



KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#20 MOSER 33-4 (2270'FSL & 2423'FWL)
Field: WELD COUNTY (KERR MCGEE) Well: MOSER 33-4
Facility: SEC.04-T2N-R65W Wellbore: MOSER 33-4 PWB

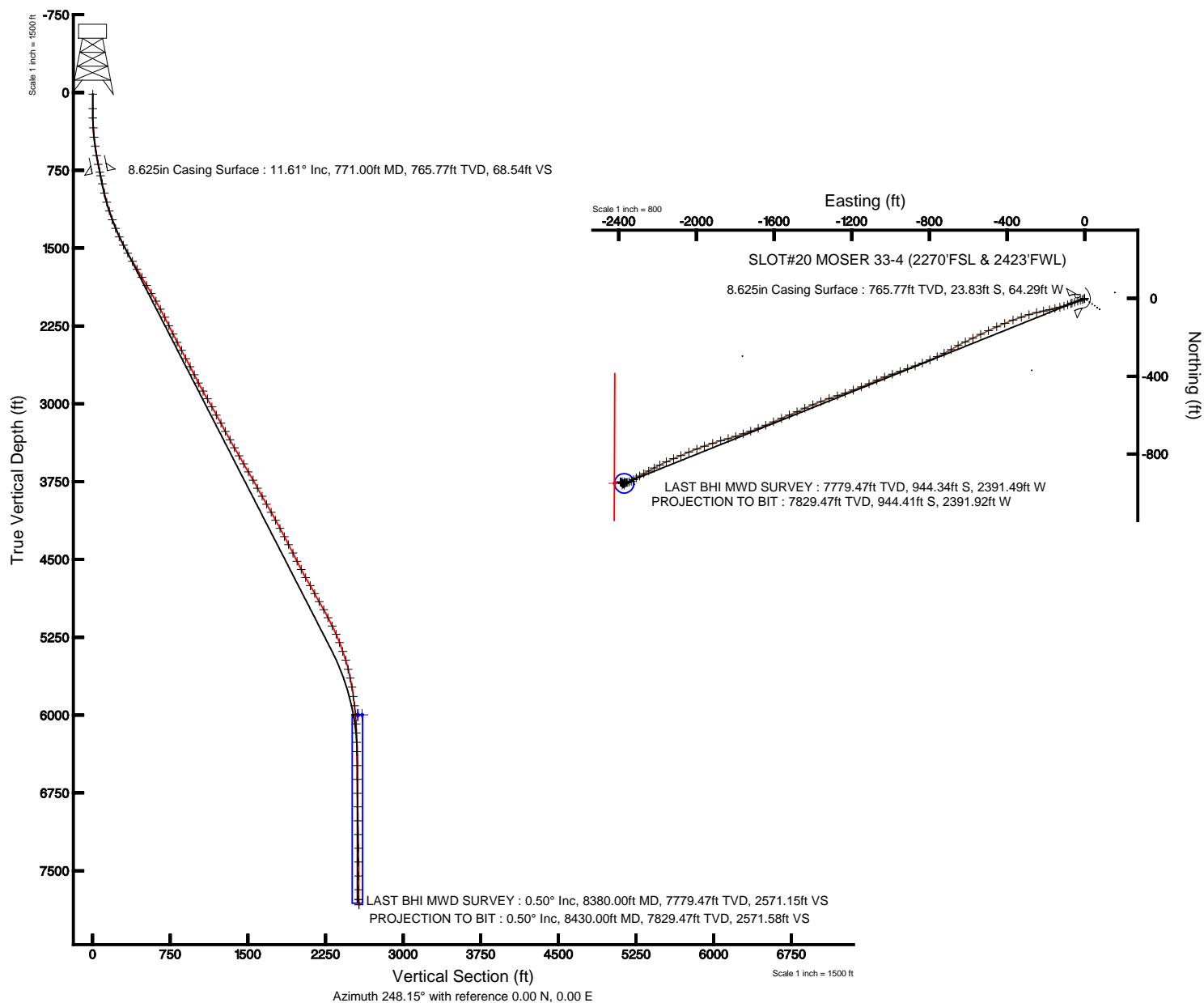


Plot reference wellbore is MOSER 33-4 (REV.8.0) PWB	
True vertical depths are referenced to XTREME 15 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 15 (RKB)	North Reference: True north
XTREME 15 (RKB) to Mean Sea Level 4874 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#20 MOSER 33-4 (2270'FSL & 2423'FWL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdam on 9/8/2011



