

Noble Energy

Weld County, CO (NAD 83)

Sec. 27-T11N-R61W

Fabrizius PC GK27-99HZ

Plan #2

Plan: Plan #2 Proposal

Sperry Drilling Services

Proposal Report

02 August, 2010

Well Coordinates: 1,573,079.59 N, 3,359,948.14 E (40° 53' 57.19" N, 104° 11' 52.66" W)

Ground Level: 5,216.00 ft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Geodetic Scale Factor Applied

Version: 2003.16 Build: 431

Centered on Well Fabrizio PC GK27-99HZ

RKB 24' @ 5240.00ft (H&P 315)

N

Grid

API - US Survey Feet - Custom

HALLIBURTON

Plan Report for Fabrizius PC GK27-99HZ - Plan #2 Proposal

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
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
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,980.00	0.00	0.00	3,980.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parkman										
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Plan Report for Fabrizio PC GK27-99HZ - Plan #2 Proposal

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 (°)
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,157.37	0.00	0.00	6,157.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kickoff at 6157.37ft										
6,200.00	3.41	165.00	6,199.97	-1.23	0.33	1.23	8.00	8.00	0.00	165.00
6,300.00	11.41	165.00	6,299.06	-13.67	3.66	13.67	8.00	8.00	0.00	0.00
6,400.00	19.41	165.00	6,395.39	-39.32	10.54	39.32	8.00	8.00	0.00	0.00
6,500.00	27.41	165.00	6,487.08	-77.67	20.81	77.67	8.00	8.00	0.00	0.00
6,600.00	35.41	165.00	6,572.36	-127.97	34.29	127.97	8.00	8.00	0.00	0.00
6,700.00	43.41	165.00	6,649.55	-189.24	50.71	189.24	8.00	8.00	0.00	0.00
Build Rate = 8.00°/100ft										
6,800.00	51.41	165.00	6,717.17	-260.30	69.75	260.30	8.00	8.00	0.00	0.00
6,859.52	56.17	165.00	6,752.32	-306.67	82.17	306.67	8.00	8.00	0.00	0.00
Shannon										
6,886.90	58.36	165.00	6,767.13	-328.92	88.13	328.92	8.00	8.00	0.00	0.00
Niobrara										
6,900.00	59.41	165.00	6,773.90	-339.75	91.04	339.75	8.00	8.00	0.00	0.00
6,908.09	60.06	165.00	6,777.98	-346.50	92.84	346.50	8.00	8.00	0.00	0.00
Niobrara A										
6,922.15	61.18	165.00	6,784.87	-358.33	96.02	358.33	8.00	8.00	0.00	0.00
Niobrara A Base										
7,000.00	67.41	165.00	6,818.62	-426.06	114.16	426.06	8.00	8.00	0.00	0.00
7,100.00	75.41	165.00	6,850.47	-517.54	138.67	517.54	8.00	8.00	0.00	0.00
7,133.77	78.11	165.00	6,858.21	-549.28	147.18	549.28	8.00	8.00	0.00	0.00
Niobrara B										
7,200.00	83.41	165.00	6,868.84	-612.41	164.09	612.41	8.00	8.00	0.00	0.00
7,219.87	85.00	165.00	6,870.84	-631.50	169.21	631.50	8.00	8.00	0.00	0.00
End Build at 7219.87ft - 7" Casing Pt.										
7,247.57	85.00	165.00	6,873.26	-658.16	176.35	658.16	0.00	0.00	0.00	0.00
Nio B Tgt top										
7,258.00	85.00	165.00	6,874.17	-668.19	179.04	668.19	0.00	0.00	0.00	0.00
Hold Angle at 85.00										
7,294.87	85.00	165.00	6,877.38	-703.67	188.55	703.67	0.00	0.00	0.00	0.00
Kickoff at 7294.87ft										
7,300.00	85.41	165.00	6,877.81	-708.61	189.87	708.61	8.00	8.00	0.00	0.00
7,325.00	87.41	165.00	6,879.37	-732.71	196.33	732.71	8.00	8.00	0.00	0.00
Build Rate = 8.00°/100ft										
7,357.37	90.00	165.00	6,880.10	-763.96	204.70	763.96	8.00	8.00	0.00	0.00
End Build / Begin Turn at 7357.37ft										
7,385.10	90.02	165.83	6,880.10	-790.80	211.69	790.80	3.00	0.08	3.00	88.54
Niobrara B Target										
7,400.00	90.03	166.28	6,880.09	-805.26	215.28	805.26	3.00	0.08	3.00	88.54
7,500.00	90.11	169.28	6,879.97	-902.98	236.44	902.98	3.00	0.08	3.00	88.54
7,600.00	90.18	172.28	6,879.71	-1,001.68	252.47	1,001.68	3.00	0.08	3.00	88.55
7,700.00	90.26	175.28	6,879.32	-1,101.08	263.31	1,101.08	3.00	0.08	3.00	88.55
Turn Rate = 3.00°/100ft										
7,800.00	90.33	178.27	6,878.80	-1,200.90	268.93	1,200.90	3.00	0.07	3.00	88.57
7,900.00	90.41	181.27	6,878.16	-1,300.89	269.33	1,300.89	3.00	0.07	3.00	88.58
8,000.00	90.48	184.27	6,877.38	-1,400.76	264.49	1,400.76	3.00	0.07	3.00	88.60
8,028.59	90.50	185.13	6,877.13	-1,429.25	262.15	1,429.25	3.00	0.07	3.00	88.62
End Turn at 8028.59ft										
8,100.00	90.50	185.13	6,876.51	-1,500.37	255.76	1,500.37	0.00	0.00	0.00	0.00
8,200.00	90.50	185.13	6,875.63	-1,599.97	246.82	1,599.97	0.00	0.00	0.00	0.00
8,300.00	90.50	185.13	6,874.76	-1,699.56	237.88	1,699.56	0.00	0.00	0.00	0.00

