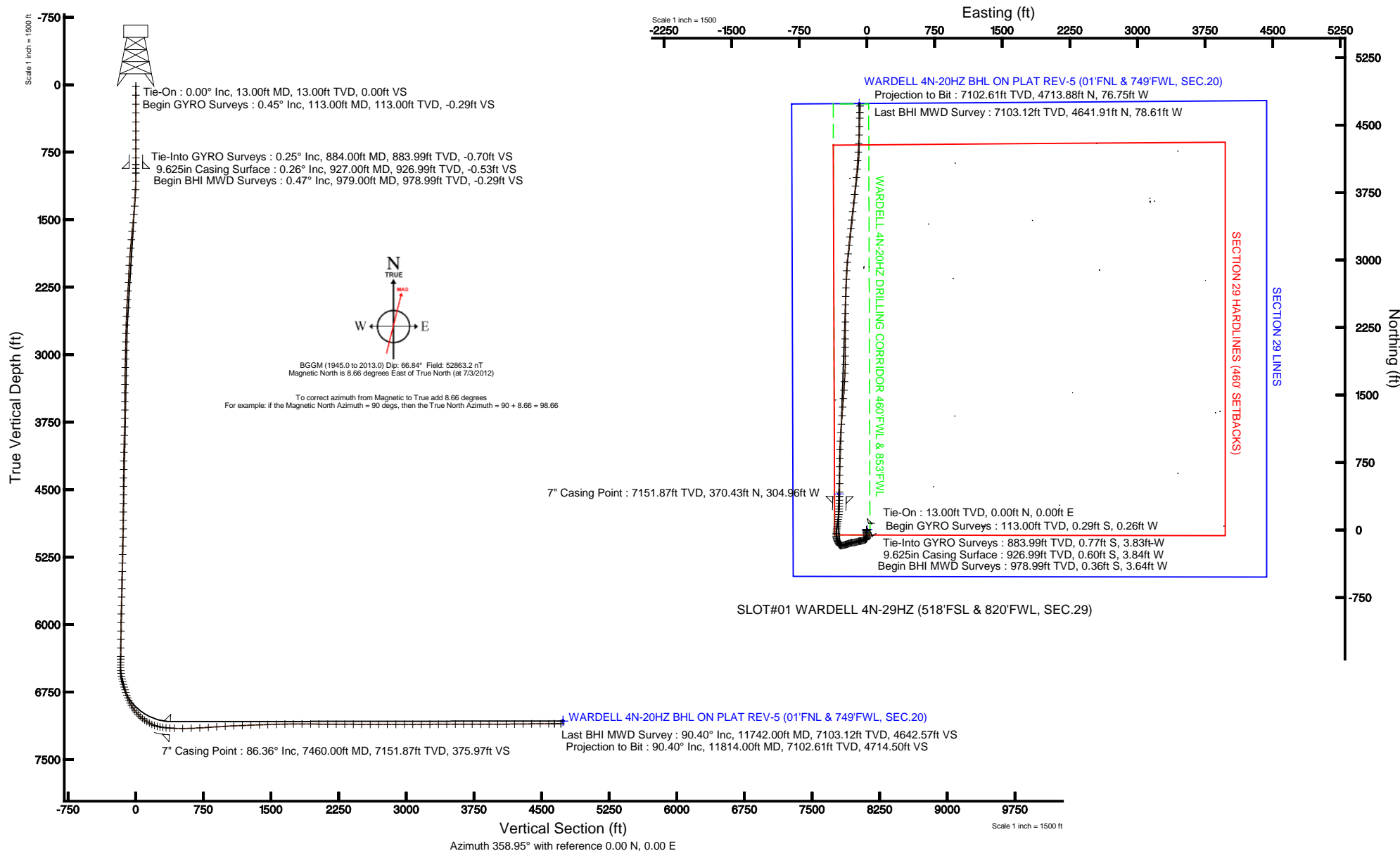


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#01 WARDELL 4N-29HZ (518'FSL & 820'FWL, SEC.29)
 Field: WELD COUNTY (KERR MCGEE) Well: WARDELL 4N-29HZ
 Facility: SEC.29-T3N-R65W Wellbore: WARDELL 4N-29HZ PWB

