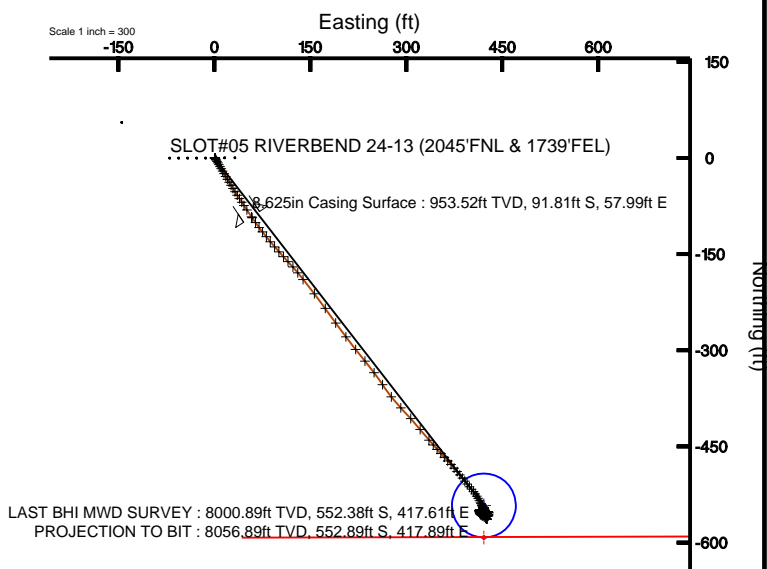
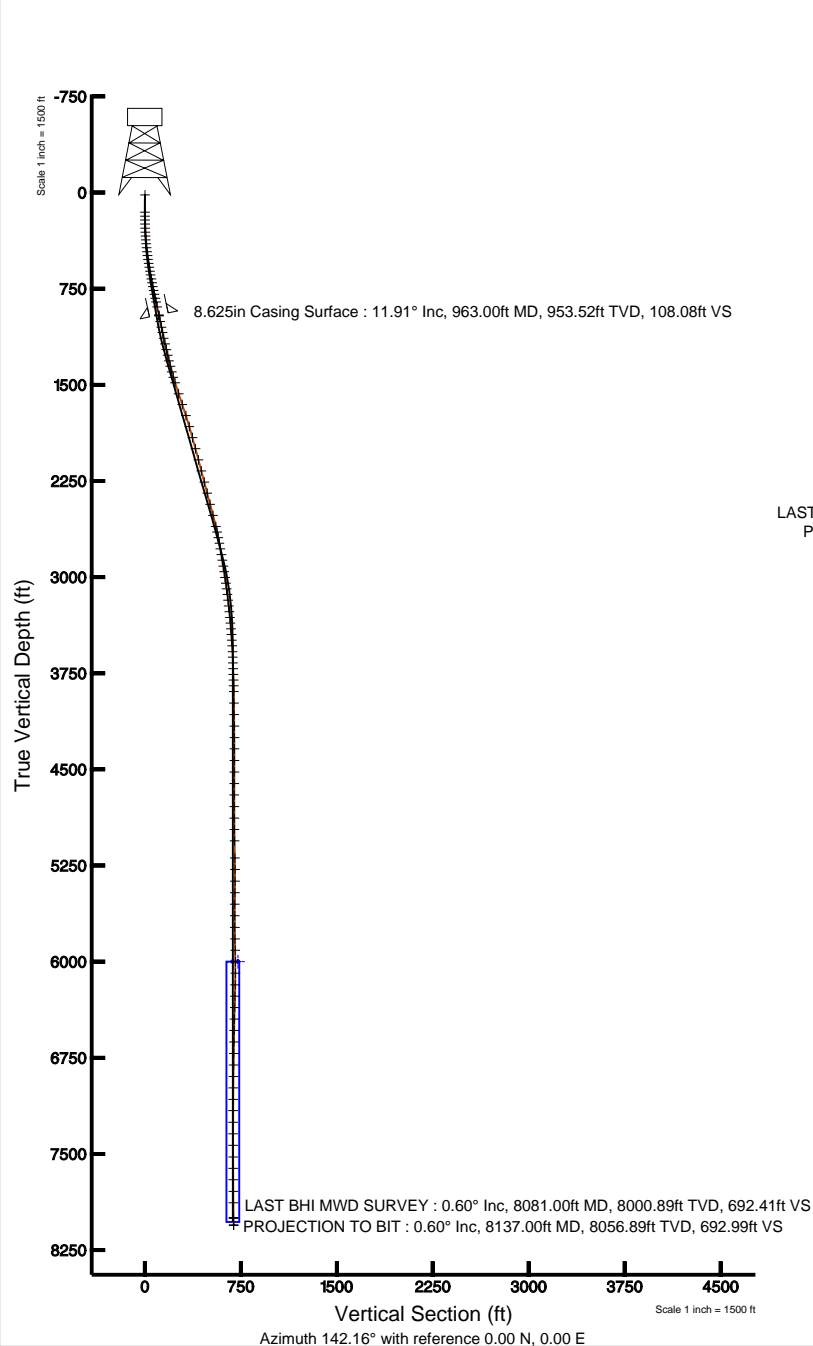