Plan Report for Fabrizious PC GK27-99HZ - Plan #2 Proposal

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 (°)
8,400.00	90.50	185.13	6,873.88	-1,799.16	228.93	1,799.16	0.00	0.00	0.00	0.00
8,500.00	90.50	185.13	6,873.00	-1,898.75	219.99	1,898.75	0.00	0.00	0.00	0.00
8,600.00	90.50	185.13	6,872.13	-1,998.35	211.05	1,998.35	0.00	0.00	0.00	0.00
8,700.00	90.50	185.13	6,871.25	-2,097.95	202.11	2,097.95	0.00	0.00	0.00	0.00
8,800.00	90.50	185.13	6,870.37	-2,197.54	193.17	2,197.54	0.00	0.00	0.00	0.00
8,900.00	90.50	185.13	6,869.50	-2,297.14	184.22	2,297.14	0.00	0.00	0.00	0.00
9,000.00	90.50	185.13	6,868.62	-2,396.73	175.28	2,396.73	0.00	0.00	0.00	0.00
9,100.00	90.50	185.13	6,867.75	-2,496.33	166.34	2,496.33	0.00	0.00	0.00	0.00
9,200.00	90.50	185.13	6,866.87	-2,595.92	157.40	2,595.92	0.00	0.00	0.00	0.00
9,300.00	90.50	185.13	6,865.99	-2,695.52	148.46	2,695.52	0.00	0.00	0.00	0.00
9,400.00	90.50	185.13	6,865.12	-2,795.11	139.51	2,795.11	0.00	0.00	0.00	0.00
9,500.00	90.50	185.13	6,864.24	-2,894.71	130.57	2,894.71	0.00	0.00	0.00	0.00
Hold Angle at 90.50										
9,600.00	90.50	185.13	6,863.37	-2,994.31	121.63	2,994.31	0.00	0.00	0.00	0.00
9,700.00	90.50	185.13	6,862.49	-3,093.90	112.69	3,093.90	0.00	0.00	0.00	0.00
9,800.00	90.50	185.13	6,861.61	-3,193.50	103.75	3,193.50	0.00	0.00	0.00	0.00
9,900.00	90.50	185.13	6,860.74	-3,293.09	94.80	3,293.09	0.00	0.00	0.00	0.00
10,000.00	90.50	185.13	6,859.86	-3,392.69	85.86	3,392.69	0.00	0.00	0.00	0.00
10,100.00	90.50	185.13	6,858.99	-3,492.28	76.92	3,492.28	0.00	0.00	0.00	0.00
10,200.00	90.50	185.13	6,858.11	-3,591.88	67.98	3,591.88	0.00	0.00	0.00	0.00
10,300.00	90.50	185.13	6,857.23	-3,691.47	59.04	3,691.47	0.00	0.00	0.00	0.00
10,400.00	90.50	185.13	6,856.36	-3,791.07	50.09	3,791.07	0.00	0.00	0.00	0.00
10,500.00	90.50	185.13	6,855.48	-3,890.67	41.15	3,890.67	0.00	0.00	0.00	0.00
10,600.00	90.50	185.13	6,854.61	-3,990.26	32.21	3,990.26	0.00	0.00	0.00	0.00
10,700.00	90.50	185.13	6,853.73	-4,089.86	23.27	4,089.86	0.00	0.00	0.00	0.00
10,800.00	90.50	185.13	6,852.85	-4,189.45	14.32	4,189.45	0.00	0.00	0.00	0.00
10,900.00	90.50	185.13	6,851.98	-4,289.05	5.38	4,289.05	0.00	0.00	0.00	0.00
10,960.20	90.50	185.13	6,851.45	-4,349.00	0.00	4,349.00	0.00	0.00	0.00	0.00
Fabrizius PC GK27-99HZ Plan #2 BH Tgt										

