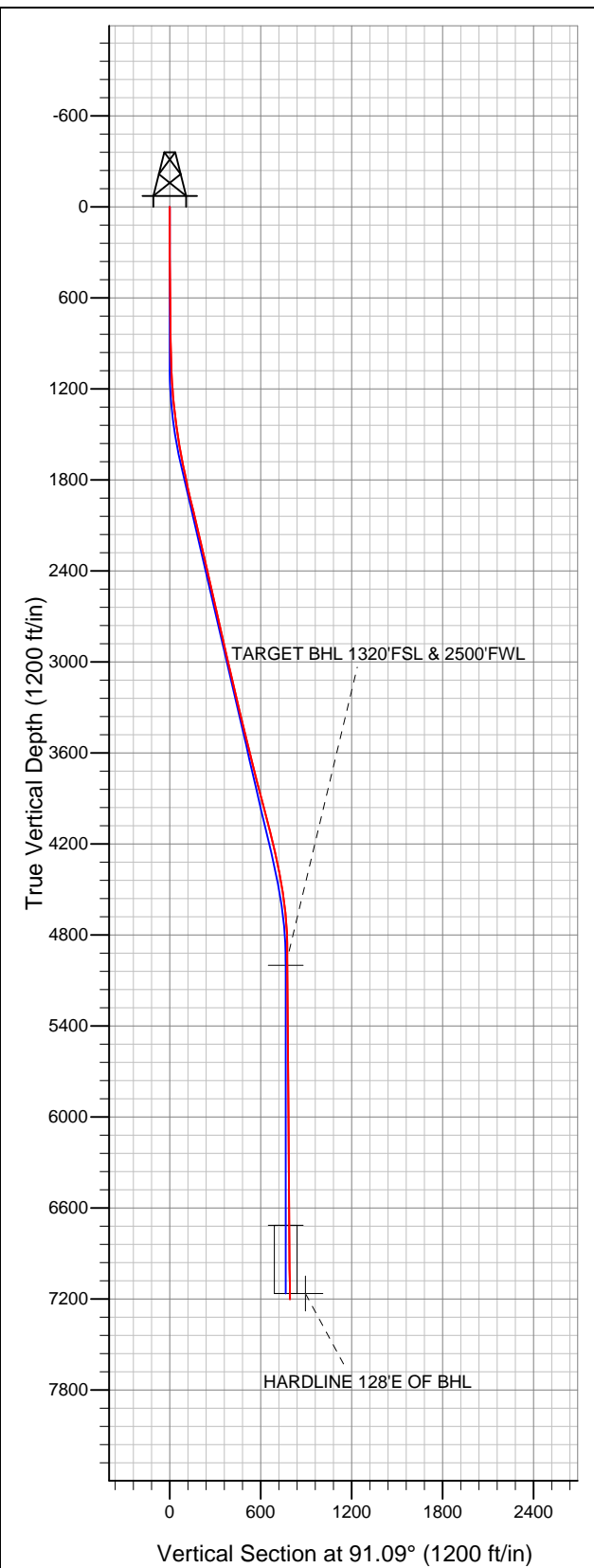


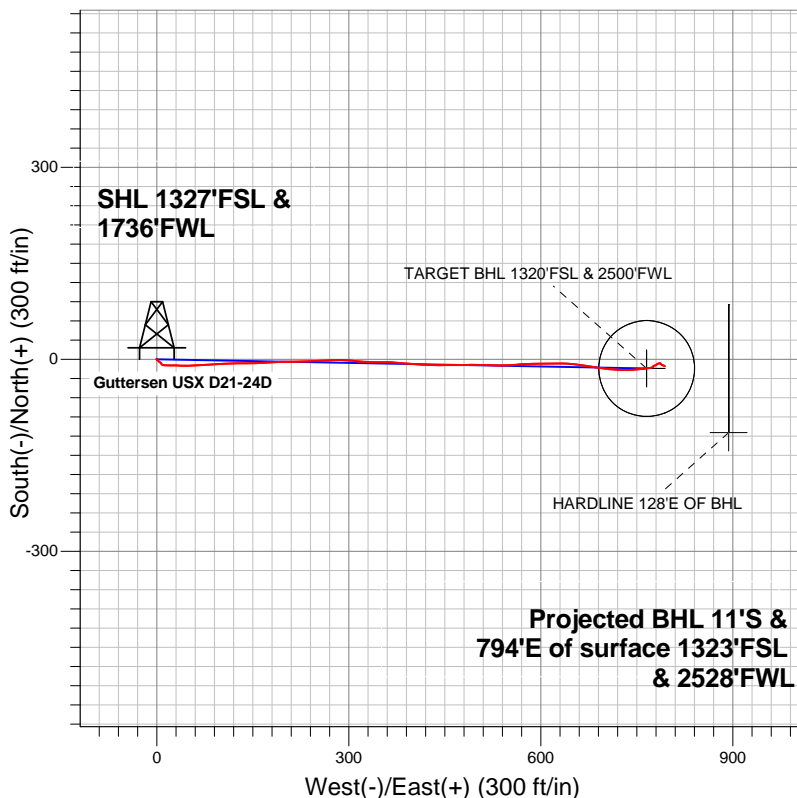
Well Name: Gutteresen USX D21-24D

Surface Location: Gutteresen USX D21-32D Pad Sec.21-T3N-R64W
North American Datum 1983 US State Plane 1983Colorado Northern Zone
Ground Elevation: 4820.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1319772.98	3262681.20	40.207350	-104.559490	
Original Well Elev		WELL @ 4833.0ft (Original Well Elev)				



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- Wellbore #1
- Gutteresen USX D21-24D, Wellbore #1, Noble Gutteresen USX D21-24D Plan #1 (7-16-12) R V0
- Survey #1

Final Survey Plot

Projected Final Survey -
7285'MD & 7201'TVD @ 794'VS
1.10 deg Inc 120.80 deg AZ

Project: SEC.21-T3N-R64W
Site: Gutteresen USX D21-32D Pad Sec.21-T3N-R64W
Well: Gutteresen USX D21-24D
Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.21-T3N-R64W

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

Guttersen USX D21-24D

Wellbore #1

Survey: Survey #1

Standard Survey Report

25 July, 2012



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Guttersten USX D21-24D
Project:	SEC.21-T3N-R64W	TVD Reference:	WELL @ 4833.0ft (Original Well Elev)
Site:	Guttersten USX D21-32D Pad Sec.21-T3N-R64W	MD Reference:	WELL @ 4833.0ft (Original Well Elev)
Well:	Guttersten USX D21-24D	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 D21-24D					
Well Position	+N-S	0.0 ft	Northing:	1,319,772.98 ft	Latitude:	40.207350
	+E-W	0.0 ft	Easting:	3,262,681.20 ft	Longitude:	-104.559490
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,820.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/16/2012	8.59	66.89	52,938

