

KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#12 RIVERBEND 8-13 RE-DRILL (2045'FNL & 1753'FEL)
 Field: WELD COUNTY (KERR MCGEE) Well: RIVERBEND 8-13 RE-DRILL
 Facility: SEC.13-T1N-R67W Wellbore: RIVERBEND 8-13 RE-DRILL PWB



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	86.281	17.00	0.00	0.00	0.00	0.00
End of Tangent	1100.00	0.000	86.281	1100.00	0.00	0.00	0.00	0.00
End of Build (S)	1900.00	16.000	86.281	1889.64	7.20	110.74	2.00	110.98
End of Tangent (S)	5069.19	16.000	86.281	4936.07	63.87	982.45	0.00	984.52
Drop (S)	5869.19	0.000	86.281	5725.71	71.06	1093.19	2.00	1095.50
End of Tangent	8175.48	0.000	86.281	8032.00	71.06	1093.19	0.00	1095.50

Location Information

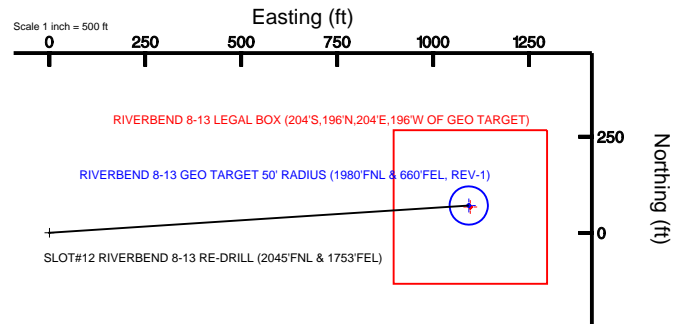
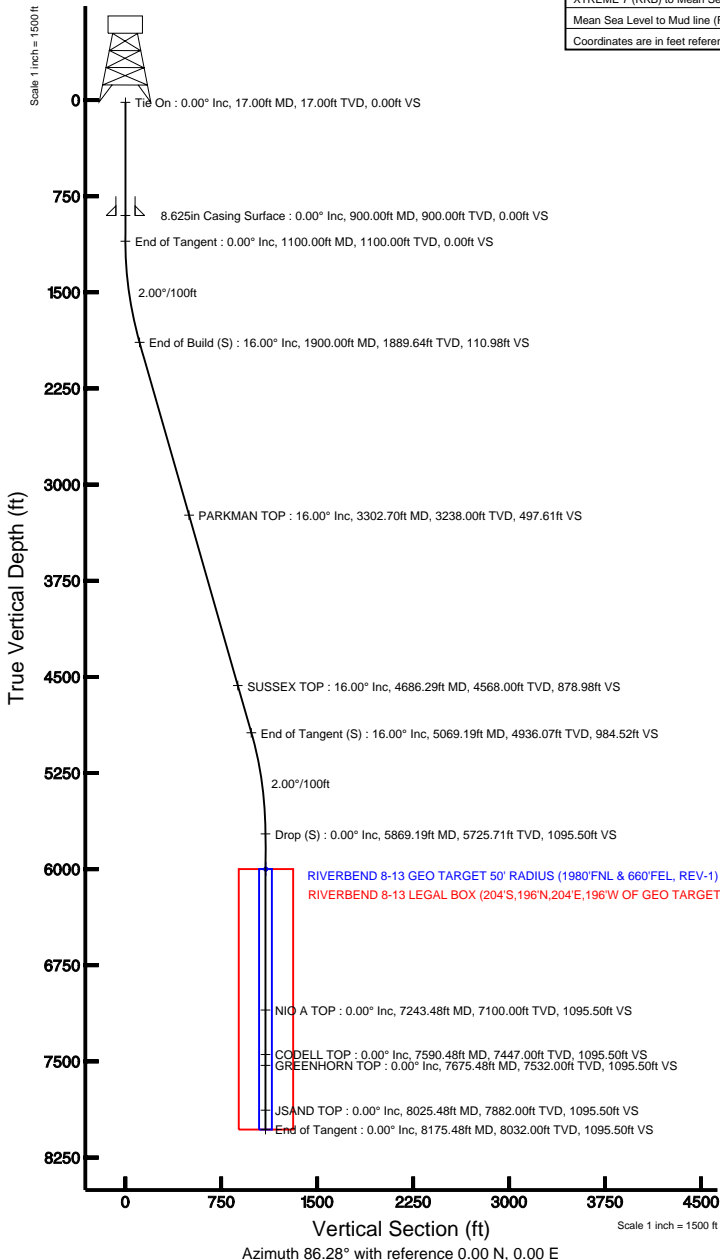
Facility Name				Grid East (USft)	Grid North (USft)	Latitude	Longitude
SEC.13-T1N-R67W				3185830.271	1262744.796	40°03'09.770"N	104°50'10.194"W
Slot	Local N (ft)	Local E (ft)	Grid East (USft)	Grid North (USft)	Latitude	Longitude	
SLOT#12 RIVERBEND 8-13 RE-DRILL (2045'FNL & 1753'FEL)	0.36	50.11	3185880.375	1262745.531	40°03'09.774"N	104°50'09.550"W	
XTREME 7 (RKB) to Mud line (Facility: SEC.13-T1N-R67W)						4934ft	
Mean Sea Level to Mud line (Facility: SEC.13-T1N-R67W)						0ft	
XTREME 7 (RKB) to Mean Sea Level						4934ft	