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





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REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	MOSER 33-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MOSER 33-4 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	9/8/2011 at 2:32:05 PM
Convergence at slot	0.54° East	Database/Source file	WA_Denver/MOSER_33-4_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-663.39	-97.82	3232095.84	1304675.13	40°10'00.282"N	104°40'10.193"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#20 MOSER 33-4 (2270'FSL & 2423'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	248.15°



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Field	WELD COUNTY (KERR MCGEE)	Wellbore	MOSER 33-4 AWB
Facility	SEC.04-T2N-R65W		

WELLPATH DATA (91 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	113.500	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	113.500	15.00	0.00	0.00	0.00	0.00	
153.00	0.300	113.500	153.00	-0.25	-0.14	0.33	0.22	
245.00	1.200	230.900	244.99	0.50	-0.85	-0.20	1.48	
338.00	4.000	241.100	337.89	4.65	-3.03	-3.79	3.04	
430.00	6.100	250.600	429.53	12.72	-6.20	-11.21	2.45	
517.00	8.300	253.000	515.84	23.59	-9.58	-21.58	2.55	
608.00	9.700	253.100	605.71	37.78	-13.73	-35.20	1.54	
695.00	11.200	250.300	691.27	53.52	-18.70	-50.16	1.82	
807.00	11.800	249.600	801.02	75.84	-26.36	-71.14	0.55	
886.00	11.600	248.200	878.38	91.86	-32.13	-86.08	0.44	
979.00	13.500	252.000	969.15	112.04	-38.96	-105.09	2.23	
1069.00	15.300	255.600	1056.32	134.30	-45.16	-126.59	2.23	
1158.00	18.400	255.200	1141.49	159.89	-51.67	-151.55	3.49	
1248.00	19.600	258.700	1226.59	188.83	-58.25	-180.08	1.84	
1336.00	22.700	257.000	1308.65	220.12	-64.97	-211.11	3.59	
1425.00	25.800	257.000	1389.79	256.24	-73.19	-246.72	3.48	
1514.00	27.400	254.200	1469.37	295.74	-83.12	-285.30	2.28	
1604.00	29.500	250.300	1548.51	338.49	-96.23	-326.10	3.11	
1694.00	30.700	249.600	1626.37	383.60	-111.71	-368.50	1.39	
1782.00	30.800	247.800	1702.00	428.59	-128.05	-410.41	1.05	
1872.00	30.600	246.100	1779.39	474.52	-146.04	-452.69	0.99	
1963.00	30.400	244.300	1857.79	520.64	-165.41	-494.61	1.03	
2051.00	30.500	244.300	1933.66	565.14	-184.75	-534.80	0.11	
2140.00	29.800	244.300	2010.62	609.74	-204.14	-575.08	0.79	
2229.00	28.800	244.000	2088.23	653.19	-223.12	-614.28	1.14	
2317.00	27.700	240.400	2165.75	694.60	-242.52	-651.11	2.30	
2408.00	26.600	240.400	2246.72	735.75	-263.03	-687.22	1.21	
2498.00	26.700	243.600	2327.17	775.87	-281.98	-722.85	1.60	
2588.00	27.600	245.400	2407.25	816.85	-299.65	-759.92	1.35	
2676.00	27.700	247.100	2485.20	857.66	-316.09	-797.30	0.90	
2765.00	27.900	246.800	2563.93	899.16	-332.34	-835.49	0.27	
2852.00	28.100	249.600	2640.75	939.99	-347.50	-873.41	1.53	
2940.00	26.700	250.300	2718.88	980.47	-361.39	-911.45	1.63	
3030.00	28.000	249.600	2798.81	1021.80	-375.57	-950.28	1.49	
3120.00	29.500	250.600	2877.72	1065.06	-390.30	-990.99	1.75	
3206.00	29.700	248.900	2952.50	1107.52	-405.00	-1030.84	1.00	
3293.00	29.400	246.400	3028.18	1150.41	-421.31	-1070.52	1.46	
3384.00	28.700	246.800	3107.73	1194.58	-438.86	-1111.07	0.80	
3474.00	28.800	247.800	3186.64	1237.87	-455.57	-1151.00	0.55	
3566.00	29.100	248.900	3267.14	1282.40	-471.99	-1192.39	0.66	
3656.00	28.800	249.600	3345.90	1325.95	-487.43	-1233.13	0.50	
3745.00	29.300	253.100	3423.71	1369.08	-501.23	-1274.06	1.99	
3835.00	30.300	251.000	3501.81	1413.70	-515.03	-1316.60	1.61	
3925.00	30.600	248.200	3579.40	1459.29	-530.93	-1359.34	1.61	