Location:	COLORADO	Slot:	SLOT#05 RIVERBEND 24-13 (2045/FNL & 1739/FEL)
Field:	WELD COUNTY (KERR MCGEE)	Well:	RIVERBEND 24-13
Facility:	SEC.13-T1N-R67W	Wellbore:	RIVERBEND 24-13 PWB



Post reference ellipsoid is NAD83/24-13 (REV-A-D) PWP	
True vertical depths are referenced to XTREME 7 (RKB)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
Measured depths are referenced to XTREME 7 (RKB)	North Reference: True north
XTREME 7 (RKB) to Mean Sea Level: 4934 feet	Scale: True distance
Mean Sea Level to Mud line (Facility SEC.19-T1N-RTW): 0 feet	Depths are in feet
Coordinates are in feet referenced by SDC	Created by: ccrickson on 1/13/2010



BGGM (1945.0 to 2012.0) Dip: 66.79° Field: 53021.7 nT  
Magnetic North is 8.92 degrees East of True North (at 11/16/2010)

To correct azimuth from Magnetic to True add 8.92 degrees  
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth =  $90 + 8.92 = 98.92$



# Actual Wellpath Report

RIVERBEND 24-13 AWP

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INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 RIVERBEND 24-13 (2045'FNL & 1739'FEL)
Area	COLORADO	Well	RIVERBEND 24-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 24-13 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	1/13/2011 at 11:31:35 PM
Convergence at slot	0.43° East	Database/Source file	Denver Server/RIVERBEND_24-13_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.36	64.11	3185894.37	1262745.64	40°03'09.774"N	104°50'09.370"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	142.16°



# Actual Wellpath Report

RIVERBEND 24-13 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 RIVERBEND 24-13 (2045'FNL & 1739'FEL)
Area	COLORADO	Well	RIVERBEND 24-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 24-13 AWB
Facility	SEC.13-T1N-R67W		

