

Project: Garfield County, CO  
 Site: BJU M33 496 Pad  
 Well: BJU M33 FED 24A-32 496  
 Wellbore: Wellbore #1  
 Design: Design #4  
 Latitude: 39.653461  
 Longitude: -108.177780  
 Ground Level: 8401.0  
 RKB @ 8431.0usft (H&P #329)

**FORMATION TOP DETAILS**

TVDPath	MDPath	Formation
2265.0	2389.1	Wasatch
5277.0	5674.3	Wasatch G
5554.0	5976.5	Fort Union
7403.0	7945.9	Ohio Creek
7662.0	8204.9	TOG
7873.0	8215.9	Williams Fork
10221.0	10764.8	Cameo
10867.0	11411.0	Rollins

**REFERENCE INFORMATION**

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

**WELL DETAILS: BJU M33 FED 24A-32 496**

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14412352.60	2434843.90	39.653461	-108.177780
		8401.0		24A-32	

**PROJECT DETAILS: Garfield County, CO**

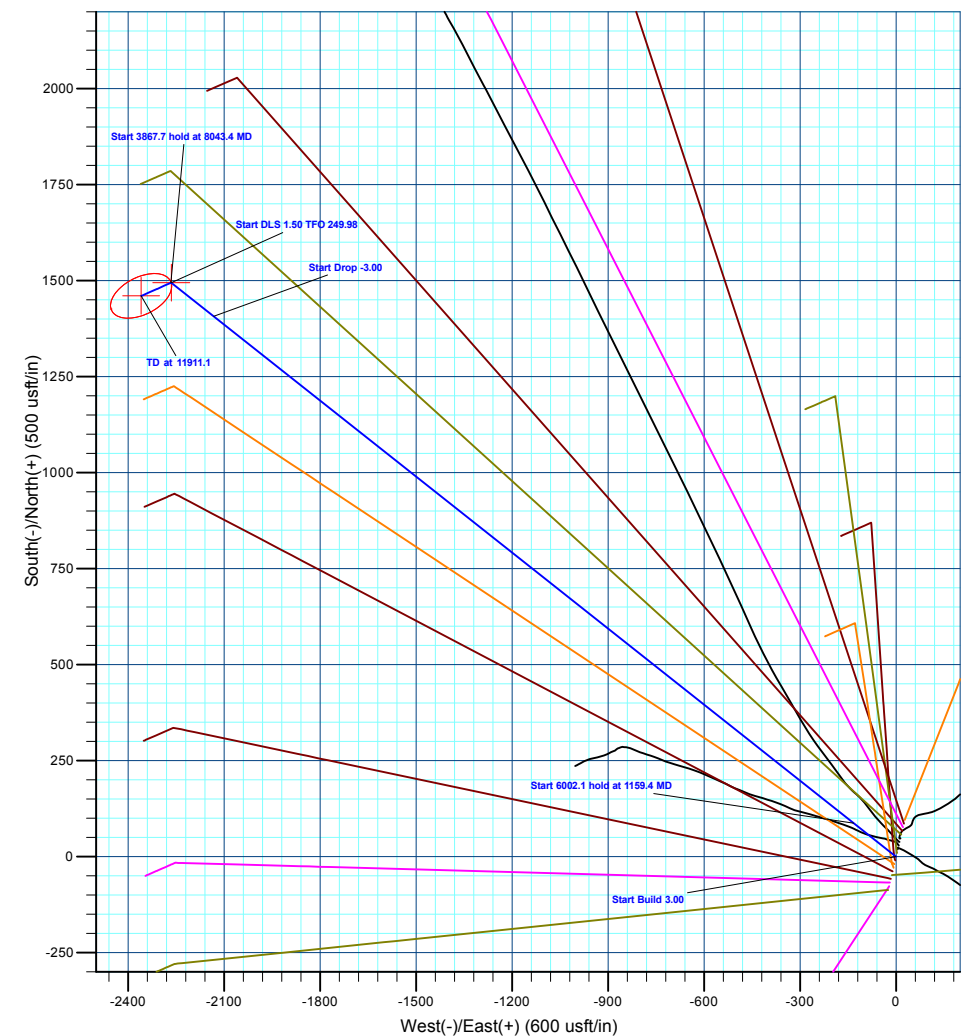
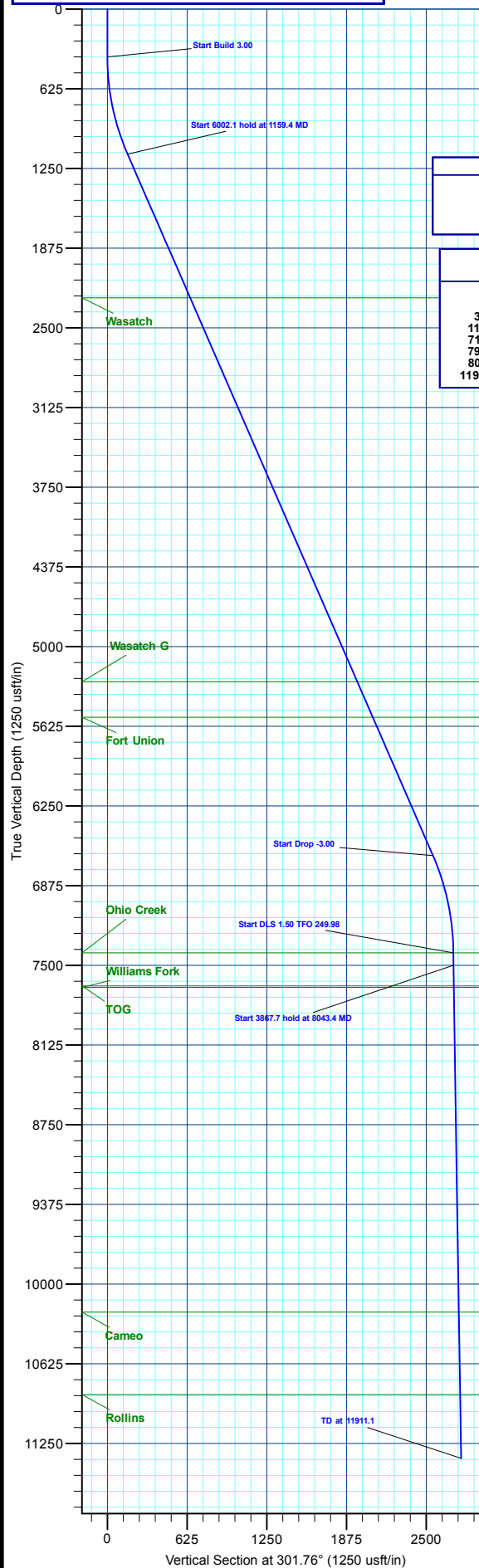
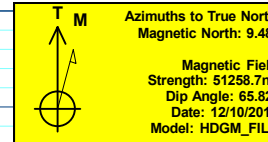
Geodetic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1927 - Western US  
 Ellipsoid: Clarke 1866  
 Zone: Zone 12N (114 W to 108 W)  
 System Datum: Mean Sea Level

