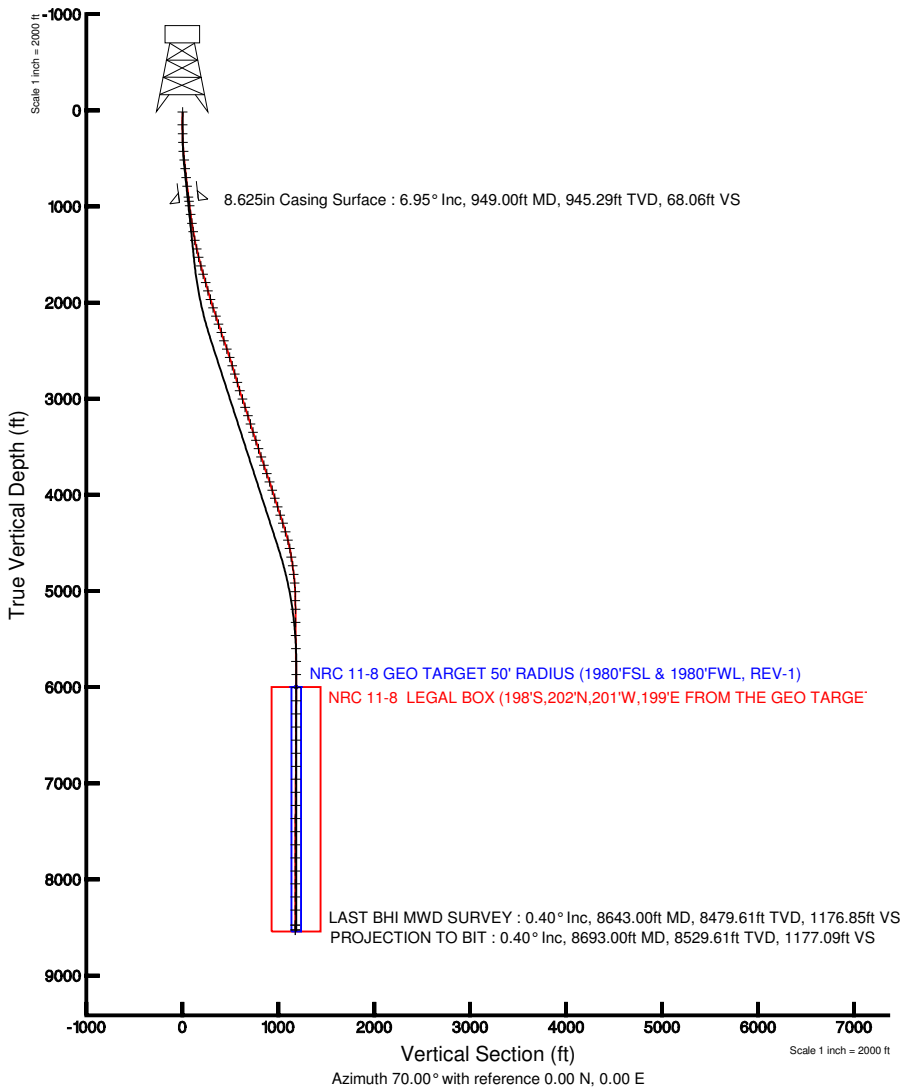
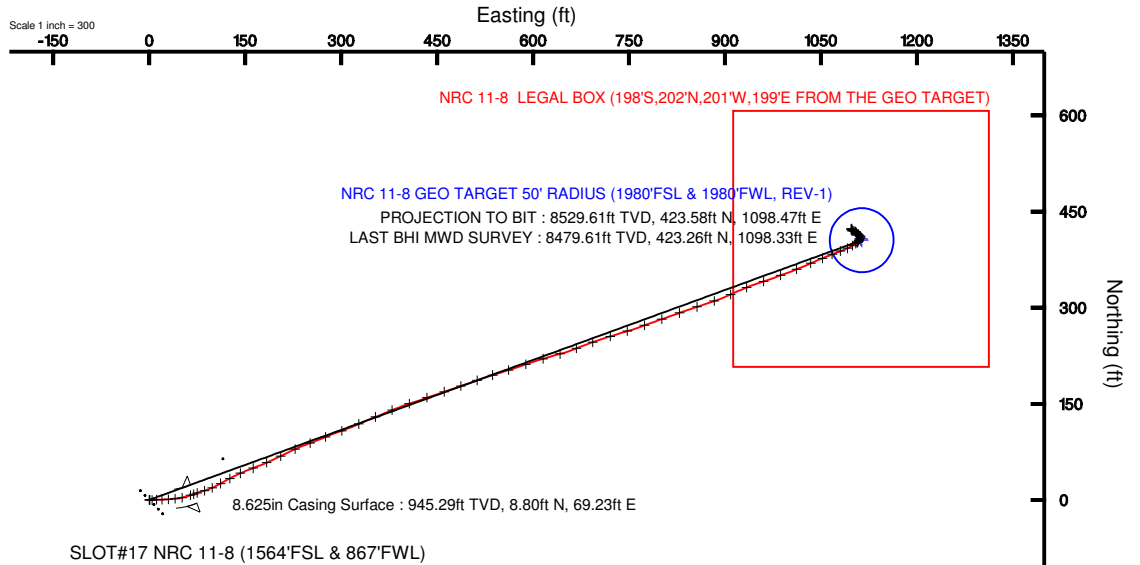


