

Project: Garfield County, CO  
 Site: NPM M33 496 Pad  
 Well: BJU M33 FED 24C-32 496  
 Wellbore: Wellbore #1  
 Design: Design #2  
 Latitude: 39.653376  
 Longitude: -108.177848  
 Ground Level: 8401.0  
 RKB @ 8431.0usft (H&P #329)

FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
2240.0	2307.8	Wasatch	
5240.0	5428.4	Wasatch G	
5526.0	5725.9	Fort Union	
7380.0	7640.2	Ohio Creek	
7643.0	7903.3	TOG	
7643.0	7903.3	Williams Fork	
10181.0	10442.3	Cameo	
10831.0	11092.5	Rollins	

#### REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well BJU M33 FED 24C-32 496 - Slot BJU M33 FED 24C-32 496, True North  
 Vertical (TVD) Reference: RKB @ 8431.0usft (H&P #329)  
 Section (VS) Reference: Slot - BJU M33 FED 24C-32 496(0.0N, 0.0E)  
 Measured Depth Reference: RKB @ 8431.0usft (H&P #329)  
 Calculation Method: Minimum Curvature

#### WELL DETAILS: BJU M33 FED 24C-32 496

8401.0  
 +N/-S 0.0 +E/-W 0.0 Northing 14412321.10 Easting 2434825.80 Latitude 39.653376 Longitude -108.177848