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Area	COLORADO	Well	MOSER 33-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MOSER 33-4 AWB
Facility	SEC.04-T2N-R65W		

WELLPATH DATA (91 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4014.00	29.500	248.500	3656.43	1503.85	-547.37	-1400.76	1.25	
4104.00	29.600	245.000	3734.73	1548.21	-564.89	-1441.53	1.92	
4194.00	29.400	246.100	3813.06	1592.48	-583.23	-1481.87	0.64	
4283.00	29.000	248.200	3890.76	1635.89	-600.09	-1521.87	1.24	
4372.00	30.100	245.700	3968.18	1679.76	-617.29	-1562.25	1.86	
4461.00	29.900	246.800	4045.26	1724.23	-635.21	-1602.98	0.66	
4550.00	28.700	246.100	4122.87	1767.77	-652.61	-1642.91	1.40	
4639.00	28.000	249.200	4201.20	1810.01	-668.69	-1681.98	1.83	
4728.00	28.000	251.000	4279.79	1851.77	-682.91	-1721.26	0.95	
4817.00	27.200	249.200	4358.66	1892.97	-696.93	-1760.03	1.30	
4907.00	27.100	253.400	4438.75	1933.96	-710.10	-1798.91	2.13	
4995.00	26.500	253.100	4517.30	1973.48	-721.53	-1836.90	0.70	
5084.00	27.900	253.800	4596.45	2013.98	-733.11	-1875.90	1.61	
5174.00	29.800	252.000	4675.28	2057.25	-745.90	-1917.39	2.32	
5264.00	29.100	250.300	4753.65	2101.44	-760.19	-1959.27	1.21	
5351.00	29.500	249.200	4829.52	2144.00	-774.92	-1999.21	0.77	
5441.00	29.800	246.800	4907.74	2188.51	-791.60	-2040.48	1.36	
5530.00	29.100	247.100	4985.24	2232.26	-808.74	-2080.74	0.80	
5618.00	27.100	246.800	5062.86	2273.70	-824.96	-2118.88	2.28	
5707.00	26.700	246.100	5142.23	2313.95	-841.05	-2155.80	0.57	
5795.00	24.300	242.200	5221.66	2351.72	-857.51	-2189.90	3.33	
5882.00	21.200	241.100	5301.88	2385.14	-873.46	-2219.51	3.60	
5972.00	19.600	241.500	5386.24	2416.29	-888.53	-2247.02	1.78	
6063.00	16.900	241.500	5472.65	2444.59	-902.13	-2272.07	2.97	
6152.00	14.500	240.100	5558.32	2468.48	-913.86	-2293.10	2.73	
6241.00	11.600	241.500	5645.02	2488.40	-923.68	-2310.62	3.28	
6330.00	10.100	234.500	5732.43	2504.88	-932.48	-2324.84	2.24	
6420.00	8.000	238.300	5821.30	2518.72	-940.36	-2336.60	2.42	
6510.00	6.200	253.800	5910.62	2529.73	-945.01	-2346.59	2.90	
6597.00	4.900	258.700	5997.21	2538.06	-947.04	-2354.75	1.59	
6686.00	3.300	269.300	6085.98	2544.18	-947.82	-2361.04	1.98	
6775.00	2.300	258.700	6174.87	2548.33	-948.20	-2365.35	1.26	
6863.00	1.900	246.100	6262.81	2551.52	-949.14	-2368.42	0.69	
6953.00	0.400	215.100	6352.79	2553.27	-950.00	-2369.96	1.75	
7088.00	0.900	229.100	6487.78	2554.67	-951.08	-2371.03	0.39	
7221.00	0.800	217.200	6620.77	2556.46	-952.50	-2372.38	0.15	
7355.00	0.900	236.900	6754.75	2558.29	-953.82	-2373.83	0.23	
7486.00	1.300	258.000	6885.73	2560.76	-954.69	-2376.15	0.43	
7622.00	1.200	287.500	7021.70	2563.38	-954.59	-2379.01	0.47	
7753.00	1.800	303.000	7152.65	2565.63	-953.05	-2382.05	0.55	
7885.00	2.300	316.700	7284.57	2567.79	-950.00	-2385.60	0.53	
8019.00	1.200	326.600	7418.51	2569.06	-946.87	-2388.22	0.85	
8152.00	0.700	325.900	7551.49	2569.51	-945.03	-2389.44	0.38	
8286.00	0.600	274.200	7685.48	2570.31	-944.30	-2390.60	0.43	
8380.00	0.500	260.500	7779.47	2571.15	-944.34	-2391.49	0.18	LAST BHI MWD SURVEY



