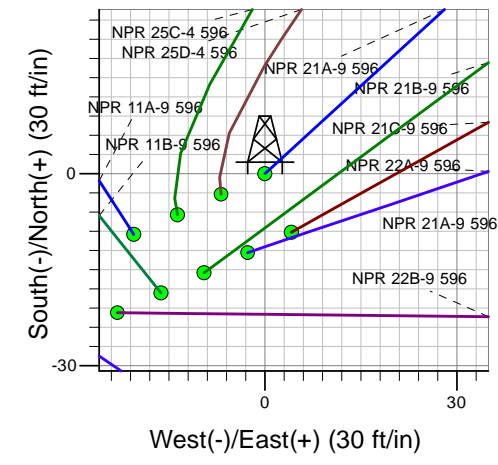
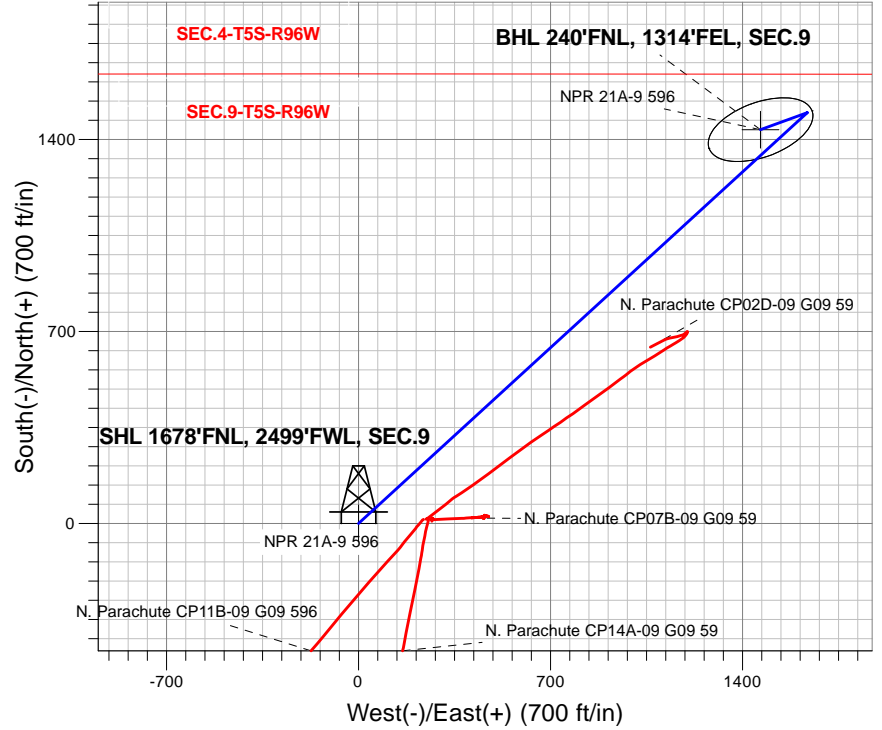
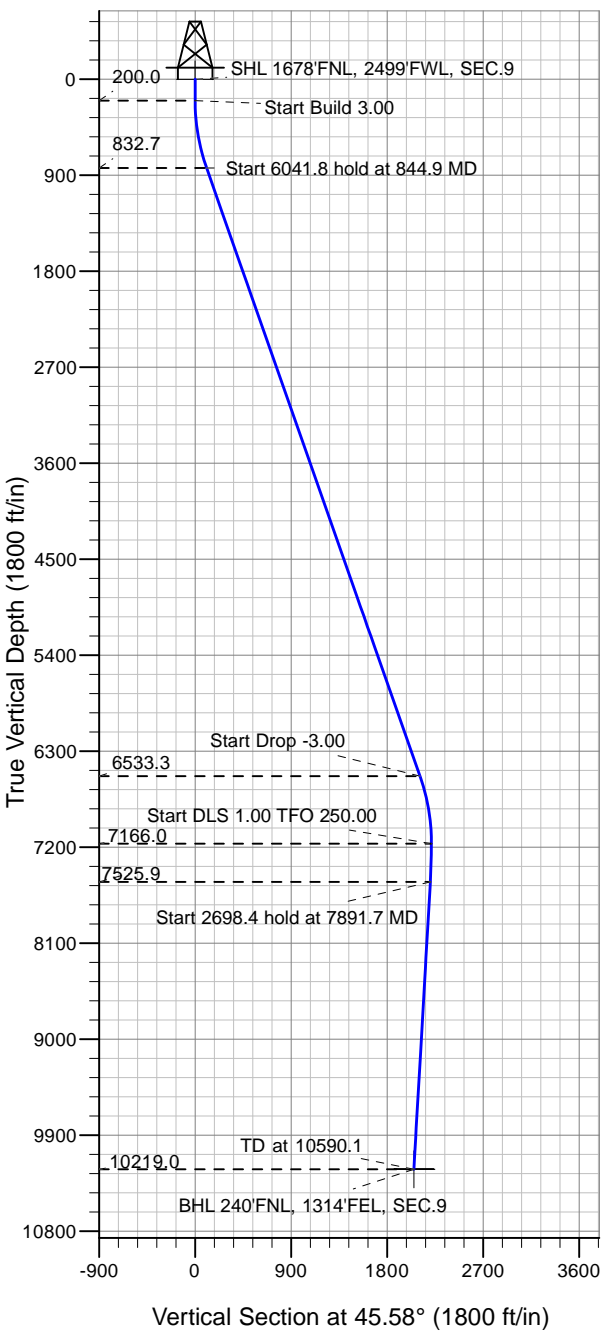


