

Noble Energy (Rockies)

Garfield County, CO

Sec. 35-T7S-R95W (SGV 35D2 PAD)

BM 34-42D - B11

Wellbore #1

Plan: Plan #1 Proposal

Sperry Drilling Services Proposal Report

20 October, 2009

Well Coordinates: 579,123.41 N, 1,301,224.98 E (39° 23' 50.55" N, 107° 58' 22.59" W)
Ground Level: 8,846.00 ft

Local Coordinate Origin:	Centered on Well BM 34-42D - Slot B11
Viewing Datum:	RKB - 24' @ 8870.00ft
TVDs to System:	N
North Reference:	Grid
Unit System:	API - US Survey Feet - Custom

Geodetic Scale Factor Applied
Version: 2003.16 Build: 431

HALLIBURTON

Plan Report for BM 34-42D - Plan #1 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
BM 34-42D 100' FSL Hardline Tgt										
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
225.00	0.00	0.00	225.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kickoff at 225.00ft										
300.00	1.50	217.54	299.99	-0.78	-0.60	0.98	2.00	2.00	0.00	217.54
400.00	3.50	217.54	399.89	-4.24	-3.26	5.34	2.00	2.00	0.00	0.00
500.00	5.50	217.54	499.58	-10.46	-8.04	13.19	2.00	2.00	0.00	0.00
575.00	7.00	217.54	574.13	-16.93	-13.01	21.35	2.00	2.00	0.00	0.00
Build Rate = 2.00°/100ft										
600.00	7.50	217.54	598.93	-19.43	-14.93	24.51	2.00	2.00	0.00	0.00
700.00	9.50	217.54	697.83	-31.15	-23.94	39.28	2.00	2.00	0.00	0.00
800.00	11.50	217.54	796.15	-45.60	-35.04	57.50	2.00	2.00	0.00	0.00
900.00	13.50	217.54	893.77	-62.76	-48.23	79.14	2.00	2.00	0.00	0.00
918.80	13.88	217.54	912.04	-66.29	-50.94	83.59	2.00	2.00	0.00	0.00
End Build at 918.80ft										
1,000.00	13.88	217.54	990.87	-81.73	-62.81	103.06	0.00	0.00	0.00	0.00
1,100.00	13.88	217.54	1,087.95	-100.74	-77.42	127.04	0.00	0.00	0.00	0.00
1,200.00	13.88	217.54	1,185.03	-119.76	-92.04	151.02	0.00	0.00	0.00	0.00
1,300.00	13.88	217.54	1,282.11	-138.78	-106.65	175.00	0.00	0.00	0.00	0.00
1,400.00	13.88	217.54	1,379.19	-157.79	-121.26	198.98	0.00	0.00	0.00	0.00
1,500.00	13.88	217.54	1,476.28	-176.81	-135.88	222.95	0.00	0.00	0.00	0.00
1,600.00	13.88	217.54	1,573.36	-195.82	-150.49	246.93	0.00	0.00	0.00	0.00
1,700.00	13.88	217.54	1,670.44	-214.84	-165.10	270.91	0.00	0.00	0.00	0.00
1,800.00	13.88	217.54	1,767.52	-233.85	-179.72	294.89	0.00	0.00	0.00	0.00
1,900.00	13.88	217.54	1,864.60	-252.87	-194.33	318.87	0.00	0.00	0.00	0.00
2,000.00	13.88	217.54	1,961.69	-271.88	-208.94	342.85	0.00	0.00	0.00	0.00
2,100.00	13.88	217.54	2,058.77	-290.90	-223.56	366.83	0.00	0.00	0.00	0.00
2,200.00	13.88	217.54	2,155.85	-309.91	-238.17	390.80	0.00	0.00	0.00	0.00
2,300.00	13.88	217.54	2,252.93	-328.93	-252.78	414.78	0.00	0.00	0.00	0.00
2,380.00	13.88	217.54	2,330.60	-344.14	-264.48	433.97	0.00	0.00	0.00	0.00
8 5/8" Casing Pt.										
2,400.00	13.88	217.54	2,350.01	-347.95	-267.40	438.76	0.00	0.00	0.00	0.00
2,500.00	13.88	217.54	2,447.09	-366.96	-282.01	462.74	0.00	0.00	0.00	0.00
2,600.00	13.88	217.54	2,544.18	-385.98	-296.63	486.72	0.00	0.00	0.00	0.00
2,700.00	13.88	217.54	2,641.26	-404.99	-311.24	510.70	0.00	0.00	0.00	0.00
2,800.00	13.88	217.54	2,738.34	-424.01	-325.85	534.68	0.00	0.00	0.00	0.00
2,900.00	13.88	217.54	2,835.42	-443.02	-340.47	558.65	0.00	0.00	0.00	0.00
3,000.00	13.88	217.54	2,932.50	-462.04	-355.08	582.63	0.00	0.00	0.00	0.00
3,100.00	13.88	217.54	3,029.58	-481.05	-369.69	606.61	0.00	0.00	0.00	0.00
3,200.00	13.88	217.54	3,126.67	-500.07	-384.31	630.59	0.00	0.00	0.00	0.00
3,300.00	13.88	217.54	3,223.75	-519.08	-398.92	654.57	0.00	0.00	0.00	0.00
3,400.00	13.88	217.54	3,320.83	-538.10	-413.53	678.55	0.00	0.00	0.00	0.00
3,470.00	13.88	217.54	3,388.79	-551.41	-423.76	695.33	0.00	0.00	0.00	0.00
13.88 Inclination										
3,500.00	13.88	217.54	3,417.91	-557.11	-428.15	702.52	0.00	0.00	0.00	0.00
3,600.00	13.88	217.54	3,514.99	-576.13	-442.76	726.50	0.00	0.00	0.00	0.00
3,700.00	13.88	217.54	3,612.07	-595.15	-457.37	750.48	0.00	0.00	0.00	0.00
3,800.00	13.88	217.54	3,709.16	-614.16	-471.99	774.46	0.00	0.00	0.00	0.00
3,900.00	13.88	217.54	3,806.24	-633.18	-486.60	798.44	0.00	0.00	0.00	0.00
4,000.00	13.88	217.54	3,903.32	-652.19	-501.21	822.42	0.00	0.00	0.00	0.00
4,100.00	13.88	217.54	4,000.40	-671.21	-515.83	846.40	0.00	0.00	0.00	0.00
4,200.00	13.88	217.54	4,097.48	-690.22	-530.44	870.37	0.00	0.00	0.00	0.00
4,300.00	13.88	217.54	4,194.56	-709.24	-545.05	894.35	0.00	0.00	0.00	0.00
4,400.00	13.88	217.54	4,291.65	-728.25	-559.67	918.33	0.00	0.00	0.00	0.00
4,500.00	13.88	217.54	4,388.73	-747.27	-574.28	942.31	0.00	0.00	0.00	0.00
4,600.00	13.88	217.54	4,485.81	-766.28	-588.89	966.29	0.00	0.00	0.00	0.00