#### PROJECT DETAILS: Garfield County, CO

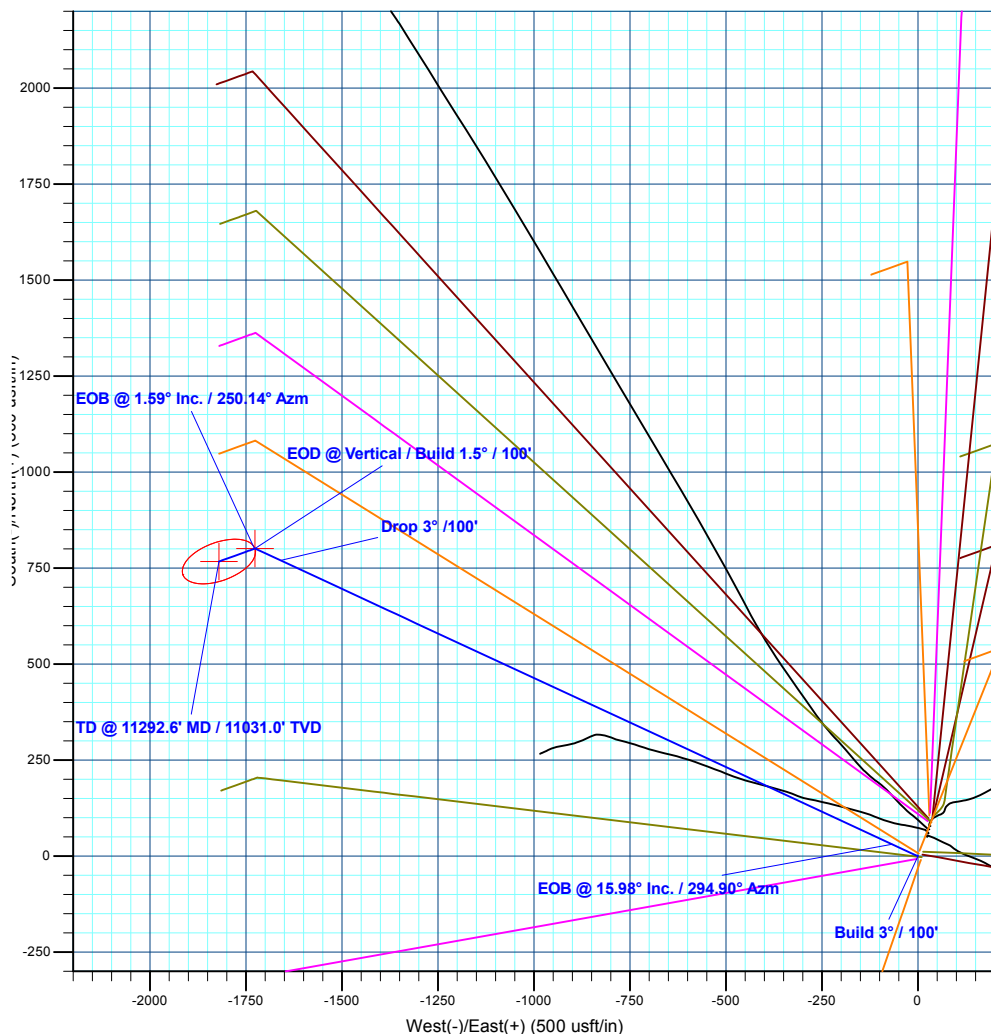
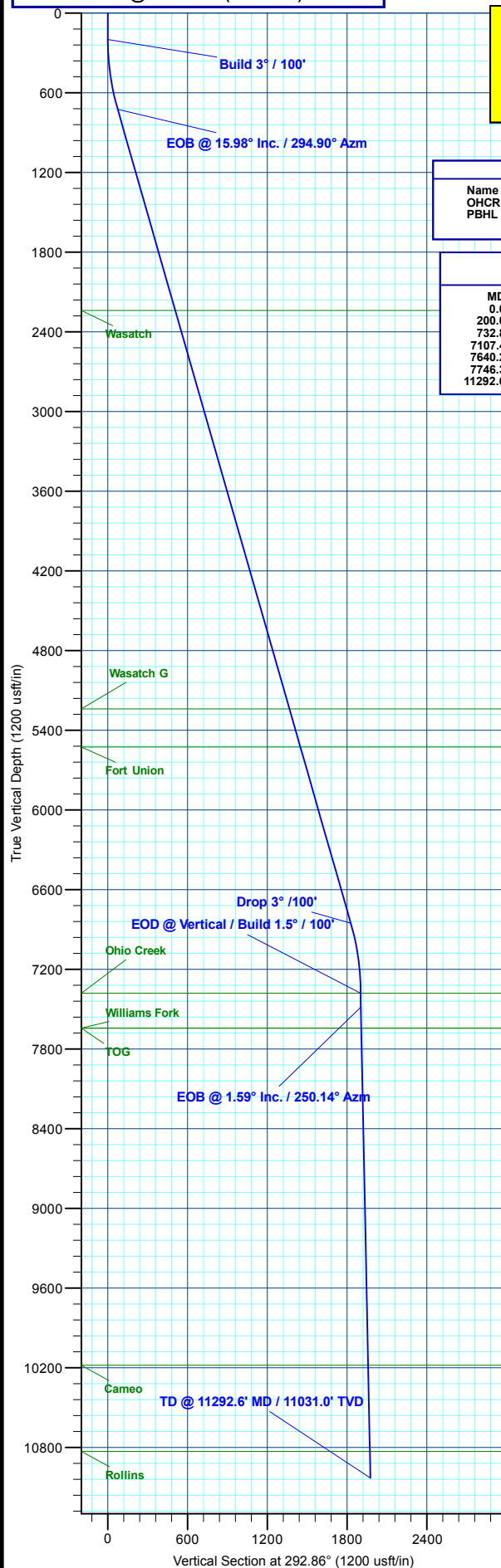
Geodetic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1927 - Western US  
 Ellipsoid: Clarke 1866  
 Zone: Zone 12N (114 W to 108 W)  
 System Datum: Mean Sea Level

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - D#2 - BJ M33 24C-32 496	7380.0	801.3	-1726.2	14413067.68	2433075.25	39.655575	-108.183976
PBHL - D#2 - BJ M33 24C-32 496	11031.0	767.3	-1820.2	14413030.80	2432982.40	39.655481	-108.184310

