

Project: Garfield County, CO  
 Site: NPM M33 496 Pad  
 Well: BJU M33 FED 22D-32 496  
 Wellbore: Wellbore #1  
 Design: Design #2  
 Latitude: 39.653646  
 Longitude: -108.177749  
 Ground Level: 8401.0  
 RKB @ 8431.0usft (H&P #329)

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2295.0	2420.8	Wasatch
5295.0	5659.7	Wasatch G
5571.0	5957.7	Fort Union
7419.0	7913.8	Ohio Creek
7694.0	8188.8	TOG
7694.0	8188.8	Williams Fork
10236.0	10731.8	Cameo
10887.0	11383.1	Rollins

#### REFERENCE INFORMATION

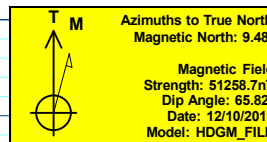
Co-ordinate (N/E) Reference: Well BJU M33 FED 22D-32 496 - Slot BJU M33 FED 22D-32 496, True North  
 Vertical (TVD) Reference: RKB @ 8431.0usft (H&P #329)  
 Section (VS) Reference: Slot - BJU M33 FED 22D-32 496(0.0N, 0.0E)  
 Measured Depth Reference: RKB @ 8431.0usft (H&P #329)  
 Calculation Method: Minimum Curvature

#### WELL DETAILS: BJU M33 FED 22D-32 496

8401.0  
 +N/-S 0.0 +E/-W 0.0 Northing 14412420.30 Easting 2434850.40 Latitude 39.653646 Longitude -108.177749

