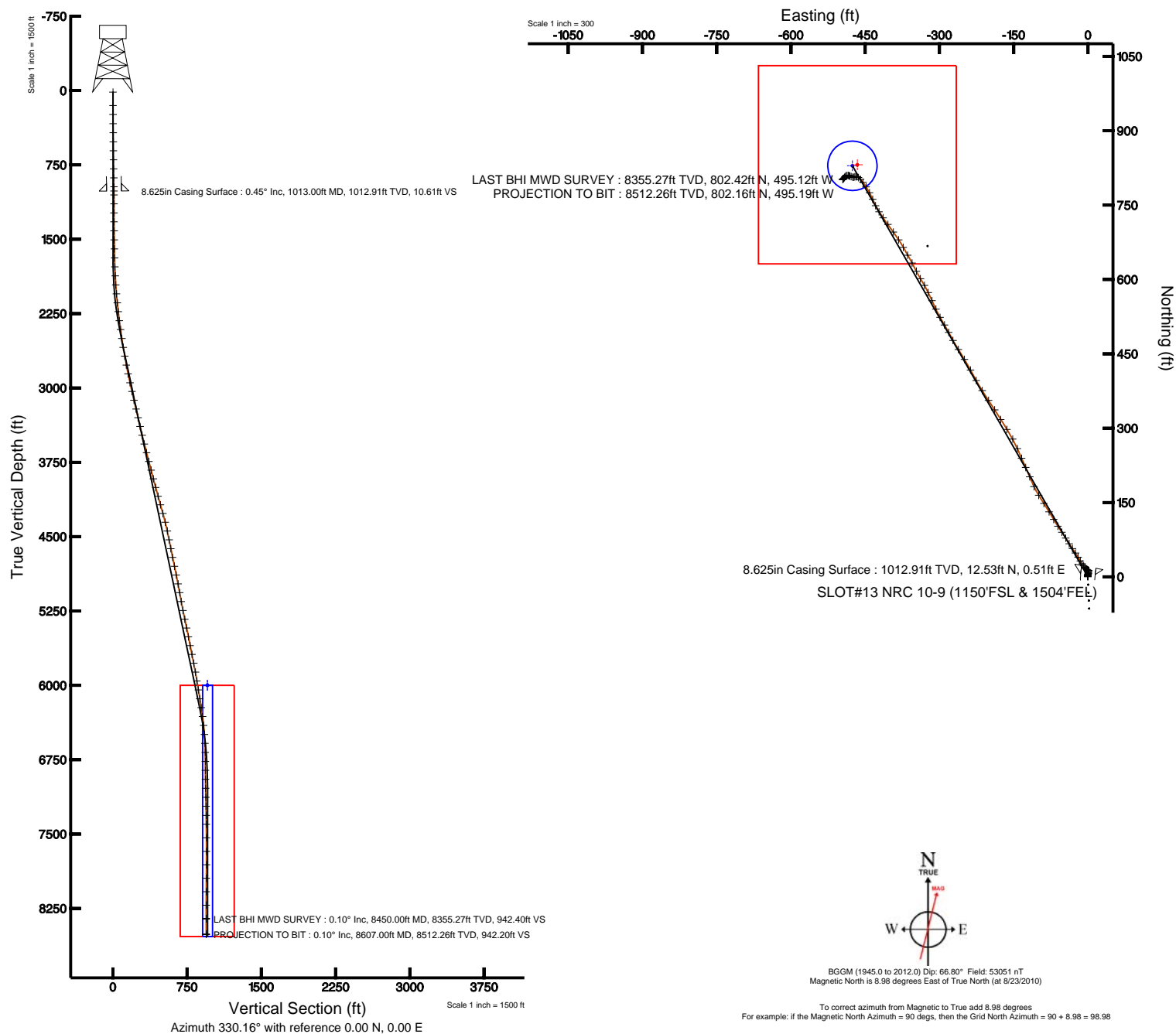


Location:	COLORADO	Slot:	SLOT#13 NRC 10-9 (1150'FSL & 1504'FEL)
Field:	WELD COUNTY (KERR MCGEE)	Well:	NRC 10-9
Facility:	SEC.09-T1N-R67W	Wellbore:	NRC 10-9 PWB



