

Anadarko Petroleum Corp.

Weld County, CO (NAD 83)

Sec. 22 T2N-R66W

Gobbler 37C-27HZ

Plan A Rev 0

Plan: Plan A Rev 0 Permit

Sperry Drilling Services

Proposal Report

09 October, 2012

Well Coordinates: 1,286,740.13 N, 3,206,691.23 E (40° 07' 05.27" N, 104° 45' 39.36" W)

Ground Level: 5,048.00 ft

Local Coordinate Origin: Centered on Well Gobbler 37C-27HZ

Viewing Datum: RKB=17 @ 5065.00ft (Drilling Rig)

TVDs to System: N

North Reference: True

Unit System: API - US Survey Feet - Custom

Geodetic Scale Factor Applied

Version: 2003.16 Build: 431

HALLIBURTON

Project: Weld County, CO (NAD 83)
 Site: Sec. 22 T2N-R66W
 Well: Gobbler 37C-27HZ
 Wellbore: Plan A Rev 0
 Design: Plan A Rev 0 Permit

Anadarko Petroleum Corp.



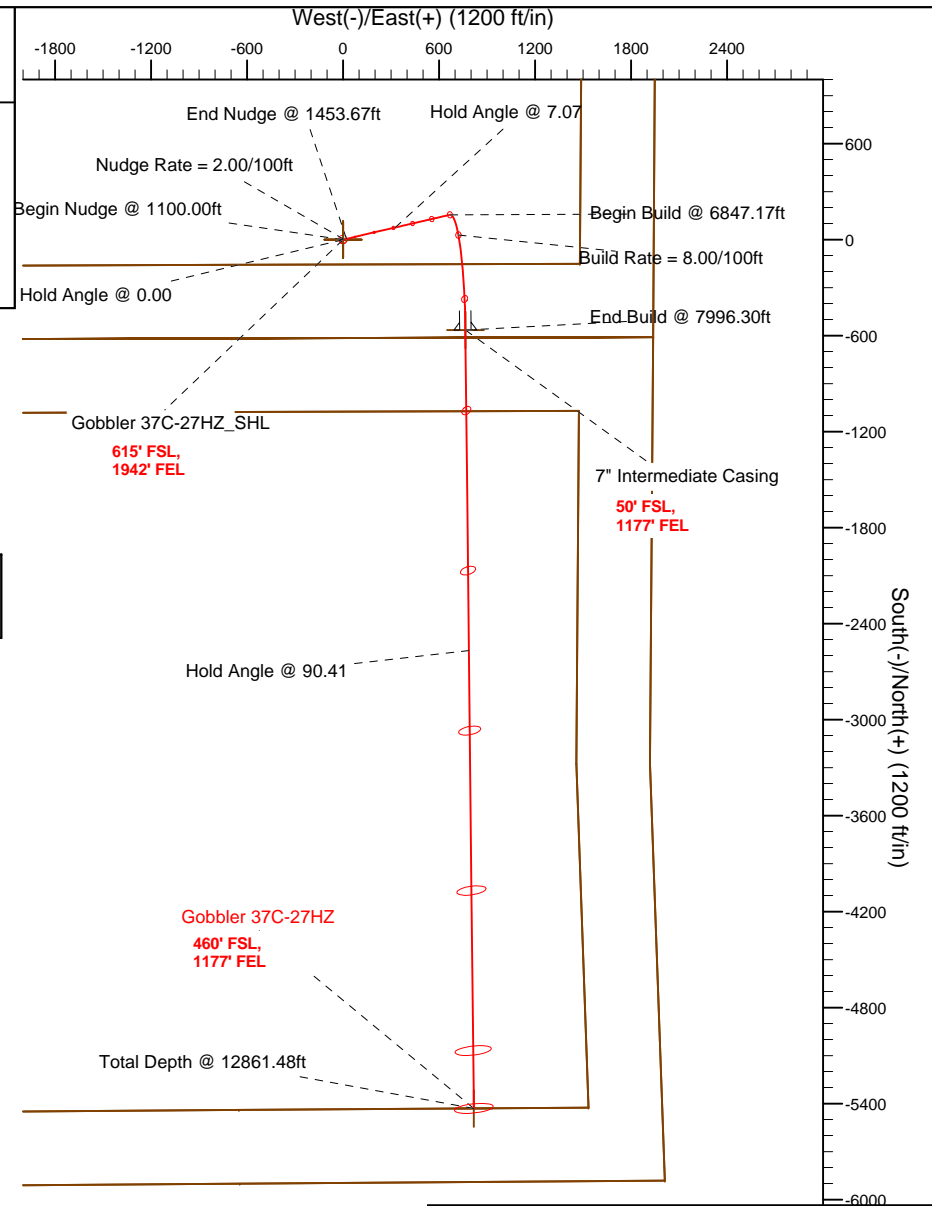
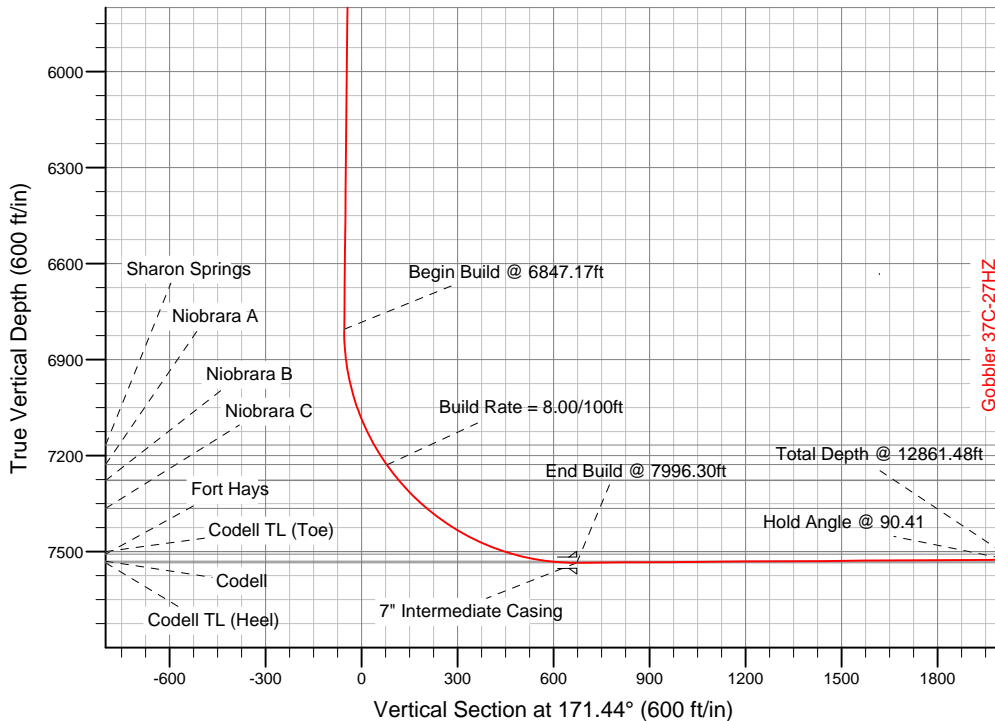
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	
3	1453.67	7.07	76.94	1452.77	4.93	21.24	2.00	76.94	-1.71	
