

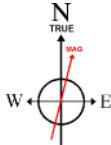


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#14 MOSER 37-4 (2213'FSL & 2503'FWL)
 Field: WELD COUNTY (KERR MCGEE) Well: MOSER 37-4
 Facility: SEC.04-T2N-R65W Wellbore: MOSER 37-4 PWB

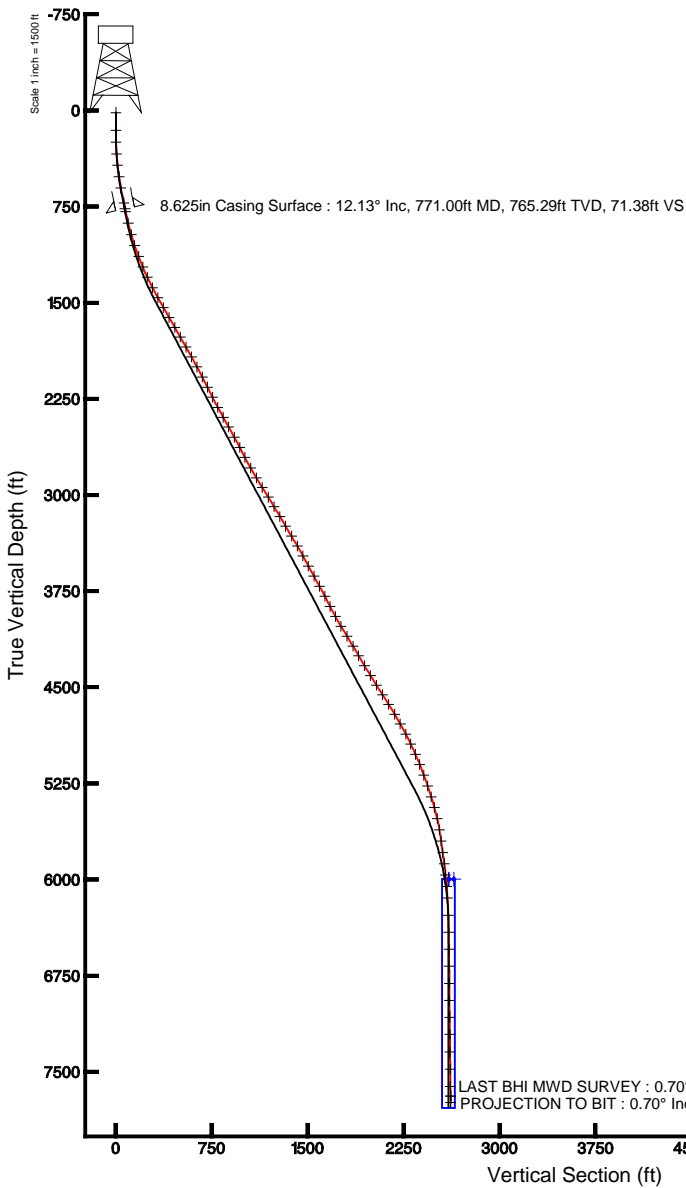
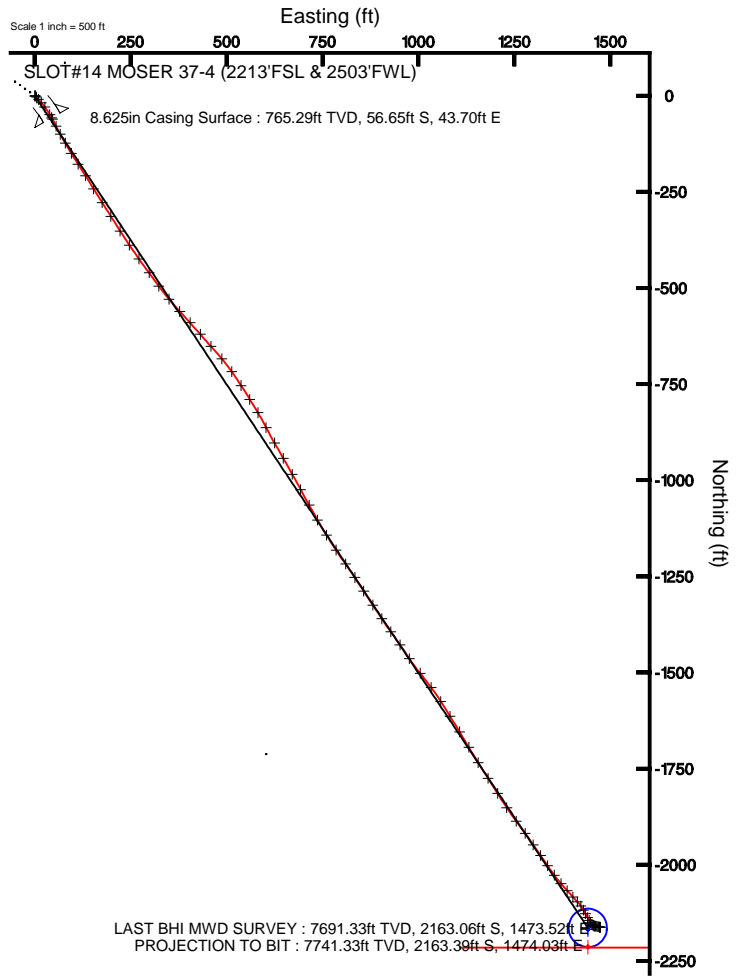