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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 MOSER 33-4 (2270'FSL & 2423'FWL)
Area	COLORADO	Well	MOSER 33-4
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MOSER 33-4 AWB
Facility	SEC.04-T2N-R65W		

WELLPATH DATA (91 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8430.00	0.500	260.500	7829.47	2571.58	-944.41	-2391.92	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: MOSER 33-4 AWB Ref Wellpath: MOSER 33-4 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	775.56	0.00	0.00	-24.53	-66.18
8.625in Casing Surface	15.00	771.00	756.00	15.00	765.77	0.00	0.00	-23.83	-64.29
7.875in Open Hole	771.00	8365.00	7594.00	765.77	7764.48	-23.83	-64.29	-944.32	-2391.36

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
MOSER 33-4 BHL ON PLAT (1310'FSL & 40'FWL, REV-1)		6000.00	-951.81	-2383.23	3229721.74	1303701.08	40°09'50.875"N	104°40'40.890"W	point
MOSER 33-4 GEO TARGET 50' RADIUS (1310'FSL & 50'FWL, REV-2)		6000.00	-951.79	-2373.23	3229731.73	1303701.20	40°09'50.875"N	104°40'40.761"W	circle
MOSER 33-4 HARDLINE 50'W OF GEO TARGET		6000.00	-951.79	-2423.23	3229681.74	1303700.73	40°09'50.875"N	104°40'41.405"W	point

WELLPATH COMPOSITION - Ref Wellbore: MOSER 33-4 AWB Ref Wellpath: MOSER 33-4 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	8380.00	NaviTrak (Standard)	BHI MWD SURVEYS <153-8380>	MOSER 33-4 AWB
8380.00	8430.00	Blind Drilling (std)	Projection to bit	MOSER 33-4 AWB



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WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8380.00	0.500	260.500	7779.47	LAST BHI MWD SURVEY
8430.00	0.500	260.500	7829.47	PROJECTION TO BIT