4	6847.17	7.07	76.94	6805.22	155.06	668.21	0.00	0.00	-53.90	
5	7996.30	90.41	179.39	7535.00	-565.00	765.00	8.00	102.31	672.55	Gobbler 37C-27HZ_Casing Point
6	12861.48	90.41	179.39	7500.00	-5429.78	817.12	0.00	0.00	5490.92	Gobbler 37C-27HZ_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Gobbler 37C-27HZ_22 Setback Line	0.00	0.00	0.00	40.118130	-104.760933	Polygon
Gobbler 37C-27HZ_27 Setback Line	0.00	0.00	0.00	40.118130	-104.760933	Polygon
Gobbler 37C-27HZ_Sec 22/27 Line	0.00	0.00	0.00	40.118130	-104.760933	Polygon
Gobbler 37C-27HZ_Section Line	0.00	0.00	0.00	40.118130	-104.760933	Polygon
Gobbler 37C-27HZ_SHL	0.00	0.00	0.00	40.118130	-104.760933	Point
Gobbler 37C-27HZ_BHL	7500.00	-5429.78	817.12	40.103225	-104.758012	Point
Gobbler 37C-27HZ_Casing Point	7535.00	-565.00	765.00	40.116579	-104.758198	Point

Target Line:
7539.53' TVDkb @ 0° VS Drilling 90.41°



WELL DETAILS: Gobbler 37C-27HZ

Ground Level: 5048.00 RKB=17 @ 5065.00ft (Drilling Rig)

