

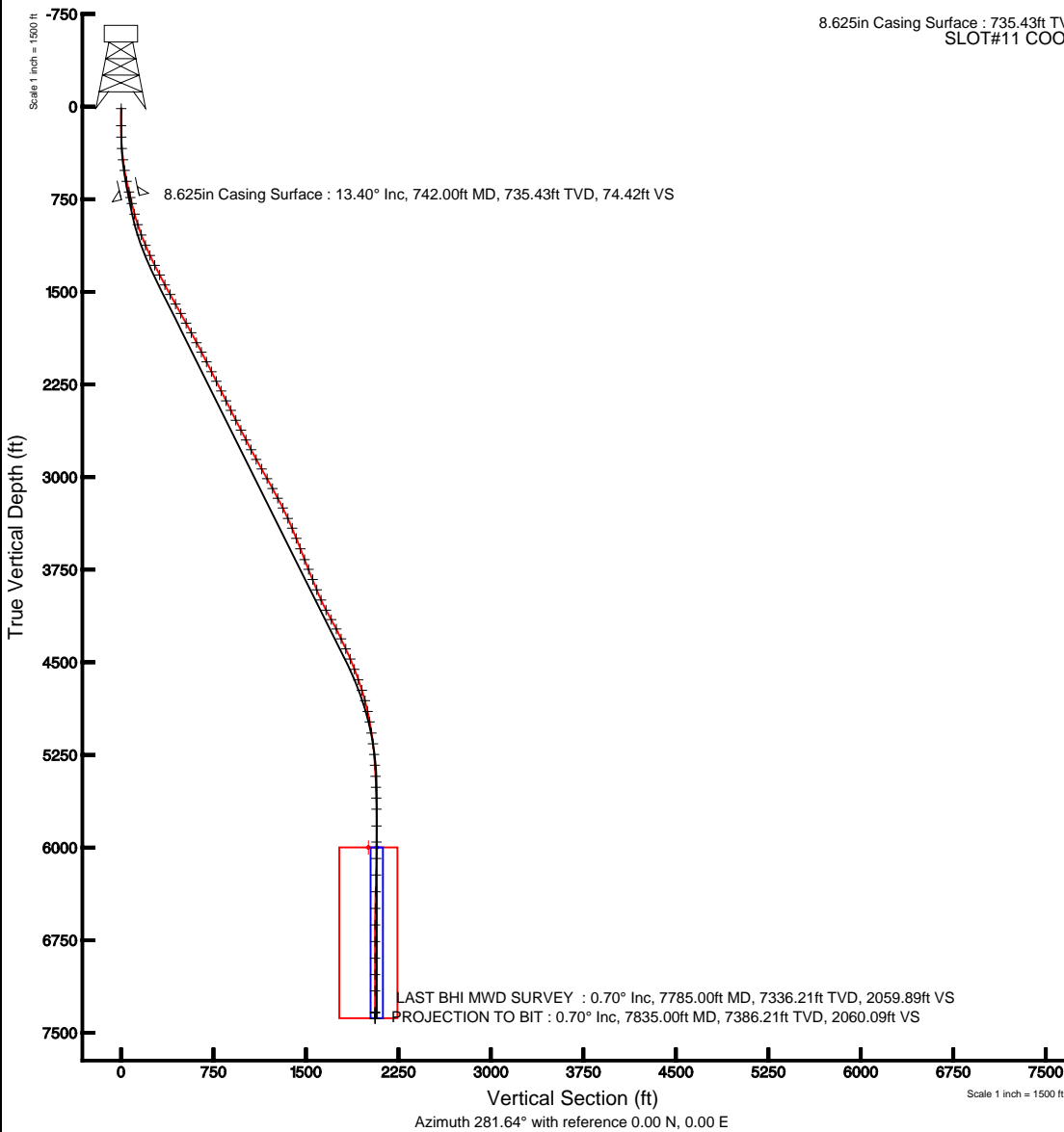
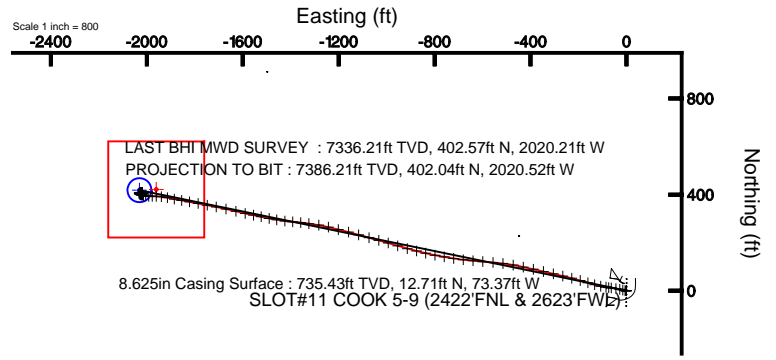


