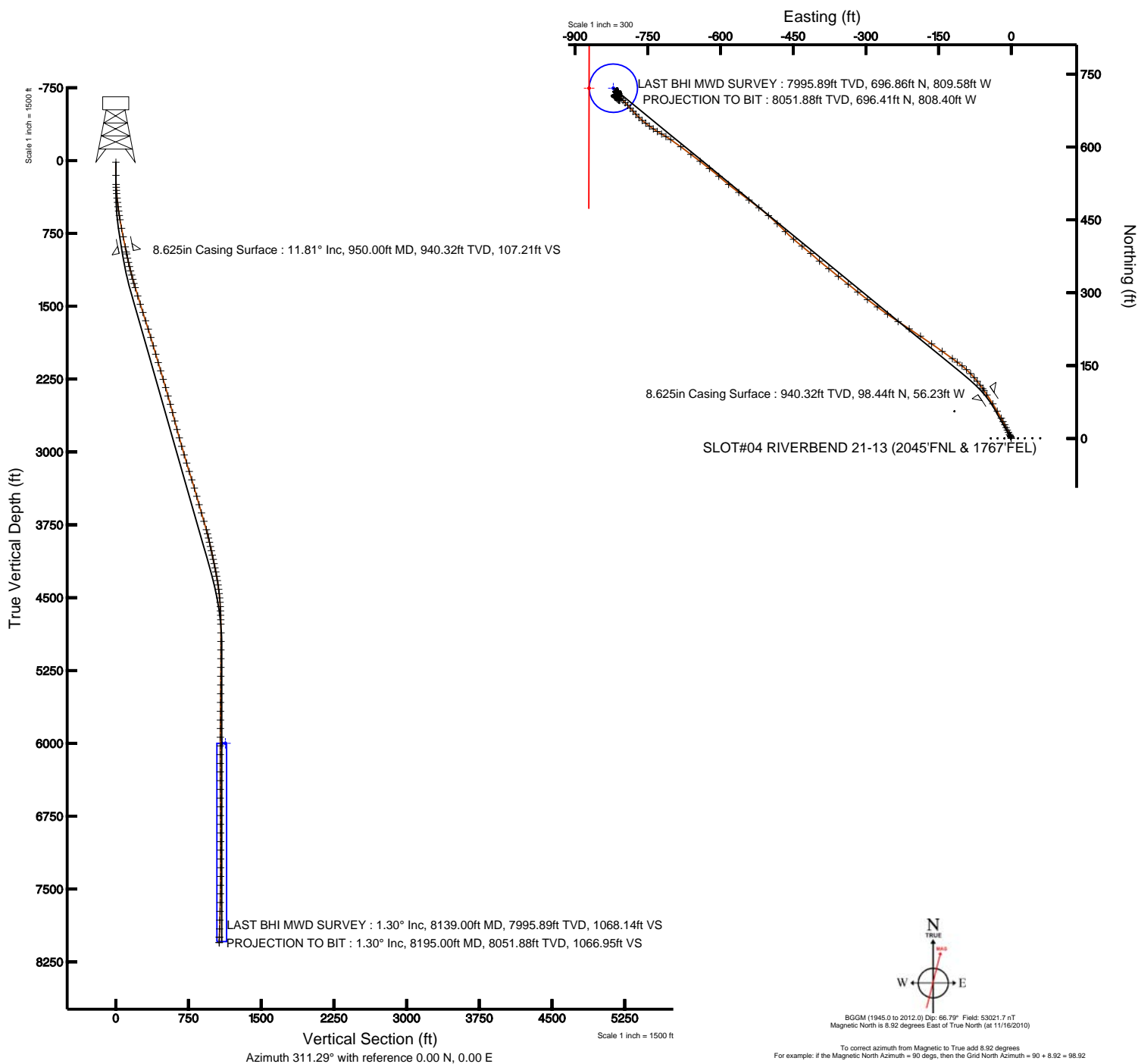


Location:	COLORADO	Slot:	SLOT#04 RIVERBEND 21-13 (2045/FNL & 1767/FEL)
Field:	WELD COUNTY (KERR MCGEE)	Well:	RIVERBEND 21-13
Facility:	SEC.13-T1N-R67W	Wellbore:	RIVERBEND 21-13 PWB



