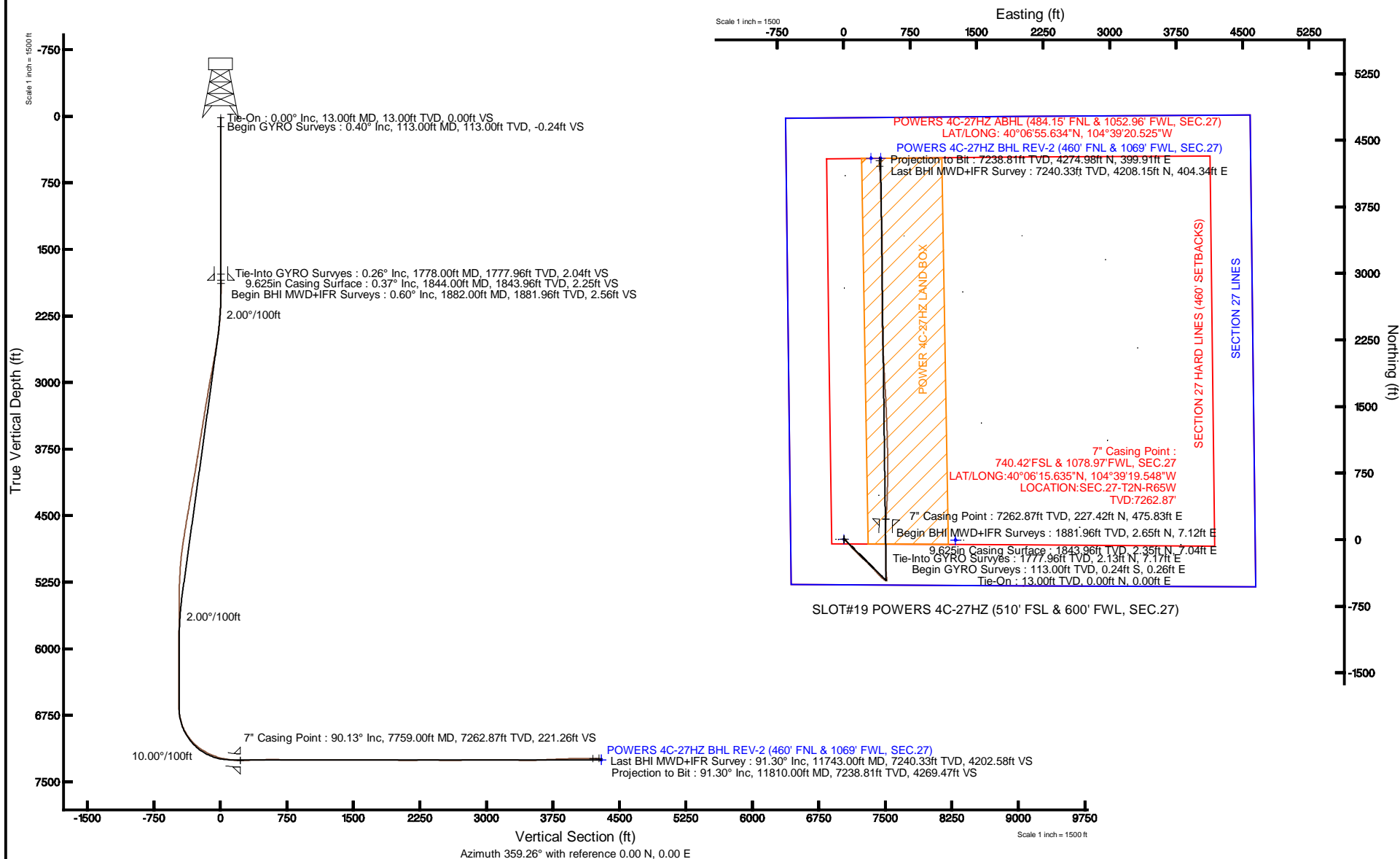


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#19 POWERS 4C-27HZ (510' FSL & 600' FWL, SEC.27)
 Field: WELD COUNTY (KERR MCGEE) Well: POWERS 4C-27HZ
 Facility: SEC.27-T2N-R65W Wellbore: POWERS 4C-27HZ PWB

