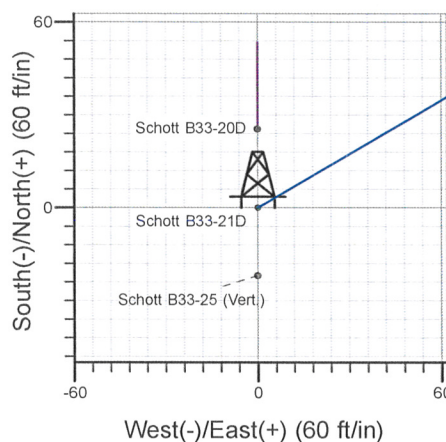
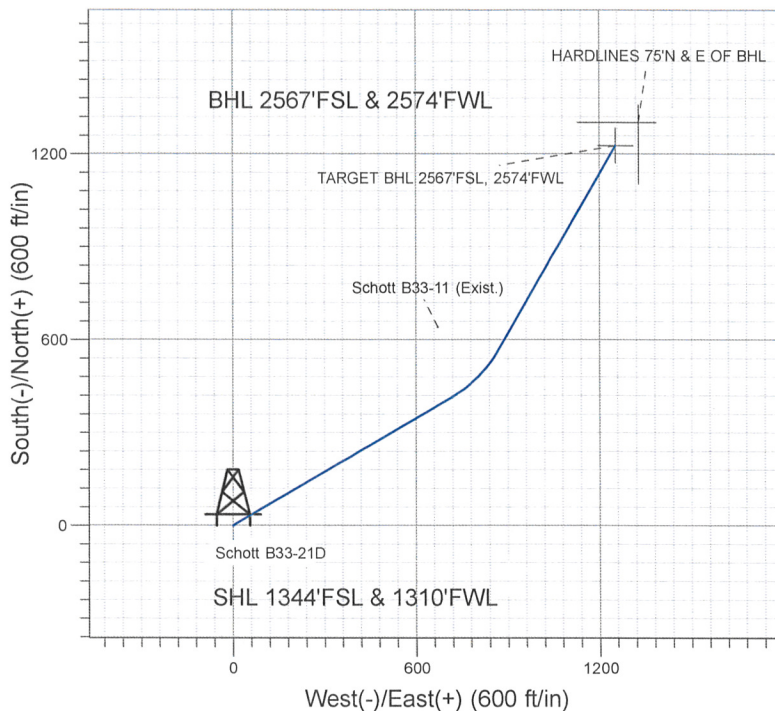
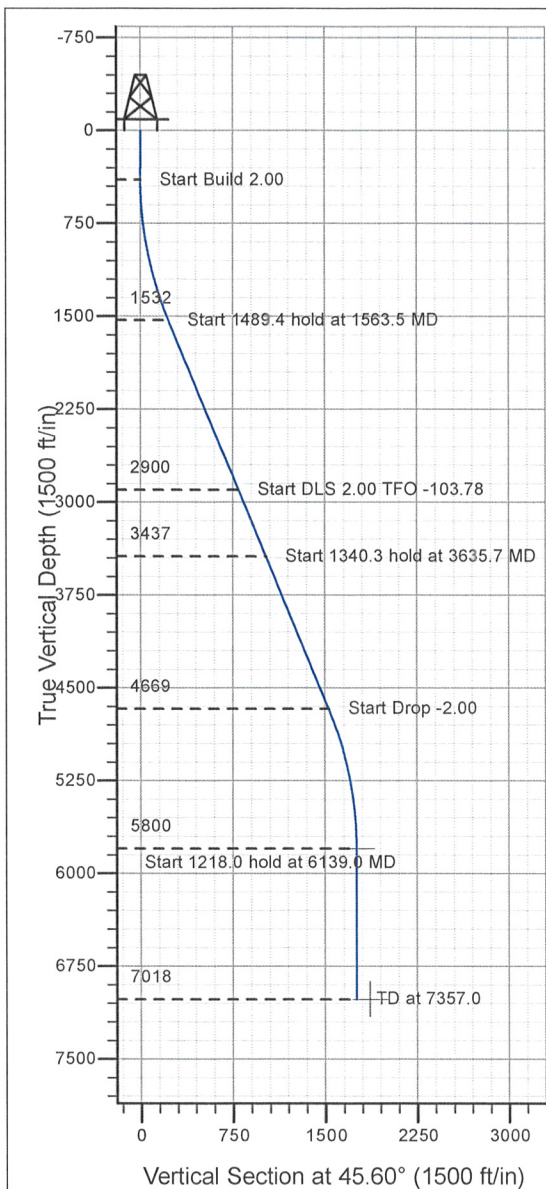


