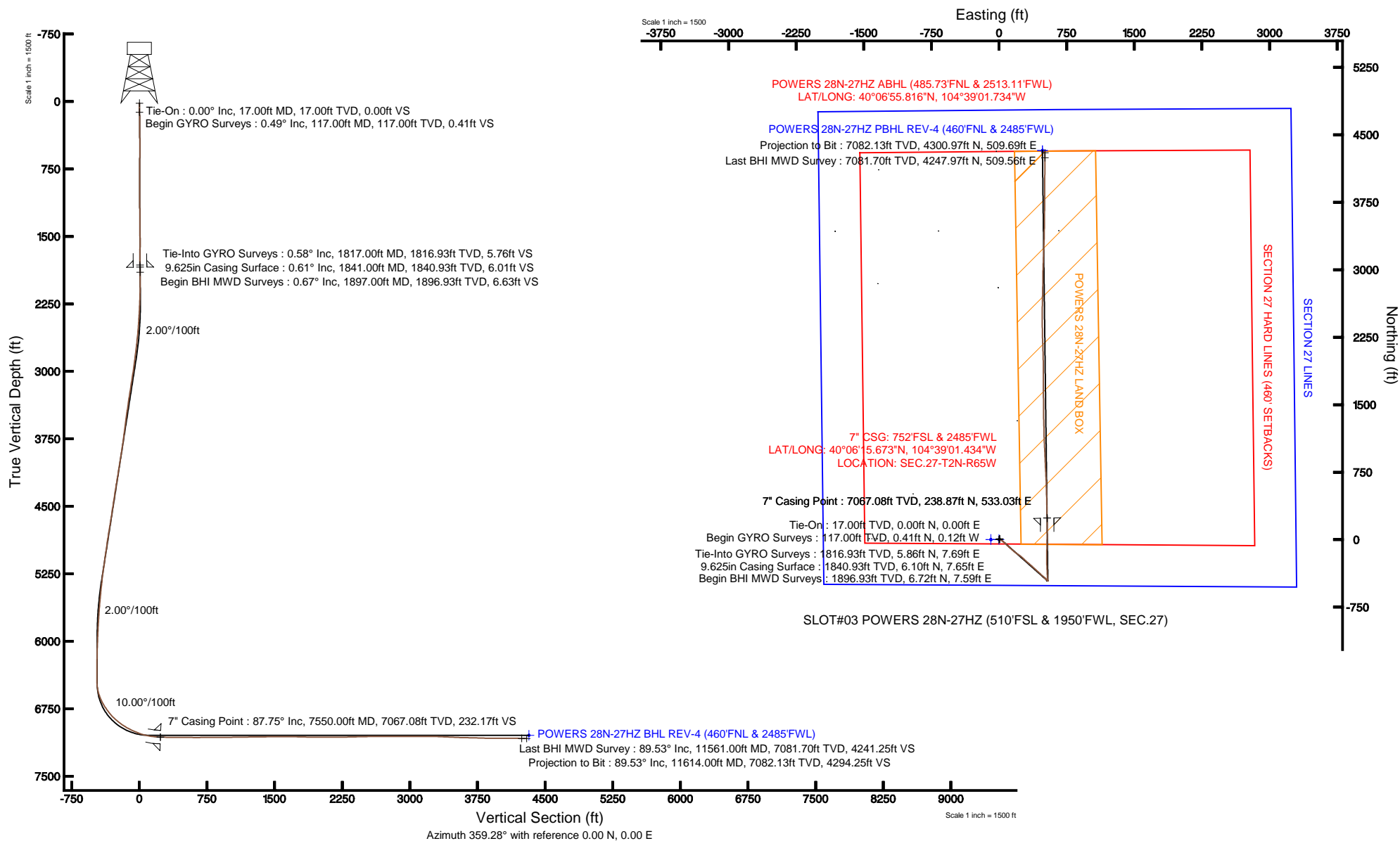


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27)
 Field: WELD COUNTY (KERR MCGEE) Well: POWERS 28N-27HZ
 Facility: SEC.27-T2N-R65W Wellbore: POWERS 28N-27HZ PWB

Plot reference wellpath is POWERS 28N-27HZ (REV-D.0) PWP

True vertical depths are referenced to XTREME 6 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 6 (RKB)	North Reference: True north
XTREME 6 (RKB) to Mean Sea Level: 4967 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wiljef02 on 4/11/2013





