

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



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	15.00	0.000	270.000	15.00	0.00	0.00	0.00	0.00
End of Tangent	200.00	0.000	270.000	200.00	0.00	0.00	0.00	0.00
End of Build	700.00	10.000	270.000	697.47	0.00	-43.52	2.00	42.35
End of Tangent	1100.00	10.000	270.000	1091.39	0.00	-112.98	0.00	109.93
End of 3D Arc (S)	2040.26	28.324	284.637	1976.18	56.88	-413.13	2.00	415.11
End of Tangent (S)	5067.26	28.324	284.637	4640.78	419.78	-1802.71	0.00	1850.92
Drop (S)	6483.46	0.000	284.637	6000.00	506.45	-2134.55	2.00	2193.81
End of Tangent	8981.46	0.000	284.637	8498.00	506.45	-2134.55	0.00	2193.81

Location Information

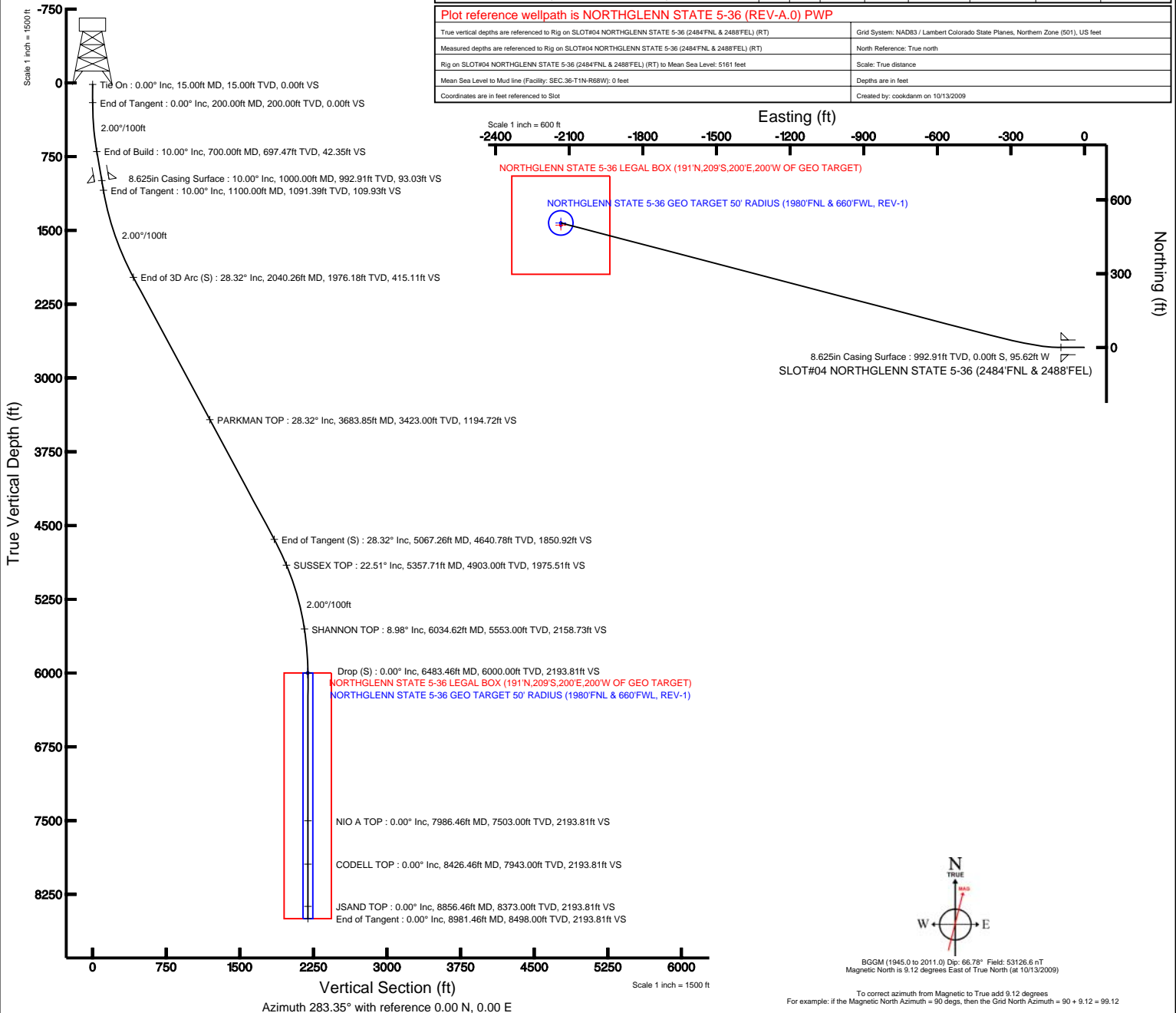
Facility Name			Grid East (USR)	Grid North (USR)	Latitude	Longitude
SEC.36-T1N-R68W			3153664.397	1246309.186	40°00'29.520"N	104°57'05.148"W
Slot	Local N (ft)	Local E (ft)	Grid East (USR)	Grid North (USR)	Latitude	Longitude
SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL)	-47.36	-0.00	3153664.689	1246261.831	40°00'29.052"N	104°57'05.148"W
Rig on SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL) (RT) to Mud line (Facility: SEC.36-T1N-R68W)					5161ft	
Mean Sea Level to Mud line (Facility: SEC.36-T1N-R68W)					0ft	
Rig on SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL) (RT) to Mean Sea Level					5161ft	