Well Name: Schott B33-21D

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 1372544.77 3262152.13 40° 21' 7.992 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 B33-21D
 Plan #1 (9-2-09)
 11:21, September 03 2009



Azimuths to True North
 Magnetic North: 8.95°
 Magnetic Field
 Strength: 53335.9snT
 Dip Angle: 67.12°
 Date: 9/3/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2567'FSL, 2574'FWL	5800.0	1227.0	1252.9	40° 21' 20.116 N	104° 33' 17.584 W	Point
HARDLINES 75°N & E OF BHL	7018.0	1302.0	1327.9	40° 21' 20.858 N	104° 33' 16.616 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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	1563.5	23.27	60.00	1531.8	116.5	201.8	2.00	60.00	225.7	
4	3052.9	23.27	60.00	2900.0	410.7	711.4	0.00	0.00	795.6	
5	3635.7	23.26	30.20	3437.3	568.3	869.5	2.00	-103.78	1018.9	
6	4976.0	23.26	30.20	4668.7	1025.7	1135.8	0.00	0.00	1529.2	
7	6139.0	0.00	0.00	5800.0	1227.0	1252.9	2.00	180.00	1753.7	TARGET BHL 2567'FSL, 2574'FWL
8	7357.0	0.00	0.00	7018.0	1227.0	1252.9	0.00	0.00	1753.7	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.33-T5N-R64W

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

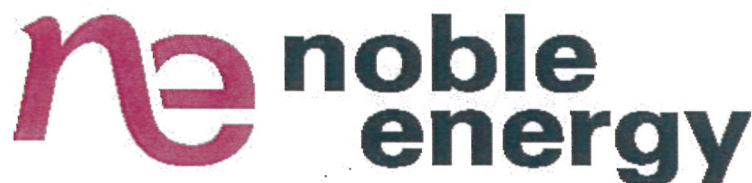
Schott B33-21D

Wellbore #1

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

Standard Planning Report

03 September, 2009



Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Schott B33-21D
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 B33-21D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-2-09)		

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 B33-21D					
Well Position	+N/-S	-25.5 ft	Northing:	1,372,544.77 ft	Latitude:	40° 21' 7.992 N
	+E/-W	0.0 ft	Easting:	3,262,152.13 ft	Longitude:	104° 33' 33.768 W
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	9/3/2009	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	45.60

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,563.5	23.27	60.00	1,531.8	116.5	201.8	2.00	2.00	0.00	60.00	
3,052.9	23.27	60.00	2,900.0	410.7	711.4	0.00	0.00	0.00	0.00	
3,635.7	23.26	30.20	3,437.3	568.3	869.5	2.00	0.00	-5.11	-103.78	
4,976.0	23.26	30.20	4,668.7	1,025.7	1,135.8	0.00	0.00	0.00	0.00	
6,139.0	0.00	0.00	5,800.0	1,227.0	1,252.9	2.00	-2.00	0.00	180.00	TARGET BHL 2567
7,357.0	0.00	0.00	7,018.0	1,227.0	1,252.9	0.00	0.00	0.00	0.00	