Plot reference wellpath is WARDELL 4N-29HZ (REV-F.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
ENSIGN 145 (RKB) to Mean Sea Level: 4915 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 WARDELL 4N-29HZ (518'FSL & 820'FWL, SEC.29)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsje02 on 8/7/2012





Actual Wellpath Report

WARDELL 4N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 WARDELL 4N-29HZ (518'FSL & 820'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 4N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 4N-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 10:54:44
Convergence at slot	0.52° East	Database/Source file	WellArchitectDB/WARDELL_4N-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	0.00	3225228.56	1313304.30	40°11'26.182"N	104°41'37.640"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#01 WARDELL 4N-29HZ (518'FSL & 820'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	359.07°



Actual Wellpath Report

WARDELL 4N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 WARDELL 4N-29HZ (518'FSL & 820'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 4N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 4N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH DATA (150 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	221.790	0.00	0.00	0.00	0.00	40°11'26.182"N	104°41'37.640"W	0.00	
13.00	0.000	221.790	13.00	0.00	0.00	0.00	40°11'26.182"N	104°41'37.640"W	0.00	Tie-On
113.00	0.450	221.790	113.00	-0.29	-0.29	-0.26	40°11'26.179"N	104°41'37.643"W	0.45	Begin GYRO Surveys
213.00	0.340	270.080	213.00	-0.57	-0.59	-0.82	40°11'26.176"N	104°41'37.651"W	0.34	
313.00	0.420	283.770	312.99	-0.47	-0.50	-1.47	40°11'26.177"N	104°41'37.659"W	0.12	
413.00	0.390	273.840	412.99	-0.35	-0.39	-2.17	40°11'26.178"N	104°41'37.668"W	0.08	
513.00	0.390	236.020	512.99	-0.51	-0.55	-2.79	40°11'26.177"N	104°41'37.676"W	0.25	
613.00	0.340	238.090	612.99	-0.85	-0.90	-3.32	40°11'26.173"N	104°41'37.683"W	0.05	
713.00	0.140	31.920	712.99	-0.90	-0.96	-3.51	40°11'26.173"N	104°41'37.685"W	0.47	
813.00	0.200	261.000	812.99	-0.82	-0.88	-3.62	40°11'26.173"N	104°41'37.687"W	0.31	
884.00	0.250	326.400	883.99	-0.71	-0.77	-3.83	40°11'26.174"N	104°41'37.689"W	0.35	Tie-Into GYRO Surveys
979.00	0.470	51.990	978.99	-0.30	-0.36	-3.64	40°11'26.178"N	104°41'37.687"W	0.54	Begin BHI MWD Surveys
1071.00	1.080	208.000	1070.98	-0.83	-0.89	-3.74	40°11'26.173"N	104°41'37.688"W	1.65	
1164.00	2.560	201.000	1163.93	-3.52	-3.60	-4.90	40°11'26.146"N	104°41'37.703"W	1.61	
1256.00	3.690	186.470	1255.79	-8.36	-8.46	-5.97	40°11'26.098"N	104°41'37.717"W	1.49	