## WELLPATH DATA (128 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	59.900	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	59.900	17.00	0.00	0.00	0.00	0.00	
152.00	0.300	59.900	152.00	0.05	0.18	0.31	0.22	
183.00	0.200	105.300	183.00	0.10	0.20	0.43	0.69	
214.00	0.400	140.200	214.00	0.25	0.11	0.55	0.85	
245.00	1.000	143.200	245.00	0.63	-0.19	0.78	1.94	
277.00	1.800	149.900	276.99	1.41	-0.85	1.20	2.55	
308.00	2.800	151.700	307.96	2.64	-1.94	1.80	3.23	
338.00	3.700	148.100	337.91	4.32	-3.41	2.66	3.07	
368.00	4.600	149.200	367.83	6.48	-5.26	3.79	3.01	
399.00	5.400	148.800	398.72	9.16	-7.58	5.18	2.58	
430.00	6.200	149.200	429.56	12.27	-10.26	6.79	2.58	
461.00	6.900	149.500	460.35	15.78	-13.31	8.60	2.26	
491.00	7.600	150.600	490.11	19.53	-16.59	10.49	2.38	
522.00	8.400	150.600	520.81	23.80	-20.35	12.60	2.58	
553.00	9.000	149.500	551.46	28.44	-24.41	14.95	2.01	
584.00	9.600	149.200	582.05	33.41	-28.72	17.50	1.94	
615.00	10.000	149.500	612.60	38.65	-33.26	20.19	1.30	
645.00	10.400	148.500	642.12	43.92	-37.81	22.93	1.46	
676.00	10.600	148.500	672.60	49.54	-42.63	25.88	0.65	
707.00	11.200	148.100	703.04	55.37	-47.61	28.96	1.95	
737.00	11.700	147.800	732.45	61.29	-52.66	32.12	1.68	
768.00	11.900	147.100	762.79	67.60	-58.00	35.53	0.79	
799.00	12.000	147.100	793.12	74.00	-63.39	39.02	0.32	
831.00	12.000	146.400	824.42	80.63	-68.96	42.66	0.45	
860.00	12.200	146.400	852.77	86.69	-74.02	46.03	0.69	
900.00	12.000	146.000	891.89	95.06	-80.99	50.69	0.54	
971.00	11.900	146.000	961.35	109.73	-93.18	58.91	0.14	
1016.00	12.000	145.000	1005.37	119.03	-100.85	64.19	0.51	
1061.00	11.900	143.200	1049.40	128.34	-108.40	69.65	0.86	
1104.00	11.500	140.100	1091.50	137.05	-115.24	75.06	1.73	
1150.00	12.500	142.200	1136.50	146.62	-122.69	81.05	2.37	
1195.00	13.500	142.200	1180.34	156.74	-130.69	87.26	2.22	
1240.00	13.200	139.000	1224.13	167.12	-138.72	93.85	1.77	
1285.00	13.200	137.200	1267.94	177.37	-146.37	100.71	0.91	
1330.00	13.500	136.200	1311.72	187.71	-153.93	107.83	0.84	
1374.00	14.100	137.600	1354.45	198.16	-161.59	115.00	1.56	
1419.00	15.100	138.700	1398.00	209.48	-170.04	122.57	2.31	
1463.00	16.400	141.100	1440.35	221.41	-179.18	130.25	3.30	
1508.00	17.900	141.800	1483.35	234.68	-189.56	138.52	3.36	
1598.00	18.900	141.500	1568.74	263.08	-211.84	156.15	1.12	
1687.00	18.500	145.000	1653.05	291.60	-234.69	173.22	1.34	
1778.00	17.600	143.900	1739.57	319.77	-257.63	189.61	1.06	
1868.00	17.000	143.200	1825.50	346.53	-279.16	205.50	0.71	
1957.00	15.400	141.500	1910.96	371.35	-298.83	220.65	1.87	



# Actual Wellpath Report

RIVERBEND 24-13 AWP

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INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 RIVERBEND 24-13 (2045'FNL & 1739'FEL)
Area	COLORADO	Well	RIVERBEND 24-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 24-13 AWB
Facility	SEC.13-T1N-R67W		