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Schott B33-21D
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 B33-21D	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	0.80	60.00	440.0	0.1	0.2	0.3	2.00	2.00	0.00
480.0	1.60	60.00	480.0	0.6	1.0	1.1	2.00	2.00	0.00
520.0	2.40	60.00	520.0	1.3	2.2	2.4	2.00	2.00	0.00
560.0	3.20	60.00	559.9	2.2	3.9	4.3	2.00	2.00	0.00
600.0	4.00	60.00	599.8	3.5	6.0	6.8	2.00	2.00	0.00
640.0	4.80	60.00	639.7	5.0	8.7	9.7	2.00	2.00	0.00
680.0	5.60	60.00	679.6	6.8	11.8	13.2	2.00	2.00	0.00
720.0	6.40	60.00	719.3	8.9	15.5	17.3	2.00	2.00	0.00
760.0	7.20	60.00	759.1	11.3	19.6	21.9	2.00	2.00	0.00
800.0	8.00	60.00	798.7	13.9	24.1	27.0	2.00	2.00	0.00
840.0	8.80	60.00	838.3	16.9	29.2	32.7	2.00	2.00	0.00
880.0	9.60	60.00	877.8	20.1	34.7	38.9	2.00	2.00	0.00
920.0	10.40	60.00	917.1	23.5	40.8	45.6	2.00	2.00	0.00
960.0	11.20	60.00	956.4	27.3	47.2	52.8	2.00	2.00	0.00
1,000.0	12.00	60.00	995.6	31.3	54.2	60.6	2.00	2.00	0.00
1,040.0	12.80	60.00	1,034.7	35.6	61.7	69.0	2.00	2.00	0.00
1,080.0	13.60	60.00	1,073.6	40.2	69.6	77.8	2.00	2.00	0.00
1,120.0	14.40	60.00	1,112.4	45.0	77.9	87.2	2.00	2.00	0.00
1,160.0	15.20	60.00	1,151.1	50.1	86.8	97.1	2.00	2.00	0.00
1,200.0	16.00	60.00	1,189.6	55.5	96.1	107.5	2.00	2.00	0.00
1,240.0	16.80	60.00	1,228.0	61.1	105.9	118.4	2.00	2.00	0.00
1,280.0	17.60	60.00	1,266.2	67.0	116.1	129.9	2.00	2.00	0.00
1,320.0	18.40	60.00	1,304.3	73.2	126.8	141.9	2.00	2.00	0.00
1,360.0	19.20	60.00	1,342.1	79.7	138.0	154.3	2.00	2.00	0.00
1,400.0	20.00	60.00	1,379.8	86.4	149.6	167.3	2.00	2.00	0.00
1,440.0	20.80	60.00	1,417.3	93.4	161.7	180.8	2.00	2.00	0.00
1,480.0	21.60	60.00	1,454.6	100.6	174.2	194.9	2.00	2.00	0.00
1,520.0	22.40	60.00	1,491.7	108.1	187.2	209.4	2.00	2.00	0.00
1,560.0	23.20	60.00	1,528.6	115.8	200.6	224.4	2.00	2.00	0.00
1,563.5	23.27	60.00	1,531.8	116.5	201.8	225.7	2.00	2.00	0.00
1,600.0	23.27	60.00	1,565.3	123.7	214.3	239.7	0.00	0.00	0.00
1,640.0	23.27	60.00	1,602.1	131.6	228.0	255.0	0.00	0.00	0.00
1,680.0	23.27	60.00	1,638.8	139.5	241.7	270.3	0.00	0.00	0.00
1,720.0	23.27	60.00	1,675.5	147.4	255.4	285.6	0.00	0.00	0.00
1,760.0	23.27	60.00	1,712.3	155.3	269.0	300.9	0.00	0.00	0.00
1,800.0	23.27	60.00	1,749.0	163.2	282.7	316.2	0.00	0.00	0.00
1,840.0	23.27	60.00	1,785.8	171.1	296.4	331.5	0.00	0.00	0.00
1,880.0	23.27	60.00	1,822.5	179.0	310.1	346.8	0.00	0.00	0.00
1,920.0	23.27	60.00	1,859.3	186.9	323.8	362.1	0.00	0.00	0.00
1,960.0	23.27	60.00	1,896.0	194.8	337.5	377.4	0.00	0.00	0.00
2,000.0	23.27	60.00	1,932.8	202.7	351.2	392.7	0.00	0.00	0.00
2,040.0	23.27	60.00	1,969.5	210.6	364.8	408.1	0.00	0.00	0.00
2,080.0	23.27	60.00	2,006.3	218.5	378.5	423.4	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Schott B33-21D