Plot reference filepath is NRC 10-9 (REV-B.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: 6208 feet	Scale: True distance
Mean Sea Level to Mud line (Facility, SEC 69-TIN-R67W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Stok	Created by: cdozmann on 9/21/2010





Actual Wellpath Report

NRC 10-9 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#13 NRC 10-9 (1150'FSL & 1504'FEL)
Area	COLORADO	Well	NRC 10-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 10-9 AWB
Facility	SEC.09-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	0.999962	Report Generated	9/21/2010 at 3:53:34 PM
Convergence at slot	0.39° East	Database/Source file	Denver Server/NRC_10-9_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	-2465.89	182.78	3170265.95	1265807.17	40°03'41.137"N	104°53'30.077"W
Facility Reference Pt			3170066.29	1268271.65	40°04'05.506"N	104°53'32.428"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	5038.00ft
Horizontal Reference Pt	Slot	XTREME 12 (RT) to Mean Sea Level	5038.00ft
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	330.16°



Actual Wellpath Report

NRC 10-9 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#13 NRC 10-9 (1150'FSL & 1504'FEL)
Area	COLORADO	Well	NRC 10-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 10-9 AWB
Facility	SEC.09-T1N-R67W		

WELLPATH DATA (92 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	351.800	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	351.800	15.00	0.00	0.00	0.00	0.00	
150.00	0.500	351.800	150.00	0.55	0.58	-0.08	0.37	
241.00	0.500	340.500	240.99	1.31	1.35	-0.27	0.11	
333.00	0.600	11.500	332.99	2.06	2.20	-0.31	0.34	
425.00	0.800	8.000	424.98	2.93	3.31	-0.13	0.22	
517.00	0.800	20.300	516.97	3.85	4.55	0.19	0.19	
607.00	0.700	25.500	606.97	4.57	5.63	0.64	0.13	
698.00	0.900	2.000	697.96	5.49	6.85	0.91	0.42	
789.00	1.100	354.900	788.94	6.89	8.43	0.85	0.26	
880.00	1.300	356.000	879.92	8.61	10.33	0.70	0.22	
970.00	0.900	349.700	969.91	10.20	12.05	0.51	0.46	
1052.00	0.500	92.700	1051.90	10.61	12.66	0.75	1.37	
1143.00	0.300	102.500	1142.90	10.24	12.59	1.38	0.23	
1233.00	0.200	258.300	1232.90	10.13	12.51	1.45	0.54	
1324.00	0.400	301.500	1323.90	10.46	12.64	1.03	0.32	
1415.00	0.600	298.700	1414.90	11.14	13.04	0.34	0.22	
1506.00	1.000	302.900	1505.89	12.25	13.70	-0.75	0.44	
1597.00	1.500	314.500	1596.87	14.11	14.97	-2.26	0.61	
1688.00	1.600	312.100	1687.83	16.46	16.65	-4.06	0.13	
1778.00	2.200	320.100	1777.78	19.36	18.82	-6.10	0.73	
1869.00	2.700	324.400	1868.70	23.21	21.90	-8.46	0.59	
1960.00	3.700	325.100	1959.56	28.27	26.05	-11.39	1.10	
2051.00	5.000	328.600	2050.29	35.16	31.85	-15.14	1.46	
2142.00	6.000	329.600	2140.87	43.88	39.33	-19.61	1.10	
2232.00	6.800	327.200	2230.31	53.90	47.87	-24.88	0.94	
2323.00	6.900	323.000	2320.66	64.70	56.76	-31.09	0.56	
2414.00	8.200	328.900	2410.87	76.62	66.69	-37.73	1.66	
2505.00	8.700	327.500	2500.88	89.98	78.05	-44.78	0.59	
2596.00	9.000	326.100	2590.80	103.96	89.76	-52.45	0.41	
2686.00	9.700	326.800	2679.60	118.55	101.95	-60.52	0.79	
2777.00	10.700	330.000	2769.17	134.65	115.68	-68.95	1.26	
2868.00	12.200	327.500	2858.35	152.70	131.11	-78.34	1.74	
2959.00	12.900	328.600	2947.18	172.46	147.89	-88.79	0.81	
3049.00	12.200	326.500	3035.03	191.99	164.39	-99.28	0.93	
3140.00	13.200	335.600	3123.81	211.94	181.87	-108.88	2.45	
3231.00	14.200	337.400	3212.22	233.35	201.64	-117.46	1.19	
3321.00	12.300	335.600	3299.82	253.85	220.56	-125.66	2.16	
3412.00	13.400	336.300	3388.54	273.98	239.05	-133.91	1.22	
3503.00	13.600	336.700	3477.03	295.09	258.53	-142.38	0.24	
3594.00	13.800	330.700	3565.44	316.58	277.82	-151.92	1.58	
3685.00	15.200	327.900	3653.54	339.35	297.39	-163.57	1.72	
3776.00	14.700	327.900	3741.46	362.81	317.28	-176.05	0.55	
3867.00	14.500	327.900	3829.52	385.73	336.71	-188.24	0.22	
3957.00	15.100	326.500	3916.54	408.69	356.03	-200.69	0.78	