#### 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

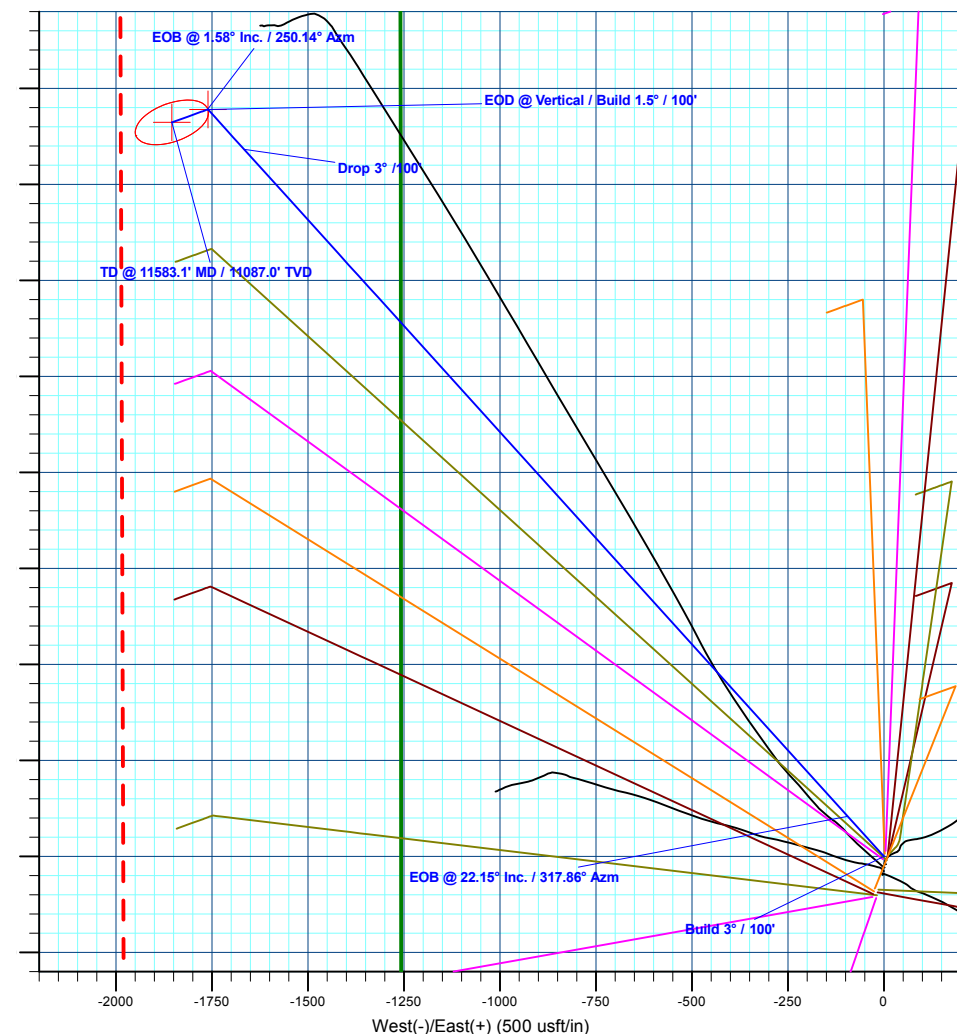
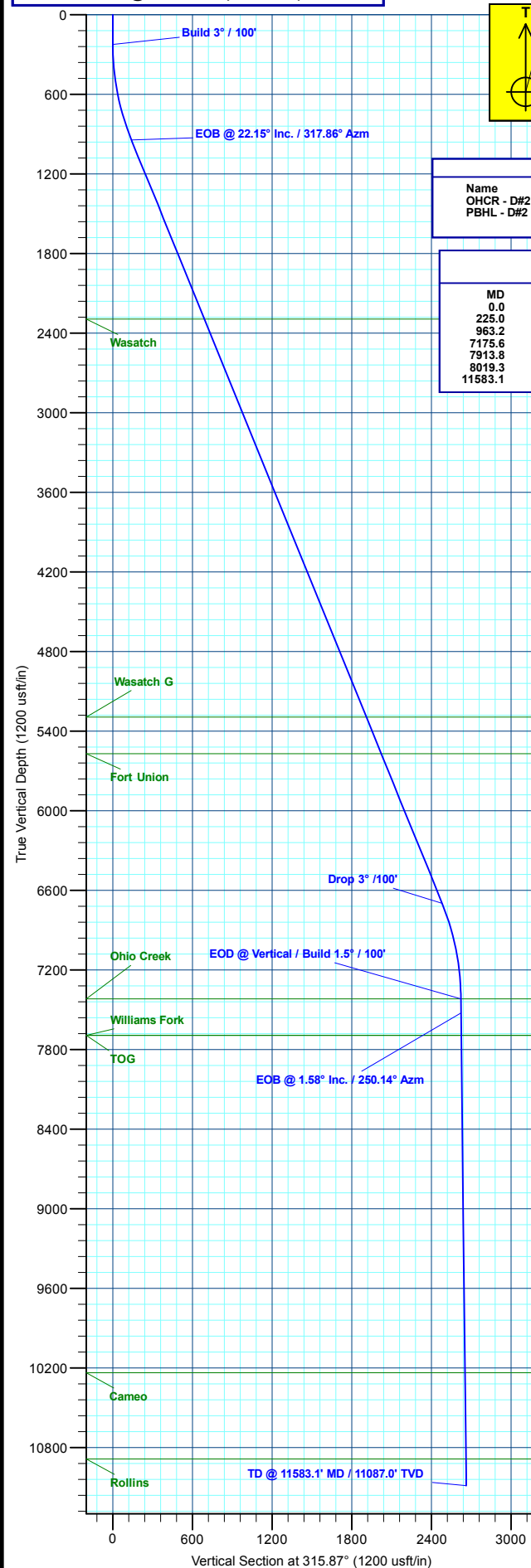


#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - D#2 - BJ M33 22D-32 496	7419.0	1945.5	-1760.1	14414309.48	2433029.95	39.658985	-108.183999
PBHL - D#2 - BJ M33 22D-32 496	11087.0	1911.5	-1854.1	14414272.60	2432937.10	39.658892	-108.184332

