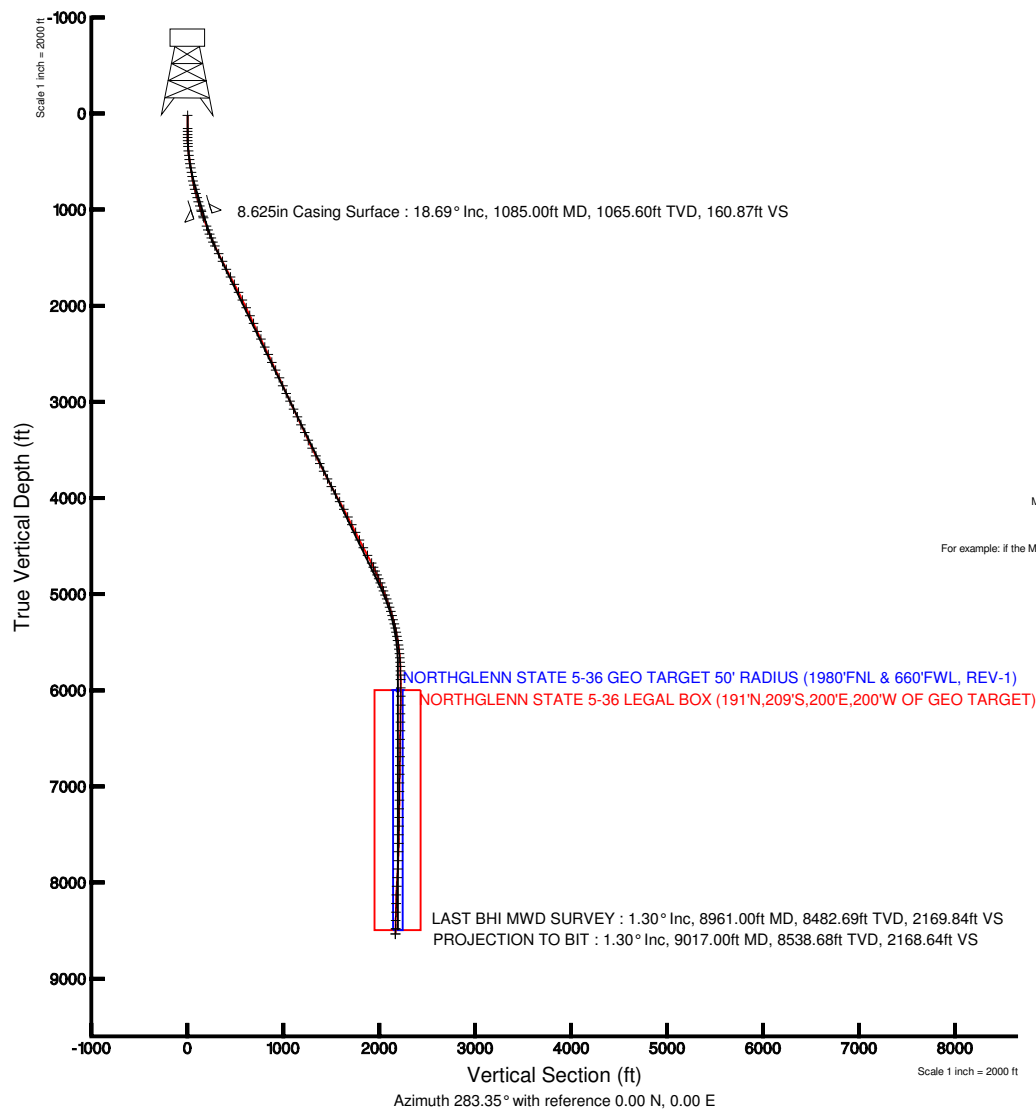
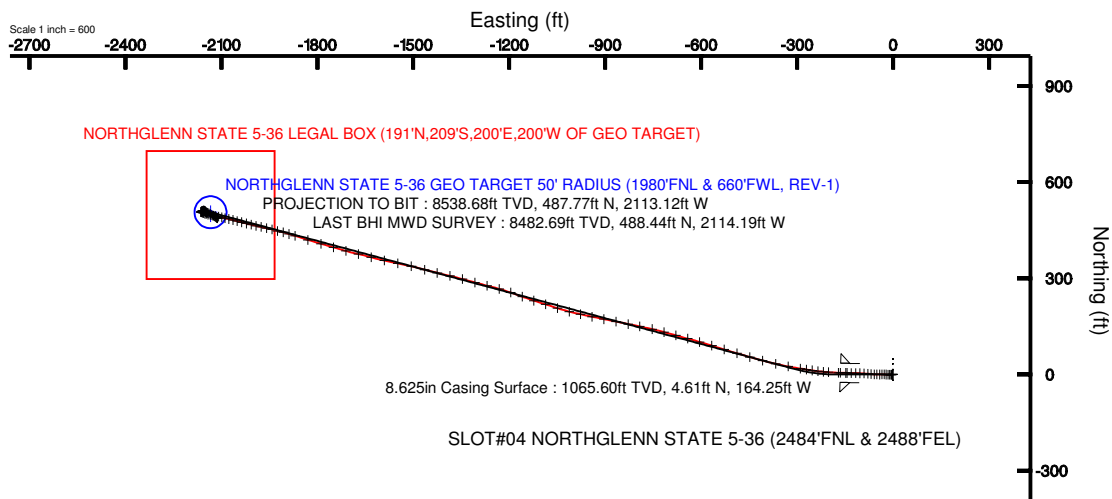


KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL)
 Field: WELD COUNTY (KERR MCGEE) Well: NORTHGLENN STATE 5-36
 Facility: SEC.36-T1N-R68W Wellbore: NORTHGLENN STATE 5-36 PWB



Plot reference wellpath is NORTHGLENN STATE 5-36 (REV-C.0) PWP	
True vertical depths are referenced to XTREME 8 (RT)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
Measured depths are referenced to XTREME 8 (RT)	North Reference: True north
XTREME 8 (RT) to Mean Sea Level: 5163 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: SEC.36-T1N-R68W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: bensjacj on 9/2/2010



BGGM (1945.0 to 2012.0) Dip: 66.74° Field: 53017.8 nT
 Magnetic North is 9.01 degrees East of True North (at 8/6/2010)

To correct azimuth from Magnetic to True add 9.01 degrees
 For example: If the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 9.01 = 99.01



Actual Wellpath Report

NORTHGLENN STATE 5-36 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 5-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 5-36 AWB
Facility	SEC.36-T1N-R68W		

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	0.999966	Report Generated	9/2/2010 at 11:33:21 AM
Convergence at slot	0.35° East	Database/Source file	WA_Denver/NORTHGLENN_STATE_5-36_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	-47.36	-0.00	3153664.69	1246261.83	40°00'29.052"N	104°57'05.148"W
Facility Reference Pt			3153664.40	1246309.19	40°00'29.520"N	104°57'05.148"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 8 (RT) to Facility Vertical Datum	5163.00ft
Horizontal Reference Pt	Slot	XTREME 8 (RT) to Mean Sea Level	5163.00ft
Vertical Reference Pt	XTREME 8 (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	XTREME 8 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	283.35°