Plot reference wellpath is POWERS 4C-27HZ (REV-D.0) PWP

True vertical depths are referenced to ENSIGN 138 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSIGN 138 (RKB)	North Reference: True north
ENSGIN 138 (RKB) to Mean Sea Level: 4948 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#19 POWERS 4C-27HZ (510' FSL & 600' FWL, SEC.27)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: preccain on 3/28/2013





Actual Wellpath Report

POWERS 4C-27HZ AWP

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 POWERS 4C-27HZ (510' FSL & 600' FWL, SEC.27)
Area	COLORADO	Well	POWERS 4C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 4C-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	Precain
Scale	0.99996	Report Generated	3/28/2013 at 2:14:34 PM
Convergence at slot	0.54° East	Database/Source file	WellArchitectDB/POWERS_4C-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	7.32	-1260.38	3235770.07	1281749.65	40°06'13.388"N	104°39'25.672"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	ENSIGN 138 (RKB) to Facility Vertical Datum	4948.00ft
Horizontal Reference Pt	Slot	ENSIGN 138 (RKB) to Mean Sea Level	4948.00ft
Vertical Reference Pt	ENSIGN 138 (RKB)	ENSIGN 138 (RKB) to Mud Line at Slot (SLOT#19 POWERS 4C-27HZ (510' FSL & 600' FWL, SEC.27))	4948.00ft
MD Reference Pt	ENSIGN 138 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.26°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 POWERS 4C-27HZ (510' FSL & 600' FWL, SEC.27)
Area	COLORADO	Well	POWERS 4C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 4C-27HZ AWB
Facility	SEC.27-T2N-R65W		

