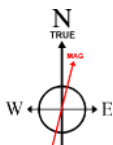


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 MIRACLE 17-12 (2480'FSL & 295'FEL)
 Field: LARIMER COUNTY Well: MIRACLE 17-12
 Facility: SEC.12-T5N-R68W Wellbore: MIRACLE 17-12 PWB

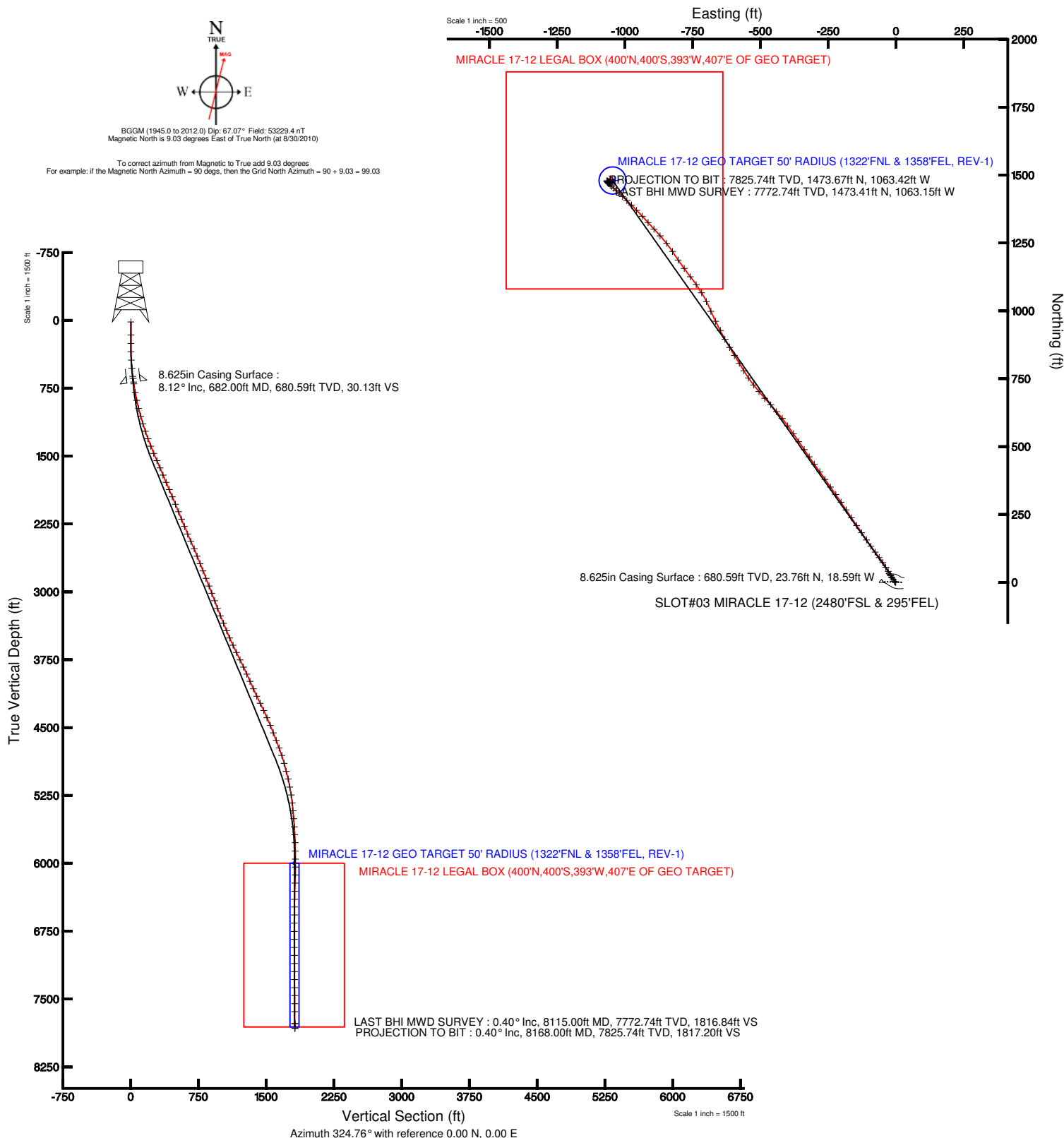


Plot reference wellpath is MIRACLE 17-12 (REV-B.0) PWP	
True vertical depths are referenced to XTREME 6 (RT)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
Measured depths are referenced to XTREME 6 (RT)	North Reference: True north
XTREME 6 (RT) to Mean Sea Level: 4964 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: SEC.12-T5N-R68W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: bensjaci on 9/2/2010



