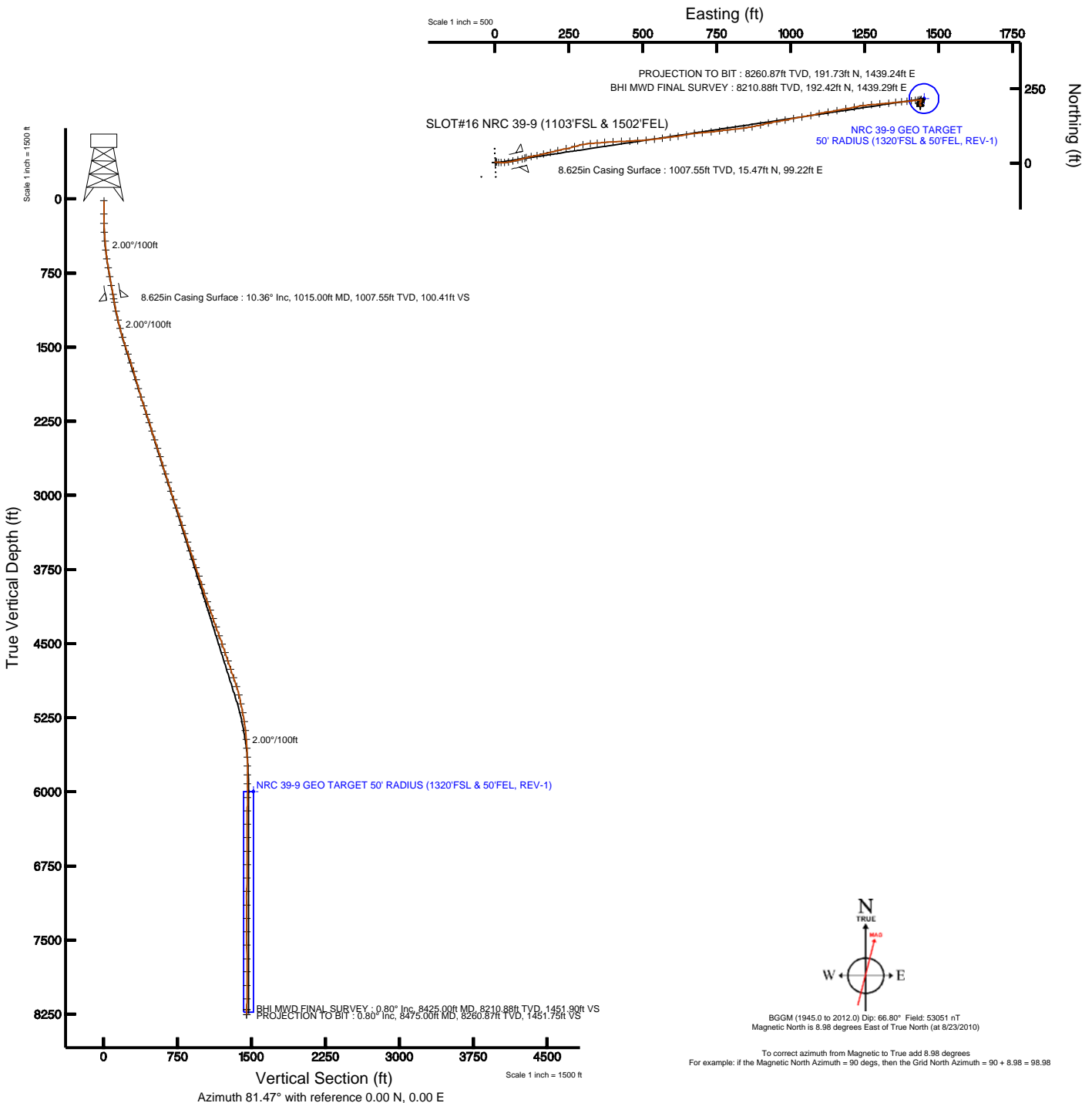


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#16 NRC 39-9 (1103'FSL & 1502'FEL)
 Field: WELD COUNTY (KERR MCGEE) Well: NRC 39-9
 Facility: SEC.09-T1N-R67W Wellbore: NRC 39-9 PWB