WELLPATH DATA (132 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	132.890	0.00	0.00	0.00	0.00	40°06'13.388"N	104°39'25.672"W	0.00	
13.00	0.000	132.890	13.00	0.00	0.00	0.00	40°06'13.388"N	104°39'25.672"W	0.00	Tie-On
113.00	0.400	132.890	113.00	-0.24	-0.24	0.26	40°06'13.386"N	104°39'25.669"W	0.40	Begin GYRO Surveys
213.00	0.780	113.420	212.99	-0.76	-0.75	1.14	40°06'13.381"N	104°39'25.657"W	0.42	
313.00	0.640	80.380	312.99	-0.95	-0.92	2.31	40°06'13.379"N	104°39'25.642"W	0.43	
413.00	0.500	54.760	412.98	-0.62	-0.58	3.22	40°06'13.382"N	104°39'25.631"W	0.29	
513.00	0.530	46.070	512.98	-0.06	-0.01	3.91	40°06'13.388"N	104°39'25.622"W	0.08	
613.00	0.510	71.610	612.97	0.40	0.46	4.66	40°06'13.393"N	104°39'25.612"W	0.23	
713.00	0.090	137.120	712.97	0.47	0.54	5.14	40°06'13.393"N	104°39'25.606"W	0.48	
813.00	0.380	2.540	812.97	0.75	0.81	5.21	40°06'13.396"N	104°39'25.605"W	0.45	
913.00	0.460	87.820	912.97	1.09	1.16	5.62	40°06'13.399"N	104°39'25.600"W	0.57	
1013.00	0.110	234.970	1012.97	1.04	1.12	5.95	40°06'13.399"N	104°39'25.595"W	0.56	
1113.00	0.380	37.400	1112.97	1.25	1.33	6.07	40°06'13.401"N	104°39'25.594"W	0.49	
1213.00	0.270	158.090	1212.97	1.29	1.37	6.36	40°06'13.402"N	104°39'25.590"W	0.57	
1313.00	0.310	3.780	1312.97	1.34	1.42	6.46	40°06'13.402"N	104°39'25.589"W	0.57	
1413.00	0.380	137.760	1412.97	1.36	1.45	6.70	40°06'13.402"N	104°39'25.586"W	0.64	
1513.00	0.420	359.680	1512.97	1.48	1.57	6.92	40°06'13.404"N	104°39'25.583"W	0.75	
1613.00	0.200	158.650	1612.96	1.68	1.77	6.99	40°06'13.406"N	104°39'25.582"W	0.61	
1713.00	0.400	28.040	1712.96	1.83	1.92	7.21	40°06'13.407"N	104°39'25.579"W	0.55	
1778.00	0.260	273.360	1777.96	2.04	2.13	7.17	40°06'13.409"N	104°39'25.580"W	0.86	Tie-Into GYRO Surveys
1882.00	0.600	19.900	1881.96	2.56	2.65	7.12	40°06'13.414"N	104°39'25.580"W	0.69	Begin BHI MWD+IFR Surveys
1977.00	1.200	116.200	1976.95	2.58	2.68	8.19	40°06'13.415"N	104°39'25.567"W	1.47	
2072.00	2.300	145.400	2071.91	0.54	0.67	10.16	40°06'13.395"N	104°39'25.541"W	1.46	
2166.00	4.200	135.500	2165.75	-3.51	-3.33	13.64	40°06'13.355"N	104°39'25.496"W	2.10	
2261.00	5.800	134.000	2260.39	-9.40	-9.15	19.54	40°06'13.298"N	104°39'25.421"W	1.69	
2357.00	7.500	139.100	2355.74	-17.60	-17.26	27.13	40°06'13.217"N	104°39'25.323"W	1.87	
2452.00	9.600	143.000	2449.68	-28.73	-28.27	35.96	40°06'13.109"N	104°39'25.209"W	2.29	
2548.00	11.600	140.600	2544.04	-42.72	-42.12	46.90	40°06'12.972"N	104°39'25.068"W	2.13	
2643.00	12.600	136.900	2636.93	-57.84	-57.07	60.04	40°06'12.824"N	104°39'24.899"W	1.33	
2737.00	13.500	136.800	2728.50	-73.51	-72.55	74.56	40°06'12.671"N	104°39'24.712"W	0.96	
2832.00	13.700	138.900	2820.84	-90.26	-89.12	89.55	40°06'12.507"N	104°39'24.520"W	0.56	
2927.00	14.500	135.600	2912.97	-107.44	-106.09	105.26	40°06'12.340"N	104°39'24.317"W	1.19	
3022.00	14.300	135.000	3004.99	-124.45	-122.88	121.88	40°06'12.174"N	104°39'24.104"W	0.26	
3116.00	13.900	134.500	3096.16	-140.78	-139.01	138.14	40°06'12.014"N	104°39'23.894"W	0.44	
3210.00	13.400	134.900	3187.50	-156.58	-154.61	153.91	40°06'11.860"N	104°39'23.691"W	0.54	
3305.00	13.100	133.500	3279.97	-171.96	-169.79	169.52	40°06'11.710"N	104°39'23.490"W	0.46	
3400.00	12.600	134.100	3372.59	-186.78	-184.41	184.77	40°06'11.566"N	104°39'23.294"W	0.54	
3495.00	12.600	135.300	3465.31	-201.54	-198.99	199.50	40°06'11.422"N	104°39'23.105"W	0.28	
3591.00	13.000	133.600	3558.92	-216.63	-213.88	214.68	40°06'11.274"N	104°39'22.909"W	0.57	
3686.00	13.100	132.400	3651.47	-231.46	-228.51	230.37	40°06'11.130"N	104°39'22.707"W	0.30	
3781.00	13.100	132.300	3744.00	-246.17	-243.01	246.28	40°06'10.987"N	104°39'22.503"W	0.02	
3876.00	13.300	133.600	3836.49	-261.15	-257.79	262.16	40°06'10.840"N	104°39'22.298"W	0.38	
3971.00	13.100	136.900	3928.98	-276.74	-273.19	277.43	40°06'10.688"N	104°39'22.102"W	0.82	
4065.00	13.000	136.800	4020.55	-292.42	-288.67	291.95	40°06'10.535"N	104°39'21.915"W	0.11	
4160.00	13.400	136.100	4113.04	-308.33	-304.40	306.89	40°06'10.380"N	104°39'21.723"W	0.45	