**DESIGN TARGET DETAILS**

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 24A-32	7403.0	1494.8	-2265.3	14413775.38	2432532.73	39.657563	-108.185823
PBHL - 24A-32	11367.0	1460.5	-2359.2	14413738.20	2432439.90	39.657469	-108.186156

**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	
375.0	0.00	0.00	375.0	0.0	0.0	0.00	0.00	0.0	Start Build 3.00
1159.4	23.53	303.42	1137.5	87.5	-132.6	3.00	303.42	158.8	Start 6002.1 hold at 1159.4 MD
7161.5	23.53	303.42	6640.5	1407.3	-2132.7	0.00	0.00	2554.1	Start Drop -3.00
7945.9	0.00	0.00	7403.0	1494.8	-2265.3	3.00	180.00	2712.9	Start DLS 1.50 TFO 249.98
8043.4	1.46	249.98	7500.5	1494.3	-2266.5	1.50	249.98	2713.6	Start 3867.7 hold at 8043.4 MD
11911.1	1.46	249.98	11367.0	1460.5	-2359.2	0.00	0.00	2774.7	TD at 11911.1



**Plan: Design #4 (BJU M33 FED 24A-32 496/Wellbore #1)**

**Created By: Will Jircik Date: 9:13, November 19 2022**



## **Caerus Oil & Gas**

**Garfield County, CO**

**BJU M33 496 Pad**

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

**Wellbore #1**

**Plan: Design #4**

## **KLX Well Planning Report**

**19 November, 2022**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 24A-32 496 - Slot 24A-32
<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>	BJU M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24A-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #4		