Actual Wellpath Report

NRC 10-9 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#13 NRC 10-9 (1150'FSL & 1504'FEL)
Area	COLORADO	Well	NRC 10-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 10-9 AWB
Facility	SEC.09-T1N-R67W		

WELLPATH DATA (92 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4048.00	14.900	327.900	4004.44	432.21	375.83	-213.45	0.45	
4139.00	15.100	330.000	4092.34	455.75	396.00	-225.60	0.64	
4229.00	16.000	332.400	4179.04	479.87	417.15	-237.20	1.23	
4320.00	15.600	328.900	4266.61	504.63	438.74	-249.34	1.14	
4411.00	14.300	327.500	4354.52	528.09	458.69	-261.69	1.48	
4502.00	12.700	331.000	4443.01	549.32	476.92	-272.58	1.97	
4593.00	10.700	333.100	4532.11	567.77	493.21	-281.26	2.25	
4684.00	11.200	327.900	4621.46	585.03	508.23	-289.78	1.22	
4774.00	11.500	331.400	4709.70	602.74	523.51	-298.71	0.83	
4865.00	12.000	334.900	4798.79	621.23	540.04	-307.07	0.96	
4956.00	12.000	335.600	4887.80	640.08	557.22	-314.99	0.16	
5047.00	10.900	334.200	4976.99	658.08	573.59	-322.64	1.25	
5137.00	10.100	330.000	5065.49	674.46	588.08	-330.29	1.23	
5228.00	9.800	328.200	5155.12	690.18	601.57	-338.36	0.47	
5319.00	11.900	334.200	5244.49	707.28	616.60	-346.53	2.62	
5410.00	11.900	330.700	5333.53	726.02	633.23	-355.20	0.79	
5500.00	11.400	330.300	5421.68	744.19	649.05	-364.15	0.56	
5591.00	11.400	330.700	5510.88	762.18	664.71	-373.01	0.09	
5682.00	11.400	326.100	5600.09	780.14	680.01	-382.43	1.00	
5772.00	12.800	325.800	5688.09	798.96	695.64	-392.99	1.56	
5863.00	11.400	322.900	5777.07	817.93	711.15	-404.08	1.68	
5954.00	9.500	325.400	5866.55	834.34	724.51	-413.77	2.15	
6045.00	9.000	326.100	5956.37	848.92	736.60	-422.01	0.56	
6136.00	8.900	334.500	6046.26	863.04	748.86	-429.01	1.44	
6227.00	9.100	336.300	6136.14	877.22	761.80	-434.93	0.38	
6317.00	9.700	331.700	6224.94	891.87	775.00	-441.39	1.07	
6408.00	7.600	328.200	6314.90	905.55	786.86	-448.19	2.38	
6499.00	6.300	323.600	6405.23	916.53	796.00	-454.33	1.55	
6590.00	4.000	315.900	6495.86	924.56	802.30	-459.50	2.63	
6680.00	2.800	303.300	6585.70	929.57	805.76	-463.52	1.56	
6771.00	1.600	288.100	6676.63	932.49	807.37	-466.59	1.46	
6862.00	1.300	264.300	6767.60	933.86	807.66	-468.82	0.73	
6953.00	1.500	252.600	6858.57	934.54	807.21	-470.99	0.38	
7043.00	1.700	249.500	6948.54	935.01	806.39	-473.36	0.24	
7134.00	1.600	304.000	7039.51	936.37	806.62	-475.68	1.66	
7225.00	2.000	282.500	7130.46	938.58	807.68	-478.28	0.85	
7315.00	1.400	300.800	7220.42	940.59	808.58	-480.76	0.89	
7407.00	1.200	291.000	7312.40	942.32	809.50	-482.62	0.32	
7497.00	1.000	279.700	7402.38	943.55	809.97	-484.28	0.33	
7633.00	1.100	259.700	7538.36	944.74	809.94	-486.73	0.28	
7770.00	1.200	244.600	7675.33	945.29	809.09	-489.32	0.23	
7906.00	1.000	200.000	7811.31	944.64	807.36	-491.01	0.63	
8042.00	0.700	221.700	7947.29	943.61	805.63	-491.97	0.32	
8178.00	1.000	226.300	8083.28	943.06	804.19	-493.38	0.23	
8314.00	0.500	225.600	8219.27	942.63	802.95	-494.67	0.37	



