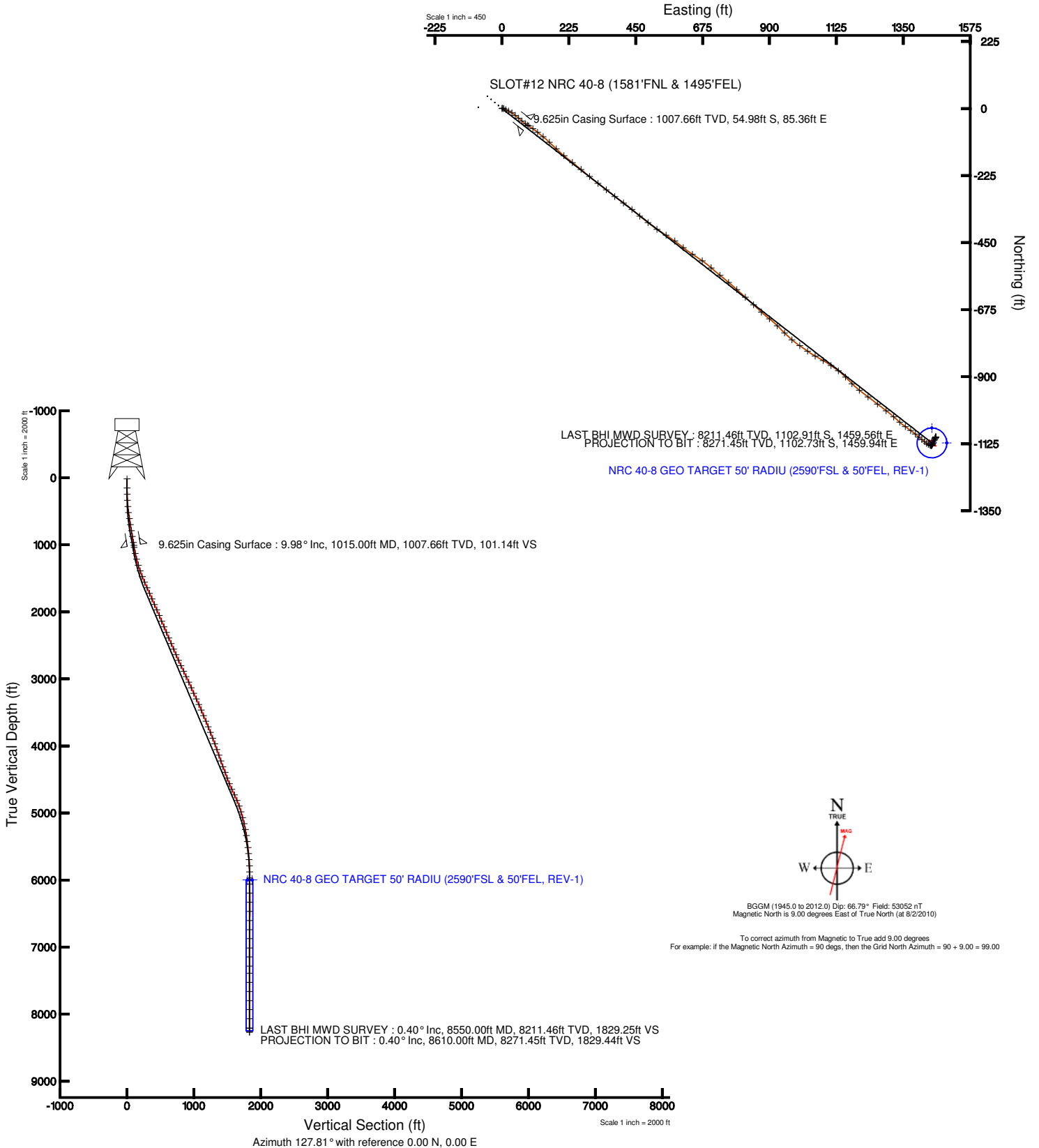


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#12 NRC 40-8 (1581'FNL & 1495'FEL)
 Field: WELD COUNTY (KERR MCGEE) Well: NRC 40-8
 Facility: SEC.08-T1N-R67W Wellbore: NRC 40-8 PWB