BGGM (1945.0 to 2012.0) Dip: 67.07° Field: 53229.4 nT
 Magnetic North is 9.03 degrees East of True North (at 8/30/2010)

To correct azimuth from Magnetic to True add 9.03 degrees
 For example: If the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 9.03 = 99.03





Actual Wellpath Report

MIRACLE 17-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MIRACLE 17-12 (2480'FSL & 295'FEL)
Area	COLORADO	Well	MIRACLE 17-12
Field	LARIMER COUNTY	Wellbore	MIRACLE 17-12 AWB
Facility	SEC.12-T5N-R68W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet	Software System	WellArchitect® 2.0
North Reference	True	User	Bensjacj
Scale	0.999961	Report Generated	9/2/2010 at 11:12:05 AM
Convergence at slot	0.36° East	Database/Source file	WA_Denver/MIRACLE_17-12_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.36	-20.05	3154400.48	1394063.88	40°24'49.615"N	104°56'43.814"W
Facility Reference Pt			3154420.53	1394063.64	40°24'49.612"N	104°56'43.555"W
Field Reference Pt			3154420.53	1394063.64	40°24'49.612"N	104°56'43.555"W

WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 6 (RT) to Facility Vertical Datum	4964.00ft
Horizontal Reference Pt	Slot	XTREME 6 (RT) to Mean Sea Level	4964.00ft
Vertical Reference Pt	XTREME 6 (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	XTREME 6 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	324.76°



Actual Wellpath Report

MIRACLE 17-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MIRACLE 17-12 (2480'FSL & 295'FEL)
Area	COLORADO	Well	MIRACLE 17-12
Field	LARIMER COUNTY	Wellbore	MIRACLE 17-12 AWB
Facility	SEC.12-T5N-R68W		

WELLPATH DATA (94 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	238.270	0.00	0.00	0.00	0.00	0.00	
16.00	0.000	238.270	16.00	0.00	0.00	0.00	0.00	
161.00	0.500	238.270	161.00	0.04	-0.33	-0.54	0.34	
253.00	0.500	269.600	252.99	0.29	-0.55	-1.28	0.29	
345.00	1.700	311.800	344.98	1.85	0.36	-2.70	1.49	
437.00	3.300	320.500	436.89	5.82	3.31	-5.40	1.78	
528.00	5.000	324.100	527.65	12.40	8.55	-9.39	1.89	
618.00	6.900	330.000	617.16	21.71	16.41	-14.40	2.22	
640.00	7.500	330.400	638.98	24.45	18.80	-15.77	2.74	
701.00	8.400	330.400	699.40	32.85	26.14	-19.93	1.48	
798.00	10.500	330.000	795.07	48.70	39.95	-27.85	2.17	
888.00	11.800	329.000	883.37	66.05	54.94	-36.69	1.46	
979.00	14.000	325.500	972.07	86.33	71.99	-47.72	2.56	
1067.00	16.200	322.600	1057.03	109.25	90.52	-61.21	2.64	
1155.00	17.100	324.100	1141.34	134.45	110.75	-76.25	1.13	
1242.00	18.600	323.700	1224.15	161.12	132.30	-91.97	1.73	
1329.00	19.900	326.500	1306.29	189.79	155.83	-108.35	1.83	
1418.00	21.600	325.500	1389.51	221.31	181.96	-125.99	1.95	
1504.00	23.100	325.100	1469.05	254.01	208.84	-144.61	1.75	
1591.00	23.600	326.200	1548.92	288.49	237.31	-164.07	0.76	
1678.00	23.100	325.500	1628.80	322.96	265.85	-183.42	0.66	
1766.00	22.900	327.200	1709.80	357.33	294.47	-202.47	0.79	
1853.00	22.900	324.400	1789.95	391.17	322.46	-221.50	1.25	
1940.00	23.600	324.800	1869.88	425.51	350.45	-241.39	0.82	
2027.00	22.800	324.800	1949.85	459.79	378.46	-261.15	0.92	
2116.00	22.600	324.800	2031.95	494.13	406.53	-280.94	0.22	
2205.00	22.200	324.100	2114.24	528.05	434.12	-300.66	0.54	
2294.00	22.200	325.500	2196.64	561.67	461.60	-320.04	0.59	
2381.00	22.100	326.100	2277.22	594.47	488.73	-338.48	0.28	
2471.00	23.700	325.800	2360.12	629.48	517.74	-358.09	1.78	
2559.00	23.600	324.400	2440.73	664.78	546.69	-378.29	0.65	
2649.00	23.500	324.800	2523.24	700.74	576.00	-399.12	0.21	
2738.00	21.400	321.000	2605.49	734.69	603.12	-419.57	2.87	
2827.00	22.000	320.200	2688.19	767.51	628.55	-440.46	0.75	
2914.00	22.200	317.400	2768.80	800.05	653.17	-462.01	1.23	
3003.00	21.600	318.800	2851.37	833.02	677.87	-484.19	0.89	
3093.00	21.000	320.200	2935.23	865.57	702.73	-505.42	0.87	
3180.00	21.300	321.600	3016.37	896.89	727.09	-525.21	0.68	
3268.00	20.600	325.500	3098.55	928.33	752.37	-543.91	1.77	
3357.00	21.000	328.900	3181.75	959.89	778.93	-561.02	1.43	
3446.00	21.800	328.300	3264.62	992.30	806.65	-577.94	0.93	
3535.00	23.000	328.300	3346.90	1026.15	835.50	-595.76	1.35	
3625.00	22.500	330.000	3429.90	1060.84	865.38	-613.61	0.92	
3712.00	24.100	330.400	3509.80	1095.10	895.24	-630.71	1.85	
3800.00	25.000	332.500	3589.85	1131.41	927.36	-648.17	1.42	



