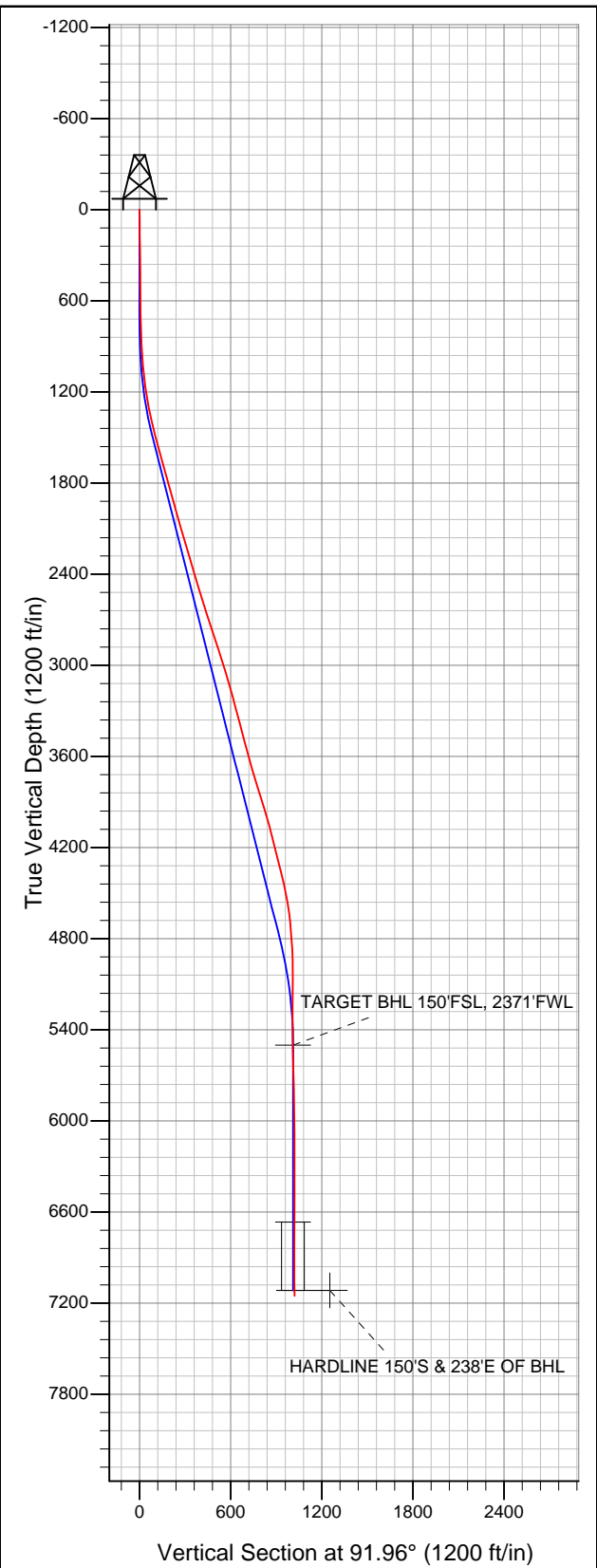


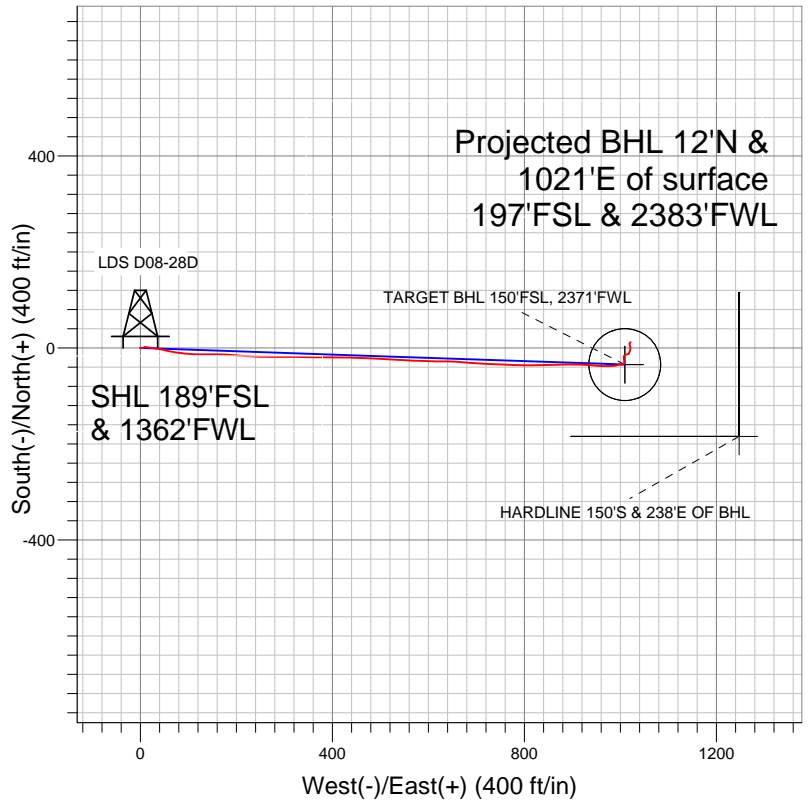


Well Name: LDS D08-28D

Surface Location: LDS D08-30D Pad Sec.5-T3N-R64W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone
Ground Elevation: 4753.0
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1334405.84 3257007.17 40.247680 -104.579260
Original Well Elev WELL @ 4766.0ft (Original Well Elev)