1348.00	3.960	191.450	1347.59	-14.40	-14.52	-6.93	40°11'26.039"N	104°41'37.729"W	0.47	
1440.00	5.410	185.200	1439.28	-21.82	-21.95	-7.96	40°11'25.965"N	104°41'37.743"W	1.67	
1535.00	6.080	171.910	1533.81	-31.26	-31.39	-7.66	40°11'25.872"N	104°41'37.739"W	1.56	
1630.00	6.640	172.270	1628.22	-41.71	-41.82	-6.21	40°11'25.769"N	104°41'37.720"W	0.59	
1724.00	5.260	173.870	1721.71	-51.40	-51.49	-5.02	40°11'25.673"N	104°41'37.705"W	1.48	
1819.00	4.270	168.580	1816.38	-59.21	-59.28	-3.85	40°11'25.596"N	104°41'37.690"W	1.14	
1914.00	4.680	170.880	1911.09	-66.53	-66.58	-2.54	40°11'25.524"N	104°41'37.673"W	0.47	
2009.00	3.450	164.860	2005.85	-73.13	-73.16	-1.18	40°11'25.459"N	104°41'37.655"W	1.37	
2104.00	2.840	166.260	2100.71	-78.20	-78.21	0.13	40°11'25.409"N	104°41'37.638"W	0.65	
2199.00	2.850	179.510	2195.59	-82.86	-82.86	0.71	40°11'25.363"N	104°41'37.631"W	0.69	
2294.00	3.870	193.840	2290.43	-88.32	-88.33	-0.04	40°11'25.309"N	104°41'37.641"W	1.38	
2389.00	3.980	203.690	2385.21	-94.41	-94.46	-2.13	40°11'25.249"N	104°41'37.667"W	0.72	
2483.00	3.910	215.000	2478.99	-99.98	-100.07	-5.28	40°11'25.193"N	104°41'37.708"W	0.83	
2578.00	4.000	232.590	2573.77	-104.57	-104.74	-9.77	40°11'25.147"N	104°41'37.766"W	1.28	
2673.00	3.510	238.610	2668.56	-108.01	-108.27	-14.88	40°11'25.112"N	104°41'37.832"W	0.66	
2768.00	4.250	251.780	2763.35	-110.53	-110.88	-20.71	40°11'25.086"N	104°41'37.907"W	1.21	
2863.00	4.690	252.270	2858.06	-112.70	-113.17	-27.75	40°11'25.064"N	104°41'37.998"W	0.46	
2957.00	4.500	254.700	2951.75	-114.73	-115.31	-34.97	40°11'25.042"N	104°41'38.091"W	0.29	
3052.00	4.660	254.630	3046.45	-116.61	-117.32	-42.29	40°11'25.023"N	104°41'38.185"W	0.17	
3147.00	4.490	254.870	3141.15	-118.49	-119.31	-49.60	40°11'25.003"N	104°41'38.279"W	0.18	
3242.00	4.430	255.770	3235.86	-120.24	-121.18	-56.74	40°11'24.984"N	104°41'38.371"W	0.10	
3337.00	3.850	259.440	3330.61	-121.62	-122.67	-63.44	40°11'24.970"N	104°41'38.457"W	0.67	
3431.00	3.630	263.390	3424.41	-122.44	-123.59	-69.49	40°11'24.961"N	104°41'38.535"W	0.36	
3526.00	2.340	256.930	3519.28	-123.15	-124.37	-74.37	40°11'24.953"N	104°41'38.598"W	1.40	
3621.00	2.720	265.280	3614.19	-123.70	-125.00	-78.51	40°11'24.947"N	104°41'38.652"W	0.56	
3716.00	4.290	266.200	3709.01	-124.03	-125.42	-84.30	40°11'24.943"N	104°41'38.726"W	1.65	
3811.00	4.610	245.600	3803.73	-125.73	-127.23	-91.32	40°11'24.925"N	104°41'38.817"W	1.71	
3905.00	4.360	244.800	3897.44	-128.70	-130.31	-97.99	40°11'24.894"N	104°41'38.903"W	0.27	
4000.00	4.850	252.650	3992.13	-131.32	-133.05	-105.09	40°11'24.867"N	104°41'38.994"W	0.84	
4095.00	5.130	256.340	4086.77	-133.39	-135.25	-113.06	40°11'24.845"N	104°41'39.097"W	0.45	



