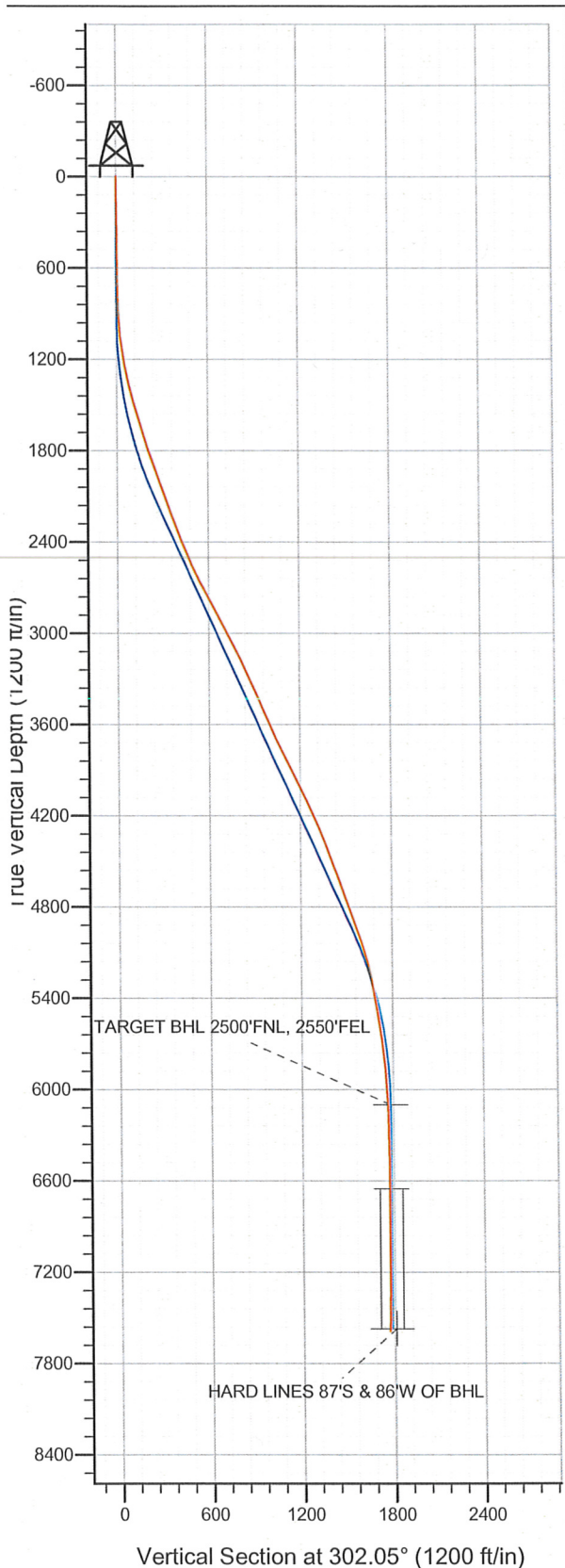
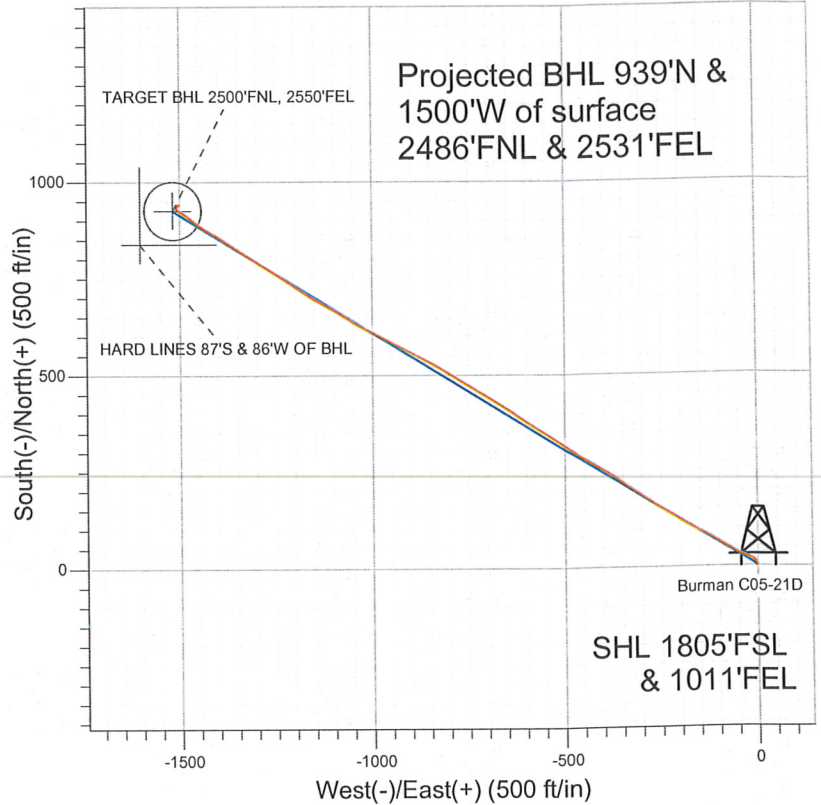