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
6,157.37	6,157.37	0.00	0.00	Kickoff at 6157.37ft
6,700.00	6,649.55	-189.24	50.71	Build Rate = 8.00°/100ft
7,219.87	6,870.84	-631.50	169.21	End Build at 7219.87ft
7,258.00	6,874.17	-668.19	179.04	Hold Angle at 85.00
7,294.87	6,877.38	-703.67	188.55	Kickoff at 7294.87ft
7,325.00	6,879.37	-732.71	196.33	Build Rate = 8.00°/100ft
7,357.37	6,880.10	-763.96	204.70	End Build / Begin Turn at 7357.37ft
7,700.00	6,879.32	-1,101.08	263.31	Turn Rate = 3.00°/100ft
8,028.59	6,877.13	-1,429.25	262.15	End Turn at 8028.59ft
9,500.00	6,864.24	-2,894.71	130.57	Hold Angle at 90.50
10,960.20	6,851.45	-4,349.00	0.00	Total Depth = 10960.20ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	+E/-W (ft)	Start TVD (ft)
Target	Fabrizius PC GK27-99HZ Plan #2 BH Tgt	180.00	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
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Plan Report for Fabrizio PC GK27-99HZ - Plan #2 Proposal

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.00	10,960.19	Plan #2 Proposal	MWD

Casing Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,219.87	6,870.84	7" Casing Pt.	7	8-3/4

Formation Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,980.00	3,980.00	Parkman		-0.50	180.00
6,859.52	6,755.00	Shannon		-0.50	180.00
6,886.90	6,770.00	Niobrara		-0.50	180.00
6,908.09	6,781.00	Niobrara A		-0.50	180.00
6,922.15	6,788.00	Niobrara A Base		-0.50	180.00
7,133.77	6,863.00	Niobrara B		-0.50	180.00
7,247.57	6,879.00	Nio B Tgt top		-0.50	180.00
7,385.10	6,887.00	Niobrara B Target		-0.50	180.00

Plan Report for Fabrizio PC GK27-99HZ - Plan #2 Proposal

Targets associated with this wellbore

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
Fabrizius 27-44	0.00	-4,286.50	3,610.85	Circle
Fabrizius PC GK27-99HZ S. Section Line	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ N. Section Line	0.00	0.00	0.00	Polygon
Fabrizius 27-42	0.00	-2,997.16	2,341.87	Circle
Fabrizius 27-34	0.00	-4,337.93	1,117.29	Circle
Fabrizius PC GK27-99HZ Plan #1 BH Tgt	6,829.85	-3,649.02	3,598.64	Point
Bill 12-27	0.00	-2,935.89	-178.10	Circle
Fabrizius 27-14	0.00	-1,721.61	3,586.64	Circle
Fabrizius PC GK27-99HZ E. Section Line	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ S. 600' Setback	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ N. 600' Setback	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ E. 600' Setback	0.00	0.00	0.00	Polygon
Fabrizius 27-22	0.00	-491.37	-211.21	Circle
Fabrizius PC GK27-99HZ W. Section Line	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ W. 600' Setback	0.00	0.00	0.00	Polygon
Fabrizius 27-44	0.00	-4,286.50	3,610.85	Circle
Fabrizius PC GK27-99HZ S. Section Line	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ N. Section Line	0.00	0.00	0.00	Polygon
Fabrizius 27-42	0.00	-2,997.16	2,341.87	Circle
Fabrizius PC GK27-99HZ Plan #2 BH Tgt	6,851.45	-4,349.00	0.00	Point
Fabrizius 27-34	0.00	-4,337.93	1,117.29	Circle
Bill 12-27	0.00	-2,935.89	-178.10	Circle
Fabrizius 27-14	0.00	-1,721.61	3,586.64	Circle
Fabrizius 27-112	0.00	-545.32	2,311.17	Circle
Fabrizius PC GK27-99HZ E. Section Line	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ S. 600' Setback	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ N. 600' Setback	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ E. 600' Setback	0.00	0.00	0.00	Polygon
Fabrizius 27-22	0.00	-491.37	-211.21	Circle
Fabrizius PC GK27-99HZ W. Section Line	0.00	0.00	0.00	Polygon
Fabrizius PC GK27-99HZ W. 600' Setback	0.00	0.00	0.00	Polygon