Plot reference wellpath is NRC 39-9 (REV-A.0) PWB	
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: 5039 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: SEC.09-T1N-R67W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wagnjam on 10/26/2010





Actual Wellpath Report

NRC 39-9 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 NRC 39-9 (1103'FSL & 1502'FEL)
Area	COLORADO	Well	NRC 39-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 39-9 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	Wagnjam
Scale	0.999962	Report Generated	10/26/2010 at 11:38:44 AM
Convergence at slot	0.39° East	Database/Source file	WA_Denver/NRC_39-9_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	-2513.97	184.74	3170268.24	1265759.10	40°03'40.662"N	104°53'30.052"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	5039.00ft
Horizontal Reference Pt	Slot	XTREME 12 (RT) to Mean Sea Level	5039.00ft
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	81.47°



Actual Wellpath Report

NRC 39-9 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 NRC 39-9 (1103'FSL & 1502'FEL)
Area	COLORADO	Well	NRC 39-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 39-9 AWB
Facility	SEC.09-T1N-R67W		

WELLPATH DATA (87 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	354.600	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	354.600	15.00	0.00	0.00	0.00	0.00	
149.00	0.800	354.600	149.00	0.05	0.93	-0.09	0.60	
241.00	1.700	67.000	240.98	1.41	2.10	1.11	1.79	
333.00	3.600	89.200	332.88	5.59	2.68	5.25	2.31	
425.00	4.900	103.200	424.62	12.10	1.82	11.97	1.80	
516.00	6.000	94.800	515.21	20.34	0.54	20.49	1.49	
607.00	7.500	84.200	605.58	30.90	0.74	31.14	2.14	
698.00	9.700	79.700	695.56	44.50	2.71	44.59	2.53	
789.00	10.000	77.900	785.21	60.05	5.74	59.86	0.47	
880.00	10.600	76.200	874.75	76.27	9.39	75.71	0.74	
970.00	10.200	75.500	963.27	92.44	13.36	91.47	0.47	
1051.00	10.500	73.000	1042.95	106.87	17.31	105.47	0.67	
1142.00	11.300	78.600	1132.31	123.98	21.50	122.14	1.46	
1233.00	13.400	79.700	1221.20	143.42	25.15	141.26	2.32	
1324.00	14.800	76.500	1309.46	165.54	29.75	162.93	1.76	
1414.00	16.100	76.200	1396.20	189.42	35.41	186.23	1.45	
1505.00	18.400	77.500	1483.11	216.32	41.52	212.51	2.56	
1596.00	18.600	76.500	1569.40	245.10	48.02	240.64	0.41	
1687.00	18.900	74.400	1655.57	274.19	55.37	268.95	0.81	
1778.00	17.100	78.600	1742.12	302.18	61.98	296.26	2.44	
1868.00	15.500	85.600	1828.51	327.40	65.52	321.23	2.81	
1959.00	15.300	86.700	1916.24	351.48	67.14	345.34	0.39	
2050.00	17.500	84.200	2003.53	377.11	69.22	370.94	2.54	
2141.00	18.800	87.400	2090.01	405.36	71.27	399.20	1.80	
2232.00	17.900	87.800	2176.38	433.84	72.47	427.83	1.00	
2322.00	17.800	87.100	2262.05	461.28	73.69	455.39	0.26	
2413.00	17.200	86.300	2348.83	488.53	75.27	482.70	0.71	
2504.00	18.000	85.600	2435.57	515.96	77.21	510.15	0.91	
2595.00	18.500	83.200	2522.00	544.41	80.00	538.50	0.99	