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (USR)	Grid North (USR)	Latitude	Longitude
NORTHGLENN STATE 5-36 GEO TARGET 50' RADIUS (1980'FNL & 660'FWL, REV-1)	6483.46	6000.00	506.45	-2134.55	3151527.12	1246795.05	40°00'34.056"N	104°57'32.580"W
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

Plot reference wellpath is NORTHGLENN STATE 5-36 (REV-A.0) PWP

True vertical depths are referenced to Rig on SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL) (RT)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL) (RT)	North Reference: True north
Rig on SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL) (RT) to Mean Sea Level: 5161 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: cookdamm on 10/13/2009





Planned Wellpath Report

NORTHGLENN STATE 5-36 (REV-A.0) PWP

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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 PWB
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	Cookdanm
Scale	0.999966	Report Generated	10/13/2009 at 6:01:46 PM
Convergence at slot	0.35° East	Database/Source file	Denver Server/NORTHGLENN_STATE_5-36_PWB.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	Rig on SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL) (RT) Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL) (RT) Level
Vertical Reference Pt	Rig on SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL) (RT)	Facility Vertical Datum to Mud L
MD Reference Pt	Rig on SLOT#04 NORTHGLENN STATE 5-36 (2484'FNL & 2488'FEL) (RT)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



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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 PWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (104 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	270.000	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	270.000	15.00	0.00	0.00	0.00	0.00	Tie On
115.00†	0.000	270.000	115.00	0.00	0.00	0.00	0.00	
200.00	0.000	270.000	200.00	0.00	0.00	0.00	0.00	End of Tangent
215.00†	0.300	270.000	215.00	0.04	0.00	-0.04	2.00	
315.00†	2.300	270.000	314.97	2.25	0.00	-2.31	2.00	
415.00†	4.300	270.000	414.80	7.85	0.00	-8.06	2.00	
515.00†	6.300	270.000	514.37	16.83	0.00	-17.30	2.00	
615.00†	8.300	270.000	613.55	29.20	0.00	-30.01	2.00	
700.00	10.000	270.000	697.47	42.35	0.00	-43.52	2.00	End of Build
715.00†	10.000	270.000	712.24	44.88	0.00	-46.13	0.00	
815.00†	10.000	270.000	810.72	61.78	0.00	-63.49	0.00	
915.00†	10.000	270.000	909.20	78.67	0.00	-80.86	0.00	
1015.00†	10.000	270.000	1007.68	95.57	0.00	-98.22	0.00	
1100.00	10.000	270.000	1091.39	109.93	0.00	-112.98	0.00	End of Tangent
1115.00†	10.279	270.625	1106.15	112.50	0.01	-115.62	2.00	
1215.00†	12.165	274.062	1204.24	131.61	0.86	-135.06	2.00	
1315.00†	14.082	276.581	1301.62	154.09	3.00	-157.65	2.00	
1415.00†	16.019	278.505	1398.19	179.92	6.43	-183.39	2.00	
1515.00†	17.969	280.022	1493.82	209.07	11.16	-212.22	2.00	
1615.00†	19.929	281.251	1588.40	241.50	17.17	-244.13	2.00	
1715.00†	21.896	282.267	1681.80	277.18	24.46	-279.07	2.00	
1815.00†	23.868	283.123	1773.93	316.06	33.01	-317.00	2.00	
1915.00†	25.844	283.855	1864.66	358.09	42.83	-357.87	2.00	
2015.00†	27.824	284.489	1953.89	403.22	53.89	-401.63	2.00	
2040.26	28.324	284.637	1976.18	415.11	56.88	-413.13	2.00	End of 3D Arc (S)
2115.00†	28.324	284.637	2041.97	450.56	65.84	-447.45	0.00	
2215.00†	28.324	284.637	2130.00	497.99	77.83	-493.35	0.00	
2315.00†	28.324	284.637	2218.03	545.43	89.81	-539.26	0.00	
2415.00†	28.324	284.637	2306.05	592.86	101.80	-585.16	0.00	
2515.00†	28.324	284.637	2394.08	640.29	113.79	-631.07	0.00	
2615.00†	28.324	284.637	2482.11	687.73	125.78	-676.98	0.00	
2715.00†	28.324	284.637	2570.14	735.16	137.77	-722.88	0.00	
2815.00†	28.324	284.637	2658.17	782.59	149.76	-768.79	0.00	
2915.00†	28.324	284.637	2746.19	830.03	161.75	-814.69	0.00	
3015.00†	28.324	284.637	2834.22	877.46	173.74	-860.60	0.00	
3115.00†	28.324	284.637	2922.25	924.89	185.73	-906.51	0.00	
3215.00†	28.324	284.637	3010.28	972.33	197.72	-952.41	0.00	
3315.00†	28.324	284.637	3098.31	1019.76	209.71	-998.32	0.00	
3415.00†	28.324	284.637	3186.33	1067.20	221.69	-1044.22	0.00	
3515.00†	28.324	284.637	3274.36	1114.63	233.68	-1090.13	0.00	
3615.00†	28.324	284.637	3362.39	1162.06	245.67	-1136.03	0.00	
3683.85†	28.324	284.637	3423.00	1194.72	253.93	-1167.64	0.00	PARKMAN TOP
3715.00†	28.324	284.637	3450.42	1209.50	257.66	-1181.94	0.00	
3815.00†	28.324	284.637	3538.45	1256.93	269.65	-1227.85	0.00	



