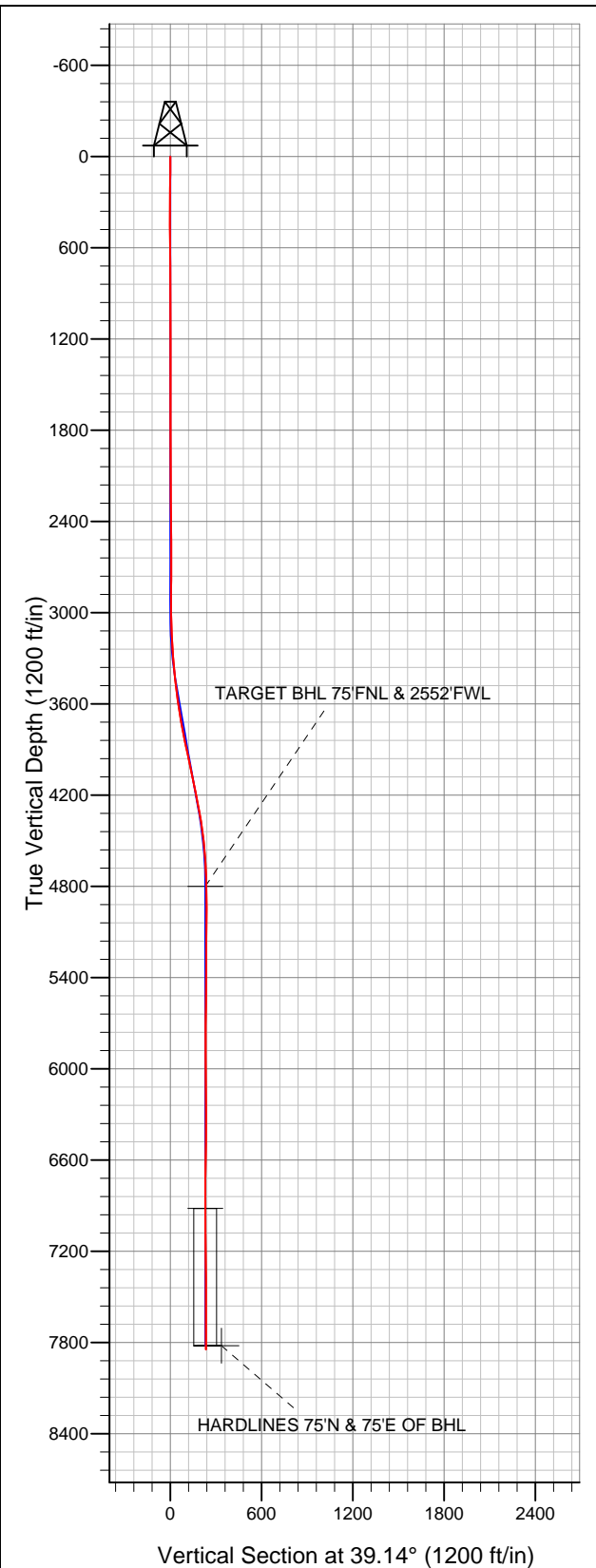




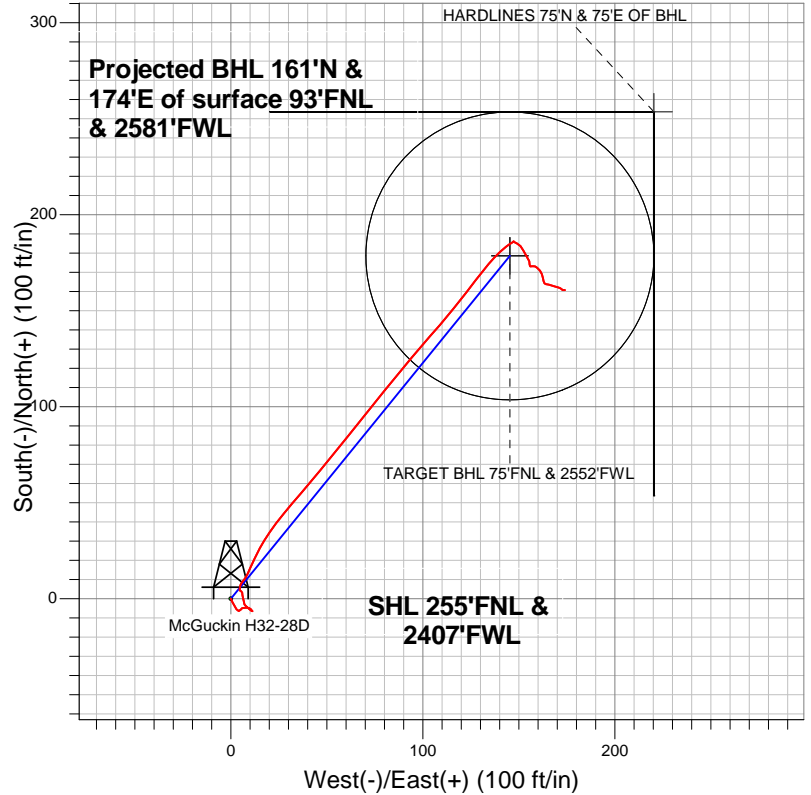
Well Name: McGuckin H32-28D

Surface Location: McGuckin H32-28D Pad Sec.32-T3N-R65W
 North American Datum 1983 US State Plane 1983Colorado Northern Zone
 Ground Elevation: 4872.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1312544.29	3226822.10	40.188480	-104.688110	
Original Well Elev			WELL @ 4885.0ft (Original Well Elev)			



