



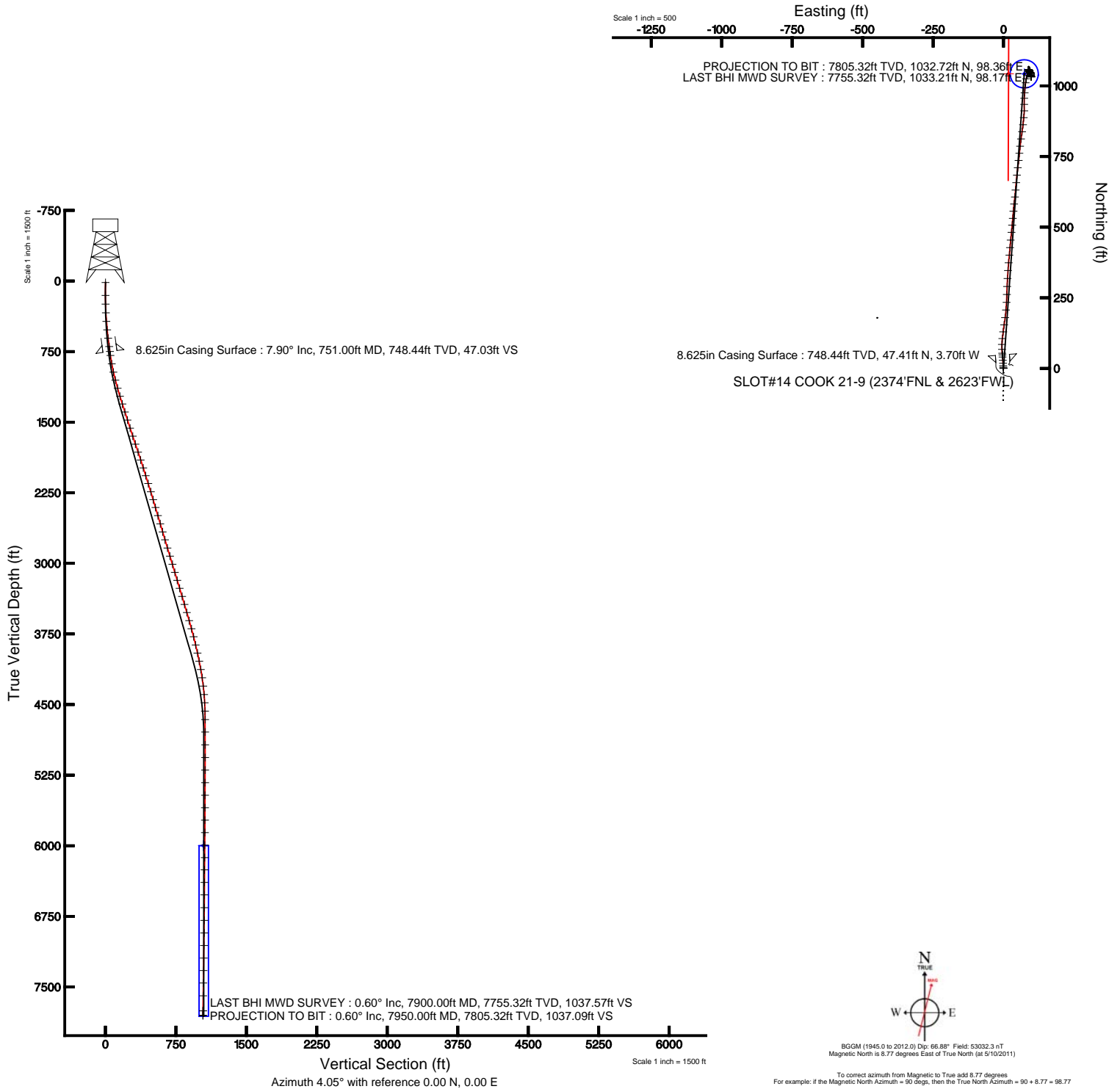
# KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#14 COOK 21-9 (2374'FNL & 2623'FWL)  
Field: WELD COUNTY (KERR MCGEE) Well: COOK 21-9  
Facility: SEC.09-T2N-R65W Wellbore: COOK 21-9 PWB



Plot reference wellpath is COOK 21-9 (REV-A.0) PWP

True vertical depths are referenced to XTREME 15 (RXB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 15 (RXB)	North Reference: True north
XTREME 15 (RXB) to Mean Sea Level: 4867 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#14 COOK 21-9 (2374'FNL & 2623'FWL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookidm on 7/26/2011





