

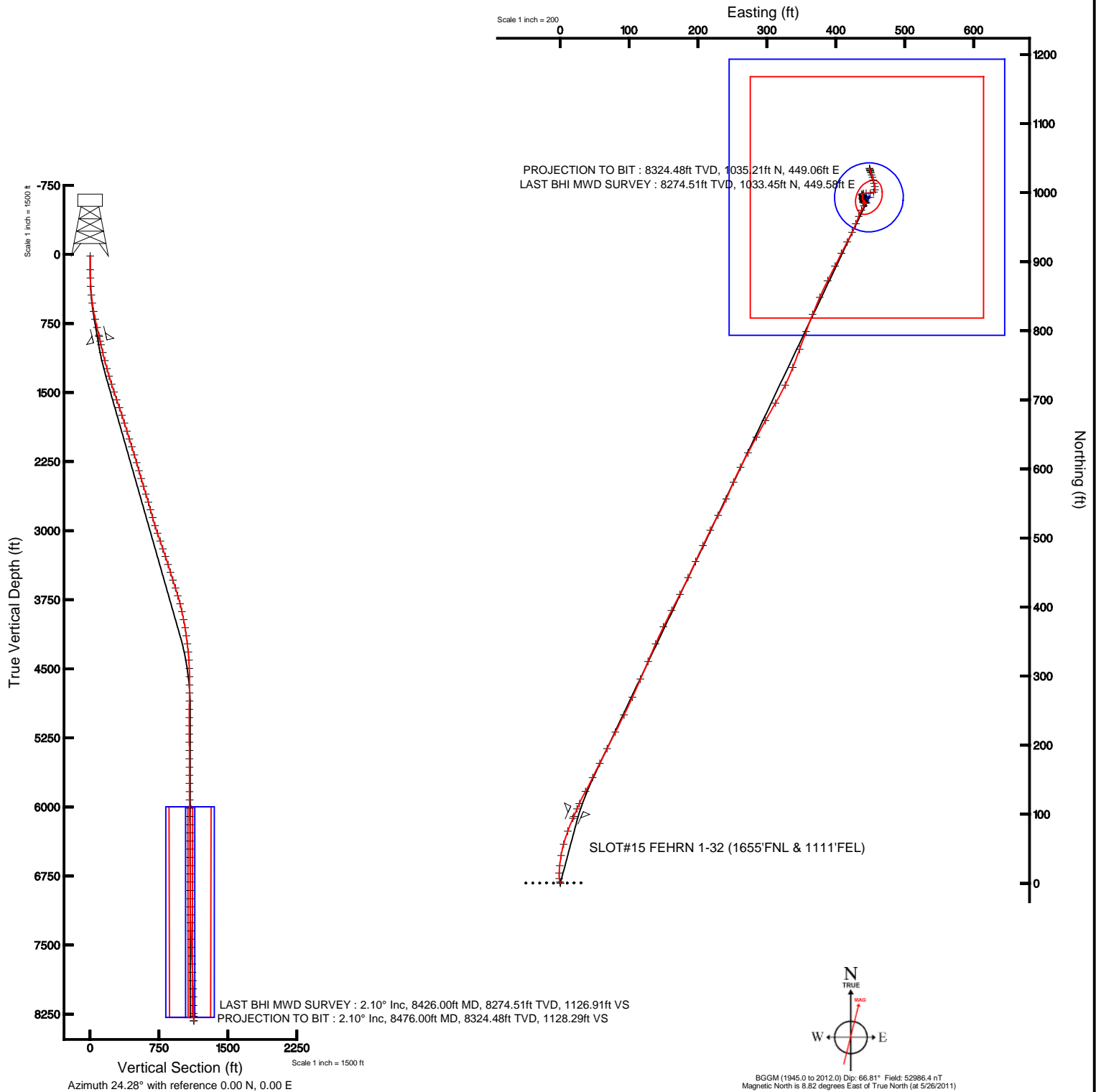


KERR MCGEE OIL & GAS ONSHORE LP



Location: COLORADO Slot: SLOT#15 FEHRN 1-32 (1655'FNL & 1111'FEL)
Field: WELD COUNTY (KERR MCGEE) Well: FEHRN 1-32
Facility: SEC.32-T2N-R66W Wellbore: FEHRN 1-32 PWB

