

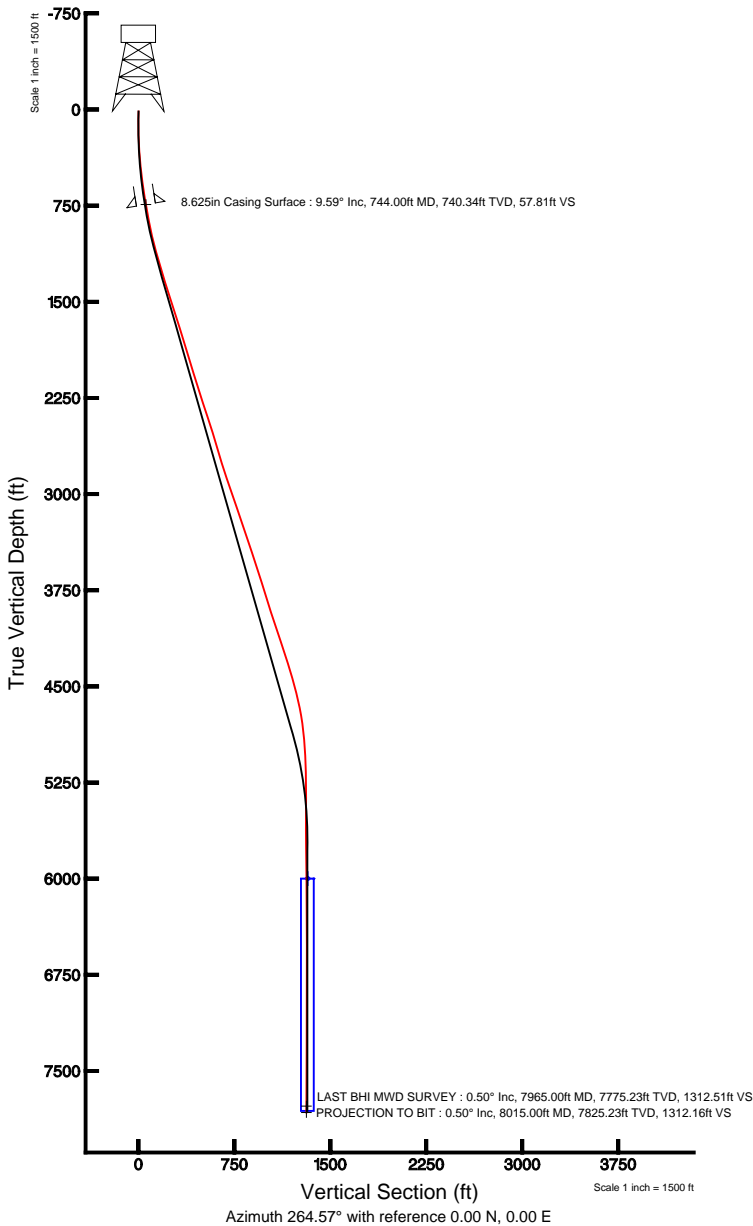
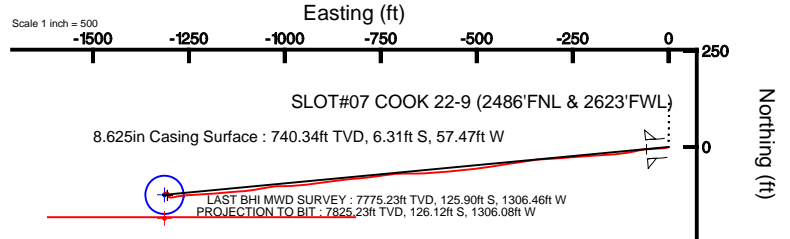


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#07 COOK 22-9 (2486'FNL & 2623'FWL)
 Field: WELD COUNTY (KERR MCGEE) Well: COOK 22-9
 Facility: SEC.09-T2N-R65W Wellbore: COOK 22-9 PWB



Plot reference wellbore is COOK 22-9 (REV. A.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (901), 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: 4888 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#07 COOK 22-9 (2486'FNL & 2623'FWL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdam on 7/26/2011



BGGM (1945.0 to 2012.0) Dip: 66.88° Field: 53032.3 nT
 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 22-9 AWP

Page 1 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 COOK 22-9 (2486'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 22-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 22-9 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 3:31:03 PM
Convergence at slot	0.54° East	Database/Source file	WA_DENVER/COOK_22-9_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	2525.40	2176.73	3232299.98	1299921.15	40°09'13.284"N	104°40'08.137"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#07 COOK 22-9 (2486'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	264.57°



Actual Wellpath Report

COOK 22-9 AWP

Page 2 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 COOK 22-9 (2486'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 22-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 22-9 AWB
Facility	SEC.09-T2N-R65W		

