

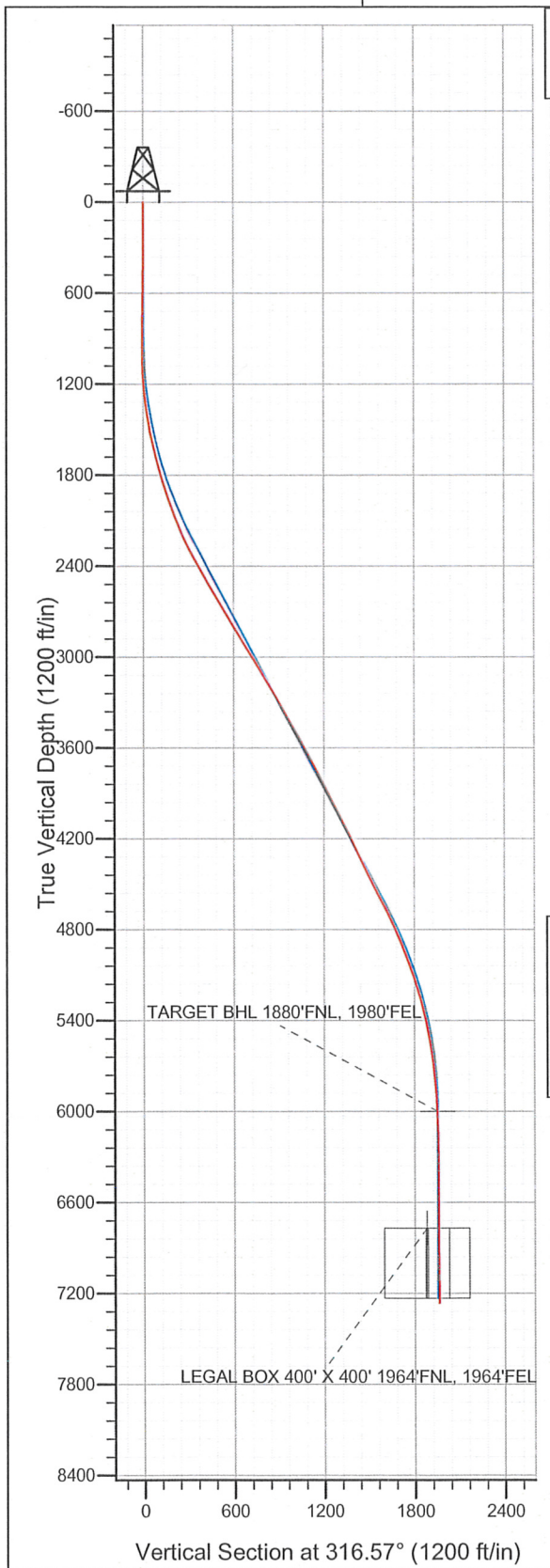
Well Name: **Pioneer Y07-07D**

Surface Location: Pioneer Y07-08D Pad Sec.7-T2N-R64W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

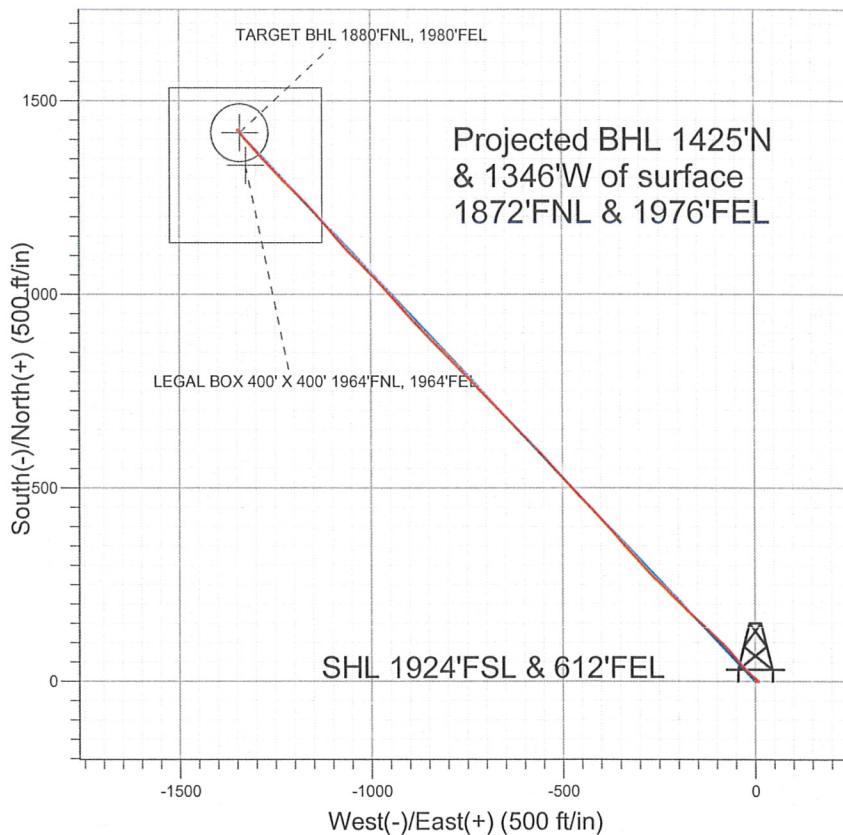
Ground Elevation: 4860.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1299144.45	3255192.83	40.150940	-104.587060	