Actual Wellpath Report

POWERS 4C-27HZ AWP

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 POWERS 4C-27HZ (510' FSL & 600' FWL, SEC.27)
Area	COLORADO	Well	POWERS 4C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 4C-27HZ AWB
Facility	SEC.27-T2N-R65W		

WELLPATH DATA (132 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4255.00	14.300	134.600	4205.28	-324.70	-320.57	322.88	40°06'10.220"N	104°39'21.517"W	1.02	
4350.00	13.500	134.400	4297.49	-340.91	-336.56	339.16	40°06'10.062"N	104°39'21.307"W	0.84	
4446.00	12.600	137.000	4391.01	-356.60	-352.06	354.30	40°06'09.909"N	104°39'21.112"W	1.12	
4542.00	13.500	137.800	4484.53	-372.75	-368.02	368.97	40°06'09.751"N	104°39'20.924"W	0.96	
4636.00	12.900	135.100	4576.05	-388.50	-383.58	383.75	40°06'09.597"N	104°39'20.734"W	0.92	
4732.00	12.900	134.900	4669.63	-403.85	-398.74	398.90	40°06'09.448"N	104°39'20.539"W	0.05	
4827.00	12.400	134.400	4762.32	-418.66	-413.36	413.70	40°06'09.303"N	104°39'20.348"W	0.54	
4921.00	11.200	133.800	4854.33	-432.22	-426.74	427.50	40°06'09.171"N	104°39'20.170"W	1.28	
5016.00	9.100	131.400	4947.84	-443.73	-438.09	439.80	40°06'09.059"N	104°39'20.012"W	2.25	
5111.00	7.800	126.200	5041.81	-452.64	-446.87	450.64	40°06'08.972"N	104°39'19.873"W	1.59	
5206.00	6.000	124.100	5136.12	-459.35	-453.46	459.95	40°06'08.907"N	104°39'19.753"W	1.91	
5301.00	4.200	131.200	5230.74	-464.52	-458.54	466.68	40°06'08.857"N	104°39'19.666"W	2.00	
5395.00	2.300	135.800	5324.58	-468.19	-462.16	470.59	40°06'08.821"N	104°39'19.616"W	2.04	
5490.00	0.700	146.600	5419.55	-470.06	-464.01	472.24	40°06'08.803"N	104°39'19.595"W	1.70	
5585.00	0.400	114.600	5514.54	-470.69	-464.63	472.86	40°06'08.796"N	104°39'19.587"W	0.44	
5777.00	0.500	113.600	5706.54	-471.32	-465.24	474.23	40°06'08.790"N	104°39'19.569"W	0.05	
6157.00	0.700	101.600	6086.52	-472.50	-466.37	478.03	40°06'08.779"N	104°39'19.520"W	0.06	
6442.00	0.600	111.100	6371.50	-473.43	-467.26	481.12	40°06'08.770"N	104°39'19.480"W	0.05	
6673.00	0.100	94.900	6602.49	-473.90	-467.71	482.45	40°06'08.766"N	104°39'19.463"W	0.22	
6727.00	0.600	349.600	6656.49	-473.62	-467.44	482.45	40°06'08.769"N	104°39'19.463"W	1.17	
6773.00	5.100	6.700	6702.42	-471.36	-465.17	482.64	40°06'08.791"N	104°39'19.461"W	9.85	