North Reference Sheet for Sec. 27-T11N-R61W - Fabrizio PC GK27-99HZ - Plan #2

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to RKB 24' @ 5240.00ft (H&P 315). Northing and Easting are relative to Fabrizio PC GK27-99HZ

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: 1.00002086

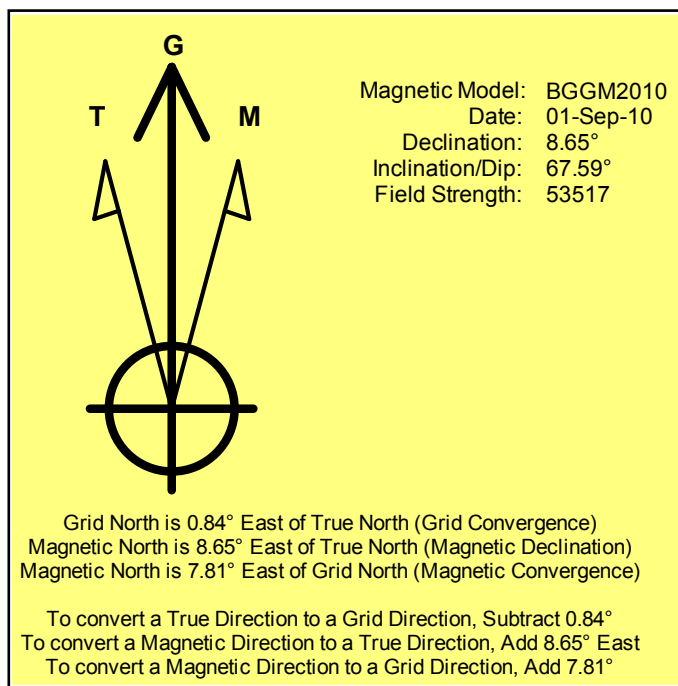
Grid Coordinates of Well: 1,573,079.59 ft N, 3,359,948.14 ft E

Geographical Coordinates of Well: 40° 53' 57.19" N, 104° 11' 52.66" W

Grid Convergence at Surface is: 0.84°

Based upon Minimum Curvature type calculations, at a Measured Depth of 10,960.20ft
the Bottom Hole Displacement is 4,349.00ft in the Direction of 180.00° (Grid).

Magnetic Convergence at surface is: -7.81° (1 September 2010, , BGGM2010)



