

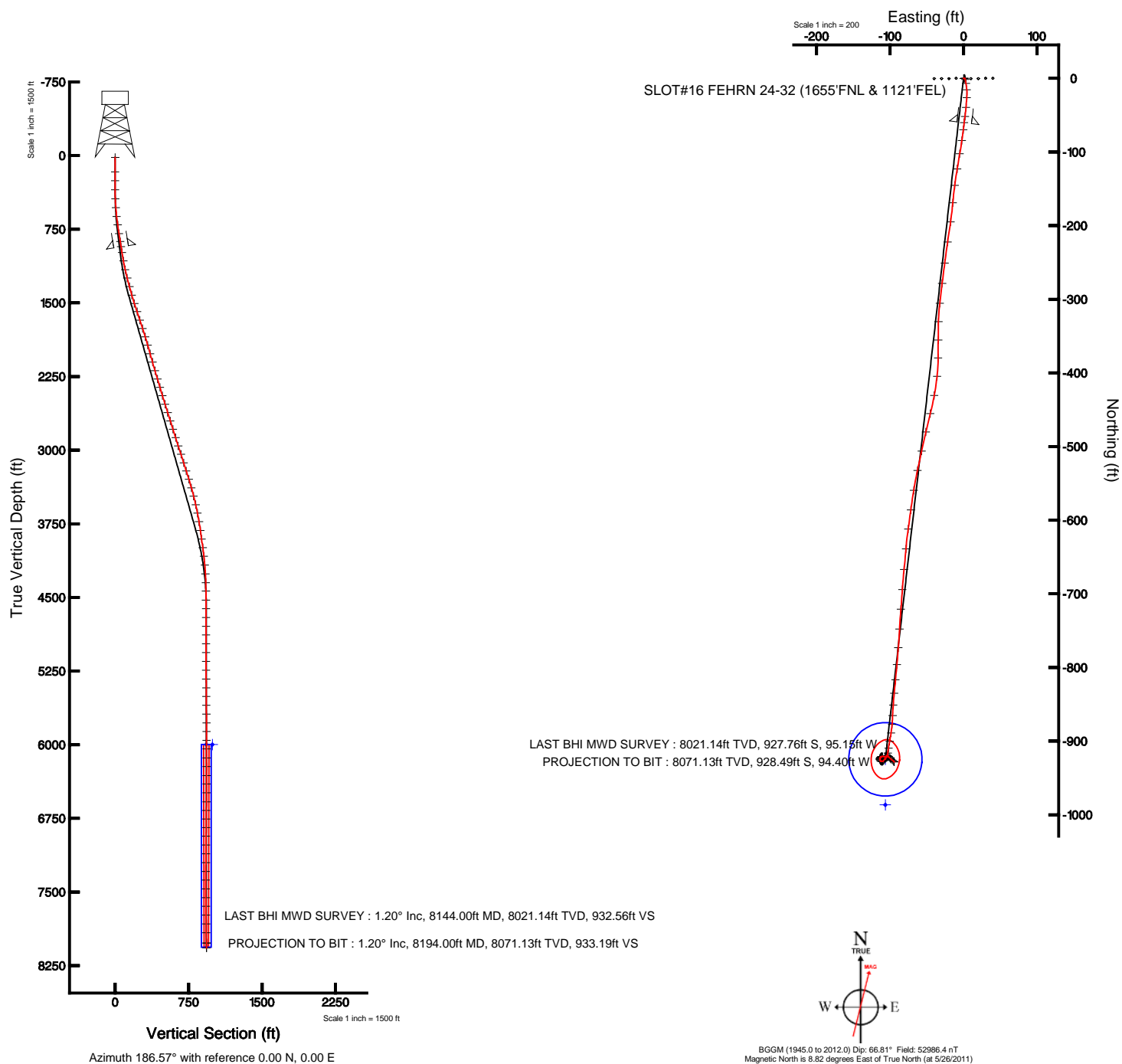


# KERR MCGEE OIL & GAS ONSHORE LP



Location: COLORADO Slot: SLOT#16 FEHRN 24-32 (1655'FNL & 1121'FEL)  
Field: WELD COUNTY (KERR MCGEE) Well: FEHRN 24-32  
Facility: SEC.32-T2N-R66W Wellbore: FEHRN 24-32 PWB

