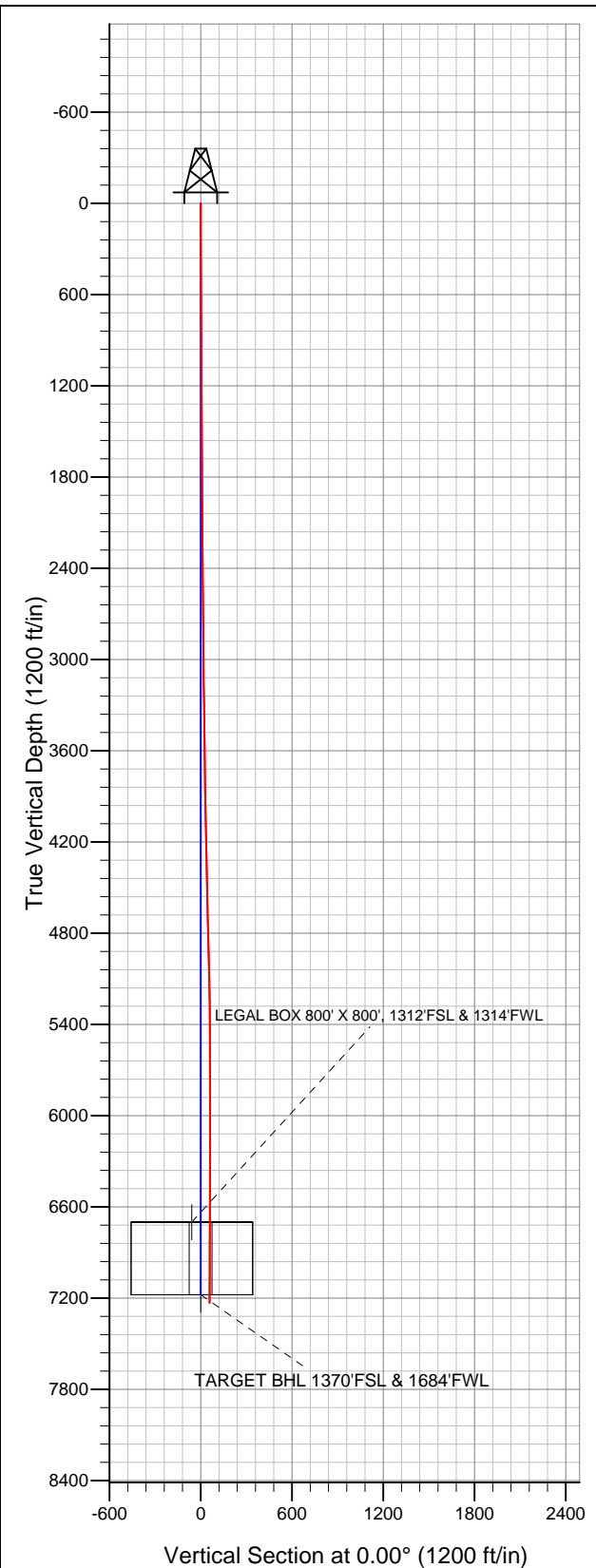




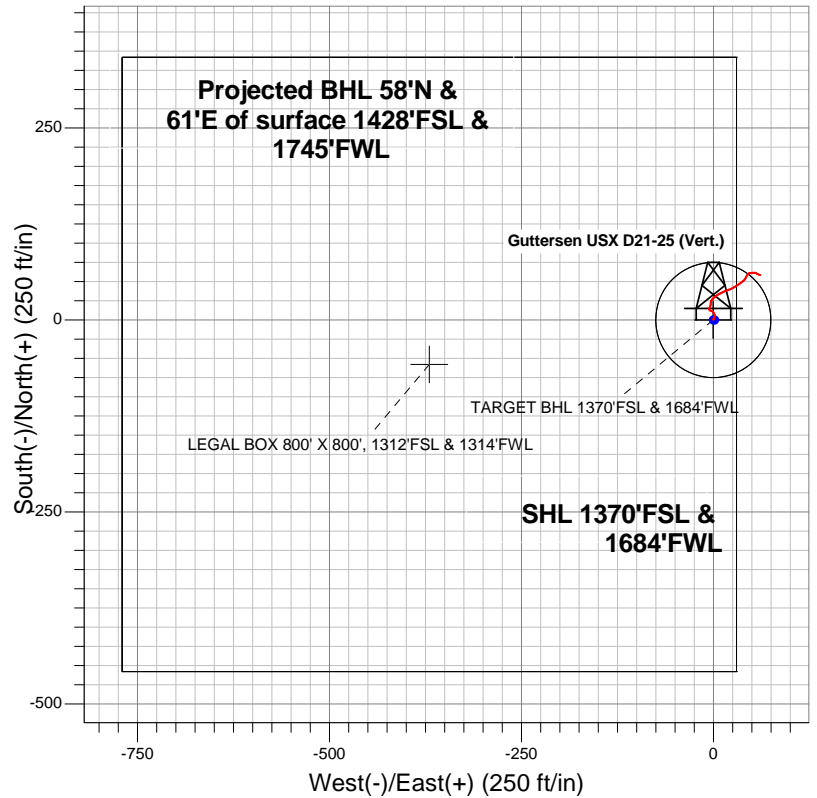
Well Name: Gutteresen USX D21-25 (Vert.)