Actual Wellpath Report

NORTHGLENN STATE 5-36 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 5-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 5-36 AWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (131 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	226.600	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	226.600	17.00	0.00	0.00	0.00	0.00	
154.00	0.400	226.600	154.00	0.26	-0.33	-0.35	0.29	
185.00	0.400	231.600	185.00	0.39	-0.47	-0.51	0.11	
217.00	1.000	249.800	217.00	0.69	-0.64	-0.86	1.98	
248.00	1.700	259.700	247.99	1.34	-0.81	-1.57	2.37	
279.00	2.500	260.700	278.97	2.38	-1.00	-2.69	2.58	
310.00	3.300	265.000	309.93	3.85	-1.19	-4.24	2.67	
341.00	4.000	268.800	340.86	5.75	-1.29	-6.21	2.39	
388.00	5.500	272.300	387.70	9.54	-1.23	-10.10	3.25	
433.00	6.900	271.300	432.44	14.30	-1.09	-14.96	3.12	
478.00	8.200	273.400	477.04	20.11	-0.83	-20.87	2.95	
522.00	8.700	272.000	520.57	26.46	-0.53	-27.32	1.23	
567.00	9.100	268.100	565.03	33.23	-0.53	-34.28	1.61	
612.00	9.600	268.800	609.43	40.30	-0.73	-41.59	1.14	
658.00	10.800	272.700	654.70	48.25	-0.61	-49.73	3.01	
703.00	11.500	273.700	698.85	56.81	-0.12	-58.42	1.61	
748.00	12.900	275.100	742.83	66.21	0.62	-67.90	3.18	
793.00	14.400	275.500	786.56	76.72	1.60	-78.47	3.34	
838.00	15.800	273.700	830.01	88.31	2.53	-90.16	3.28	
883.00	16.700	272.000	873.21	100.68	3.15	-102.73	2.26	
928.00	17.300	272.000	916.24	113.58	3.61	-115.88	1.33	
974.00	17.700	271.300	960.11	127.13	4.01	-129.71	0.98	
1019.00	18.000	270.200	1002.95	140.59	4.19	-143.50	1.00	
1032.00	18.100	270.900	1015.31	144.52	4.23	-147.53	1.84	
1104.00	18.900	272.000	1083.59	166.87	4.81	-170.36	1.21	
1195.00	20.600	273.400	1169.23	197.09	6.28	-201.08	1.94	
1240.00	21.900	275.400	1211.17	213.20	7.53	-217.33	3.31	
1285.00	23.100	277.600	1252.75	230.30	9.49	-234.44	3.26	
1330.00	23.600	279.000	1294.06	248.06	12.07	-252.09	1.66	
1375.00	24.500	278.700	1335.15	266.35	14.89	-270.21	2.02	
1420.00	25.300	279.000	1375.97	285.23	17.80	-288.93	1.80	
1510.00	26.000	280.800	1457.10	324.12	24.51	-327.30	1.16	
1600.00	27.100	283.200	1537.61	364.33	32.89	-366.64	1.71	
1691.00	27.500	284.600	1618.48	406.06	42.92	-407.15	0.83	
1781.00	27.800	286.000	1698.20	447.80	53.94	-447.43	0.80	
1870.00	27.900	286.400	1776.89	489.32	65.54	-487.36	0.24	
1961.00	27.100	286.700	1857.61	531.28	77.51	-527.64	0.89	
2051.00	26.200	287.500	1938.05	571.56	89.37	-566.22	1.08	
2142.00	26.000	286.400	2019.77	611.51	101.04	-604.51	0.58	
2232.00	25.100	284.600	2100.97	650.30	111.43	-641.91	1.32	
2322.00	25.100	286.000	2182.47	688.45	121.50	-678.73	0.66	
2412.00	25.200	285.000	2263.94	726.67	131.72	-715.59	0.49	
2503.00	25.300	282.900	2346.24	765.48	141.08	-753.26	0.99	
2594.00	25.800	281.800	2428.34	804.72	149.47	-791.60	0.76	