NOBLE ENERGY INC WELD COUNTY CO



- LEGEND**
- Wellbore #1
 - McGuckin H32-28D, Wellbore #1, Noble McGuckin H32-28D Plan #1 (1-4-12) V0
 - Survey #1

Final Survey Plot

Projected Final Survey -
 7865'MD & 7846'TVD @ 235'VS
 0.50 deg Inc 87.10 deg AZ

Project: SEC.32-T3N-R65W
 Site: McGuckin H32-28D Pad Sec.32-T3N-R65W
 Well: McGuckin H32-28D
 Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.32-T3N-R65W

McGuckin H32-28D Pad Sec.32-T3N-R65W

McGuckin H32-28D

Wellbore #1

Survey: Survey #1

Standard Survey Report

09 May, 2012



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well McGuckin H32-28D
Project:	SEC.32-T3N-R65W	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site:	McGuckin H32-28D Pad Sec.32-T3N-R65W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Well:	McGuckin H32-28D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.32-T3N-R65W, 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	McGuckin H32-28D Pad Sec.32-T3N-R65W		
Site Position:		Northing:	1,312,544.30ft
From:	Lat/Long	Easting:	3,226,822.10ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.188480
		Longitude:	-104.688110
		Grid Convergence:	0.52 °

Well	McGuckin H32-28D		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft		Wellhead Elevation:
			ft
			Latitude:
			40.188480
			Longitude:
			-104.688110
			Ground Level:
			4,872.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/4/2012	8.73	66.87	52,970

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 (°)	
	4,800.0	0.0	0.0	39.14	