Plan: Plan A Rev 0 Permit (Gobbler 37C-27HZ/Plan A Rev 0)

Created By: Fred Hartmann Date: 10/08/2012
 Reviewed: _____ Date: _____

Plan Report for Gobbler 37C-27HZ - Plan A Rev 0 Permit

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hold Angle @ 0.00										
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 1100.00ft										
1,200.00	2.00	76.94	1,199.98	0.39	1.70	-0.14	2.00	2.00	0.00	76.94
1,300.00	4.00	76.94	1,299.84	1.58	6.80	-0.55	2.00	2.00	0.00	0.00
Nudge Rate = 2.00/100ft										
1,400.00	6.00	76.94	1,399.45	3.55	15.29	-1.23	2.00	2.00	0.00	0.00
1,453.67	7.07	76.94	1,452.77	4.93	21.24	-1.71	2.00	2.00	0.00	0.00
End Nudge @ 1453.67ft										
1,500.00	7.07	76.94	1,498.75	6.22	26.80	-2.16	0.00	0.00	0.00	0.00
1,600.00	7.07	76.94	1,597.99	9.00	38.79	-3.13	0.00	0.00	0.00	0.00
1,700.00	7.07	76.94	1,697.23	11.79	50.79	-4.10	0.00	0.00	0.00	0.00
1,800.00	7.07	76.94	1,796.47	14.57	62.78	-5.06	0.00	0.00	0.00	0.00
1,900.00	7.07	76.94	1,895.71	17.35	74.78	-6.03	0.00	0.00	0.00	0.00
2,000.00	7.07	76.94	1,994.94	20.14	86.77	-7.00	0.00	0.00	0.00	0.00
2,100.00	7.07	76.94	2,094.18	22.92	98.77	-7.97	0.00	0.00	0.00	0.00
2,200.00	7.07	76.94	2,193.42	25.70	110.76	-8.93	0.00	0.00	0.00	0.00
2,300.00	7.07	76.94	2,292.66	28.49	122.76	-9.90	0.00	0.00	0.00	0.00
2,400.00	7.07	76.94	2,391.90	31.27	134.75	-10.87	0.00	0.00	0.00	0.00
2,500.00	7.07	76.94	2,491.14	34.05	146.75	-11.84	0.00	0.00	0.00	0.00
2,600.00	7.07	76.94	2,590.38	36.84	158.75	-12.80	0.00	0.00	0.00	0.00
2,700.00	7.07	76.94	2,689.62	39.62	170.74	-13.77	0.00	0.00	0.00	0.00
2,800.00	7.07	76.94	2,788.86	42.41	182.74	-14.74	0.00	0.00	0.00	0.00
2,900.00	7.07	76.94	2,888.09	45.19	194.73	-15.71	0.00	0.00	0.00	0.00
3,000.00	7.07	76.94	2,987.33	47.97	206.73	-16.67	0.00	0.00	0.00	0.00
3,100.00	7.07	76.94	3,086.57	50.76	218.72	-17.64	0.00	0.00	0.00	0.00
3,200.00	7.07	76.94	3,185.81	53.54	230.72	-18.61	0.00	0.00	0.00	0.00
3,300.00	7.07	76.94	3,285.05	56.32	242.71	-19.58	0.00	0.00	0.00	0.00
3,400.00	7.07	76.94	3,384.29	59.11	254.71	-20.55	0.00	0.00	0.00	0.00
3,500.00	7.07	76.94	3,483.53	61.89	266.70	-21.51	0.00	0.00	0.00	0.00
3,600.00	7.07	76.94	3,582.77	64.67	278.70	-22.48	0.00	0.00	0.00	0.00
3,700.00	7.07	76.94	3,682.01	67.46	290.69	-23.45	0.00	0.00	0.00	0.00
3,800.00	7.07	76.94	3,781.24	70.24	302.69	-24.42	0.00	0.00	0.00	0.00
3,900.00	7.07	76.94	3,880.48	73.03	314.69	-25.38	0.00	0.00	0.00	0.00
4,000.00	7.07	76.94	3,979.72	75.81	326.68	-26.35	0.00	0.00	0.00	0.00
Hold Angle @ 7.07										
4,100.00	7.07	76.94	4,078.96	78.59	338.68	-27.32	0.00	0.00	0.00	0.00
4,200.00	7.07	76.94	4,178.20	81.38	350.67	-28.29	0.00	0.00	0.00	0.00
4,211.89	7.07	76.94	4,190.00	81.71	352.10	-28.40	0.00	0.00	0.00	0.00
Parkman										
4,300.00	7.07	76.94	4,277.44	84.16	362.67	-29.25	0.00	0.00	0.00	0.00
4,400.00	7.07	76.94	4,376.68	86.94	374.66	-30.22	0.00	0.00	0.00	0.00
4,500.00	7.07	76.94	4,475.92	89.73	386.66	-31.19	0.00	0.00	0.00	0.00
4,600.00	7.07	76.94	4,575.16	92.51	398.65	-32.16	0.00	0.00	0.00	0.00
4,600.85	7.07	76.94	4,576.00	92.53	398.75	-32.16	0.00	0.00	0.00	0.00
Sussex										