Surface Location: Gutteresen USX D21-32D Pad Sec.21-T3N-R64W
North American Datum 1983 US State Plane 1983Colorado Northern Zone
Ground Elevation: 4821.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1319816.13	3262627.68	40.207470	-104.559680	
Original Well Elev				WELL @ 4834.0ft (Original Well Elev)		



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- Wellbore #1
- Gutteresen USX D21-25 (Vert.), Wellbore #1, Plan #1 (6-29-12) R V0
- Survey #1

Final Survey Plot

Projected Final Survey -
7232'MD & 7231'TVD @ 58°VS
0.60 deg Inc 122.90 deg AZ

Project: SEC.21-T3N-R64W
Site: Gutteresen USX D21-32D Pad Sec.21-T3N-R64W
Well: Gutteresen USX D21-25 (Vert.)
Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.21-T3N-R64W

Guttersen USX D21-32D Pad Sec.21-T3N-R64W

Guttersen USX D21-25 (Vert.)

Wellbore #1

Survey: Survey #1

Standard Survey Report

10 July, 2012



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Guttersten USX D21-25 (Vert.)
Project:	SEC.21-T3N-R64W	TVD Reference:	WELL @ 4834.0ft (Original Well Elev)
Site:	Guttersten USX D21-32D Pad Sec.21-T3N-R64W	MD Reference:	WELL @ 4834.0ft (Original Well Elev)
Well:	Guttersten USX D21-25 (Vert.)	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.21-T3N-R64W, Weld County, CO		
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		Guttersen USX D21-32D Pad Sec.21-T3N-R64W			
Site Position:		Northing:	1,319,830.53ft	Latitude:	40.207510
From:	Lat/Long	Easting:	3,262,610.76ft	Longitude:	-104.559740
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.61 °

Well	Guttersten USX D21-25 (Vert.)					
Well Position	+N-S	0.0 ft	Northing:	1,319,816.13 ft	Latitude:	40.207470
	+E-W	0.0 ft	Easting:	3,262,627.68 ft	Longitude:	-104.559680
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,821.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/29/2012	8.60	66.89	52,943

