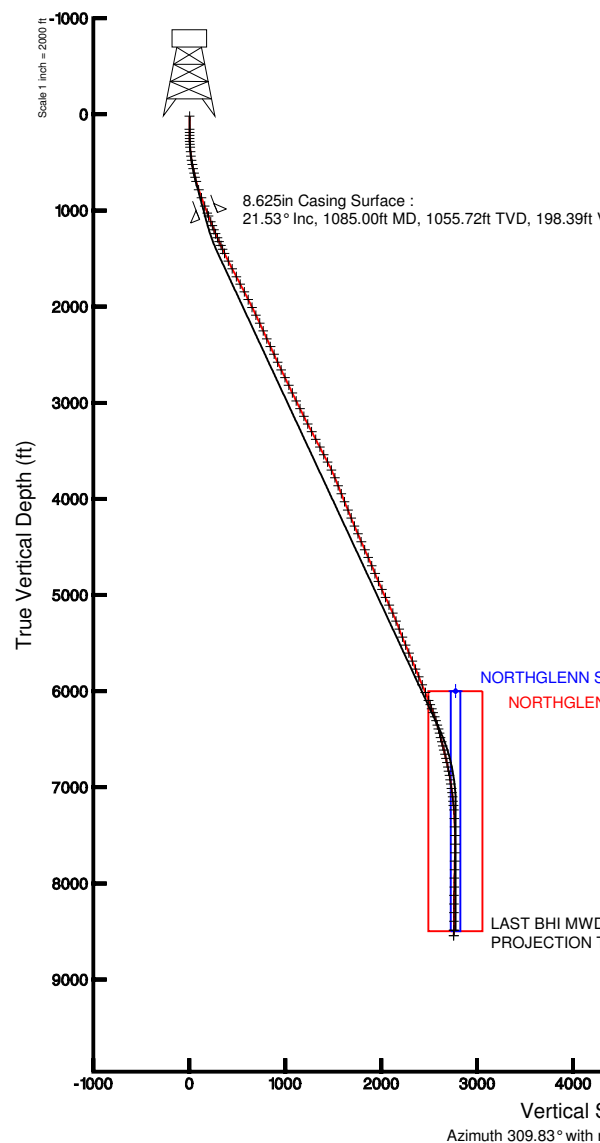
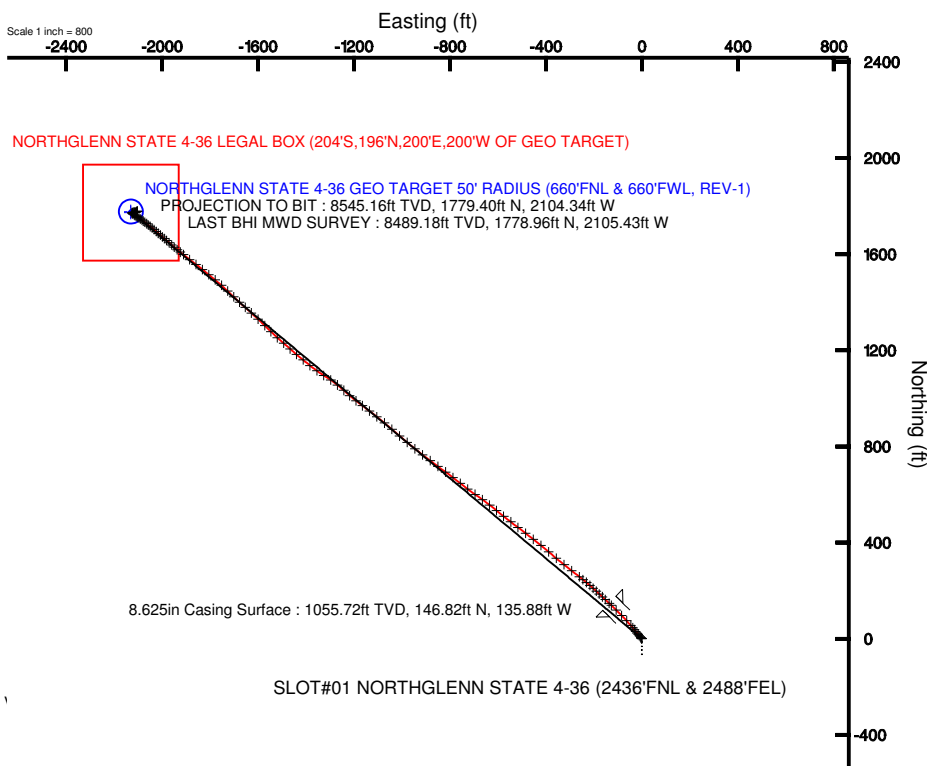


# KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#01 NORTHGLENN STATE 4-36 (2436'FNL & 2488'FEL)  
 Field: WELD COUNTY (KERR MCGEE) Well: NORTHGLENN STATE 4-36  
 Facility: SEC.36-T1N-R68W Wellbore: NORTHGLENN STATE 4-36 PWB



Plot reference wellpath is NORTHGLENN STATE 4-36 (REV-B.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 4-36 AWP

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**INTEQ**

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 NORTHGLENN STATE 4-36 (2436'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 4-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 4-36 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 12:27:16 PM
Convergence at slot	0.35° East	Database/Source file	WA_Denver/NORTHGLENN_STATE_4-36_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	3153664.40	1246309.19	40°00'29.520"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	309.83°





# Actual Wellpath Report

## NORTHGLENN STATE 4-36 AWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 NORTHGLENN STATE 4-36 (2436'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 4-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 4-36 AWB
Facility	SEC.36-T1N-R68W		

### WELLPATH DATA (128 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	253.400	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	253.400	17.00	0.00	0.00	0.00	0.00	
154.00	0.200	253.400	154.00	0.13	-0.07	-0.23	0.15	
185.00	0.300	284.600	185.00	0.24	-0.06	-0.36	0.53	
217.00	0.800	301.200	217.00	0.53	0.07	-0.63	1.62	
248.00	1.500	319.900	247.99	1.15	0.50	-1.08	2.53	
279.00	2.600	318.000	278.97	2.24	1.33	-1.81	3.55	
310.00	3.600	318.700	309.93	3.90	2.58	-2.92	3.23	
341.00	4.800	319.100	340.84	6.14	4.29	-4.41	3.87	
388.00	6.200	317.000	387.62	10.60	7.64	-7.43	3.01	
433.00	7.700	320.500	432.29	15.97	11.74	-11.01	3.46	
478.00	9.200	320.900	476.80	22.47	16.86	-15.19	3.34	
522.00	10.500	321.600	520.15	29.84	22.73	-19.90	2.97	
567.00	11.600	320.500	564.32	38.30	29.44	-25.33	2.49	
612.00	12.700	320.100	608.31	47.62	36.72	-31.38	2.45	
658.00	14.400	319.800	653.03	58.23	44.97	-38.32	3.70	
703.00	15.800	319.800	696.47	69.77	53.92	-45.88	3.11	
793.00	18.900	318.000	782.37	96.28	74.12	-63.55	3.50	
883.00	20.100	315.200	867.21	126.10	95.93	-84.20	1.69	
974.00	21.100	315.200	952.39	157.98	118.64	-106.76	1.10	
1052.00	21.600	313.500	1025.03	186.28	138.49	-127.07	1.02	
1148.00	21.400	312.800	1114.35	221.41	162.55	-152.74	0.34	
1193.00	21.800	312.100	1156.19	237.96	173.73	-164.96	1.06	
1239.00	22.300	312.800	1198.83	255.21	185.39	-177.70	1.23	
1284.00	23.100	313.500	1240.34	272.54	197.27	-190.37	1.88	
1329.00	23.800	312.400	1281.63	290.42	209.47	-203.48	1.83	
1373.00	24.200	312.400	1321.82	308.30	221.53	-216.69	0.91	
1418.00	24.400	310.000	1362.84	326.81	233.73	-230.62	2.24	
1463.00	25.100	307.800	1403.70	345.65	245.55	-245.29	2.57	
1508.00	25.800	308.200	1444.34	364.97	257.46	-260.52	1.60	
1599.00	26.500	307.800	1526.02	405.06	282.15	-292.13	0.79	
1689.00	27.200	308.500	1606.32	445.69	307.26	-324.09	0.85	
1780.00	27.900	310.000	1687.00	487.77	333.89	-356.68	1.08	
1869.00	27.900	310.700	1765.66	529.42	360.86	-388.42	0.37	
1959.00	27.400	308.500	1845.38	571.18	387.48	-420.59	1.26	
2050.00	27.100	308.900	1926.28	612.83	413.53	-453.11	0.39	
2140.00	26.500	307.500	2006.61	653.39	438.63	-484.99	0.97	
2231.00	25.400	307.100	2088.44	693.17	462.76	-516.66	1.22	
2321.00	24.500	307.500	2170.04	731.10	485.76	-546.87	1.02	
2411.00	24.900	309.200	2251.80	768.69	509.10	-576.35	0.91	
2502.00	24.800	308.900	2334.38	806.93	533.19	-606.05	0.18	
2590.00	24.900	307.500	2414.23	843.90	556.06	-635.11	0.68	
2679.00	24.500	306.400	2495.09	881.04	578.42	-664.83	0.68	
2769.00	25.100	304.000	2576.79	918.66	600.17	-695.68	1.30	
2858.00	25.600	307.500	2657.23	956.65	622.43	-726.58	1.77	