Plot reference wellbore is MOSER 37-4 (REV-B.0) PWB	
True vertical depths are referenced to XTREME 15 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 15 (RKB)	North Reference: True north
XTREME 15 (RKB) to Mean Sea Level: 4874 feet	Scale: True distance
Mean Sea Level to Murline (At Slot: SLOT#14 MOSER 37-4 (2213'FSL & 2503'FWL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: coolderm on 9/7/2011



BGGM (1945.0 to 2012.0) Dip: 66.89° Field: 53035.1 nT
 Magnetic North is 8.76 degrees East of True North (at 6/9/2011)

To correct azimuth from Magnetic to True add 8.76 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the True North Azimuth = 90 + 8.76 = 98.76



Azimuth 146.33° with reference 0.00 N, 0.00 E



Actual Wellpath Report

MOSER 37-4 AWP

Page 1 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MOSER 37-4 (2213'FSL & 2503'FWL)
Area	COLORADO	Well	MOSER 37-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MOSER 37-4 AWB
Facility	SEC.04-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	9/7/2011 at 3:26:30 PM
Convergence at slot	0.54° East	Database/Source file	WA_Denver/MOSER_37-4_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-719.45	-19.81	3232174.36	1304619.81	40°09'59.728"N	104°40'09.188"W
Facility Reference Pt			3232187.43	1305339.38	40°10'06.838"N	104°40'08.933"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	4874.00ft
Horizontal Reference Pt	Slot	XTREME 15 (RKB) to Mean Sea Level	4874.00ft
Vertical Reference Pt	XTREME 15 (RKB)	XTREME 15 (RKB) to Mud Line at Slot (SLOT#14 MOSER 37-4 (2213'FSL & 2503'FWL))	4874.00ft
MD Reference Pt	XTREME 15 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	146.33°



Actual Wellpath Report

MOSER 37-4 AWP

Page 2 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MOSER 37-4 (2213'FSL & 2503'FWL)
Area	COLORADO	Well	MOSER 37-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MOSER 37-4 AWB
Facility	SEC.04-T2N-R65W		