Actual Wellpath Report

POWERS 28N-27HZ AWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27)
Area	COLORADO	Well	POWERS 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 28N-27HZ AWB
Facility	SEC.27-T2N-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	0.99996	Report Generated	4/11/2013 at 07:33:31
Convergence at slot	0.55° East	Database/Source file	WellArchitectDB/POWERS_28N-27HZ_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.30	89.98	3237120.39	1281754.93	40°06'13.313"N	104°39'08.294"W
Facility Reference Pt			3237030.41	1281754.37	40°06'13.316"N	104°39'09.452"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 6 (RKB) to Facility Vertical Datum	4967.00ft
Horizontal Reference Pt	Slot	XTREME 6 (RKB) to Mean Sea Level	4967.00ft
Vertical Reference Pt	XTREME 6 (RKB)	XTREME 6 (RKB) to Mud Line at Slot (SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27))	4967.00ft
MD Reference Pt	XTREME 6 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	6.76°



Actual Wellpath Report

POWERS 28N-27HZ AWP

Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27)
Area	COLORADO	Well	POWERS 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 28N-27HZ AWB
Facility	SEC.27-T2N-R65W		

WELLPATH DATA (146 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	343.350	0.00	0.00	0.00	0.00	40°06'13.313"N	104°39'08.294"W	0.00	
17.00	0.000	343.350	17.00	0.00	0.00	0.00	40°06'13.313"N	104°39'08.294"W	0.00	Tie-On
117.00	0.490	343.350	117.00	0.39	0.41	-0.12	40°06'13.317"N	104°39'08.296"W	0.49	Begin GYRO Surveys
217.00	0.830	356.290	216.99	1.50	1.54	-0.29	40°06'13.328"N	104°39'08.298"W	0.37	
317.00	0.610	64.770	316.99	2.49	2.49	0.14	40°06'13.338"N	104°39'08.292"W	0.83	
417.00	0.690	359.800	416.98	3.37	3.32	0.62	40°06'13.346"N	104°39'08.286"W	0.70	
517.00	0.650	108.680	516.98	3.85	3.74	1.16	40°06'13.350"N	104°39'08.279"W	1.09	
617.00	0.380	138.590	616.97	3.51	3.31	1.91	40°06'13.346"N	104°39'08.269"W	0.37	
717.00	0.310	142.690	716.97	3.10	2.85	2.30	40°06'13.341"N	104°39'08.264"W	0.07	
817.00	0.620	81.760	816.97	3.04	2.71	3.00	40°06'13.340"N	104°39'08.255"W	0.54	
917.00	0.360	226.820	916.97	2.94	2.57	3.30	40°06'13.338"N	104°39'08.251"W	0.94	
1017.00	0.260	137.540	1016.97	2.55	2.19	3.23	40°06'13.335"N	104°39'08.252"W	0.44	
1117.00	0.710	32.650	1116.96	2.96	2.54	3.71	40°06'13.338"N	104°39'08.246"W	0.82	
1217.00	0.550	358.390	1216.96	4.00	3.55	4.04	40°06'13.348"N	104°39'08.242"W	0.40	
1317.00	0.700	63.100	1316.95	4.81	4.30	4.57	40°06'13.356"N	104°39'08.235"W	0.68	
1417.00	0.670	12.740	1416.95	5.73	5.15	5.24	40°06'13.364"N	104°39'08.227"W	0.58	
1517.00	0.710	73.630	1516.94	6.55	5.89	5.96	40°06'13.371"N	104°39'08.217"W	0.70	