Pit reference weight/in RIVERBED 21-13 (REV-B-0) PVP True vertical depths are referenced to XTREME 7 (RKB) Measured depths are referenced to XTREME 7 (RKB) XTREME 7 (RKB) to Mean Sea Level: 4034 feet Mean Sea Level to Mud line (Facility: SEC-13-T1N-R67W): 0 feet Coordinates are in feet referenced to Slot		Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501). US feet North Reference: True north Scale: True distance Depths are in feet Created by: cookdarrn on 1/26/2011
--	--	---





# Actual Wellpath Report

RIVERBEND 21-13 AWP

Page 1 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 RIVERBEND 21-13 (2045'FNL & 1767'FEL)
Area	COLORADO	Well	RIVERBEND 21-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 21-13 AWB
Facility	SEC.13-T1N-R67W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet	Software System	WellArchitect® 2.0
North Reference	True	User	Cookdanm
Scale	0.999963	Report Generated	1/26/2011 at 4:36:58 PM
Convergence at slot	0.43° East	Database/Source file	Denver Server/RIVERBEND_21-13_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.36	36.11	3185866.38	1262745.43	40°03'09.774"N	104°50'09.730"W
Facility Reference Pt			3185830.27	1262744.80	40°03'09.770"N	104°50'10.194"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 7 (RKB) to Facility Vertical Datum	4934.00ft
Horizontal Reference Pt	Slot	XTREME 7 (RKB) to Mean Sea Level	4934.00ft
Vertical Reference Pt	XTREME 7 (RKB)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	XTREME 7 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	311.29°



# Actual Wellpath Report

RIVERBEND 21-13 AWP

Page 2 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 RIVERBEND 21-13 (2045'FNL & 1767'FEL)
Area	COLORADO	Well	RIVERBEND 21-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 21-13 AWB
Facility	SEC.13-T1N-R67W		