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 (°)	
	7,178.0	0.0	0.0	0.00	

Survey Program	Date	7/10/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
110.0	7,232.0	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	
110.0	0.10	6.00	110.0	0.1	0.0	0.1	0.09	0.09	0.00	
202.0	0.10	18.30	202.0	0.3	0.0	0.3	0.02	0.00	13.37	
294.0	0.10	350.70	294.0	0.4	0.1	0.4	0.05	0.00	-30.00	
386.0	0.40	351.80	386.0	0.8	0.0	0.8	0.33	0.33	1.20	
477.0	0.20	335.80	477.0	1.3	-0.1	1.3	0.24	-0.22	-17.58	
569.0	0.40	34.00	569.0	1.7	0.0	1.7	0.37	0.22	63.26	
671.0	0.50	61.90	671.0	2.2	0.6	2.2	0.23	0.10	27.35	
749.0	0.60	24.80	749.0	2.7	1.1	2.7	0.46	0.13	-47.56	
845.0	0.60	8.10	845.0	3.7	1.3	3.7	0.18	0.00	-17.40	
1,008.0	0.40	16.90	1,008.0	5.1	1.6	5.1	0.13	-0.12	5.40	
1,171.0	0.30	5.00	1,171.0	6.0	1.8	6.0	0.08	-0.06	-7.30	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Guttersten USX D21-25 (Vert.)
Project:	SEC.21-T3N-R64W	TVD Reference:	WELL @ 4834.0ft (Original Well Elev)
Site:	Guttersten USX D21-32D Pad Sec.21-T3N-R64W	MD Reference:	WELL @ 4834.0ft (Original Well Elev)
Well:	Guttersten USX D21-25 (Vert.)	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	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)
1,335.0	0.30	328.20	1,335.0	6.8	1.6	6.8	0.12	0.00	-22.44
1,498.0	0.30	331.70	1,498.0	7.6	1.2	7.6	0.01	0.00	2.15
1,662.0	0.30	346.90	1,662.0	8.4	0.9	8.4	0.05	0.00	9.27
1,826.0	0.40	348.30	1,826.0	9.3	0.7	9.3	0.06	0.06	0.85
1,989.0	0.60	315.40	1,989.0	10.5	0.0	10.5	0.21	0.12	-20.18
2,153.0	1.00	286.90	2,152.9	11.5	-2.0	11.5	0.34	0.24	-17.38
2,316.0	1.00	304.50	2,315.9	12.7	-4.5	12.7	0.19	0.00	10.80
2,479.0	0.40	356.00	2,478.9	14.1	-5.7	14.1	0.50	-0.37	31.60
2,643.0	0.70	34.80	2,642.9	15.5	-5.2	15.5	0.28	0.18	23.66
2,806.0	0.50	24.50	2,805.9	17.0	-4.3	17.0	0.14	-0.12	-6.32
2,970.0	0.50	23.10	2,969.9	18.3	-3.8	18.3	0.01	0.00	-0.85
3,133.0	0.60	359.30	3,132.9	19.8	-3.5	19.8	0.15	0.06	-14.60
3,296.0	0.90	0.40	3,295.9	21.9	-3.5	21.9	0.18	0.18	0.67
3,460.0	0.80	18.10	3,459.8	24.3	-3.1	24.3	0.17	-0.06	10.79
3,738.0	1.20	49.60	3,737.8	28.0	-0.3	28.0	0.24	0.14	11.33
4,032.0	2.10	52.20	4,031.7	33.3	6.3	33.3	0.31	0.31	0.88
4,315.0	2.50	74.70	4,314.5	38.1	16.3	38.1	0.35	0.14	7.95
4,604.0	3.10	58.00	4,603.1	43.9	29.1	43.9	0.35	0.21	-5.78
4,767.0	3.20	54.40	4,765.9	48.9	36.5	48.9	0.14	0.06	-2.21
4,931.0	1.50	29.40	4,929.7	53.5	41.3	53.5	1.19	-1.04	-15.24
5,094.0	1.30	28.30	5,092.7	56.9	43.2	56.9	0.12	-0.12	-0.67
5,258.0	1.00	42.20	5,256.6	59.6	45.0	59.6	0.25	-0.18	8.48
5,421.0	0.60	65.40	5,419.6	61.1	46.8	61.1	0.31	-0.25	14.23
5,584.0	0.60	96.00	5,582.6	61.3	48.4	61.3	0.19	0.00	18.77
5,748.0	0.40	75.10	5,746.6	61.4	49.8	61.4	0.16	-0.12	-12.74
5,911.0	0.50	89.70	5,909.6	61.5	51.1	61.5	0.09	0.06	8.96
6,075.0	0.50	92.80	6,073.6	61.5	52.5	61.5	0.02	0.00	1.89
6,238.0	0.40	80.90	6,236.6	61.6	53.8	61.6	0.08	-0.06	-7.30
6,446.0	0.40	113.40	6,444.6	61.4	55.1	61.4	0.11	0.00	15.63
6,565.0	0.40	132.40	6,563.6	60.9	55.8	60.9	0.11	0.00	15.97
6,699.2	0.48	121.72	6,697.8	60.3	56.7	60.3	0.09	0.06	-7.96
LEGAL BOX 800' X 800', 1312'FSL & 1314'FWL									
6,701.3	0.48	121.59	6,699.8	60.3	56.7	60.3	0.09	0.07	-6.56
TARGET CIRCLE 1370'FSL & 1684'FWL									
6,728.0	0.50	119.90	6,726.6	60.2	56.9	60.2	0.09	0.07	-6.31
6,892.0	0.50	116.40	6,890.6	59.5	58.1	59.5	0.02	0.00	-2.13
7,055.0	0.50	100.40	7,053.6	59.1	59.5	59.1	0.09	0.00	-9.82
7,179.1	0.56	117.06	7,177.7	58.7	60.5	58.7	0.13	0.05	13.42
TARGET BHL 1370'FSL & 1684'FWL									
7,232.0	0.60	122.90	7,230.6	58.4	61.0	58.4	0.13	0.07	11.05

Checked By: _____ Approved By: _____ Date: _____