Plot reference wellpath is FEHRN 1-32 (REV-C.0) PWP	
True vertical depths are referenced to XTREME 6 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 6 (RKB)	North Reference: True north
XTREME 6 (RKB) to Mean Sea Level: 4932 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#15 FEHRN 1-32 (1655'FNL & 1111'FEL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: doddanna on 9/8/2011





Actual Wellpath Report

FEHRN 1-32 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 FEHRN 1-32 (1655'FNL & 1111'FEL)
Area	COLORADO	Well	FEHRN 1-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	FEHRN 1-32 AWB
Facility	SEC.32-T2N-R66W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.0
North Reference	True	User	Doddanna
Scale	0.99996	Report Generated	9/8/2011 at 1:55:21 PM
Convergence at slot	0.46° East	Database/Source file	WA_Denver/FEHRN_1-32_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	1311.18	499.60	3197058.72	1279083.39	40°05'50.377"N	104°47'44.131"W
Facility Reference Pt			3196569.55	1277768.35	40°05'37.420"N	104°47'50.560"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 6 (RKB) to Facility Vertical Datum	4932.00ft
Horizontal Reference Pt	Slot	XTREME 6 (RKB) to Mean Sea Level	4932.00ft
Vertical Reference Pt	XTREME 6 (RKB)	XTREME 6 (RKB) to Mud Line at Slot (SLOT#15 FEHRN 1-32 (1655'FNL & 1111'FEL))	4932.00ft
MD Reference Pt	XTREME 6 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	24.28°



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 FEHRN 1-32 (1655'FNL & 1111'FEL)
Area	COLORADO	Well	FEHRN 1-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	FEHRN 1-32 AWB
Facility	SEC.32-T2N-R66W		

WELLPATH DATA (98 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	76.300	0.00	0.00	0.00	0.00	0.00	
16.00	0.000	76.300	16.00	0.00	0.00	0.00	0.00	
164.00	0.200	76.300	164.00	0.16	0.06	0.25	0.14	
255.00	2.200	332.000	254.98	1.33	1.64	-0.41	2.48	
346.00	4.100	355.500	345.84	5.25	6.43	-1.49	2.48	
439.00	5.800	1.400	438.49	12.49	14.44	-1.64	1.91	
529.00	8.200	6.000	527.81	22.78	25.37	-0.85	2.74	
620.00	10.500	9.200	617.60	36.95	40.01	1.15	2.59	
706.00	12.000	15.900	701.95	53.36	56.35	4.85	2.31	
797.00	13.300	19.400	790.74	73.15	75.32	10.92	1.66	
885.00	12.900	23.900	876.45	93.06	93.85	18.26	1.24	
898.00	12.900	23.900	889.12	95.96	96.50	19.44	0.00	
991.00	12.500	23.900	979.85	116.40	115.19	27.72	0.43	
1077.00	14.000	29.200	1063.56	136.08	132.79	36.57	2.24	
1168.00	14.700	25.700	1151.72	158.59	152.80	46.95	1.22	
1257.00	15.200	27.500	1237.71	181.52	173.32	57.23	0.77	
1345.00	16.600	25.700	1322.34	205.61	194.88	68.01	1.69	
1436.00	17.600	27.500	1409.32	232.34	218.80	80.00	1.24	
1525.00	18.700	26.100	1493.89	260.04	243.55	92.49	1.33	
1614.00	18.700	24.300	1578.19	288.57	269.37	104.64	0.65	
1703.00	18.900	24.300	1662.44	317.25	295.51	116.44	0.22	
1791.00	18.100	22.300	1745.89	345.16	321.14	127.49	1.16	
1881.00	17.800	24.300	1831.51	372.89	346.62	138.46	0.76	
1971.00	17.100	25.300	1917.37	399.88	371.12	149.78	0.85	
2061.00	17.200	27.500	2003.37	426.39	394.88	161.57	0.73	
2150.00	17.300	27.100	2088.37	452.75	418.34	173.68	0.17	
2241.00	17.200	25.000	2175.27	479.72	442.57	185.53	0.69	
2329.00	16.500	25.000	2259.50	505.22	465.69	196.31	0.80	
2420.00	16.100	25.000	2346.84	530.76	488.84	207.10	0.44	
2510.00	15.600	26.100	2433.42	555.33	511.02	217.70	0.65	
2597.00	17.100	29.200	2516.90	579.77	532.69	229.09	1.99	
2686.00	17.500	23.600	2601.88	606.19	556.38	240.83	1.92	
2777.00	16.500	23.600	2688.90	632.79	580.76	251.48	1.10	
2865.00	15.100	26.800	2773.57	656.74	602.44	261.65	1.87	
2953.00	15.800	28.200	2858.39	680.15	623.23	272.48	0.90	
3043.00	17.500	28.500	2944.62	705.87	645.92	284.73	1.89	
3131.00	18.800	29.200	3028.24	733.19	669.93	297.96	1.50	
3221.00	19.300	30.300	3113.31	762.43	695.43	312.54	0.68	
3311.00	18.900	26.100	3198.36	791.79	721.36	326.46	1.59	
3398.00	18.500	21.100	3280.77	819.66	746.89	337.63	1.90	
3488.00	17.800	20.100	3366.29	847.64	773.13	347.50	0.85	
3579.00	17.120	20.100	3453.10	874.87	798.78	356.88	0.75	
3668.00	17.800	21.500	3538.00	901.52	823.73	366.37	0.90	
3756.00	17.800	23.900	3621.79	928.41	848.55	376.75	0.83	
3846.00	16.700	27.000	3707.74	955.08	872.65	388.19	1.59	