Plan Report for BM 34-42D - Plan #1 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 (°)
4,700.00	13.88	217.54	4,582.89	-785.30	-603.51	990.27	0.00	0.00	0.00	0.00
4,800.00	13.88	217.54	4,679.97	-804.32	-618.12	1,014.25	0.00	0.00	0.00	0.00
4,900.00	13.88	217.54	4,777.06	-823.33	-632.74	1,038.22	0.00	0.00	0.00	0.00
5,000.00	13.88	217.54	4,874.14	-842.35	-647.35	1,062.20	0.00	0.00	0.00	0.00
5,100.00	13.88	217.54	4,971.22	-861.36	-661.96	1,086.18	0.00	0.00	0.00	0.00
5,200.00	13.88	217.54	5,068.30	-880.38	-676.58	1,110.16	0.00	0.00	0.00	0.00
5,300.00	13.88	217.54	5,165.38	-899.39	-691.19	1,134.14	0.00	0.00	0.00	0.00
5,400.00	13.88	217.54	5,262.46	-918.41	-705.80	1,158.12	0.00	0.00	0.00	0.00
5,500.00	13.88	217.54	5,359.55	-937.42	-720.42	1,182.10	0.00	0.00	0.00	0.00
5,600.00	13.88	217.54	5,456.63	-956.44	-735.03	1,206.07	0.00	0.00	0.00	0.00
5,700.00	13.88	217.54	5,553.71	-975.45	-749.64	1,230.05	0.00	0.00	0.00	0.00
5,800.00	13.88	217.54	5,650.79	-994.47	-764.26	1,254.03	0.00	0.00	0.00	0.00
5,829.01	13.88	217.54	5,678.95	-999.99	-768.50	1,260.99	0.00	0.00	0.00	0.00
Begin Drop at 5829.01ft										
5,900.00	12.81	217.54	5,748.03	-1,012.98	-778.48	1,277.37	1.50	-1.50	0.00	180.00
6,000.00	11.31	217.54	5,845.82	-1,029.54	-791.21	1,298.26	1.50	-1.50	0.00	180.00
6,100.00	9.81	217.54	5,944.12	-1,044.08	-802.38	1,316.59	1.50	-1.50	0.00	180.00
6,200.00	8.31	217.54	6,042.87	-1,056.56	-811.98	1,332.33	1.50	-1.50	0.00	180.00
6,300.00	6.81	217.54	6,142.00	-1,067.00	-819.99	1,345.49	1.50	-1.50	0.00	180.00
6,400.00	5.31	217.54	6,241.43	-1,075.37	-826.43	1,356.04	1.50	-1.50	0.00	180.00
6,440.00	4.71	217.54	6,281.28	-1,078.14	-828.56	1,359.54	1.50	-1.50	0.00	180.00
Drop Rate = 1.50°/100ft										
6,500.00	3.81	217.54	6,341.12	-1,081.67	-831.27	1,364.00	1.50	-1.50	0.00	-180.00
6,600.00	2.31	217.54	6,440.97	-1,085.91	-834.53	1,369.33	1.50	-1.50	0.00	180.00
6,700.00	0.81	217.54	6,540.93	-1,088.07	-836.19	1,372.06	1.50	-1.50	0.00	180.00
6,754.07	0.00	0.00	6,595.00	-1,088.37	-836.42	1,372.44	1.50	-1.50	0.00	180.00
End Drop at 6754.07ft - Williams Fork - BM 34-42D Plan #1 Driller's Tgt										
6,754.09	0.00	243.43	6,595.02	-1,088.37	-836.42	1,372.44	0.00	0.00	0.00	243.43
BM 34-42D Plan #1 Zone Tgt										