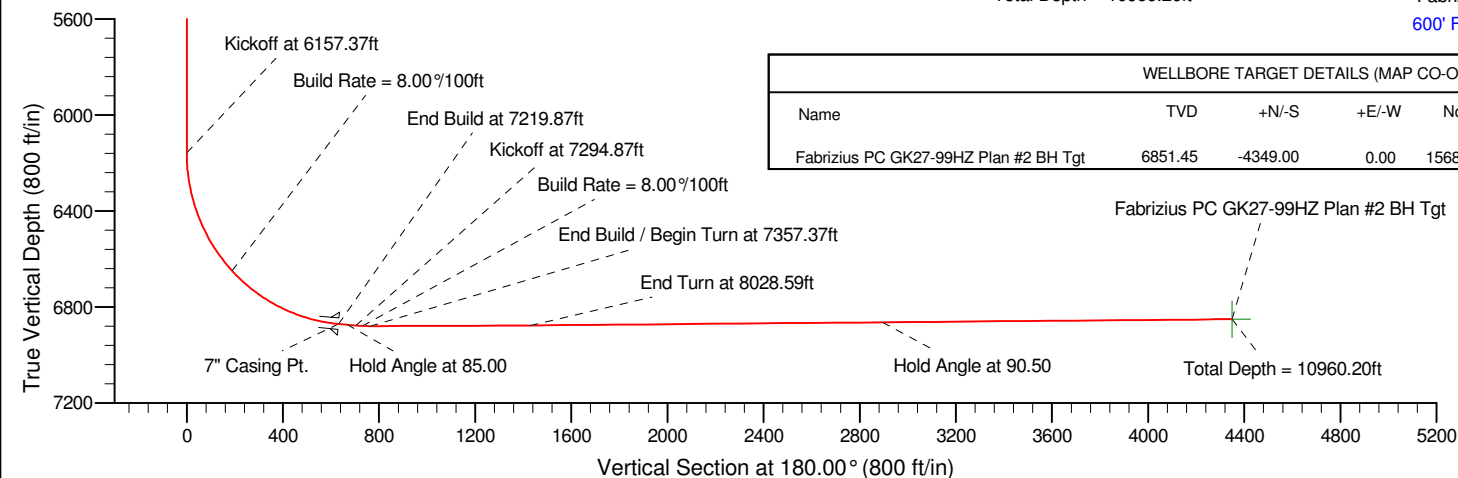
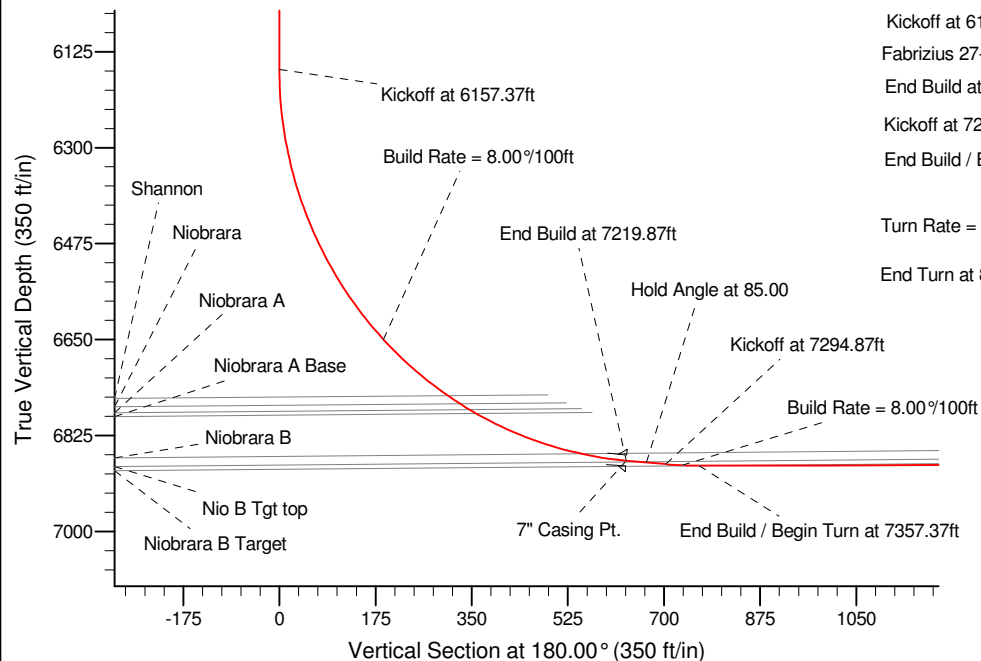
Project: Weld County, CO (NAD 83)
Site: Sec. 27-T11N-R61W
Well: Fabrizio PC GK27-99HZ
Wellbore: Plan #2
Design: Plan #2 Proposal