1617.00	0.350	127.100	1616.94	6.64	5.88	6.80	40°06'13.371"N	104°39'08.206"W	0.58	
1717.00	0.460	115.070	1716.93	6.36	5.53	7.41	40°06'13.368"N	104°39'08.199"W	0.14	
1817.00	0.580	350.290	1816.93	6.72	5.86	7.69	40°06'13.371"N	104°39'08.195"W	0.92	Tie-Into GYRO Surveys
1897.00	0.670	356.980	1896.93	7.57	6.72	7.59	40°06'13.379"N	104°39'08.196"W	0.14	Begin BHI MWD Surveys
1940.00	0.780	352.720	1939.92	8.10	7.27	7.54	40°06'13.385"N	104°39'08.197"W	0.28	
2025.00	0.930	111.280	2024.92	8.49	7.59	8.11	40°06'13.388"N	104°39'08.190"W	1.73	
2110.00	1.770	131.820	2109.89	7.56	6.46	9.73	40°06'13.377"N	104°39'08.169"W	1.13	
2194.00	2.860	133.790	2193.82	5.56	4.15	12.21	40°06'13.354"N	104°39'08.137"W	1.30	
2279.00	4.340	128.290	2278.65	2.60	0.69	16.27	40°06'13.320"N	104°39'08.085"W	1.79	
2364.00	5.370	127.190	2363.35	-1.10	-3.71	21.96	40°06'13.276"N	104°39'08.011"W	1.22	
2449.00	6.350	123.260	2447.90	-5.21	-8.69	29.06	40°06'13.227"N	104°39'07.920"W	1.25	
2534.00	7.390	131.730	2532.29	-10.44	-14.91	37.07	40°06'13.166"N	104°39'07.817"W	1.71	
2619.00	8.110	131.990	2616.52	-17.03	-22.56	45.61	40°06'13.090"N	104°39'07.707"W	0.85	
2704.00	8.960	134.140	2700.58	-24.51	-31.18	54.82	40°06'13.005"N	104°39'07.589"W	1.07	
2789.00	9.550	132.260	2784.47	-32.63	-40.53	64.78	40°06'12.912"N	104°39'07.460"W	0.78	
2872.00	10.340	138.110	2866.22	-41.55	-50.71	74.85	40°06'12.812"N	104°39'07.331"W	1.54	
2957.00	11.350	131.130	2949.71	-51.31	-61.89	86.25	40°06'12.701"N	104°39'07.184"W	1.95	
3042.00	12.670	132.430	3032.85	-61.47	-73.68	99.43	40°06'12.585"N	104°39'07.014"W	1.59	
3127.00	12.940	131.400	3115.73	-72.31	-86.26	113.45	40°06'12.461"N	104°39'06.834"W	0.42	
3212.00	13.590	131.070	3198.46	-83.35	-99.12	128.12	40°06'12.334"N	104°39'06.645"W	0.77	
3297.00	12.820	132.010	3281.22	-94.42	-111.99	142.65	40°06'12.206"N	104°39'06.458"W	0.94	
3382.00	12.080	132.170	3364.22	-105.02	-124.27	156.25	40°06'12.085"N	104°39'06.283"W	0.87	
3467.00	12.410	128.260	3447.28	-114.95	-135.90	170.02	40°06'11.970"N	104°39'06.106"W	1.05	
3552.00	12.860	126.250	3530.23	-124.38	-147.15	184.82	40°06'11.859"N	104°39'05.916"W	0.74	
3637.00	13.470	125.220	3612.99	-133.75	-158.45	200.53	40°06'11.747"N	104°39'05.713"W	0.77	
3723.00	12.510	123.080	3696.79	-142.65	-169.31	216.52	40°06'11.640"N	104°39'05.508"W	1.25	
3808.00	12.400	125.170	3779.79	-151.08	-179.59	231.69	40°06'11.538"N	104°39'05.312"W	0.55	
3893.00	12.750	129.870	3862.75	-160.55	-190.86	246.35	40°06'11.427"N	104°39'05.124"W	1.27	



Actual Wellpath Report

POWERS 28N-27HZ AWP

Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27)
Area	COLORADO	Well	POWERS 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 28N-27HZ AWB
Facility	SEC.27-T2N-R65W		

