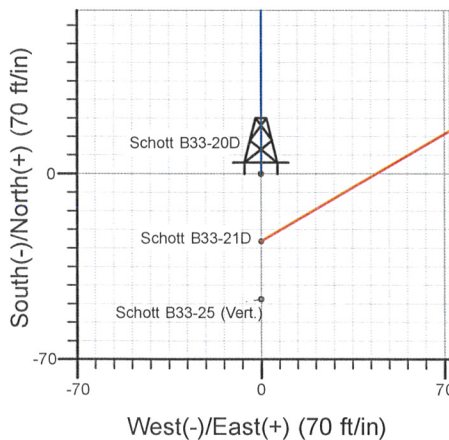
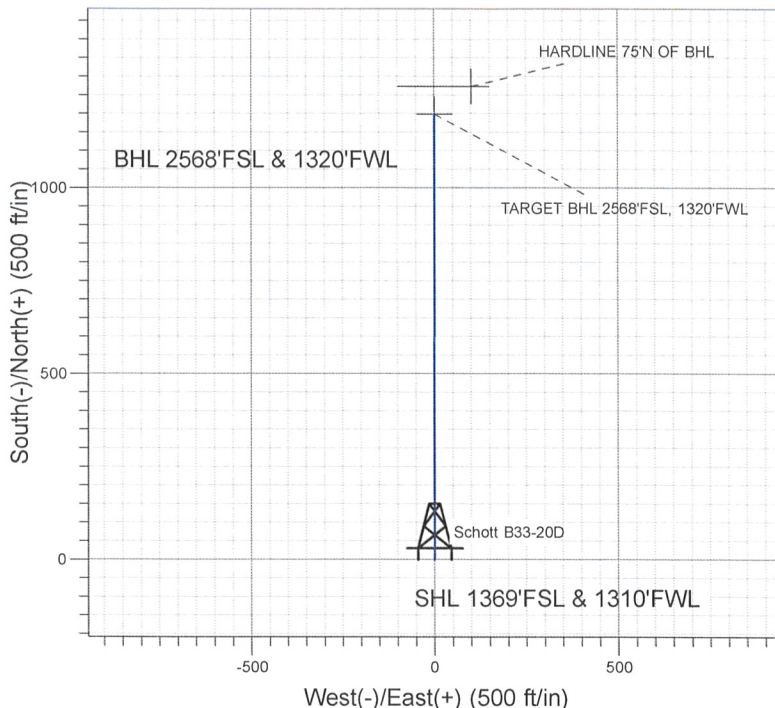
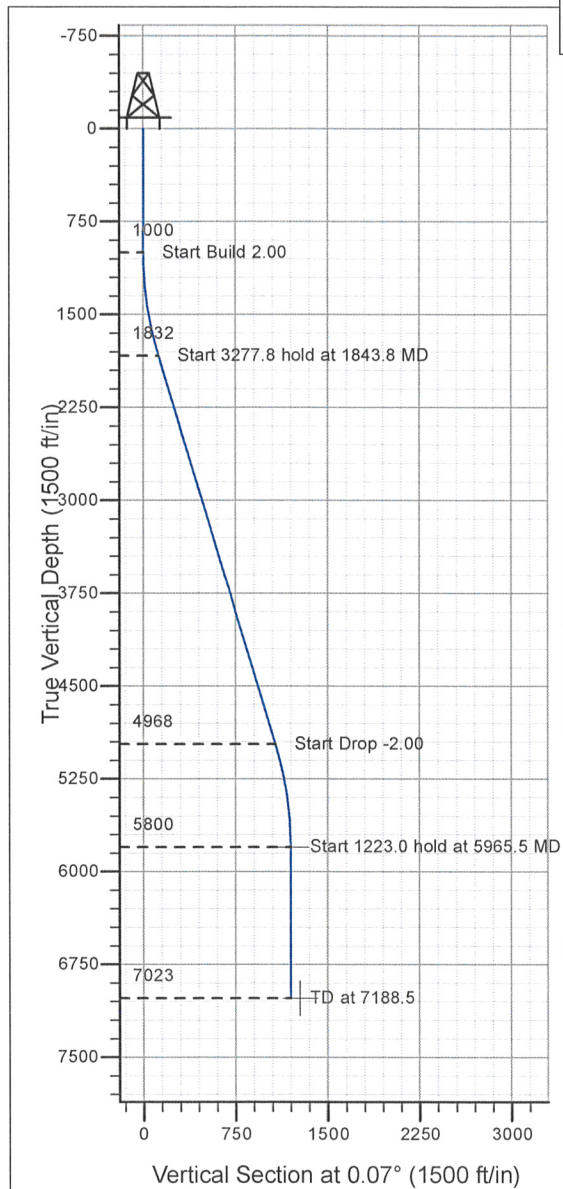