Plot reference wellpath is NRC 40-8 (REV-A.0) PWP	
True vertical depths are referenced to XTREME 12 (RT)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
Measured depths are referenced to XTREME 12 (RT)	North Reference: True north
XTREME 12 (RT) to Mean Sea Level: 5023 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: SEC.08-T1N-R67W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: bensjaj on 8/5/2010





Actual Wellpath Report

NRC 40-8 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NRC 40-8 (1581'FNL & 1495'FEL)
Area	COLORADO	Well	NRC 40-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 40-8 AWB
Facility	SEC.08-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	Bensjacj
Scale	0.999962	Report Generated	8/5/2010 at 12:46:48 PM
Convergence at slot	0.38° East	Database/Source file	WA_Denver/NRC_40-8_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	2657.87	-85.64	3164996.69	1268333.59	40°04'06.456"N	104°54'37.631"W
Facility Reference Pt			3165100.01	1265676.46	40°03'40.190"N	104°54'36.529"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 12 (RT) to Facility Vertical Datum	5023.00ft
Horizontal Reference Pt	Slot	XTREME 12 (RT) to Mean Sea Level	5023.00ft
Vertical Reference Pt	XTREME 12 (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	XTREME 12 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	127.81°



Actual Wellpath Report

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NRC 40-8 (1581'FNL & 1495'FEL)
Area	COLORADO	Well	NRC 40-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 40-8 AWP
Facility	SEC.08-T1N-R67W		

WELLPATH DATA (89 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	30.800	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	30.800	15.00	0.00	0.00	0.00	0.00	
150.00	1.000	30.800	149.99	-0.14	1.01	0.60	0.74	
242.00	1.700	93.000	241.97	0.88	1.63	2.38	1.65	
334.00	3.900	115.900	333.86	5.06	0.19	6.56	2.64	
427.00	5.400	119.400	426.55	12.49	-3.34	13.21	1.64	
518.00	7.500	116.900	516.97	22.55	-8.13	22.24	2.33	
607.00	8.600	122.900	605.09	34.89	-14.37	33.01	1.55	
699.00	9.300	127.900	695.97	49.18	-22.67	44.65	1.14	
790.00	9.400	129.600	785.76	63.96	-31.93	56.18	0.32	
880.00	9.500	131.400	874.54	78.71	-41.52	67.41	0.35	
971.00	9.500	124.700	964.30	93.71	-50.77	79.22	1.21	
1044.00	10.300	124.000	1036.21	106.24	-57.84	89.58	1.11	
1134.00	11.500	124.300	1124.58	123.22	-67.40	103.67	1.33	
1225.00	13.700	128.900	1213.39	143.05	-79.28	119.55	2.66	
1316.00	16.900	129.300	1301.15	167.05	-94.43	138.18	3.52	
1406.00	19.500	132.800	1386.65	195.10	-112.92	159.32	3.13	
1497.00	21.700	133.800	1471.82	226.97	-134.89	182.61	2.45	
1588.00	23.200	129.300	1555.93	261.62	-157.89	208.63	2.51	
1679.00	24.100	128.600	1639.29	298.12	-180.84	237.02	1.04	
1769.00	24.400	129.300	1721.34	335.08	-204.07	265.77	0.46	
1860.00	24.100	130.000	1804.32	372.43	-227.92	294.54	0.46	
1951.00	23.100	127.900	1887.70	408.85	-250.83	322.86	1.44	
2041.00	23.500	127.900	1970.36	444.45	-272.70	350.96	0.44	
2132.00	23.700	127.200	2053.75	480.88	-294.90	379.84	0.38	
2223.00	23.400	126.400	2137.17	517.23	-316.68	408.95	0.48	
2314.00	22.900	129.600	2220.85	552.99	-338.69	437.14	1.49	
2405.00	22.000	129.600	2304.95	587.73	-360.84	463.92	0.99	
2495.00	24.100	127.900	2387.76	622.96	-382.88	491.41	2.45	
2586.00	24.700	124.300	2470.64	660.51	-405.01	521.78	1.76	
2677.00	22.400	122.200	2554.06	696.75	-424.96	552.16	2.69	
2768.00	22.900	126.100	2638.04	731.71	-444.64	581.14	1.74	
2858.00	24.900	128.600	2720.32	768.16	-466.78	610.10	2.49	
2949.00	24.900	123.300	2802.88	806.42	-489.25	641.08	2.45	
3040.00	25.900	124.300	2885.08	845.35	-510.97	673.52	1.20	
3130.00	25.100	131.400	2966.33	884.03	-534.67	704.08	3.51	
3221.00	25.100	129.200	3048.74	922.59	-559.64	733.52	1.03	
3312.00	23.800	130.000	3131.58	960.24	-583.64	762.54	1.47	
3403.00	24.100	131.400	3214.74	997.13	-607.73	790.54	0.71	
3494.00	25.200	132.400	3297.45	1034.99	-633.08	818.79	1.29	
3585.00	24.200	132.800	3380.12	1072.88	-658.81	846.78	1.11	
3675.00	22.400	133.100	3462.78	1108.33	-683.07	872.84	2.00	
3766.00	23.100	127.200	3546.71	1143.45	-705.71	899.72	2.62	
3857.00	22.600	135.200	3630.59	1178.65	-728.92	926.26	3.46	
3947.00	22.900	134.200	3713.59	1213.20	-753.39	951.00	0.54	