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 B33-21D	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	23.27	60.00	2,043.0	226.4	392.2	438.7	0.00	0.00	0.00
2,160.0	23.27	60.00	2,079.8	234.3	405.9	454.0	0.00	0.00	0.00
2,200.0	23.27	60.00	2,116.5	242.2	419.6	469.3	0.00	0.00	0.00
2,240.0	23.27	60.00	2,153.2	250.2	433.3	484.6	0.00	0.00	0.00
2,280.0	23.27	60.00	2,190.0	258.1	447.0	499.9	0.00	0.00	0.00
2,320.0	23.27	60.00	2,226.7	266.0	460.6	515.2	0.00	0.00	0.00
2,360.0	23.27	60.00	2,263.5	273.9	474.3	530.5	0.00	0.00	0.00
2,400.0	23.27	60.00	2,300.2	281.8	488.0	545.8	0.00	0.00	0.00
2,440.0	23.27	60.00	2,337.0	289.7	501.7	561.1	0.00	0.00	0.00
2,480.0	23.27	60.00	2,373.7	297.6	515.4	576.4	0.00	0.00	0.00
2,520.0	23.27	60.00	2,410.5	305.5	529.1	591.7	0.00	0.00	0.00
2,560.0	23.27	60.00	2,447.2	313.4	542.8	607.0	0.00	0.00	0.00
2,600.0	23.27	60.00	2,484.0	321.3	556.4	622.3	0.00	0.00	0.00
2,640.0	23.27	60.00	2,520.7	329.2	570.1	637.6	0.00	0.00	0.00
2,680.0	23.27	60.00	2,557.5	337.1	583.8	653.0	0.00	0.00	0.00
2,720.0	23.27	60.00	2,594.2	345.0	597.5	668.3	0.00	0.00	0.00
2,760.0	23.27	60.00	2,630.9	352.9	611.2	683.6	0.00	0.00	0.00
2,800.0	23.27	60.00	2,667.7	360.8	624.9	698.9	0.00	0.00	0.00
2,840.0	23.27	60.00	2,704.4	368.7	638.6	714.2	0.00	0.00	0.00
2,880.0	23.27	60.00	2,741.2	376.6	652.2	729.5	0.00	0.00	0.00
2,920.0	23.27	60.00	2,777.9	384.5	665.9	744.8	0.00	0.00	0.00
2,960.0	23.27	60.00	2,814.7	392.4	679.6	760.1	0.00	0.00	0.00
3,000.0	23.27	60.00	2,851.4	400.3	693.3	775.4	0.00	0.00	0.00
3,040.0	23.27	60.00	2,888.2	408.2	707.0	790.7	0.00	0.00	0.00
3,052.9	23.27	60.00	2,900.0	410.7	711.4	795.6	0.00	0.00	0.00
3,080.0	23.15	58.66	2,924.9	416.2	720.6	806.0	2.00	-0.46	-4.94
3,120.0	22.99	56.66	2,961.7	424.6	733.8	821.3	2.00	-0.40	-5.00
3,160.0	22.85	54.63	2,998.6	433.3	746.7	836.7	2.00	-0.34	-5.06
3,200.0	22.74	52.59	3,035.4	442.5	759.2	852.0	2.00	-0.28	-5.11
3,240.0	22.66	50.53	3,072.4	452.1	771.2	867.4	2.00	-0.21	-5.15
3,280.0	22.60	48.45	3,109.3	462.1	782.9	882.7	2.00	-0.14	-5.19
3,320.0	22.57	46.37	3,146.2	472.5	794.2	898.1	2.00	-0.08	-5.20
3,360.0	22.56	44.29	3,183.1	483.3	805.2	913.4	2.00	-0.01	-5.21
3,400.0	22.59	42.20	3,220.1	494.5	815.7	928.8	2.00	0.06	-5.21
3,440.0	22.64	40.13	3,257.0	506.1	825.8	944.1	2.00	0.13	-5.19
3,480.0	22.71	38.06	3,293.9	518.0	835.5	959.4	2.00	0.19	-5.16
3,520.0	22.82	36.01	3,330.8	530.4	844.8	974.7	2.00	0.26	-5.13
3,560.0	22.95	33.98	3,367.7	543.1	853.8	990.0	2.00	0.32	-5.08
3,600.0	23.10	31.97	3,404.5	556.2	862.3	1,005.3	2.00	0.39	-5.02
3,635.7	23.26	30.20	3,437.3	568.3	869.5	1,018.9	2.00	0.45	-4.95
3,640.0	23.26	30.20	3,441.2	569.7	870.4	1,020.5	0.00	0.00	0.00
3,680.0	23.26	30.20	3,478.0	583.4	878.3	1,035.7	0.00	0.00	0.00