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (USft)	Grid North (USft)	Latitude	Longitude
RIVERBEND 8-13 GEO TARGET 50' RADIUS (1980'FNL & 660'FEL, REV-1)		6000.00	71.06	1093.19	3186972.96	1262824.78	40°03'10.476"N	104°49'55.492"W
RIVERBEND 8-13 LEGAL BOX (204'S,196'N,204'E,196'W OF GEO TARGET)		6000.00	67.07	1097.20	3186976.99	1262820.81	40°03'10.437"N	104°49'55.448"W

Plot reference wellpath is RIVERBEND 8-13 RE-DRILL (REV-A.0) 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.13-T1N-R67W): 0 feet Depths are in feet
 Coordinates are in feet referenced to Slot Created by: cookdanm on 11/29/2010



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



Planned Wellpath Report

RIVERBEND 8-13 RE-DRILL (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RIVERBEND 8-13 RE-DRILL (2045'FNL & 1753'FEL)
Area	COLORADO	Well	RIVERBEND 8-13 RE-DRILL
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 8-13 RE-DRILL PWB
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	11/29/2010 at 1:06:21 PM
Convergence at slot	0.43° East	Database/Source file	Denver Server/RIVERBEND_8-13_RE-DRILL_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.36	50.11	3185880.38	1262745.53	40°03'09.774"N	104°50'09.550"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	86.28°



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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RIVERBEND 8-13 RE-DRILL (2045'FNL & 1753'FEL)
Area	COLORADO	Well	RIVERBEND 8-13 RE-DRILL
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 8-13 RE-DRILL PWB
Facility	SEC.13-T1N-R67W		

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	86.281	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	86.281	17.00	0.00	0.00	0.00	0.00	Tie On
117.00†	0.000	86.281	117.00	0.00	0.00	0.00	0.00	
217.00†	0.000	86.281	217.00	0.00	0.00	0.00	0.00	
317.00†	0.000	86.281	317.00	0.00	0.00	0.00	0.00	
417.00†	0.000	86.281	417.00	0.00	0.00	0.00	0.00	
517.00†	0.000	86.281	517.00	0.00	0.00	0.00	0.00	
617.00†	0.000	86.281	617.00	0.00	0.00	0.00	0.00	
717.00†	0.000	86.281	717.00	0.00	0.00	0.00	0.00	
817.00†	0.000	86.281	817.00	0.00	0.00	0.00	0.00	
917.00†	0.000	86.281	917.00	0.00	0.00	0.00	0.00	
1017.00†	0.000	86.281	1017.00	0.00	0.00	0.00	0.00	
1100.00	0.000	86.281	1100.00	0.00	0.00	0.00	0.00	End of Tangent
1117.00†	0.340	86.281	1117.00	0.05	0.00	0.05	2.00	
1217.00†	2.340	86.281	1216.97	2.39	0.15	2.38	2.00	
1317.00†	4.340	86.281	1316.79	8.21	0.53	8.20	2.00	
1417.00†	6.340	86.281	1416.35	17.52	1.14	17.48	2.00	
1517.00†	8.340	86.281	1515.53	30.30	1.97	30.23	2.00	
1617.00†	10.340	86.281	1614.20	46.52	3.02	46.43	2.00	
1717.00†	12.340	86.281	1712.24	66.19	4.29	66.05	2.00	
1817.00†	14.340	86.281	1809.54	89.26	5.79	89.07	2.00	
1900.00	16.000	86.281	1889.64	110.98	7.20	110.74	2.00	End of Build (S)
1917.00†	16.000	86.281	1905.98	115.66	7.50	115.42	0.00	
2017.00†	16.000	86.281	2002.11	143.23	9.29	142.92	0.00	
2117.00†	16.000	86.281	2098.24	170.79	11.08	170.43	0.00	
2217.00†	16.000	86.281	2194.36	198.35	12.87	197.94	0.00	
2317.00†	16.000	86.281	2290.49	225.92	14.66	225.44	0.00	
2417.00†	16.000	86.281	2386.62	253.48	16.44	252.95	0.00	
2517.00†	16.000	86.281	2482.74	281.05	18.23	280.45	0.00	
2617.00†	16.000	86.281	2578.87	308.61	20.02	307.96	0.00	
2717.00†	16.000	86.281	2674.99	336.17	21.81	335.46	0.00	
2817.00†	16.000	86.281	2771.12	363.74	23.60	362.97	0.00	
2917.00†	16.000	86.281	2867.25	391.30	25.38	390.48	0.00	
3017.00†	16.000	86.281	2963.37	418.86	27.17	417.98	0.00	
3117.00†	16.000	86.281	3059.50	446.43	28.96	445.49	0.00	
3217.00†	16.000	86.281	3155.62	473.99	30.75	472.99	0.00	
3302.70†	16.000	86.281	3238.00	497.61	32.28	496.56	0.00	PARKMAN TOP
3317.00†	16.000	86.281	3251.75	501.56	32.54	500.50	0.00	
3417.00†	16.000	86.281	3347.88	529.12	34.32	528.00	0.00	
3517.00†	16.000	86.281	3444.00	556.68	36.11	555.51	0.00	
3617.00†	16.000	86.281	3540.13	584.25	37.90	583.02	0.00	
3717.00†	16.000	86.281	3636.26	611.81	39.69	610.52	0.00	
3817.00†	16.000	86.281	3732.38	639.37	41.48	638.03	0.00	
3917.00†	16.000	86.281	3828.51	666.94	43.26	665.53	0.00	
4017.00†	16.000	86.281	3924.63	694.50	45.05	693.04	0.00	