Original Well Elev WELL @ 4873.0ft (Original Well Elev)



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- Pioneer Y07-07D, Wellbore #1, Noble Pioneer Y07-07D Plan #3 (6-03-11) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
7702'MD & 7263'TVD @ 1960'VS
0.3 deg Inc 68.1 deg AZ

Project: SEC.7-T2N-R64W
Site: Pioneer Y07-08D Pad Sec.7-T2N-R64W
Well: Pioneer Y07-07D
Plan: Wellbore #1



Directional

**NOBLE ENERGY INC WELD
COUNTY CO**

SEC.7-T2N-R64W

Pioneer Y07-08D Pad Sec.7-T2N-R64W

Pioneer Y07-07D

Wellbore #1

Survey: Survey #1

Standard Survey Report

28 June, 2011



Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.7-T2N-R64W
Site: Pioneer Y07-08D Pad Sec.7-T2N-R64W
Well: Pioneer Y07-07D
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Pioneer Y07-07D
TVD Reference: WELL @ 4873.0ft (Original Well Elev)
MD Reference: WELL @ 4873.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Landmark

Project	SEC.7-T2N-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 Pioneer Y07-08D Pad Sec.7-T2N-R64W

Site Position:		Northing:	1,299,130.06 ft	Latitude:	40.150900
From:	Lat/Long	Easting:	3,255,209.75 ft	Longitude:	-104.587000
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.59 °

Well	Pioneer Y07-07D				
Well Position	+N/-S	0.0 ft	Northing:	1,299,144.45 ft	Latitude: 40.150940
	+E/-W	0.0 ft	Easting:	3,255,192.83 ft	Longitude: -104.587060
Position Uncertainty	0.0 ft		Wellhead Elevation:	ft	Ground Level: 4,860.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/3/2011	8.75	66.88	53,023

Design Wellbore #1

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
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Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	316.57

Survey Program Date 6/28/2011

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
890.0	7,702.0	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
890.0	1.20	92.70	889.9	-0.4	9.3	-6.7	0.13	0.13	0.00
984.0	0.40	43.40	983.9	-0.2	10.5	-7.4	1.05	-0.85	-52.45
1,077.0	1.90	301.70	1,076.9	0.8	9.4	-5.9	2.17	1.61	-109.36
1,171.0	4.20	308.20	1,170.8	3.7	5.4	-1.0	2.47	2.45	6.91
1,265.0	6.00	308.50	1,264.4	8.9	-1.2	7.3	1.92	1.91	0.32
1,359.0	7.70	311.10	1,357.7	16.1	-9.7	18.4	1.84	1.81	2.77
1,453.0	9.40	316.20	1,450.7	25.8	-19.8	32.4	1.98	1.81	5.43
1,547.0	12.00	319.20	1,543.0	38.8	-31.5	49.8	2.83	2.77	3.19
1,641.0	14.50	318.90	1,634.5	55.0	-45.6	71.3	2.66	2.66	-0.32
1,735.0	16.00	319.80	1,725.2	73.8	-61.7	96.0	1.62	1.60	0.96
1,829.0	16.70	315.70	1,815.4	93.3	-79.5	122.5	1.44	0.74	-4.36
1,923.0	17.60	312.40	1,905.2	112.6	-99.4	150.1	1.41	0.96	-3.51

Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.7-T2N-R64W
Site: Pioneer Y07-08D Pad Sec.7-T2N-R64W
Well: Pioneer Y07-07D
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Pioneer Y07-07D
TVD Reference: WELL @ 4873.0ft (Original Well Elev)
MD Reference: WELL @ 4873.0ft (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)
2,017.0	19.80	312.50	1,994.3	132.9	-121.7	180.2	2.34	2.34	0.11
2,111.0	21.50	313.30	2,082.2	155.5	-146.0	213.3	1.83	1.81	0.85
2,205.0	23.60	314.10	2,169.0	180.4	-172.0	249.3	2.26	2.23	0.85
2,298.0	25.70	314.30	2,253.6	207.5	-199.8	288.0	2.26	2.26	0.22
2,392.0	28.10	315.30	2,337.4	237.4	-230.0	330.5	2.60	2.55	1.06
2,486.0	29.40	315.10	2,419.8	269.5	-261.8	375.7	1.39	1.38	-0.21
2,580.0	30.20	317.50	2,501.4	303.3	-294.1	422.4	1.53	0.85	2.55
2,674.0	30.50	318.20	2,582.5	338.5	-326.0	469.9	0.49	0.32	0.74
2,768.0	31.10	319.40	2,663.2	374.7	-357.7	518.0	0.91	0.64	1.28
2,862.0	30.20	317.40	2,744.1	410.6	-389.5	565.9	1.45	-0.96	-2.13
2,956.0	31.30	316.50	2,824.9	445.7	-422.3	614.0	1.27	1.17	-0.96
3,050.0	32.00	316.70	2,904.9	481.5	-456.2	663.3	0.75	0.74	0.21
3,144.0	31.30	317.70	2,984.9	517.7	-489.7	712.6	0.93	-0.74	1.06
3,238.0	31.80	317.60	3,065.0	554.1	-522.8	761.8	0.53	0.53	-0.11
3,332.0	30.00	315.90	3,145.7	589.2	-555.9	810.0	2.13	-1.91	-1.81
3,425.0	30.10	315.70	3,226.2	622.6	-588.3	856.6	0.15	0.11	-0.22
3,519.0	31.00	316.00	3,307.1	656.9	-621.6	904.4	0.97	0.96	0.32
3,613.0	30.30	316.20	3,388.0	691.4	-654.9	952.3	0.75	-0.74	0.21
3,707.0	29.00	315.40	3,469.7	724.8	-687.3	998.8	1.45	-1.38	-0.85
3,801.0	28.70	314.90	3,552.0	756.9	-719.3	1,044.1	0.41	-0.32	-0.53
3,895.0	28.50	316.60	3,634.5	789.1	-750.7	1,089.1	0.89	-0.21	1.81
3,989.0	28.10	316.00	3,717.3	821.4	-781.4	1,133.7	0.52	-0.43	-0.64
4,083.0	26.40	314.80	3,800.9	852.0	-811.6	1,176.7	1.90	-1.81	-1.28
4,177.0	26.80	315.50	3,884.9	881.9	-841.3	1,218.8	0.54	0.43	0.74
4,271.0	26.50	316.40	3,968.9	912.2	-870.6	1,261.0	0.54	-0.32	0.96
4,365.0	28.00	317.70	4,052.5	943.7	-900.0	1,304.0	1.72	1.60	1.38
4,459.0	27.40	318.80	4,135.7	976.3	-929.1	1,347.7	0.84	-0.64	1.17
4,553.0	25.80	318.10	4,219.8	1,007.8	-957.0	1,389.7	1.73	-1.70	-0.74
4,647.0	24.20	316.70	4,305.0	1,037.0	-983.8	1,429.5	1.81	-1.70	-1.49
4,740.0	26.30	314.50	4,389.1	1,065.3	-1,011.6	1,469.1	2.47	2.26	-2.37
4,834.0	25.90	314.70	4,473.5	1,094.4	-1,041.1	1,510.4	0.44	-0.43	0.21
4,928.0	27.70	317.60	4,557.4	1,124.9	-1,070.4	1,552.8	2.37	1.91	3.09
5,022.0	28.00	319.80	4,640.5	1,157.9	-1,099.4	1,596.7	1.14	0.32	2.34
5,116.0	26.20	319.70	4,724.2	1,190.6	-1,127.0	1,639.4	1.92	-1.91	-0.11
5,210.0	23.70	316.80	4,809.4	1,220.2	-1,153.4	1,679.1	2.96	-2.66	-3.09
5,304.0	21.60	314.80	4,896.2	1,246.2	-1,178.6	1,715.2	2.38	-2.23	-2.13
5,398.0	20.50	314.80	4,983.9	1,270.0	-1,202.6	1,749.0	1.17	-1.17	0.00
5,492.0	19.80	315.50	5,072.1	1,292.9	-1,225.4	1,781.4	0.79	-0.74	0.74
5,586.0	17.70	316.00	5,161.1	1,314.6	-1,246.5	1,811.6	2.24	-2.23	0.53
5,680.0	15.90	316.40	5,251.1	1,334.2	-1,265.3	1,838.7	1.92	-1.91	0.43
5,774.0	13.10	316.70	5,342.1	1,351.2	-1,281.5	1,862.3	2.98	-2.98	0.32
5,868.0	11.40	317.70	5,434.0	1,365.9	-1,295.0	1,882.2	1.82	-1.81	1.06
5,962.0	10.00	319.20	5,526.3	1,378.9	-1,306.6	1,899.7	1.52	-1.49	1.60
6,056.0	8.80	316.90	5,619.1	1,390.4	-1,316.9	1,915.0	1.34	-1.28	-2.45
6,150.0	7.00	319.80	5,712.2	1,400.0	-1,325.5	1,927.9	1.96	-1.91	3.09
6,244.0	5.20	322.70	5,805.6	1,407.7	-1,331.8	1,937.9	1.94	-1.91	3.09
6,338.0	3.80	325.50	5,899.4	1,413.7	-1,336.1	1,945.2	1.51	-1.49	2.98
6,432.0	3.30	327.20	5,993.2	1,418.5	-1,339.3	1,950.9	0.54	-0.53	1.81
6,438.8	3.14	327.45	6,000.0	1,418.9	-1,339.5	1,951.3	2.37	-2.36	3.64
TARGET BHL 1880'FNL, 1980'FEL									
6,526.0	1.10	337.00	6,087.1	1,421.6	-1,341.2	1,954.4	2.37	-2.34	10.96
6,650.0	0.20	319.20	6,211.1	1,422.9	-1,341.8	1,955.7	0.74	-0.73	-14.35
6,713.0	0.40	330.20	6,274.1	1,423.2	-1,341.9	1,956.1	0.33	0.32	17.46
6,807.0	0.70	312.90	6,368.1	1,423.9	-1,342.5	1,957.0	0.36	0.32	-18.40