Survey Program	Date	5/9/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
208.0	7,865.0	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	
208.0	1.10	155.70	208.0	-1.8	0.8	-0.9	0.53	0.53	0.00	
454.0	0.90	144.40	453.9	-5.5	2.9	-2.5	0.11	-0.08	-4.59	
709.0	0.80	35.90	708.9	-5.7	5.1	-1.2	0.54	-0.04	-42.55	
788.0	0.50	54.40	787.9	-5.1	5.7	-0.3	0.46	-0.38	23.42	
860.0	0.60	83.30	859.9	-4.9	6.4	0.2	0.40	0.14	40.14	
989.0	0.30	80.30	988.9	-4.7	7.4	1.0	0.23	-0.23	-2.33	
1,117.0	0.40	84.80	1,116.9	-4.6	8.1	1.6	0.08	0.08	3.52	
1,245.0	0.60	111.40	1,244.9	-4.8	9.2	2.1	0.24	0.16	20.78	
1,373.0	0.40	128.60	1,372.9	-5.3	10.2	2.3	0.19	-0.16	13.44	
1,502.0	0.70	139.50	1,501.9	-6.2	11.0	2.1	0.25	0.23	8.45	
1,630.0	1.10	303.90	1,629.9	-6.1	10.5	1.9	1.39	0.31	128.44	
1,758.0	0.60	316.30	1,757.9	-5.0	9.1	1.9	0.41	-0.39	9.69	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well McGuckin H32-28D
Project:	SEC.32-T3N-R65W	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site:	McGuckin H32-28D Pad Sec.32-T3N-R65W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Well:	McGuckin H32-28D	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)
1,886.0	0.60	306.30	1,885.9	-4.1	8.0	1.9	0.08	0.00	-7.81
2,015.0	0.70	328.80	2,014.9	-3.0	7.1	2.1	0.21	0.08	17.44
2,143.0	0.80	1.00	2,142.9	-1.5	6.7	3.1	0.33	0.08	25.16
2,271.0	0.90	337.60	2,270.8	0.4	6.3	4.3	0.28	0.08	-18.28
2,399.0	0.60	2.80	2,398.8	2.0	6.0	5.3	0.34	-0.23	19.69
2,528.0	0.40	347.80	2,527.8	3.1	5.9	6.1	0.18	-0.16	-11.63
2,656.0	0.50	312.00	2,655.8	3.9	5.4	6.4	0.23	0.08	-27.97
2,784.0	0.20	253.10	2,783.8	4.2	4.8	6.3	0.34	-0.23	-46.02
2,912.0	0.40	0.60	2,911.8	4.6	4.6	6.4	0.39	0.16	83.98
3,041.0	1.20	7.00	3,040.8	6.4	4.7	7.9	0.62	0.62	4.96
3,169.0	2.00	42.80	3,168.8	9.3	6.4	11.3	0.97	0.63	27.97
3,297.0	4.70	23.00	3,296.5	15.8	10.0	18.6	2.26	2.11	-15.47
3,425.0	5.80	27.70	3,424.0	26.4	15.1	30.0	0.92	0.86	3.67
3,554.0	8.10	37.70	3,552.0	39.3	23.6	45.4	2.01	1.78	7.75
3,682.0	10.10	40.50	3,678.4	55.0	36.4	65.7	1.60	1.56	2.19
3,810.0	11.00	39.30	3,804.3	73.0	51.5	89.1	0.72	0.70	-0.94
3,938.0	11.80	39.50	3,929.7	92.5	67.5	114.4	0.63	0.63	0.16
4,067.0	12.10	37.70	4,055.9	113.4	84.2	141.1	0.37	0.23	-1.40
4,195.0	11.30	42.00	4,181.3	133.3	100.8	167.0	0.92	-0.63	3.36
4,323.0	9.80	39.00	4,307.1	151.1	116.0	190.5	1.25	-1.17	-2.34
4,451.0	8.20	36.70	4,433.5	166.9	128.3	210.5	1.28	-1.25	-1.80
4,580.0	5.50	44.90	4,561.6	178.7	138.2	225.8	2.22	-2.09	6.36
4,708.0	2.50	58.10	4,689.3	184.5	144.9	234.6	2.44	-2.34	10.31
4,818.6	0.40	32.85	4,799.9	186.1	147.2	237.2	1.94	-1.90	-22.83
TARGET BHL 75°FNL & 2552°FWL									
4,836.0	0.20	336.00	4,817.2	186.2	147.2	237.3	1.94	-1.16	-327.26
4,964.0	0.70	142.30	4,945.2	185.8	147.6	237.2	0.70	0.39	129.92
5,093.0	0.80	98.40	5,074.2	185.0	148.9	237.5	0.44	0.08	-34.03
5,221.0	1.40	141.40	5,202.2	183.7	150.8	237.6	0.77	0.47	33.59
5,349.0	1.10	154.60	5,330.2	181.3	152.3	236.8	0.32	-0.23	10.31
5,477.0	1.80	149.50	5,458.1	178.5	153.9	235.5	0.56	0.55	-3.98
5,606.0	1.00	154.10	5,587.1	175.7	155.4	234.4	0.63	-0.62	3.57
5,734.0	0.70	197.90	5,715.1	174.0	155.6	233.2	0.54	-0.23	34.22
5,862.0	0.50	109.80	5,843.1	173.0	155.9	232.6	0.66	-0.16	-68.83
5,990.0	0.70	70.60	5,971.1	173.1	157.2	233.5	0.35	0.16	-30.63
6,119.0	0.50	126.70	6,100.1	173.0	158.4	234.2	0.46	-0.16	43.49
6,247.0	0.50	123.80	6,228.1	172.4	159.3	234.2	0.02	0.00	-2.27
6,375.0	0.70	127.00	6,356.1	171.6	160.4	234.3	0.16	0.16	2.50
6,503.0	1.00	158.10	6,484.0	170.1	161.4	233.8	0.42	0.23	24.30
6,632.0	1.40	160.40	6,613.0	167.6	162.4	232.5	0.31	0.31	1.78
6,760.0	0.60	183.30	6,741.0	165.4	162.8	231.1	0.69	-0.63	17.89
6,888.0	0.60	135.50	6,869.0	164.3	163.3	230.5	0.38	0.00	-37.34
6,936.6	0.97	111.80	6,917.6	164.0	163.8	230.6	1.00	0.76	-48.76
TARGET CIRCLE 75°FNL & 2552°FWL									
7,016.0	1.70	98.40	6,997.0	163.5	165.6	231.4	1.00	0.92	-16.88
7,145.0	1.10	117.70	7,125.9	162.7	168.6	232.6	0.59	-0.47	14.96
7,273.0	0.50	89.40	7,253.9	162.1	170.3	233.2	0.55	-0.47	-22.11
7,401.0	0.50	113.30	7,381.9	161.9	171.3	233.7	0.16	0.00	18.67
7,529.0	0.50	133.70	7,509.9	161.3	172.2	233.8	0.14	0.00	15.94
7,658.0	0.10	154.50	7,638.9	160.8	172.7	233.7	0.32	-0.31	16.12
7,786.0	0.50	87.10	7,766.9	160.7	173.3	234.1	0.37	0.31	-52.66
7,840.6	0.50	87.10	7,821.4	160.7	173.8	234.4	0.00	0.00	0.00
HARDLINES 75°N & 75°E OF BHL									
7,865.0	0.50	87.10	7,845.9	160.8	174.0	234.5	0.00	0.00	0.00

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well McGuckin H32-28D
Project:	SEC.32-T3N-R65W	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site:	McGuckin H32-28D Pad Sec.32-T3N-R65W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Well:	McGuckin H32-28D	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)

Checked By: _____ Approved By: _____ Date: _____