WELLPATH DATA (146 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3978.00	13.600	133.330	3945.52	-171.62	-203.73	260.82	40°06'11.300"N	104°39'04.937"W	1.36	
4063.00	13.030	133.000	4028.23	-183.24	-217.13	275.10	40°06'11.167"N	104°39'04.754"W	0.68	
4148.00	12.260	132.400	4111.17	-194.17	-229.75	288.77	40°06'11.043"N	104°39'04.578"W	0.92	
4233.00	14.220	132.080	4193.91	-205.46	-242.83	303.19	40°06'10.913"N	104°39'04.392"W	2.31	
4318.00	13.640	130.960	4276.41	-217.13	-256.40	318.50	40°06'10.779"N	104°39'04.195"W	0.75	
4403.00	12.780	129.470	4359.16	-227.85	-268.94	333.33	40°06'10.655"N	104°39'04.004"W	1.09	
4486.00	12.950	132.160	4440.07	-238.20	-281.02	347.31	40°06'10.536"N	104°39'03.824"W	0.75	
4572.00	12.880	131.440	4523.90	-249.23	-293.83	361.64	40°06'10.409"N	104°39'03.640"W	0.20	
4657.00	12.330	132.840	4606.85	-259.97	-306.27	375.40	40°06'10.286"N	104°39'03.463"W	0.74	
4742.00	13.520	131.990	4689.69	-271.05	-319.09	389.44	40°06'10.160"N	104°39'03.282"W	1.42	
4827.00	13.560	132.270	4772.33	-282.57	-332.44	404.19	40°06'10.028"N	104°39'03.092"W	0.09	
4913.00	13.010	131.730	4856.03	-293.97	-345.67	418.88	40°06'09.897"N	104°39'02.903"W	0.66	
4997.00	12.080	130.590	4938.02	-304.28	-357.68	432.61	40°06'09.778"N	104°39'02.727"W	1.15	
5083.00	10.960	134.130	5022.29	-314.26	-369.23	445.31	40°06'09.664"N	104°39'02.563"W	1.54	
5168.00	11.770	134.260	5105.62	-324.44	-380.90	457.32	40°06'09.549"N	104°39'02.409"W	0.95	
5253.00	11.070	132.740	5188.94	-334.51	-392.49	469.52	40°06'09.434"N	104°39'02.252"W	0.90	
5338.00	10.520	131.960	5272.44	-343.78	-403.22	481.29	40°06'09.328"N	104°39'02.100"W	0.67	
5423.00	9.460	131.420	5356.15	-352.23	-413.03	492.30	40°06'09.231"N	104°39'01.959"W	1.25	
5508.00	8.480	132.450	5440.10	-359.85	-421.88	502.16	40°06'09.144"N	104°39'01.832"W	1.17	
5593.00	7.540	132.700	5524.27	-366.78	-429.89	510.88	40°06'09.065"N	104°39'01.720"W	1.11	
5679.00	6.530	135.440	5609.63	-373.15	-437.20	518.46	40°06'08.992"N	104°39'01.622"W	1.24	
5764.00	5.510	136.010	5694.16	-378.76	-443.58	524.69	40°06'08.929"N	104°39'01.542"W	1.20	
5849.00	4.670	135.250	5778.82	-383.49	-448.98	529.96	40°06'08.876"N	104°39'01.474"W	0.99	
5934.00	3.640	136.560	5863.60	-387.37	-453.39	534.25	40°06'08.832"N	104°39'01.419"W	1.22	
6019.00	3.000	144.600	5948.45	-390.75	-457.17	537.39	40°06'08.795"N	104°39'01.378"W	0.93	
6104.00	2.330	147.240	6033.36	-393.73	-460.43	539.61	40°06'08.763"N	104°39'01.350"W	0.80	
6189.00	1.890	143.710	6118.30	-396.09	-463.02	541.38	40°06'08.737"N	104°39'01.327"W	0.54	
6275.00	0.800	160.480	6204.28	-397.66	-464.72	542.42	40°06'08.720"N	104°39'01.314"W	1.33	
6360.00	0.500	159.940	6289.27	-398.53	-465.63	542.74	40°06'08.711"N	104°39'01.309"W	0.35	
6445.00	0.550	201.610	6374.27	-399.25	-466.36	542.72	40°06'08.704"N	104°39'01.310"W	0.44	
6531.00	1.260	353.140	6460.26	-398.73	-465.81	542.46	40°06'08.710"N	104°39'01.313"W	2.05	
6574.00	7.130	353.560	6503.13	-395.67	-462.68	542.10	40°06'08.741"N	104°39'01.318"W	13.65	
6616.00	11.990	354.290	6544.53	-388.87	-455.75	541.37	40°06'08.809"N	104°39'01.327"W	11.57	
6659.00	17.430	353.200	6586.11	-378.24	-444.90	540.17	40°06'08.916"N	104°39'01.343"W	12.67	
6701.00	22.020	353.420	6625.63	-364.46	-430.82	538.52	40°06'09.055"N	104°39'01.364"W	10.93	
6744.00	25.910	355.230	6664.92	-347.40	-413.45	536.81	40°06'09.227"N	104°39'01.386"W	9.21	
6787.00	29.940	357.030	6702.91	-327.61	-393.36	535.47	40°06'09.426"N	104°39'01.403"W	9.57	
6829.00	32.770	356.750	6738.77	-306.08	-371.54	534.29	40°06'09.641"N	104°39'01.418"W	6.75	
6872.00	36.590	357.370	6774.12	-281.97	-347.11	533.04	40°06'09.883"N	104°39'01.434"W	8.92	
6914.00	39.810	357.170	6807.13	-256.35	-321.17	531.80	40°06'10.139"N	104°39'01.450"W	7.67	
6957.00	44.140	357.830	6839.09	-227.98	-292.45	530.55	40°06'10.423"N	104°39'01.466"W	10.12	
7000.00	47.290	358.890	6869.11	-197.53	-261.68	529.68	40°06'10.727"N	104°39'01.478"W	7.53	
7042.00	51.360	359.460	6896.47	-165.96	-229.84	529.23	40°06'11.042"N	104°39'01.483"W	9.74	
7085.00	54.500	0.160	6922.39	-131.91	-195.53	529.12	40°06'11.381"N	104°39'01.485"W	7.42	
7128.00	57.750	1.020	6946.36	-96.42	-159.84	529.49	40°06'11.733"N	104°39'01.480"W	7.74	