6,800.00	0.04	243.43	6,640.93	-1,088.38	-836.43	1,372.45	0.08	0.08	0.00	243.43
6,900.00	0.12	243.43	6,740.93	-1,088.44	-836.55	1,372.58	0.08	0.08	0.00	0.00
7,000.00	0.20	243.43	6,840.93	-1,088.56	-836.80	1,372.82	0.08	0.08	0.00	0.00
7,100.00	0.28	243.43	6,940.93	-1,088.74	-837.17	1,373.20	0.08	0.08	0.00	0.00
7,200.00	0.36	243.43	7,040.92	-1,088.99	-837.66	1,373.70	0.08	0.08	0.00	0.00
7,300.00	0.44	243.43	7,140.92	-1,089.30	-838.28	1,374.33	0.08	0.08	0.00	0.00
7,400.00	0.52	243.43	7,240.92	-1,089.67	-839.03	1,375.08	0.08	0.08	0.00	0.00
7,500.00	0.60	243.43	7,340.91	-1,090.11	-839.89	1,375.96	0.08	0.08	0.00	0.00
7,600.00	0.68	243.43	7,440.91	-1,090.60	-840.89	1,376.97	0.08	0.08	0.00	0.00
7,700.00	0.76	243.43	7,540.90	-1,091.16	-842.01	1,378.11	0.08	0.08	0.00	0.00
7,736.10	0.79	243.43	7,577.00	-1,091.38	-842.44	1,378.55	0.08	0.08	0.00	0.00
Top of Gas										
7,800.00	0.84	243.43	7,640.89	-1,091.79	-843.25	1,379.37	0.08	0.08	0.00	0.00
7,900.00	0.92	243.43	7,740.88	-1,092.47	-844.62	1,380.76	0.08	0.08	0.00	0.00
8,000.00	1.00	243.43	7,840.87	-1,093.22	-846.11	1,382.27	0.08	0.08	0.00	0.00
8,100.00	1.08	243.43	7,940.85	-1,094.03	-847.73	1,383.91	0.08	0.08	0.00	0.00
8,200.00	1.16	243.43	8,040.83	-1,094.90	-849.47	1,385.68	0.08	0.08	0.00	0.00
8,300.00	1.24	243.43	8,140.81	-1,095.83	-851.34	1,387.57	0.08	0.08	0.00	0.00
8,400.00	1.32	243.43	8,240.78	-1,096.83	-853.34	1,389.59	0.08	0.08	0.00	0.00
8,500.00	1.40	243.43	8,340.75	-1,097.89	-855.45	1,391.74	0.08	0.08	0.00	0.00
8,600.00	1.48	243.43	8,440.72	-1,099.01	-857.70	1,394.02	0.08	0.08	0.00	0.00
8,700.00	1.56	243.43	8,540.69	-1,100.19	-860.06	1,396.42	0.08	0.08	0.00	0.00
8,730.10	1.58	243.43	8,570.78	-1,100.56	-860.80	1,397.16	0.08	0.08	0.00	0.00
8,800.00	1.53	243.43	8,640.65	-1,101.41	-862.50	1,398.88	0.08	-0.08	0.00	180.00
8,900.00	1.45	243.43	8,740.62	-1,102.57	-864.82	1,401.24	0.08	-0.08	0.00	180.00
9,000.00	1.38	243.43	8,840.59	-1,103.67	-867.03	1,403.48	0.08	-0.08	0.00	180.00
9,100.00	1.30	243.43	8,940.56	-1,104.72	-869.11	1,405.59	0.08	-0.08	0.00	180.00
9,200.00	1.22	243.43	9,040.54	-1,105.70	-871.08	1,407.59	0.08	-0.08	0.00	180.00
9,297.49	1.15	243.43	9,138.00	-1,106.60	-872.89	1,409.42	0.08	-0.08	0.00	180.00
Cameo										