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
732.8	15.98	294.90	725.9	31.1	-67.0	3.00	294.90	73.8	EOB @ 15.98° Inc. / 294.90° Azm
7107.4	15.98	294.90	6854.1	770.2	-1659.2	0.00	0.00	1828.1	Drop 3° / 100'
7640.2	0.00	0.00	7380.0	801.3	-1726.2	3.00	180.00	1901.9	EOD @ Vertical / Build 1.5° / 100'
7746.3	1.59	250.14	7486.0	800.8	-1727.6	1.50	250.14	1903.0	EOB @ 1.59° Inc. / 250.14° Azm
11292.6	1.59	250.14	11031.0	767.3	-1820.2	0.00	0.00	1975.3	TD @ 11292.6° MD / 11031.0° TVD



Plan: Design #2 (BJU M33 FED 24C-32 496/Wellbore #1)

Created By: Will Jircik

Date: 13:24, January 16 2020



## **Caerus Oil & Gas**

**Garfield County, CO**

**NPM M33 496 Pad**

**BJU M33 FED 24C-32 496 - Slot BJU M33 FED 24C-32 496**

**Wellbore #1**

**Plan: Design #2**

## **QES Well Planning Report**

**16 January, 2020**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 24C-32 496 - Slot BJU M33 FED 24C-32 496
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Site:</b>	NPM M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24C-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2		

<b>Project</b>	Garfield County, CO		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Fee	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	NPM M33 496 Pad		
<b>Site Position:</b>		<b>Northing:</b>	14,415,354.00 usft
<b>From:</b>	Map	<b>Easting:</b>	2,447,010.80 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	39.660635
		<b>Longitude:</b>	-108.134267
		<b>Grid Convergence:</b>	1.83 °

<b>Well</b>	BJU M33 FED 24C-32 496 - Slot BJU M33 FED 24C-32 496		
<b>Well Position</b>	<b>+N/-S</b>	-2,642.2 usft	<b>Northing:</b> 14,412,321.10 usft
	<b>+E/-W</b>	-12,275.6 usft	<b>Easting:</b> 2,434,825.80 usft
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 39.653376
			<b>Longitude:</b> -108.177848
			<b>Ground Level:</b> 8,401.0 usft

<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_FILE	12/10/2019	9.48	65.82	51,259.60000000

<b>Design</b>	Design #2				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	292.86	

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	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	
732.8	15.98	294.90	725.9	31.1	-67.0	3.00	3.00	0.00	294.90	
7,107.4	15.98	294.90	6,854.1	770.2	-1,659.2	0.00	0.00	0.00	0.00	
7,640.2	0.00	0.00	7,380.0	801.3	-1,726.2	3.00	-3.00	0.00	180.00	OHCR - D#2 - BJ M
7,746.3	1.59	250.14	7,486.0	800.8	-1,727.6	1.50	1.50	-103.61	250.14	
11,292.6	1.59	250.14	11,031.0	767.3	-1,820.2	0.00	0.00	0.00	0.00	PBHL - D#2 - BJ M