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	91.09	

Survey Program	Date	7/25/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
144.0	7,285.0	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	
144.0	0.20	257.20	144.0	-0.1	-0.2	-0.2	0.14	0.14	0.00	
236.0	0.40	155.40	236.0	-0.4	-0.3	-0.3	0.52	0.22	-110.65	
328.0	0.60	131.30	328.0	-1.0	0.2	0.2	0.31	0.22	-26.20	
420.0	0.70	132.90	420.0	-1.7	1.0	1.0	0.11	0.11	1.74	
511.0	0.90	134.20	511.0	-2.6	1.9	2.0	0.22	0.22	1.43	
613.0	1.00	129.20	613.0	-3.7	3.2	3.3	0.13	0.10	-4.90	
695.0	0.90	120.30	695.0	-4.5	4.3	4.4	0.22	-0.12	-10.85	
750.0	0.80	116.90	749.9	-4.9	5.0	5.1	0.20	-0.18	-6.18	
795.0	0.80	114.00	794.9	-5.1	5.6	5.7	0.09	0.00	-6.44	
876.0	1.30	159.80	875.9	-6.2	6.4	6.5	1.16	0.62	56.54	
957.0	1.50	140.50	956.9	-7.9	7.4	7.6	0.63	0.25	-23.83	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Guttersten USX D21-24D
Project:	SEC.21-T3N-R64W	TVD Reference:	WELL @ 4833.0ft (Original Well Elev)
Site:	Guttersten USX D21-32D Pad Sec.21-T3N-R64W	MD Reference:	WELL @ 4833.0ft (Original Well Elev)
Well:	Guttersten USX D21-24D	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)
1,039.0	2.30	103.20	1,038.9	-9.1	9.7	9.9	1.75	0.98	-45.49
1,121.0	3.20	92.10	1,120.8	-9.6	13.6	13.8	1.27	1.10	-13.54
1,202.0	4.20	88.30	1,201.6	-9.6	18.8	19.0	1.27	1.23	-4.69
1,284.0	5.50	91.10	1,283.3	-9.5	25.7	25.9	1.61	1.59	3.41
1,366.0	6.50	93.70	1,364.9	-9.9	34.3	34.5	1.26	1.22	3.17
1,447.0	7.80	90.00	1,445.2	-10.2	44.4	44.6	1.70	1.60	-4.57
1,529.0	9.10	86.90	1,526.3	-9.9	56.4	56.6	1.68	1.59	-3.78
1,611.0	10.30	86.20	1,607.2	-9.0	70.2	70.4	1.47	1.46	-0.85
1,692.0	11.20	86.90	1,686.7	-8.1	85.3	85.4	1.12	1.11	0.86
1,774.0	12.00	86.90	1,767.1	-7.2	101.7	101.9	0.98	0.98	0.00
1,856.0	12.80	89.20	1,847.1	-6.6	119.3	119.4	1.15	0.98	2.80
1,937.0	13.00	89.30	1,926.1	-6.4	137.4	137.5	0.25	0.25	0.12
2,019.0	12.80	88.10	2,006.0	-6.0	155.7	155.8	0.41	-0.24	-1.46
2,101.0	13.50	87.00	2,085.9	-5.2	174.4	174.4	0.91	0.85	-1.34
2,182.0	13.50	87.80	2,164.6	-4.3	193.2	193.3	0.23	0.00	0.99
2,264.0	13.70	89.30	2,244.3	-3.8	212.5	212.6	0.49	0.24	1.83
2,346.0	13.40	88.30	2,324.1	-3.4	231.7	231.7	0.46	-0.37	-1.22