6822.00	10.100	5.800	6750.98	-464.93	-458.73	483.33	40°06'08.855"N	104°39'19.452"W	10.21	
6868.00	12.800	357.200	6796.06	-455.82	-449.63	483.49	40°06'08.945"N	104°39'19.450"W	6.93	
6918.00	18.700	357.100	6844.16	-442.27	-436.08	482.82	40°06'09.079"N	104°39'19.459"W	11.80	
6964.00	22.700	355.900	6887.19	-426.03	-419.85	481.81	40°06'09.239"N	104°39'19.472"W	8.74	
7013.00	27.700	355.400	6931.51	-405.22	-399.06	480.22	40°06'09.444"N	104°39'19.492"W	10.21	
7060.00	31.300	354.400	6972.41	-382.14	-376.01	478.15	40°06'09.672"N	104°39'19.519"W	7.73	
7108.00	37.300	355.600	7012.04	-355.18	-349.07	475.81	40°06'09.938"N	104°39'19.549"W	12.58	
7155.00	42.700	359.500	7048.04	-325.01	-318.91	474.58	40°06'10.236"N	104°39'19.565"W	12.66	
7202.00	47.400	1.300	7081.24	-291.76	-285.66	474.83	40°06'10.565"N	104°39'19.561"W	10.36	
7249.00	51.600	1.000	7111.75	-256.05	-249.94	475.55	40°06'10.918"N	104°39'19.552"W	8.95	
7298.00	56.600	1.100	7140.48	-216.39	-210.27	476.28	40°06'11.310"N	104°39'19.543"W	10.21	
7345.00	60.800	359.700	7164.89	-176.25	-170.12	476.55	40°06'11.707"N	104°39'19.539"W	9.29	
7392.00	64.600	359.400	7186.44	-134.49	-128.36	476.22	40°06'12.119"N	104°39'19.544"W	8.10	
7439.00	67.600	359.300	7205.48	-91.53	-85.40	475.73	40°06'12.544"N	104°39'19.550"W	6.39	
7486.00	71.500	358.800	7221.90	-47.50	-41.38	475.00	40°06'12.979"N	104°39'19.559"W	8.36	
7533.00	76.100	357.600	7235.01	-2.39	3.72	473.57	40°06'13.425"N	104°39'19.578"W	10.09	
7582.00	80.400	357.900	7244.99	45.56	51.65	471.69	40°06'13.898"N	104°39'19.602"W	8.80	
7628.00	81.300	2.300	7252.30	90.96	97.05	471.77	40°06'14.347"N	104°39'19.601"W	9.64	
7652.00	82.400	2.400	7255.71	114.68	120.79	472.75	40°06'14.582"N	104°39'19.588"W	4.60	
7675.00	84.000	1.200	7258.43	137.49	143.61	473.46	40°06'14.807"N	104°39'19.579"W	8.67	
7696.00	85.300	0.900	7260.39	158.39	164.52	473.85	40°06'15.014"N	104°39'19.574"W	6.35	
7707.00	86.200	1.000	7261.20	169.36	175.49	474.03	40°06'15.122"N	104°39'19.572"W	8.23	
7711.00	86.500	1.400	7261.46	173.35	179.48	474.11	40°06'15.162"N	104°39'19.571"W	12.48	
7759.00†	90.134	2.703	7262.87	221.26	227.42	475.83	40°06'15.635"N	104°39'19.548"W	8.04	7" Casing Point