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#17 NRC 11-8 (1564'FSL & 867'FWL)
 Field: WELD COUNTY (KERR MCGEE) Well: NRC 11-8
 Facility: SEC.08-T1N-R67W Wellbore: NRC 11-8 PWB



Plot reference wellpath is NRC 11-8 (REV-C.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: 5041 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: bensjacj on 8/19/2010



BGGM (1945.0 to 2012.0) Dip: 66.79° Field: 53052 nT
 Magnetic North is 9.00 degrees East of True North (at 8/2/2010)
 To correct azimuth from Magnetic to True add 9.00 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 9.00 = 99.00



Actual Wellpath Report

NRC 11-8 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 NRC 11-8 (1564'FSL & 867'FWL)
Area	COLORADO	Well	NRC 11-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 11-8 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	8/19/2010 at 10:52:13 AM
Convergence at slot	0.37° East	Database/Source file	WA_Denver/NRC_11-8_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	548.80	-2992.77	3162103.78	1266205.32	40°03'45.612"N	104°55'15.020"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	5041.00ft
Horizontal Reference Pt	Slot	XTREME 12 (RT) to Mean Sea Level	5041.00ft
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	70.00°



Actual Wellpath Report

NRC 11-8 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 NRC 11-8 (1564'FSL & 867'FWL)
Area	COLORADO	Well	NRC 11-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 11-8 AWB
Facility	SEC.08-T1N-R67W		