# Actual Wellpath Report

NORTHGLENN STATE 4-36 AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 NORTHGLENN STATE 4-36 (2436'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 4-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 4-36 AWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (128 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2948.00	25.800	308.200	2738.32	995.66	646.38	-757.40	0.40	
3037.00	25.600	308.200	2818.52	1034.24	670.24	-787.73	0.22	
3126.00	25.800	305.700	2898.72	1072.78	693.44	-818.57	1.24	
3216.00	26.100	306.100	2979.64	1112.07	716.53	-850.47	0.39	
3307.00	26.200	307.800	3061.33	1152.12	740.64	-882.52	0.83	
3397.00	27.300	307.100	3141.70	1192.59	765.27	-914.68	1.27	
3486.00	27.300	309.200	3220.78	1233.39	790.48	-946.78	1.08	
3575.00	27.500	310.000	3299.80	1274.34	816.58	-978.33	0.47	
3666.00	27.900	310.300	3380.37	1316.64	843.86	-1010.67	0.47	
3756.00	27.300	311.000	3460.13	1358.33	871.02	-1042.30	0.76	
3845.00	27.700	309.200	3539.07	1399.42	897.49	-1073.74	1.04	
3934.00	27.100	308.900	3618.09	1440.38	923.29	-1105.54	0.69	
4024.00	25.100	306.800	3698.91	1479.94	947.60	-1136.79	2.45	
4114.00	22.500	307.500	3781.25	1516.22	969.52	-1165.74	2.91	
4203.00	22.300	308.200	3863.53	1550.11	990.33	-1192.52	0.37	
4293.00	21.900	310.000	3946.92	1583.96	1011.68	-1218.80	0.87	
4382.00	21.800	312.400	4029.53	1617.07	1033.49	-1243.71	1.01	
4474.00	22.200	308.900	4114.83	1651.52	1055.93	-1269.86	1.49	
4564.00	22.400	304.300	4198.11	1685.59	1076.27	-1297.26	1.95	
4655.00	23.100	302.900	4282.03	1720.57	1095.74	-1326.57	0.97	
4744.00	23.100	305.000	4363.90	1755.30	1115.23	-1355.53	0.93	
4834.00	24.300	309.200	4446.31	1791.41	1137.07	-1384.35	2.30	
4924.00	23.900	308.500	4528.47	1828.16	1160.12	-1412.97	0.55	
5014.00	23.000	310.700	4611.03	1863.96	1182.94	-1440.56	1.39	
5105.00	23.300	311.400	4694.71	1899.73	1206.43	-1467.54	0.45	
5195.00	22.900	311.400	4777.49	1935.03	1229.78	-1494.03	0.44	
5285.00	23.100	311.700	4860.33	1970.18	1253.11	-1520.35	0.26	
5376.00	23.900	314.200	4943.79	2006.40	1277.84	-1546.89	1.40	
5465.00	25.200	314.500	5024.74	2043.26	1303.69	-1573.33	1.47	
5555.00	25.400	312.800	5106.11	2081.64	1330.23	-1601.16	0.84	
5646.00	23.600	312.400	5188.91	2119.33	1355.78	-1628.93	1.99	
5736.00	21.400	311.400	5272.06	2153.74	1378.79	-1654.56	2.48	
5824.00	21.500	313.100	5353.96	2185.89	1400.42	-1678.38	0.72	
5914.00	21.500	313.500	5437.70	2218.82	1423.04	-1702.38	0.16	
6005.00	23.200	313.500	5521.86	2253.35	1446.86	-1727.48	1.87	
6095.00	23.100	311.000	5604.62	2288.69	1470.65	-1753.67	1.10	
6185.00	22.800	310.300	5687.49	2323.78	1493.51	-1780.29	0.45	
6275.00	22.300	309.200	5770.61	2358.29	1515.58	-1806.82	0.73	
6364.00	22.000	310.000	5853.04	2391.85	1536.97	-1832.68	0.48	
6453.00	22.900	306.100	5935.30	2425.80	1557.89	-1859.44	1.95	
6540.00	22.200	308.500	6015.65	2459.12	1578.09	-1885.98	1.33	
6630.00	21.600	307.500	6099.16	2492.67	1598.76	-1912.43	0.78	
6676.00	21.300	309.200	6141.97	2509.49	1609.20	-1925.62	1.50	
6721.00	20.700	310.700	6183.98	2525.61	1619.55	-1937.99	1.79	
6766.00	20.200	309.600	6226.15	2541.34	1629.69	-1950.00	1.40	