Actual Wellpath Report

FEHRN 1-32 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 FEHRN 1-32 (1655'FNL & 1111'FEL)
Area	COLORADO	Well	FEHRN 1-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	FEHRN 1-32 AWB
Facility	SEC.32-T2N-R66W		

WELLPATH DATA (98 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
3935.00	14.100	26.800	3793.54	978.69	893.72	398.88	2.92	
4024.00	13.000	26.100	3880.06	999.52	912.39	408.18	1.25	
4112.00	11.100	28.500	3966.11	1017.87	928.72	416.57	2.23	
4201.00	9.500	25.300	4053.68	1033.76	942.89	423.80	1.91	
4290.00	7.700	22.500	4141.67	1047.06	955.04	429.22	2.08	
4379.00	7.000	19.400	4229.94	1058.42	965.67	433.31	0.90	
4468.00	5.900	31.700	4318.38	1068.36	974.67	437.51	1.98	
4556.00	3.700	18.300	4406.07	1075.67	981.22	440.78	2.79	
4646.00	1.800	5.000	4495.96	1079.90	985.38	441.81	2.21	
4735.00	0.900	353.400	4584.94	1081.82	987.47	441.86	1.05	
4825.00	1.100	320.700	4674.93	1082.81	988.84	441.23	0.66	
4914.00	0.900	193.400	4763.92	1082.50	988.82	440.52	2.02	
5001.00	1.100	217.000	4850.91	1081.01	987.49	439.86	0.52	
5092.00	1.100	169.100	4941.89	1079.45	985.94	439.50	0.98	
5181.00	1.400	92.800	5030.88	1079.15	985.04	440.75	1.76	
5269.00	0.800	93.200	5118.86	1079.76	984.96	442.44	0.68	
5360.00	0.500	93.200	5209.85	1080.13	984.90	443.47	0.33	
5449.00	0.400	56.600	5298.85	1080.54	985.05	444.12	0.33	
5537.00	0.200	275.000	5386.85	1080.75	985.23	444.22	0.65	
5628.00	0.500	303.400	5477.85	1080.76	985.46	443.73	0.37	
5719.00	1.000	300.600	5568.84	1080.91	986.09	442.71	0.55	
5807.00	1.100	314.000	5656.83	1081.28	987.06	441.45	0.30	
5896.00	1.100	319.600	5745.81	1081.93	988.31	440.28	0.12	
5986.00	0.700	328.000	5835.80	1082.60	989.43	439.43	0.47	
6074.00	0.700	347.400	5923.79	1083.33	990.41	439.02	0.27	
6165.00	0.600	353.000	6014.79	1084.18	991.43	438.85	0.13	
6255.00	0.600	10.600	6104.78	1085.04	992.36	438.87	0.20	
6344.00	0.400	6.700	6193.78	1085.79	993.13	439.00	0.23	
6431.00	0.600	10.200	6280.77	1086.52	993.88	439.11	0.23	
6521.00	0.200	3.600	6370.77	1087.13	994.50	439.21	0.45	
6610.00	0.300	17.300	6459.77	1087.51	994.87	439.28	0.13	
6700.00	0.200	348.100	6549.77	1087.87	995.25	439.32	0.18	
6789.00	0.400	356.200	6638.77	1088.27	995.71	439.27	0.23	
6880.00	0.400	310.500	6729.77	1088.63	996.24	439.01	0.34	
6967.00	0.300	278.800	6816.76	1088.66	996.47	438.55	0.25	
7058.00	0.400	327.700	6907.76	1088.77	996.77	438.15	0.33	
7148.00	0.600	341.800	6997.76	1089.29	997.49	437.83	0.26	
7237.00	1.100	57.000	7086.75	1090.35	998.40	438.40	1.25	
7324.00	1.900	82.300	7173.72	1091.82	999.04	440.53	1.17	
7410.00	3.000	90.000	7259.64	1093.50	999.23	444.19	1.33	
7498.00	4.700	87.200	7347.44	1096.09	999.41	450.10	1.94	
7589.00	2.500	45.700	7438.27	1099.63	1000.98	455.24	3.60	
7678.00	2.500	9.500	7527.19	1103.32	1004.25	456.95	1.74	
7772.00	3.300	347.000	7621.07	1107.45	1008.91	456.68	1.46	
7860.00	3.300	345.300	7708.93	1111.44	1013.83	455.47	0.11	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 FEHRN 1-32 (1655'FNL & 1111'FEL)
Area	COLORADO	Well	FEHRN 1-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	FEHRN 1-32 AWB
Facility	SEC.32-T2N-R66W		