Actual Wellpath Report

NRC 39-9 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 NRC 39-9 (1103'FSL & 1502'FEL)
Area	COLORADO	Well	NRC 39-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 39-9 AWB
Facility	SEC.09-T1N-R67W		

WELLPATH DATA (87 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2686.00	17.200	81.400	2608.62	572.30	83.72	566.15	1.55	
2777.00	17.000	84.200	2695.60	599.04	87.08	592.68	0.93	
2868.00	18.000	81.800	2782.38	626.39	90.43	619.84	1.35	
2959.00	17.200	77.600	2869.13	653.88	95.32	646.90	1.65	
3049.00	17.800	84.600	2954.97	680.89	99.48	673.59	2.43	
3140.00	18.400	85.300	3041.47	709.11	101.96	701.75	0.70	
3231.00	18.800	83.900	3127.71	738.09	104.70	730.65	0.66	
3322.00	17.600	82.100	3214.16	766.50	108.15	758.85	1.46	
3413.00	17.400	84.200	3300.95	793.85	111.41	786.02	0.73	
3504.00	18.000	82.800	3387.64	821.50	114.55	813.51	0.81	
3594.00	17.900	82.800	3473.26	849.23	118.03	841.02	0.11	
3685.00	18.400	80.400	3559.73	877.57	122.17	869.06	0.99	
3776.00	18.800	76.500	3645.98	906.54	127.99	897.48	1.44	
3867.00	18.300	77.600	3732.26	935.40	134.48	925.69	0.67	
3958.00	18.800	80.400	3818.53	964.31	140.00	954.10	1.12	
4048.00	17.800	79.300	3903.98	992.56	144.97	981.92	1.18	
4139.00	18.300	77.900	3990.50	1020.72	150.55	1009.56	0.73	
4230.00	19.800	81.800	4076.52	1050.39	155.74	1038.78	2.16	
4320.00	19.300	78.600	4161.33	1080.49	160.86	1068.45	1.31	
4411.00	18.500	76.500	4247.42	1109.90	167.20	1097.23	1.15	
4502.00	19.500	82.500	4333.47	1139.47	172.55	1126.33	2.41	
4593.00	20.600	78.600	4418.96	1170.65	177.70	1157.09	1.90	
4684.00	18.700	79.700	4504.66	1201.22	183.47	1187.14	2.13	
4774.00	19.200	79.700	4589.78	1230.43	188.70	1215.89	0.56	
4865.00	18.500	80.400	4675.90	1259.82	193.78	1244.85	0.81	
4956.00	18.900	86.300	4762.10	1288.95	197.14	1273.79	2.12	
5047.00	18.900	84.000	4848.20	1318.36	199.63	1303.16	0.82	
5138.00	17.900	84.200	4934.55	1347.05	202.59	1331.73	1.10	
5228.00	13.800	84.600	5021.10	1371.59	204.99	1356.19	4.56	
5319.00	12.100	85.300	5109.79	1391.95	206.80	1376.50	1.88	



Actual Wellpath Report

NRC 39-9 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 NRC 39-9 (1103'FSL & 1502'FEL)
Area	COLORADO	Well	NRC 39-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 39-9 AWB
Facility	SEC.09-T1N-R67W		