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 24C-32 496 - Slot BJU M33 FED 24C-32 496
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Site:</b>	NPM M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24C-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	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
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Build 3° / 100'</b>									
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	3.00	294.90	300.0	1.1	-2.4	2.6	3.00	3.00	0.00
400.0	6.00	294.90	399.6	4.4	-9.5	10.5	3.00	3.00	0.00
500.0	9.00	294.90	498.8	9.9	-21.3	23.5	3.00	3.00	0.00
600.0	12.00	294.90	597.1	17.6	-37.9	41.7	3.00	3.00	0.00
700.0	15.00	294.90	694.3	27.4	-59.0	65.0	3.00	3.00	0.00
<b>EOB @ 15.98° Inc. / 294.90° Azm</b>									
732.8	15.98	294.90	725.9	31.1	-67.0	73.8	3.00	3.00	0.00
800.0	15.98	294.90	790.5	38.9	-83.8	92.3	0.00	0.00	0.00
900.0	15.98	294.90	886.7	50.5	-108.7	119.8	0.00	0.00	0.00
1,000.0	15.98	294.90	982.8	62.1	-133.7	147.3	0.00	0.00	0.00
1,100.0	15.98	294.90	1,078.9	73.7	-158.7	174.8	0.00	0.00	0.00
1,200.0	15.98	294.90	1,175.1	85.3	-183.7	202.4	0.00	0.00	0.00
1,300.0	15.98	294.90	1,271.2	96.8	-208.6	229.9	0.00	0.00	0.00
1,400.0	15.98	294.90	1,367.3	108.4	-233.6	257.4	0.00	0.00	0.00
1,500.0	15.98	294.90	1,463.5	120.0	-258.6	284.9	0.00	0.00	0.00
1,600.0	15.98	294.90	1,559.6	131.6	-283.6	312.4	0.00	0.00	0.00
1,700.0	15.98	294.90	1,655.7	143.2	-308.6	340.0	0.00	0.00	0.00
1,800.0	15.98	294.90	1,751.9	154.8	-333.5	367.5	0.00	0.00	0.00
1,900.0	15.98	294.90	1,848.0	166.4	-358.5	395.0	0.00	0.00	0.00
2,000.0	15.98	294.90	1,944.1	178.0	-383.5	422.5	0.00	0.00	0.00
2,100.0	15.98	294.90	2,040.3	189.6	-408.5	450.0	0.00	0.00	0.00
2,200.0	15.98	294.90	2,136.4	201.2	-433.5	477.6	0.00	0.00	0.00
2,300.0	15.98	294.90	2,232.5	212.8	-458.4	505.1	0.00	0.00	0.00
<b>Wasatch</b>									
2,307.8	15.98	294.90	2,240.0	213.7	-460.4	507.2	0.00	0.00	0.00
2,400.0	15.98	294.90	2,328.7	224.4	-483.4	532.6	0.00	0.00	0.00
2,500.0	15.98	294.90	2,424.8	236.0	-508.4	560.1	0.00	0.00	0.00
2,600.0	15.98	294.90	2,520.9	247.6	-533.4	587.6	0.00	0.00	0.00
2,700.0	15.98	294.90	2,617.1	259.2	-558.3	615.2	0.00	0.00	0.00
2,800.0	15.98	294.90	2,713.2	270.8	-583.3	642.7	0.00	0.00	0.00
2,900.0	15.98	294.90	2,809.3	282.4	-608.3	670.2	0.00	0.00	0.00
3,000.0	15.98	294.90	2,905.5	293.9	-633.3	697.7	0.00	0.00	0.00
3,100.0	15.98	294.90	3,001.6	305.5	-658.3	725.3	0.00	0.00	0.00
3,200.0	15.98	294.90	3,097.7	317.1	-683.2	752.8	0.00	0.00	0.00
3,300.0	15.98	294.90	3,193.9	328.7	-708.2	780.3	0.00	0.00	0.00
3,400.0	15.98	294.90	3,290.0	340.3	-733.2	807.8	0.00	0.00	0.00
3,500.0	15.98	294.90	3,386.1	351.9	-758.2	835.3	0.00	0.00	0.00
3,600.0	15.98	294.90	3,482.3	363.5	-783.1	862.9	0.00	0.00	0.00
3,700.0	15.98	294.90	3,578.4	375.1	-808.1	890.4	0.00	0.00	0.00
3,800.0	15.98	294.90	3,674.5	386.7	-833.1	917.9	0.00	0.00	0.00
3,900.0	15.98	294.90	3,770.7	398.3	-858.1	945.4	0.00	0.00	0.00
4,000.0	15.98	294.90	3,866.8	409.9	-883.1	972.9	0.00	0.00	0.00
4,100.0	15.98	294.90	3,962.9	421.5	-908.0	1,000.5	0.00	0.00	0.00
4,200.0	15.98	294.90	4,059.1	433.1	-933.0	1,028.0	0.00	0.00	0.00
4,300.0	15.98	294.90	4,155.2	444.7	-958.0	1,055.5	0.00	0.00	0.00
4,400.0	15.98	294.90	4,251.3	456.3	-983.0	1,083.0	0.00	0.00	0.00
4,500.0	15.98	294.90	4,347.5	467.9	-1,007.9	1,110.5	0.00	0.00	0.00
4,600.0	15.98	294.90	4,443.6	479.5	-1,032.9	1,138.1	0.00	0.00	0.00
4,700.0	15.98	294.90	4,539.7	491.0	-1,057.9	1,165.6	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 24C-32 496 - Slot BJU M33 FED 24C-32 496
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Site:</b>	NPM M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24C-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2		