Plot reference wellpath is FEHRN 24-32 (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#16 FEHRN 24-32 (1655'FNL & 1121'FEL)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: dodanna on 9/8/2011





# Actual Wellpath Report

FEHRN 24-32 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 FEHRN 24-32 (1655'FNL & 1121'FEL)
Area	COLORADO	Well	FEHRN 24-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	FEHRN 24-32 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 4:37:03 PM
Convergence at slot	0.46° East	Database/Source file	WA_Denver/FEHRN_24-32_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	489.53	3197048.65	1279083.31	40°05'50.377"N	104°47'44.261"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#16 FEHRN 24-32 (1655'FNL & 1121'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	186.57°



# Actual Wellpath Report

FEHRN 24-32 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 FEHRN 24-32 (1655'FNL & 1121'FEL)
Area	COLORADO	Well	FEHRN 24-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	FEHRN 24-32 AWB
Facility	SEC.32-T2N-R66W		

WELLPATH DATA (93 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	70.000	0.00	0.00	0.00	0.00	0.00	
16.00	0.000	70.000	16.00	0.00	0.00	0.00	0.00	
164.00	0.400	70.000	164.00	-0.23	0.18	0.49	0.27	
255.00	0.400	73.900	255.00	-0.50	0.37	1.09	0.03	
346.00	0.400	72.800	345.99	-0.75	0.56	1.70	0.01	
439.00	2.300	169.100	438.97	0.90	-1.18	2.36	2.56	
529.00	4.800	170.200	528.79	6.24	-6.67	3.34	2.78	
620.00	6.300	174.400	619.36	14.77	-15.39	4.48	1.71	
706.00	8.000	184.300	704.69	25.37	-26.05	4.49	2.43	
797.00	8.800	185.300	794.71	38.65	-39.30	3.37	0.89	
876.00	9.000	187.800	872.76	50.87	-51.44	1.98	0.55	
991.00	9.100	186.400	986.33	68.96	-69.39	-0.26	0.21	
1077.00	10.700	188.800	1071.05	83.74	-84.04	-2.24	1.92	
1168.00	12.400	189.500	1160.20	101.94	-102.02	-5.14	1.87	
1257.00	14.800	189.500	1246.70	122.84	-122.66	-8.60	2.70	
1347.00	14.600	187.400	1333.76	145.66	-145.25	-11.96	0.63	
1436.00	16.300	185.300	1419.54	169.37	-168.81	-14.55	2.01	
1525.00	17.700	188.100	1504.65	195.38	-194.64	-17.61	1.82	
1614.00	18.700	188.500	1589.19	223.16	-222.15	-21.63	1.13	
1704.00	18.500	187.400	1674.49	251.86	-250.58	-25.60	0.45	
1794.00	17.800	187.100	1760.02	279.89	-278.39	-29.14	0.78	
1884.00	17.100	186.700	1845.87	306.88	-305.18	-32.38	0.79	
1973.00	16.000	181.100	1931.19	332.18	-330.44	-34.15	2.18	
2063.00	16.000	180.400	2017.70	356.86	-355.25	-34.47	0.21	
2152.00	15.800	180.400	2103.30	381.10	-379.63	-34.64	0.22	
2242.00	16.500	186.000	2189.75	406.06	-404.59	-36.06	1.90	
2332.00	17.300	190.600	2275.87	432.19	-430.46	-39.86	1.73	
2419.00	16.400	194.100	2359.13	457.27	-455.09	-45.23	1.56	
2509.00	17.000	193.000	2445.34	482.94	-480.23	-51.29	0.75	
2599.00	17.500	192.300	2531.29	509.48	-506.27	-57.13	0.60	
2688.00	17.600	192.000	2616.15	536.19	-532.51	-62.78	0.15	
2778.00	17.800	189.200	2701.89	563.48	-559.39	-67.81	0.97	
2868.00	17.000	187.800	2787.77	590.38	-586.01	-71.79	1.00	
2957.00	17.500	188.100	2872.77	616.76	-612.15	-75.44	0.57	
3045.00	18.500	184.600	2956.46	643.94	-639.16	-78.43	1.67	
3135.00	17.800	186.000	3041.98	671.97	-667.08	-81.01	0.92	
3226.00	17.400	183.600	3128.72	699.46	-694.49	-83.32	0.91	
3314.00	17.900	185.000	3212.58	726.12	-721.10	-85.32	0.75	
3403.00	17.400	183.200	3297.39	753.08	-748.01	-87.26	0.83	
3493.00	15.500	184.300	3383.70	778.53	-773.44	-88.91	2.14	
3582.00	14.400	185.000	3469.69	801.48	-796.32	-90.77	1.25	
3670.00	13.000	185.700	3555.19	822.31	-817.07	-92.70	1.60	
3759.00	10.700	185.000	3642.28	840.58	-835.27	-94.42	2.59	
3848.00	10.200	184.600	3729.81	856.72	-851.35	-95.77	0.57	
3937.00	8.000	182.100	3817.68	870.77	-865.40	-96.63	2.51	