#### 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	
225.0	0.00	0.00	225.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
963.2	22.15	317.86	944.9	104.5	-94.5	3.00	317.86	140.8	EOB @ 22.15° Inc. / 317.86° Azm
7175.6	0.00	317.86	6699.1	1841.0	-1665.6	0.00	0.00	2481.2	Drop 3° / 100'
7913.8	22.15	0.00	7419.0	1945.5	-1760.1	3.00	180.00	2622.0	EOD @ Vertical / Build 1.5° / 100'
8019.3	1.58	250.14	7524.5	1945.0	-1761.5	1.50	250.14	2622.6	EOB @ 1.58° Inc. / 250.14° Azm
11583.1	1.58	250.14	11087.0	1911.5	-1854.1	0.00	0.00	2663.0	TD @ 11583.1' MD / 11087.0' TVD



Plan: Design #2 (BJU M33 FED 22D-32 496/Wellbore #1)

Created By: Will Jircik

Date: 12:57, January 16 2020



## **Caerus Oil & Gas**

**Garfield County, CO**

**NPM M33 496 Pad**

**BJU M33 FED 22D-32 496 - Slot BJU M33 FED 22D-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 22D-32 496 - Slot BJU M33 FED 22D-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 22D-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 22D-32 496 - Slot BJU M33 FED 22D-32 496		
<b>Well Position</b>	<b>+N/-S</b>	-2,543.9 usft	<b>Northing:</b> 14,412,420.30 usft
	<b>+E/-W</b>	-12,247.9 usft	<b>Easting:</b> 2,434,850.40 usft
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 39.653646
			<b>Longitude:</b> -108.177749
			<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	51,258.70000000