Actual Wellpath Report

POWERS 28N-27HZ AWP

Page 4 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27)
Area	COLORADO	Well	POWERS 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 28N-27HZ AWB
Facility	SEC.27-T2N-R65W		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7170.00	61.130	1.270	6967.71	-60.43	-123.68	530.21	40°06'12.091"N	104°39'01.471"W	8.06	
7213.00	64.110	0.960	6987.48	-22.43	-85.51	530.95	40°06'12.468"N	104°39'01.461"W	6.96	
7255.00	65.930	0.960	7005.22	15.44	-47.45	531.59	40°06'12.844"N	104°39'01.453"W	4.33	
7298.00	69.440	1.420	7021.54	55.03	-7.68	532.42	40°06'13.237"N	104°39'01.442"W	8.22	
7339.00	72.650	1.710	7034.86	93.64	31.07	533.48	40°06'13.620"N	104°39'01.429"W	7.86	
7381.00	76.330	0.130	7046.09	133.89	71.53	534.13	40°06'14.020"N	104°39'01.420"W	9.48	
7424.00	79.720	359.740	7055.01	175.65	113.59	534.08	40°06'14.435"N	104°39'01.421"W	7.93	
7466.00	82.810	359.600	7061.38	216.84	155.10	533.84	40°06'14.846"N	104°39'01.424"W	7.36	
7515.00	87.350	359.610	7065.59	265.27	203.90	533.50	40°06'15.328"N	104°39'01.428"W	9.27	
7550.00†	87.754	358.840	7067.08	299.93	238.87	533.03	40°06'15.673"N	104°39'01.434"W	2.48	7" Casing Point
7560.00	87.870	358.620	7067.46	309.83	248.86	532.81	40°06'15.772"N	104°39'01.437"W	2.48	
7645.00	89.040	359.020	7069.75	393.98	333.80	531.06	40°06'16.612"N	104°39'01.460"W	1.45	
7730.00	89.930	358.840	7070.52	478.18	418.79	529.47	40°06'17.451"N	104°39'01.480"W	1.07	
7815.00	90.090	358.640	7070.50	562.35	503.77	527.60	40°06'18.291"N	104°39'01.504"W	0.30	
7900.00	88.980	357.950	7071.19	646.42	588.72	525.07	40°06'19.131"N	104°39'01.537"W	1.54	
7986.00	90.670	357.470	7071.46	731.35	674.65	521.64	40°06'19.980"N	104°39'01.581"W	2.04	
8071.00	90.120	357.050	7070.87	815.18	759.55	517.57	40°06'20.819"N	104°39'01.633"W	0.81	
8155.00	90.090	357.490	7070.72	898.03	843.45	513.57	40°06'21.648"N	104°39'01.685"W	0.53	
8240.00	90.120	357.490	7070.56	981.92	928.37	509.85	40°06'22.487"N	104°39'01.732"W	0.04	
8325.00	91.440	356.740	7069.40	1065.71	1013.26	505.57	40°06'23.326"N	104°39'01.787"W	1.79	
8410.00	91.020	358.110	7067.58	1149.56	1098.15	501.75	40°06'24.165"N	104°39'01.837"W	1.69	
8496.00	90.270	358.920	7066.61	1234.67	1184.11	499.53	40°06'25.015"N	104°39'01.865"W	1.28	
