

### Well Name: Schmier G20-32D

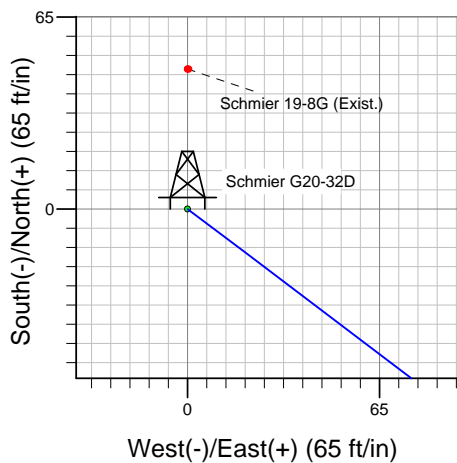
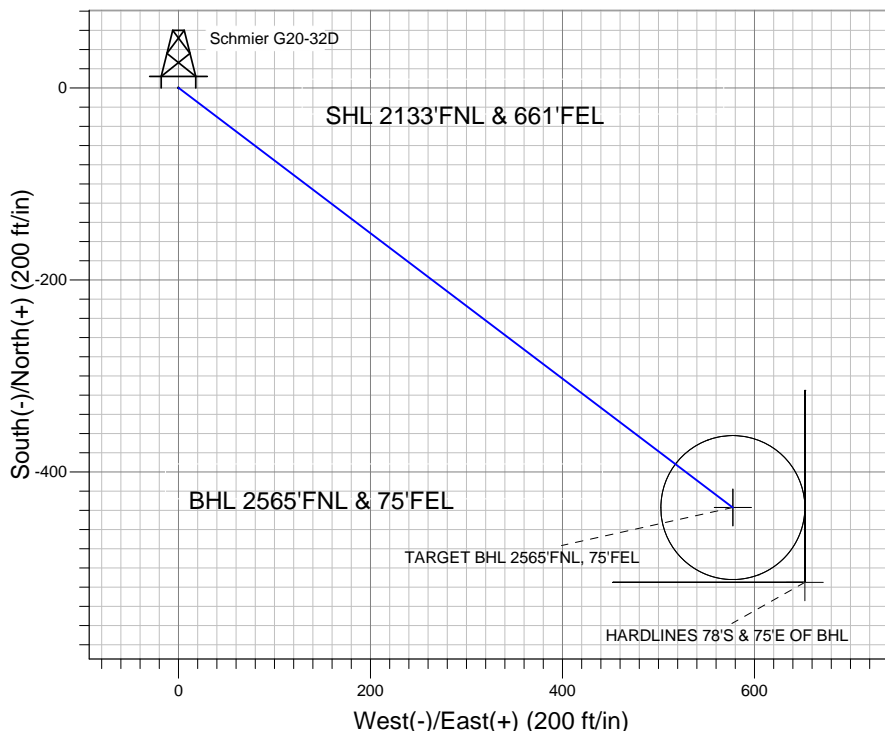
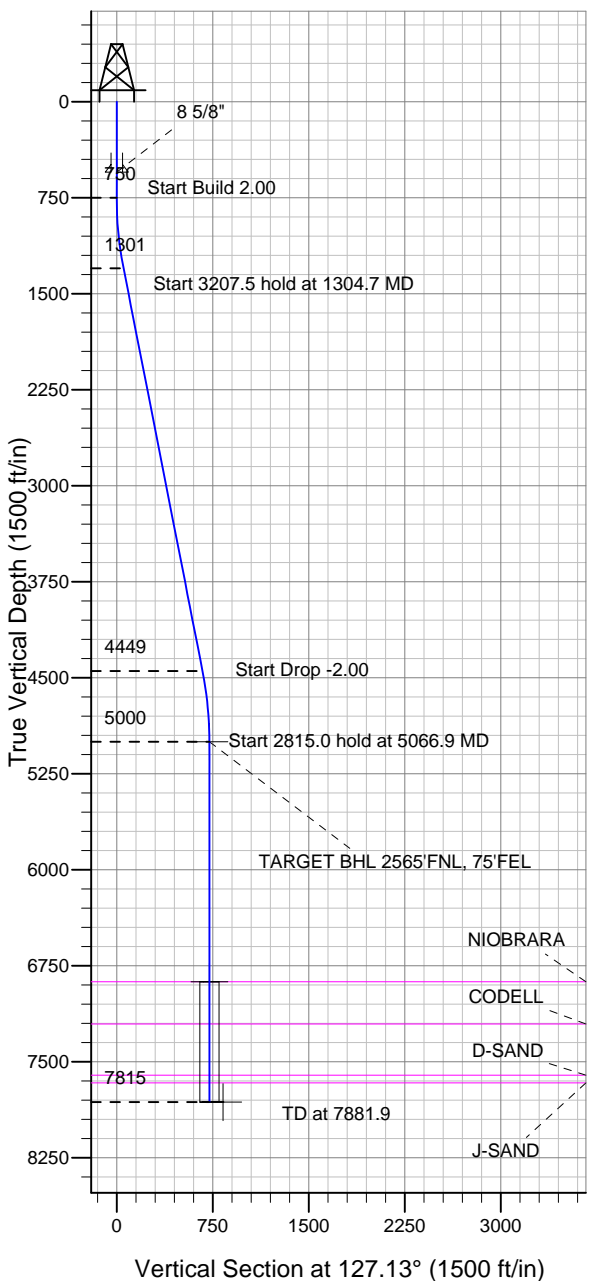
Surface Location: Schmier G20-32D Pad Sec.19-T4N-R65W  
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4762.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1352885.66	3223473.70	40.299300	-104.698790	