WELLPATH DATA (82 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	170.200	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	170.200	15.00	0.00	0.00	0.00	0.00	
153.00	0.100	170.200	153.00	-0.01	-0.12	0.02	0.07	
246.00	1.800	236.400	245.98	1.27	-1.01	-1.18	1.89	
338.00	4.200	261.200	337.85	5.91	-2.32	-5.72	2.91	
428.00	5.800	263.400	427.51	13.75	-3.35	-13.49	1.79	
517.00	7.000	265.800	515.95	23.67	-4.26	-23.37	1.38	
604.00	8.500	267.900	602.16	35.39	-4.89	-35.08	1.75	
699.00	9.600	266.200	695.97	50.31	-5.67	-50.00	1.19	
792.00	9.600	261.600	787.67	65.81	-7.32	-65.41	0.82	
881.00	11.100	259.100	875.22	81.75	-10.02	-81.17	1.76	
970.00	12.500	258.800	962.34	99.86	-13.51	-99.03	1.57	
1057.00	14.500	261.600	1046.93	120.11	-16.93	-119.04	2.42	
1147.00	16.300	265.500	1133.70	143.99	-19.57	-142.78	2.31	
1237.00	16.300	265.800	1220.08	169.25	-21.48	-167.97	0.09	
1325.00	17.100	267.600	1304.37	194.51	-22.93	-193.21	1.08	
1416.00	17.500	266.200	1391.25	221.55	-24.40	-220.23	0.63	
1506.00	17.300	264.800	1477.13	248.46	-26.51	-247.06	0.52	
1595.00	16.900	265.500	1562.20	274.63	-28.72	-273.13	0.51	
1683.00	19.000	267.100	1645.91	301.73	-30.45	-300.20	2.45	
1773.00	18.300	266.500	1731.19	330.49	-32.05	-328.93	0.81	
1862.00	17.000	260.900	1816.00	357.44	-34.97	-355.73	2.40	
1951.00	16.400	261.600	1901.25	382.97	-38.86	-381.00	0.71	
2038.00	17.000	260.900	1984.58	407.93	-42.66	-405.71	0.73	
2128.00	17.000	262.600	2070.65	434.21	-46.44	-431.75	0.55	
2217.00	17.600	261.200	2155.62	460.64	-50.17	-457.95	0.82	
2306.00	18.400	260.900	2240.26	488.09	-54.45	-485.12	0.90	
2396.00	17.800	262.600	2325.81	516.02	-58.47	-512.78	0.89	
2484.00	18.400	265.600	2409.46	543.35	-61.27	-539.97	1.26	
2575.00	17.300	265.500	2496.07	571.24	-63.43	-567.78	1.21	
2662.00	17.000	265.500	2579.21	596.89	-65.45	-593.36	0.34	
2750.00	16.900	265.100	2663.38	622.54	-67.55	-618.93	0.17	
2838.00	16.100	267.200	2747.76	647.52	-69.24	-643.86	1.13	
2927.00	18.500	271.800	2832.73	673.86	-69.40	-670.30	3.10	
3017.00	19.200	266.900	2917.91	702.81	-69.75	-699.35	1.92	
3106.00	18.700	263.000	3002.09	731.70	-72.28	-728.13	1.53	
3196.00	19.300	261.600	3087.18	760.98	-76.21	-757.16	0.84	
3286.00	19.500	263.700	3172.08	790.85	-80.03	-786.81	0.81	
3373.00	19.000	266.500	3254.21	819.52	-82.49	-815.38	1.21	
3463.00	18.800	263.000	3339.36	848.66	-85.15	-844.39	1.28	
3553.00	17.900	261.600	3424.79	876.97	-88.94	-872.47	1.11	
3642.00	17.900	261.900	3509.48	904.29	-92.86	-899.54	0.10	
3733.00	17.600	262.300	3596.15	932.01	-96.68	-927.02	0.36	
3822.00	17.800	265.100	3680.93	959.06	-99.64	-953.91	0.98	
3911.00	17.800	268.300	3765.68	986.24	-101.21	-981.06	1.10	
4000.00	17.300	269.000	3850.53	1013.01	-101.84	-1007.89	0.61	
4091.00	17.600	262.300	3937.35	1040.25	-103.92	-1035.06	2.23	
4180.00	17.800	257.400	4022.15	1067.19	-108.69	-1061.67	1.69	
4271.00	20.100	263.700	4108.22	1096.63	-113.44	-1090.79	3.38	
4361.00	19.600	265.800	4192.87	1127.19	-116.25	-1121.22	0.97	
4451.00	17.000	265.100	4278.31	1155.44	-118.48	-1149.39	2.90	
4539.00	16.600	264.400	4362.56	1180.87	-120.80	-1174.71	0.51	
4629.00	15.500	267.200	4449.05	1205.74	-122.64	-1199.52	1.49	
4719.00	13.900	266.900	4536.10	1228.56	-123.82	-1222.33	1.78	
4808.00	12.400	266.200	4622.76	1248.79	-125.03	-1242.54	1.69	