Noble Energy

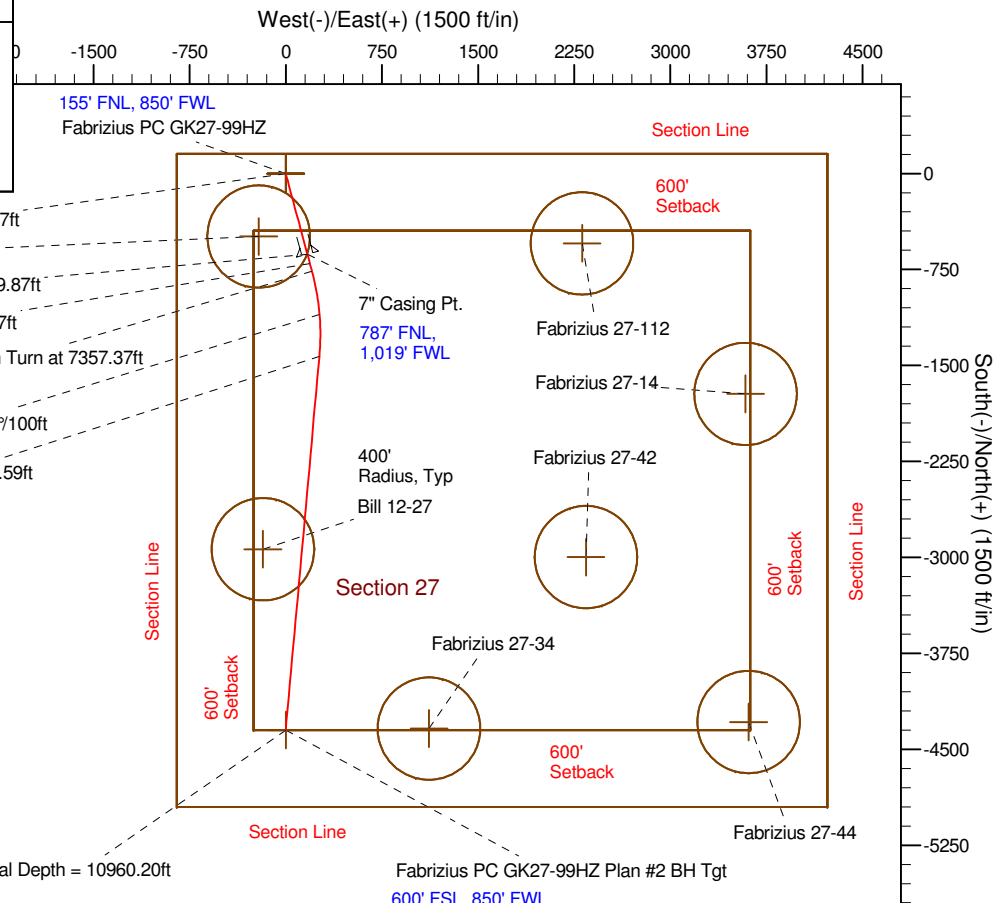
HALLIBURTON
Sperry Drilling

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	6157.37	0.00	0.00	6157.37	0.00	0.00	0.00	0.00	0.00	
3	7219.87	85.00	165.00	6870.84	-631.50	169.21	8.00	165.00	631.50	
4	7294.87	85.00	165.00	6877.38	-703.67	188.55	0.00	0.00	703.67	
5	7357.37	90.00	165.00	6880.10	-763.96	204.70	8.00	0.00	763.96	
6	8028.59	90.50	185.13	6877.13	-1429.25	262.15	3.00	88.54	1429.25	
7	10960.20	90.50	185.13	6851.45	-4349.00	0.00	0.00	0.00	4349.00	Fabrizius PC GK27-99HZ Plan #2 BH Tgt



Kickoff at 6157.37ft
Fabrizius 27-22
End Build at 7219.87ft
Kickoff at 7294.87ft
End Build / Begin Turn at 7357.37ft
Turn Rate = 3.00%/100ft
End Turn at 8028.59ft



WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Fabrizius PC GK27-99HZ Plan #2 BH Tgt	6851.45	-4349.00	0.00	1568730.50	3359948.14	40.887285	-104.198191	Point

WELL DETAILS: Fabrizio PC GK27-99HZ

Ground Level:		5216.00	
Northing	Easting	Latitude	Longitude
1573079.59	3359948.14	40.899220	-104.197960

Plan: Plan #2 Proposal (Fabrizius PC GK27-99HZ/Plan #2)

Created By: Paul A. Bitzan	Date: 8:40, August 02 2010
Checked: _____	Date: _____
Reviewed: _____	Date: _____
Approved: _____	Date: _____