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

<b>Well</b>	BJU M33 FED 24A-32 496 - Slot 24A-32					
<b>Well Position</b>	<b>+N/-S</b>	-2,611.3 usft	<b>Northing:</b>	14,412,352.60 usft	<b>Latitude:</b>	39.653461
	<b>+E/-W</b>	-12,256.5 usft	<b>Easting:</b>	2,434,843.90 usft	<b>Longitude:</b>	-108.177780
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>		<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 #4			
<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	301.76

<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	
375.0	0.00	0.00	375.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,159.4	23.53	303.42	1,137.5	87.5	-132.6	3.00	3.00	0.00	303.42	
7,161.5	23.53	303.42	6,640.5	1,407.3	-2,132.7	0.00	0.00	0.00	0.00	
7,945.9	0.00	0.00	7,403.0	1,494.8	-2,265.3	3.00	-3.00	0.00	180.00	OHCR - 24A-32
8,043.4	1.46	249.98	7,500.5	1,494.3	-2,266.5	1.50	1.50	-112.80	249.98	
11,911.1	1.46	249.98	11,367.0	1,460.5	-2,359.2	0.00	0.00	0.00	0.00	PBHL - 24A-32

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 24A-32 496 - Slot 24A-32
<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>	BJU M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24A-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #4		

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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Start Build 3.00</b>									
375.0	0.00	0.00	375.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.75	303.42	400.0	0.1	-0.1	0.2	3.00	3.00	0.00
500.0	3.75	303.42	499.9	2.3	-3.4	4.1	3.00	3.00	0.00
600.0	6.75	303.42	599.5	7.3	-11.0	13.2	3.00	3.00	0.00
700.0	9.75	303.42	698.4	15.2	-23.0	27.6	3.00	3.00	0.00
800.0	12.75	303.42	796.5	25.9	-39.3	47.1	3.00	3.00	0.00
900.0	15.75	303.42	893.4	39.5	-59.8	71.7	3.00	3.00	0.00
1,000.0	18.75	303.42	988.9	55.8	-84.6	101.3	3.00	3.00	0.00
1,100.0	21.75	303.42	1,082.7	74.9	-113.5	135.9	3.00	3.00	0.00
<b>Start 6002.1 hold at 1159.4 MD</b>									
1,159.4	23.53	303.42	1,137.5	87.5	-132.6	158.8	3.00	3.00	0.00
1,200.0	23.53	303.42	1,174.8	96.4	-146.1	175.0	0.00	0.00	0.00
1,300.0	23.53	303.42	1,266.4	118.4	-179.4	214.9	0.00	0.00	0.00
1,400.0	23.53	303.42	1,358.1	140.4	-212.7	254.8	0.00	0.00	0.00
1,500.0	23.53	303.42	1,449.8	162.4	-246.1	294.7	0.00	0.00	0.00
1,600.0	23.53	303.42	1,541.5	184.4	-279.4	334.6	0.00	0.00	0.00
1,700.0	23.53	303.42	1,633.2	206.3	-312.7	374.5	0.00	0.00	0.00
1,800.0	23.53	303.42	1,724.9	228.3	-346.0	414.4	0.00	0.00	0.00
1,900.0	23.53	303.42	1,816.5	250.3	-379.4	454.3	0.00	0.00	0.00
2,000.0	23.53	303.42	1,908.2	272.3	-412.7	494.2	0.00	0.00	0.00
2,100.0	23.53	303.42	1,999.9	294.3	-446.0	534.1	0.00	0.00	0.00
2,200.0	23.53	303.42	2,091.6	316.3	-479.3	574.1	0.00	0.00	0.00
2,300.0	23.53	303.42	2,183.3	338.3	-512.7	614.0	0.00	0.00	0.00
<b>Wasatch</b>									
2,389.1	23.53	303.42	2,265.0	357.9	-542.4	649.5	0.00	0.00	0.00
2,400.0	23.53	303.42	2,275.0	360.3	-546.0	653.9	0.00	0.00	0.00
2,500.0	23.53	303.42	2,366.6	382.3	-579.3	693.8	0.00	0.00	0.00
2,600.0	23.53	303.42	2,458.3	404.3	-612.6	733.7	0.00	0.00	0.00
2,700.0	23.53	303.42	2,550.0	426.2	-646.0	773.6	0.00	0.00	0.00
2,800.0	23.53	303.42	2,641.7	448.2	-679.3	813.5	0.00	0.00	0.00
2,900.0	23.53	303.42	2,733.4	470.2	-712.6	853.4	0.00	0.00	0.00
3,000.0	23.53	303.42	2,825.1	492.2	-745.9	893.3	0.00	0.00	0.00
3,100.0	23.53	303.42	2,916.8	514.2	-779.3	933.2	0.00	0.00	0.00
3,200.0	23.53	303.42	3,008.4	536.2	-812.6	973.1	0.00	0.00	0.00
3,300.0	23.53	303.42	3,100.1	558.2	-845.9	1,013.0	0.00	0.00	0.00
3,400.0	23.53	303.42	3,191.8	580.2	-879.2	1,053.0	0.00	0.00	0.00
3,500.0	23.53	303.42	3,283.5	602.2	-912.6	1,092.9	0.00	0.00	0.00
3,600.0	23.53	303.42	3,375.2	624.1	-945.9	1,132.8	0.00	0.00	0.00
3,700.0	23.53	303.42	3,466.9	646.1	-979.2	1,172.7	0.00	0.00	0.00
3,800.0	23.53	303.42	3,558.5	668.1	-1,012.5	1,212.6	0.00	0.00	0.00
3,900.0	23.53	303.42	3,650.2	690.1	-1,045.9	1,252.5	0.00	0.00	0.00
4,000.0	23.53	303.42	3,741.9	712.1	-1,079.2	1,292.4	0.00	0.00	0.00
4,100.0	23.53	303.42	3,833.6	734.1	-1,112.5	1,332.3	0.00	0.00	0.00
4,200.0	23.53	303.42	3,925.3	756.1	-1,145.8	1,372.2	0.00	0.00	0.00
4,300.0	23.53	303.42	4,017.0	778.1	-1,179.2	1,412.1	0.00	0.00	0.00
4,400.0	23.53	303.42	4,108.6	800.1	-1,212.5	1,452.0	0.00	0.00	0.00
4,500.0	23.53	303.42	4,200.3	822.0	-1,245.8	1,491.9	0.00	0.00	0.00
4,600.0	23.53	303.42	4,292.0	844.0	-1,279.1	1,531.9	0.00	0.00	0.00