# Actual Wellpath Report

COOK 21-9 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 COOK 21-9 (2374'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 21-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 21-9 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 4:27:16 PM
Convergence at slot	0.54° East	Database/Source file	WA_DENVER/COOK_21-9_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	2637.60	2177.84	3232300.05	1300033.35	40°09'14.393"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#14 COOK 21-9 (2374'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	4.05°



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Area	COLORADO	Well	COOK 21-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 21-9 AWB
Facility	SEC.09-T2N-R65W		

## WELLPATH DATA (79 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	220.100	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	220.100	15.00	0.00	0.00	0.00	0.00	
153.00	0.200	220.100	153.00	-0.19	-0.18	-0.16	0.14	
245.00	1.200	2.100	244.99	0.64	0.66	-0.22	1.48	
338.00	2.600	352.300	337.94	3.68	3.72	-0.47	1.54	
429.00	4.500	355.800	428.76	9.23	9.33	-1.01	2.10	
519.00	6.400	355.800	518.35	17.69	17.85	-1.63	2.11	
609.00	7.200	356.500	607.72	28.25	28.48	-2.35	0.89	
698.00	7.900	355.800	695.94	39.83	40.15	-3.13	0.79	
793.00	7.900	354.800	790.04	52.73	53.16	-4.20	0.14	
883.00	9.700	357.200	878.98	66.37	66.90	-5.14	2.04	
974.00	12.600	0.000	968.25	83.88	84.48	-5.51	3.24	
1061.00	15.100	7.400	1052.72	104.67	105.21	-4.05	3.52	
1150.00	16.300	7.400	1138.40	128.71	129.10	-0.95	1.35	
1239.00	16.500	8.100	1223.78	153.78	153.99	2.44	0.32	
1326.00	17.900	7.100	1306.89	179.46	179.50	5.83	1.64	
1415.00	17.600	5.700	1391.65	206.57	206.46	8.86	0.59	
1505.00	17.700	2.800	1477.42	233.85	233.66	10.88	0.98	
1595.00	18.300	1.800	1563.01	261.64	261.45	11.99	0.75	
1685.00	18.400	2.100	1648.44	289.96	289.77	12.96	0.15	
1774.00	18.700	3.500	1732.81	318.26	318.05	14.34	0.60	
1864.00	18.100	3.200	1818.21	346.67	346.40	16.00	0.67	
1952.00	18.300	6.000	1901.81	374.15	373.79	18.21	1.02	
2040.00	18.000	5.300	1985.43	401.55	401.07	20.91	0.42	
2127.00	17.800	4.600	2068.22	428.28	427.71	23.22	0.34	
2215.00	17.600	6.000	2152.05	455.03	454.35	25.69	0.53	
2306.00	17.500	6.000	2238.82	482.46	481.64	28.56	0.11	
2394.00	16.200	4.200	2323.04	507.96	507.04	30.84	1.59	
2481.00	16.300	6.000	2406.56	532.29	531.29	33.01	0.59	
2571.00	16.800	4.600	2492.84	557.92	556.81	35.37	0.71	
2661.00	15.700	5.700	2579.24	583.10	581.90	37.62	1.27	
2751.00	16.800	7.400	2665.64	608.26	606.91	40.51	1.33	
2839.00	16.200	3.900	2750.02	633.23	631.77	42.98	1.32	
2930.00	17.100	5.300	2837.21	659.30	657.76	45.08	1.08	
3020.00	17.600	5.700	2923.11	686.13	684.47	47.65	0.57	
3110.00	16.700	7.100	3009.11	712.64	710.85	50.60	1.10	
3200.00	16.700	7.100	3095.31	738.47	736.51	53.80	0.00	
3289.00	16.500	5.000	3180.60	763.88	761.79	56.48	0.71	
3377.00	16.800	6.000	3264.91	789.08	786.89	58.90	0.47	
3467.00	17.100	8.500	3351.01	815.27	812.91	62.21	0.88	
3556.00	16.300	9.200	3436.25	840.76	838.18	66.15	0.93	
3646.00	16.200	5.300	3522.66	865.89	863.15	69.32	1.22	
3736.00	16.300	6.400	3609.06	891.06	888.20	71.89	0.36	
3825.00	15.300	2.100	3694.70	915.28	912.35	73.71	1.73	
3913.00	14.700	357.200	3779.71	937.97	935.10	73.59	1.59	
4003.00	13.200	3.200	3867.05	959.58	956.77	73.61	2.31	
4092.00	12.400	4.600	3953.84	979.30	976.44	74.94	0.96	
4180.00	11.700	6.000	4039.90	997.66	994.74	76.63	0.86	
4270.00	10.400	6.700	4128.23	1014.90	1011.88	78.54	1.45	
4358.00	8.400	13.000	4215.05	1029.18	1026.03	80.91	2.55	
4448.00	6.900	10.900	4304.24	1041.05	1037.75	83.41	1.70	
4538.00	4.400	16.900	4393.80	1049.78	1046.36	85.44	2.85	
4626.00	2.900	2.100	4481.62	1055.30	1051.82	86.50	2.00	
4715.00	1.800	15.500	4570.55	1058.92	1055.41	86.96	1.37	
4804.00	0.600	58.700	4659.53	1060.56	1057.00	87.73	1.60	