Actual Wellpath Report

NORTHGLENN STATE 5-36 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 5-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 5-36 AWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (131 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2680.00	25.200	281.800	2505.97	841.73	157.04	-827.84	0.70	
2770.00	25.700	280.800	2587.23	880.38	164.61	-865.76	0.73	
2859.00	25.800	281.800	2667.40	919.02	172.19	-903.68	0.50	
2949.00	24.500	281.800	2748.86	957.25	180.01	-941.12	1.44	
3039.00	24.000	282.200	2830.92	994.21	187.70	-977.28	0.58	
3127.00	24.600	284.300	2911.12	1030.42	196.00	-1012.52	1.20	
3217.00	25.100	287.800	2992.80	1068.18	206.46	-1048.85	1.73	
3308.00	25.400	287.800	3075.10	1106.88	218.33	-1085.81	0.33	
3398.00	25.700	287.500	3156.30	1145.59	230.10	-1122.80	0.36	
3487.00	25.400	290.600	3236.60	1183.77	242.62	-1159.07	1.54	
3577.00	25.000	288.500	3318.04	1221.86	255.45	-1195.17	1.09	
3667.00	25.000	286.400	3399.61	1259.79	266.85	-1231.45	0.99	
3758.00	25.800	283.900	3481.81	1298.80	277.04	-1269.13	1.47	
3846.00	27.300	285.300	3560.53	1338.12	286.96	-1307.18	1.85	
3935.00	26.900	285.000	3639.76	1378.64	297.56	-1346.32	0.47	
4025.00	26.600	283.500	3720.13	1419.14	307.53	-1385.58	0.82	
4116.00	26.500	283.600	3801.53	1459.82	317.06	-1425.12	0.12	
4204.00	28.200	285.000	3879.69	1500.24	327.06	-1464.29	2.07	
4294.00	29.200	282.900	3958.64	1543.45	337.47	-1506.23	1.58	
4383.00	28.800	281.100	4036.48	1586.58	346.44	-1548.43	1.08	
4475.00	27.300	282.500	4117.67	1629.82	355.27	-1590.78	1.78	
4566.00	27.300	285.300	4198.54	1671.55	365.30	-1631.28	1.41	
4656.00	27.500	283.200	4278.44	1712.95	375.49	-1671.42	1.10	
4745.00	26.700	285.000	4357.67	1753.49	385.36	-1710.74	1.29	
4835.00	26.700	287.100	4438.08	1793.88	396.54	-1749.60	1.05	
4925.00	27.300	285.300	4518.27	1834.68	407.93	-1788.83	1.13	
5016.00	28.600	287.500	4598.66	1877.27	419.98	-1829.73	1.82	
5106.00	26.800	287.100	4678.34	1919.00	432.43	-1869.67	2.01	
5151.00	25.700	286.400	4718.70	1938.87	438.17	-1888.73	2.54	
5196.00	24.600	284.600	4759.43	1957.97	443.28	-1907.16	2.98	
5241.00	23.900	285.000	4800.46	1976.45	448.00	-1925.03	1.60	
5286.00	22.800	284.300	4841.77	1994.28	452.52	-1942.28	2.52	
5332.00	22.400	282.900	4884.24	2011.96	456.67	-1959.46	1.46	
5377.00	21.900	282.500	4925.92	2028.92	460.41	-1976.01	1.16	
5421.00	21.000	282.900	4966.87	2045.01	463.94	-1991.71	2.07	
5466.00	20.300	283.200	5008.98	2060.88	467.52	-2007.17	1.57	
5511.00	20.100	284.600	5051.21	2076.42	471.26	-2022.25	1.16	
5556.00	19.500	285.000	5093.55	2091.66	475.15	-2036.99	1.37	
5602.00	17.900	283.900	5137.12	2106.40	478.83	-2051.27	3.56	
5647.00	17.300	283.900	5180.02	2120.01	482.10	-2064.48	1.33	
5692.00	16.200	283.900	5223.11	2132.97	485.22	-2077.06	2.44	
5737.00	15.000	282.500	5266.45	2145.07	487.99	-2088.84	2.79	
5781.00	14.100	282.200	5309.04	2156.13	490.35	-2099.64	2.05	
5825.00	12.800	281.500	5351.83	2166.36	492.46	-2109.66	2.98	
5870.00	11.800	281.100	5395.80	2175.94	494.34	-2119.06	2.23	