Original Well Elev WELL @ 4775.0ft (Original Well Elev)

### NOBLE ENERGY INC WELD COUNTY CO



Schmier G20-32D Pad Sec.19-T4N-R65W  
Schmier G20-32D  
Noble Schmier G20-32D Plan #3 (3-15-12)  
13:20, March 16 2012



Azimuths to True North  
Magnetic North: 8.72°

Magnetic Field  
Strength: 53006.8snT  
Dip Angle: 66.95°  
Date: 3/16/2012  
Model: IGRF2010

#### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2565'FNL, 75'FEL	5000.0	-437.1	577.4	40.298100	-104.696720	Point
TARGET CIRCLE 2565'FNL, 75'FEL	6875.0	-437.1	577.4	40.298100	-104.696720	Circle (Radius: 75.0)
HARDLINES 78'S & 75'E OF BHL	7815.0	-515.1	652.4	40.297886	-104.696451	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	750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.0	
3	1304.7	11.09	127.13	1301.2	-32.3	42.7	2.00	127.13	53.5	
4	4512.2	11.09	127.13	4448.8	-404.8	534.7	0.00	0.00	670.7	
5	5066.9	0.00	0.00	5000.0	-437.1	577.4	2.00	180.00	724.2	TARGET BHL 2565'FNL, 75'FEL
6	7881.9	0.00	0.00	7815.0	-437.1	577.4	0.00	0.00	724.2	



## **Directional**

### **NOBLE ENERGY INC WELD COUNTY CO**

**SEC.19-T4N-R65W**

**Schmier G20-32D Pad Sec.19-T4N-R65W**

**Schmier G20-32D**

**Wellbore #1**

**Plan: Noble Schmier G20-32D Plan #3 (3-15-12)**

### **Standard Planning Report**

**16 March, 2012**



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Schmier G20-32D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4775.0ft (Original Well Elev)
<b>Project:</b>	SEC.19-T4N-R65W	<b>MD Reference:</b>	WELL @ 4775.0ft (Original Well Elev)
<b>Site:</b>	Schmier G20-32D Pad Sec.19-T4N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Schmier G20-32D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Schmier G20-32D Plan #3 (3-15-12)		