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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)
6,901.0	0.60	280.70	6,462.1	1,424.3	-1,343.4	1,957.9	0.40	-0.11	-34.26
6,995.0	0.30	233.70	6,556.1	1,424.3	-1,344.1	1,958.4	0.48	-0.32	-50.00
7,089.0	0.20	284.90	6,650.1	1,424.2	-1,344.5	1,958.5	0.25	-0.11	54.47
7,183.0	0.40	239.30	6,744.1	1,424.1	-1,344.9	1,958.7	0.32	0.21	-48.51
7,209.9	0.33	246.01	6,771.0	1,424.0	-1,345.1	1,958.8	0.30	-0.26	24.92
LEGAL BOX 400' X 400' 1964'FNL, 1964'FEL - TARGET CIRCLE 1880'FNL & 1980'FEL									
7,277.0	0.20	281.60	6,838.1	1,423.9	-1,345.4	1,959.0	0.30	-0.19	53.06
7,371.0	0.40	257.70	6,932.1	1,423.9	-1,345.8	1,959.3	0.25	0.21	-25.43
7,465.0	0.40	315.40	7,026.1	1,424.0	-1,346.4	1,959.8	0.41	0.00	61.38
7,559.0	0.40	10.40	7,120.1	1,424.6	-1,346.6	1,960.3	0.39	0.00	58.51
7,653.0	0.30	68.10	7,214.1	1,425.0	-1,346.3	1,960.4	0.37	-0.11	61.38
7,702.0	0.30	68.10	7,263.1	1,425.1	-1,346.0	1,960.3	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____