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.0	15.98	294.90	4,635.9	502.6	-1,082.9	1,193.1	0.00	0.00	0.00
4,900.0	15.98	294.90	4,732.0	514.2	-1,107.9	1,220.6	0.00	0.00	0.00
5,000.0	15.98	294.90	4,828.1	525.8	-1,132.8	1,248.1	0.00	0.00	0.00
5,100.0	15.98	294.90	4,924.3	537.4	-1,157.8	1,275.7	0.00	0.00	0.00
5,200.0	15.98	294.90	5,020.4	549.0	-1,182.8	1,303.2	0.00	0.00	0.00
5,300.0	15.98	294.90	5,116.5	560.6	-1,207.8	1,330.7	0.00	0.00	0.00
5,400.0	15.98	294.90	5,212.7	572.2	-1,232.8	1,358.2	0.00	0.00	0.00
<b>Wasatch G</b>									
5,428.4	15.98	294.90	5,240.0	575.5	-1,239.9	1,366.0	0.00	0.00	0.00
5,500.0	15.98	294.90	5,308.8	583.8	-1,257.7	1,385.7	0.00	0.00	0.00
5,600.0	15.98	294.90	5,404.9	595.4	-1,282.7	1,413.3	0.00	0.00	0.00
5,700.0	15.98	294.90	5,501.1	607.0	-1,307.7	1,440.8	0.00	0.00	0.00
<b>Fort Union</b>									
5,725.9	15.98	294.90	5,526.0	610.0	-1,314.2	1,447.9	0.00	0.00	0.00
5,800.0	15.98	294.90	5,597.2	618.6	-1,332.7	1,468.3	0.00	0.00	0.00
5,900.0	15.98	294.90	5,693.3	630.2	-1,357.6	1,495.8	0.00	0.00	0.00
6,000.0	15.98	294.90	5,789.5	641.8	-1,382.6	1,523.3	0.00	0.00	0.00
6,100.0	15.98	294.90	5,885.6	653.4	-1,407.6	1,550.9	0.00	0.00	0.00
6,200.0	15.98	294.90	5,981.7	665.0	-1,432.6	1,578.4	0.00	0.00	0.00
6,300.0	15.98	294.90	6,077.9	676.6	-1,457.6	1,605.9	0.00	0.00	0.00
6,400.0	15.98	294.90	6,174.0	688.1	-1,482.5	1,633.4	0.00	0.00	0.00
6,500.0	15.98	294.90	6,270.1	699.7	-1,507.5	1,660.9	0.00	0.00	0.00
6,600.0	15.98	294.90	6,366.3	711.3	-1,532.5	1,688.5	0.00	0.00	0.00
6,700.0	15.98	294.90	6,462.4	722.9	-1,557.5	1,716.0	0.00	0.00	0.00
6,800.0	15.98	294.90	6,558.5	734.5	-1,582.4	1,743.5	0.00	0.00	0.00
6,900.0	15.98	294.90	6,654.7	746.1	-1,607.4	1,771.0	0.00	0.00	0.00
7,000.0	15.98	294.90	6,750.8	757.7	-1,632.4	1,798.5	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
7,107.4	15.98	294.90	6,854.1	770.2	-1,659.2	1,828.1	0.00	0.00	0.00
7,200.0	13.21	294.90	6,943.7	780.0	-1,680.4	1,851.4	3.00	-3.00	0.00
7,300.0	10.21	294.90	7,041.6	788.5	-1,698.8	1,871.7	3.00	-3.00	0.00
7,400.0	7.21	294.90	7,140.4	794.9	-1,712.5	1,886.8	3.00	-3.00	0.00
7,500.0	4.21	294.90	7,239.9	799.1	-1,721.5	1,896.8	3.00	-3.00	0.00
7,600.0	1.21	294.90	7,339.8	801.1	-1,725.8	1,901.5	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek</b>									
7,640.2	0.00	0.00	7,380.0	801.3	-1,726.2	1,901.9	3.00	-3.00	0.00