Actual Wellpath Report

POWERS 4C-27HZ AWP

Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 POWERS 4C-27HZ (510' FSL & 600' FWL, SEC.27)
Area	COLORADO	Well	POWERS 4C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 4C-27HZ AWB
Facility	SEC.27-T2N-R65W		

WELLPATH DATA (132 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7781.00	91.800	3.300	7262.50	243.21	249.38	476.98	40°06'15.852"N	104°39'19.534"W	8.04	
7889.00	92.000	3.500	7258.92	350.87	357.13	483.38	40°06'16.917"N	104°39'19.451"W	0.26	
7984.00	91.700	2.400	7255.85	445.62	451.96	488.27	40°06'17.854"N	104°39'19.388"W	1.20	
8080.00	90.700	1.800	7253.84	541.48	547.87	491.79	40°06'18.802"N	104°39'19.343"W	1.21	
8175.00	89.100	0.500	7254.00	636.42	642.84	493.69	40°06'19.741"N	104°39'19.318"W	2.17	
8269.00	88.600	0.300	7255.89	730.38	736.82	494.35	40°06'20.669"N	104°39'19.310"W	0.57	
8366.00	89.200	0.500	7257.75	827.35	833.80	495.03	40°06'21.628"N	104°39'19.301"W	0.65	
8460.00	90.400	359.200	7258.08	921.34	927.80	494.78	40°06'22.557"N	104°39'19.304"W	1.88	
8556.00	90.700	358.600	7257.16	1017.33	1023.77	492.94	40°06'23.505"N	104°39'19.328"W	0.70	
8652.00	90.300	358.700	7256.32	1113.32	1119.74	490.68	40°06'24.453"N	104°39'19.357"W	0.43	
8747.00	90.300	358.000	7255.82	1208.31	1214.70	487.94	40°06'25.392"N	104°39'19.392"W	0.74	
8936.00	89.900	357.800	7255.49	1397.25	1403.57	481.02	40°06'27.258"N	104°39'19.481"W	0.24	
9031.00	90.000	357.300	7255.58	1492.21	1498.49	476.95	40°06'28.196"N	104°39'19.534"W	0.54	
9125.00	90.400	357.000	7255.25	1586.15	1592.37	472.28	40°06'29.124"N	104°39'19.594"W	0.53	
9221.00	88.800	356.300	7255.92	1682.04	1688.20	466.67	40°06'30.071"N	104°39'19.666"W	1.82	
9316.00	89.900	356.800	7257.00	1776.93	1783.02	460.95	40°06'31.008"N	104°39'19.739"W	1.27	
9411.00	89.700	357.100	7257.33	1871.85	1877.88	455.90	40°06'31.945"N	104°39'19.805"W	0.38	
9506.00	88.500	357.000	7258.82	1966.76	1972.75	451.01	40°06'32.883"N	104°39'19.867"W	1.27	
9602.00	89.400	356.900	7260.58	2062.67	2068.59	445.90	40°06'33.830"N	104°39'19.933"W	0.94	
9697.00	90.600	357.400	7260.58	2157.60	2163.47	441.18	40°06'34.768"N	104°39'19.994"W	1.37	
9792.00	90.900	358.900	7259.34	2252.57	2258.41	438.11	40°06'35.706"N	104°39'20.033"W	1.61	
9886.00	90.200	358.400	7258.43	2346.56	2352.38	435.90	40°06'36.635"N	104°39'20.062"W	0.92	
9981.00	88.800	357.800	7259.26	2441.54	2447.32	432.75	40°06'37.573"N	104°39'20.102"W	1.60	
10076.00	89.700	359.500	7260.51	2536.52	2542.28	430.51	40°06'38.511"N	104°39'20.131"W	2.02	
10171.00	90.500	0.200	7260.34	2631.51	2637.28	430.26	40°06'39.450"N	104°39'20.134"W	1.12	
10266.00	90.200	0.200	7259.76	2726.50	2732.28	430.60	40°06'40.389"N	104°39'20.130"W	0.32	
10361.00	90.700	1.000	7259.01	2821.47	2827.27	431.59	40°06'41.327"N	104°39'20.117"W	0.99	
10457.00	90.700	0.400	7257.84	2917.43	2923.26	432.76	40°06'42.276"N	104°39'20.102"W	0.62	
10551.00	90.700	359.700	7256.69	3011.41	3017.25	432.85	40°06'43.205"N	104°39'20.101"W	0.74	
10648.00	89.400	0.900	7256.61	3108.39	3114.24	433.35	40°06'44.163"N	104°39'20.094"W	1.82	
10744.00	89.700	358.800	7257.36	3204.38	3210.23	433.10	40°06'45.112"N	104°39'20.098"W	2.21	
10841.00	88.900	1.700	7258.55	3301.35	3307.21	433.52	40°06'46.070"N	104°39'20.092"W	3.10	
10936.00	88.600	357.800	7260.62	3396.30	3402.17	433.11	40°06'47.009"N	104°39'20.097"W	4.12	
11032.00	90.300	356.700	7261.54	3492.23	3498.05	428.51	40°06'47.956"N	104°39'20.157"W	2.11	
11127.00	92.900	359.200	7258.89	3587.16	3592.94	425.11	40°06'48.894"N	104°39'20.200"W	3.80	
11222.00	92.800	358.800	7254.17	3682.04	3687.81	423.45	40°06'49.831"N	104°39'20.222"W	0.43	
11317.00	92.900	357.800	7249.44	3776.91	3782.65	420.64	40°06'50.769"N	104°39'20.258"W	1.06	
11411.00	91.900	357.400	7245.51	3870.78	3876.48	416.70	40°06'51.696"N	104°39'20.309"W	1.15	
11506.00	90.700	359.800	7243.35	3965.74	3971.42	414.38	40°06'52.634"N	104°39'20.338"W	2.82	
11601.00	90.400	357.500	7242.44	4060.73	4066.38	412.15	40°06'53.573"N	104°39'20.367"W	2.44	
11743.00	91.300	356.200	7240.33	4202.58	4208.15	404.34	40°06'54.973"N	104°39'20.468"W	1.11	Last BHI MWD+IFR Survey
11810.00	91.300	356.200	7238.81	4269.47	4274.98	399.91	40°06'55.634"N	104°39'20.525"W	0.00	Projection to Bit