### Caerus Oil and Gas LLC



NPR 21A-9 596  
 Plan #2 (3-06-18)  
 14:42, March 15 2018

Azimuths to True North  
 Magnetic North: 9.62°

Magnetic Field  
 Strength: 51485.2snT  
 Dip Angle: 65.85°  
 Date: 3/15/2018  
 Model: HDGM

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
SHL 1678'FNL, 2499'FWL, SEC.9	1.0	0.0	0.0	39.632235	-108.174024	Point
BHL 240'FNL, 1314'FEL, SEC.9	10219.0	1435.6	1465.2	39.636176	-108.168822	Ellipse (Radii: L200.0 W100.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	844.9	19.35	47.52	832.7	72.8	79.5	3.00	47.52	107.8	
4	6886.6	19.35	47.52	6533.3	1424.6	1555.6	0.00	0.00	2108.2	
5	7531.5	0.00	0.00	7166.0	1497.5	1635.1	3.00	180.00	2215.9	
6	7891.7	3.60	250.00	7525.9	1493.6	1624.5	1.00	250.00	2205.6	
7	10590.1	3.60	250.00	10219.0	1435.6	1465.2	0.00	0.00	2051.3	BHL 240'FNL, 1314'FEL, SEC.9



## Directional

### **Caerus Oil and Gas LLC**

**SEC.9-T5S-R96W**

**NPR G09 596 Pad Sec.9-T5S-R96W**

**NPR 21A-9 596**

**Wellbore #1**

**Plan: Plan #2 (3-06-18)**

### **Standard Planning Report**

**15 March, 2018**

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well NPR 21A-9 596
<b>Company:</b>	Caerus Oil and Gas LLC	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Project:</b>	SEC.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>North Reference:</b>	True
<b>Well:</b>	NPR 21A-9 596	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (3-06-18)		

<b>Project</b>	SEC.9-T5S-R96W, Garfield County, CO		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		Using Well Reference Point
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		Using geodetic scale factor

<b>Site</b>	NPR G09 596 Pad Sec.9-T5S-R96W				
<b>Site Position:</b>	<b>Northing:</b>	14,404,590.33 usft	<b>Latitude:</b>	39.632067	
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,436,015.01 usft	<b>Longitude:</b>	-108.174492
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	1.80 °