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<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>	BJU M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24A-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #4		

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	23.53	303.42	4,383.7	866.0	-1,312.5	1,571.8	0.00	0.00	0.00	
4,800.0	23.53	303.42	4,475.4	888.0	-1,345.8	1,611.7	0.00	0.00	0.00	
4,900.0	23.53	303.42	4,567.1	910.0	-1,379.1	1,651.6	0.00	0.00	0.00	
5,000.0	23.53	303.42	4,658.8	932.0	-1,412.4	1,691.5	0.00	0.00	0.00	
5,100.0	23.53	303.42	4,750.4	954.0	-1,445.7	1,731.4	0.00	0.00	0.00	
5,200.0	23.53	303.42	4,842.1	976.0	-1,479.1	1,771.3	0.00	0.00	0.00	
5,300.0	23.53	303.42	4,933.8	998.0	-1,512.4	1,811.2	0.00	0.00	0.00	
5,400.0	23.53	303.42	5,025.5	1,019.9	-1,545.7	1,851.1	0.00	0.00	0.00	
5,500.0	23.53	303.42	5,117.2	1,041.9	-1,579.0	1,891.0	0.00	0.00	0.00	
5,600.0	23.53	303.42	5,208.9	1,063.9	-1,612.4	1,930.9	0.00	0.00	0.00	
<b>Wasatch G</b>										
5,674.3	23.53	303.42	5,277.0	1,080.3	-1,637.1	1,960.6	0.00	0.00	0.00	
5,700.0	23.53	303.42	5,300.5	1,085.9	-1,645.7	1,970.9	0.00	0.00	0.00	
5,800.0	23.53	303.42	5,392.2	1,107.9	-1,679.0	2,010.8	0.00	0.00	0.00	
5,900.0	23.53	303.42	5,483.9	1,129.9	-1,712.3	2,050.7	0.00	0.00	0.00	
<b>Fort Union</b>										
5,976.5	23.53	303.42	5,554.0	1,146.7	-1,737.8	2,081.2	0.00	0.00	0.00	
6,000.0	23.53	303.42	5,575.6	1,151.9	-1,745.7	2,090.6	0.00	0.00	0.00	
6,100.0	23.53	303.42	5,667.3	1,173.9	-1,779.0	2,130.5	0.00	0.00	0.00	
6,200.0	23.53	303.42	5,759.0	1,195.9	-1,812.3	2,170.4	0.00	0.00	0.00	
6,300.0	23.53	303.42	5,850.6	1,217.8	-1,845.6	2,210.3	0.00	0.00	0.00	
6,400.0	23.53	303.42	5,942.3	1,239.8	-1,879.0	2,250.2	0.00	0.00	0.00	
6,500.0	23.53	303.42	6,034.0	1,261.8	-1,912.3	2,290.1	0.00	0.00	0.00	
6,600.0	23.53	303.42	6,125.7	1,283.8	-1,945.6	2,330.0	0.00	0.00	0.00	
6,700.0	23.53	303.42	6,217.4	1,305.8	-1,978.9	2,369.9	0.00	0.00	0.00	
6,800.0	23.53	303.42	6,309.1	1,327.8	-2,012.3	2,409.8	0.00	0.00	0.00	
6,900.0	23.53	303.42	6,400.7	1,349.8	-2,045.6	2,449.8	0.00	0.00	0.00	
7,000.0	23.53	303.42	6,492.4	1,371.8	-2,078.9	2,489.7	0.00	0.00	0.00	
7,100.0	23.53	303.42	6,584.1	1,393.8	-2,112.2	2,529.6	0.00	0.00	0.00	
<b>Start Drop -3.00</b>										
7,161.5	23.53	303.42	6,640.5	1,407.3	-2,132.7	2,554.1	0.00	0.00	0.00	
7,200.0	22.38	303.42	6,676.0	1,415.6	-2,145.3	2,569.1	3.00	-3.00	0.00	
7,300.0	19.38	303.42	6,769.4	1,435.2	-2,175.0	2,604.7	3.00	-3.00	0.00	
7,400.0	16.38	303.42	6,864.5	1,452.1	-2,200.6	2,635.4	3.00	-3.00	0.00	
7,500.0	13.38	303.42	6,961.2	1,466.2	-2,222.0	2,661.1	3.00	-3.00	0.00	
7,600.0	10.38	303.42	7,059.0	1,477.6	-2,239.2	2,681.6	3.00	-3.00	0.00	
7,700.0	7.38	303.42	7,157.8	1,486.0	-2,252.1	2,697.1	3.00	-3.00	0.00	
7,800.0	4.38	303.42	7,257.3	1,491.7	-2,260.6	2,707.3	3.00	-3.00	0.00	
7,900.0	1.38	303.42	7,357.1	1,494.4	-2,264.8	2,712.3	3.00	-3.00	0.00	
<b>Start DLS 1.50 TFO 249.98 - Ohio Creek</b>										
7,945.9	0.00	0.00	7,403.0	1,494.8	-2,265.3	2,712.9	3.00	-3.00	0.00	
8,000.0	0.81	249.98	7,457.1	1,494.6	-2,265.6	2,713.1	1.50	1.50	0.00	
<b>Start 3867.7 hold at 8043.4 MD</b>										
8,043.4	1.46	249.98	7,500.5	1,494.3	-2,266.5	2,713.6	1.50	1.50	0.00	
8,100.0	1.46	249.98	7,557.1	1,493.8	-2,267.8	2,714.5	0.00	0.00	0.00	
8,200.0	1.46	249.98	7,657.1	1,493.0	-2,270.2	2,716.1	0.00	0.00	0.00	
<b>TOG</b>										
8,204.9	1.46	249.98	7,662.0	1,492.9	-2,270.3	2,716.2	0.00	0.00	0.00	
<b>Williams Fork</b>										
8,215.9	1.46	249.98	7,673.0	1,492.8	-2,270.6	2,716.4	0.00	0.00	0.00	
8,300.0	1.46	249.98	7,757.0	1,492.1	-2,272.6	2,717.7	0.00	0.00	0.00	
8,400.0	1.46	249.98	7,857.0	1,491.2	-2,275.0	2,719.3	0.00	0.00	0.00	
8,500.0	1.46	249.98	7,957.0	1,490.3	-2,277.4	2,720.8	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 24A-32 496 - Slot 24A-32
<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>	BJU M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24A-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #4		