Plan Report for BM 34-42D - Plan #1 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 (°)
9,300.00	1.15	243.43	9,140.51	-1,106.63	-872.93	1,409.47	0.08	-0.08	0.00	-180.00
9,400.00	1.07	243.43	9,240.50	-1,107.49	-874.66	1,411.22	0.08	-0.08	0.00	180.00
9,500.00	0.99	243.43	9,340.48	-1,108.30	-876.28	1,412.86	0.08	-0.08	0.00	180.00
9,600.00	0.92	243.43	9,440.47	-1,109.05	-877.77	1,414.37	0.08	-0.08	0.00	180.00
9,670.54	0.86	243.43	9,511.00	-1,109.54	-878.75	1,415.37	0.08	-0.08	0.00	-180.00
Rollins										
9,700.00	0.84	243.43	9,540.45	-1,109.73	-879.14	1,415.76	0.08	-0.08	0.00	180.00
9,800.00	0.77	243.43	9,640.44	-1,110.36	-880.40	1,417.04	0.08	-0.08	0.00	180.00
9,900.00	0.69	243.43	9,740.44	-1,110.93	-881.54	1,418.19	0.08	-0.08	0.00	180.00
10,000.00	0.61	243.43	9,840.43	-1,111.44	-882.55	1,419.22	0.08	-0.08	0.00	180.00
10,018.57	0.60	243.43	9,859.00	-1,111.53	-882.73	1,419.40	0.08	-0.08	0.00	180.00
Cozzette										
10,100.00	0.54	243.43	9,940.42	-1,111.89	-883.45	1,420.13	0.08	-0.08	0.00	-180.00
10,200.00	0.46	243.43	10,040.42	-1,112.28	-884.23	1,420.93	0.08	-0.08	0.00	180.00
10,300.00	0.39	243.43	10,140.42	-1,112.61	-884.90	1,421.60	0.08	-0.08	0.00	180.00
10,315.58	0.37	243.43	10,156.00	-1,112.65	-884.99	1,421.69	0.08	-0.08	0.00	180.00
Corcora										
10,400.00	0.31	243.43	10,240.42	-1,112.88	-885.44	1,422.15	0.08	-0.08	0.00	-180.00
10,500.00	0.23	243.43	10,340.41	-1,113.09	-885.86	1,422.58	0.08	-0.08	0.00	180.00
10,556.59	0.19	243.43	10,397.00	-1,113.19	-886.05	1,422.77	0.08	-0.08	0.00	180.00
Mancos										
10,600.00	0.16	243.43	10,440.41	-1,113.24	-886.17	1,422.89	0.08	-0.08	0.00	-180.00
10,700.00	0.08	243.43	10,540.41	-1,113.34	-886.35	1,423.07	0.08	-0.08	0.00	180.00
10,800.00	0.01	243.43	10,640.41	-1,113.37	-886.42	1,423.14	0.08	-0.08	0.00	-180.00
10,806.59	0.00	360.00	10,647.00	-1,113.37	-886.42	1,423.14	0.08	-0.08	0.00	180.00
BM 34-42D Plan #1 BH Tgt										