2,427.0	12.90	87.20	2,402.9	-2.7	250.1	250.1	0.69	-0.62	-1.36
2,509.0	12.20	87.80	2,483.0	-1.9	267.9	267.9	0.87	-0.85	0.73
2,591.0	12.70	88.30	2,563.1	-1.3	285.6	285.6	0.62	0.61	0.61
2,673.0	12.50	97.20	2,643.1	-2.2	303.4	303.4	2.38	-0.24	10.85
2,754.0	13.60	93.40	2,722.0	-3.9	321.6	321.6	1.72	1.36	-4.69
2,836.0	13.30	90.60	2,801.7	-4.5	340.7	340.7	0.87	-0.37	-3.41
2,918.0	12.10	90.20	2,881.7	-4.7	358.7	358.7	1.47	-1.46	-0.49
2,999.0	12.10	95.70	2,960.9	-5.5	375.6	375.7	1.42	0.00	6.79
3,081.0	14.20	94.80	3,040.8	-7.2	394.2	394.3	2.57	2.56	-1.10
3,163.0	12.90	92.70	3,120.5	-8.5	413.4	413.5	1.69	-1.59	-2.56
3,244.0	13.80	90.90	3,199.3	-9.1	432.1	432.2	1.22	1.11	-2.22
3,326.0	13.60	89.00	3,279.0	-9.1	451.5	451.6	0.60	-0.24	-2.32
3,408.0	12.80	91.10	3,358.8	-9.1	470.2	470.3	1.14	-0.98	2.56
3,489.0	13.90	87.90	3,437.6	-8.9	488.9	489.0	1.64	1.36	-3.95
3,571.0	13.60	92.30	3,517.3	-8.9	508.4	508.5	1.33	-0.37	5.37
3,653.0	14.20	92.30	3,596.9	-9.7	528.1	528.2	0.73	0.73	0.00
3,734.0	14.10	85.10	3,675.4	-9.3	547.8	547.9	2.18	-0.12	-8.89
3,816.0	14.00	87.60	3,755.0	-8.0	567.7	567.7	0.75	-0.12	3.05
3,898.0	15.40	88.50	3,834.3	-7.3	588.5	588.5	1.73	1.71	1.10
3,979.0	15.10	89.00	3,912.4	-6.8	609.8	609.8	0.40	-0.37	0.62
4,061.0	14.50	89.70	3,991.7	-6.6	630.7	630.7	0.76	-0.73	0.85
4,143.0	13.50	96.70	4,071.3	-7.6	650.5	650.5	2.40	-1.22	8.54
4,224.0	13.50	99.00	4,150.0	-10.2	669.2	669.3	0.66	0.00	2.84
4,306.0	13.80	98.30	4,229.7	-13.1	688.4	688.5	0.42	0.37	-0.85
4,388.0	12.20	95.50	4,309.6	-15.4	706.7	706.8	2.10	-1.95	-3.41
4,469.0	11.20	93.40	4,388.9	-16.7	723.0	723.2	1.34	-1.23	-2.59
4,551.0	10.10	87.20	4,469.5	-16.8	738.2	738.4	1.94	-1.34	-7.56
4,633.0	8.10	84.10	4,550.5	-15.8	751.1	751.3	2.51	-2.44	-3.78
4,715.0	6.00	84.20	4,631.9	-14.8	761.1	761.3	2.56	-2.56	0.12
4,796.0	4.00	83.70	4,712.6	-14.1	768.1	768.3	2.47	-2.47	-0.62
4,878.0	3.30	71.60	4,794.4	-13.0	773.2	773.3	1.26	-0.85	-14.76
4,960.0	0.60	11.30	4,876.3	-11.9	775.5	775.6	3.72	-3.29	-73.54
5,041.0	0.50	22.20	4,957.3	-11.1	775.8	775.8	0.18	-0.12	13.46
5,083.6	0.43	37.74	4,999.9	-10.8	775.9	776.0	0.34	-0.17	36.50
TARGET BHL 1320'FSL & 2500'FWL									
5,123.0	0.40	55.80	5,039.3	-10.6	776.1	776.2	0.34	-0.07	45.82