Actual Wellpath Report

MIRACLE 17-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MIRACLE 17-12 (2480'FSL & 295'FEL)
Area	COLORADO	Well	MIRACLE 17-12
Field	LARIMER COUNTY	Wellbore	MIRACLE 17-12 AWB
Facility	SEC.12-T5N-R68W		

WELLPATH DATA (94 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
3889.00	26.400	333.900	3670.04	1169.58	961.81	-665.56	1.71	
3980.00	26.600	336.000	3751.48	1209.54	998.59	-682.75	1.05	
4069.00	26.000	333.500	3831.27	1248.36	1034.25	-699.56	1.42	
4156.00	24.000	328.300	3910.13	1284.88	1066.38	-717.37	3.41	
4244.00	24.100	325.100	3990.49	1320.71	1096.34	-737.05	1.49	
4333.00	24.300	323.000	4071.67	1357.18	1125.87	-758.47	0.99	
4423.00	25.600	323.000	4153.27	1395.13	1156.19	-781.31	1.44	
4511.00	25.800	325.800	4232.57	1433.28	1187.21	-803.52	1.40	
4599.00	25.700	326.000	4311.83	1471.51	1218.87	-824.95	0.15	
4688.00	23.200	321.600	4392.85	1508.31	1248.61	-846.64	3.47	
4780.00	23.600	318.400	4477.28	1544.71	1276.59	-870.12	1.45	
4868.00	21.600	317.000	4558.52	1578.27	1301.61	-892.87	2.35	
4957.00	21.100	318.100	4641.42	1610.41	1325.51	-914.74	0.72	
5047.00	20.500	316.300	4725.55	1642.09	1348.97	-936.45	0.97	
5136.00	18.500	316.300	4809.44	1671.47	1370.44	-956.97	2.25	
5226.00	15.600	315.300	4895.48	1697.54	1389.37	-975.35	3.24	
5317.00	15.300	312.800	4983.19	1721.36	1406.23	-992.77	0.80	
5406.00	13.500	311.800	5069.39	1742.97	1421.13	-1009.13	2.04	
5496.00	10.200	313.500	5157.46	1761.03	1433.62	-1022.74	3.69	
5585.00	8.700	314.900	5245.25	1775.39	1443.80	-1033.23	1.70	
5674.00	6.800	312.100	5333.43	1787.16	1452.08	-1041.91	2.18	
5761.00	5.700	313.500	5419.91	1796.42	1458.51	-1048.86	1.28	
5850.00	4.600	313.500	5508.55	1804.26	1464.01	-1054.66	1.24	
5939.00	4.200	313.900	5597.29	1810.96	1468.73	-1059.60	0.45	
6028.00	2.600	324.100	5686.13	1816.18	1472.62	-1063.13	1.91	
6115.00	1.600	329.300	5773.07	1819.36	1475.26	-1064.91	1.17	
6206.00	1.100	299.100	5864.05	1821.42	1476.78	-1066.32	0.94	
6296.00	1.200	348.700	5954.03	1823.06	1478.13	-1067.26	1.08	
6385.00	1.000	56.000	6043.02	1823.89	1479.47	-1066.80	1.38	
6472.00	2.600	122.600	6129.98	1822.05	1478.83	-1064.50	2.74	
6563.00	2.000	124.000	6220.91	1818.65	1476.83	-1061.45	0.66	
6652.00	1.700	112.100	6309.86	1816.09	1475.47	-1058.94	0.55	
6742.00	1.100	110.300	6399.83	1814.25	1474.67	-1056.89	0.67	
6827.00	1.100	106.000	6484.82	1812.94	1474.16	-1055.34	0.10	
6914.00	0.700	108.000	6571.81	1811.87	1473.77	-1054.03	0.46	
7005.00	0.500	172.200	6662.80	1811.07	1473.20	-1053.45	0.73	
7096.00	0.500	239.300	6753.80	1810.75	1472.60	-1053.74	0.61	
7185.00	0.500	248.100	6842.80	1810.87	1472.26	-1054.43	0.09	
7273.00	1.000	261.100	6930.79	1811.30	1472.00	-1055.55	0.60	
7361.00	1.000	247.000	7018.78	1811.80	1471.58	-1057.01	0.28	
7451.00	0.900	263.000	7108.76	1812.30	1471.19	-1058.44	0.31	
7541.00	0.400	287.100	7198.76	1812.88	1471.19	-1059.44	0.62	
7630.00	0.400	298.400	7287.76	1813.41	1471.43	-1060.01	0.09	
7719.00	0.400	286.800	7376.75	1813.93	1471.67	-1060.58	0.09	
7807.00	0.500	328.600	7464.75	1814.56	1472.09	-1061.07	0.38	