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#11 COOK 5-9 (2422'FNL & 2623'FWL)
 Field: WELD COUNTY (KERR MCGEE) Well: COOK 5-9
 Facility: SEC.09-T2N-R65W Wellbore: COOK 5-9 PWB



Plot reference wellbore is COOK 5-9 (REV. A.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to XTREME 15 (RKB)	North Reference: True north
Measured depths are referenced to XTREME 15 (RKB)	Scale: True distance
XTREME 15 (RKB) to Mean Sea Level: 4868 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot: SLOT#11 COOK 5-9 (2422'FNL & 2623'FWL)) 0 feet	Coordinates are in feet referenced to Slot
	Created by: cplkdam on 7/26/2011



BCGM (1945.0 to 2012.0) Dip: 66.88° Field: 53032.3 ft
 Magnetic North is 8.77 degrees East of True North (at 5/10/2011)
 To correct azimuth from Magnetic to True add 8.77 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the True North Azimuth = 90 + 8.77 = 98.77



Actual Wellpath Report

COOK 5-9 AWP

Page 1 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 COOK 5-9 (2422'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 5-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 5-9 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	Cookdannm
Scale	0.999958	Report Generated	7/26/2011 at 4:14:09 PM
Convergence at slot	0.54° East	Database/Source file	WA_DENVER/COOK_5-9_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	2589.51	2177.29	3232299.94	1299985.26	40°09'13.918"N	104°40'08.130"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	4888.00ft
Horizontal Reference Pt	Slot	XTREME 15 (RKB) to Mean Sea Level	4888.00ft
Vertical Reference Pt	XTREME 15 (RKB)	XTREME 15 (RKB) to Mud Line at Slot (SLOT#11 COOK 5-9 (2422'FNL & 2623'FWL))	4888.00ft
MD Reference Pt	XTREME 15 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	281.64°



Actual Wellpath Report

COOK 5-9 AWP

Page 2 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 COOK 5-9 (2422'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 5-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 5-9 AWB
Facility	SEC.09-T2N-R65W		