Actual Wellpath Report

NORTHGLENN STATE 5-36 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 5-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 5-36 AWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (131 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5915.00	10.400	281.500	5439.95	2184.59	496.03	-2127.55	3.12	
5960.00	9.400	283.900	5484.28	2192.33	497.72	-2135.10	2.40	
6006.00	8.400	280.400	5529.73	2199.44	499.23	-2142.05	2.47	
6051.00	7.000	285.700	5574.32	2205.46	500.57	-2147.92	3.49	
6096.00	5.700	288.500	5619.04	2210.43	502.02	-2152.68	2.97	
6141.00	4.800	293.100	5663.86	2214.51	503.47	-2156.53	2.21	
6186.00	3.700	302.200	5708.73	2217.74	504.98	-2159.50	2.86	
6231.00	2.000	301.200	5753.67	2219.86	506.16	-2161.40	3.78	
6276.00	1.300	273.700	5798.66	2221.11	506.60	-2162.58	2.31	
6320.00	1.100	275.100	5842.65	2222.02	506.67	-2163.50	0.46	
6365.00	0.400	270.200	5887.64	2222.60	506.71	-2164.08	1.56	
6454.00	0.400	283.900	5976.64	2223.22	506.78	-2164.70	0.11	
6541.00	0.700	36.400	6063.64	2223.31	507.29	-2164.67	1.07	
6632.00	1.100	58.600	6154.63	2222.47	508.19	-2163.60	0.58	
6722.00	1.100	50.900	6244.61	2221.33	509.18	-2162.19	0.16	
6811.00	1.000	59.600	6333.60	2220.25	510.11	-2160.86	0.21	
6901.00	0.900	72.600	6423.58	2219.08	510.72	-2159.51	0.26	
6990.00	0.700	80.400	6512.57	2217.98	511.02	-2158.30	0.26	
7081.00	0.800	78.600	6603.57	2216.89	511.24	-2157.13	0.11	
7171.00	0.800	90.600	6693.56	2215.70	511.36	-2155.89	0.19	
7262.00	0.900	102.900	6784.55	2214.37	511.19	-2154.56	0.23	
7352.00	0.900	108.900	6874.54	2212.96	510.81	-2153.20	0.10	
7442.00	0.800	129.600	6964.53	2211.69	510.18	-2152.05	0.36	
7533.00	0.900	137.000	7055.52	2210.53	509.25	-2151.07	0.16	
7622.00	0.800	150.300	7144.51	2209.52	508.20	-2150.28	0.25	
7712.00	1.000	154.200	7234.50	2208.60	506.95	-2149.63	0.23	
7802.00	1.100	124.300	7324.48	2207.29	505.75	-2148.58	0.61	
7892.00	0.800	95.500	7414.47	2205.87	505.20	-2147.24	0.62	
7981.00	0.700	97.300	7503.46	2204.71	505.08	-2146.08	0.12	
8071.00	1.300	102.500	7593.45	2203.14	504.78	-2144.54	0.67	
8160.00	2.000	115.200	7682.41	2200.61	503.91	-2142.15	0.88	
8251.00	2.600	116.200	7773.34	2197.05	502.32	-2138.86	0.66	
8340.00	3.100	116.600	7862.23	2192.74	500.35	-2134.89	0.56	
8430.00	3.600	118.700	7952.07	2187.64	497.90	-2130.24	0.57	
8518.00	3.400	118.700	8039.91	2182.46	495.32	-2125.53	0.23	
8609.00	1.900	117.600	8130.81	2178.40	493.33	-2121.82	1.65	
8698.00	1.600	120.100	8219.77	2175.78	492.02	-2119.44	0.35	
8788.00	1.400	125.700	8309.74	2173.56	490.75	-2117.46	0.28	
8877.00	1.300	126.400	8398.71	2171.62	489.52	-2115.77	0.11	
8961.00	1.300	122.200	8482.69	2169.84	488.44	-2114.19	0.11	LAST BHI MWD SURVEY
9017.00	1.300	122.200	8538.68	2168.64	487.77	-2113.12	0.00	PROJECTION TO BIT



Actual Wellpath Report

NORTHGLENN STATE 5-36 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 5-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 5-36 AWB
Facility	SEC.36-T1N-R68W		

HOLE & CASING SECTIONS

Ref Wellbore: NORTHGLENN STATE 5-36 AWB Ref Wellpath: NORTHGLENN STATE 5-36 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	17.00	1095.00	1078.00	17.00	1075.07	0.00	0.00	4.71	-167.46
8.625in Casing Surface	17.00	1085.00	1068.00	17.00	1065.60	0.00	0.00	4.61	-164.25
7.875in Open Hole	1085.00	9017.00	7932.00	1065.60	8538.68	4.61	-164.25	487.77	-2113.12

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
NORTHGLENN STATE 5-36 GEO TARGET 50' RADIUS (1980'FNL & 660'FWL, REV-1)		6000.00	506.45	-2134.55	3151527.12	1246755.05	40°00'34.056"N	104°57'32.580"W	circle
NORTHGLENN STATE 5-36 LEGAL BOX (191'N,209'S,200'E,200'W OF GEO TARGET)		6000.00	497.45	-2134.55	3151527.18	1246746.05	40°00'33.967"N	104°57'32.580"W	square

WELLPATH COMPOSITION Ref Wellbore: NORTHGLENN STATE 5-36 AWB Ref Wellpath: NORTHGLENN STATE 5-36 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	8961.00	NaviTrak (Standard)	BHI MWD SURVEYS <154-8961>	NORTHGLENN STATE 5-36 AWB
8961.00	9017.00	Blind Drilling (std)	Projection to bit	NORTHGLENN STATE 5-36 AWB



Actual Wellpath Report

NORTHGLENN STATE 5-36 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 5-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 5-36 AWB
Facility	SEC.36-T1N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8961.00	1.300	122.200	8482.69	LAST BHI MWD SURVEY
9017.00	1.300	122.200	8538.68	PROJECTION TO BIT