Planned Wellpath Report

RIVERBEND 8-13 RE-DRILL (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RIVERBEND 8-13 RE-DRILL (2045'FNL & 1753'FEL)
Area	COLORADO	Well	RIVERBEND 8-13 RE-DRILL
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 8-13 RE-DRILL PWB
Facility	SEC.13-T1N-R67W		

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

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4117.00†	16.000	86.281	4020.76	722.07	46.84	720.54	0.00	
4217.00†	16.000	86.281	4116.89	749.63	48.63	748.05	0.00	
4317.00†	16.000	86.281	4213.01	777.19	50.42	775.56	0.00	
4417.00†	16.000	86.281	4309.14	804.76	52.20	803.06	0.00	
4517.00†	16.000	86.281	4405.26	832.32	53.99	830.57	0.00	
4617.00†	16.000	86.281	4501.39	859.88	55.78	858.07	0.00	
4686.29†	16.000	86.281	4568.00	878.98	57.02	877.13	0.00	SUSSEX TOP
4717.00†	16.000	86.281	4597.52	887.45	57.57	885.58	0.00	
4817.00†	16.000	86.281	4693.64	915.01	59.36	913.08	0.00	
4917.00†	16.000	86.281	4789.77	942.57	61.14	940.59	0.00	
5017.00†	16.000	86.281	4885.90	970.14	62.93	968.10	0.00	
5069.19	16.000	86.281	4936.07	984.52	63.87	982.45	0.00	End of Tangent (S)
5117.00†	15.044	86.281	4982.13	997.32	64.70	995.22	2.00	
5217.00†	13.044	86.281	5079.14	1021.58	66.27	1019.43	2.00	
5317.00†	11.044	86.281	5176.93	1042.45	67.62	1040.25	2.00	
5417.00†	9.044	86.281	5275.39	1059.89	68.75	1057.66	2.00	
5517.00†	7.044	86.281	5374.40	1073.88	69.66	1071.62	2.00	
5617.00†	5.044	86.281	5473.84	1084.41	70.35	1082.12	2.00	
5717.00†	3.044	86.281	5573.59	1091.46	70.80	1089.16	2.00	
5817.00†	1.044	86.281	5673.52	1095.03	71.03	1092.72	2.00	
5869.19	0.000	86.281	5725.71 [†]	1095.50	71.06	1093.19	2.00	Drop (S)
5917.00†	0.000	86.281	5773.52	1095.50	71.06	1093.19	0.00	
6017.00†	0.000	86.281	5873.52	1095.50	71.06	1093.19	0.00	
6117.00†	0.000	86.281	5973.52	1095.50	71.06	1093.19	0.00	
6217.00†	0.000	86.281	6073.52	1095.50	71.06	1093.19	0.00	
6317.00†	0.000	86.281	6173.52	1095.50	71.06	1093.19	0.00	
6417.00†	0.000	86.281	6273.52	1095.50	71.06	1093.19	0.00	
6517.00†	0.000	86.281	6373.52	1095.50	71.06	1093.19	0.00	
6617.00†	0.000	86.281	6473.52	1095.50	71.06	1093.19	0.00	
6717.00†	0.000	86.281	6573.52	1095.50	71.06	1093.19	0.00	
6817.00†	0.000	86.281	6673.52	1095.50	71.06	1093.19	0.00	
6917.00†	0.000	86.281	6773.52	1095.50	71.06	1093.19	0.00	
7017.00†	0.000	86.281	6873.52	1095.50	71.06	1093.19	0.00	
7117.00†	0.000	86.281	6973.52	1095.50	71.06	1093.19	0.00	
7217.00†	0.000	86.281	7073.52	1095.50	71.06	1093.19	0.00	
7243.48†	0.000	86.281	7100.00	1095.50	71.06	1093.19	0.00	NIO A TOP
7317.00†	0.000	86.281	7173.52	1095.50	71.06	1093.19	0.00	
7417.00†	0.000	86.281	7273.52	1095.50	71.06	1093.19	0.00	
7517.00†	0.000	86.281	7373.52	1095.50	71.06	1093.19	0.00	
7590.48†	0.000	86.281	7447.00	1095.50	71.06	1093.19	0.00	CODELL TOP
7617.00†	0.000	86.281	7473.52	1095.50	71.06	1093.19	0.00	
7675.48†	0.000	86.281	7532.00	1095.50	71.06	1093.19	0.00	GREENHORN TOP
7717.00†	0.000	86.281	7573.52	1095.50	71.06	1093.19	0.00	
7817.00†	0.000	86.281	7673.52	1095.50	71.06	1093.19	0.00	
7917.00†	0.000	86.281	7773.52	1095.50	71.06	1093.19	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RIVERBEND 8-13 RE-DRILL (2045'FNL & 1753'FEL)
Area	COLORADO	Well	RIVERBEND 8-13 RE-DRILL
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 8-13 RE-DRILL PWB
Facility	SEC.13-T1N-R67W		