Well Name: Schott B33-20D

Surface Location: Schott B33-20D Pad Sec.33-T5N-R64W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4685.0
 +N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1372570.27 3262151.86 40° 21' 8.244 N 104° 33' 33.768 W
 Original Well Elev WELL @ 4698.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Schott B33-20D Pad Sec.33-T5N-R64W
 Schott B33-20D
 Plan #1 (9-2-09)
 12:17, September 03 2009



Azimuths to True North
 Magnetic North: 8.95°

Magnetic Field
 Strength: 53336.3snT
 Dip Angle: 67.12°
 Date: 9/2/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2568'FSL, 1320'FWL	5800.0	1198.4	1.5	40° 21' 20.086 N	104° 33' 33.749 W	Point
HARDLINE 75'N OF BHL	7023.0	1273.4	101.5	40° 21' 20.827 N	104° 33' 32.457 W	Polygon

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1843.8	16.88	0.07	1831.7	123.4	0.2	2.00	0.07	123.4	
4	5121.6	16.88	0.07	4968.3	1075.0	1.3	0.00	0.00	1075.0	
5	5965.5	0.00	0.00	5800.0	1198.4	1.5	2.00	180.00	1198.4	TARGET BHL 2568'FSL, 1320'FWL
6	7188.5	0.00	0.00	7023.0	1198.4	1.5	0.00	0.00	1198.4	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.33-T5N-R64W

Schott B33-20D Pad Sec.33-T5N-R64W

Schott B33-20D

Wellbore #1

Plan: Plan #1 (9-2-09)

Standard Planning Report

03 September, 2009



Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.33-T5N-R64W
Site: Schott B33-20D Pad Sec.33-T5N-R64W
Well: Schott B33-20D
Wellbore: Wellbore #1
Design: Plan #1 (9-2-09)

Local Co-ordinate Reference: Well Schott B33-20D
TVD Reference: WELL @ 4698.0ft (Original Well Elev)
MD Reference: WELL @ 4698.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	SEC.33-T5N-R64W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Schott B33-20D Pad Sec.33-T5N-R64W			
Site Position:		Northing:	1,372,570.28 ft	Latitude: 40° 21' 8.244 N
From: Lat/Long		Easting:	3,262,151.86 ft	Longitude: 104° 33' 33.768 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence: 0.61 °

Well	Schott B33-20D			
Well Position	+N/-S	0.0 ft	Northing:	1,372,570.27 ft
	+E/-W	0.0 ft	Easting:	3,262,151.86 ft
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft
			Ground Level:	4,685.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/2/2009	8.95	67.12	53,336

Design	Plan #1 (9-2-09)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.07

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,843.8	16.88	0.07	1,831.7	123.4	0.2	2.00	2.00	0.00	0.07	
5,121.6	16.88	0.07	4,968.3	1,075.0	1.3	0.00	0.00	0.00	0.00	
5,965.5	0.00	0.00	5,800.0	1,198.4	1.5	2.00	-2.00	0.00	180.00	TARGET BHL 2568
7,188.5	0.00	0.00	7,023.0	1,198.4	1.5	0.00	0.00	0.00	0.00	

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Schott B33-20D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4698.0ft (Original Well Elev)
Project:	SEC.33-T5N-R64W	MD Reference:	WELL @ 4698.0ft (Original Well Elev)
Site:	Schott B33-20D Pad Sec.33-T5N-R64W	North Reference:	True
Well:	Schott B33-20D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-2-09)		

