



Actual Wellpath Report

COOK 31-9 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#13 COOK 31-9 (2390'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 31-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 31-9 AWB
Facility	SEC.09-T2N-R65W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.1
North Reference	True	User	Cookdanm
Scale	0.999958	Report Generated	7/26/2011 at 4:54:09 PM
Convergence at slot	0.54° East	Database/Source file	WA_DENVER/COOK_31-9_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	2621.57	2177.84	3232300.20	1300017.32	40°09'14.234"N	104°40'08.123"W
Facility Reference Pt			3230146.88	1297375.76	40°08'48.329"N	104°40'36.170"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 15 (RKB) to Facility Vertical Datum	4887.00ft
Horizontal Reference Pt	Slot	XTREME 15 (RKB) to Mean Sea Level	4887.00ft
Vertical Reference Pt	XTREME 15 (RKB)	XTREME 15 (RKB) to Mud Line at Slot (SLOT#13 COOK 31-9 (2390'FNL & 2623'FWL))	4887.00ft
MD Reference Pt	XTREME 15 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	292.69°



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WELLPATH DATA (93 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	312.900	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	312.900	15.00	0.00	0.00	0.00	0.00	
153.00	0.500	312.900	153.00	0.57	0.41	-0.44	0.36	
245.00	1.700	285.100	244.98	2.29	1.04	-2.05	1.39	
339.00	4.700	282.700	338.82	7.47	2.25	-7.16	3.19	
430.00	6.700	286.200	429.37	16.42	4.55	-15.89	2.23	
520.00	9.100	283.000	518.51	28.65	7.62	-27.87	2.71	
607.00	10.300	281.600	604.26	43.07	10.73	-42.19	1.41	
683.00	11.800	280.200	678.85	57.32	13.47	-56.50	2.00	
759.00	11.900	278.800	753.23	72.52	16.05	-71.89	0.40	
852.00	12.300	284.400	844.17	91.63	19.98	-90.96	1.33	
945.00	14.900	279.500	934.56	113.08	24.41	-112.35	3.06	
1064.00	17.100	280.200	1048.94	145.06	30.04	-144.67	1.86	
1155.00	19.600	282.000	1135.31	173.12	35.58	-172.77	2.82	
1244.00	21.100	285.100	1218.75	203.67	42.86	-202.84	2.07	
1334.00	22.100	290.800	1302.44	236.66	53.09	-234.31	2.58	
1421.00	22.900	296.400	1382.83	269.91	66.43	-264.77	2.63	
1510.00	25.100	299.600	1464.13	305.94	83.46	-296.70	2.87	
1600.00	26.400	299.200	1545.19	344.77	102.65	-330.77	1.46	
1690.00	29.200	296.000	1624.80	386.57	122.04	-367.98	3.52	
1779.00	30.700	294.300	1701.91	430.96	140.91	-408.20	1.94	
1868.00	30.800	292.500	1778.40	476.46	158.98	-449.96	1.04	
1956.00	30.500	292.200	1854.11	521.32	176.04	-491.45	0.38	
2045.00	31.600	293.900	1930.36	567.22	194.02	-533.68	1.58	
2136.00	31.000	293.600	2008.11	614.49	213.06	-576.95	0.68	
2226.00	30.500	293.600	2085.46	660.50	231.48	-619.12	0.56	
2314.00	30.200	294.300	2161.40	704.95	249.53	-659.75	0.53	
2403.00	29.900	294.600	2238.44	749.50	267.98	-700.32	0.38	
2491.00	30.600	293.900	2314.45	793.81	286.18	-740.75	0.89	
2579.00	31.300	294.300	2389.92	839.05	304.66	-782.06	0.83	
2670.00	29.900	291.800	2468.25	885.36	322.81	-824.66	2.08	
2760.00	29.300	292.500	2546.51	929.82	339.57	-865.84	0.77	
2850.00	29.400	291.500	2624.96	973.92	356.10	-906.74	0.56	
2940.00	30.300	291.800	2703.01	1018.71	372.62	-948.37	1.01	
3029.00	31.000	292.200	2779.58	1064.08	389.62	-990.44	0.82	
3117.00	32.400	292.900	2854.45	1110.32	407.36	-1033.14	1.64	
3206.00	32.300	291.800	2929.64	1157.94	425.47	-1077.18	0.67	
3293.00	32.200	291.800	3003.22	1204.36	442.71	-1120.29	0.11	
3383.00	31.600	292.200	3079.62	1251.91	460.52	-1164.39	0.71	
3472.00	31.200	292.200	3155.59	1298.28	478.04	-1207.32	0.45	
3560.00	30.200	293.200	3231.26	1343.21	495.38	-1248.77	1.28	
3650.00	30.200	296.400	3309.05	1388.43	514.36	-1289.85	1.79	
3738.00	29.000	298.900	3385.56	1431.73	534.51	-1328.35	1.96	
3829.00	28.800	296.400	3465.23	1475.54	554.92	-1367.30	1.35	
3918.00	30.700	293.600	3542.50	1519.65	573.55	-1407.33	2.64	
4008.00	30.100	293.600	3620.13	1565.19	591.78	-1449.06	0.67	
4097.00	29.400	291.800	3697.40	1609.35	608.83	-1489.79	1.27	
4184.00	29.600	292.900	3773.12	1652.18	625.12	-1529.42	0.66	
4272.00	30.200	290.400	3849.41	1696.04	641.29	-1570.18	1.57	
4362.00	30.100	291.100	3927.24	1741.21	657.31	-1612.45	0.41	
4449.00	31.800	291.800	4001.85	1785.94	673.68	-1654.09	2.00	
4539.00	32.600	291.100	4078.00	1833.89	691.21	-1698.73	0.98	
4628.00	30.800	292.500	4153.72	1880.65	708.56	-1742.15	2.18	
4715.00	29.400	292.900	4228.99	1924.28	725.40	-1782.41	1.63	
4803.00	29.100	291.800	4305.77	1967.27	741.75	-1822.17	0.70	