<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	315.87	

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
225.0	0.00	0.00	225.0	0.0	0.0	0.00	0.00	0.00	0.00	
963.2	22.15	317.86	944.9	104.5	-94.5	3.00	3.00	0.00	317.86	
7,175.6	22.15	317.86	6,699.1	1,841.0	-1,665.6	0.00	0.00	0.00	0.00	
7,913.8	0.00	0.00	7,419.0	1,945.5	-1,760.1	3.00	-3.00	0.00	180.00	OHCR - D#2 - BJ M
8,019.3	1.58	250.14	7,524.5	1,945.0	-1,761.5	1.50	1.50	-104.10	250.14	
11,583.1	1.58	250.14	11,087.0	1,911.5	-1,854.1	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 22D-32 496 - Slot BJU M33 FED 22D-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 22D-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
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Build 3° / 100'</b>									
225.0	0.00	0.00	225.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	2.25	317.86	300.0	1.1	-1.0	1.5	3.00	3.00	0.00
400.0	5.25	317.86	399.8	5.9	-5.4	8.0	3.00	3.00	0.00
500.0	8.25	317.86	499.1	14.7	-13.3	19.8	3.00	3.00	0.00
600.0	11.25	317.86	597.6	27.2	-24.6	36.7	3.00	3.00	0.00
700.0	14.25	317.86	695.1	43.6	-39.4	58.7	3.00	3.00	0.00
800.0	17.25	317.86	791.4	63.7	-57.6	85.9	3.00	3.00	0.00
900.0	20.25	317.86	886.0	87.5	-79.2	118.0	3.00	3.00	0.00
<b>EOB @ 22.15° Inc. / 317.86° Azm</b>									
963.2	22.15	317.86	944.9	104.5	-94.5	140.8	3.00	3.00	0.00
1,000.0	22.15	317.86	979.0	114.8	-103.8	154.7	0.00	0.00	0.00
1,100.0	22.15	317.86	1,071.7	142.7	-129.1	192.3	0.00	0.00	0.00
1,200.0	22.15	317.86	1,164.3	170.7	-154.4	230.0	0.00	0.00	0.00
1,300.0	22.15	317.86	1,256.9	198.6	-179.7	267.7	0.00	0.00	0.00
1,400.0	22.15	317.86	1,349.5	226.6	-205.0	305.4	0.00	0.00	0.00
1,500.0	22.15	317.86	1,442.2	254.5	-230.3	343.0	0.00	0.00	0.00
1,600.0	22.15	317.86	1,534.8	282.5	-255.6	380.7	0.00	0.00	0.00
1,700.0	22.15	317.86	1,627.4	310.4	-280.9	418.4	0.00	0.00	0.00
1,800.0	22.15	317.86	1,720.0	338.4	-306.2	456.1	0.00	0.00	0.00
1,900.0	22.15	317.86	1,812.7	366.3	-331.4	493.7	0.00	0.00	0.00
2,000.0	22.15	317.86	1,905.3	394.3	-356.7	531.4	0.00	0.00	0.00
2,100.0	22.15	317.86	1,997.9	422.2	-382.0	569.1	0.00	0.00	0.00
2,200.0	22.15	317.86	2,090.5	450.2	-407.3	606.7	0.00	0.00	0.00
2,300.0	22.15	317.86	2,183.1	478.2	-432.6	644.4	0.00	0.00	0.00
2,400.0	22.15	317.86	2,275.8	506.1	-457.9	682.1	0.00	0.00	0.00
<b>Wasatch</b>									
2,420.8	22.15	317.86	2,295.0	511.9	-463.1	689.9	0.00	0.00	0.00
2,500.0	22.15	317.86	2,368.4	534.1	-483.2	719.8	0.00	0.00	0.00
2,600.0	22.15	317.86	2,461.0	562.0	-508.5	757.4	0.00	0.00	0.00
2,700.0	22.15	317.86	2,553.6	590.0	-533.8	795.1	0.00	0.00	0.00
2,800.0	22.15	317.86	2,646.3	617.9	-559.0	832.8	0.00	0.00	0.00
2,900.0	22.15	317.86	2,738.9	645.9	-584.3	870.5	0.00	0.00	0.00
3,000.0	22.15	317.86	2,831.5	673.8	-609.6	908.1	0.00	0.00	0.00
3,100.0	22.15	317.86	2,924.1	701.8	-634.9	945.8	0.00	0.00	0.00
3,200.0	22.15	317.86	3,016.8	729.7	-660.2	983.5	0.00	0.00	0.00
3,300.0	22.15	317.86	3,109.4	757.7	-685.5	1,021.1	0.00	0.00	0.00
3,400.0	22.15	317.86	3,202.0	785.6	-710.8	1,058.8	0.00	0.00	0.00
3,500.0	22.15	317.86	3,294.6	813.6	-736.1	1,096.5	0.00	0.00	0.00
3,600.0	22.15	317.86	3,387.2	841.5	-761.4	1,134.2	0.00	0.00	0.00
3,700.0	22.15	317.86	3,479.9	869.5	-786.7	1,171.8	0.00	0.00	0.00
3,800.0	22.15	317.86	3,572.5	897.4	-811.9	1,209.5	0.00	0.00	0.00
3,900.0	22.15	317.86	3,665.1	925.4	-837.2	1,247.2	0.00	0.00	0.00
4,000.0	22.15	317.86	3,757.7	953.4	-862.5	1,284.9	0.00	0.00	0.00
4,100.0	22.15	317.86	3,850.4	981.3	-887.8	1,322.5	0.00	0.00	0.00
4,200.0	22.15	317.86	3,943.0	1,009.3	-913.1	1,360.2	0.00	0.00	0.00
4,300.0	22.15	317.86	4,035.6	1,037.2	-938.4	1,397.9	0.00	0.00	0.00
4,400.0	22.15	317.86	4,128.2	1,065.2	-963.7	1,435.5	0.00	0.00	0.00
4,500.0	22.15	317.86	4,220.9	1,093.1	-989.0	1,473.2	0.00	0.00	0.00
4,600.0	22.15	317.86	4,313.5	1,121.1	-1,014.3	1,510.9	0.00	0.00	0.00