4937.00	0.500	76.000	4792.52	1061.14	1057.50	88.89	0.14	
5073.00	0.300	103.000	4928.52	1061.27	1057.57	89.81	0.20	
5208.00	0.300	245.100	5063.52	1061.04	1057.34	89.83	0.42	
5341.00	0.300	140.100	5196.52	1060.62	1056.93	89.74	0.36	
5475.00	0.500	111.800	5330.51	1060.19	1056.44	90.51	0.21	



# Actual Wellpath Report

COOK 21-9 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 COOK 21-9 (2374'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 21-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 21-9 AWB
Facility	SEC.09-T2N-R65W		

## WELLPATH DATA (79 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5609.00	0.500	117.800	5464.51	1059.78	1055.95	91.57	0.04	
5741.00	0.500	130.500	5596.50	1059.20	1055.31	92.51	0.08	
5873.00	0.500	278.100	5728.50	1058.90	1055.01	92.38	0.73	
6005.00	0.400	182.500	5860.50	1058.48	1054.63	91.79	0.51	
6139.00	0.700	126.900	5994.49	1057.57	1053.68	92.43	0.43	
6271.00	1.000	191.300	6126.48	1055.99	1052.06	92.85	0.71	
6402.00	0.900	174.800	6257.46	1053.84	1049.92	92.71	0.22	
6535.00	0.700	144.500	6390.45	1052.18	1048.21	93.28	0.35	
6668.00	0.500	96.400	6523.44	1051.53	1047.49	94.33	0.39	
6804.00	0.500	97.800	6659.44	1051.47	1047.34	95.51	0.01	
6938.00	0.400	116.700	6793.43	1051.25	1047.05	96.50	0.13	
7072.00	0.600	161.000	6927.43	1050.43	1046.18	97.15	0.31	
7205.00	0.900	182.800	7060.42	1048.74	1044.48	97.33	0.31	
7339.00	1.400	169.100	7194.39	1046.11	1041.82	97.58	0.42	
7472.00	1.100	186.000	7327.36	1043.26	1038.95	97.76	0.36	
7604.00	0.700	177.200	7459.34	1041.19	1036.89	97.67	0.32	
7740.00	0.800	175.100	7595.33	1039.43	1035.11	97.79	0.08	
7900.00	0.600	159.600	7755.32	1037.57	1033.21	98.17	0.17	LAST BHI MWD SURVEY
7950.00	0.600	159.600	7805.32	1037.09	1032.72	98.36	0.00	PROJECTION TO BIT

## HOLE & CASING SECTIONS - Ref Wellbore: COOK 21-9 AWB Ref Wellpath: COOK 21-9 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	761.00	746.00	15.00	758.35	0.00	0.00	48.78	-3.82
8.625in Casing Surface	15.00	751.00	736.00	15.00	748.44	0.00	0.00	47.41	-3.70
7.875in Open Hole	761.00	7950.00	7189.00	758.35	7805.32	48.78	-3.82	1032.72	98.36

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
COOK 21-9 HARDLINE 56'W OF GEO TARGET		6000.00	1043.35	17.79	3232308.06	1301076.78	40°09'24.703"N	104°40'07.894"W	point
COOK 21-9 GEO TARGET 50' RADIUS (1330'FNL & 2590'FEL, REV-1)		6000.00	1043.33	73.82	3232364.09	1301077.28	40°09'24.703"N	104°40'07.172"W	circle

## WELLPATH COMPOSITION - Ref Wellbore: COOK 21-9 AWB Ref Wellpath: COOK 21-9 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	7900.00	NaviTrak (Standard)	BHI MWD SURVEYS <153-7900>	COOK 21-9 AWB
7900.00	7950.00	Blind Drilling (std)	Projection to bit	COOK 21-9 AWB



# Actual Wellpath Report

COOK 21-9 AWP

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Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 21-9 AWB
Facility	SEC.09-T2N-R65W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7900.00	0.600	159.600	7755.32	LAST BHI MWD SURVEY
7950.00	0.600	159.600	7805.32	PROJECTION TO BIT