## WELLPATH DATA (128 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2047.00	14.600	140.800	1997.89	394.64	-316.97	235.26	0.91	
2137.00	15.000	142.900	2084.91	417.63	-335.05	249.46	0.74	
2226.00	14.900	146.400	2170.90	440.56	-353.77	262.74	1.02	
2317.00	15.100	142.200	2258.80	464.08	-372.88	276.48	1.21	
2406.00	14.500	136.200	2344.85	486.76	-390.08	291.30	1.85	
2496.00	14.700	137.600	2431.95	509.34	-406.65	306.79	0.45	
2585.00	14.900	140.800	2517.99	532.04	-423.85	321.64	0.95	
2674.00	13.200	139.400	2604.33	553.63	-440.44	335.49	1.95	
2719.00	12.500	138.700	2648.20	563.62	-448.00	342.04	1.59	
2763.00	11.600	137.600	2691.23	572.79	-454.84	348.17	2.11	
2808.00	10.500	137.200	2735.40	581.38	-461.19	354.01	2.45	
2853.00	10.100	137.200	2779.67	589.40	-467.09	359.47	0.89	
2898.00	10.000	137.900	2823.98	597.23	-472.89	364.77	0.35	
2943.00	9.400	139.000	2868.34	604.79	-478.56	369.80	1.40	
2989.00	9.100	138.300	2913.74	612.17	-484.11	374.69	0.70	
3034.00	9.100	140.100	2958.17	619.28	-489.50	379.34	0.63	
3079.00	8.400	140.100	3002.65	626.12	-494.75	383.73	1.56	
3124.00	7.700	141.500	3047.21	632.42	-499.63	387.71	1.62	
3169.00	7.700	140.800	3091.80	638.45	-504.33	391.50	0.21	
3213.00	7.500	140.400	3135.41	644.26	-508.82	395.19	0.47	
3258.00	6.600	140.100	3180.07	649.78	-513.07	398.72	2.00	
3303.00	6.500	140.800	3224.78	654.91	-517.03	401.99	0.28	
3348.00	6.000	142.500	3269.51	659.81	-520.87	405.03	1.18	
3393.00	5.500	143.200	3314.28	664.32	-524.46	407.76	1.12	
3437.00	5.200	146.400	3358.09	668.42	-527.81	410.12	0.96	
3482.00	5.000	148.500	3402.91	672.40	-531.18	412.27	0.61	
3526.00	4.700	150.600	3446.76	676.09	-534.38	414.16	0.79	
3571.00	3.500	154.800	3491.64	679.25	-537.23	415.65	2.75	
3615.00	3.000	145.000	3535.57	681.71	-539.39	416.88	1.69	
3661.00	2.800	149.500	3581.51	684.03	-541.35	418.14	0.66	
3704.00	2.200	163.600	3624.47	685.84	-543.04	418.91	1.99	
3749.00	2.200	165.700	3669.44	687.44	-544.71	419.37	0.18	
3794.00	2.800	156.200	3714.40	689.29	-546.55	420.02	1.62	
3839.00	1.900	138.300	3759.36	691.10	-548.11	420.96	2.56	
3883.00	1.800	137.000	3803.33	692.52	-549.16	421.92	0.25	
3928.00	1.000	114.700	3848.32	693.57	-549.85	422.76	2.12	
3972.00	0.900	199.500	3892.32	694.10	-550.33	422.99	2.92	
4062.00	1.000	155.200	3982.31	695.25	-551.71	423.09	0.80	
4152.00	1.400	127.400	4072.29	697.08	-553.09	424.29	0.77	
4242.00	1.100	120.700	4162.26	698.94	-554.20	425.91	0.37	
4332.00	0.100	218.800	4252.26	699.76	-554.70	426.60	1.24	
4420.00	0.400	270.100	4340.26	699.59	-554.76	426.24	0.39	
4511.00	0.400	3.700	4431.26	699.16	-554.44	425.95	0.64	
4600.00	0.800	11.700	4520.25	698.52	-553.53	426.09	0.46	
4690.00	0.400	36.700	4610.25	698.03	-552.66	426.41	0.52	



# Actual Wellpath Report

RIVERBEND 24-13 AWP

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INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 RIVERBEND 24-13 (2045'FNL & 1739'FEL)
Area	COLORADO	Well	RIVERBEND 24-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 24-13 AWB
Facility	SEC.13-T1N-R67W		