## WELLPATH DATA (113 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	356.300	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	356.300	17.00	0.00	0.00	0.00	0.00	
152.00	0.800	356.300	152.00	0.67	0.94	-0.06	0.59	
245.00	2.000	334.800	244.97	2.61	3.06	-0.79	1.39	
276.00	3.000	333.100	275.94	3.86	4.27	-1.39	3.23	
307.00	4.000	332.400	306.88	5.62	5.95	-2.26	3.23	
339.00	5.000	330.600	338.78	7.98	8.16	-3.46	3.16	
386.00	6.500	333.100	385.54	12.39	12.31	-5.67	3.23	
431.00	7.000	333.400	430.23	17.29	17.04	-8.05	1.11	
476.00	7.500	334.100	474.87	22.54	22.13	-10.56	1.13	
521.00	8.800	333.100	519.41	28.44	27.84	-13.40	2.91	
567.00	9.700	332.700	564.82	35.32	34.42	-16.77	1.96	
612.00	10.300	331.000	609.13	42.63	41.31	-20.46	1.49	
702.00	11.300	329.900	697.54	58.57	55.98	-28.78	1.13	
791.00	11.700	327.800	784.75	75.48	71.16	-37.96	0.65	
897.00	12.100	325.300	888.47	96.57	89.39	-50.02	0.62	
971.00	11.700	326.000	960.88	111.35	101.98	-58.63	0.57	
1016.00	12.500	323.600	1004.88	120.52	109.68	-64.07	2.10	
1061.00	13.100	321.100	1048.76	130.30	117.57	-70.16	1.81	
1104.00	13.500	319.000	1090.61	140.08	125.15	-76.51	1.46	
1150.00	14.500	316.500	1135.24	151.13	133.38	-84.00	2.54	
1195.00	15.500	312.300	1178.71	162.76	141.52	-92.33	3.28	
1240.00	15.700	308.800	1222.06	174.85	149.38	-101.52	2.14	
1285.00	16.100	305.600	1265.33	187.14	156.83	-111.34	2.14	
1330.00	16.400	306.000	1308.54	199.68	164.19	-121.55	0.71	
1419.00	17.100	305.300	1393.76	225.20	179.14	-142.39	0.82	
1508.00	17.900	305.300	1478.64	251.82	194.60	-164.24	0.90	
1598.00	18.200	303.500	1564.21	279.50	210.35	-187.25	0.70	
1687.00	18.100	302.800	1648.78	306.94	225.51	-210.46	0.27	
1778.00	17.000	303.500	1735.55	334.11	240.52	-233.43	1.23	
1868.00	17.400	306.000	1821.52	360.54	255.69	-255.29	0.93	
1957.00	16.400	305.300	1906.68	386.29	270.77	-276.31	1.15	
2047.00	16.400	307.100	1993.02	411.60	285.78	-296.81	0.56	
2137.00	16.500	309.200	2079.33	437.04	301.52	-316.85	0.67	
2226.00	16.700	308.100	2164.62	462.44	317.40	-336.71	0.42	
2317.00	16.500	309.500	2251.83	488.41	333.68	-356.97	0.49	
2406.00	16.200	308.100	2337.23	513.44	349.38	-376.49	0.56	
2496.00	15.800	309.900	2423.75	538.22	364.99	-395.77	0.71	
2585.00	15.700	312.300	2509.41	562.37	380.87	-413.97	0.74	
2674.00	14.700	307.800	2595.30	585.69	395.89	-431.80	1.74	
2763.00	14.600	310.600	2681.40	608.17	410.11	-449.24	0.80	
2853.00	15.200	315.100	2768.38	631.29	425.85	-466.19	1.45	
2943.00	14.900	313.700	2855.29	654.62	442.20	-482.88	0.52	
3034.00	16.400	310.900	2942.92	679.16	458.70	-501.05	1.85	
3124.00	16.800	308.500	3029.17	704.86	475.12	-520.83	0.88	



# Actual Wellpath Report

RIVERBEND 21-13 AWP

Page 3 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 RIVERBEND 21-13 (2045'FNL & 1767'FEL)
Area	COLORADO	Well	RIVERBEND 21-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 21-13 AWB
Facility	SEC.13-T1N-R67W		