8581.00	90.830	358.190	7065.79	1318.79	1269.08	497.38	40°06'25.854"N	104°39'01.893"W	1.08	
8666.00	90.740	358.500	7064.63	1402.87	1354.04	494.93	40°06'26.694"N	104°39'01.924"W	0.38	
8751.00	90.550	359.380	7063.67	1487.08	1439.02	493.35	40°06'27.534"N	104°39'01.945"W	1.06	
8836.00	89.930	0.030	7063.32	1571.43	1524.01	492.92	40°06'28.373"N	104°39'01.950"W	1.06	
8922.00	89.900	359.820	7063.44	1656.82	1610.01	492.80	40°06'29.223"N	104°39'01.952"W	0.25	
9007.00	89.960	0.090	7063.55	1741.22	1695.01	492.74	40°06'30.063"N	104°39'01.952"W	0.33	
9092.00	88.980	359.440	7064.34	1825.58	1780.01	492.39	40°06'30.903"N	104°39'01.957"W	1.38	
9177.00	87.810	359.700	7066.72	1909.88	1864.97	491.75	40°06'31.743"N	104°39'01.965"W	1.41	
9262.00	89.780	359.220	7068.50	1994.17	1949.94	490.95	40°06'32.583"N	104°39'01.975"W	2.39	
9347.00	89.840	358.970	7068.79	2078.41	2034.93	489.61	40°06'33.422"N	104°39'01.993"W	0.30	
9432.00	90.120	358.000	7068.81	2162.52	2119.90	487.36	40°06'34.262"N	104°39'02.022"W	1.19	
9516.00	90.890	357.760	7068.07	2245.51	2203.84	484.25	40°06'35.092"N	104°39'02.062"W	0.96	
9601.00	90.950	358.690	7066.71	2329.56	2288.79	481.62	40°06'35.931"N	104°39'02.095"W	1.10	
9686.00	91.450	359.540	7064.93	2413.79	2373.76	480.31	40°06'36.771"N	104°39'02.112"W	1.16	
9771.00	91.290	0.010	7062.90	2498.13	2458.73	479.97	40°06'37.610"N	104°39'02.117"W	0.58	
9856.00	90.740	0.080	7061.39	2582.53	2543.72	480.04	40°06'38.450"N	104°39'02.116"W	0.65	
9941.00	90.370	1.200	7060.57	2667.04	2628.71	480.99	40°06'39.290"N	104°39'02.103"W	1.39	
10025.00	89.750	1.650	7060.48	2750.68	2712.68	483.08	40°06'40.120"N	104°39'02.077"W	0.91	
10110.00	90.310	1.060	7060.44	2835.30	2797.66	485.09	40°06'40.960"N	104°39'02.051"W	0.96	
10194.00	89.720	0.690	7060.41	2918.86	2881.65	486.37	40°06'41.790"N	104°39'02.034"W	0.83	
10280.00	90.860	0.710	7059.98	3004.38	2967.64	487.42	40°06'42.640"N	104°39'02.021"W	1.33	
10365.00	89.620	2.040	7059.62	3089.00	3052.61	489.46	40°06'43.479"N	104°39'01.994"W	2.14	
10450.00	90.330	2.500	7059.66	3173.74	3137.54	492.83	40°06'44.319"N	104°39'01.951"W	1.00	



Actual Wellpath Report

POWERS 28N-27HZ AWP

Page 5 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27)
Area	COLORADO	Well	POWERS 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 28N-27HZ AWB
Facility	SEC.27-T2N-R65W		