Plan Report for Gobbler 37C-27HZ - Plan A Rev 0 Permit

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
4,700.00	7.07	76.94	4,674.40	95.29	410.65	-33.12	0.00	0.00	0.00	0.00
4,800.00	7.07	76.94	4,773.63	98.08	422.64	-34.09	0.00	0.00	0.00	0.00
4,900.00	7.07	76.94	4,872.87	100.86	434.64	-35.06	0.00	0.00	0.00	0.00
5,000.00	7.07	76.94	4,972.11	103.65	446.63	-36.03	0.00	0.00	0.00	0.00
5,100.00	7.07	76.94	5,071.35	106.43	458.63	-36.99	0.00	0.00	0.00	0.00
5,200.00	7.07	76.94	5,170.59	109.21	470.63	-37.96	0.00	0.00	0.00	0.00
5,300.00	7.07	76.94	5,269.83	112.00	482.62	-38.93	0.00	0.00	0.00	0.00
5,400.00	7.07	76.94	5,369.07	114.78	494.62	-39.90	0.00	0.00	0.00	0.00
5,500.00	7.07	76.94	5,468.31	117.56	506.61	-40.86	0.00	0.00	0.00	0.00
5,600.00	7.07	76.94	5,567.55	120.35	518.61	-41.83	0.00	0.00	0.00	0.00
5,700.00	7.07	76.94	5,666.78	123.13	530.60	-42.80	0.00	0.00	0.00	0.00
5,800.00	7.07	76.94	5,766.02	125.91	542.60	-43.77	0.00	0.00	0.00	0.00
5,900.00	7.07	76.94	5,865.26	128.70	554.59	-44.73	0.00	0.00	0.00	0.00
6,000.00	7.07	76.94	5,964.50	131.48	566.59	-45.70	0.00	0.00	0.00	0.00
6,100.00	7.07	76.94	6,063.74	134.27	578.58	-46.67	0.00	0.00	0.00	0.00
6,200.00	7.07	76.94	6,162.98	137.05	590.58	-47.64	0.00	0.00	0.00	0.00
6,300.00	7.07	76.94	6,262.22	139.83	602.57	-48.60	0.00	0.00	0.00	0.00
6,400.00	7.07	76.94	6,361.46	142.62	614.57	-49.57	0.00	0.00	0.00	0.00
6,500.00	7.07	76.94	6,460.70	145.40	626.56	-50.54	0.00	0.00	0.00	0.00
6,600.00	7.07	76.94	6,559.93	148.18	638.56	-51.51	0.00	0.00	0.00	0.00
6,700.00	7.07	76.94	6,659.17	150.97	650.56	-52.47	0.00	0.00	0.00	0.00
6,800.00	7.07	76.94	6,758.41	153.75	662.55	-53.44	0.00	0.00	0.00	0.00
6,847.17	7.07	76.94	6,805.22	155.06	668.21	-53.90	0.00	0.00	0.00	0.00
Begin Build @ 6847.17ft										
6,900.00	7.42	110.82	6,857.65	154.59	674.57	-52.48	8.00	0.66	64.14	102.31
7,000.00	12.72	146.88	6,956.17	143.05	686.64	-39.27	8.00	5.30	36.06	68.68
7,100.00	19.90	159.78	7,052.11	117.81	698.56	-12.54	8.00	7.18	12.90	33.11