WELLPATH DATA (85 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	249.100	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	249.100	15.00	0.00	0.00	0.00	0.00	
149.00	0.300	249.100	149.00	-0.35	-0.13	-0.33	0.22	
240.00	1.500	95.100	239.99	0.49	-0.32	0.64	1.95	
332.00	3.100	86.700	331.91	3.96	-0.28	4.32	1.77	
425.00	5.000	87.800	424.68	10.23	0.02	10.88	2.04	
516.00	6.100	88.100	515.25	18.60	0.33	19.68	1.21	
606.00	6.600	86.000	604.70	28.12	0.85	29.61	0.61	
698.00	6.900	84.100	696.06	38.56	1.79	40.39	0.41	
789.00	6.700	79.000	786.42	49.11	3.36	51.03	0.70	
905.00	6.900	70.200	901.61	62.76	7.02	64.23	0.91	
996.00	7.000	70.900	991.94	73.77	10.68	74.62	0.14	
1087.00	8.100	74.000	1082.15	85.71	14.26	86.02	1.29	
1178.00	8.500	65.600	1172.20	98.81	18.81	98.31	1.40	
1269.00	9.700	60.300	1262.05	113.07	25.39	111.09	1.61	
1360.00	11.200	62.100	1351.54	129.39	33.32	125.56	1.69	
1450.00	12.800	66.000	1439.57	147.99	41.47	142.40	1.99	
1541.00	14.200	69.800	1528.06	169.21	49.42	162.08	1.82	
1632.00	15.100	66.300	1616.10	192.20	58.04	183.41	1.39	
1723.00	15.800	63.500	1703.81	216.34	68.33	205.35	1.12	
1813.00	16.200	65.500	1790.33	241.03	79.01	227.74	0.76	
1904.00	16.200	69.800	1877.72	266.38	88.65	251.21	1.32	
1995.00	16.700	67.400	1964.99	292.13	98.06	275.19	0.93	
2086.00	18.400	70.900	2051.76	319.56	107.79	300.84	2.20	
2177.00	18.400	65.600	2138.11	348.24	118.42	327.49	1.84	
2267.00	18.300	68.800	2223.54	376.53	129.40	353.60	1.12	
2358.00	17.800	67.000	2310.06	404.70	140.00	379.72	0.82	
2449.00	18.600	71.600	2396.51	433.10	150.01	406.30	1.81	
2540.00	19.300	70.900	2482.58	462.65	159.52	434.28	0.81	
2630.00	17.600	70.900	2567.95	491.12	168.84	461.19	1.89	
2721.00	17.300	71.600	2654.76	518.41	177.61	487.03	0.40	
2812.00	17.100	69.500	2741.69	545.31	186.57	512.40	0.72	
2903.00	15.900	73.300	2828.94	571.13	194.83	536.88	1.77	
2993.00	17.800	71.900	2915.08	597.19	202.65	561.76	2.16	
3084.00	18.500	70.900	3001.55	625.53	211.70	588.62	0.84	
3175.00	17.900	73.700	3088.00	653.92	220.35	615.69	1.17	
3266.00	17.600	74.700	3174.67	681.59	227.90	642.38	0.47	
3357.00	16.700	67.400	3261.63	708.37	236.56	667.73	2.56	
3447.00	18.900	71.200	3347.32	735.86	246.23	693.47	2.76	
3538.00	18.000	72.600	3433.64	764.64	255.18	720.84	1.10	
3629.00	17.800	73.000	3520.24	792.58	263.45	747.56	0.26	
3720.00	18.200	69.800	3606.78	820.68	272.42	774.20	1.17	
3810.00	19.000	70.900	3692.08	849.39	282.07	801.23	0.97	
3901.00	19.000	70.500	3778.12	879.01	291.86	829.19	0.14	
3992.00	18.100	71.200	3864.40	907.96	301.36	856.54	1.02	



Actual Wellpath Report

NRC 11-8 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 NRC 11-8 (1564'FSL & 867'FWL)
Area	COLORADO	Well	NRC 11-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 11-8 AWP
Facility	SEC.08-T1N-R67W		