## WELLPATH DATA (128 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4779.00	0.400	38.100	4699.24	697.87	-552.17	426.79	0.01	
4870.00	0.400	100.000	4790.24	698.03	-551.97	427.29	0.45	
4960.00	0.400	107.100	4880.24	698.52	-552.12	427.90	0.06	
5049.00	0.700	152.400	4969.24	699.31	-552.69	428.45	0.57	
5137.00	1.100	171.700	5057.23	700.58	-554.00	428.82	0.56	
5271.00	1.200	193.100	5191.20	702.58	-556.64	428.69	0.33	
5361.00	1.100	189.300	5281.18	703.76	-558.41	428.34	0.14	
5452.00	1.000	280.000	5372.17	703.77	-559.14	427.42	1.64	
5542.00	1.100	274.400	5462.16	702.60	-558.93	425.78	0.16	
5632.00	0.800	229.700	5552.15	702.05	-559.27	424.44	0.86	
5722.00	0.100	259.600	5642.14	702.04	-559.69	423.88	0.79	
5813.00	0.600	165.000	5733.14	702.44	-560.17	423.93	0.68	
5903.00	1.000	176.900	5823.13	703.52	-561.41	424.09	0.48	
5991.00	1.500	127.100	5911.11	705.27	-562.87	425.05	1.30	
6080.00	0.400	126.000	6000.10	706.69	-563.76	426.23	1.24	
6170.00	0.700	297.200	6090.10	706.49	-563.69	426.00	1.22	
6261.00	1.100	314.800	6181.09	705.12	-562.82	424.88	0.53	
6350.00	0.900	299.000	6270.07	703.63	-561.88	423.67	0.38	
6438.00	1.900	307.400	6358.05	701.59	-560.66	421.90	1.16	
6528.00	1.100	302.100	6448.01	699.33	-559.29	419.99	0.90	
6617.00	1.300	301.800	6536.99	697.58	-558.31	418.40	0.22	
6707.00	1.100	300.000	6626.97	695.83	-557.34	416.79	0.23	
6797.00	0.800	338.700	6716.96	694.42	-556.32	415.81	0.77	
6887.00	0.900	327.100	6806.95	693.12	-555.14	415.20	0.22	
6977.00	1.100	341.200	6896.94	691.60	-553.73	414.54	0.35	
7066.00	0.900	350.600	6985.93	690.17	-552.23	414.15	0.29	
7155.00	0.600	352.800	7074.92	689.16	-551.08	413.98	0.34	
7243.00	0.400	354.900	7162.91	688.50	-550.32	413.89	0.23	
7334.00	0.400	56.000	7253.91	688.26	-549.82	414.13	0.45	
7424.00	0.400	76.400	7343.91	688.41	-549.57	414.69	0.16	
7514.00	0.400	84.900	7433.91	688.71	-549.47	415.31	0.07	
7605.00	0.400	100.000	7524.91	689.11	-549.50	415.94	0.12	
7693.00	0.400	97.500	7612.90	689.56	-549.59	416.55	0.02	
7782.00	0.300	145.300	7701.90	690.01	-549.82	416.99	0.33	
7873.00	0.500	190.300	7792.90	690.52	-550.41	417.05	0.39	
7962.00	0.600	162.600	7881.90	691.21	-551.24	417.12	0.32	
8081.00	0.600	151.000	8000.89	692.41	-552.38	417.61	0.10	LAST BHI MWD SURVEY
8137.00	0.600	151.000	8056.89	692.99	-552.89	417.89	0.00	PROJECTION TO BIT



# Actual Wellpath Report

RIVERBEND 24-13 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 RIVERBEND 24-13 (2045'FNL & 1739'FEL)
Area	COLORADO	Well	RIVERBEND 24-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 24-13 AWB
Facility	SEC.13-T1N-R67W		

HOLE & CASING SECTIONS Ref Wellbore: RIVERBEND 24-13 AWB Ref Wellpath: RIVERBEND 24-13 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	963.00	946.00	17.00	953.52	0.00	0.00	-91.81	57.99
8.625in Casing Surface	17.00	963.00	946.00	17.00	953.52	0.00	0.00	-91.81	57.99
7.875in Open Hole	963.00	8137.00	7174.00	953.52	8056.89	-91.81	57.99	-552.89	417.89

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
RIVERBEND 24-13 GEO TARGET 50' RADIUS (2590'FNL & 1320'FEL, REV-1)		6000.00	-542.42	421.33	3186319.74	1262206.41	40°03'04.414"N	104°50'03.952"W	circle
RIVERBEND 24-13 HARDLINE 50'S OF GEO TARGET		6000.00	-592.42	421.33	3186320.11	1262156.42	40°03'03.920"N	104°50'03.952"W	point

WELLPATH COMPOSITION Ref Wellbore: RIVERBEND 24-13 AWB Ref Wellpath: RIVERBEND 24-13 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	900.00	NaviTrak (Standard)	BHI MWD SURVEYS 12.25 <152-900>	RIVERBEND 24-13 AWB
900.00	8081.00	NaviTrak (Standard)	BHI MWD SURVEYS 7.875 HOLE <971-8081>	RIVERBEND 24-13 AWB
8081.00	8137.00	Blind Drilling (std)	Projection to bit	RIVERBEND 24-13 AWB



# Actual Wellpath Report

RIVERBEND 24-13 AWP

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**INTEQ**

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 RIVERBEND 24-13 (2045'FNL & 1739'FEL)
Area	COLORADO	Well	RIVERBEND 24-13
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 24-13 AWB
Facility	SEC.13-T1N-R67W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8081.00	0.600	151.000	8000.89	LAST BHI MWD SURVEY
8137.00	0.600	151.000	8056.89	PROJECTION TO BIT