WELLPATH DATA (146 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10535.00	89.720	1.710	7059.62	3258.45	3222.48	495.95	40°06'45.158"N	104°39'01.911"W	1.17	
10620.00	87.960	2.500	7061.34	3343.15	3307.40	499.07	40°06'45.997"N	104°39'01.871"W	2.27	
10705.00	87.620	1.220	7064.62	3427.78	3392.29	501.83	40°06'46.836"N	104°39'01.835"W	1.56	
10790.00	87.370	0.900	7068.34	3512.28	3477.20	503.40	40°06'47.675"N	104°39'01.815"W	0.48	
10875.00	88.080	0.280	7071.71	3596.72	3562.12	504.28	40°06'48.514"N	104°39'01.803"W	1.11	
10958.00	89.070	1.030	7073.77	3679.22	3645.09	505.22	40°06'49.334"N	104°39'01.791"W	1.50	
11128.00	87.980	359.650	7078.15	3848.09	3815.03	506.23	40°06'51.014"N	104°39'01.778"W	1.03	
11299.00	90.240	0.780	7080.81	4017.94	3985.99	506.87	40°06'52.703"N	104°39'01.770"W	1.48	
11469.00	89.620	0.620	7081.01	4186.99	4155.98	508.95	40°06'54.383"N	104°39'01.743"W	0.38	
11561.00	89.530	0.140	7081.70	4278.42	4247.97	509.56	40°06'55.292"N	104°39'01.735"W	0.53	Last BHI MWD Survey
11614.00	89.530	0.140	7082.13	4331.07	4300.97	509.69	40°06'55.816"N	104°39'01.734"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: POWERS 28N-27HZ AWB Ref Wellpath: POWERS 28N-27HZ 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	17.00	1841.00	1824.00	17.00	1840.93	0.00	0.00	6.10	7.65
9.625in Casing Surface	17.00	1841.00	1824.00	17.00	1840.93	0.00	0.00	6.10	7.65
8.75in Open Hole	1841.00	7560.00	5719.00	1840.93	7067.46	6.10	7.65	248.86	532.81
7in Casing Intermediate	17.00	7550.00	7533.00	17.00	7067.08	0.00	0.00	238.87	533.03
6.125in Open Hole	7550.00	11614.00	4064.00	7067.08	7082.13	238.87	533.03	4300.97	509.69



Actual Wellpath Report

POWERS 28N-27HZ AWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27)
Area	COLORADO	Well	POWERS 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 28N-27HZ AWB
Facility	SEC.27-T2N-R65W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 27 LINES		1.00	0.30	-90.14	3237030.25	1281754.37	40°06'13.316"N	104°39'09.454"W	polygon
POWERS 28N-27HZ BHL REV-3 (460'FNL & 2485'FWL)		7045.00	4326.70	481.58	3237560.57	1286085.85	40°06'56.070"N	104°39'02.095"W	point
ROBERT POWERS USX X 27-18 150' CIRCLE		7045.00	3397.96	697.70	3237785.54	1285159.26	40°06'46.892"N	104°38'59.314"W	circle
POWERS 28N-27HZ BHL REV-4 (460'FNL & 2485'FWL)		7047.00	4326.70	481.58	3237560.57	1286085.85	40°06'56.070"N	104°39'02.095"W	point
POWERS 28N-27HZ LAND BOX		7077.00	0.00	0.00	3237120.39	1281754.93	40°06'13.313"N	104°39'08.294"W	polygon
SECTION 27 HARD LINES (460' SETBACKS)		7274.00	0.30	-90.14	3237030.25	1281754.37	40°06'13.316"N	104°39'09.454"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: POWERS 28N-27HZ AWB Ref Wellpath: POWERS 28N-27HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1817.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <117-1817>	POWERS 28N-27HZ AWB
1817.00	7560.00	NaviTrak (Standard)	BHI MWD SURVEYS 8 3/4" HOLE <1897-7560>	POWERS 28N-27HZ AWB
7560.00	11561.00	OnTrak (Standard)	BHI MWD SURVEYS 6 1/8" HOLE <7645-11561>	POWERS 28N-27HZ AWB
11561.00	11614.00	Blind Drilling (std)	Projection to bit	POWERS 28N-27HZ AWB



Actual Wellpath Report

POWERS 28N-27HZ AWP
Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 POWERS 28N-27HZ (510'FSL & 1950'FWL, SEC.27)
Area	COLORADO	Well	POWERS 28N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 28N-27HZ AWB
Facility	SEC.27-T2N-R65W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
17.00	0.000	343.350	17.00	Tie-On	
117.00	0.490	343.350	117.00	Begin GYRO Surveys	
1817.00	0.580	350.290	1816.93	Tie-Into GYRO Surveys	
1897.00	0.670	356.980	1896.93	Begin BHI MWD Surveys	
7550.00	87.754	358.840	7067.08	7" Casing Point	
11561.00	89.530	0.140	7081.70	Last BHI MWD Survey	
11614.00	89.530	0.140	7082.13	Projection to Bit	