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<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 22D-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)
4,700.0	22.15	317.86	4,406.1	1,149.0	-1,039.6	1,548.6	0.00	0.00	0.00
4,800.0	22.15	317.86	4,498.7	1,177.0	-1,064.8	1,586.2	0.00	0.00	0.00
4,900.0	22.15	317.86	4,591.3	1,204.9	-1,090.1	1,623.9	0.00	0.00	0.00
5,000.0	22.15	317.86	4,684.0	1,232.9	-1,115.4	1,661.6	0.00	0.00	0.00
5,100.0	22.15	317.86	4,776.6	1,260.8	-1,140.7	1,699.2	0.00	0.00	0.00
5,200.0	22.15	317.86	4,869.2	1,288.8	-1,166.0	1,736.9	0.00	0.00	0.00
5,300.0	22.15	317.86	4,961.8	1,316.7	-1,191.3	1,774.6	0.00	0.00	0.00
5,400.0	22.15	317.86	5,054.5	1,344.7	-1,216.6	1,812.3	0.00	0.00	0.00
5,500.0	22.15	317.86	5,147.1	1,372.6	-1,241.9	1,849.9	0.00	0.00	0.00
5,600.0	22.15	317.86	5,239.7	1,400.6	-1,267.2	1,887.6	0.00	0.00	0.00
<b>Wasatch G</b>									
5,659.7	22.15	317.86	5,295.0	1,417.3	-1,282.3	1,910.1	0.00	0.00	0.00
5,700.0	22.15	317.86	5,332.3	1,428.5	-1,292.5	1,925.3	0.00	0.00	0.00
5,800.0	22.15	317.86	5,425.0	1,456.5	-1,317.7	1,963.0	0.00	0.00	0.00
5,900.0	22.15	317.86	5,517.6	1,484.5	-1,343.0	2,000.6	0.00	0.00	0.00
<b>Fort Union</b>									
5,957.7	22.15	317.86	5,571.0	1,500.6	-1,357.6	2,022.4	0.00	0.00	0.00
6,000.0	22.15	317.86	5,610.2	1,512.4	-1,368.3	2,038.3	0.00	0.00	0.00
6,100.0	22.15	317.86	5,702.8	1,540.4	-1,393.6	2,076.0	0.00	0.00	0.00
6,200.0	22.15	317.86	5,795.5	1,568.3	-1,418.9	2,113.6	0.00	0.00	0.00
6,300.0	22.15	317.86	5,888.1	1,596.3	-1,444.2	2,151.3	0.00	0.00	0.00
6,400.0	22.15	317.86	5,980.7	1,624.2	-1,469.5	2,189.0	0.00	0.00	0.00
6,500.0	22.15	317.86	6,073.3	1,652.2	-1,494.8	2,226.7	0.00	0.00	0.00
6,600.0	22.15	317.86	6,165.9	1,680.1	-1,520.1	2,264.3	0.00	0.00	0.00
6,700.0	22.15	317.86	6,258.6	1,708.1	-1,545.3	2,302.0	0.00	0.00	0.00
6,800.0	22.15	317.86	6,351.2	1,736.0	-1,570.6	2,339.7	0.00	0.00	0.00
6,900.0	22.15	317.86	6,443.8	1,764.0	-1,595.9	2,377.4	0.00	0.00	0.00
7,000.0	22.15	317.86	6,536.4	1,791.9	-1,621.2	2,415.0	0.00	0.00	0.00
7,100.0	22.15	317.86	6,629.1	1,819.9	-1,646.5	2,452.7	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
7,175.6	22.15	317.86	6,699.1	1,841.0	-1,665.6	2,481.2	0.00	0.00	0.00
7,200.0	21.41	317.86	6,721.7	1,847.7	-1,671.7	2,490.2	3.00	-3.00	0.00
7,300.0	18.41	317.86	6,815.8	1,873.0	-1,694.5	2,524.3	3.00	-3.00	0.00
7,400.0	15.41	317.86	6,911.4	1,894.6	-1,714.1	2,553.3	3.00	-3.00	0.00