Well Name: Burman C05-21D
Surface Location: Burman C04-33D Pad Sec.5-T4N-R64W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone
Ground Elevation: 4749.0
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1367738.71 3259666.25 40.339100 -104.568480
Original Well Elev @ 4762.0ft (Original Well Elev)



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- △ Burman C05-21D, Wellbore #1, Noble Burman C05-21D Plan #1 (6-15-11) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
7920'MD & 7587'TVD @ 1770'VS
0.5 deg Inc 104.0 deg AZ

Project: SEC.5-T4N-R64W
Site: Burman C04-33D Pad Sec.5-T4N-R64W
Well: Burman C05-21D
Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.5-T4N-R64W

Burman C04-33D Pad Sec.5-T4N-R64W

Burman C05-21D

Wellbore #1

Survey: Survey #1

Standard Survey Report

27 October, 2011



Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.5-T4N-R64W
Site: Burman C04-33D Pad Sec.5-T4N-R64W
Well: Burman C05-21D
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Burman C05-21D
TVD Reference: WELL @ 4762.0ft (Original Well Elev)
MD Reference: WELL @ 4762.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Landmark

Project SEC.5-T4N-R64W, Weld County, Colorado

Map System: US State Plane 1983	System Datum: Mean Sea Level
Geo Datum: North American Datum 1983	Using Well Reference Point
Map Zone: Colorado Northern Zone	Using geodetic scale factor

Site Burman C04-33D Pad Sec.5-T4N-R64W

Site Position:	Northing: 1,367,739.92 ft	Latitude: 40.339100
From: Lat/Long	Easting: 3,259,777.75 ft	Longitude: -104.568080
Position Uncertainty: 0.0 ft	Slot Radius: "	Grid Convergence: 0.60 °

Well Burman C05-21D		
Well Position	Northing: 1,367,738.71 ft	Latitude: 40.339100
+N/-S 0.0 ft	Easting: 3,259,666.25 ft	Longitude: -104.568480
+E/-W 0.0 ft		
Position Uncertainty 0.0 ft	Wellhead Elevation: ft	Ground Level: 4,749.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/23/2011	8.75	67.03	53,119

Design Wellbore #1

Audit Notes:

Version: 1.0 **Phase:** ACTUAL **Tie On Depth:** 0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	302.05

Survey Program **Date** 10/27/2011

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
74.0	7,920.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard

Survey

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
74.0	0.50	329.00	74.0	0.3	-0.2	0.3	0.68	0.68	0.00
167.0	0.30	51.50	167.0	0.8	-0.2	0.6	0.59	-0.22	88.71
260.0	1.20	329.00	260.0	1.8	-0.5	1.4	1.29	0.97	-88.71
321.0	1.30	338.30	321.0	3.0	-1.1	2.5	0.37	0.16	15.25
403.0	1.00	328.70	403.0	4.4	-1.8	3.9	0.43	-0.37	-11.71
485.0	0.80	320.90	484.9	5.5	-2.5	5.1	0.29	-0.24	-9.51
567.0	1.00	343.80	566.9	6.6	-3.1	6.1	0.50	0.24	27.93
648.0	0.60	13.80	647.9	7.7	-3.2	6.8	0.70	-0.49	37.04
664.0	0.60	4.00	663.9	7.9	-3.2	6.9	0.64	0.00	-61.25
751.0	0.80	357.00	750.9	8.9	-3.2	7.4	0.25	0.23	-8.05
833.0	1.70	309.70	832.9	10.3	-4.1	9.0	1.58	1.10	-57.68
915.0	3.60	313.00	914.8	12.8	-6.9	12.7	2.32	2.32	4.02

Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.5-T4N-R64W
Site: Burman C04-33D Pad Sec.5-T4N-R64W
Well: Burman C05-21D
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Burman C05-21D
TVD Reference: WELL @ 4762.0ft (Original Well Elev)
MD Reference: WELL @ 4762.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Landmark

Survey

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)
997.0	4.70	303.90	996.6	16.4	-11.6	18.6	1.56	1.34	-11.10
1,078.0	6.90	297.60	1,077.2	20.5	-18.7	26.7	2.82	2.72	-7.78
1,160.0	8.60	290.20	1,158.4	24.9	-28.8	37.7	2.40	2.07	-9.02
1,242.0	10.60	292.60	1,239.3	30.0	-41.5	51.1	2.49	2.44	2.93
1,324.0	12.50	298.80	1,319.6	37.1	-56.3	67.4	2.76	2.32	7.56
1,405.0	14.50	302.70	1,398.4	46.8	-72.5	86.3	2.71	2.47	4.81
1,487.0	16.10	301.10	1,477.5	58.3	-90.9	107.9	2.02	1.95	-1.95
1,569.0	16.20	299.70	1,556.2	69.8	-110.5	130.7	0.49	0.12	-1.71
1,651.0	17.30	299.50	1,634.8	81.5	-131.1	154.3	1.34	1.34	-0.24
1,732.0	17.60	297.20	1,712.0	93.0	-152.4	178.6	0.93	0.37	-2.84
1,814.0	18.60	302.00	1,790.0	105.6	-174.6	204.0	2.19	1.22	5.85
1,896.0	19.40	301.40	1,867.5	119.6	-197.3	230.7	1.00	0.98	-0.73
1,977.0	20.00	303.40	1,943.8	134.3	-220.3	258.0	1.11	0.74	2.47
2,059.0	19.70	301.10	2,020.9	149.1	-243.9	285.8	1.02	-0.37	-2.80
2,141.0	19.70	302.30	2,098.1	163.6	-267.4	313.5	0.49	0.00	1.46
2,223.0	19.70	305.30	2,175.3	179.0	-290.4	341.1	1.23	0.00	3.66
2,304.0	20.50	303.00	2,251.4	194.6	-313.4	368.9	1.39	0.99	-2.84
2,386.0	20.30	304.40	2,328.2	210.5	-337.2	397.5	0.64	-0.24	1.71
2,468.0	21.60	306.20	2,404.8	227.4	-361.1	426.7	1.77	1.59	2.20
2,550.0	23.00	300.70	2,480.7	244.5	-387.0	457.8	3.06	1.71	-6.71
2,631.0	25.10	300.40	2,554.6	261.3	-415.5	490.8	2.60	2.59	-0.37
2,713.0	26.00	300.90	2,628.6	279.3	-445.9	526.2	1.13	1.10	0.61
2,795.0	27.90	303.90	2,701.7	299.3	-477.2	563.3	2.85	2.32	3.66
2,877.0	28.10	304.10	2,774.1	320.8	-509.2	601.8	0.27	0.24	0.24
2,958.0	28.60	302.50	2,845.4	341.9	-541.3	640.2	1.12	0.62	-1.98
3,040.0	27.40	301.60	2,917.8	362.3	-573.9	678.7	1.55	-1.46	-1.10
3,122.0	26.90	304.10	2,990.8	382.6	-605.4	716.1	1.52	-0.61	3.05