Planned 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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,040.0	0.80	0.07	1,040.0	0.3	0.0	0.3	2.00	2.00	0.00
1,080.0	1.60	0.07	1,080.0	1.1	0.0	1.1	2.00	2.00	0.00
1,120.0	2.40	0.07	1,120.0	2.5	0.0	2.5	2.00	2.00	0.00
1,160.0	3.20	0.07	1,159.9	4.5	0.0	4.5	2.00	2.00	0.00
1,200.0	4.00	0.07	1,199.8	7.0	0.0	7.0	2.00	2.00	0.00
1,240.0	4.80	0.07	1,239.7	10.0	0.0	10.0	2.00	2.00	0.00
1,280.0	5.60	0.07	1,279.6	13.7	0.0	13.7	2.00	2.00	0.00
1,320.0	6.40	0.07	1,319.3	17.9	0.0	17.9	2.00	2.00	0.00
1,360.0	7.20	0.07	1,359.1	22.6	0.0	22.6	2.00	2.00	0.00
1,400.0	8.00	0.07	1,398.7	27.9	0.0	27.9	2.00	2.00	0.00
1,440.0	8.80	0.07	1,438.3	33.7	0.0	33.7	2.00	2.00	0.00
1,480.0	9.60	0.07	1,477.8	40.1	0.0	40.1	2.00	2.00	0.00
1,520.0	10.40	0.07	1,517.1	47.1	0.1	47.1	2.00	2.00	0.00
1,560.0	11.20	0.07	1,556.4	54.6	0.1	54.6	2.00	2.00	0.00
1,600.0	12.00	0.07	1,595.6	62.6	0.1	62.6	2.00	2.00	0.00
1,640.0	12.80	0.07	1,634.7	71.2	0.1	71.2	2.00	2.00	0.00
1,680.0	13.60	0.07	1,673.6	80.3	0.1	80.3	2.00	2.00	0.00
1,720.0	14.40	0.07	1,712.4	90.0	0.1	90.0	2.00	2.00	0.00
1,760.0	15.20	0.07	1,751.1	100.2	0.1	100.2	2.00	2.00	0.00
1,800.0	16.00	0.07	1,789.6	111.0	0.1	111.0	2.00	2.00	0.00
1,840.0	16.80	0.07	1,828.0	122.3	0.2	122.3	2.00	2.00	0.00
1,843.8	16.88	0.07	1,831.7	123.4	0.2	123.4	2.00	2.00	0.00
1,880.0	16.88	0.07	1,866.3	133.9	0.2	133.9	0.00	0.00	0.00
1,920.0	16.88	0.07	1,904.6	145.5	0.2	145.5	0.00	0.00	0.00
1,960.0	16.88	0.07	1,942.8	157.1	0.2	157.1	0.00	0.00	0.00
2,000.0	16.88	0.07	1,981.1	168.7	0.2	168.7	0.00	0.00	0.00
2,040.0	16.88	0.07	2,019.4	180.3	0.2	180.3	0.00	0.00	0.00
2,080.0	16.88	0.07	2,057.7	191.9	0.2	191.9	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Schott B33-20D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4698.0ft (Original Well Elev)
Project:	SEC.33-T5N-R64W	MD Reference:	WELL @ 4698.0ft (Original Well Elev)
Site:	Schott B33-20D Pad Sec.33-T5N-R64W	North Reference:	True
Well:	Schott B33-20D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-2-09)		