WELLPATH DATA (90 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	20.400	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	20.400	15.00	0.00	0.00	0.00	0.00	
153.00	0.400	20.400	153.00	-0.28	0.45	0.17	0.29	
245.00	1.600	126.900	244.99	0.74	-0.02	1.31	1.91	
338.00	4.000	137.500	337.87	5.17	-3.19	4.54	2.63	
427.00	6.100	140.000	426.52	12.94	-9.10	9.67	2.37	
517.00	8.100	141.000	515.82	24.01	-17.69	16.74	2.23	
606.00	10.500	142.100	603.65	38.34	-28.97	25.67	2.70	
726.00	12.200	149.100	721.30	61.91	-48.48	38.90	1.82	
793.00	12.100	150.500	786.80	75.98	-60.66	45.99	0.46	
886.00	13.400	155.100	877.51	96.36	-78.92	55.33	1.77	
979.00	15.900	150.900	967.48	119.71	-99.83	66.06	2.92	
1069.00	18.700	149.800	1053.40	146.41	-123.08	79.32	3.13	
1159.00	21.200	149.100	1137.99	177.07	-149.52	94.94	2.79	
1247.00	22.700	146.600	1219.61	209.94	-177.35	112.46	2.01	
1335.00	25.300	148.000	1300.00	245.72	-207.47	131.77	3.02	
1426.00	27.400	148.000	1381.54	286.10	-241.73	153.17	2.31	
1515.00	28.900	148.000	1460.01	328.06	-277.33	175.42	1.69	
1603.00	29.500	147.700	1536.83	370.98	-313.68	198.27	0.70	
1693.00	30.200	147.000	1614.89	415.77	-351.40	222.44	0.87	
1781.00	29.900	146.300	1691.06	459.83	-388.21	246.66	0.52	
1869.00	29.900	144.200	1767.35	503.69	-424.24	271.66	1.19	
1959.00	29.400	143.800	1845.56	548.17	-460.26	297.83	0.60	
2047.00	29.100	143.800	1922.34	591.13	-494.96	323.23	0.34	
2136.00	28.600	140.000	2000.30	633.93	-528.75	349.70	2.14	
2226.00	27.500	137.100	2079.74	675.85	-560.47	377.70	1.95	
2314.00	26.700	138.200	2158.07	715.47	-590.09	404.71	1.07	
2403.00	27.000	138.900	2237.48	755.30	-620.22	431.31	0.49	
2492.00	29.200	137.500	2315.98	796.79	-651.46	459.26	2.58	
2580.00	29.500	140.500	2392.69	839.56	-684.00	487.55	1.71	
2667.00	28.700	144.500	2468.72	881.75	-717.54	513.31	2.42	
2758.00	28.600	147.000	2548.58	925.37	-753.60	537.86	1.32	
2848.00	27.500	148.700	2628.01	967.68	-789.42	560.39	1.51	
2936.00	27.600	149.100	2706.03	1008.34	-824.27	581.41	0.24	
3029.00	29.300	152.300	2787.80	1052.49	-862.91	603.06	2.45	
3119.00	31.300	150.500	2865.50	1097.72	-902.76	624.81	2.44	
3207.00	31.900	150.100	2940.45	1143.72	-942.82	647.66	0.72	
3297.00	32.000	150.900	3016.82	1191.22	-984.27	671.11	0.48	
3384.00	31.200	151.600	3090.92	1236.64	-1024.23	693.04	1.01	
3474.00	30.500	150.900	3168.19	1282.62	-1064.69	715.23	0.87	
3562.00	30.200	150.100	3244.13	1326.96	-1103.39	737.12	0.57	
3652.00	31.300	148.400	3321.47	1372.91	-1142.93	760.66	1.56	
3741.00	30.700	146.600	3397.76	1418.74	-1181.59	785.28	1.24	
3830.00	28.600	144.500	3475.11	1462.75	-1217.90	810.16	2.63	
3920.00	28.000	146.600	3554.35	1505.41	-1253.08	834.30	1.29	



Actual Wellpath Report

MOSER 37-4 AWP

Page 3 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MOSER 37-4 (2213'FSL & 2503'FWL)
Area	COLORADO	Well	MOSER 37-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MOSER 37-4 AWB
Facility	SEC.04-T2N-R65W		