Planned Wellpath Report

NORTHGLENN STATE 5-36 (REV-A.0) PWP

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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 PWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (104 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
3915.00†	28.324	284.637	3626.47	1304.36	281.64	-1273.75	0.00	
4015.00†	28.324	284.637	3714.50	1351.80	293.63	-1319.66	0.00	
4115.00†	28.324	284.637	3802.53	1399.23	305.62	-1365.56	0.00	
4215.00†	28.324	284.637	3890.56	1446.66	317.61	-1411.47	0.00	
4315.00†	28.324	284.637	3978.58	1494.10	329.60	-1457.38	0.00	
4415.00†	28.324	284.637	4066.61	1541.53	341.58	-1503.28	0.00	
4515.00†	28.324	284.637	4154.64	1588.97	353.57	-1549.19	0.00	
4615.00†	28.324	284.637	4242.67	1636.40	365.56	-1595.09	0.00	
4715.00†	28.324	284.637	4330.70	1683.83	377.55	-1641.00	0.00	
4815.00†	28.324	284.637	4418.72	1731.27	389.54	-1686.90	0.00	
4915.00†	28.324	284.637	4506.75	1778.70	401.53	-1732.81	0.00	
5015.00†	28.324	284.637	4594.78	1826.13	413.52	-1778.72	0.00	
5067.26	28.324	284.637	4640.78	1850.92	419.78	-1802.71	0.00	End of Tangent (S)
5115.00†	27.369	284.637	4682.99	1873.22	425.42	-1824.28	2.00	
5215.00†	25.369	284.637	4772.59	1917.62	436.64	-1867.25	2.00	
5315.00†	23.369	284.637	4863.67	1958.87	447.07	-1907.17	2.00	
5357.71†	22.515	284.637	4903.00	1975.51	451.27	-1923.28	2.00	SUSSEX TOP
5415.00†	21.369	284.637	4956.14	1996.91	456.68	-1944.00	2.00	
5515.00†	19.369	284.637	5049.88	2031.71	465.48	-1977.67	2.00	
5615.00†	17.369	284.637	5144.78	2063.21	473.44	-2008.16	2.00	
5715.00†	15.369	284.637	5240.73	2091.39	480.56	-2035.43	2.00	
5815.00†	13.369	284.637	5337.59	2116.20	486.83	-2059.44	2.00	
5915.00†	11.369	284.637	5435.27	2137.61	492.25	-2080.16	2.00	
6015.00†	9.369	284.637	5533.63	2155.60	496.79	-2097.58	2.00	
6034.62†	8.977	284.637	5553.00	2158.73	497.58	-2100.60	2.00	SHANNON TOP
6115.00†	7.369	284.637	5632.56	2170.15	500.47	-2111.66	2.00	
6215.00†	5.369	284.637	5731.94	2181.24	503.28	-2122.39	2.00	
6315.00†	3.369	284.637	5831.64	2188.86	505.20	-2129.76	2.00	
6415.00†	1.369	284.637	5931.55	2192.99	506.24	-2133.76	2.00	
6483.46	0.000	284.637	6000.00 [†]	2193.81	506.45	-2134.55	2.00	Drop (S)
6515.00†	0.000	284.637	6031.54	2193.81	506.45	-2134.55	0.00	
6615.00†	0.000	284.637	6131.54	2193.81	506.45	-2134.55	0.00	
6715.00†	0.000	284.637	6231.54	2193.81	506.45	-2134.55	0.00	
6815.00†	0.000	284.637	6331.54	2193.81	506.45	-2134.55	0.00	
6915.00†	0.000	284.637	6431.54	2193.81	506.45	-2134.55	0.00	
7015.00†	0.000	284.637	6531.54	2193.81	506.45	-2134.55	0.00	
7115.00†	0.000	284.637	6631.54	2193.81	506.45	-2134.55	0.00	
7215.00†	0.000	284.637	6731.54	2193.81	506.45	-2134.55	0.00	
7315.00†	0.000	284.637	6831.54	2193.81	506.45	-2134.55	0.00	
7415.00†	0.000	284.637	6931.54	2193.81	506.45	-2134.55	0.00	
7515.00†	0.000	284.637	7031.54	2193.81	506.45	-2134.55	0.00	
7615.00†	0.000	284.637	7131.54	2193.81	506.45	-2134.55	0.00	
7715.00†	0.000	284.637	7231.54	2193.81	506.45	-2134.55	0.00	
7815.00†	0.000	284.637	7331.54	2193.81	506.45	-2134.55	0.00	
7915.00†	0.000	284.637	7431.54	2193.81	506.45	-2134.55	0.00	