7,500.0	12.41	317.86	7,008.5	1,912.4	-1,730.2	2,577.4	3.00	-3.00	0.00
7,600.0	9.41	317.86	7,106.7	1,926.4	-1,742.9	2,596.3	3.00	-3.00	0.00
7,700.0	6.41	317.86	7,205.7	1,936.6	-1,752.1	2,610.0	3.00	-3.00	0.00
7,800.0	3.41	317.86	7,305.3	1,943.0	-1,757.9	2,618.6	3.00	-3.00	0.00
7,900.0	0.41	317.86	7,405.2	1,945.5	-1,760.1	2,621.9	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek</b>									
7,913.8	0.00	0.00	7,419.0	1,945.5	-1,760.1	2,622.0	3.00	-3.00	0.00
8,000.0	1.29	250.14	7,505.2	1,945.2	-1,761.1	2,622.4	1.50	1.50	0.00
<b>EOB @ 1.58° Inc. / 250.14° Azm</b>									
8,019.3	1.58	250.14	7,524.5	1,945.0	-1,761.5	2,622.6	1.50	1.50	0.00
8,100.0	1.58	250.14	7,605.2	1,944.2	-1,763.6	2,623.5	0.00	0.00	0.00
<b>Williams Fork - TOG</b>									
8,188.8	1.58	250.14	7,694.0	1,943.4	-1,765.9	2,624.5	0.00	0.00	0.00
8,200.0	1.58	250.14	7,705.2	1,943.3	-1,766.2	2,624.6	0.00	0.00	0.00
8,300.0	1.58	250.14	7,805.1	1,942.4	-1,768.8	2,625.8	0.00	0.00	0.00
8,400.0	1.58	250.14	7,905.1	1,941.4	-1,771.4	2,626.9	0.00	0.00	0.00
8,500.0	1.58	250.14	8,005.0	1,940.5	-1,774.0	2,628.0	0.00	0.00	0.00
8,600.0	1.58	250.14	8,105.0	1,939.5	-1,776.6	2,629.2	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 22D-32 496 - Slot BJU M33 FED 22D-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 22D-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)
8,700.0	1.58	250.14	8,205.0	1,938.6	-1,779.2	2,630.3	0.00	0.00	0.00
8,800.0	1.58	250.14	8,304.9	1,937.7	-1,781.8	2,631.4	0.00	0.00	0.00
8,900.0	1.58	250.14	8,404.9	1,936.7	-1,784.4	2,632.6	0.00	0.00	0.00
9,000.0	1.58	250.14	8,504.9	1,935.8	-1,787.0	2,633.7	0.00	0.00	0.00
9,100.0	1.58	250.14	8,604.8	1,934.9	-1,789.6	2,634.8	0.00	0.00	0.00
9,200.0	1.58	250.14	8,704.8	1,933.9	-1,792.2	2,636.0	0.00	0.00	0.00
9,300.0	1.58	250.14	8,804.7	1,933.0	-1,794.8	2,637.1	0.00	0.00	0.00
9,400.0	1.58	250.14	8,904.7	1,932.0	-1,797.4	2,638.2	0.00	0.00	0.00
9,500.0	1.58	250.14	9,004.7	1,931.1	-1,800.0	2,639.4	0.00	0.00	0.00
9,600.0	1.58	250.14	9,104.6	1,930.2	-1,802.6	2,640.5	0.00	0.00	0.00
9,700.0	1.58	250.14	9,204.6	1,929.2	-1,805.2	2,641.7	0.00	0.00	0.00
9,800.0	1.58	250.14	9,304.6	1,928.3	-1,807.8	2,642.8	0.00	0.00	0.00
9,900.0	1.58	250.14	9,404.5	1,927.3	-1,810.4	2,643.9	0.00	0.00	0.00
10,000.0	1.58	250.14	9,504.5	1,926.4	-1,813.0	2,645.1	0.00	0.00	0.00
10,100.0	1.58	250.14	9,604.4	1,925.5	-1,815.6	2,646.2	0.00	0.00	0.00