7,700.0	0.90	250.14	7,439.8	801.1	-1,726.6	1,902.2	1.50	1.50	0.00
<b>EOB @ 1.59° Inc. / 250.14° Azm</b>									
7,746.3	1.59	250.14	7,486.0	800.8	-1,727.6	1,903.0	1.50	1.50	0.00
7,800.0	1.59	250.14	7,539.7	800.2	-1,729.0	1,904.1	0.00	0.00	0.00
7,900.0	1.59	250.14	7,639.7	799.3	-1,731.6	1,906.1	0.00	0.00	0.00
<b>Williams Fork - TOG</b>									
7,903.3	1.59	250.14	7,643.0	799.3	-1,731.7	1,906.2	0.00	0.00	0.00
8,000.0	1.59	250.14	7,739.7	798.4	-1,734.2	1,908.2	0.00	0.00	0.00
8,100.0	1.59	250.14	7,839.6	797.4	-1,736.8	1,910.2	0.00	0.00	0.00
8,200.0	1.59	250.14	7,939.6	796.5	-1,739.4	1,912.2	0.00	0.00	0.00
8,300.0	1.59	250.14	8,039.5	795.5	-1,742.0	1,914.3	0.00	0.00	0.00
8,400.0	1.59	250.14	8,139.5	794.6	-1,744.7	1,916.3	0.00	0.00	0.00
8,500.0	1.59	250.14	8,239.5	793.6	-1,747.3	1,918.3	0.00	0.00	0.00
8,600.0	1.59	250.14	8,339.4	792.7	-1,749.9	1,920.4	0.00	0.00	0.00
8,700.0	1.59	250.14	8,439.4	791.8	-1,752.5	1,922.4	0.00	0.00	0.00
8,800.0	1.59	250.14	8,539.3	790.8	-1,755.1	1,924.5	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 24C-32 496 - Slot BJU M33 FED 24C-32 496
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Site:</b>	NPM M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24C-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,900.0	1.59	250.14	8,639.3	789.9	-1,757.7	1,926.5	0.00	0.00	0.00	
9,000.0	1.59	250.14	8,739.3	788.9	-1,760.3	1,928.5	0.00	0.00	0.00	
9,100.0	1.59	250.14	8,839.2	788.0	-1,762.9	1,930.6	0.00	0.00	0.00	
9,200.0	1.59	250.14	8,939.2	787.0	-1,765.5	1,932.6	0.00	0.00	0.00	
9,300.0	1.59	250.14	9,039.2	786.1	-1,768.2	1,934.7	0.00	0.00	0.00	
9,400.0	1.59	250.14	9,139.1	785.2	-1,770.8	1,936.7	0.00	0.00	0.00	
9,500.0	1.59	250.14	9,239.1	784.2	-1,773.4	1,938.7	0.00	0.00	0.00	
9,600.0	1.59	250.14	9,339.0	783.3	-1,776.0	1,940.8	0.00	0.00	0.00	
9,700.0	1.59	250.14	9,439.0	782.3	-1,778.6	1,942.8	0.00	0.00	0.00	
9,800.0	1.59	250.14	9,539.0	781.4	-1,781.2	1,944.9	0.00	0.00	0.00	
9,900.0	1.59	250.14	9,638.9	780.4	-1,783.8	1,946.9	0.00	0.00	0.00	
10,000.0	1.59	250.14	9,738.9	779.5	-1,786.4	1,948.9	0.00	0.00	0.00	
10,100.0	1.59	250.14	9,838.8	778.6	-1,789.0	1,951.0	0.00	0.00	0.00	
10,200.0	1.59	250.14	9,938.8	777.6	-1,791.6	1,953.0	0.00	0.00	0.00	
10,300.0	1.59	250.14	10,038.8	776.7	-1,794.3	1,955.1	0.00	0.00	0.00	