WELLPATH DATA (98 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
7949.00	2.700	349.100	7797.80	1115.14	1018.36	454.43	0.71	
8039.00	2.400	341.100	7887.71	1118.25	1022.23	453.41	0.52	
8129.00	2.300	340.000	7977.64	1120.92	1025.71	452.19	0.12	
8218.00	2.100	340.700	8066.57	1123.38	1028.92	451.04	0.23	
8308.00	0.400	348.100	8156.55	1124.82	1030.79	450.43	1.89	
8397.00	1.900	341.400	8245.53	1126.16	1032.49	449.89	1.69	
8426.00	2.100	343.200	8274.51	1126.91	1033.45	449.58	0.72	LAST BHI MWD SURVEY
8476.00	2.100	343.200	8324.48	1128.29	1035.21	449.06	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: FEHRN 1-32 AWB Ref Wellpath: FEHRN 1-32 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	953.00	937.00	16.00	942.76	0.00	0.00	107.63	24.37
8.625in Casing Surface	16.00	953.00	937.00	16.00	942.76	0.00	0.00	107.63	24.37
7.875in Open Hole	953.00	8476.00	7523.00	942.76	8324.48	107.63	24.37	1035.21	449.06

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
FEHRN 1-32 GEO TARGET 50' RADIUS (660'FNL & 660'FEL, REV-1)		6000.00	993.39	448.17	3197498.97	1280080.27	40°06'00.194"N	104°47'38.364"W	circle
FEHRN 1-32 LEGAL BOX (200'N,200'S,197'E,203'W OF GEO TARGET)		6000.00	993.43	445.17	3197495.97	1280080.28	40°06'00.194"N	104°47'38.403"W	square

WELLPATH COMPOSITION - Ref Wellbore: FEHRN 1-32 AWB Ref Wellpath: FEHRN 1-32 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	898.00	NaviTrak (Standard)	BHI MWD NAVITRAK 12.25 <164-898>	FEHRN 1-32 AWB
898.00	8426.00	NaviTrak (Standard)	BHI MWD NAVITRAK 7.875 <991-8426>	FEHRN 1-32 AWB
8426.00	8476.00	Blind Drilling (std)	Projection to bit	FEHRN 1-32 AWB