7,200.00	27.53	165.89	7,143.61	79.36	710.10	27.19	8.00	7.62	6.11	20.70
7,226.63	29.59	167.01	7,167.00	66.99	713.08	39.87	8.00	7.74	4.22	15.09
Sharon Springs										
7,298.91	35.22	169.45	7,228.00	29.08	720.91	78.53	8.00	7.79	3.38	14.10
Niobrara A										
7,300.00	35.31	169.48	7,228.89	28.46	721.02	79.16	8.00	7.82	2.89	12.04
Build Rate = 8.00/100ft										
7,362.12	40.18	171.09	7,278.00	-9.01	727.41	117.16	8.00	7.84	2.58	12.01
Niobrara B										
7,400.00	43.16	171.91	7,306.29	-33.92	731.13	142.34	8.00	7.87	2.18	10.75
7,485.37	49.90	173.48	7,365.00	-95.34	738.95	204.24	8.00	7.89	1.84	10.13
Niobrara C										
7,500.00	51.05	173.71	7,374.31	-106.55	740.21	215.52	8.00	7.90	1.62	9.05
7,600.00	58.96	175.15	7,431.61	-188.02	748.10	297.26	8.00	7.91	1.44	8.90
7,700.00	66.89	176.37	7,477.09	-276.75	754.64	385.97	8.00	7.93	1.22	8.07
7,793.03	74.27	177.38	7,508.00	-364.30	759.40	473.25	8.00	7.93	1.08	7.52
Fort Hays										
7,800.00	74.82	177.45	7,509.86	-371.01	759.70	479.93	8.00	7.94	1.04	7.18
7,900.00	82.76	178.45	7,529.27	-468.96	763.19	577.31	8.00	7.94	1.00	7.16
7,905.96	83.24	178.51	7,530.00	-474.88	763.35	583.19	8.00	7.94	0.98	6.97
Codell										
7,996.30	90.41	179.39	7,535.00	-565.00	765.00	672.55	8.00	7.94	0.97	6.96
End Build @ 7996.30ft - Codell TL (Heel) - 7" Intermediate Casing - Gobbler 37C-27HZ_Casing Point										
8,000.00	90.41	179.39	7,534.97	-568.70	765.04	676.22	0.00	0.00	0.00	6.91
8,100.00	90.41	179.39	7,534.25	-668.69	766.11	775.25	0.00	0.00	0.00	0.00
8,200.00	90.41	179.39	7,533.53	-768.68	767.18	874.29	0.00	0.00	0.00	0.00
8,300.00	90.41	179.39	7,532.82	-868.67	768.25	973.33	0.00	0.00	0.00	0.00
8,400.00	90.41	179.39	7,532.10	-968.67	769.33	1,072.37	0.00	0.00	0.00	0.00
8,500.00	90.41	179.39	7,531.38	-1,068.66	770.40	1,171.40	0.00	0.00	0.00	0.00
8,600.00	90.41	179.39	7,530.66	-1,168.65	771.47	1,270.44	0.00	0.00	0.00	0.00
8,700.00	90.41	179.39	7,529.94	-1,268.64	772.54	1,369.48	0.00	0.00	0.00	0.00
8,800.00	90.41	179.39	7,529.22	-1,368.63	773.61	1,468.52	0.00	0.00	0.00	0.00