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
225.00	225.00	0.00	0.00	Kickoff at 225.00ft
575.00	574.13	-16.93	-13.01	Build Rate = 2.00°/100ft
918.80	912.04	-66.29	-50.94	End Build at 918.80ft
3,470.00	3,388.79	-551.41	-423.76	13.88 Inclination
5,829.01	5,678.95	-999.99	-768.50	Begin Drop at 5829.01ft
6,440.00	6,281.28	-1,078.14	-828.56	Drop Rate = 1.50°/100ft
6,754.07	6,595.00	-1,088.37	-836.42	End Drop at 6754.07ft
10,806.59	10,647.00	-1,113.37	-886.42	Total Depth = 10806.59ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/-S (ft)	+E/-W (ft)	
Target	BM 34-42D Plan #1 BH Tgt	218.53	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.00	10,806.59	Plan #1 Proposal	MWD

Plan Report for BM 34-42D - Plan #1 Proposal

Casing Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
2,380.00	2,330.60	8 5/8" Casing Pt.	8-5/8	11

Formation Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,754.07	6,595.00	Williams Fork		0.00	
7,736.10	7,577.00	Top of Gas		0.00	
9,297.49	9,138.00	Cameo		0.00	
9,670.54	9,511.00	Rollins		0.00	
10,018.57	9,859.00	Cozzette		0.00	
10,315.58	10,156.00	Corcora		0.00	
10,556.59	10,397.00	Mancos		0.00	

Targets associated with this wellbore

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
BM 34-42D Plan #1 BH Tgt	10,647.00	-1,113.37	-886.42	Point
BM 34-42D Plan #1 Zone Tgt	6,595.00	-1,113.37	-886.42	Rectangle
BM 34-42D 100' FSL Hardline Tgt	0.00	0.00	0.00	Polygon
BM 34-42D Plan #1 Driller's Tgt	6,595.00	-1,088.37	-836.42	Rectangle

North Reference Sheet for Sec. 35-T7S-R95W (SGV 35D2 PAD) - BM 34-42D - Wellbore #1

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' @ 8870.00ft. Northing and Easting are relative to BM 34-42D - Slot B11

Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is -105.50°, Longitude Origin: 0° 0' 0.000 E°, Latitude Origin: 39° 45' 0.000 N°

False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 0.99994925

Grid Coordinates of Well: 579,123.41 ft N, 1,301,224.98 ft E

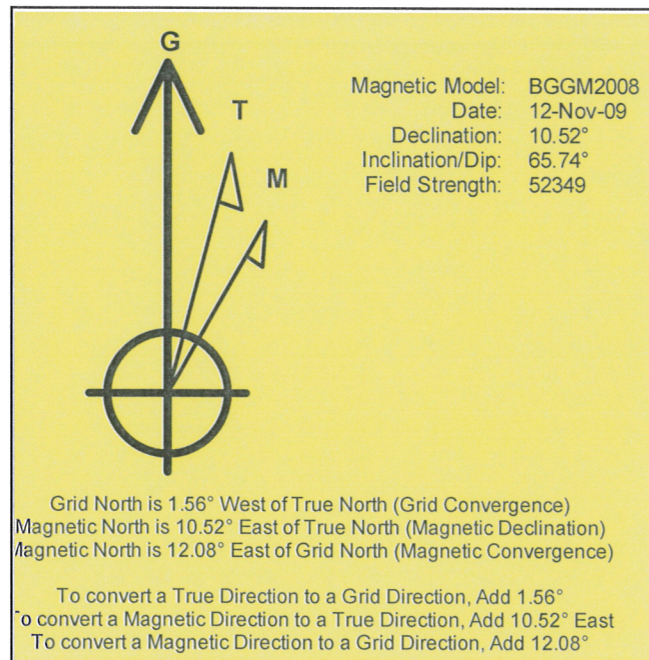
Geographical Coordinates of Well: 39° 23' 50.55" N, 107° 58' 22.59" W

Grid Convergence at Surface is: -1.56°

Based upon Minimum Curvature type calculations, at a Measured Depth of 10,806.59ft

the Bottom Hole Displacement is 1,423.14ft in the Direction of 218.53° (Grid).