3,720.0	23.26	30.20	3,514.7	597.1	886.3	1,051.0	0.00	0.00	0.00
3,760.0	23.26	30.20	3,551.5	610.7	894.2	1,066.2	0.00	0.00	0.00
3,800.0	23.26	30.20	3,588.2	624.4	902.2	1,081.4	0.00	0.00	0.00
3,840.0	23.26	30.20	3,625.0	638.0	910.1	1,096.6	0.00	0.00	0.00
3,880.0	23.26	30.20	3,661.7	651.7	918.1	1,111.9	0.00	0.00	0.00
3,920.0	23.26	30.20	3,698.5	665.3	926.0	1,127.1	0.00	0.00	0.00
3,960.0	23.26	30.20	3,735.2	679.0	934.0	1,142.3	0.00	0.00	0.00
4,000.0	23.26	30.20	3,772.0	692.6	941.9	1,157.6	0.00	0.00	0.00
4,040.0	23.26	30.20	3,808.7	706.3	949.9	1,172.8	0.00	0.00	0.00
4,080.0	23.26	30.20	3,845.5	719.9	957.8	1,188.0	0.00	0.00	0.00
4,120.0	23.26	30.20	3,882.2	733.6	965.7	1,203.3	0.00	0.00	0.00
4,160.0	23.26	30.20	3,919.0	747.2	973.7	1,218.5	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Schott B33-21D
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 B33-21D	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)
4,200.0	23.26	30.20	3,955.7	760.9	981.6	1,233.7	0.00	0.00	0.00
4,240.0	23.26	30.20	3,992.5	774.5	989.6	1,248.9	0.00	0.00	0.00
4,280.0	23.26	30.20	4,029.2	788.2	997.5	1,264.2	0.00	0.00	0.00
4,320.0	23.26	30.20	4,066.0	801.8	1,005.5	1,279.4	0.00	0.00	0.00
4,360.0	23.26	30.20	4,102.7	815.5	1,013.4	1,294.6	0.00	0.00	0.00
4,400.0	23.26	30.20	4,139.5	829.1	1,021.4	1,309.9	0.00	0.00	0.00
4,440.0	23.26	30.20	4,176.2	842.8	1,029.3	1,325.1	0.00	0.00	0.00
4,480.0	23.26	30.20	4,213.0	856.4	1,037.3	1,340.3	0.00	0.00	0.00
4,520.0	23.26	30.20	4,249.7	870.1	1,045.2	1,355.5	0.00	0.00	0.00
4,560.0	23.26	30.20	4,286.5	883.7	1,053.2	1,370.8	0.00	0.00	0.00
4,600.0	23.26	30.20	4,323.2	897.4	1,061.1	1,386.0	0.00	0.00	0.00
4,640.0	23.26	30.20	4,360.0	911.0	1,069.0	1,401.2	0.00	0.00	0.00
4,680.0	23.26	30.20	4,396.7	924.7	1,077.0	1,416.5	0.00	0.00	0.00
4,720.0	23.26	30.20	4,433.5	938.4	1,084.9	1,431.7	0.00	0.00	0.00
4,760.0	23.26	30.20	4,470.2	952.0	1,092.9	1,446.9	0.00	0.00	0.00
4,800.0	23.26	30.20	4,507.0	965.7	1,100.8	1,462.2	0.00	0.00	0.00
4,840.0	23.26	30.20	4,543.7	979.3	1,108.8	1,477.4	0.00	0.00	0.00
4,880.0	23.26	30.20	4,580.4	993.0	1,116.7	1,492.6	0.00	0.00	0.00
4,920.0	23.26	30.20	4,617.2	1,006.6	1,124.7	1,507.8	0.00	0.00	0.00
4,960.0	23.26	30.20	4,653.9	1,020.3	1,132.6	1,523.1	0.00	0.00	0.00
4,976.0	23.26	30.20	4,668.7	1,025.7	1,135.8	1,529.2	0.00	0.00	0.00
5,000.0	22.78	30.20	4,690.7	1,033.8	1,140.5	1,538.2	2.00	-2.00	0.00
5,040.0	21.98	30.20	4,727.7	1,047.0	1,148.2	1,552.9	2.00	-2.00	0.00
5,080.0	21.18	30.20	4,764.9	1,059.7	1,155.6	1,567.1	2.00	-2.00	0.00
5,120.0	20.38	30.20	4,802.3	1,072.0	1,162.7	1,580.8	2.00	-2.00	0.00
5,160.0	19.58	30.20	4,839.9	1,083.8	1,169.6	1,593.9	2.00	-2.00	0.00
5,200.0	18.78	30.20	4,877.7	1,095.1	1,176.2	1,606.6	2.00	-2.00	0.00