<b>Well</b>	NPR 21A-9 596					
<b>Well Position</b>	<b>+N/-S</b>	61.0 ft	<b>Northing:</b>	14,404,655.51 usft	<b>Latitude:</b>	39.632235
	<b>+E/-W</b>	131.5 ft	<b>Easting:</b>	2,436,144.60 usft	<b>Longitude:</b>	-108.174025
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	0.0 ft	<b>Ground Level:</b>	7,640.0 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>
	HDGM	3/15/2018	9.62	65.85	51,485

<b>Design</b>	Plan #2 (3-06-18)			
<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	45.58

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
844.9	19.35	47.52	832.7	72.8	79.5	3.00	3.00	0.00	47.52	
6,886.6	19.35	47.52	6,533.3	1,424.6	1,555.6	0.00	0.00	0.00	0.00	
7,531.5	0.00	0.00	7,166.0	1,497.5	1,635.1	3.00	-3.00	0.00	180.00	
7,891.7	3.60	250.00	7,525.9	1,493.6	1,624.5	1.00	1.00	-30.54	250.00	
10,590.1	3.60	250.00	10,219.0	1,435.6	1,465.2	0.00	0.00	0.00	0.00	BHL 240'FNL, 1314'F

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well NPR 21A-9 596
<b>Company:</b>	Caerus Oil and Gas LLC	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Project:</b>	SEC.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>North Reference:</b>	True
<b>Well:</b>	NPR 21A-9 596	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (3-06-18)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00	
<b>SHL 1678'FNL, 2499'FWL, SEC.9</b>										
100.0	0.00	0.00	100.0	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	
300.0	3.00	47.52	300.0	1.8	1.9	2.6	3.00	3.00	0.00	
400.0	6.00	47.52	399.6	7.1	7.7	10.5	3.00	3.00	0.00	
500.0	9.00	47.52	498.8	15.9	17.3	23.5	3.00	3.00	0.00	
600.0	12.00	47.52	597.1	28.2	30.8	41.7	3.00	3.00	0.00	
700.0	15.00	47.52	694.3	44.0	48.0	65.0	3.00	3.00	0.00	
800.0	18.00	47.52	790.2	63.1	68.9	93.4	3.00	3.00	0.00	
844.9	19.35	47.52	832.7	72.8	79.5	107.8	3.00	3.00	0.00	
900.0	19.35	47.52	884.7	85.2	93.0	126.0	0.00	0.00	0.00	
1,000.0	19.35	47.52	979.1	107.5	117.4	159.1	0.00	0.00	0.00	
1,100.0	19.35	47.52	1,073.4	129.9	141.9	192.3	0.00	0.00	0.00	
1,200.0	19.35	47.52	1,167.8	152.3	166.3	225.4	0.00	0.00	0.00	
1,300.0	19.35	47.52	1,262.1	174.7	190.7	258.5	0.00	0.00	0.00	
1,400.0	19.35	47.52	1,356.5	197.0	215.1	291.6	0.00	0.00	0.00	
1,500.0	19.35	47.52	1,450.8	219.4	239.6	324.7	0.00	0.00	0.00	