Planned 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)
2,120.0	16.88	0.07	2,096.0	203.6	0.3	203.6	0.00	0.00	0.00
2,160.0	16.88	0.07	2,134.2	215.2	0.3	215.2	0.00	0.00	0.00
2,200.0	16.88	0.07	2,172.5	226.8	0.3	226.8	0.00	0.00	0.00
2,240.0	16.88	0.07	2,210.8	238.4	0.3	238.4	0.00	0.00	0.00
2,280.0	16.88	0.07	2,249.1	250.0	0.3	250.0	0.00	0.00	0.00
2,320.0	16.88	0.07	2,287.3	261.6	0.3	261.6	0.00	0.00	0.00
2,360.0	16.88	0.07	2,325.6	273.2	0.3	273.2	0.00	0.00	0.00
2,400.0	16.88	0.07	2,363.9	284.8	0.4	284.8	0.00	0.00	0.00
2,440.0	16.88	0.07	2,402.2	296.5	0.4	296.5	0.00	0.00	0.00
2,480.0	16.88	0.07	2,440.5	308.1	0.4	308.1	0.00	0.00	0.00
2,520.0	16.88	0.07	2,478.7	319.7	0.4	319.7	0.00	0.00	0.00
2,560.0	16.88	0.07	2,517.0	331.3	0.4	331.3	0.00	0.00	0.00
2,600.0	16.88	0.07	2,555.3	342.9	0.4	342.9	0.00	0.00	0.00
2,640.0	16.88	0.07	2,593.6	354.5	0.4	354.5	0.00	0.00	0.00
2,680.0	16.88	0.07	2,631.8	366.1	0.5	366.1	0.00	0.00	0.00
2,720.0	16.88	0.07	2,670.1	377.7	0.5	377.7	0.00	0.00	0.00
2,760.0	16.88	0.07	2,708.4	389.4	0.5	389.4	0.00	0.00	0.00
2,800.0	16.88	0.07	2,746.7	401.0	0.5	401.0	0.00	0.00	0.00
2,840.0	16.88	0.07	2,784.9	412.6	0.5	412.6	0.00	0.00	0.00
2,880.0	16.88	0.07	2,823.2	424.2	0.5	424.2	0.00	0.00	0.00
2,920.0	16.88	0.07	2,861.5	435.8	0.5	435.8	0.00	0.00	0.00
2,960.0	16.88	0.07	2,899.8	447.4	0.6	447.4	0.00	0.00	0.00
3,000.0	16.88	0.07	2,938.1	459.0	0.6	459.0	0.00	0.00	0.00
3,040.0	16.88	0.07	2,976.3	470.6	0.6	470.6	0.00	0.00	0.00
3,080.0	16.88	0.07	3,014.6	482.3	0.6	482.3	0.00	0.00	0.00
3,120.0	16.88	0.07	3,052.9	493.9	0.6	493.9	0.00	0.00	0.00
3,160.0	16.88	0.07	3,091.2	505.5	0.6	505.5	0.00	0.00	0.00
3,200.0	16.88	0.07	3,129.4	517.1	0.6	517.1	0.00	0.00	0.00
3,240.0	16.88	0.07	3,167.7	528.7	0.7	528.7	0.00	0.00	0.00
3,280.0	16.88	0.07	3,206.0	540.3	0.7	540.3	0.00	0.00	0.00
3,320.0	16.88	0.07	3,244.3	551.9	0.7	551.9	0.00	0.00	0.00
3,360.0	16.88	0.07	3,282.6	563.5	0.7	563.5	0.00	0.00	0.00
3,400.0	16.88	0.07	3,320.8	575.2	0.7	575.2	0.00	0.00	0.00
3,440.0	16.88	0.07	3,359.1	586.8	0.7	586.8	0.00	0.00	0.00
3,480.0	16.88	0.07	3,397.4	598.4	0.7	598.4	0.00	0.00	0.00
3,520.0	16.88	0.07	3,435.7	610.0	0.8	610.0	0.00	0.00	0.00
3,560.0	16.88	0.07	3,473.9	621.6	0.8	621.6	0.00	0.00	0.00
3,600.0	16.88	0.07	3,512.2	633.2	0.8	633.2	0.00	0.00	0.00
3,640.0	16.88	0.07	3,550.5	644.8	0.8	644.8	0.00	0.00	0.00
3,680.0	16.88	0.07	3,588.8	656.4	0.8	656.4	0.00	0.00	0.00
3,720.0	16.88	0.07	3,627.0	668.1	0.8	668.1	0.00	0.00	0.00
3,760.0	16.88	0.07	3,665.3	679.7	0.8	679.7	0.00	0.00	0.00
3,800.0	16.88	0.07	3,703.6	691.3	0.9	691.3	0.00	0.00	0.00
3,840.0	16.88	0.07	3,741.9	702.9	0.9	702.9	0.00	0.00	0.00
3,880.0	16.88	0.07	3,780.2	714.5	0.9	714.5	0.00	0.00	0.00
3,920.0	16.88	0.07	3,818.4	726.1	0.9	726.1	0.00	0.00	0.00
3,960.0	16.88	0.07	3,856.7	737.7	0.9	737.7	0.00	0.00	0.00
4,000.0	16.88	0.07	3,895.0	749.3	0.9	749.4	0.00	0.00	0.00
4,040.0	16.88	0.07	3,933.3	761.0	0.9	761.0	0.00	0.00	0.00
4,080.0	16.88	0.07	3,971.5	772.6	1.0	772.6	0.00	0.00	0.00
4,120.0	16.88	0.07	4,009.8	784.2	1.0	784.2	0.00	0.00	0.00
4,160.0	16.88	0.07	4,048.1	795.8	1.0	795.8	0.00	0.00	0.00
4,200.0	16.88	0.07	4,086.4	807.4	1.0	807.4	0.00	0.00	0.00
4,240.0	16.88	0.07	4,124.7	819.0	1.0	819.0	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Schott B33-20D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4698.0ft (Original Well Elev)
Project:	SEC.33-T5N-R64W	MD Reference:	WELL @ 4698.0ft (Original Well Elev)
Site:	Schott B33-20D Pad Sec.33-T5N-R64W	North Reference:	True
Well:	Schott B33-20D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-2-09)		