3,204.0	27.70	303.70	3,063.6	403.6	-636.6	753.7	1.00	0.98	-0.49
3,285.0	26.60	301.10	3,135.7	423.4	-667.8	790.7	2.00	-1.36	-3.21
3,367.0	25.10	302.50	3,209.5	442.2	-698.2	826.4	1.97	-1.83	1.71
3,449.0	24.30	300.20	3,284.0	460.1	-727.4	860.7	1.52	-0.98	-2.80
3,531.0	24.50	300.20	3,358.7	477.1	-756.7	894.5	0.24	0.24	0.00
3,612.0	24.40	301.30	3,432.4	494.3	-785.5	928.1	0.58	-0.12	1.36
3,694.0	23.70	302.30	3,507.3	511.9	-813.9	961.5	0.99	-0.85	1.22
3,776.0	23.70	298.30	3,582.4	528.5	-842.3	994.4	1.96	0.00	-4.88
3,857.0	24.00	297.40	3,656.5	543.8	-871.3	1,027.1	0.58	0.37	-1.11
3,939.0	25.90	296.50	3,730.8	559.5	-902.1	1,061.5	2.36	2.32	-1.10
4,021.0	26.40	297.60	3,804.4	575.9	-934.3	1,097.5	0.85	0.61	1.34
4,103.0	26.80	298.80	3,877.7	593.2	-966.7	1,134.2	0.82	0.49	1.46
4,184.0	26.60	296.50	3,950.1	610.1	-998.9	1,170.4	1.30	-0.25	-2.84
4,266.0	24.90	298.60	4,024.0	626.6	-1,030.5	1,205.9	2.35	-2.07	2.56
4,348.0	25.40	302.70	4,098.2	644.4	-1,060.5	1,240.8	2.21	0.61	5.00
4,430.0	25.40	300.20	4,172.3	662.7	-1,090.5	1,275.9	1.31	0.00	-3.05
4,511.0	23.10	298.60	4,246.1	679.0	-1,119.4	1,309.2	2.95	-2.84	-1.98
4,593.0	21.50	299.00	4,322.0	694.0	-1,146.7	1,340.2	1.96	-1.95	0.49
4,675.0	20.90	303.00	4,398.4	709.3	-1,172.1	1,369.8	1.91	-0.73	4.88
4,757.0	20.70	305.30	4,475.1	725.6	-1,196.2	1,398.9	1.03	-0.24	2.80
4,838.0	20.80	302.80	4,550.8	741.7	-1,220.0	1,427.6	1.10	0.12	-3.09
4,920.0	19.20	303.90	4,627.9	757.1	-1,243.4	1,455.7	2.00	-1.95	1.34
5,002.0	18.90	300.40	4,705.4	771.3	-1,266.1	1,482.4	1.44	-0.37	-4.27
5,084.0	20.40	301.10	4,782.6	785.4	-1,289.7	1,510.0	1.85	1.83	0.85
5,165.0	20.30	303.00	4,858.6	800.4	-1,313.6	1,538.1	0.82	-0.12	2.35
5,247.0	19.90	303.40	4,935.6	815.8	-1,337.2	1,566.3	0.52	-0.49	0.49
5,329.0	19.00	302.80	5,012.9	830.7	-1,360.1	1,593.6	1.12	-1.10	-0.73

Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.5-T4N-R64W
Site: Burman C04-33D Pad Sec.5-T4N-R64W
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Wellbore: Wellbore #1
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Survey Calculation Method: Minimum Curvature
Database: Landmark