<b>Project</b>	SEC.19-T4N-R65W, Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site						Schmier G20-32D Pad Sec.19-T4N-R65W											
Site Position:						Northing:			1,352,885.67 ft			Latitude:			40.299300		
From:			Lat/Long			Easting:			3,223,473.70 ft			Longitude:			-104.698790		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.52 °		

Well	Schmier G20-32D					
Well Position	+N/-S	0.0 ft	Northing:	1,352,885.66 ft	Latitude:	40.299300
	+E/-W	0.0 ft	Easting:	3,223,473.70 ft	Longitude:	-104.698790
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,762.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	3/16/2012	8.72	66.95	53,007

<b>Design</b>	Noble Schmier G20-32D Plan #3 (3-15-12)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	127.13

<b>Plan Sections</b>										
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	
750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,304.7	11.09	127.13	1,301.2	-32.3	42.7	2.00	2.00	0.00	127.13	
4,512.2	11.09	127.13	4,448.8	-404.8	534.7	0.00	0.00	0.00	0.00	
5,066.9	0.00	0.00	5,000.0	-437.1	577.4	2.00	-2.00	0.00	180.00	TARGET BHL 2565
7,881.9	0.00	0.00	7,815.0	-437.1	577.4	0.00	0.00	0.00	0.00	

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<b>Project:</b>	SEC.19-T4N-R65W	<b>MD Reference:</b>	WELL @ 4775.0ft (Original Well Elev)
<b>Site:</b>	Schmier G20-32D Pad Sec.19-T4N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Schmier G20-32D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Schmier G20-32D Plan #3 (3-15-12)		

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
550.0	0.00	0.00	550.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
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
750.0	0.00	0.00	750.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.20	127.13	760.0	0.0	0.0	0.0	2.00	2.00	0.00
800.0	1.00	127.13	800.0	-0.3	0.3	0.4	2.00	2.00	0.00
840.0	1.80	127.13	840.0	-0.9	1.1	1.4	2.00	2.00	0.00
880.0	2.60	127.13	880.0	-1.8	2.4	2.9	2.00	2.00	0.00
920.0	3.40	127.13	919.9	-3.0	4.0	5.0	2.00	2.00	0.00
960.0	4.20	127.13	959.8	-4.6	6.1	7.7	2.00	2.00	0.00
1,000.0	5.00	127.13	999.7	-6.6	8.7	10.9	2.00	2.00	0.00
1,040.0	5.80	127.13	1,039.5	-8.9	11.7	14.7	2.00	2.00	0.00
1,080.0	6.60	127.13	1,079.3	-11.5	15.1	19.0	2.00	2.00	0.00
1,120.0	7.40	127.13	1,119.0	-14.4	19.0	23.9	2.00	2.00	0.00
1,160.0	8.20	127.13	1,158.6	-17.7	23.4	29.3	2.00	2.00	0.00
1,200.0	9.00	127.13	1,198.2	-21.3	28.1	35.3	2.00	2.00	0.00
1,240.0	9.80	127.13	1,237.6	-25.2	33.3	41.8	2.00	2.00	0.00
1,280.0	10.60	127.13	1,277.0	-29.5	39.0	48.9	2.00	2.00	0.00
1,304.7	11.09	127.13	1,301.2	-32.3	42.7	53.5	2.00	2.00	0.00
1,320.0	11.09	127.13	1,316.3	-34.1	45.0	56.5	0.00	0.00	0.00
1,360.0	11.09	127.13	1,355.5	-38.7	51.2	64.2	0.00	0.00	0.00
1,400.0	11.09	127.13	1,394.8	-43.4	57.3	71.9	0.00	0.00	0.00
1,440.0	11.09	127.13	1,434.0	-48.0	63.4	79.6	0.00	0.00	0.00
1,480.0	11.09	127.13	1,473.3	-52.7	69.6	87.3	0.00	0.00	0.00
1,520.0	11.09	127.13	1,512.5	-57.3	75.7	95.0	0.00	0.00	0.00
1,560.0	11.09	127.13	1,551.8	-62.0	81.8	102.7	0.00	0.00	0.00
1,600.0	11.09	127.13	1,591.0	-66.6	88.0	110.4	0.00	0.00	0.00
1,640.0	11.09	127.13	1,630.3	-71.3	94.1	118.1	0.00	0.00	0.00
1,680.0	11.09	127.13	1,669.5	-75.9	100.3	125.7	0.00	0.00	0.00
1,720.0	11.09	127.13	1,708.8	-80.5	106.4	133.4	0.00	0.00	0.00
1,760.0	11.09	127.13	1,748.0	-85.2	112.5	141.1	0.00	0.00	0.00
1,800.0	11.09	127.13	1,787.3	-89.8	118.7	148.8	0.00	0.00	0.00
1,840.0	11.09	127.13	1,826.5	-94.5	124.8	156.5	0.00	0.00	0.00
1,880.0	11.09	127.13	1,865.8	-99.1	130.9	164.2	0.00	0.00	0.00
1,920.0	11.09	127.13	1,905.0	-103.8	137.1	171.9	0.00	0.00	0.00
1,960.0	11.09	127.13	1,944.3	-108.4	143.2	179.6	0.00	0.00	0.00

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<b>Project:</b>	SEC.19-T4N-R65W	<b>MD Reference:</b>	WELL @ 4775.0ft (Original Well Elev)
<b>Site:</b>	Schmier G20-32D Pad Sec.19-T4N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Schmier G20-32D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Schmier G20-32D Plan #3 (3-15-12)		

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)
2,000.0	11.09	127.13	1,983.5	-113.1	149.3	187.3	0.00	0.00	0.00
2,040.0	11.09	127.13	2,022.8	-117.7	155.5	195.0	0.00	0.00	0.00
2,080.0	11.09	127.13	2,062.1	-122.4	161.6	202.7	0.00	0.00	0.00
2,120.0	11.09	127.13	2,101.3	-127.0	167.8	210.4	0.00	0.00	0.00
2,160.0	11.09	127.13	2,140.6	-131.7	173.9	218.1	0.00	0.00	0.00
2,200.0	11.09	127.13	2,179.8	-136.3	180.0	225.8	0.00	0.00	0.00
2,240.0	11.09	127.13	2,219.1	-140.9	186.2	233.5	0.00	0.00	0.00
2,280.0	11.09	127.13	2,258.3	-145.6	192.3	241.2	0.00	0.00	0.00
2,320.0	11.09	127.13	2,297.6	-150.2	198.4	248.9	0.00	0.00	0.00
2,360.0	11.09	127.13	2,336.8	-154.9	204.6	256.6	0.00	0.00	0.00
2,400.0	11.09	127.13	2,376.1	-159.5	210.7	264.3	0.00	0.00	0.00
2,440.0	11.09	127.13	2,415.3	-164.2	216.8	272.0	0.00	0.00	0.00
2,480.0	11.09	127.13	2,454.6	-168.8	223.0	279.7	0.00	0.00	0.00
2,520.0	11.09	127.13	2,493.8	-173.5	229.1	287.4	0.00	0.00	0.00
2,560.0	11.09	127.13	2,533.1	-178.1	235.3	295.1	0.00	0.00	0.00
2,600.0	11.09	127.13	2,572.3	-182.8	241.4	302.8	0.00	0.00	0.00
2,640.0	11.09	127.13	2,611.6	-187.4	247.5	310.5	0.00	0.00	0.00
2,680.0	11.09	127.13	2,650.8	-192.0	253.7	318.2	0.00	0.00	0.00
2,720.0	11.09	127.13	2,690.1	-196.7	259.8	325.9	0.00	0.00	0.00
2,760.0	11.09	127.13	2,729.3	-201.3	265.9	333.6	0.00	0.00	0.00
2,800.0	11.09	127.13	2,768.6	-206.0	272.1	341.2	0.00	0.00	0.00
2,840.0	11.09	127.13	2,807.9	-210.6	278.2	348.9	0.00	0.00	0.00
2,880.0	11.09	127.13	2,847.1	-215.3	284.3	356.6	0.00	0.00	0.00
2,920.0	11.09	127.13	2,886.4	-219.9	290.5	364.3	0.00	0.00	0.00
2,960.0	11.09	127.13	2,925.6	-224.6	296.6	372.0	0.00	0.00	0.00
3,000.0	11.09	127.13	2,964.9	-229.2	302.8	379.7	0.00	0.00	0.00
3,040.0	11.09	127.13	3,004.1	-233.9	308.9	387.4	0.00	0.00	0.00
3,080.0	11.09	127.13	3,043.4	-238.5	315.0	395.1	0.00	0.00	0.00
3,120.0	11.09	127.13	3,082.6	-243.1	321.2	402.8	0.00	0.00	0.00
3,160.0	11.09	127.13	3,121.9	-247.8	327.3	410.5	0.00	0.00	0.00
3,200.0	11.09	127.13	3,161.1	-252.4	333.4	418.2	0.00	0.00	0.00
3,240.0	11.09	127.13	3,200.4	-257.1	339.6	425.9	0.00	0.00	0.00
3,280.0	11.09	127.13	3,239.6	-261.7	345.7	433.6	0.00	0.00	0.00
3,320.0	11.09	127.13	3,278.9	-266.4	351.8	441.3	0.00	0.00	0.00
3,360.0	11.09	127.13	3,318.1	-271.0	358.0	449.0	0.00	0.00	0.00
3,400.0	11.09	127.13	3,357.4	-275.7	364.1	456.7	0.00	0.00	0.00
3,440.0	11.09	127.13	3,396.6	-280.3	370.3	464.4	0.00	0.00	0.00
3,480.0	11.09	127.13	3,435.9	-285.0	376.4	472.1	0.00	0.00	0.00
3,520.0	11.09	127.13	3,475.1	-289.6	382.5	479.8	0.00	0.00	0.00
3,560.0	11.09	127.13	3,514.4	-294.2	388.7	487.5	0.00	0.00	0.00
3,600.0	11.09	127.13	3,553.7	-298.9	394.8	495.2	0.00	0.00	0.00
3,640.0	11.09	127.13	3,592.9	-303.5	400.9	502.9	0.00	0.00	0.00
3,680.0	11.09	127.13	3,632.2	-308.2	407.1	510.6	0.00	0.00	0.00
3,720.0	11.09	127.13	3,671.4	-312.8	413.2	518.3	0.00	0.00	0.00
3,760.0	11.09	127.13	3,710.7	-317.5	419.3	526.0	0.00	0.00	0.00
3,800.0	11.09	127.13	3,749.9	-322.1	425.5	533.7	0.00	0.00	0.00
3,840.0	11.09	127.13	3,789.2	-326.8	431.6	541.4	0.00	0.00	0.00
3,880.0	11.09	127.13	3,828.4	-331.4	437.8	549.1	0.00	0.00	0.00
3,920.0	11.09	127.13	3,867.7	-336.1	443.9	556.8	0.00	0.00	0.00
3,960.0	11.09	127.13	3,906.9	-340.7	450.0	564.4	0.00	0.00	0.00
4,000.0	11.09	127.13	3,946.2	-345.4	456.2	572.1	0.00	0.00	0.00
4,040.0	11.09	127.13	3,985.4	-350.0	462.3	579.8	0.00	0.00	0.00
4,080.0	11.09	127.13	4,024.7	-354.6	468.4	587.5	0.00	0.00	0.00
4,120.0	11.09	127.13	4,063.9	-359.3	474.6	595.2	0.00	0.00	0.00

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<b>Project:</b>	SEC.19-T4N-R65W	<b>MD Reference:</b>	WELL @ 4775.0ft (Original Well Elev)
<b>Site:</b>	Schmier G20-32D Pad Sec.19-T4N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Schmier G20-32D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Schmier G20-32D Plan #3 (3-15-12)		

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)
4,160.0	11.09	127.13	4,103.2	-363.9	480.7	602.9	0.00	0.00	0.00
4,200.0	11.09	127.13	4,142.4	-368.6	486.8	610.6	0.00	0.00	0.00
4,240.0	11.09	127.13	4,181.7	-373.2	493.0	618.3	0.00	0.00	0.00
4,280.0	11.09	127.13	4,220.9	-377.9	499.1	626.0	0.00	0.00	0.00
4,320.0	11.09	127.13	4,260.2	-382.5	505.2	633.7	0.00	0.00	0.00
4,360.0	11.09	127.13	4,299.4	-387.2	511.4	641.4	0.00	0.00	0.00
4,400.0	11.09	127.13	4,338.7	-391.8	517.5	649.1	0.00	0.00	0.00
4,440.0	11.09	127.13	4,378.0	-396.5	523.7	656.8	0.00	0.00	0.00
4,480.0	11.09	127.13	4,417.2	-401.1	529.8	664.5	0.00	0.00	0.00
4,512.2	11.09	127.13	4,448.8	-404.8	534.7	670.7	0.00	0.00	0.00
4,520.0	10.94	127.13	4,456.5	-405.7	535.9	672.2	2.00	-2.00	0.00
4,560.0	10.14	127.13	4,495.8	-410.2	541.8	679.5	2.00	-2.00	0.00
4,600.0	9.34	127.13	4,535.2	-414.2	547.1	686.3	2.00	-2.00	0.00
4,640.0	8.54	127.13	4,574.7	-418.0	552.1	692.5	2.00	-2.00	0.00
4,680.0	7.74	127.13	4,614.3	-421.4	556.6	698.1	2.00	-2.00	0.00
4,720.0	6.94	127.13	4,654.0	-424.5	560.7	703.3	2.00	-2.00	0.00
4,760.0	6.14	127.13	4,693.7	-427.2	564.3	707.8	2.00	-2.00	0.00
4,800.0	5.34	127.13	4,733.5	-429.7	567.5	711.8	2.00	-2.00	0.00
4,840.0	4.54	127.13	4,773.4	-431.7	570.3	715.2	2.00	-2.00	0.00
4,880.0	3.74	127.13	4,813.3	-433.5	572.6	718.1	2.00	-2.00	0.00
4,920.0	2.94	127.13	4,853.2	-434.9	574.4	720.5	2.00	-2.00	0.00
4,960.0	2.14	127.13	4,893.2	-435.9	575.8	722.2	2.00	-2.00	0.00
5,000.0	1.34	127.13	4,933.2	-436.7	576.8	723.4	2.00	-2.00	0.00
5,040.0	0.54	127.13	4,973.1	-437.1	577.3	724.1	2.00	-2.00	0.00
5,066.9	0.00	0.00	5,000.0	-437.1	577.4	724.2	2.00	-2.00	-473.42
TARGET BHL 2565'FNL, 75'FEL									
5,080.0	0.00	0.00	5,013.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,120.0	0.00	0.00	5,053.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,160.0	0.00	0.00	5,093.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,200.0	0.00	0.00	5,133.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,240.0	0.00	0.00	5,173.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,280.0	0.00	0.00	5,213.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,320.0	0.00	0.00	5,253.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,360.0	0.00	0.00	5,293.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,400.0	0.00	0.00	5,333.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,440.0	0.00	0.00	5,373.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,480.0	0.00	0.00	5,413.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,520.0	0.00	0.00	5,453.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,560.0	0.00	0.00	5,493.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,600.0	0.00	0.00	5,533.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,640.0	0.00	0.00	5,573.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,680.0	0.00	0.00	5,613.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,720.0	0.00	0.00	5,653.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,760.0	0.00	0.00	5,693.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,800.0	0.00	0.00	5,733.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,840.0	0.00	0.00	5,773.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,880.0	0.00	0.00	5,813.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,920.0	0.00	0.00	5,853.1	-437.1	577.4	724.2	0.00	0.00	0.00
5,960.0	0.00	0.00	5,893.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,000.0	0.00	0.00	5,933.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,040.0	0.00	0.00	5,973.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,080.0	0.00	0.00	6,013.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,120.0	0.00	0.00	6,053.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,160.0	0.00	0.00	6,093.1	-437.1	577.4	724.2	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Schmier G20-32D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4775.0ft (Original Well Elev)
<b>Project:</b>	SEC.19-T4N-R65W	<b>MD Reference:</b>	WELL @ 4775.0ft (Original Well Elev)
<b>Site:</b>	Schmier G20-32D Pad Sec.19-T4N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Schmier G20-32D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Schmier G20-32D Plan #3 (3-15-12)		