Planned 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)
4,280.0	16.88	0.07	4,162.9	830.6	1.0	830.6	0.00	0.00	0.00
4,320.0	16.88	0.07	4,201.2	842.3	1.0	842.3	0.00	0.00	0.00
4,360.0	16.88	0.07	4,239.5	853.9	1.1	853.9	0.00	0.00	0.00
4,400.0	16.88	0.07	4,277.8	865.5	1.1	865.5	0.00	0.00	0.00
4,440.0	16.88	0.07	4,316.0	877.1	1.1	877.1	0.00	0.00	0.00
4,480.0	16.88	0.07	4,354.3	888.7	1.1	888.7	0.00	0.00	0.00
4,520.0	16.88	0.07	4,392.6	900.3	1.1	900.3	0.00	0.00	0.00
4,560.0	16.88	0.07	4,430.9	911.9	1.1	911.9	0.00	0.00	0.00
4,600.0	16.88	0.07	4,469.1	923.5	1.1	923.5	0.00	0.00	0.00
4,640.0	16.88	0.07	4,507.4	935.2	1.2	935.2	0.00	0.00	0.00
4,680.0	16.88	0.07	4,545.7	946.8	1.2	946.8	0.00	0.00	0.00
4,720.0	16.88	0.07	4,584.0	958.4	1.2	958.4	0.00	0.00	0.00
4,760.0	16.88	0.07	4,622.3	970.0	1.2	970.0	0.00	0.00	0.00
4,800.0	16.88	0.07	4,660.5	981.6	1.2	981.6	0.00	0.00	0.00
4,840.0	16.88	0.07	4,698.8	993.2	1.2	993.2	0.00	0.00	0.00
4,880.0	16.88	0.07	4,737.1	1,004.8	1.2	1,004.8	0.00	0.00	0.00
4,920.0	16.88	0.07	4,775.4	1,016.4	1.3	1,016.4	0.00	0.00	0.00
4,960.0	16.88	0.07	4,813.6	1,028.1	1.3	1,028.1	0.00	0.00	0.00
5,000.0	16.88	0.07	4,851.9	1,039.7	1.3	1,039.7	0.00	0.00	0.00
5,040.0	16.88	0.07	4,890.2	1,051.3	1.3	1,051.3	0.00	0.00	0.00
5,080.0	16.88	0.07	4,928.5	1,062.9	1.3	1,062.9	0.00	0.00	0.00
5,120.0	16.88	0.07	4,966.7	1,074.5	1.3	1,074.5	0.00	0.00	0.00
5,121.6	16.88	0.07	4,968.3	1,075.0	1.3	1,075.0	0.00	0.00	0.00
5,160.0	16.11	0.07	5,005.1	1,085.9	1.3	1,085.9	2.00	-2.00	0.00
5,200.0	15.31	0.07	5,043.6	1,096.7	1.4	1,096.7	2.00	-2.00	0.00
5,240.0	14.51	0.07	5,082.3	1,107.0	1.4	1,107.0	2.00	-2.00	0.00
5,280.0	13.71	0.07	5,121.1	1,116.7	1.4	1,116.7	2.00	-2.00	0.00
5,320.0	12.91	0.07	5,160.0	1,126.0	1.4	1,126.0	2.00	-2.00	0.00
5,360.0	12.11	0.07	5,199.0	1,134.6	1.4	1,134.6	2.00	-2.00	0.00
5,400.0	11.31	0.07	5,238.2	1,142.7	1.4	1,142.7	2.00	-2.00	0.00
5,440.0	10.51	0.07	5,277.5	1,150.3	1.4	1,150.3	2.00	-2.00	0.00
5,480.0	9.71	0.07	5,316.8	1,157.3	1.4	1,157.3	2.00	-2.00	0.00
5,520.0	8.91	0.07	5,356.3	1,163.8	1.4	1,163.8	2.00	-2.00	0.00
5,560.0	8.11	0.07	5,395.9	1,169.7	1.4	1,169.7	2.00	-2.00	0.00
5,600.0	7.31	0.07	5,435.5	1,175.1	1.5	1,175.1	2.00	-2.00	0.00
5,640.0	6.51	0.07	5,475.2	1,179.9	1.5	1,179.9	2.00	-2.00	0.00
5,680.0	5.71	0.07	5,515.0	1,184.1	1.5	1,184.1	2.00	-2.00	0.00
5,720.0	4.91	0.07	5,554.8	1,187.8	1.5	1,187.8	2.00	-2.00	0.00
5,760.0	4.11	0.07	5,594.7	1,191.0	1.5	1,191.0	2.00	-2.00	0.00
5,800.0	3.31	0.07	5,634.6	1,193.6	1.5	1,193.6	2.00	-2.00	0.00
5,840.0	2.51	0.07	5,674.6	1,195.6	1.5	1,195.6	2.00	-2.00	0.00
5,880.0	1.71	0.07	5,714.5	1,197.1	1.5	1,197.1	2.00	-2.00	0.00
5,920.0	0.91	0.07	5,754.5	1,198.0	1.5	1,198.0	2.00	-2.00	0.00
5,960.0	0.11	0.07	5,794.5	1,198.4	1.5	1,198.4	2.00	-2.00	0.00
5,965.5	0.00	0.00	5,800.0	1,198.4	1.5	1,198.4	2.00	-2.00	-1.29
TARGET BHL 2568'FSL, 1320'FWL									
6,000.0	0.00	0.00	5,834.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,040.0	0.00	0.00	5,874.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,080.0	0.00	0.00	5,914.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,120.0	0.00	0.00	5,954.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,160.0	0.00	0.00	5,994.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,200.0	0.00	0.00	6,034.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,240.0	0.00	0.00	6,074.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.33-T5N-R64W
 Site: Schott B33-20D Pad Sec.33-T5N-R64W
 Well: Schott B33-20D
 Wellbore: Wellbore #1
 Design: Plan #1 (9-2-09)