1,600.0	19.35	47.52	1,545.2	241.8	264.0	357.8	0.00	0.00	0.00	
1,700.0	19.35	47.52	1,639.5	264.2	288.4	390.9	0.00	0.00	0.00	
1,800.0	19.35	47.52	1,733.9	286.5	312.9	424.0	0.00	0.00	0.00	
1,900.0	19.35	47.52	1,828.2	308.9	337.3	457.1	0.00	0.00	0.00	
2,000.0	19.35	47.52	1,922.6	331.3	361.7	490.2	0.00	0.00	0.00	
2,100.0	19.35	47.52	2,016.9	353.7	386.2	523.3	0.00	0.00	0.00	
2,200.0	19.35	47.52	2,111.3	376.0	410.6	556.5	0.00	0.00	0.00	
2,300.0	19.35	47.52	2,205.6	398.4	435.0	589.6	0.00	0.00	0.00	
2,400.0	19.35	47.52	2,300.0	420.8	459.5	622.7	0.00	0.00	0.00	
2,500.0	19.35	47.52	2,394.4	443.2	483.9	655.8	0.00	0.00	0.00	
2,600.0	19.35	47.52	2,488.7	465.5	508.3	688.9	0.00	0.00	0.00	
2,700.0	19.35	47.52	2,583.1	487.9	532.7	722.0	0.00	0.00	0.00	
2,800.0	19.35	47.52	2,677.4	510.3	557.2	755.1	0.00	0.00	0.00	
2,900.0	19.35	47.52	2,771.8	532.7	581.6	788.2	0.00	0.00	0.00	
3,000.0	19.35	47.52	2,866.1	555.0	606.0	821.3	0.00	0.00	0.00	
3,100.0	19.35	47.52	2,960.5	577.4	630.5	854.4	0.00	0.00	0.00	
3,200.0	19.35	47.52	3,054.8	599.8	654.9	887.5	0.00	0.00	0.00	
3,300.0	19.35	47.52	3,149.2	622.1	679.3	920.6	0.00	0.00	0.00	
3,400.0	19.35	47.52	3,243.5	644.5	703.8	953.8	0.00	0.00	0.00	
3,500.0	19.35	47.52	3,337.9	666.9	728.2	986.9	0.00	0.00	0.00	
3,600.0	19.35	47.52	3,432.2	689.3	752.6	1,020.0	0.00	0.00	0.00	
3,700.0	19.35	47.52	3,526.6	711.6	777.1	1,053.1	0.00	0.00	0.00	
3,800.0	19.35	47.52	3,620.9	734.0	801.5	1,086.2	0.00	0.00	0.00	
3,900.0	19.35	47.52	3,715.3	756.4	825.9	1,119.3	0.00	0.00	0.00	
4,000.0	19.35	47.52	3,809.7	778.8	850.3	1,152.4	0.00	0.00	0.00	
4,100.0	19.35	47.52	3,904.0	801.1	874.8	1,185.5	0.00	0.00	0.00	
4,200.0	19.35	47.52	3,998.4	823.5	899.2	1,218.6	0.00	0.00	0.00	
4,300.0	19.35	47.52	4,092.7	845.9	923.6	1,251.7	0.00	0.00	0.00	
4,400.0	19.35	47.52	4,187.1	868.3	948.1	1,284.8	0.00	0.00	0.00	
4,500.0	19.35	47.52	4,281.4	890.6	972.5	1,318.0	0.00	0.00	0.00	
4,600.0	19.35	47.52	4,375.8	913.0	996.9	1,351.1	0.00	0.00	0.00	
4,700.0	19.35	47.52	4,470.1	935.4	1,021.4	1,384.2	0.00	0.00	0.00	
4,800.0	19.35	47.52	4,564.5	957.8	1,045.8	1,417.3	0.00	0.00	0.00	
4,900.0	19.35	47.52	4,658.8	980.1	1,070.2	1,450.4	0.00	0.00	0.00	
5,000.0	19.35	47.52	4,753.2	1,002.5	1,094.6	1,483.5	0.00	0.00	0.00	