## WELLPATH DATA (113 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
3213.00	16.800	306.700	3114.37	730.53	490.81	-541.21	0.58	
3303.00	17.200	307.100	3200.44	756.76	506.61	-562.25	0.46	
3393.00	17.400	308.500	3286.37	783.47	523.01	-583.40	0.51	
3482.00	16.800	310.900	3371.43	809.63	539.72	-603.53	1.04	
3571.00	16.100	308.100	3456.79	834.81	555.75	-622.97	1.19	
3661.00	15.200	307.100	3543.45	859.04	570.57	-642.20	1.04	
3749.00	16.300	307.100	3628.15	882.86	584.98	-661.25	1.25	
3839.00	17.300	306.700	3714.30	908.80	600.60	-682.05	1.12	
3928.00	16.300	303.900	3799.51	934.37	615.47	-703.03	1.45	
3972.00	13.900	300.000	3841.99	945.68	621.56	-712.73	5.92	
4017.00	13.100	300.700	3885.74	956.00	626.87	-721.80	1.81	
4062.00	12.700	301.400	3929.61	965.88	632.05	-730.41	0.95	
4107.00	12.700	303.500	3973.50	975.65	637.35	-738.75	1.03	
4152.00	12.600	307.800	4017.41	985.46	643.09	-746.76	2.10	
4198.00	12.100	308.100	4062.35	995.28	649.14	-754.52	1.10	
4242.00	12.000	309.500	4105.38	1004.45	654.90	-761.67	0.70	
4287.00	11.800	314.400	4149.41	1013.72	661.09	-768.57	2.29	
4332.00	11.400	318.300	4193.50	1022.73	667.63	-774.82	1.96	
4375.00	11.100	317.600	4235.67	1031.06	673.86	-780.44	0.77	
4420.00	10.800	317.900	4279.85	1039.56	680.19	-786.18	0.68	
4465.00	9.800	317.200	4324.12	1047.56	686.13	-791.61	2.24	
4511.00	8.600	314.100	4369.53	1054.89	691.39	-796.74	2.82	
4556.00	7.600	316.200	4414.08	1061.21	695.88	-801.22	2.32	
4600.00	6.400	322.900	4457.75	1066.51	699.94	-804.71	3.29	
4645.00	5.300	321.800	4502.52	1071.01	703.57	-807.51	2.46	
4690.00	4.100	317.200	4547.37	1074.66	706.39	-809.89	2.79	
4735.00	2.800	314.300	4592.28	1077.35	708.33	-811.77	2.91	
4779.00	2.600	321.800	4636.24	1079.41	709.87	-813.15	0.92	
4824.00	1.800	330.600	4681.20	1081.08	711.29	-814.13	1.92	
4870.00	1.700	328.100	4727.18	1082.41	712.50	-814.85	0.27	
4915.00	0.900	327.400	4772.17	1083.39	713.36	-815.39	1.78	
5005.00	0.400	2.940	4862.16	1084.27	714.27	-815.75	0.69	
5094.00	0.300	62.700	4951.16	1084.37	714.69	-815.53	0.40	
5182.00	0.500	64.500	5039.16	1084.14	714.96	-814.98	0.23	
5271.00	0.500	72.600	5128.16	1083.78	715.24	-814.26	0.08	
5361.00	0.400	74.000	5218.15	1083.41	715.45	-813.58	0.11	
5452.00	0.400	91.200	5309.15	1083.00	715.53	-812.96	0.13	
5542.00	0.500	116.200	5399.15	1082.38	715.35	-812.29	0.24	
5632.00	0.600	153.100	5489.14	1081.56	714.75	-811.73	0.40	
5722.00	1.100	169.900	5579.13	1080.45	713.48	-811.36	0.61	
5813.00	0.100	168.900	5670.13	1079.70	712.54	-811.19	1.10	
5903.00	0.400	171.700	5760.13	1079.40	712.16	-811.13	0.33	
5991.00	0.500	165.700	5848.12	1078.85	711.48	-810.99	0.13	
6080.00	0.800	164.300	5937.12	1078.01	710.51	-810.73	0.34	
6169.00	0.400	196.300	6026.11	1077.36	709.61	-810.65	0.57	



# Actual Wellpath Report

RIVERBEND 21-13 AWP

Page 4 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 RIVERBEND 21-13 (2045'FNL & 1767'FEL)
Area	COLORADO	Well	RIVERBEND 21-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 21-13 AWB
Facility	SEC.13-T1N-R67W		