Local Co-ordinate Reference: Well Schott B33-20D
 TVD Reference: WELL @ 4698.0ft (Original Well Elev)
 MD Reference: WELL @ 4698.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned 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)
6,280.0	0.00	0.00	6,114.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,320.0	0.00	0.00	6,154.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,360.0	0.00	0.00	6,194.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,400.0	0.00	0.00	6,234.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,440.0	0.00	0.00	6,274.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,480.0	0.00	0.00	6,314.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,520.0	0.00	0.00	6,354.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,560.0	0.00	0.00	6,394.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,434.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,640.0	0.00	0.00	6,474.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,680.0	0.00	0.00	6,514.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,720.0	0.00	0.00	6,554.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,738.5	0.00	0.00	6,573.0	1,198.4	1.5	1,198.4	0.00	0.00	0.00
NIOBRARA									
6,760.0	0.00	0.00	6,594.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,634.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,840.0	0.00	0.00	6,674.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,880.0	0.00	0.00	6,714.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,920.0	0.00	0.00	6,754.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
6,960.0	0.00	0.00	6,794.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,834.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
7,038.5	0.00	0.00	6,873.0	1,198.4	1.5	1,198.4	0.00	0.00	0.00
CODELL									
7,040.0	0.00	0.00	6,874.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
7,080.0	0.00	0.00	6,914.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
7,120.0	0.00	0.00	6,954.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
7,160.0	0.00	0.00	6,994.5	1,198.4	1.5	1,198.4	0.00	0.00	0.00
7,188.5	0.00	0.00	7,023.0	1,198.4	1.5	1,198.4	0.00	0.00	0.00
HARDLINE 75°N OF BHL									

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
TARGET BHL 2568'F	0.00	0.00	5,800.0	1,198.4	1.5	1,373,768.53	3,262,140.63	40° 21' 20.086 N	104° 33' 33.749 W
- plan hits target center									
- Point									
HARDLINE 75°N OF E	0.00	0.00	7,023.0	1,273.4	101.5	1,373,844.62	3,262,239.84	40° 21' 20.827 N	104° 33' 32.457 W
- plan misses target center by 125.0ft at 7188.5ft MD (7023.0 TVD, 1198.4 N, 1.5 E)									
- Polygon									
Point 1			7,023.0	0.0	0.0	1,373,844.62	3,262,239.84		
Point 2			7,023.0	0.0	-200.0	1,373,842.50	3,262,039.86		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,738.5	6,573.0	NIOBRARA		0.00	
7,038.5	6,873.0	CODELL		0.00	

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.33-T5N-R64W
Site: Schott B33-20D Pad Sec.33-T5N-R64W
Well: Schott B33-20D
Wellbore: Wellbore #1
Design: Plan #1 (9-2-09)

Local Co-ordinate Reference: Well Schott B33-20D
TVD Reference: WELL @ 4698.0ft (Original Well Elev)
MD Reference: WELL @ 4698.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature