

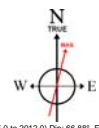
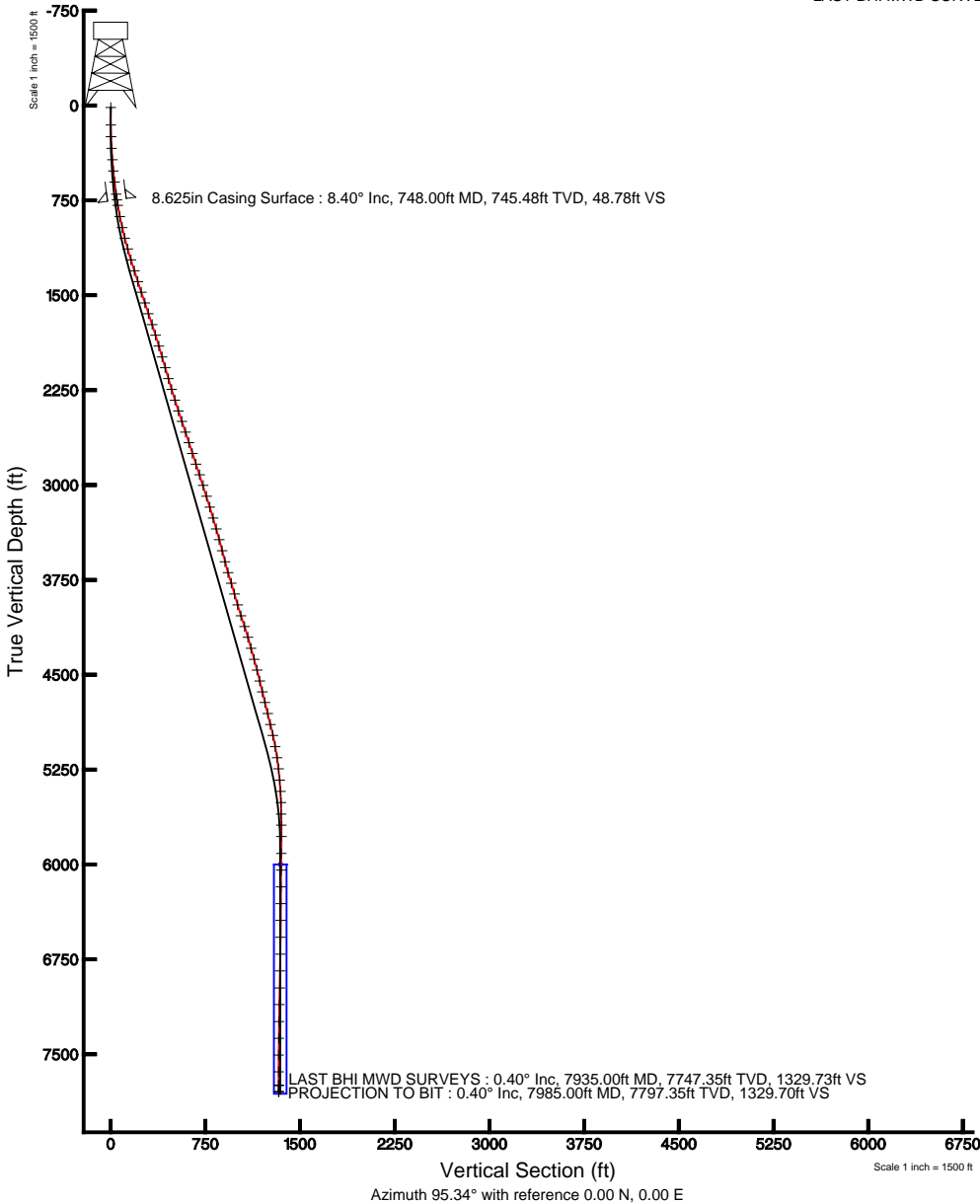
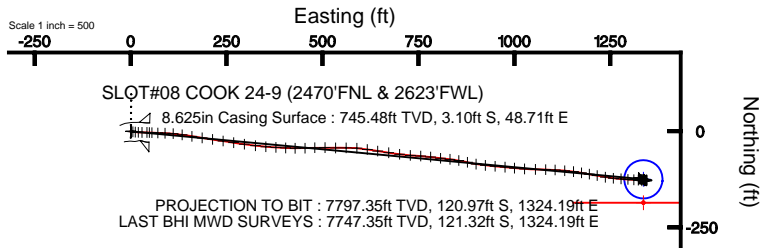


# KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#08 COOK 24-9 (2470'FNL & 2623'FWL)  
 Field: WELD COUNTY (KERR MCGEE) Well: COOK 24-9  
 Facility: SEC.09-T2N-R65W Wellbore: COOK 24-9 PWB



Plot reference wellpath is COOK 24-9 (REV-A.0) PWP	
True vertical depths are referenced to XTREME 15 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (601), US feet
Measured depths are referenced to XTREME 15 (RKB)	North Reference: True north
XTREME 15 (RKB) to Mean Sea Level: 4888 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#08 COOK 24-9 (2470'FNL & 2623'FWL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdam on 7/26/2011



BGM (1945.0 to 2012.0) Dp: 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 24-9 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 COOK 24-9 (2470'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 24-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 24-9 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 4:42:19 PM
Convergence at slot	0.54° East	Database/Source file	WA_DENVER/COOK_24-9_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	2541.43	2176.73	3232299.83	1299937.18	40°09'13.442"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#08 COOK 24-9 (2470'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	95.34°



# Actual Wellpath Report

COOK 24-9 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 COOK 24-9 (2470'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 24-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 24-9 AWB
Facility	SEC.09-T2N-R65W		

**WELLPATH DATA (84 stations) † = interpolated/extrapolated station**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	48.200	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	48.200	15.00	0.00	0.00	0.00	0.00	
153.00	0.100	48.200	153.00	0.08	0.08	0.09	0.07	
246.00	1.900	104.800	245.98	1.66	-0.26	1.64	1.99	
338.00	3.400	99.900	337.88	5.88	-1.12	5.80	1.65	
428.00	4.600	97.100	427.66	12.15	-2.02	12.01	1.35	
517.00	5.700	92.500	516.30	20.13	-2.66	19.97	1.32	
605.00	6.800	89.700	603.78	29.68	-2.82	29.55	1.30	
703.00	8.100	91.100	700.95	42.34	-2.92	42.25	1.34	
792.00	8.700	92.800	788.99	55.32	-3.37	55.24	0.73	
882.00	11.300	93.500	877.62	70.93	-4.24	70.85	2.89	
971.00	13.000	90.700	964.62	89.63	-4.90	89.56	2.02	
1058.00	15.000	95.300	1049.04	110.64	-6.06	110.56	2.63	
1146.00	16.400	98.800	1133.75	134.43	-9.01	134.18	1.92	
1236.00	16.900	99.200	1219.98	160.17	-13.04	159.65	0.57	
1326.00	17.800	98.100	1305.88	186.96	-17.07	186.18	1.06	
1416.00	17.700	98.100	1391.60	214.37	-20.94	213.34	0.11	
1505.00	18.600	99.200	1476.17	242.04	-25.12	240.75	1.08	
1594.00	17.900	98.800	1560.69	269.86	-29.48	268.28	0.80	
1683.00	19.100	97.800	1645.09	298.06	-33.55	296.22	1.39	
1774.00	18.400	97.100	1731.26	327.29	-37.34	325.22	0.81	
1862.00	17.500	95.000	1814.98	354.40	-40.21	352.19	1.26	
1952.00	16.500	92.100	1901.05	380.69	-41.86	378.44	1.46	
2042.00	16.300	93.900	1987.39	406.08	-43.19	403.81	0.61	
2131.00	16.200	90.400	2072.83	430.94	-44.12	428.69	1.11	
2221.00	16.900	88.600	2159.10	456.44	-43.89	454.32	0.96	
2309.00	17.100	85.800	2243.26	481.90	-42.63	480.01	0.96	
2399.00	17.100	93.200	2329.29	508.17	-42.40	506.42	2.42	
2489.00	18.800	90.400	2414.91	535.85	-43.24	534.14	2.12	
2576.00	18.200	89.000	2497.41	563.32	-43.10	561.74	0.86	
2665.00	18.500	94.200	2581.89	591.25	-43.89	589.72	1.87	
2753.00	17.700	99.500	2665.54	618.55	-47.12	616.84	2.08	
2842.00	18.200	98.500	2750.21	645.92	-51.41	643.93	0.66	
2932.00	19.200	98.800	2835.46	674.73	-55.75	672.46	1.12	
3020.00	19.000	97.400	2918.62	703.49	-59.81	700.97	0.57	
3109.00	17.800	93.900	3003.07	731.57	-62.60	728.91	1.83	
3199.00	17.100	93.500	3088.92	758.55	-64.35	755.84	0.79	
3289.00	16.600	97.800	3175.06	784.62	-66.90	781.78	1.49	
3379.00	16.900	96.700	3261.24	810.54	-70.17	807.51	0.48	
3468.00	15.400	95.700	3346.73	835.29	-72.85	832.12	1.71	
3557.00	15.100	99.500	3432.60	858.67	-75.94	855.31	1.17	
3647.00	14.700	104.100	3519.57	881.65	-80.66	877.95	1.39	
3737.00	14.900	99.200	3606.59	904.48	-85.29	900.45	1.41	
3827.00	16.300	96.700	3693.28	928.65	-88.61	924.42	1.73	
3914.00	17.700	93.900	3776.47	954.08	-90.94	949.74	1.86	
4003.00	16.400	96.400	3861.56	980.17	-93.26	975.73	1.68	
4093.00	15.600	95.300	3948.07	1004.98	-95.79	1000.40	0.95	
4183.00	18.600	93.900	4034.09	1031.43	-97.89	1026.78	3.36	
4272.00	18.400	91.100	4118.49	1059.63	-99.12	1054.98	1.02	
4362.00	16.300	91.100	4204.39	1086.39	-99.64	1081.82	2.33	
4452.00	15.600	93.200	4290.92	1111.08	-100.56	1106.53	1.01	
4543.00	16.100	96.000	4378.47	1135.93	-102.56	1131.29	1.00	
4631.00	14.100	95.700	4463.42	1158.85	-104.90	1154.10	2.27	
4720.00	13.700	101.600	4549.82	1180.17	-108.09	1175.21	1.65	
4808.00	13.300	97.400	4635.39	1200.64	-111.49	1195.45	1.20	

4895.00	14.200	102.300	4719.90	1221.24	-115.06	1215.81	1.69
4985.00	14.000	101.000	4807.19	1243.03	-119.48	1237.28	0.42
5074.00	13.400	94.200	4893.66	1264.05	-122.29	1258.13	1.93
5163.00	12.700	93.900	4980.36	1284.14	-123.71	1278.18	0.79
5253.00	10.500	95.000	5068.52	1302.24	-125.10	1296.22	2.46



# Actual Wellpath Report

COOK 24-9 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 COOK 24-9 (2470'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 24-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 24-9 AWB
Facility	SEC.09-T2N-R65W		

WELLPATH DATA (84 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5342.00	9.100	93.500	5156.22	1317.38	-126.24	1311.32	1.60	
5431.00	6.400	95.000	5244.40	1329.38	-127.10	1323.29	3.04	
5521.00	5.300	105.100	5333.93	1338.49	-128.62	1332.30	1.67	
5610.00	3.200	81.200	5422.69	1344.95	-129.31	1338.73	3.04	
5699.00	1.700	44.700	5511.61	1348.20	-127.99	1342.11	2.35	
5790.00	1.500	64.700	5602.57	1350.08	-126.53	1344.14	0.65	
5877.00	1.100	160.000	5689.56	1351.42	-126.82	1345.45	2.23	
5967.00	0.700	207.500	5779.55	1351.58	-128.12	1345.49	0.90	
6101.00	0.400	274.600	5913.54	1350.80	-128.81	1344.65	0.49	
6233.00	0.400	287.600	6045.54	1349.89	-128.64	1343.75	0.07	
6365.00	0.800	304.500	6177.53	1348.64	-127.97	1342.55	0.33	
6498.00	0.800	290.800	6310.52	1346.93	-127.12	1340.92	0.14	
6630.00	0.700	303.800	6442.51	1345.33	-126.34	1339.39	0.15	
6763.00	0.600	330.900	6575.50	1344.23	-125.28	1338.37	0.24	
6897.00	0.400	284.800	6709.50	1343.37	-124.55	1337.58	0.32	
7029.00	1.300	255.300	6841.48	1341.51	-124.81	1335.69	0.74	
7164.00	1.400	263.400	6976.44	1338.45	-125.39	1332.57	0.16	
7296.00	1.200	286.200	7108.41	1335.52	-125.19	1329.64	0.42	
7430.00	1.100	292.200	7242.38	1332.91	-124.31	1327.10	0.12	
7563.00	0.900	280.600	7375.36	1330.65	-123.64	1324.89	0.21	
7695.00	0.400	342.500	7507.35	1329.44	-123.01	1323.73	0.60	
7827.00	0.500	33.800	7639.35	1329.53	-122.09	1323.92	0.30	
7935.00	0.400	1.100	7747.35	1329.73	-121.32	1324.19	0.25	LAST BHI MWD SURVEYS
7985.00	0.400	1.100	7797.35	1329.70	-120.97	1324.19	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: COOK 24-9 AWB Ref Wellpath: COOK 24-9 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	758.00	743.00	15.00	755.37	0.00	0.00	-3.15	50.17
8.625in Casing Surface	15.00	748.00	733.00	15.00	745.48	0.00	0.00	-3.10	48.71
7.875in Open Hole	758.00	7985.00	7227.00	755.37	7797.35	-3.15	50.17	-120.97	1324.19

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
COOK 24-9 GEO TARGET 50' RADIUS (2590'FNL & 1310'FEL, REV-1)		6000.00	-124.88	1336.43	3233637.31	1299824.83	40°09'12.208"N	104°39'50.926"W	circle
COOK 24-9 HARDLINE 61'S OF GEO TARGET		6000.00	-185.92	1336.46	3233637.91	1299763.80	40°09'11.605"N	104°39'50.926"W	point

WELLPATH COMPOSITION - Ref Wellbore: COOK 24-9 AWB Ref Wellpath: COOK 24-9 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	7935.00	NaviTrak (Standard)	BHI MWD SURVEY <153-7935>	COOK 24-9 AWB
7935.00	7985.00	Blind Drilling (std)	Projection to bit	COOK 24-9 AWB



# Actual Wellpath Report

COOK 24-9 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 COOK 24-9 (2470'FNL & 2623'FWL)
Area	COLORADO	Well	COOK 24-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 24-9 AWB
Facility	SEC.09-T2N-R65W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7935.00	0.400	1.100	7747.35	LAST BHI MWD SURVEYS
7985.00	0.400	1.100	7797.35	PROJECTION TO BIT