Actual Wellpath Report

POWERS 4C-27HZ AWP

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 POWERS 4C-27HZ (510' FSL & 600' FWL, SEC.27)
Area	COLORADO	Well	POWERS 4C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 4C-27HZ AWB
Facility	SEC.27-T2N-R65W		

HOLE & CASING SECTIONS - Ref Wellbore: POWERS 4C-27HZ AWB Ref Wellpath: POWERS 4C-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	13.00	1844.00	1831.00	13.00	1843.96	0.00	0.00	2.35	7.04
9.625in Casing Surface	13.00	1844.00	1831.00	13.00	1843.96	0.00	0.00	2.35	7.04
8.75in Open Hole	1844.00	7766.00	5922.00	1843.96	7262.82	2.35	7.04	234.41	476.17
7in Casing Intermediate	13.00	7759.00	7746.00	13.00	7262.87	0.00	0.00	227.42	475.83
6.125in Open Hole	7766.00	11810.00	4044.00	7262.82	7238.81	234.41	476.17	4274.98	399.91

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 27 LINES		-18.00	-7.25	1260.23	3237030.25	1281754.37	40°06'13.316"N	104°39'09.454"W	polygon
POWER 4C-27HZ LAND BOX		7255.00	0.00	0.00	3235770.07	1281749.65	40°06'13.388"N	104°39'25.672"W	polygon
POWERS 4C-27HZ BHL ON PLAT REV-1 (460' FNL & 960' FWL, SEC.27)		7255.00	4300.49	306.57	3236035.74	1286052.68	40°06'55.886"N	104°39'21.726"W	point
POWERS 4C-27HZ BHL REV-2 (460' FNL & 1069' FWL, SEC.27)		7255.00	4300.49	415.57	3236144.73	1286053.71	40°06'55.886"N	104°39'20.323"W	point
SECTION 27 HARD LINES (460' SETBACKS)		7255.00	-7.25	1260.23	3237030.25	1281754.37	40°06'13.316"N	104°39'09.454"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: POWERS 4C-27HZ AWB Ref Wellpath: POWERS 4C-27HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	1778.00	Generic gyro - continuous (Standard)	MS SURVEYS GYRO <113-1778>	POWERS 4C-27HZ AWB
1778.00	7711.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1882-7711>	POWERS 4C-27HZ AWB
7711.00	11743.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7781-11743>	POWERS 4C-27HZ AWB
11743.00	11810.00	Blind Drilling (std)	Projection to bit	POWERS 4C-27HZ AWB



Actual Wellpath Report

POWERS 4C-27HZ AWP

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 POWERS 4C-27HZ (510' FSL & 600' FWL, SEC.27)
Area	COLORADO	Well	POWERS 4C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	POWERS 4C-27HZ AWB
Facility	SEC.27-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	132.890	13.00	Tie-On
113.00	0.400	132.890	113.00	Begin GYRO Surveys
1778.00	0.260	273.360	1777.96	Tie-Into GYRO Surveys
1882.00	0.600	19.900	1881.96	Begin BHI MWD+IFR Surveys
7759.00	90.134	2.703	7262.87	7" Casing Point
11743.00	91.300	356.200	7240.33	Last BHI MWD+IFR Survey
11810.00	91.300	356.200	7238.81	Projection to Bit