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- LDS D08-28D, Wellbore #1, Noble LDS D08-28D Plan #1 (3-20-12) R V0
- Wellbore #1

Final Survey Plot

Projected Final Survey -
7284'MD & 7151'TVD @ 1020'VS
1.1 deg Inc 59.0 deg AZ

Project: SEC.5-T3N-R64W
Site: LDS D08-30D Pad Sec.5-T3N-R64W
Well: LDS D08-28D
Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.5-T3N-R64W

LDS D08-30D Pad Sec.5-T3N-R64W

LDS D08-28D

Wellbore #1

Design: Wellbore #1

Standard Survey Report

26 March, 2012



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well LDS D08-28D
Project:	SEC.5-T3N-R64W	TVD Reference:	WELL @ 4766.0ft (Original Well Elev)
Site:	LDS D08-30D Pad Sec.5-T3N-R64W	MD Reference:	WELL @ 4766.0ft (Original Well Elev)
Well:	LDS D08-28D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.5-T3N-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	LDS D08-30D Pad Sec.5-T3N-R64W		
Site Position:		Northing:	1,334,405.07 ft
From:	Lat/Long	Easting:	3,256,931.80 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.247680
		Longitude:	-104.579530
		Grid Convergence:	0.59 °

Well	LDS D08-28D		
Well Position	+N/-S	0.0 ft	Northing: 1,334,405.84 ft
	+E/-W	0.0 ft	Easting: 3,257,007.17 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.247680
		Longitude:	-104.579260
		Ground Level:	4,753.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/20/2012	8.65	66.93	52,991