10,400.0	1.59	250.14	10,138.7	775.7	-1,796.9	1,957.1	0.00	0.00	0.00	
Cameo										
10,442.3	1.59	250.14	10,181.0	775.3	-1,798.0	1,958.0	0.00	0.00	0.00	
10,500.0	1.59	250.14	10,238.7	774.8	-1,799.5	1,959.1	0.00	0.00	0.00	
10,600.0	1.59	250.14	10,338.7	773.8	-1,802.1	1,961.2	0.00	0.00	0.00	
10,700.0	1.59	250.14	10,438.6	772.9	-1,804.7	1,963.2	0.00	0.00	0.00	
10,800.0	1.59	250.14	10,538.6	772.0	-1,807.3	1,965.3	0.00	0.00	0.00	
10,900.0	1.59	250.14	10,638.5	771.0	-1,809.9	1,967.3	0.00	0.00	0.00	
11,000.0	1.59	250.14	10,738.5	770.1	-1,812.5	1,969.3	0.00	0.00	0.00	
Rollins										
11,092.5	1.59	250.14	10,831.0	769.2	-1,814.9	1,971.2	0.00	0.00	0.00	
11,100.0	1.59	250.14	10,838.5	769.1	-1,815.1	1,971.4	0.00	0.00	0.00	
11,200.0	1.59	250.14	10,938.4	768.2	-1,817.8	1,973.4	0.00	0.00	0.00	
TD @ 11292.6' MD / 11031.0' TVD										
11,292.6	1.59	250.14	11,031.0	767.3	-1,820.2	1,975.3	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
- hit/miss target										
- Shape										
OHCR - D#2 - BJ M33	0.00	0.00	7,380.0	801.3	-1,726.2	14,413,067.68	2,433,075.25	39.655575		-108.183976
- plan hits target center										
- Point										
PBHL - D#2 - BJ M33	0.00	0.00	11,031.0	767.3	-1,820.2	14,413,030.80	2,432,982.40	39.655481		-108.184310
- plan hits target center										
- Ellipse (radii L100.0 W50.0 on 250.00 azi)										

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 24C-32 496 - Slot BJU M33 FED 24C-32 496
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8431.0usft (H&P #329)
<b>Site:</b>	NPM M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24C-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2		

#### Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,307.8	2,240.0	Wasatch			
5,428.4	5,240.0	Wasatch G			
5,725.9	5,526.0	Fort Union			
7,640.2	7,380.0	Ohio Creek			
7,903.3	7,643.0	Williams Fork			
7,903.3	7,643.0	TOG			
10,442.3	10,181.0	Cameo			
11,092.5	10,831.0	Rollins			

#### Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.0	200.0	0.0	0.0	Build 3° / 100'
732.8	725.9	31.1	-67.0	EOB @ 15.98° Inc. / 294.90° Azm
7,107.4	6,854.1	770.2	-1,659.2	Drop 3° / 100'
7,640.2	7,380.0	801.3	-1,726.2	EOD @ Vertical / Build 1.5° / 100'
7,746.3	7,486.0	800.8	-1,727.6	EOB @ 1.59° Inc. / 250.14° Azm
11,292.6	11,031.0	767.3	-1,820.2	TD @ 11292.6' MD / 11031.0' TVD