Plan Report for Gobbler 37C-27HZ - Plan A Rev 0 Permit

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Tooface Azimuth (°)
8,900.00	90.41	179.39	7,528.50	-1,468.62	774.68	1,567.55	0.00	0.00	0.00	0.00
9,000.00	90.41	179.39	7,527.78	-1,568.62	775.75	1,666.59	0.00	0.00	0.00	0.00
9,100.00	90.41	179.39	7,527.06	-1,668.61	776.82	1,765.63	0.00	0.00	0.00	0.00
9,200.00	90.41	179.39	7,526.34	-1,768.60	777.90	1,864.67	0.00	0.00	0.00	0.00
9,300.00	90.41	179.39	7,525.62	-1,868.59	778.97	1,963.71	0.00	0.00	0.00	0.00
9,400.00	90.41	179.39	7,524.90	-1,968.58	780.04	2,062.74	0.00	0.00	0.00	0.00
9,500.00	90.41	179.39	7,524.18	-2,068.57	781.11	2,161.78	0.00	0.00	0.00	0.00
9,600.00	90.41	179.39	7,523.46	-2,168.57	782.18	2,260.82	0.00	0.00	0.00	0.00
9,700.00	90.41	179.39	7,522.74	-2,268.56	783.25	2,359.86	0.00	0.00	0.00	0.00
9,800.00	90.41	179.39	7,522.02	-2,368.55	784.32	2,458.89	0.00	0.00	0.00	0.00
9,900.00	90.41	179.39	7,521.30	-2,468.54	785.40	2,557.93	0.00	0.00	0.00	0.00
10,000.00	90.41	179.39	7,520.59	-2,568.53	786.47	2,656.97	0.00	0.00	0.00	0.00
Hold Angle @ 90.41										
10,100.00	90.41	179.39	7,519.87	-2,668.52	787.54	2,756.01	0.00	0.00	0.00	0.00
10,200.00	90.41	179.39	7,519.15	-2,768.52	788.61	2,855.05	0.00	0.00	0.00	0.00
10,300.00	90.41	179.39	7,518.43	-2,868.51	789.68	2,954.08	0.00	0.00	0.00	0.00
10,400.00	90.41	179.39	7,517.71	-2,968.50	790.75	3,053.12	0.00	0.00	0.00	0.00
10,500.00	90.41	179.39	7,516.99	-3,068.49	791.82	3,152.16	0.00	0.00	0.00	0.00
10,600.00	90.41	179.39	7,516.27	-3,168.48	792.89	3,251.20	0.00	0.00	0.00	0.00
10,700.00	90.41	179.39	7,515.55	-3,268.47	793.97	3,350.23	0.00	0.00	0.00	0.00
10,800.00	90.41	179.39	7,514.83	-3,368.47	795.04	3,449.27	0.00	0.00	0.00	0.00
10,900.00	90.41	179.39	7,514.11	-3,468.46	796.11	3,548.31	0.00	0.00	0.00	0.00
11,000.00	90.41	179.39	7,513.39	-3,568.45	797.18	3,647.35	0.00	0.00	0.00	0.00
11,100.00	90.41	179.39	7,512.67	-3,668.44	798.25	3,746.38	0.00	0.00	0.00	0.00
11,200.00	90.41	179.39	7,511.95	-3,768.43	799.32	3,845.42	0.00	0.00	0.00	0.00
11,300.00	90.41	179.39	7,511.23	-3,868.42	800.39	3,944.46	0.00	0.00	0.00	0.00
11,400.00	90.41	179.39	7,510.51	-3,968.42	801.47	4,043.50	0.00	0.00	0.00	0.00
11,500.00	90.41	179.39	7,509.79	-4,068.41	802.54	4,142.54	0.00	0.00	0.00	0.00
11,600.00	90.41	179.39	7,509.08	-4,168.40	803.61	4,241.57	0.00	0.00	0.00	0.00
11,700.00	90.41	179.39	7,508.36	-4,268.39	804.68	4,340.61	0.00	0.00	0.00	0.00
11,800.00	90.41	179.39	7,507.64	-4,368.38	805.75	4,439.65	0.00	0.00	0.00	0.00
11,900.00	90.41	179.39	7,506.92	-4,468.37	806.82	4,538.69	0.00	0.00	0.00	0.00
12,000.00	90.41	179.39	7,506.20	-4,568.37	807.89	4,637.72	0.00	0.00	0.00	0.00
12,100.00	90.41	179.39	7,505.48	-4,668.36	808.96	4,736.76	0.00	0.00	0.00	0.00
12,200.00	90.41	179.39	7,504.76	-4,768.35	810.04	4,835.80	0.00	0.00	0.00	0.00
12,300.00	90.41	179.39	7,504.04	-4,868.34	811.11	4,934.84	0.00	0.00	0.00	0.00
12,400.00	90.41	179.39	7,503.32	-4,968.33	812.18	5,033.88	0.00	0.00	0.00	0.00
12,500.00	90.41	179.39	7,502.60	-5,068.32	813.25	5,132.91	0.00	0.00	0.00	0.00
12,600.00	90.41	179.39	7,501.88	-5,168.32	814.32	5,231.95	0.00	0.00	0.00	0.00
12,700.00	90.41	179.39	7,501.16	-5,268.31	815.39	5,330.99	0.00	0.00	0.00	0.00
12,800.00	90.41	179.39	7,500.44	-5,368.30	816.46	5,430.03	0.00	0.00	0.00	0.00
12,861.47	90.41	179.39	7,500.00	-5,429.76	817.12	5,490.90	0.00	0.00	0.00	0.00
Codell TL (Toe)										
12,861.48	90.41	179.39	7,500.00	-5,429.77	817.12	5,490.91	0.00	0.00	0.00	0.00
Total Depth @ 12861.48ft - Gobbler 37C-27HZ_BHL										