## WELLPATH DATA (113 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
6259.00	0.400	32.800	6116.11	1077.27	709.57	-810.57	0.88	
6350.00	0.400	161.500	6207.11	1077.04	709.54	-810.29	0.79	
6438.00	0.400	344.300	6295.11	1077.03	709.54	-810.28	0.91	
6528.00	0.300	290.200	6385.11	1077.52	709.93	-810.59	0.37	
6617.00	0.400	241.700	6474.11	1077.84	709.86	-811.08	0.34	
6707.00	0.600	223.000	6564.11	1077.97	709.37	-811.68	0.28	
6797.00	1.000	260.300	6654.10	1078.47	708.89	-812.77	0.71	
6887.00	0.800	243.800	6744.09	1079.21	708.48	-814.11	0.36	
6977.00	0.800	276.800	6834.08	1079.97	708.28	-815.30	0.50	
7066.00	0.800	244.100	6923.07	1080.72	708.08	-816.47	0.51	
7155.00	1.100	225.500	7012.06	1081.02	707.21	-817.64	0.48	
7243.00	0.400	295.400	7100.05	1081.38	706.75	-818.52	1.17	
7334.00	0.300	210.400	7191.05	1081.64	706.68	-818.93	0.53	
7424.00	0.700	171.000	7281.05	1081.17	705.93	-818.96	0.56	
7514.00	0.800	151.700	7371.04	1080.16	704.84	-818.58	0.30	
7605.00	0.400	195.600	7462.03	1079.43	703.97	-818.36	0.64	
7693.00	0.600	149.200	7550.03	1078.86	703.28	-818.21	0.49	
7782.00	1.300	126.000	7639.02	1077.41	702.29	-817.15	0.88	
7873.00	1.700	128.100	7729.99	1075.03	700.85	-815.26	0.44	
7964.00	1.600	131.300	7820.95	1072.42	699.17	-813.24	0.15	
8055.00	1.400	122.100	7911.92	1070.05	697.74	-811.34	0.34	
8139.00	1.300	110.900	7995.89	1068.14	696.86	-809.58	0.34	LAST BHI MWD SURVEY
8195.00	1.300	110.900	8051.88	1066.95	696.41	-808.40	0.00	PROJECTION TO BIT

## HOLE & CASING SECTIONS Ref Wellbore: RIVERBEND 21-13 AWB Ref Wellpath: RIVERBEND 21-13 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	17.00	950.00	933.00	17.00	940.32	0.00	0.00	98.44	-56.23
8.625in Casing Surface	17.00	950.00	933.00	17.00	940.32	0.00	0.00	98.44	-56.23
7.875in Open Hole	950.00	8195.00	7245.00	940.32	8051.88	98.44	-56.23	696.41	-808.40



# Actual Wellpath Report

RIVERBEND 21-13 AWP

Page 5 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 RIVERBEND 21-13 (2045'FNL & 1767'FEL)
Area	COLORADO	Well	RIVERBEND 21-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 21-13 AWB
Facility	SEC.13-T1N-R67W		

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
RIVERBEND 21-13 BHL ON PLAT (1320'FNL & 2590'FEL, REV-1)		6000.00	721.31	-825.26	3185035.77	1263460.51	40°03'16.902"N	104°50'20.342"W	point
RIVERBEND 21-13 GEO TARGET 50' RADIUS (1320'FNL & 2586'FEL , REV- 2)		6000.00	721.31	-821.26	3185039.77	1263460.54	40°03'16.902"N	104°50'20.291"W	circle
RIVERBEND 21-13 HARDLINE 50'W OF GEO TARGET		6000.00	721.31	-871.26	3184989.77	1263460.17	40°03'16.902"N	104°50'20.934"W	point

## WELLPATH COMPOSITION Ref Wellbore: RIVERBEND 21-13 AWB Ref Wellpath: RIVERBEND 21-13 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	897.00	NaviTrak (Standard)	BHI MWD SURVEYS 12.25 HOLE <152-897>	RIVERBEND 21-13 AWB
897.00	8139.00	NaviTrak (Standard)	BHI MWD SURVEYS 7.875 HOLE <971-8139>	RIVERBEND 21-13 AWB
8139.00	8195.00	Blind Drilling (std)	Projection to bit	RIVERBEND 21-13 AWB



# Actual Wellpath Report

RIVERBEND 21-13 AWP

Page 6 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 RIVERBEND 21-13 (2045'FNL & 1767'FEL)
Area	COLORADO	Well	RIVERBEND 21-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 21-13 AWB
Facility	SEC.13-T1N-R67W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8139.00	1.300	110.900	7995.89	LAST BHI MWD SURVEY
8195.00	1.300	110.900	8051.88	PROJECTION TO BIT