WELLPATH DATA (87 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5410.00	10.600	82.500	5199.01	1409.83	208.67	1394.31	1.76	
5501.00	9.200	84.200	5288.65	1425.47	210.50	1409.84	1.57	
5592.00	6.400	83.900	5378.80	1437.81	211.77	1422.12	3.08	
5682.00	4.700	83.200	5468.37	1446.50	212.74	1430.77	1.89	
5773.00	2.900	83.500	5559.17	1452.53	213.45	1436.76	1.98	
5864.00	2.500	86.300	5650.07	1456.81	213.83	1441.03	0.46	
5955.00	0.400	63.800	5741.03	1459.09	214.10	1443.30	2.35	
6045.00	0.400	271.800	5831.03	1459.08	214.25	1443.27	0.86	
6136.00	0.700	212.900	5922.03	1458.40	213.79	1442.65	0.66	
6272.00	0.500	199.200	6058.02	1457.57	212.54	1442.00	0.18	
6409.00	0.700	176.700	6195.01	1457.22	211.14	1441.85	0.22	
6545.00	0.700	215.400	6331.00	1456.57	209.63	1441.42	0.34	
6681.00	0.600	172.100	6467.00	1455.98	208.25	1441.03	0.36	
6817.00	0.500	194.600	6602.99	1455.74	206.97	1440.98	0.17	
6953.00	0.700	227.300	6738.98	1454.82	205.83	1440.22	0.29	
7089.00	0.800	234.700	6874.97	1453.29	204.72	1438.84	0.10	
7225.00	0.800	204.800	7010.96	1451.92	203.31	1437.66	0.30	
7362.00	0.800	178.100	7147.95	1451.28	201.48	1437.29	0.27	
7498.00	1.100	169.300	7283.93	1451.22	199.25	1437.57	0.24	
7635.00	0.300	169.300	7420.92	1451.28	197.61	1437.88	0.58	
7771.00	0.600	112.700	7556.91	1451.91	196.98	1438.60	0.37	
7907.00	0.200	80.400	7692.91	1452.75	196.75	1439.49	0.33	
8041.00	0.300	144.400	7826.91	1453.14	196.50	1439.93	0.21	
8178.00	0.400	162.300	7963.91	1453.38	195.75	1440.28	0.11	
8314.00	1.100	207.300	8099.89	1452.70	194.14	1439.83	0.64	
8425.00	0.800	183.900	8210.88	1451.90	192.42	1439.29	0.44	BHI MWD FINAL SURVEY
8475.00	0.800	183.900	8260.87	1451.75	191.73	1439.24	0.00	PROJECTION TO BIT



Actual Wellpath Report

NRC 39-9 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 NRC 39-9 (1103'FSL & 1502'FEL)
Area	COLORADO	Well	NRC 39-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 39-9 AWB
Facility	SEC.09-T1N-R67W		

HOLE & CASING SECTIONS Ref Wellbore: NRC 39-9 AWB Ref Wellpath: NRC 39-9 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	0.00	1051.00	1051.00	0.00	1042.95	0.00	0.00	17.31	105.47
8.625in Casing Surface	15.00	1015.00	1000.00	15.00	1007.55	0.00	0.00	15.47	99.22
6.5in Open Hole	1015.00	8475.00	7460.00	1007.55	8260.87	15.47	99.22	191.73	1439.24

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
NRC 39-9 GEO TARGET 50' RADIUS (1320'FSL & 50'FEL, REV-1)		6000.00	217.89	1451.90	3171718.55	1265986.93	40°03'42.815"N	104°53'11.378"W	circle
NRC 39-9 HARDLINE 50'E OF GEO TARGET		6000.00	217.89	1501.90	3171768.55	1265987.28	40°03'42.815"N	104°53'10.735"W	point

WELLPATH COMPOSITION Ref Wellbore: NRC 39-9 AWB Ref Wellpath: NRC 39-9 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	970.00	NaviTrak (Standard)	BHI MWD SURVEYS 12.25 HOLE <149-970>	NRC 39-9 AWB
970.00	8425.00	NaviTrak (Standard)	BHI MWD SURVEYS 7.875 HOLE <1051-8425>	NRC 39-9 AWB
8425.00	8475.00	Blind Drilling (std)	Projection to bit	NRC 39-9 AWB



Actual Wellpath Report

NRC 39-9 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 NRC 39-9 (1103'FSL & 1502'FEL)
Area	COLORADO	Well	NRC 39-9
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 39-9 AWB
Facility	SEC.09-T1N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8425.00	0.800	183.900	8210.88	BHI MWD FINAL SURVEY
8475.00	0.800	183.900	8260.87	PROJECTION TO BIT