4890.00	30.400	293.900	4381.30	2010.44	758.53	-1861.94	1.91	
4978.00	29.700	296.700	4457.48	2054.45	777.34	-1901.78	1.78	
5066.00	28.200	295.700	4534.48	2096.96	796.16	-1939.99	1.79	
5155.00	29.500	293.600	4612.43	2139.87	814.05	-1979.02	1.85	
5246.00	30.000	291.100	4691.44	2185.02	831.21	-2020.78	1.47	



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Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 31-9 AWB
Facility	SEC.09-T2N-R65W		

WELLPATH DATA (93 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5337.00	29.600	294.300	4770.41	2230.23	848.65	-2062.49	1.80	
5427.00	29.700	297.500	4848.64	2274.67	868.09	-2102.53	1.76	
5516.00	30.000	297.100	4925.83	2318.82	888.41	-2141.89	0.40	
5605.00	27.900	296.700	5003.70	2361.78	907.90	-2180.31	2.37	
5693.00	27.300	293.400	5081.69	2402.50	925.17	-2217.22	1.87	
5782.00	27.800	290.800	5160.60	2443.65	940.65	-2255.36	1.46	
5872.00	26.700	293.200	5240.62	2484.85	956.06	-2293.56	1.73	
5960.00	26.200	287.600	5319.42	2523.98	969.73	-2330.26	2.89	
6049.00	26.300	284.800	5399.24	2563.08	980.71	-2368.05	1.40	
6137.00	23.800	283.700	5478.96	2599.93	989.89	-2404.15	2.89	
6226.00	20.000	283.700	5561.52	2632.72	997.75	-2436.40	4.27	
6316.00	17.300	286.600	5646.79	2661.23	1005.22	-2464.18	3.17	
6407.00	16.300	288.700	5733.90	2687.42	1013.18	-2489.25	1.29	
6494.00	14.700	292.500	5817.74	2710.64	1021.32	-2511.01	2.18	
6584.00	12.100	292.900	5905.28	2731.50	1029.37	-2530.25	2.89	
6673.00	10.900	298.200	5992.50	2749.20	1036.97	-2546.26	1.80	
6763.00	7.700	308.000	6081.31	2763.49	1044.71	-2558.52	3.95	
6852.00	5.700	308.000	6169.69	2773.51	1051.10	-2566.70	2.25	
6939.00	3.700	291.800	6256.40	2780.48	1054.80	-2572.71	2.74	
7029.00	1.400	283.000	6346.31	2784.47	1056.13	-2576.48	2.58	
7119.00	1.500	250.300	6436.28	2786.43	1055.98	-2578.66	0.91	
7209.00	1.100	213.400	6526.26	2787.46	1054.86	-2580.24	1.01	
7297.00	1.300	178.300	6614.24	2787.20	1053.16	-2580.68	0.85	
7387.00	1.300	160.300	6704.22	2786.09	1051.18	-2580.30	0.45	
7477.00	1.100	151.900	6794.20	2784.73	1049.45	-2579.55	0.30	
7611.00	1.500	142.800	6928.16	2782.22	1046.92	-2577.89	0.34	
7743.00	1.600	124.100	7060.11	2778.92	1044.51	-2575.32	0.39	
7877.00	2.200	116.000	7194.04	2774.52	1042.34	-2571.46	0.49	
8012.00	1.500	102.700	7328.97	2770.19	1040.81	-2567.40	0.60	
8146.00	3.100	121.000	7462.86	2764.88	1038.56	-2562.59	1.30	
8279.00	2.400	119.900	7595.71	2758.56	1035.32	-2557.09	0.53	
8452.00	2.100	125.900	7768.57	2751.88	1031.65	-2551.38	0.22	LAST BHI MWD SURVEY
8502.00	2.100	125.900	7818.54	2750.09	1030.58	-2549.90	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: COOK 31-9 AWB Ref Wellpath: COOK 31-9 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]
12.25in Open Hole	15.00	738.00	723.00	15.00	732.68	0.00	0.00	15.37	-67.62
8.625in Casing Surface	15.00	728.00	713.00	15.00	722.90	0.00	0.00	15.04	-65.59
7.875in Open Hole	738.00	8502.00	7764.00	732.68	7818.54	15.37	-67.62	1030.58	-2549.90



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Facility	SEC.09-T2N-R65W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
COOK 31-9 GEO TARGET 50' RADIUS (1325'FNL & 50'FWL, REV-1)		6000.00	1072.95	-2566.87	3229723.49	1301066.12	40°09'24.836"N	104°40'41.182"W	circle
COOK 31-9 HARDLINE 50'W OF GEO TARGET		6000.00	1072.99	-2616.84	3229673.53	1301065.70	40°09'24.836"N	104°40'41.826"W	point

WELLPATH COMPOSITION - Ref Wellbore: COOK 31-9 AWB Ref Wellpath: COOK 31-9 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	8452.00	NaviTrak (Standard)	BHI MWD SURVEYS <153-8452>	COOK 31-9 AWB
8452.00	8502.00	Blind Drilling (std)	Projection to bit	COOK 31-9 AWB



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Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 31-9 AWB
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WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8452.00	2.100	125.900	7768.57	LAST BHI MWD SURVEY
8502.00	2.100	125.900	7818.54	PROJECTION TO BIT