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	6,133.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,240.0	0.00	0.00	6,173.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,280.0	0.00	0.00	6,213.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,320.0	0.00	0.00	6,253.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,360.0	0.00	0.00	6,293.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,400.0	0.00	0.00	6,333.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,440.0	0.00	0.00	6,373.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,480.0	0.00	0.00	6,413.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,520.0	0.00	0.00	6,453.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,560.0	0.00	0.00	6,493.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,533.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,640.0	0.00	0.00	6,573.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,680.0	0.00	0.00	6,613.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,720.0	0.00	0.00	6,653.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,760.0	0.00	0.00	6,693.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,733.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,840.0	0.00	0.00	6,773.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,880.0	0.00	0.00	6,813.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,920.0	0.00	0.00	6,853.1	-437.1	577.4	724.2	0.00	0.00	0.00
6,941.9	0.00	0.00	6,875.0	-437.1	577.4	724.2	0.00	0.00	0.00
NIOBRARA - TARGET CIRCLE 2565'FNL, 75'FEL									
6,960.0	0.00	0.00	6,893.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,000.0	0.00	0.00	6,933.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,040.0	0.00	0.00	6,973.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,080.0	0.00	0.00	7,013.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,120.0	0.00	0.00	7,053.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,160.0	0.00	0.00	7,093.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,200.0	0.00	0.00	7,133.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,240.0	0.00	0.00	7,173.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,271.9	0.00	0.00	7,205.0	-437.1	577.4	724.2	0.00	0.00	0.00
CODELL									
7,280.0	0.00	0.00	7,213.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,320.0	0.00	0.00	7,253.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,360.0	0.00	0.00	7,293.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,400.0	0.00	0.00	7,333.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,440.0	0.00	0.00	7,373.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,480.0	0.00	0.00	7,413.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,520.0	0.00	0.00	7,453.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,560.0	0.00	0.00	7,493.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,600.0	0.00	0.00	7,533.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,640.0	0.00	0.00	7,573.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,671.9	0.00	0.00	7,605.0	-437.1	577.4	724.2	0.00	0.00	0.00
D-SAND									
7,680.0	0.00	0.00	7,613.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,720.0	0.00	0.00	7,653.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,731.9	0.00	0.00	7,665.0	-437.1	577.4	724.2	0.00	0.00	0.00
J-SAND									
7,760.0	0.00	0.00	7,693.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,733.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,840.0	0.00	0.00	7,773.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,880.0	0.00	0.00	7,813.1	-437.1	577.4	724.2	0.00	0.00	0.00
7,881.9	0.00	0.00	7,815.0	-437.1	577.4	724.2	0.00	0.00	0.00
HARDLINES 78'S & 75'E OF BHL									

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Schmier G20-32D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4775.0ft (Original Well Elev)
<b>Project:</b>	SEC.19-T4N-R65W	<b>MD Reference:</b>	WELL @ 4775.0ft (Original Well Elev)
<b>Site:</b>	Schmier G20-32D Pad Sec.19-T4N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Schmier G20-32D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Schmier G20-32D Plan #3 (3-15-12)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
550.0	550.0	8 5/8"	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,941.9	6,875.0	NIOBRARA		0.00		
7,271.9	7,205.0	CODELL		0.00		
7,671.9	7,605.0	D-SAND		0.00		
7,731.9	7,665.0	J-SAND		0.00		