WELLPATH DATA (83 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	135.400	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	135.400	15.00	0.00	0.00	0.00	0.00	
153.00	0.700	135.400	153.00	-0.70	-0.60	0.59	0.51	
246.00	1.800	275.000	245.98	0.28	-0.88	-0.46	2.56	
338.00	4.500	282.700	337.84	5.32	0.04	-5.43	2.96	
430.00	7.500	284.400	429.32	14.93	2.33	-14.76	3.27	
517.00	9.800	282.700	515.33	28.01	5.37	-27.49	2.66	
607.00	11.500	278.800	603.77	44.63	8.43	-43.83	2.05	
696.00	13.400	278.100	690.68	63.78	11.24	-62.81	2.14	
792.00	13.400	277.400	784.06	85.98	14.24	-84.85	0.17	
881.00	16.000	282.300	870.15	108.53	18.18	-107.07	3.24	
970.00	17.800	285.500	955.30	134.37	24.43	-132.16	2.28	
1058.00	20.800	286.900	1038.35	163.36	32.57	-160.08	3.45	
1149.00	22.800	285.900	1122.84	197.03	42.09	-192.50	2.24	
1239.00	24.900	284.400	1205.15	233.35	51.59	-227.63	2.43	
1327.00	26.900	283.000	1284.30	271.76	60.67	-264.97	2.38	
1416.00	27.600	283.000	1363.43	312.50	69.84	-304.68	0.79	
1506.00	28.700	283.000	1442.78	354.95	79.39	-346.05	1.22	
1595.00	28.800	282.700	1520.81	397.75	88.91	-387.79	0.20	
1684.00	29.400	281.600	1598.57	441.03	98.02	-430.10	0.90	
1771.00	29.000	280.600	1674.52	483.47	106.19	-471.75	0.73	
1861.00	28.700	277.100	1753.35	526.83	112.87	-514.64	1.91	
1949.00	27.900	275.100	1830.84	568.35	117.32	-556.12	1.41	
2040.00	28.200	274.200	1911.15	610.82	120.78	-598.77	0.57	
2127.00	27.900	275.700	1987.93	651.45	124.31	-639.52	0.88	
2216.00	26.900	276.400	2066.94	692.21	128.62	-680.25	1.18	
2305.00	27.200	279.200	2146.21	732.59	134.12	-720.34	1.47	
2392.00	26.800	279.500	2223.73	772.05	140.54	-759.31	0.49	
2480.00	26.200	280.600	2302.48	811.30	147.38	-797.97	0.88	
2569.00	27.000	284.400	2382.07	851.13	156.02	-836.86	2.11	
2656.00	26.600	282.700	2459.72	890.33	165.22	-874.99	0.99	
2745.00	26.800	284.800	2539.24	930.28	174.72	-913.82	1.08	
2836.00	27.800	287.300	2620.10	971.89	186.27	-953.92	1.67	
2925.00	27.400	287.300	2698.97	1012.92	198.54	-993.29	0.45	
3014.00	27.200	283.700	2778.07	1053.63	209.44	-1032.61	1.87	
3103.00	29.400	285.900	2856.43	1095.75	220.25	-1073.38	2.74	
3193.00	30.100	285.100	2934.56	1140.30	232.18	-1116.42	0.89	
3283.00	28.500	285.100	3013.05	1184.27	243.65	-1158.94	1.78	
3374.00	28.700	283.000	3092.95	1227.78	254.22	-1201.19	1.13	
3463.00	28.600	284.400	3171.05	1270.42	264.33	-1242.65	0.76	
3552.00	26.800	279.200	3249.86	1311.76	272.84	-1283.10	3.38	
3647.00	25.100	277.100	3335.28	1353.24	278.75	-1324.24	2.03	
3732.00	22.400	277.400	3413.07	1387.37	283.07	-1358.19	3.18	
3822.00	21.800	274.100	3496.46	1421.04	286.47	-1391.87	1.53	
3912.00	20.600	277.200	3580.37	1453.40	289.65	-1424.25	1.82	
4007.00	21.900	279.800	3668.92	1487.77	294.76	-1458.29	1.69	
4092.00	22.600	281.300	3747.59	1519.95	300.66	-1489.93	1.06	
4181.00	22.100	282.700	3829.90	1553.79	307.69	-1523.03	0.82	
4270.00	21.300	279.900	3912.60	1586.69	314.15	-1555.29	1.47	
4360.00	24.400	283.100	3995.53	1621.62	321.18	-1589.51	3.71	
4451.00	27.700	283.700	4077.27	1661.56	330.45	-1628.37	3.64	
4539.00	30.100	282.000	4154.31	1704.07	339.88	-1669.83	2.88	
4626.00	26.800	281.600	4230.79	1745.51	348.36	-1710.40	3.80	
4714.00	25.000	280.900	4309.95	1783.94	355.87	-1748.09	2.07	
4804.00	25.300	280.200	4391.42	1822.19	362.87	-1785.69	0.47	

4894.00	22.800	280.900	4473.60	1858.85	369.57	-1821.75	2.80
4984.00	20.700	279.500	4557.18	1892.19	375.50	-1854.57	2.40
5074.00	19.900	281.600	4641.60	1923.40	381.20	-1885.26	1.20
5164.00	18.500	280.900	4726.59	1953.00	386.98	-1914.29	1.58
5252.00	15.300	276.400	4810.78	1978.53	390.92	-1939.54	3.93