Actual Wellpath Report

WARDELL 4N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 WARDELL 4N-29HZ (518'FSL & 820'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 4N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 4N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH DATA (150 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4190.00	5.030	260.570	4181.40	-134.94	-136.94	-121.29	40°11'24.829"N	104°41'39.203"W	0.41	
4285.00	4.560	259.160	4276.07	-136.21	-138.33	-129.11	40°11'24.815"N	104°41'39.304"W	0.51	
4379.00	4.690	260.150	4369.76	-137.45	-139.69	-136.56	40°11'24.802"N	104°41'39.400"W	0.16	
4474.00	4.480	264.220	4464.46	-138.36	-140.73	-144.08	40°11'24.791"N	104°41'39.497"W	0.41	
4569.00	4.480	265.680	4559.17	-138.90	-141.38	-151.47	40°11'24.785"N	104°41'39.592"W	0.12	
4664.00	4.270	264.560	4653.89	-139.39	-141.99	-158.69	40°11'24.779"N	104°41'39.685"W	0.24	
4759.00	4.310	264.210	4748.63	-139.97	-142.69	-165.77	40°11'24.772"N	104°41'39.776"W	0.05	
4853.00	4.040	266.120	4842.38	-140.44	-143.27	-172.58	40°11'24.766"N	104°41'39.864"W	0.32	
4948.00	3.610	253.620	4937.17	-141.41	-144.34	-178.79	40°11'24.756"N	104°41'39.944"W	0.98	
5043.00	4.310	252.840	5031.94	-143.20	-146.24	-185.07	40°11'24.737"N	104°41'40.025"W	0.74	
5138.00	4.570	249.280	5126.65	-145.48	-148.63	-192.02	40°11'24.713"N	104°41'40.114"W	0.40	
5233.00	4.160	252.630	5221.38	-147.74	-151.00	-198.85	40°11'24.690"N	104°41'40.202"W	0.51	
5328.00	4.040	248.160	5316.14	-149.91	-153.27	-205.25	40°11'24.667"N	104°41'40.285"W	0.36	
5422.00	4.660	250.830	5409.86	-152.29	-155.76	-211.93	40°11'24.643"N	104°41'40.371"W	0.69	
5517.00	4.970	252.120	5504.53	-154.69	-158.29	-219.49	40°11'24.618"N	104°41'40.468"W	0.35	
5612.00	4.760	251.890	5599.19	-157.06	-160.78	-227.15	40°11'24.593"N	104°41'40.567"W	0.22	
5707.00	4.100	254.170	5693.90	-159.09	-162.93	-234.17	40°11'24.572"N	104°41'40.657"W	0.72	
5802.00	4.240	250.780	5788.65	-161.07	-165.01	-240.75	40°11'24.551"N	104°41'40.742"W	0.30	
5896.00	4.330	249.570	5882.39	-163.34	-167.39	-247.36	40°11'24.528"N	104°41'40.827"W	0.14	
5991.00	4.690	259.940	5977.10	-165.16	-169.32	-254.54	40°11'24.509"N	104°41'40.920"W	0.94	
6086.00	4.430	261.460	6071.79	-166.26	-170.55	-261.99	40°11'24.497"N	104°41'41.016"W	0.30	