5,240.0	17.98	30.20	4,915.6	1,106.0	1,182.6	1,618.8	2.00	-2.00	0.00
5,280.0	17.18	30.20	4,953.8	1,116.5	1,188.6	1,630.4	2.00	-2.00	0.00
5,320.0	16.38	30.20	4,992.1	1,126.5	1,194.4	1,641.5	2.00	-2.00	0.00
5,360.0	15.58	30.20	5,030.5	1,136.0	1,200.0	1,652.2	2.00	-2.00	0.00
5,400.0	14.78	30.20	5,069.1	1,145.0	1,205.3	1,662.3	2.00	-2.00	0.00
5,440.0	13.98	30.20	5,107.9	1,153.6	1,210.3	1,671.8	2.00	-2.00	0.00
5,480.0	13.18	30.20	5,146.8	1,161.7	1,215.0	1,680.9	2.00	-2.00	0.00
5,520.0	12.38	30.20	5,185.8	1,169.4	1,219.4	1,689.4	2.00	-2.00	0.00
5,560.0	11.58	30.20	5,224.9	1,176.6	1,223.6	1,697.4	2.00	-2.00	0.00
5,600.0	10.78	30.20	5,264.1	1,183.3	1,227.5	1,704.9	2.00	-2.00	0.00
5,640.0	9.98	30.20	5,303.5	1,189.5	1,231.1	1,711.9	2.00	-2.00	0.00
5,680.0	9.18	30.20	5,342.9	1,195.3	1,234.5	1,718.3	2.00	-2.00	0.00
5,720.0	8.38	30.20	5,382.5	1,200.5	1,237.6	1,724.2	2.00	-2.00	0.00
5,760.0	7.58	30.20	5,422.1	1,205.3	1,240.3	1,729.5	2.00	-2.00	0.00
5,800.0	6.78	30.20	5,461.8	1,209.7	1,242.9	1,734.3	2.00	-2.00	0.00
5,840.0	5.98	30.20	5,501.5	1,213.5	1,245.1	1,738.6	2.00	-2.00	0.00
5,880.0	5.18	30.20	5,541.3	1,216.9	1,247.1	1,742.4	2.00	-2.00	0.00
5,920.0	4.38	30.20	5,581.2	1,219.7	1,248.7	1,745.6	2.00	-2.00	0.00
5,960.0	3.58	30.20	5,621.1	1,222.1	1,250.1	1,748.3	2.00	-2.00	0.00
6,000.0	2.78	30.20	5,661.0	1,224.1	1,251.2	1,750.4	2.00	-2.00	0.00
6,040.0	1.98	30.20	5,701.0	1,225.5	1,252.1	1,752.0	2.00	-2.00	0.00
6,080.0	1.18	30.20	5,741.0	1,226.4	1,252.6	1,753.1	2.00	-2.00	0.00
6,120.0	0.38	30.20	5,781.0	1,226.9	1,252.9	1,753.6	2.00	-2.00	0.00
6,139.0	0.00	0.00	5,800.0	1,227.0	1,252.9	1,753.7	2.00	-2.00	0.00
TARGET BHL 2567'FSL, 2574'FWL									
6,160.0	0.00	0.00	5,821.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Schott B33-21D
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 B33-21D	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)
6,200.0	0.00	0.00	5,861.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,240.0	0.00	0.00	5,901.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,280.0	0.00	0.00	5,941.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,320.0	0.00	0.00	5,981.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,360.0	0.00	0.00	6,021.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,400.0	0.00	0.00	6,061.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,440.0	0.00	0.00	6,101.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,480.0	0.00	0.00	6,141.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,520.0	0.00	0.00	6,181.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,560.0	0.00	0.00	6,221.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,600.0	0.00	0.00	6,261.