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Guttersen USX D21-24D
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Site:	Guttersen USX D21-32D Pad Sec.21-T3N-R64W	MD Reference:	WELL @ 4833.0ft (Original Well Elev)
Well:	Guttersen USX D21-24D	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)
5,205.0	0.40	72.60	5,121.3	-10.4	776.6	776.7	0.14	0.00	20.49
5,286.0	0.50	79.30	5,202.3	-10.2	777.3	777.3	0.14	0.12	8.27
5,368.0	0.50	65.10	5,284.3	-10.0	777.9	778.0	0.15	0.00	-17.32
5,450.0	0.50	67.20	5,366.3	-9.7	778.6	778.6	0.02	0.00	2.56
5,531.0	0.60	69.50	5,447.3	-9.4	779.3	779.3	0.13	0.12	2.84
5,613.0	0.80	49.80	5,529.3	-8.9	780.1	780.2	0.38	0.24	-24.02
5,695.0	0.60	48.70	5,611.3	-8.3	780.9	780.9	0.24	-0.24	-1.34
5,776.0	0.80	48.90	5,692.3	-7.6	781.7	781.7	0.25	0.25	0.25
5,858.0	0.60	77.00	5,774.3	-7.1	782.5	782.5	0.48	-0.24	34.27
5,940.0	0.40	70.00	5,856.3	-6.9	783.2	783.2	0.25	-0.24	-8.54
6,021.0	0.40	71.80	5,937.3	-6.7	783.7	783.7	0.02	0.00	2.22
6,103.0	0.40	69.50	6,019.3	-6.6	784.3	784.2	0.02	0.00	-2.80
6,185.0	0.40	77.40	6,101.3	-6.4	784.8	784.8	0.07	0.00	9.63
6,266.0	0.40	80.00	6,182.3	-6.3	785.4	785.3	0.02	0.00	3.21
6,348.0	0.40	76.30	6,264.3	-6.2	785.9	785.9	0.03	0.00	-4.51
6,430.0	0.30	134.00	6,346.3	-6.3	786.4	786.3	0.43	-0.12	70.37
6,511.0	0.40	112.40	6,427.3	-6.5	786.8	786.8	0.20	0.12	-26.67
6,593.0	0.50	142.90	6,509.3	-6.9	787.3	787.2	0.31	0.12	37.20
6,675.0	0.40	142.90	6,591.3	-7.4	787.6	787.6	0.12	-0.12	0.00
6,757.0	0.50	131.70	6,673.3	-7.9	788.1	788.1	0.16	0.12	-13.66
6,797.6	0.54	140.84	6,713.9	-8.1	788.3	788.3	0.23	0.11	22.50
TARGET CIRCLE 1320'FSL & 2500'FWL									
6,838.0	0.60	148.40	6,754.3	-8.5	788.6	788.6	0.23	0.14	18.72
6,920.0	0.50	109.90	6,836.3	-9.0	789.1	789.2	0.46	-0.12	-46.95
7,002.0	0.80	115.70	6,918.3	-9.3	790.0	790.0	0.37	0.37	7.07
7,083.0	0.80	107.10	6,999.3	-9.7	791.0	791.1	0.15	0.00	-10.62
7,165.0	0.80	104.80	7,081.2	-10.1	792.1	792.2	0.04	0.00	-2.80
7,240.0	0.90	117.10	7,156.2	-10.5	793.2	793.2	0.28	0.13	16.40
HARDLINE 128'E OF BHL									
7,285.0	1.10	120.80	7,201.2	-10.8	793.8	793.9	0.47	0.44	8.22

Checked By: _____ Approved By: _____ Date: _____