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	91.96	

Survey Program	Date	3/26/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
77.0	7,284.0	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	
77.0	0.70	102.50	77.0	-0.1	0.5	0.5	0.91	0.91	0.00	
168.0	0.70	90.60	168.0	-0.2	1.6	1.6	0.16	0.00	-13.08	
257.0	0.50	94.60	257.0	-0.3	2.5	2.5	0.23	-0.22	4.49	
360.0	0.40	88.80	360.0	-0.3	3.3	3.3	0.11	-0.10	-5.63	
488.0	0.90	70.50	488.0	0.1	4.7	4.7	0.42	0.39	-14.30	
616.0	0.70	68.40	616.0	0.7	6.4	6.3	0.16	-0.16	-1.64	
701.0	0.90	62.30	701.0	1.2	7.4	7.4	0.26	0.24	-7.18	
769.0	1.10	53.10	768.9	1.8	8.4	8.4	0.38	0.29	-13.53	
898.0	2.90	102.30	897.9	1.9	12.6	12.5	1.81	1.40	38.14	
1,026.0	5.60	94.40	1,025.5	0.7	22.0	22.0	2.15	2.11	-6.17	
1,154.0	7.50	102.20	1,152.7	-1.5	36.4	36.4	1.64	1.48	6.09	
1,283.0	10.30	102.00	1,280.1	-5.7	55.9	56.1	2.17	2.17	-0.16	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well LDS D08-28D
Project:	SEC.5-T3N-R64W	TVD Reference:	WELL @ 4766.0ft (Original Well Elev)
Site:	LDS D08-30D Pad Sec.5-T3N-R64W	MD Reference:	WELL @ 4766.0ft (Original Well Elev)
Well:	LDS D08-28D	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)
1,411.0	13.70	98.10	1,405.3	-10.2	82.1	82.4	2.73	2.66	-3.05
1,540.0	15.20	91.80	1,530.2	-12.9	114.1	114.5	1.68	1.16	-4.88
1,668.0	15.00	88.60	1,653.8	-13.0	147.5	147.8	0.67	-0.16	-2.50
1,796.0	15.70	94.40	1,777.2	-14.0	181.3	181.7	1.32	0.55	4.53
1,925.0	15.90	94.30	1,901.4	-16.6	216.3	216.8	0.16	0.16	-0.08
2,053.0	15.50	90.70	2,024.6	-18.2	250.9	251.4	0.82	-0.31	-2.81
2,182.0	16.90	90.40	2,148.5	-18.5	286.9	287.4	1.09	1.09	-0.23
2,310.0	16.40	90.40	2,271.1	-18.8	323.6	324.0	0.39	-0.39	0.00
2,438.0	16.50	90.40	2,393.9	-19.0	359.8	360.3	0.08	0.08	0.00
2,567.0	16.40	90.60	2,517.6	-19.3	396.4	396.8	0.09	-0.08	0.16
2,695.0	18.40	91.40	2,639.7	-20.0	434.6	435.1	1.57	1.56	0.63
2,824.0	18.20	92.70	2,762.2	-21.5	475.1	475.6	0.35	-0.16	1.01
2,952.0	18.30	92.80	2,883.7	-23.4	515.1	515.6	0.08	0.08	0.08
3,080.0	16.30	92.80	3,006.0	-25.2	553.2	553.7	1.56	-1.56	0.00
3,209.0	16.80	92.70	3,129.6	-27.0	589.9	590.4	0.39	0.39	-0.08
3,337.0	14.90	89.50	3,252.7	-27.7	624.8	625.4	1.63	-1.48	-2.50
3,466.0	14.60	94.10	3,377.5	-28.8	657.6	658.2	0.94	-0.23	3.57
3,594.0	15.40	94.40	3,501.1	-31.2	690.6	691.3	0.63	0.63	0.23
3,722.0	15.20	92.30	3,624.6	-33.2	724.4	725.1	0.46	-0.16	-1.64
3,851.0	16.40	93.00	3,748.7	-34.8	759.4	760.2	0.94	0.93	0.54
3,979.0	17.60	89.90	3,871.1	-35.7	796.8	797.6	1.17	0.94	-2.42
4,108.0	16.80	89.70	3,994.4	-35.6	835.0	835.7	0.62	-0.62	-0.16
4,236.0	14.30	87.80	4,117.7	-34.9	869.3	870.0	1.99	-1.95	-1.48
4,364.0	14.20	90.00	4,241.7	-34.3	900.8	901.4	0.43	-0.08	1.72
4,493.0	13.70	94.40	4,366.9	-35.5	931.8	932.5	0.91	-0.39	3.41
4,621.0	12.10	93.00	4,491.7	-37.3	960.3	961.1	1.27	-1.25	-1.09
4,750.0	7.50	86.30	4,618.8	-37.5	982.3	983.0	3.67	-3.57	-5.19
4,878.0	4.60	73.90	4,746.1	-35.5	995.5	996.2	2.47	-2.27	-9.69
5,006.0	3.60	86.20	4,873.7	-33.8	1,004.5	1,005.0	1.04	-0.78	9.61
5,135.0	2.30	352.60	5,002.6	-31.0	1,008.2	1,008.7	3.40	-1.01	-72.56
5,263.0	2.00	354.10	5,130.5	-26.2	1,007.6	1,007.9	0.24	-0.23	1.17
5,392.0	1.70	0.60	5,259.5	-22.1	1,007.4	1,007.6	0.28	-0.23	5.04
5,520.0	1.70	359.00	5,387.4	-18.3	1,007.4	1,007.4	0.04	0.00	-1.25
5,632.2	1.27	46.61	5,499.6	-15.8	1,008.3	1,008.2	1.12	-0.38	42.42
TARGET BHL 150°FSL, 2371°FWL									
5,648.0	1.30	54.40	5,515.4	-15.5	1,008.5	1,008.5	1.12	0.19	49.45
5,777.0	2.00	67.50	5,644.3	-13.8	1,011.8	1,011.7	0.61	0.54	10.16
5,905.0	2.00	78.60	5,772.2	-12.5	1,016.1	1,015.9	0.30	0.00	8.67
6,034.0	1.10	0.60	5,901.2	-10.8	1,018.3	1,018.1	1.61	-0.70	-60.47
6,162.0	0.70	25.00	6,029.2	-8.9	1,018.6	1,018.3	0.43	-0.31	19.06
6,290.0	0.90	28.90	6,157.2	-7.3	1,019.4	1,019.1	0.16	0.16	3.05
6,419.0	1.00	25.70	6,286.1	-5.4	1,020.4	1,020.0	0.09	0.08	-2.48
6,547.0	1.10	4.30	6,414.1	-3.2	1,021.0	1,020.5	0.31	0.08	-16.72
6,676.0	1.10	0.40	6,543.1	-0.7	1,021.1	1,020.5	0.06	0.00	-3.02
6,798.2	1.39	347.38	6,665.2	1.9	1,020.8	1,020.1	0.33	0.23	-10.65
TARGET CIRCLE 150°FSL, 2371°FWL									
6,804.0	1.40	346.90	6,671.1	2.0	1,020.8	1,020.1	0.33	0.26	-8.30
6,932.0	1.90	339.50	6,799.0	5.6	1,019.7	1,018.9	0.42	0.39	-5.78
7,061.0	1.20	3.00	6,928.0	8.9	1,019.0	1,018.1	0.72	-0.54	18.22
7,189.0	1.10	47.70	7,055.9	11.1	1,020.0	1,019.0	0.69	-0.08	34.92
7,237.0	1.10	59.50	7,103.9	11.6	1,020.7	1,019.7	0.47	0.00	24.58
HARDLINE 150°S & 238°E OF BHL									
7,284.0	1.10	59.00	7,150.9	12.1	1,021.5	1,020.5	0.02	0.00	-1.06

Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.5-T3N-R64W
Site: LDS D08-30D Pad Sec.5-T3N-R64W
Well: LDS D08-28D
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well LDS D08-28D
TVD Reference: WELL @ 4766.0ft (Original Well Elev)
MD Reference: WELL @ 4766.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Landmark

Checked By: _____ Approved By: _____ Date: _____