Plan Report for Gobbler 37C-27HZ - Plan A Rev 0 Permit**Plan Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
600.00	600.00	0.00	0.00	Hold Angle @ 0.00
1,100.00	1,100.00	0.00	0.00	Begin Nudge @ 1100.00ft
1,300.00	1,299.84	1.58	6.80	Nudge Rate = 2.00/100ft
1,453.67	1,452.77	4.93	21.24	End Nudge @ 1453.67ft
4,000.00	3,979.72	75.81	326.68	Hold Angle @ 7.07
6,847.17	6,805.22	155.06	668.21	Begin Build @ 6847.17ft
7,300.00	7,228.89	28.46	721.02	Build Rate = 8.00/100ft
7,996.30	7,535.00	-565.00	765.00	End Build @ 7996.30ft
10,000.00	7,520.59	-2,568.53	786.47	Hold Angle @ 90.41
12,861.48	7,500.00	-5,429.77	817.12	Total Depth @ 12861.48ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/_S (ft)	+E/-W (ft)	
Target	Gobbler 37C-27HZ_BHL	171.44	Slot	0.00	0.00	7,500.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.00	7,996.30	Plan A Rev 0 Permit	MWD
7,996.30	12,861.48	Plan A Rev 0 Permit	MWD

Casing Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,996.30	7,535.00	7" Intermediate Casing	7	8-3/4

Formation Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,211.89	4,190.00	Parkman		0.00	
4,600.85	4,576.00	Sussex		0.00	
7,226.63	7,167.00	Sharon Springs		0.00	
7,298.91	7,228.00	Niobrara A		0.00	
7,362.12	7,278.00	Niobrara B		0.00	
7,485.37	7,365.00	Niobrara C		0.00	
7,793.03	7,508.00	Fort Hays		0.00	
7,905.96	7,530.00	Codell		0.00	
7,996.30	7,535.00	Codell TL (Heel)		0.00	
12,861.47	7,500.00	Codell TL (Toe)		0.00	

Plan Report for Gobbler 37C-27HZ - Plan A Rev 0 Permit

Targets associated with this wellbore

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
Gobbler 37C-27HZ_Casing Point	7,535.00	-565.00	765.00	Point
Gobbler 37C-27HZ_SHL	0.00	0.00	0.00	Point
Gobbler 37C-27HZ_Section Line	0.00	0.00	0.00	Point
Gobbler 37C-27HZ_Sec 22/27 Line	0.00	0.00	0.00	Point
Gobbler 37C-27HZ_22 Setback Line	0.00	0.00	0.00	Point
Gobbler 37C-27HZ_27 Setback Line	0.00	0.00	0.00	Point
Gobbler 37C-27HZ_BHL	7,500.00	-5,429.78	817.12	Point

North Reference Sheet for Sec. 22 T2N-R66W - Gobbler 37C-27HZ - Plan A Rev 0

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.
 Vertical Depths are relative to RKB=17 @ 5065.00ft (Drilling Rig). Northing and Easting are relative to Gobbler 37C-27HZ
 Coordinate System is US State Plane 1983, Colorado Northern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Lambert Conformal Conic (2 parallel)
 Central Meridian is -105.50°, Longitude Origin:0.000000°, Latitude Origin:40.783333°
 False Easting: 3,000,000.00ft, False Northing: 1,000,000.00ft, Scale Reduction: 0.99995951

Grid Coordinates of Well: 1,286,740.13 ft N, 3,206,691.23 ft E
 Geographical Coordinates of Well: 40° 07' 05.27" N, 104° 45' 39.36" W
 Grid Convergence at Surface is: 0.48°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,861.48ft
 the Bottom Hole Displacement is 5,490.91ft in the Direction of 171.44° (True).

Magnetic Convergence at surface is: -8.23° (9 October 2012, , BGGM2012)

Magnetic Model: BGGM 2012
 Date: 09-Oct-12
 Declination: 8.71°
 Inclination/Dip: 66.76°
 Field Strength: 52763

Grid North is 0.48° East of True North (Grid Convergence)
 Magnetic North is 8.71° East of True North (Magnetic Declination)
 Magnetic North is 8.23° East of Grid North (Magnetic Convergence)

To convert a True Direction to a Grid Direction, Subtract 0.48°
 To convert a Magnetic Direction to a True Direction, Add 8.71° East
 To convert a Magnetic Direction to a Grid Direction, Add 8.23°