WELLPATH DATA (85 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4083.00	18.100	71.200	3950.89	936.22	310.48	883.30	0.00	
4173.00	17.700	65.300	4036.54	963.84	320.70	908.97	2.06	
4264.00	17.500	67.700	4123.28	991.30	331.67	934.20	0.83	
4355.00	18.400	71.900	4209.86	1019.32	341.33	960.51	1.73	
4446.00	17.800	70.200	4296.36	1047.59	350.50	987.25	0.88	
4537.00	16.600	68.000	4383.28	1074.49	360.08	1012.39	1.50	
4627.00	14.200	66.000	4470.05	1098.35	369.39	1034.39	2.73	
4718.00	11.200	67.700	4558.81	1118.32	377.28	1052.77	3.32	
4809.00	9.500	68.100	4648.33	1134.66	383.44	1067.92	1.87	
4900.00	8.000	69.500	4738.27	1148.50	388.46	1080.82	1.66	
4990.00	7.000	66.300	4827.50	1160.23	392.86	1091.71	1.20	
5081.00	4.800	57.000	4918.01	1169.48	397.16	1099.98	2.63	
5172.00	2.100	53.300	5008.84	1174.78	400.23	1104.51	2.98	
5263.00	1.000	66.600	5099.80	1177.17	401.54	1106.57	1.26	
5354.00	0.400	29.400	5190.80	1178.21	402.13	1107.46	0.79	
5490.00	0.700	28.300	5326.79	1179.19	403.28	1108.09	0.22	
5626.00	1.100	36.100	5462.77	1180.89	405.06	1109.25	0.31	
5762.00	1.000	45.900	5598.75	1183.06	406.94	1110.87	0.15	
5898.00	0.700	28.000	5734.73	1184.76	408.50	1112.11	0.29	
6035.00	0.700	356.700	5871.72	1185.62	410.08	1112.46	0.28	
6171.00	0.600	329.600	6007.72	1185.73	411.52	1112.05	0.24	
6307.00	0.500	254.900	6143.71	1185.01	411.98	1111.12	0.49	
6443.00	0.800	332.800	6279.70	1184.30	412.67	1110.11	0.62	
6579.00	0.500	324.800	6415.70	1184.03	414.00	1109.33	0.23	
6715.00	0.500	310.600	6551.69	1183.58	414.87	1108.54	0.09	
6852.00	0.800	298.000	6688.68	1182.65	415.71	1107.24	0.24	
6988.00	0.600	319.800	6824.67	1181.77	416.70	1105.94	0.24	
7124.00	0.600	328.200	6960.66	1181.37	417.85	1105.11	0.06	
7260.00	0.700	310.600	7096.66	1180.82	418.99	1104.10	0.16	
7396.00	0.900	275.900	7232.64	1179.45	419.64	1102.41	0.38	
7533.00	0.700	274.400	7369.63	1177.72	419.82	1100.50	0.15	
7669.00	0.300	294.500	7505.62	1176.71	420.03	1099.35	0.32	
7805.00	0.300	342.300	7641.62	1176.47	420.52	1098.92	0.18	
7941.00	0.400	350.400	7777.62	1176.57	421.33	1098.73	0.08	
8077.00	0.500	315.900	7913.62	1176.42	422.22	1098.24	0.21	
8213.00	0.100	281.100	8049.61	1176.07	422.67	1097.71	0.31	
8349.00	0.000	74.700	8185.61	1175.97	422.69	1097.59	0.07	
8485.00	0.200	83.200	8321.61	1176.20	422.72	1097.83	0.15	
8643.00	0.400	23.800	8479.61	1176.85	423.26	1098.33	0.22	LAST BHI MWD SURVEY
8693.00	0.400	23.800	8529.61	1177.09	423.58	1098.47	0.00	PROJECTION TO BIT



Actual Wellpath Report

NRC 11-8 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 NRC 11-8 (1564'FSL & 867'FWL)
Area	COLORADO	Well	NRC 11-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 11-8 AWB
Facility	SEC.08-T1N-R67W		

HOLE & CASING SECTIONS Ref Wellbore: NRC 11-8 AWB Ref Wellpath: NRC 11-8 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	960.00	945.00	15.00	956.21	0.00	0.00	9.24	70.49
8.625in Casing Surface	15.00	949.00	934.00	15.00	945.29	0.00	0.00	8.80	69.23
7.875in Open Hole	949.00	8693.00	7744.00	945.29	8529.61	8.80	69.23	423.58	1098.47

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
NRC 11-8 LEGAL BOX (198'S,202'N,201'W,199'E FROM THE GEO TARGET)		6000.00	407.48	1113.01	3163214.06	1266620.05	40°03'49.639"N	104°55'00.705"W	square
NRC 11-8 GEO TARGET 50' RADIUS (1980'FSL & 1980'FWL, REV-1)		6000.00	405.48	1114.01	3163215.07	1266618.05	40°03'49.619"N	104°55'00.692"W	circle

WELLPATH COMPOSITION Ref Wellbore: NRC 11-8 AWB Ref Wellpath: NRC 11-8 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	8643.00	NaviTrak (Standard)	BHI MWD SURVEYS <149-8643>	NRC 11-8 AWB
8643.00	8693.00	Blind Drilling (std)	Projection to bit	NRC 11-8 AWB



Actual Wellpath Report

NRC 11-8 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 NRC 11-8 (1564'FSL & 867'FWL)
Area	COLORADO	Well	NRC 11-8
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 11-8 AWB
Facility	SEC.08-T1N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8643.00	0.400	23.800	8479.61	LAST BHI MWD SURVEY
8693.00	0.400	23.800	8529.61	PROJECTION TO BIT