WELLPATH DATA (90 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4010.00	28.600	147.300	3633.59	1548.08	-1288.84	857.57	0.76	
4099.00	29.300	145.900	3711.47	1591.15	-1324.80	881.29	1.09	
4189.00	27.500	147.000	3790.64	1633.96	-1360.47	904.95	2.08	
4279.00	27.100	144.100	3870.62	1675.22	-1394.50	928.29	1.54	
4367.00	28.700	145.600	3948.39	1716.38	-1428.18	951.98	1.99	
4455.00	31.300	145.600	4024.59	1760.37	-1464.48	976.84	2.95	
4545.00	31.500	141.400	4101.42	1807.18	-1502.15	1004.72	2.44	
4636.00	30.500	143.500	4179.42	1853.93	-1539.29	1033.29	1.62	
4724.00	29.700	147.300	4255.56	1898.04	-1575.59	1058.35	2.35	
4813.00	31.600	148.000	4332.13	1943.40	-1613.93	1082.62	2.17	
4903.00	32.100	149.400	4408.58	1990.84	-1654.51	1107.29	0.99	
4992.00	31.800	148.700	4484.09	2037.89	-1694.90	1131.51	0.54	
5080.00	32.600	148.000	4558.56	2084.75	-1734.81	1156.12	1.00	
5170.00	32.100	147.700	4634.59	2132.89	-1775.59	1181.74	0.58	
5259.00	30.900	147.700	4710.47	2179.38	-1814.89	1206.59	1.35	
5347.00	29.300	146.300	4786.61	2223.50	-1851.91	1230.62	1.99	
5437.00	27.900	143.800	4865.63	2266.57	-1887.23	1255.27	2.05	
5525.00	25.300	143.500	4944.30	2305.92	-1918.96	1278.62	2.96	
5613.00	23.600	145.900	5024.41	2342.32	-1948.67	1299.68	2.24	
5700.00	22.000	145.200	5104.61	2376.03	-1976.47	1318.75	1.87	
5789.00	20.800	145.900	5187.47	2408.50	-2003.24	1337.12	1.38	
5878.00	18.500	142.800	5271.29	2438.40	-2027.58	1354.52	2.84	
5968.00	17.500	140.700	5356.88	2466.12	-2049.43	1371.73	1.32	
6054.00	15.800	136.400	5439.28	2490.52	-2067.91	1387.99	2.44	
6143.00	13.200	138.900	5525.44	2512.54	-2084.35	1403.03	3.00	
6232.00	9.600	135.700	5612.67	2529.92	-2097.32	1414.90	4.11	
6321.00	8.300	144.900	5700.59	2543.63	-2107.89	1423.78	2.17	
6413.00	7.400	150.900	5791.72	2556.18	-2118.50	1430.48	1.32	
6499.00	7.400	150.900	5877.01	2567.22	-2128.18	1435.86	0.00	
6589.00	6.500	147.700	5966.35	2578.09	-2137.55	1441.40	1.09	
6679.00	5.100	155.100	6055.88	2587.14	-2145.48	1445.81	1.76	
6768.00	3.100	143.800	6144.65	2593.45	-2151.01	1448.90	2.41	
6903.00	1.700	129.800	6279.53	2599.02	-2155.24	1452.59	1.12	
7035.00	1.200	135.400	6411.49	2602.25	-2157.48	1455.07	0.39	
7169.00	1.100	126.600	6545.46	2604.84	-2159.24	1457.08	0.15	
7302.00	0.500	102.700	6678.45	2606.46	-2160.13	1458.68	0.51	
7436.00	0.800	85.100	6812.44	2607.33	-2160.18	1460.18	0.27	
7568.00	0.800	88.600	6944.43	2608.27	-2160.08	1462.02	0.04	
7700.00	1.100	109.400	7076.41	2609.77	-2160.48	1464.13	0.34	
7834.00	0.900	107.600	7210.39	2611.62	-2161.22	1466.35	0.15	
7971.00	1.000	101.300	7347.37	2613.31	-2161.78	1468.55	0.11	
8105.00	0.800	102.300	7481.35	2614.81	-2162.21	1470.61	0.15	
8241.00	0.900	104.400	7617.34	2616.28	-2162.68	1472.57	0.08	
8315.00	0.700	122.000	7691.33	2617.13	-2163.06	1473.52	0.43	LAST BHI MWD SURVEY
8365.00	0.700	122.000	7741.33	2617.68	-2163.39	1474.03	0.00	PROJECTION TO BIT



Actual Wellpath Report

MOSER 37-4 AWP

Page 4 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MOSER 37-4 (2213'FSL & 2503'FWL)
Area	COLORADO	Well	MOSER 37-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MOSER 37-4 AWB
Facility	SEC.04-T2N-R65W		

HOLE & CASING SECTIONS - Ref Wellbore: MOSER 37-4 AWB Ref Wellpath: MOSER 37-4 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	781.00	766.00	15.00	775.07	0.00	0.00	-58.48	44.75
8.625in Casing Surface	15.00	771.00	756.00	15.00	765.29	0.00	0.00	-56.65	43.70
7.875in Open Hole	781.00	8365.00	7584.00	775.07	7741.33	-58.48	44.75	-2163.39	1474.03

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
MOSER 37-4 BHL ON PLAT (46'FSL & 1325'FEL, REV-1)		5999.00	-2168.64	1441.94	3233636.49	1302464.87	40°09'38.297"N	104°39'50.616"W	point
MOSER 37-4 GEO TARGET 50' RADIUS (50'FSL & 1325'FEL, REV-2)		5999.00	-2164.66	1441.94	3233636.45	1302468.84	40°09'38.336"N	104°39'50.616"W	circle
MOSER 37-4 HARDLINE 50'S OF GEO TARGET		5999.00	-2214.66	1441.94	3233636.92	1302418.85	40°09'37.842"N	104°39'50.616"W	point

WELLPATH COMPOSITION - Ref Wellbore: MOSER 37-4 AWB Ref Wellpath: MOSER 37-4 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	8315.00	NaviTrak (Standard)	BHI MWD SURVEYS <153-8315>	MOSER 37-4 AWB
8315.00	8365.00	Blind Drilling (std)	Projection to bit	MOSER 37-4 AWB



Actual Wellpath Report

MOSER 37-4 AWP

Page 5 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MOSER 37-4 (2213'FSL & 2503'FWL)
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Field	WELD COUNTY (KERR MCGEE)	Wellbore	MOSER 37-4 AWB
Facility	SEC.04-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8315.00	0.700	122.000	7691.33	LAST BHI MWD SURVEY
8365.00	0.700	122.000	7741.33	PROJECTION TO BIT