6181.00	3.850	259.860	6166.55	-167.25	-171.65	-268.76	40°11'24.486"N	104°41'41.103"W	0.62	
6276.00	4.390	261.550	6261.30	-168.24	-172.75	-275.50	40°11'24.475"N	104°41'41.190"W	0.58	
6370.00	5.170	258.090	6354.97	-169.52	-174.15	-283.20	40°11'24.461"N	104°41'41.289"W	0.88	
6400.00	4.890	257.180	6384.86	-170.04	-174.71	-285.77	40°11'24.455"N	104°41'41.322"W	0.97	
6434.00	4.770	258.420	6418.74	-170.60	-175.32	-288.57	40°11'24.449"N	104°41'41.358"W	0.47	
6465.00	5.310	266.610	6449.62	-170.90	-175.66	-291.26	40°11'24.446"N	104°41'41.393"W	2.90	
6497.00	6.680	289.810	6481.45	-170.30	-175.12	-294.49	40°11'24.451"N	104°41'41.435"W	8.61	
6528.00	7.770	303.310	6512.20	-168.48	-173.36	-297.94	40°11'24.469"N	104°41'41.479"W	6.48	
6560.00	10.310	310.690	6543.80	-165.36	-170.30	-301.92	40°11'24.499"N	104°41'41.530"W	8.71	
6592.00	13.220	321.030	6575.13	-160.58	-165.59	-306.39	40°11'24.546"N	104°41'41.588"W	11.20	
6623.00	16.270	324.950	6605.11	-154.19	-159.28	-311.12	40°11'24.608"N	104°41'41.649"W	10.35	
6655.00	16.940	332.350	6635.78	-146.31	-151.48	-315.86	40°11'24.685"N	104°41'41.710"W	6.93	
6686.00	16.550	337.040	6665.46	-138.19	-143.41	-319.67	40°11'24.765"N	104°41'41.759"W	4.54	
6718.00	16.050	334.000	6696.18	-129.95	-135.24	-323.39	40°11'24.846"N	104°41'41.807"W	3.09	
6750.00	18.180	335.100	6726.76	-121.38	-126.73	-327.43	40°11'24.930"N	104°41'41.859"W	6.73	
6781.00	18.320	338.790	6756.20	-112.39	-117.80	-331.23	40°11'25.018"N	104°41'41.908"W	3.75	
6813.00	20.490	339.090	6786.38	-102.41	-107.88	-335.05	40°11'25.116"N	104°41'41.957"W	6.79	
6844.00	22.080	347.830	6815.27	-91.59	-97.11	-338.22	40°11'25.222"N	104°41'41.998"W	11.43	
6876.00	24.390	355.450	6844.68	-79.10	-84.64	-340.01	40°11'25.346"N	104°41'42.021"W	11.83	
6908.00	26.870	359.830	6873.53	-65.27	-70.82	-340.56	40°11'25.482"N	104°41'42.028"W	9.75	
6939.00	29.560	359.640	6900.85	-50.62	-56.17	-340.62	40°11'25.627"N	104°41'42.029"W	8.68	
6971.00	33.140	1.600	6928.17	-33.98	-39.53	-340.43	40°11'25.791"N	104°41'42.027"W	11.63	
7002.00	36.460	2.970	6953.62	-16.32	-21.85	-339.72	40°11'25.966"N	104°41'42.017"W	11.00	
7034.00	39.970	6.460	6978.77	3.37	-2.13	-338.07	40°11'26.161"N	104°41'41.996"W	12.87	