Magnetic Convergence at surface is: -12.08° (12 November 2009, , BGGM2008)



Project: Garfield County, CO
Site: Sec. 35-T7S-R95W (SGV 35D2 PAD)
Well: BM 34-42D
Wellbore: Wellbore #1
Plan: Plan #1 Proposal

Noble Energy (Rockies)

HALLIBURTON

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.00	0.00	0.00	225.00	0.00	0.00	0.00	0.00	0.00
918.80	13.88	217.54	912.04	-66.29	-50.94	2.00	217.54	83.59
5829.01	13.88	217.54	5678.95	-999.99	-768.50	0.00	0.00	1260.99
6754.07	0.00	0.00	6595.00	-1088.37	-836.42	1.50	180.00	1372.44
8730.10	1.58	243.43	8570.78	-1100.56	-860.80	0.08	243.43	1397.16
10806.59	0.00	360.00	10647.00	-1113.37	-886.42	0.08	180.00	1423.14

BM 34-42D Plan #1 Driller's Tgt
BM 34-42D Plan #1 BH Tgt

WELL DETAILS: BM 34-42D

Ground Level:	8946.00	Longitude	107° 58' 22.591 W
North	579123.41	Latitude	39° 23' 50.545 N
East	1301224.98		

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BM 34-42D 100' FSL Hardline Tgt	0.00	0.00	0.00	Polygon
BM 34-42D Plan #1 Driller's Tgt	6595.00	-1088.37	-836.42	Rectangle (Sides: L25.00 W25.00)
BM 34-42D Plan #1 Zone Tgt	6595.00	-1113.37	-886.42	Rectangle (Sides: L96.00 W200.00)
BM 34-42D Plan #1 BH Tgt	10647.00	-1113.37	-886.42	Point

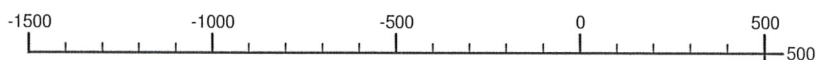
FORMATION TOP DETAILS

TVDPath	MDPath	Formation
6595.00	6754.07	Williams Fork
7577.00	7736.10	Top of Gas
9138.00	9297.49	Cameo
9511.00	9670.54	Rollins
9859.00	10018.57	Cozzette
10156.00	10315.58	Corcora
10397.00	10556.59	Mancos