# Actual Wellpath Report

FEHRN 24-32 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 FEHRN 24-32 (1655'FNL & 1121'FEL)
Area	COLORADO	Well	FEHRN 24-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	FEHRN 24-32 AWP
Facility	SEC.32-T2N-R66W		

WELLPATH DATA (93 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4026.00	7.700	184.600	3905.85	882.90	-877.53	-97.34	0.51	
4114.00	7.700	189.200	3993.05	894.69	-889.23	-98.75	0.70	
4203.00	6.900	190.200	4081.33	905.98	-900.37	-100.65	0.91	
4293.00	5.200	188.800	4170.83	915.45	-909.73	-102.23	1.90	
4383.00	3.400	187.800	4260.57	922.19	-916.40	-103.22	2.00	
4472.00	1.500	162.800	4349.49	925.90	-920.13	-103.23	2.40	
4559.00	0.300	242.300	4436.48	927.07	-921.32	-103.10	1.70	
4650.00	0.500	269.700	4527.47	927.25	-921.44	-103.70	0.30	
4738.00	1.200	266.900	4615.46	927.45	-921.49	-105.01	0.80	
4827.00	1.700	275.000	4704.44	927.64	-921.42	-107.25	0.61	
4918.00	2.000	273.600	4795.39	927.76	-921.21	-110.18	0.33	
5006.00	0.100	320.000	4883.37	927.79	-921.05	-111.77	2.20	
5095.00	0.200	122.000	4972.37	927.80	-921.07	-111.68	0.33	
5186.00	0.100	177.900	5063.37	927.95	-921.24	-111.55	0.18	
5276.00	0.700	241.900	5153.37	928.34	-921.57	-112.03	0.74	
5365.00	0.400	235.600	5242.36	928.85	-922.01	-112.76	0.34	
5454.00	0.600	215.900	5331.36	929.46	-922.56	-113.29	0.29	
5544.00	0.500	210.600	5421.36	930.23	-923.28	-113.77	0.12	
5632.00	0.400	182.500	5509.35	930.89	-923.92	-113.98	0.27	
5723.00	0.400	188.800	5600.35	931.52	-924.55	-114.04	0.05	
5813.00	0.400	168.100	5690.35	932.14	-925.16	-114.03	0.16	
5901.00	0.600	149.400	5778.34	932.79	-925.86	-113.73	0.29	
5989.00	0.700	151.900	5866.34	933.60	-926.73	-113.24	0.12	
6079.00	0.400	120.600	5956.34	934.18	-927.38	-112.71	0.46	
6168.00	0.400	106.600	6045.33	934.36	-927.62	-112.15	0.11	
6258.00	0.400	109.400	6135.33	934.49	-927.82	-111.55	0.02	
6347.00	0.300	102.300	6224.33	934.58	-927.97	-111.03	0.12	
6438.00	0.400	64.400	6315.33	934.44	-927.89	-110.51	0.27	
6525.00	0.400	49.600	6402.33	934.05	-927.56	-110.00	0.12	
6615.00	0.400	52.400	6492.32	933.60	-927.16	-109.51	0.02	
6706.00	1.000	46.400	6583.32	932.77	-926.42	-108.69	0.66	
6794.00	0.800	40.100	6671.31	931.67	-925.42	-107.74	0.25	
6882.00	0.600	40.800	6759.30	930.78	-924.60	-107.04	0.23	
6968.00	0.500	35.500	6845.29	930.08	-923.96	-106.53	0.13	
7056.00	0.600	10.600	6933.29	929.28	-923.19	-106.22	0.29	
7147.00	0.400	10.600	7024.29	928.49	-922.41	-106.07	0.22	
7236.00	0.400	67.500	7113.29	928.03	-921.99	-105.73	0.43	
7326.00	0.800	17.600	7203.28	927.26	-921.27	-105.25	0.69	
7415.00	0.500	2.500	7292.27	926.26	-920.29	-105.04	0.39	
7504.00	0.400	70.000	7381.27	925.73	-919.79	-104.74	0.57	
7592.00	1.000	124.500	7469.27	925.96	-920.12	-103.81	0.95	
7683.00	1.200	134.000	7560.25	926.91	-921.23	-102.47	0.30	
7771.00	1.200	135.400	7648.23	928.05	-922.53	-101.16	0.03	
7860.00	1.100	132.900	7737.21	929.14	-923.77	-99.88	0.13	
7950.00	1.300	128.400	7827.19	930.19	-925.00	-98.45	0.25	