Actual Wellpath Report

WARDELL 4N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 WARDELL 4N-29HZ (518'FSL & 820'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 4N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 4N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH DATA (150 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7066.00	44.590	7.870	7002.44	24.67	19.22	-335.37	40°11'26.372"N	104°41'41.961"W	14.74	
7097.00	48.770	8.070	7023.70	46.95	41.55	-332.24	40°11'26.593"N	104°41'41.921"W	13.49	
7129.00	51.110	10.250	7044.29	71.06	65.72	-328.34	40°11'26.831"N	104°41'41.871"W	8.98	
7160.00	54.170	10.890	7063.10	95.20	89.94	-323.81	40°11'27.071"N	104°41'41.813"W	10.01	
7192.00	57.930	9.290	7080.97	121.25	116.07	-319.17	40°11'27.329"N	104°41'41.753"W	12.46	
7224.00	61.570	7.040	7097.09	148.54	143.43	-315.26	40°11'27.599"N	104°41'41.702"W	12.89	
7255.00	65.760	4.640	7110.84	176.12	171.06	-312.44	40°11'27.872"N	104°41'41.666"W	15.19	
7287.00	70.010	3.440	7122.89	205.65	200.62	-310.36	40°11'28.165"N	104°41'41.639"W	13.73	
7318.00	74.460	2.520	7132.34	235.09	230.10	-308.83	40°11'28.456"N	104°41'41.619"W	14.63	
7350.00	79.420	1.950	7139.57	266.21	261.24	-307.61	40°11'28.764"N	104°41'41.604"W	15.60	
7382.00	81.870	1.560	7144.77	297.75	292.79	-306.65	40°11'29.075"N	104°41'41.591"W	7.75	
7417.00	85.210	1.400	7148.71	332.49	327.55	-305.75	40°11'29.419"N	104°41'41.580"W	9.55	
7460.00†	86.363	0.709	7151.87	375.34	370.43	-304.96	40°11'29.843"N	104°41'41.570"W	3.12	7" Casing Point
7508.00	87.650	359.940	7154.38	423.27	418.36	-304.69	40°11'30.316"N	104°41'41.566"W	3.12	
7603.00	90.240	0.220	7156.13	518.23	513.34	-304.56	40°11'31.255"N	104°41'41.564"W	2.74	
7697.00	91.940	0.660	7154.34	612.18	607.31	-303.83	40°11'32.183"N	104°41'41.555"W	1.87	
7792.00	93.200	0.170	7150.08	707.06	702.21	-303.15	40°11'33.121"N	104°41'41.546"W	1.42	
7887.00	93.780	0.090	7144.29	801.86	797.04	-302.93	40°11'34.058"N	104°41'41.544"W	0.62	
7982.00	94.120	1.760	7137.75	896.58	891.79	-301.40	40°11'34.995"N	104°41'41.524"W	1.79	
8077.00	93.410	3.100	7131.51	991.21	986.50	-297.38	40°11'35.931"N	104°41'41.472"W	1.59	
8172.00	92.000	4.280	7127.03	1085.79	1081.20	-291.27	40°11'36.866"N	104°41'41.393"W	1.93	
8267.00	92.270	4.540	7123.49	1180.32	1175.85	-283.97	40°11'37.802"N	104°41'41.299"W	0.39	
8362.00	92.920	3.960	7119.19	1274.83	1270.49	-276.94	40°11'38.737"N	104°41'41.209"W	0.92	
8457.00	91.690	4.410	7115.37	1369.37	1365.16	-270.01	40°11'39.672"N	104°41'41.119"W	1.38	
8551.00	92.030	4.830	7112.32	1462.88	1458.80	-262.45	40°11'40.598"N	104°41'41.022"W	0.57	
8646.00	90.860	3.830	7109.92	1557.45	1553.50	-255.28	40°11'41.534"N	104°41'40.930"W	1.62	
8741.00	91.600	3.830	7107.88	1652.10	1648.26	-248.93	40°11'42.470"N	104°41'40.848"W	0.78	
8836.00	90.670	2.040	7106.00	1746.86	1743.11	-244.07	40°11'43.407"N	104°41'40.785"W	2.12	
8931.00	90.150	359.790	7105.32	1841.80	1838.09	-242.55	40°11'44.346"N	104°41'40.766"W	2.43	
9026.00	88.890	0.060	7106.12	1936.78	1933.09	-242.68	40°11'45.285"N	104°41'40.767"W	1.36	
9120.00	89.290	359.960	7107.61	2030.76	2027.08	-242.66	40°11'46.214"N	104°41'40.767"W	0.44	
9215.00	89.750	0.720	7108.40	2125.73	2122.07	-242.10	40°11'47.152"N	104°41'40.760"W	0.94	
9310.00	90.300	0.800	7108.36	2220.69	2217.06	-240.84	40°11'48.091"N	104°41'40.744"W	0.59	
9405.00	89.130	0.390	7108.83	2315.65	2312.05	-239.85	40°11'49.030"N	104°41'40.731"W	1.31	
9500.00	89.470	0.240	7110.00	2410.62	2407.04	-239.33	40°11'49.968"N	104°41'40.724"W	0.39	
9594.00	89.530	0.570	7110.82	2504.59	2501.04	-238.66	40°11'50.897"N	104°41'40.716"W	0.36	
9689.00	90.330	1.400	7110.93	2599.54	2596.02	-237.03	40°11'51.836"N	104°41'40.695"W	1.21	
9784.00	89.840	2.540	7110.79	2694.41	2690.96	-233.77	40°11'52.774"N	104°41'40.653"W	1.31	
9879.00	90.360	2.750	7110.63	2789.23	2785.86	-229.38	40°11'53.712"N	104°41'40.596"W	0.59	
9974.00	89.960	2.310	7110.36	2884.05	2880.77	-225.19	40°11'54.650"N	104°41'40.542"W	0.63	
10068.00	90.180	5.060	7110.25	2977.74	2974.57	-219.15	40°11'55.577"N	104°41'40.464"W	2.93	
10163.00	89.810	6.500	7110.25	3072.09	3069.08	-209.58	40°11'56.511"N	104°41'40.341"W	1.57	
10258.00	89.960	5.940	7110.44	3166.33	3163.52	-199.29	40°11'57.444"N	104°41'40.208"W	0.61	
10353.00	90.240	5.880	7110.28	3260.67	3258.02	-189.51	40°11'58.378"N	104°41'40.082"W	0.30	
10448.00	90.360	5.590	7109.78	3355.02	3352.54	-180.01	40°11'59.312"N	104°41'39.960"W	0.33	