Actual Wellpath Report

NRC 40-8 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NRC 40-8 (1581'FNL & 1495'FEL)
Area	COLORADO	Well	NRC 40-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 40-8 AWP
Facility	SEC.08-T1N-R67W		

WELLPATH DATA (89 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4038.00	20.800	130.700	3798.05	1246.94	-776.28	975.95	2.71	
4129.00	21.400	124.300	3882.96	1279.65	-796.17	1001.92	2.61	
4220.00	20.200	125.000	3968.03	1311.92	-814.54	1028.50	1.35	
4310.00	19.400	119.800	4052.71	1342.24	-830.88	1054.21	2.15	
4401.00	20.600	119.800	4138.22	1373.06	-846.35	1081.21	1.32	
4492.00	18.600	124.700	4223.95	1403.41	-862.57	1107.04	2.84	
4583.00	20.700	127.200	4309.65	1433.99	-880.56	1131.79	2.49	
4674.00	20.800	135.200	4394.76	1466.10	-901.75	1155.99	3.11	
4764.00	20.000	135.200	4479.12	1497.21	-924.01	1178.09	0.89	
4855.00	21.900	127.900	4564.11	1529.62	-945.48	1202.46	3.54	
4946.00	26.300	127.500	4647.16	1566.77	-968.19	1231.86	4.84	
5037.00	24.900	126.800	4729.22	1606.09	-991.94	1263.19	1.57	
5128.00	23.400	127.900	4812.26	1643.31	-1014.52	1292.79	1.72	
5219.00	19.100	130.700	4897.05	1676.27	-1035.34	1318.35	4.85	
5309.00	15.900	131.700	4982.88	1703.28	-1053.15	1338.72	3.57	
5400.00	14.900	125.400	5070.61	1727.41	-1068.22	1357.57	2.14	
5491.00	13.100	126.100	5158.91	1749.41	-1081.07	1375.44	1.99	
5582.00	11.500	129.300	5247.82	1768.79	-1092.90	1390.79	1.91	
5672.00	8.800	130.700	5336.40	1784.63	-1103.07	1402.96	3.01	
5763.00	7.700	127.500	5426.46	1797.68	-1111.32	1413.07	1.31	
5854.00	6.200	128.900	5516.79	1808.69	-1118.12	1421.73	1.66	
5945.00	5.300	130.700	5607.33	1817.80	-1123.94	1428.74	1.01	
6035.00	3.500	115.500	5697.06	1824.64	-1127.84	1434.37	2.37	
6126.00	2.700	109.600	5787.93	1829.39	-1129.75	1438.90	0.95	
6217.00	1.100	106.100	5878.87	1832.24	-1130.71	1441.76	1.76	
6308.00	0.900	114.500	5969.86	1833.74	-1131.25	1443.25	0.27	
6399.00	0.500	108.200	6060.85	1834.81	-1131.67	1444.28	0.45	
6535.00	0.500	67.700	6196.85	1835.67	-1131.63	1445.39	0.25	
6671.00	0.700	38.500	6332.84	1835.97	-1130.76	1446.46	0.26	
6807.00	0.800	29.800	6468.83	1835.85	-1129.28	1447.44	0.11	
6943.00	1.300	24.800	6604.81	1835.37	-1127.06	1448.56	0.37	
7079.00	1.700	26.600	6740.76	1834.63	-1123.85	1450.11	0.30	
7215.00	2.300	22.000	6876.68	1833.50	-1119.52	1452.04	0.46	
7352.00	2.000	25.900	7013.58	1832.25	-1114.82	1454.11	0.24	
7488.00	1.400	25.900	7149.52	1831.42	-1111.19	1455.88	0.44	
7624.00	0.900	16.400	7285.49	1830.69	-1108.67	1456.90	0.39	
7729.00	0.900	24.100	7390.48	1830.19	-1107.13	1457.47	0.12	
7866.00	0.400	31.500	7527.47	1829.88	-1105.74	1458.16	0.37	
8002.00	0.400	45.600	7663.47	1829.90	-1105.00	1458.75	0.07	
8138.00	0.500	40.700	7799.46	1829.99	-1104.22	1459.48	0.08	
8274.00	0.300	17.500	7935.46	1829.90	-1103.43	1459.97	0.19	
8410.00	0.400	268.500	8071.46	1829.41	-1103.10	1459.60	0.42	
8550.00	0.400	64.900	8211.46	1829.25	-1102.91	1459.56	0.56	LAST BHI MWD SURVEY
8610.00	0.400	64.900	8271.45	1829.44	-1102.73	1459.94	0.00	PROJECTION TO BIT