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well NPR 21A-9 596
<b>Company:</b>	Caerus Oil and Gas LLC	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Project:</b>	SEC.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>North Reference:</b>	True
<b>Well:</b>	NPR 21A-9 596	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (3-06-18)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	19.35	47.52	4,847.5	1,024.9	1,119.1	1,516.6	0.00	0.00	0.00
5,200.0	19.35	47.52	4,941.9	1,047.3	1,143.5	1,549.7	0.00	0.00	0.00
5,300.0	19.35	47.52	5,036.2	1,069.6	1,167.9	1,582.8	0.00	0.00	0.00
5,400.0	19.35	47.52	5,130.6	1,092.0	1,192.4	1,615.9	0.00	0.00	0.00
5,500.0	19.35	47.52	5,225.0	1,114.4	1,216.8	1,649.0	0.00	0.00	0.00
5,600.0	19.35	47.52	5,319.3	1,136.8	1,241.2	1,682.2	0.00	0.00	0.00
5,700.0	19.35	47.52	5,413.7	1,159.1	1,265.7	1,715.3	0.00	0.00	0.00
5,800.0	19.35	47.52	5,508.0	1,181.5	1,290.1	1,748.4	0.00	0.00	0.00
5,900.0	19.35	47.52	5,602.4	1,203.9	1,314.5	1,781.5	0.00	0.00	0.00
6,000.0	19.35	47.52	5,696.7	1,226.3	1,339.0	1,814.6	0.00	0.00	0.00
6,100.0	19.35	47.52	5,791.1	1,248.6	1,363.4	1,847.7	0.00	0.00	0.00
6,200.0	19.35	47.52	5,885.4	1,271.0	1,387.8	1,880.8	0.00	0.00	0.00
6,300.0	19.35	47.52	5,979.8	1,293.4	1,412.2	1,913.9	0.00	0.00	0.00
6,400.0	19.35	47.52	6,074.1	1,315.7	1,436.7	1,947.0	0.00	0.00	0.00
6,500.0	19.35	47.52	6,168.5	1,338.1	1,461.1	1,980.1	0.00	0.00	0.00
6,600.0	19.35	47.52	6,262.8	1,360.5	1,485.5	2,013.2	0.00	0.00	0.00
6,700.0	19.35	47.52	6,357.2	1,382.9	1,510.0	2,046.4	0.00	0.00	0.00
6,800.0	19.35	47.52	6,451.5	1,405.2	1,534.4	2,079.5	0.00	0.00	0.00
6,886.6	19.35	47.52	6,533.3	1,424.6	1,555.6	2,108.2	0.00	0.00	0.00
6,900.0	18.95	47.52	6,545.9	1,427.6	1,558.8	2,112.5	3.00	-3.00	0.00
7,000.0	15.95	47.52	6,641.3	1,447.8	1,580.9	2,142.5	3.00	-3.00	0.00
7,100.0	12.95	47.52	6,738.1	1,464.7	1,599.3	2,167.4	3.00	-3.00	0.00
7,200.0	9.95	47.52	6,836.1	1,478.1	1,613.9	2,187.3	3.00	-3.00	0.00
7,300.0	6.95	47.52	6,935.0	1,488.0	1,624.8	2,201.9	3.00	-3.00	0.00
7,400.0	3.95	47.52	7,034.6	1,494.4	1,631.8	2,211.4	3.00	-3.00	0.00
7,500.0	0.95	47.52	7,134.5	1,497.3	1,634.9	2,215.7	3.00	-3.00	0.00
7,531.5	0.00	0.00	7,166.0	1,497.5	1,635.1	2,215.9	3.00	-3.00	0.00
7,600.0	0.68	250.00	7,234.5	1,497.3	1,634.7	2,215.6	1.00	1.00	0.00
7,700.0	1.68	250.00	7,334.4	1,496.6	1,632.8	2,213.7	1.00	1.00	0.00
7,800.0	2.68	250.00	7,434.4	1,495.3	1,629.2	2,210.2	1.00	1.00	0.00
7,891.7	3.60	250.00	7,525.9	1,493.6	1,624.5	2,205.6	1.00	1.00	0.00
7,900.0	3.60	250.00	7,534.2	1,493.4	1,624.0	2,205.2	0.00	0.00	0.00
8,000.0	3.60	250.00	7,634.0	1,491.3	1,618.1	2,199.4	0.00	0.00	0.00
8,100.0	3.60	250.00	7,733.8	1,489.1	1,612.2	2,193.7	0.00	0.00	0.00
8,200.0	3.60	250.00	7,833.6	1,487.0	1,606.3	2,188.0	0.00	0.00	0.00
8,300.0	3.60	250.00	7,933.4	1,484.8	1,600.4	2,182.3	0.00	0.00	0.00
8,400.0	3.60	250.00	8,033.2	1,482.7	1,594.5	2,176.6	0.00	0.00	0.00
8,500.0	3.60	250.00	8,133.0	1,480.5	1,588.6	2,170.8	0.00	0.00	0.00
8,600.0	3.60	250.00	8,232.8	1,478.4	1,582.7	2,165.1	0.00	0.00	0.00
8,700.0	3.60	250.00	8,332.6	1,476.2	1,576.8	2,159.4	0.00	0.00	0.00
8,800.0	3.60	250.00	8,432.4	1,474.1	1,570.9	2,153.7	0.00	0.00	0.00
8,900.0	3.60	250.00	8,532.2	1,471.9	1,564.9	2,148.0	0.00	0.00	0.00
9,000.0	3.60	250.00	8,632.0	1,469.8	1,559.0	2,142.2	0.00	0.00	0.00
9,100.0	3.60	250.00	8,731.8	1,467.6	1,553.1	2,136.5	0.00	0.00	0.00
9,200.0	3.60	250.00	8,831.6	1,465.5	1,547.2	2,130.8	0.00	0.00	0.00
9,300.0	3.60	250.00	8,931.5	1,463.3	1,541.3	2,125.1	0.00	0.00	0.00
9,400.0	3.60	250.00	9,031.3	1,461.2	1,535.4	2,119.4	0.00	0.00	0.00
9,500.0	3.60	250.00	9,131.1	1,459.0	1,529.5	2,113.6	0.00	0.00	0.00
9,600.0	3.60	250.00	9,230.9	1,456.9	1,523.6	2,107.9	0.00	0.00	0.00
9,700.0	3.60	250.00	9,330.7	1,454.7	1,517.7	2,102.2	0.00	0.00	0.00
9,800.0	3.60	250.00	9,430.5	1,452.6	1,511.8	2,096.5	0.00	0.00	0.00
9,900.0	3.60	250.00	9,530.3	1,450.4	1,505.9	2,090.8	0.00	0.00	0.00
10,000.0	3.60	250.00	9,630.1	1,448.3	1,500.0	2,085.0	0.00	0.00	0.00
10,100.0	3.60	250.00	9,729.9	1,446.1	1,494.1	2,079.3	0.00	0.00	0.00