Actual Wellpath Report

WARDELL 4N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 WARDELL 4N-29HZ (518'FSL & 820'FWL, SEC.29)
Area	COLORADO	Well	WARDELL 4N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 4N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH DATA (150 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10542.00	89.840	6.800	7109.62	3448.30	3445.99	-169.87	40°12'00.235"N	104°41'39.829"W	1.40	
10637.00	90.120	6.390	7109.65	3542.48	3540.36	-158.96	40°12'01.168"N	104°41'39.689"W	0.52	
10732.00	90.150	6.480	7109.43	3636.69	3634.76	-148.31	40°12'02.101"N	104°41'39.551"W	0.10	
10827.00	90.180	6.230	7109.15	3730.92	3729.18	-137.80	40°12'03.034"N	104°41'39.416"W	0.27	
10921.00	90.060	5.860	7108.96	3824.23	3822.65	-127.90	40°12'03.957"N	104°41'39.288"W	0.41	
11016.00	90.120	5.490	7108.81	3918.60	3917.19	-118.50	40°12'04.892"N	104°41'39.167"W	0.39	
11111.00	90.300	4.600	7108.46	4013.08	4011.82	-110.15	40°12'05.827"N	104°41'39.060"W	0.96	
11205.00	90.400	3.660	7107.88	4106.71	4105.57	-103.38	40°12'06.753"N	104°41'38.972"W	1.01	
11300.00	90.330	3.940	7107.28	4201.38	4200.36	-97.08	40°12'07.690"N	104°41'38.891"W	0.30	
11395.00	90.700	2.870	7106.42	4296.11	4295.19	-91.44	40°12'08.627"N	104°41'38.818"W	1.19	
11490.00	91.200	2.940	7104.85	4390.88	4390.05	-86.63	40°12'09.564"N	104°41'38.756"W	0.53	
11585.00	90.090	1.620	7103.78	4485.72	4484.97	-82.85	40°12'10.502"N	104°41'38.708"W	1.82	
11679.00	90.270	1.530	7103.49	4579.63	4578.93	-80.26	40°12'11.431"N	104°41'38.674"W	0.21	
11742.00	90.400	1.480	7103.12	4642.57	4641.91	-78.61	40°12'12.053"N	104°41'38.653"W	0.22	Last BHI MWD Survey
11814.00	90.400	1.480	7102.61	4714.51	4713.88	-76.75	40°12'12.765"N	104°41'38.629"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: WARDELL 4N-29HZ AWB Ref Wellpath: WARDELL 4N-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	927.00	914.00	13.00	926.99	0.00	0.00	-0.60	-3.84
9.625in Casing Surface	13.00	927.00	914.00	13.00	926.99	0.00	0.00	-0.60	-3.84
8.75in Open Hole	927.00	7469.00	6542.00	926.99	7152.42	-0.60	-3.84	379.41	-304.86
7in Casing Intermediate	13.00	7460.00	7447.00	13.00	7151.87	0.00	0.00	370.43	-304.96
6.125in Open Hole	7460.00	11814.00	4354.00	7151.87	7102.61	370.43	-304.96	4713.88	-76.75

WELLPATH COMPOSITION - Ref Wellbore: WARDELL 4N-29HZ AWB Ref Wellpath: WARDELL 4N-29HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	884.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <113-884>	WARDELL 4N-29HZ AWB
884.00	7417.00	NaviTrak (Standard)	BHI MWD SURVEYS 8 3/4" HOLE <979-7417>	WARDELL 4N-29HZ AWB
7417.00	11742.00	OnTrak (Standard)	BHI MWD SURVEYS 6 1/8" HOLE <7508-11742>	WARDELL 4N-29HZ AWB
11742.00	11814.00	Blind Drilling (std)	Projection to bit	WARDELL 4N-29HZ AWB



Actual Wellpath Report

WARDELL 4N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

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Field	WELD COUNTY (KERR MCGEE)	Wellbore	WARDELL 4N-29HZ AWB
Facility	SEC.29-T3N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	221.790	13.00	Tie-On
113.00	0.450	221.790	113.00	Begin GYRO Surveys
884.00	0.250	326.400	883.99	Tie-Into GYRO Surveys
979.00	0.470	51.990	978.99	Begin BHI MWD Surveys
7460.00	86.363	0.709	7151.87	7" Casing Point
11742.00	90.400	1.480	7103.12	Last BHI MWD Survey
11814.00	90.400	1.480	7102.61	Projection to Bit