# Actual Wellpath Report

## NORTHGLENN STATE 4-36 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 NORTHGLENN STATE 4-36 (2436'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 4-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 4-36 AWP
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (128 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
6809.00	20.300	311.400	6266.49	2556.22	1639.35	-1961.32	1.47	
6854.00	17.300	310.700	6309.08	2570.71	1648.88	-1972.25	6.69	
6900.00	16.400	309.200	6353.11	2584.05	1657.45	-1982.47	2.17	
6944.00	15.200	312.100	6395.45	2596.02	1665.24	-1991.56	3.26	
6989.00	14.200	311.000	6438.97	2607.43	1672.82	-2000.10	2.31	
7035.00	14.200	310.700	6483.57	2618.72	1680.20	-2008.64	0.16	
7080.00	14.800	311.000	6527.13	2629.98	1687.57	-2017.16	1.34	
7125.00	14.600	312.100	6570.66	2641.39	1695.14	-2025.71	0.76	
7170.00	14.200	310.300	6614.25	2652.58	1702.51	-2034.12	1.33	
7215.00	13.500	308.200	6657.94	2663.35	1709.33	-2042.46	1.91	
7260.00	12.900	307.800	6701.75	2673.62	1715.66	-2050.56	1.35	
7305.00	12.400	308.900	6745.66	2683.47	1721.77	-2058.29	1.23	
7351.00	11.600	308.200	6790.65	2693.03	1727.73	-2065.77	1.77	
7396.00	11.300	307.800	6834.76	2701.96	1733.23	-2072.81	0.69	
7441.00	10.500	306.800	6878.94	2710.46	1738.39	-2079.57	1.83	
7486.00	9.600	304.700	6923.25	2718.30	1742.98	-2085.94	2.16	
7532.00	9.100	304.000	6968.64	2725.73	1747.20	-2092.11	1.11	
7577.00	8.300	302.900	7013.12	2732.50	1750.95	-2097.79	1.82	
7621.00	7.200	304.700	7056.72	2738.40	1754.25	-2102.72	2.56	
7666.00	6.500	304.700	7101.40	2743.74	1757.30	-2107.13	1.56	
7711.00	6.000	301.900	7146.13	2748.61	1760.00	-2111.22	1.30	
7756.00	5.000	303.600	7190.92	2752.89	1762.33	-2114.85	2.25	
7801.00	4.100	304.000	7235.78	2756.44	1764.31	-2117.82	2.00	
7891.00	2.900	307.100	7325.61	2761.91	1767.48	-2122.30	1.35	
7980.00	2.100	316.600	7414.53	2765.78	1770.03	-2125.22	1.01	
8070.00	1.500	330.000	7504.48	2768.53	1772.24	-2126.94	0.81	
8159.00	1.100	64.600	7593.47	2769.26	1773.62	-2126.75	2.17	
8248.00	1.900	85.700	7682.44	2767.84	1774.10	-2124.51	1.08	
8337.00	1.800	85.000	7771.39	2765.79	1774.33	-2121.65	0.12	
8425.00	1.600	87.100	7859.35	2763.91	1774.51	-2119.04	0.24	
8514.00	1.500	84.600	7948.32	2762.18	1774.68	-2116.64	0.14	
8604.00	1.500	86.000	8038.29	2760.50	1774.88	-2114.29	0.04	
8693.00	1.700	76.200	8127.25	2758.88	1775.27	-2111.85	0.38	
8782.00	1.200	52.300	8216.23	2757.89	1776.16	-2109.83	0.87	
8872.00	1.000	51.600	8306.21	2757.53	1777.22	-2108.47	0.22	
8961.00	1.100	60.000	8395.19	2757.07	1778.13	-2107.12	0.21	
9055.00	1.200	67.700	8489.18	2756.30	1778.96	-2105.43	0.20	LAST BHI MWD SURVEY
9111.00	1.200	67.700	8545.16	2755.75	1779.40	-2104.34	0.00	PROJECTION TO BIT





# Actual Wellpath Report

NORTHGLENN STATE 4-36 AWP

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INTEQ

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 NORTHGLENN STATE 4-36 (2436'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 4-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 4-36 AWB
Facility	SEC.36-T1N-R68W		

## HOLE & CASING SECTIONS

Ref Wellbore: NORTHGLENN STATE 4-36 AWB Ref Wellpath: NORTHGLENN STATE 4-36 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	1115.00	1098.00	17.00	1083.64	0.00	0.00	154.34	-143.90
8.625in Casing Surface	17.00	1085.00	1068.00	17.00	1055.72	0.00	0.00	146.82	-135.88
7.875in Open Hole	1085.00	9111.00	8026.00	1055.72	8545.16	146.82	-135.88	1779.40	-2104.34

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
NORTHGLENN STATE 4-36 GEO TARGET 50' RADIUS (660'FNL & 660'FWL, REV-1)		6000.00	1777.81	-2131.64	3151521.88	1248073.72	40°00'47.088"N	104°57'32.544"W	circle
NORTHGLENN STATE 4-36 LEGAL BOX (204'S,196'N,200'E,200'W OF GEO TARGET)		6000.00	1773.81	-2131.64	3151521.90	1248069.71	40°00'47.048"N	104°57'32.544"W	square

## WELLPATH COMPOSITION Ref Wellbore: NORTHGLENN STATE 4-36 AWB Ref Wellpath: NORTHGLENN STATE 4-36 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	9055.00	NaviTrak (Standard)	BHI MWD SURVEYS <154-9055>	NORTHGLENN STATE 4-36 AWB
9055.00	9111.00	Blind Drilling (std)	Projection to bit	NORTHGLENN STATE 4-36 AWB





# Actual Wellpath Report

NORTHGLENN STATE 4-36 AWP

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**INTEQ**

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 NORTHGLENN STATE 4-36 (2436'FNL & 2488'FEL)
Area	COLORADO	Well	NORTHGLENN STATE 4-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 4-36 AWB
Facility	SEC.36-T1N-R68W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
9055.00	1.200	67.700	8489.18	LAST BHI MWD SURVEY
9111.00	1.200	67.700	8545.16	PROJECTION TO BIT