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,640.0	0.00	0.00	6,301.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,680.0	0.00	0.00	6,341.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,720.0	0.00	0.00	6,381.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,760.0	0.00	0.00	6,421.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,800.0	0.00	0.00	6,461.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,840.0	0.00	0.00	6,501.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,880.0	0.00	0.00	6,541.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,907.0	0.00	0.00	6,568.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
NIOBRARA									
6,920.0	0.00	0.00	6,581.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
6,960.0	0.00	0.00	6,621.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,000.0	0.00	0.00	6,661.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,040.0	0.00	0.00	6,701.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,080.0	0.00	0.00	6,741.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,120.0	0.00	0.00	6,781.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,160.0	0.00	0.00	6,821.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,200.0	0.00	0.00	6,861.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,207.0	0.00	0.00	6,868.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
CODELL									
7,240.0	0.00	0.00	6,901.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,280.0	0.00	0.00	6,941.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,320.0	0.00	0.00	6,981.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
7,357.0	0.00	0.00	7,018.0	1,227.0	1,252.9	1,753.7	0.00	0.00	0.00
HARDLINES 75°N & E OF BHL									

Targets
Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
HARDLINES 75°N & E	0.00	0.00	7,018.0	1,302.0	1,327.9	1,373,860.73	3,263,466.09	40° 21' 20.858 N	104° 33' 16.616 W
- plan misses target center by 106.1ft at 7357.0ft MD (7018.0 TVD, 1227.0 N, 1252.9 E)									
- Polygon									
Point 1			7,018.0	0.0	0.0	1,373,860.73	3,263,466.09		
Point 2			7,018.0	0.0	-200.0	1,373,858.61	3,263,266.11		
Point 3			7,018.0	0.0	0.0	1,373,860.73	3,263,466.09		
Point 4			7,018.0	-200.0	0.0	1,373,660.75	3,263,468.21		
TARGET BHL 2567°F	0.00	0.00	5,800.0	1,227.0	1,252.9	1,373,784.91	3,263,391.93	40° 21' 20.116 N	104° 33' 17.584 W
- plan hits target center									
- Point									

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Schott B33-21D
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 B33-21D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-2-09)		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,907.0	6,568.0	NIOBRARA		0.00	
7,207.0	6,868.0	CODELL		0.00	