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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 PWB
Facility	SEC.36-T1N-R68W		

WELLPATH DATA (104 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
7986.46†	0.000	284.637	7503.00	2193.81	506.45	-2134.55	0.00	NIO A TOP
8015.00†	0.000	284.637	7531.54	2193.81	506.45	-2134.55	0.00	
8115.00†	0.000	284.637	7631.54	2193.81	506.45	-2134.55	0.00	
8215.00†	0.000	284.637	7731.54	2193.81	506.45	-2134.55	0.00	
8315.00†	0.000	284.637	7831.54	2193.81	506.45	-2134.55	0.00	
8415.00†	0.000	284.637	7931.54	2193.81	506.45	-2134.55	0.00	
8426.46†	0.000	284.637	7943.00	2193.81	506.45	-2134.55	0.00	CODELL TOP
8515.00†	0.000	284.637	8031.54	2193.81	506.45	-2134.55	0.00	
8615.00†	0.000	284.637	8131.54	2193.81	506.45	-2134.55	0.00	
8715.00†	0.000	284.637	8231.54	2193.81	506.45	-2134.55	0.00	
8815.00†	0.000	284.637	8331.54	2193.81	506.45	-2134.55	0.00	
8856.46†	0.000	284.637	8373.00	2193.81	506.45	-2134.55	0.00	JSAND TOP
8915.00†	0.000	284.637	8431.54	2193.81	506.45	-2134.55	0.00	
8981.46	0.000	284.637	8498.00	2193.81	506.45	-2134.55	0.00	End of Tangent

HOLE & CASING SECTIONS

Ref Wellbore: NORTHGLENN STATE 5-36 PWB Ref Wellpath: NORTHGLENN STATE 5-36 (REV-A.0) PWP

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	1000.00	985.00	15.00	992.91	0.00	0.00	0.00	-95.62
8.625in Casing Surface	15.00	1000.00	985.00	15.00	992.91	0.00	0.00	0.00	-95.62
7.875in Open Hole	1000.00	8981.46	7981.46	992.91	8498.00	0.00	-95.62	506.45	-2134.55

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) NORTHGLENN STATE 5-36 GEO TARGET 50' RADIUS (1980'FNL & 660'FWL, REV-1)	6483.46	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

SURVEY PROGRAM

Ref Wellbore: NORTHGLENN STATE 5-36 PWB Ref Wellpath: NORTHGLENN STATE 5-36 (REV-A.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
15.00	8981.46	MTC (Collar, post-2000) (Standard)		NORTHGLENN STATE 5-36 PWB



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REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	NORTHGLENN STATE 5-36
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTHGLENN STATE 5-36 PWB
Facility	SEC.36-T1N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3683.85	28.324	284.637	3423.00	PARKMAN TOP
5357.71	22.515	284.637	4903.00	SUSSEX TOP
6034.62	8.977	284.637	5553.00	SHANNON TOP
7986.46	0.000	284.637	7503.00	NIO A TOP
8426.46	0.000	284.637	7943.00	CODELL TOP
8856.46	0.000	284.637	8373.00	JSAND TOP