Actual Wellpath Report

NRC 40-8 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NRC 40-8 (1581'FNL & 1495'FEL)
Area	COLORADO	Well	NRC 40-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 40-8 AWB
Facility	SEC.08-T1N-R67W		

HOLE & CASING SECTIONS Ref Wellbore: NRC 40-8 AWB Ref Wellpath: NRC 40-8 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	15.00	1025.00	1010.00	15.00	1017.51	0.00	0.00	-55.96	86.80
9.625in Casing Surface	15.00	1015.00	1000.00	15.00	1007.66	0.00	0.00	-54.98	85.36
7.875in Open Hole	1015.00	8610.00	7595.00	1007.66	8271.45	-54.98	85.36	-1102.73	1459.94

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
NRC 40-8 GEO TARGET 50' RADIU (2590'FSL & 50'FEL, REV-1)		6000.00	-1122.70	1446.78	3166450.85	1267220.58	40°03'55.361"N	104°54'19.022"W	circle
NRC 40-8 HARDLINE 50'E OF GEO TARGET		6000.00	-1122.70	1496.78	3166500.84	1267220.91	40°03'55.361"N	104°54'18.379"W	point
NRC 40-8 HARDLINE 50'N OF GEO TARGET		6000.00	-1072.70	1446.78	3166450.52	1267270.58	40°03'55.855"N	104°54'19.022"W	point

WELLPATH COMPOSITION Ref Wellbore: NRC 40-8 AWB Ref Wellpath: NRC 40-8 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	971.00	NaviTrak (Standard)	BHI MWD 12.25" HOLE <150-971>	NRC 40-8 AWB
971.00	8550.00	NaviTrak (Standard)	BHI MWD 7.875" HOLE <1044-8550>	NRC 40-8 AWB
8550.00	8610.00	Blind Drilling (std)	Projection to bit	NRC 40-8 AWB



Actual Wellpath Report

NRC 40-8 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	NRC 40-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 40-8 AWB
Facility	SEC.08-T1N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8550.00	0.400	64.900	8211.46	LAST BHI MWD SURVEY
8610.00	0.400	64.900	8271.45	PROJECTION TO BIT