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well NPR 21A-9 596
<b>Company:</b>	Caerus Oil and Gas LLC	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Project:</b>	SEC.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>North Reference:</b>	True
<b>Well:</b>	NPR 21A-9 596	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (3-06-18)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,200.0	3.60	250.00	9,829.7	1,444.0	1,488.2	2,073.6	0.00	0.00	0.00	
10,300.0	3.60	250.00	9,929.5	1,441.9	1,482.3	2,067.9	0.00	0.00	0.00	
10,400.0	3.60	250.00	10,029.3	1,439.7	1,476.4	2,062.2	0.00	0.00	0.00	
10,500.0	3.60	250.00	10,129.1	1,437.6	1,470.5	2,056.4	0.00	0.00	0.00	
10,590.1	3.60	250.00	10,219.0	1,435.6	1,465.2	2,051.3	0.00	0.00	0.00	
<b>BHL 240'FNL, 1314'FEL, SEC.9</b>										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SHL 1678'FNL, 2499'FW - hit/miss target - Shape - Point	0.00	0.00	1.0	0.0	0.0	14,404,655.51	2,436,144.60	39.632235	-108.174025	
BHL 240'FNL, 1314'FEL - plan hits target center - Ellipse (radii L200.0 W100.0 on 250.00 azi)	0.00	0.00	10,219.0	1,435.6	1,465.2	14,406,137.01	2,437,564.34	39.636176	-108.168823	