WELLPATH DATA (94 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8017.00†	0.000	86.281	7873.52	1095.50	71.06	1093.19	0.00	
8025.48†	0.000	86.281	7882.00	1095.50	71.06	1093.19	0.00	JSAND TOP
8117.00†	0.000	86.281	7973.52	1095.50	71.06	1093.19	0.00	
8175.48	0.000	86.281	8032.00	1095.50	71.06	1093.19	0.00	End of Tangent

HOLE & CASING SECTIONS									
Ref Wellbore: RIVERBEND 8-13 RE-DRILL PWB					Ref Wellpath: RIVERBEND 8-13 RE-DRILL (REV-A.0) PWP				
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	900.00	883.00	17.00	900.00	0.00	0.00	0.00	0.00
8.625in Casing Surface	17.00	900.00	883.00	17.00	900.00	0.00	0.00	0.00	0.00
7.875in Open Hole	900.00	8175.48	7275.48	900.00	8032.00	0.00	0.00	71.06	1093.19

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) RIVERBEND 8-13 GEO TARGET 50' RADIUS (1980'FNL & 660'FEL, REV-1)		6000.00	71.06	1093.19	3186972.96	1262824.78	40°03'10.476"N	104°49'55.492"W	circle
RIVERBEND 8-13 LEGAL BOX (204'S,196'N,204'E,196'W OF GEO TARGET)		6000.00	67.07	1097.20	3186976.99	1262820.81	40°03'10.437"N	104°49'55.440"W	square

SURVEY PROGRAM				
Ref Wellbore: RIVERBEND 8-13 RE-DRILL PWB			Ref Wellpath: RIVERBEND 8-13 RE-DRILL (REV-A.0) PWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	8175.48	NaviTrak (Standard)		RIVERBEND 8-13 RE-DRILL PWB



Planned Wellpath Report

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Area	COLORADO	Well	RIVERBEND 8-13 RE-DRILL
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RIVERBEND 8-13 RE-DRILL PWB
Facility	SEC.13-T1N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3302.70	16.000	86.281	3238.00	PARKMAN TOP
4686.29	16.000	86.281	4568.00	SUSSEX TOP
7243.48	0.000	86.281	7100.00	NIO A TOP
7590.48	0.000	86.281	7447.00	CODELL TOP
7675.48	0.000	86.281	7532.00	GREENHORN TOP
8025.48	0.000	86.281	7882.00	JSAND TOP