Actual Wellpath Report

MIRACLE 17-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MIRACLE 17-12 (2480'FSL & 295'FEL)
Area	COLORADO	Well	MIRACLE 17-12
Field	LARIMER COUNTY	Wellbore	MIRACLE 17-12 AWB
Facility	SEC.12-T5N-R68W		

WELLPATH DATA (94 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
7895.00	0.600	294.900	7552.75	1815.34	1472.61	-1061.69	0.38	
7983.00	0.400	292.000	7640.74	1816.00	1472.92	-1062.39	0.23	
8115.00	0.400	314.200	7772.74	1816.84	1473.41	-1063.15	0.12	LAST BHI MWD SURVEY
8168.00	0.400	314.200	7825.74	1817.20	1473.67	-1063.42	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS Ref Wellbore: MIRACLE 17-12 AWB Ref Wellpath: MIRACLE 17-12 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	16.00	695.00	679.00	16.00	693.46	0.00	0.00	25.38	-19.50
8.625in Casing Surface	16.00	682.00	666.00	16.00	680.59	0.00	0.00	23.76	-18.59
7.875in Open Hole	682.00	8168.00	7486.00	680.59	7825.74	23.76	-18.59	1473.67	-1063.42

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
MIRACLE 17-12 GEO TARGET 50' RADIUS (1322'FNL & 1358'FEL, REV-1)		6000.00	1480.59	-1045.85	3153345.43	1395537.84	40°25'04.246"N	104°56'57.336"W	circle
MIRACLE 17-12 LEGAL BOX (400'N,400'S,393'W,407'E OF GEO TARGET)		6000.00	1480.59	-1038.85	3153352.43	1395537.89	40°25'04.246"N	104°56'57.245"W	square

WELLPATH COMPOSITION Ref Wellbore: MIRACLE 17-12 AWB Ref Wellpath: MIRACLE 17-12 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	8115.00	NaviTrak (Standard)	BHI MWD SURVEYS <161-8115>	MIRACLE 17-12 AWB
8115.00	8168.00	Blind Drilling (std)	Projection to bit	MIRACLE 17-12 AWB



Actual Wellpath Report

MIRACLE 17-12 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	MIRACLE 17-12
Field	LARIMER COUNTY	Wellbore	MIRACLE 17-12 AWB
Facility	SEC.12-T5N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8115.00	0.400	314.200	7772.74	LAST BHI MWD SURVEY
8168.00	0.400	314.200	7825.74	PROJECTION TO BIT