10,200.0	1.58	250.14	9,704.4	1,924.5	-1,818.2	2,647.3	0.00	0.00	0.00
10,300.0	1.58	250.14	9,804.4	1,923.6	-1,820.8	2,648.5	0.00	0.00	0.00
10,400.0	1.58	250.14	9,904.3	1,922.7	-1,823.4	2,649.6	0.00	0.00	0.00
10,500.0	1.58	250.14	10,004.3	1,921.7	-1,826.0	2,650.7	0.00	0.00	0.00
10,600.0	1.58	250.14	10,104.2	1,920.8	-1,828.6	2,651.9	0.00	0.00	0.00
10,700.0	1.58	250.14	10,204.2	1,919.8	-1,831.2	2,653.0	0.00	0.00	0.00
Cameo									
10,731.8	1.58	250.14	10,236.0	1,919.5	-1,832.0	2,653.4	0.00	0.00	0.00
10,800.0	1.58	250.14	10,304.2	1,918.9	-1,833.8	2,654.1	0.00	0.00	0.00
10,900.0	1.58	250.14	10,404.1	1,918.0	-1,836.4	2,655.3	0.00	0.00	0.00
11,000.0	1.58	250.14	10,504.1	1,917.0	-1,839.0	2,656.4	0.00	0.00	0.00
11,100.0	1.58	250.14	10,604.1	1,916.1	-1,841.6	2,657.5	0.00	0.00	0.00
11,200.0	1.58	250.14	10,704.0	1,915.1	-1,844.2	2,658.7	0.00	0.00	0.00
11,300.0	1.58	250.14	10,804.0	1,914.2	-1,846.8	2,659.8	0.00	0.00	0.00
Rollins									
11,383.1	1.58	250.14	10,887.0	1,913.4	-1,848.9	2,660.8	0.00	0.00	0.00
11,400.0	1.58	250.14	10,903.9	1,913.3	-1,849.3	2,661.0	0.00	0.00	0.00
11,500.0	1.58	250.14	11,003.9	1,912.3	-1,851.9	2,662.1	0.00	0.00	0.00
TD @ 11583.1' MD / 11087.0' TVD									
11,583.1	1.58	250.14	11,087.0	1,911.5	-1,854.1	2,663.0	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	7,419.0	1,945.5	-1,760.1	14,414,309.48	2,433,029.95	39.658985	-108.183999
- plan hits target center									
- Point									
PBHL - D#2 - BJ M33	0.00	0.00	11,087.0	1,911.5	-1,854.1	14,414,272.60	2,432,937.10	39.658892	-108.184332
- 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 22D-32 496 - Slot BJU M33 FED 22D-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 22D-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 (°)
2,420.8	2,295.0	Wasatch			
5,659.7	5,295.0	Wasatch G			
5,957.7	5,571.0	Fort Union			
7,913.8	7,419.0	Ohio Creek			
8,188.8	7,694.0	Williams Fork			
8,188.8	7,694.0	TOG			
10,731.8	10,236.0	Cameo			
11,383.1	10,887.0	Rollins			

#### Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
225.0	225.0	0.0	0.0	Build 3° / 100'
963.2	944.9	104.5	-94.5	EOB @ 22.15° Inc. / 317.86° Azm
7,175.6	6,699.1	1,841.0	-1,665.6	Drop 3° / 100'
7,913.8	7,419.0	1,945.5	-1,760.1	EOD @ Vertical / Build 1.5° / 100'
8,019.3	7,524.5	1,945.0	-1,761.5	EOB @ 1.58° Inc. / 250.14° Azm
11,583.1	11,087.0	1,911.5	-1,854.1	TD @ 11583.1' MD / 11087.0' TVD