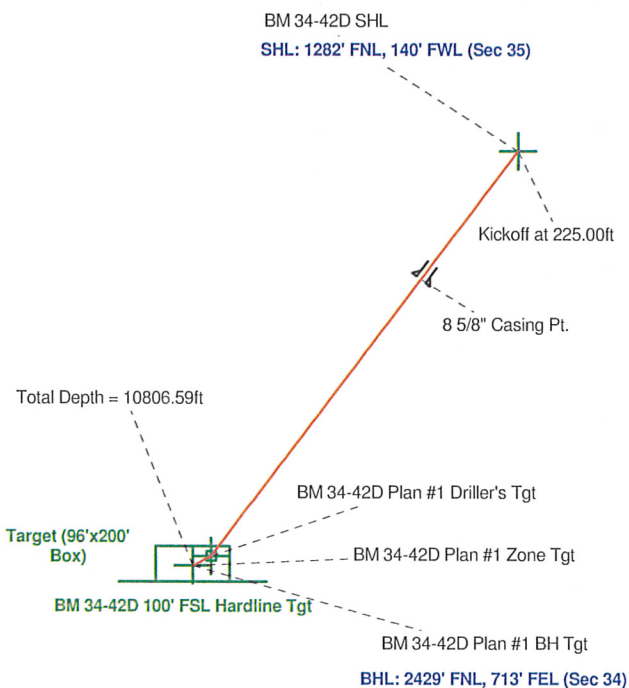
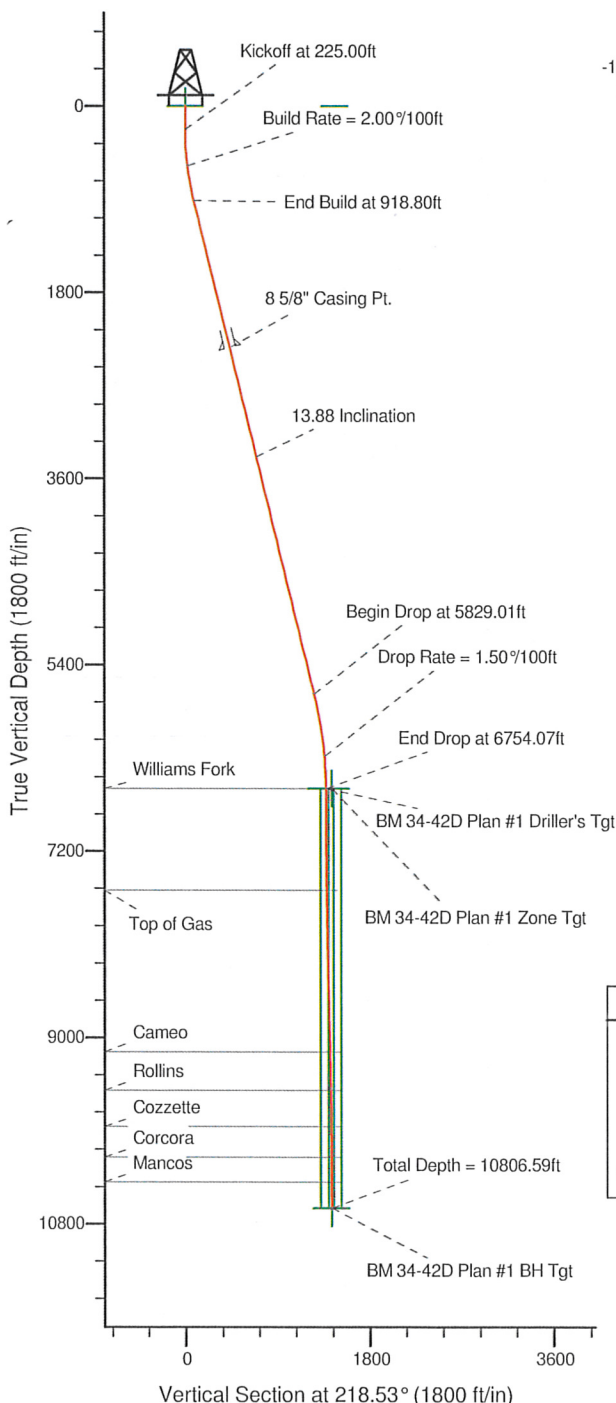
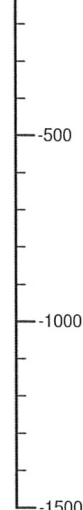


Azimuths to Grid North
True North: 1.56°
Magnetic North: 12.08°
Magnetic Field
Strength: 52348.7nT
Dip Angle: 65.74°
Date: 11/12/2009
Model: BGGM2008

West(-)/East(+) (500 ft/in)



South(-)/North(+) (500 ft/in)



ANNOTATIONS

TVD	MD	Annotation
225.00	225.00	Kickoff at 225.00ft
574.13	575.00	Build Rate = 2.00°/100ft
912.04	918.80	End Build at 918.80ft
3388.79	3470.00	13.88 Inclination
5678.95	5829.01	Begin Drop at 5829.01ft
6281.28	6440.00	Drop Rate = 1.50°/100ft
6595.00	6754.07	End Drop at 6754.07ft
10647.00	10806.59	Total Depth = 10806.59ft

PROJECT DETAILS: Garfield County, CO

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Colorado Central 502
System Datum: Mean Sea Level

Plan: Plan #1 Proposal (BM 34-42D/Wellbore #1)

Created By: Puneet Bhatia Date: 10/20/2009
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____