Survey

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)
5,411.0	16.70	303.20	5,090.9	844.4	-1,381.2	1,618.7	2.81	-2.80	0.49
5,492.0	13.60	302.10	5,169.1	855.8	-1,399.0	1,639.9	3.84	-3.83	-1.36
5,574.0	12.50	300.70	5,249.0	865.5	-1,414.8	1,658.4	1.40	-1.34	-1.71
5,656.0	9.80	298.40	5,329.4	873.4	-1,428.5	1,674.3	3.34	-3.29	-2.80
5,738.0	9.40	300.20	5,410.3	880.0	-1,440.5	1,687.9	0.61	-0.49	2.20
5,819.0	9.20	314.10	5,490.2	887.9	-1,450.8	1,700.9	2.78	-0.25	17.16
5,901.0	8.90	311.60	5,571.2	896.6	-1,460.3	1,713.5	0.60	-0.37	-3.05
5,983.0	8.90	303.20	5,652.2	904.3	-1,470.3	1,726.1	1.58	0.00	-10.24
6,064.0	7.40	304.10	5,732.4	910.7	-1,479.9	1,737.6	1.86	-1.85	1.11
6,146.0	5.70	303.90	5,813.9	915.9	-1,487.6	1,746.9	2.07	-2.07	-0.24
6,228.0	4.30	304.40	5,895.6	919.9	-1,493.6	1,754.1	1.71	-1.71	0.61
6,310.0	3.30	305.60	5,977.4	923.0	-1,498.0	1,759.5	1.22	-1.22	1.46
6,391.0	3.00	299.00	6,058.3	925.4	-1,501.8	1,764.0	0.58	-0.37	-8.15
6,433.4	2.59	300.45	6,100.6	926.4	-1,503.6	1,766.0	0.99	-0.98	3.42
TARGET BHL 2500'FNL, 2550'FEL									
6,473.0	2.20	302.30	6,140.2	927.3	-1,505.0	1,767.7	0.99	-0.97	4.67
6,555.0	1.60	309.90	6,222.1	928.9	-1,507.2	1,770.4	0.79	-0.73	9.27
6,637.0	1.10	336.40	6,304.1	930.3	-1,508.4	1,772.2	0.96	-0.61	32.32
6,718.0	1.10	336.40	6,385.1	931.8	-1,509.0	1,773.5	0.00	0.00	0.00
6,800.0	1.00	13.30	6,467.1	933.2	-1,509.1	1,774.3	0.82	-0.12	45.00
6,882.0	1.00	15.80	6,549.1	934.6	-1,508.8	1,774.8	0.05	0.00	3.05
6,964.0	0.70	26.20	6,631.1	935.7	-1,508.4	1,775.0	0.41	-0.37	12.68
6,984.8	0.66	32.26	6,651.8	935.9	-1,508.3	1,775.0	0.39	-0.19	29.19
TARGET CIRCLE 2550'FNL & 2550'FEL									
7,045.0	0.60	53.20	6,712.1	936.4	-1,507.8	1,774.9	0.39	-0.10	34.76
7,127.0	0.60	59.90	6,794.1	936.9	-1,507.1	1,774.6	0.09	0.00	8.17
7,209.0	0.70	43.60	6,876.0	937.5	-1,506.4	1,774.3	0.26	0.12	-19.88
7,291.0	0.70	55.50	6,958.0	938.1	-1,505.6	1,774.0	0.18	0.00	14.51
7,372.0	0.70	56.90	7,039.0	938.6	-1,504.8	1,773.5	0.02	0.00	1.73
7,454.0	0.70	58.80	7,121.0	939.2	-1,504.0	1,773.1	0.03	0.00	2.32
7,536.0	0.70	43.90	7,203.0	939.8	-1,503.2	1,772.8	0.22	0.00	-18.17
7,618.0	0.40	65.70	7,285.0	940.3	-1,502.6	1,772.5	0.44	-0.37	26.59
7,699.0	0.40	117.70	7,366.0	940.3	-1,502.1	1,772.1	0.43	0.00	64.20
7,781.0	0.50	127.90	7,448.0	939.9	-1,501.5	1,771.4	0.16	0.12	12.44
7,863.0	0.50	107.50	7,530.0	939.6	-1,500.9	1,770.7	0.22	0.00	-24.88
7,869.0	0.50	104.40	7,536.0	939.6	-1,500.9	1,770.7	0.45	0.00	-51.67
7,904.3	0.50	104.12	7,571.3	939.5	-1,500.6	1,770.4	0.01	0.00	-0.78
HARD LINES 87'S & 86'W OF BHL									
7,920.0	0.50	104.00	7,587.0	939.5	-1,500.4	1,770.3	0.01	0.00	-0.78

Checked By: _____ Approved By: _____ Date: _____