4897.00	11.600	264.400	4709.82	1267.29	-126.53	-1260.98	0.99
4985.00	8.400	261.600	4796.47	1282.56	-128.34	-1276.15	3.68
5074.00	4.600	253.900	4884.88	1292.57	-130.28	-1286.01	4.37
5164.00	3.800	264.400	4974.64	1299.10	-131.57	-1292.45	1.23
5254.00	2.900	271.400	5064.49	1304.34	-131.80	-1297.69	1.10



Actual Wellpath Report

COOK 22-9 AWP

Page 3 of 4



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 COOK 22-9 (2486'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 22-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 22-9 AWP
Facility	SEC.09-T2N-R65W		

WELLPATH DATA (82 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5344.00	1.200	297.500	5154.43	1307.39	-131.31	-1300.80	2.11	
5479.00	0.900	338.600	5289.41	1308.87	-129.67	-1302.44	0.58	
5611.00	1.100	340.700	5421.39	1309.46	-127.51	-1303.24	0.15	
5747.00	1.400	350.900	5557.35	1309.88	-124.64	-1303.93	0.27	
5881.00	1.500	356.200	5691.31	1309.93	-121.27	-1304.31	0.12	
6015.00	1.000	292.200	5825.29	1310.92	-119.08	-1305.51	1.04	
6149.00	0.400	264.100	5959.28	1312.42	-118.69	-1307.06	0.50	
6283.00	0.400	257.400	6093.27	1313.35	-118.84	-1307.98	0.03	
6416.00	0.600	235.200	6226.27	1314.42	-119.34	-1309.00	0.21	
6550.00	0.400	239.800	6360.26	1315.46	-119.97	-1309.98	0.15	
6684.00	0.400	217.300	6494.26	1316.20	-120.58	-1310.67	0.12	
6817.00	0.200	146.300	6627.26	1316.40	-121.14	-1310.82	0.29	
6950.00	0.400	127.300	6760.26	1315.95	-121.62	-1310.33	0.17	
7083.00	0.200	197.400	6893.25	1315.70	-122.12	-1310.03	0.29	
7217.00	0.400	148.000	7027.25	1315.58	-122.74	-1309.85	0.23	
7351.00	0.500	134.000	7161.25	1315.00	-123.54	-1309.18	0.11	
7484.00	0.500	130.100	7294.24	1314.21	-124.32	-1308.32	0.03	
7616.00	0.400	144.200	7426.24	1313.57	-125.06	-1307.61	0.11	
7749.00	0.200	234.900	7559.24	1313.54	-125.57	-1307.53	0.34	
7881.00	0.500	90.400	7691.24	1313.17	-125.71	-1307.14	0.51	
7965.00	0.500	120.600	7775.23	1312.51	-125.90	-1306.46	0.31	LAST BHI MWD SURVEY
8015.00	0.500	120.600	7825.23	1312.16	-126.12	-1306.08	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: COOK 22-9 AWP Ref Wellpath: COOK 22-9 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	754.00	739.00	15.00	750.20	0.00	0.00	-6.49	-59.13
8.625in Casing Surface	15.00	744.00	729.00	15.00	740.34	0.00	0.00	-6.31	-57.47
7.875in Open Hole	754.00	8015.00	7261.00	750.20	7825.23	-6.49	-59.13	-126.12	-1306.08

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
COOK 22-9 GEO TARGET 50' RADIUS (2615'FNL & 1310'FWL, REV-1)		6000.00	-124.94	-1313.80	3230987.46	1299783.91	40°09'12.049"N	104°40'25.057"W	circle
COOK 22-9 HARDLINE 61'S OF GEO TARGET		6000.00	-185.92	-1313.82	3230988.02	1299722.93	40°09'11.446"N	104°40'25.057"W	point

WELLPATH COMPOSITION - Ref Wellbore: COOK 22-9 AWP Ref Wellpath: COOK 22-9 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	7965.00	NaviTrak (Standard)	BHI MWD SURVEY <153-7965>	COOK 22-9 AWP
7965.00	8015.00	Blind Drilling (std)	Projection to bit	COOK 22-9 AWP



Actual Wellpath Report

COOK 22-9 AWP

Page 4 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 COOK 22-9 (2486'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 22-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 22-9 AWB
Facility	SEC.09-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7965.00	0.500	120.600	7775.23	LAST BHI MWD SURVEY
8015.00	0.500	120.600	7825.23	PROJECTION TO BIT