Actual Wellpath Report

NRC 10-9 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#13 NRC 10-9 (1150'FSL & 1504'FEL)
Area	COLORADO	Well	NRC 10-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 10-9 AWB
Facility	SEC.09-T1N-R67W		

WELLPATH DATA (92 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8450.00	0.100	195.000	8355.27	942.40	802.42	-495.12	0.31	LAST BHI MWD SURVEY
8607.00	0.100	195.000	8512.26	942.20	802.16	-495.19	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS Ref Wellbore: NRC 10-9 AWB Ref Wellpath: NRC 10-9 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	1024.90	0.00	0.00	12.60	0.56
8.625in Casing Surface	15.00	1013.00	998.00	15.00	1012.91	0.00	0.00	12.53	0.51
6.5in Open Hole	1013.00	8607.00	7594.00	1012.91	8512.26	12.53	0.51	802.16	-495.19

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
NRC 10-9 GEO TARGET 50' RADIUS (1980'FSL & 1980'FEL, REV-1)		6000.00	829.49	-475.84	3169784.46	1266633.35	40°03'49.334"N	104°53'36.197"W	circle
NRC 10-9 LEGAL BOX (202'N,198'S,210'E,190'W OF GEO TARGET)		6000.00	831.49	-465.84	3169794.44	1266635.41	40°03'49.354"N	104°53'36.068"W	square

WELLPATH COMPOSITION Ref Wellbore: NRC 10-9 AWB Ref Wellpath: NRC 10-9 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	970.00	NaviTrak (Standard)	SURFACE BHI MWD 12.25 HOLE <150-970>	NRC 10-9 AWB
970.00	8450.00	NaviTrak (Standard)	INTERMEDIATE TO TD 7.875 HOLE <1052-8450>	NRC 10-9 AWB
8450.00	8607.00	Blind Drilling (std)	Projection to bit	NRC 10-9 AWB



Actual Wellpath Report

NRC 10-9 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#13 NRC 10-9 (1150'FSL & 1504'FEL)
Area	COLORADO	Well	NRC 10-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 10-9 AWB
Facility	SEC.09-T1N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8450.00	0.100	195.000	8355.27	LAST BHI MWD SURVEY
8607.00	0.100	195.000	8512.26	PROJECTION TO BIT