Actual Wellpath Report

COOK 5-9 AWP

Page 3 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 COOK 5-9 (2422'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 5-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 5-9 AWB
Facility	SEC.09-T2N-R65W		

WELLPATH DATA (83 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5342.00	12.100	272.100	4898.21	1999.66	392.59	-1960.78	3.73	
5429.00	10.100	269.300	4983.58	2016.11	392.83	-1977.52	2.38	
5519.00	8.800	270.700	5072.36	2030.58	392.82	-1992.29	1.47	
5608.00	7.600	276.400	5160.45	2043.12	393.56	-2004.95	1.63	
5695.00	4.700	282.300	5246.94	2052.42	394.96	-2014.15	3.41	
5782.00	3.700	290.100	5333.70	2058.76	396.68	-2020.27	1.32	
5872.00	2.800	296.000	5423.56	2063.76	398.64	-2024.97	1.07	
5961.00	2.100	303.400	5512.47	2067.38	400.49	-2028.29	0.86	
6048.00	1.400	324.900	5599.43	2069.64	402.24	-2030.23	1.09	
6138.00	1.100	334.000	5689.41	2070.96	403.92	-2031.24	0.40	
6274.00	0.700	7.400	5825.40	2071.82	405.91	-2031.71	0.47	
6404.00	0.700	47.500	5955.39	2071.42	407.24	-2031.02	0.37	
6538.00	0.900	67.900	6089.38	2070.06	408.19	-2029.44	0.26	
6672.00	1.100	86.500	6223.36	2067.94	408.66	-2027.18	0.28	
6808.00	1.300	89.000	6359.33	2065.18	408.77	-2024.34	0.15	
6942.00	1.700	82.600	6493.28	2061.82	409.05	-2020.85	0.32	
7076.00	0.400	69.300	6627.25	2059.54	409.47	-2018.44	0.98	
7211.00	0.600	213.800	6762.25	2059.41	409.05	-2018.39	0.71	
7346.00	0.900	197.300	6897.24	2059.78	407.45	-2019.10	0.27	
7478.00	0.600	182.800	7029.23	2059.78	405.77	-2019.44	0.27	
7610.00	0.600	187.100	7161.22	2059.62	404.40	-2019.56	0.03	
7785.00	0.700	210.500	7336.21	2059.89	402.57	-2020.21	0.16	LAST BHI MWD SURVEY
7835.00	0.700	210.500	7386.21	2060.09	402.04	-2020.52	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: COOK 5-9 AWB Ref Wellpath: COOK 5-9 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	752.00	737.00	15.00	745.15	0.00	0.00	13.02	-75.66
8.625in Casing Surface	15.00	742.00	727.00	15.00	735.43	0.00	0.00	12.71	-73.37
7.875in Open Hole	742.00	7835.00	7093.00	735.43	7386.21	12.71	-73.37	402.04	-2020.52

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
COOK 5-9 GEO TARGET 50' RADIUS (2010'FNL & 590'FWL, REV-1)		6000.00	418.26	-2030.78	3230265.42	1300384.45	40°09'18.050"N	104°40'34.284"W	circle
COOK 5-9 LEGAL BOX (197'S,203'N,130'W, 270'E OF GEO TARGET)		6000.00	421.30	-1960.78	3230335.38	1300388.15	40°09'18.080"N	104°40'33.383"W	square

WELLPATH COMPOSITION - Ref Wellbore: COOK 5-9 AWB Ref Wellpath: COOK 5-9 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	7785.00	NaviTrak (Standard)	BHI MWD SURVEYS <153-7785>	COOK 5-9 AWB
7785.00	7835.00	Blind Drilling (std)	Projection to bit	COOK 5-9 AWB



Actual Wellpath Report

COOK 5-9 AWP

Page 4 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 COOK 5-9 (2422'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 5-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 5-9 AWB
Facility	SEC.09-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7785.00	0.700	210.500	7336.21	LAST BHI MWD SURVEY
7835.00	0.700	210.500	7386.21	PROJECTION TO BIT