# Actual Wellpath Report

FEHRN 24-32 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 FEHRN 24-32 (1655'FNL & 1121'FEL)
Area	COLORADO	Well	FEHRN 24-32
Field	WELD COUNTY (KERR MCGEE)	Wellbore	FEHRN 24-32 AWP
Facility	SEC.32-T2N-R66W		

WELLPATH DATA (93 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8040.00	1.300	128.700	7917.17	931.27	-926.27	-96.85	0.01	
8144.00	1.200	134.000	8021.14	932.56	-927.76	-95.15	0.15	LAST BHI MWD SURVEY
8194.00	1.200	134.000	8071.13	933.19	-928.49	-94.40	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: FEHRN 24-32 AWP Ref Wellpath: FEHRN 24-32 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	931.00	915.00	16.00	927.08	0.00	0.00	-59.99	0.86
8.625in Casing Surface	16.00	931.00	915.00	16.00	927.08	0.00	0.00	-59.99	0.86
7.875in Open Hole	931.00	8194.00	7263.00	927.08	8071.13	-59.99	0.86	-928.49	-94.40

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
FEHRN 24-32 GEO TARGET 50' RADIUS (2580'FNL & 1230'FEL, REV-1)		6000.00	-924.92	-106.56	3196949.44	1278157.61	40°05'41.237"N	104°47'45.632"W	circle
FEHRN 24-32 HARDLINE 62'S OF GEO TARGET		6000.00	-986.94	-106.59	3196949.91	1278095.60	40°05'40.624"N	104°47'45.632"W	point

WELLPATH COMPOSITION - Ref Wellbore: FEHRN 24-32 AWP Ref Wellpath: FEHRN 24-32 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	876.00	NaviTrak (Standard)	BHI MWD NAVITRAK 12.25 <164-876>	FEHRN 24-32 AWP
876.00	8144.00	NaviTrak (Standard)	BHI MWD NAVITRAK 7.875 <991-8144>	FEHRN 24-32 AWP
8144.00	8194.00	Blind Drilling (std)	Projection to bit	FEHRN 24-32 AWP