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)	
8,600.0	1.46	249.98	8,056.9	1,489.5	-2,279.8	2,722.4	0.00	0.00	0.00	
8,700.0	1.46	249.98	8,156.9	1,488.6	-2,282.2	2,724.0	0.00	0.00	0.00	
8,800.0	1.46	249.98	8,256.9	1,487.7	-2,284.6	2,725.6	0.00	0.00	0.00	
8,900.0	1.46	249.98	8,356.8	1,486.8	-2,287.0	2,727.2	0.00	0.00	0.00	
9,000.0	1.46	249.98	8,456.8	1,486.0	-2,289.4	2,728.7	0.00	0.00	0.00	
9,100.0	1.46	249.98	8,556.8	1,485.1	-2,291.8	2,730.3	0.00	0.00	0.00	
9,200.0	1.46	249.98	8,656.7	1,484.2	-2,294.2	2,731.9	0.00	0.00	0.00	
9,300.0	1.46	249.98	8,756.7	1,483.3	-2,296.6	2,733.5	0.00	0.00	0.00	
9,400.0	1.46	249.98	8,856.7	1,482.5	-2,299.0	2,735.1	0.00	0.00	0.00	
9,500.0	1.46	249.98	8,956.7	1,481.6	-2,301.4	2,736.6	0.00	0.00	0.00	
9,600.0	1.46	249.98	9,056.6	1,480.7	-2,303.8	2,738.2	0.00	0.00	0.00	
9,700.0	1.46	249.98	9,156.6	1,479.8	-2,306.2	2,739.8	0.00	0.00	0.00	
9,800.0	1.46	249.98	9,256.6	1,479.0	-2,308.6	2,741.4	0.00	0.00	0.00	
9,900.0	1.46	249.98	9,356.5	1,478.1	-2,311.0	2,743.0	0.00	0.00	0.00	
10,000.0	1.46	249.98	9,456.5	1,477.2	-2,313.4	2,744.5	0.00	0.00	0.00	
10,100.0	1.46	249.98	9,556.5	1,476.3	-2,315.8	2,746.1	0.00	0.00	0.00	
10,200.0	1.46	249.98	9,656.4	1,475.5	-2,318.2	2,747.7	0.00	0.00	0.00	
10,300.0	1.46	249.98	9,756.4	1,474.6	-2,320.6	2,749.3	0.00	0.00	0.00	
10,400.0	1.46	249.98	9,856.4	1,473.7	-2,323.0	2,750.9	0.00	0.00	0.00	
10,500.0	1.46	249.98	9,956.3	1,472.8	-2,325.4	2,752.4	0.00	0.00	0.00	
10,600.0	1.46	249.98	10,056.3	1,472.0	-2,327.8	2,754.0	0.00	0.00	0.00	
10,700.0	1.46	249.98	10,156.3	1,471.1	-2,330.2	2,755.6	0.00	0.00	0.00	
<b>Cameo</b>										
10,764.8	1.46	249.98	10,221.0	1,470.5	-2,331.7	2,756.6	0.00	0.00	0.00	
10,800.0	1.46	249.98	10,256.2	1,470.2	-2,332.6	2,757.2	0.00	0.00	0.00	
10,900.0	1.46	249.98	10,356.2	1,469.3	-2,335.0	2,758.8	0.00	0.00	0.00	
11,000.0	1.46	249.98	10,456.2	1,468.5	-2,337.4	2,760.3	0.00	0.00	0.00	
11,100.0	1.46	249.98	10,556.1	1,467.6	-2,339.8	2,761.9	0.00	0.00	0.00	
11,200.0	1.46	249.98	10,656.1	1,466.7	-2,342.2	2,763.5	0.00	0.00	0.00	
11,300.0	1.46	249.98	10,756.1	1,465.9	-2,344.6	2,765.1	0.00	0.00	0.00	
11,400.0	1.46	249.98	10,856.0	1,465.0	-2,347.0	2,766.7	0.00	0.00	0.00	
<b>Rollins</b>										
11,411.0	1.46	249.98	10,867.0	1,464.9	-2,347.2	2,766.8	0.00	0.00	0.00	
11,500.0	1.46	249.98	10,956.0	1,464.1	-2,349.4	2,768.2	0.00	0.00	0.00	
11,600.0	1.46	249.98	11,056.0	1,463.2	-2,351.8	2,769.8	0.00	0.00	0.00	
11,700.0	1.46	249.98	11,155.9	1,462.4	-2,354.2	2,771.4	0.00	0.00	0.00	
11,800.0	1.46	249.98	11,255.9	1,461.5	-2,356.6	2,773.0	0.00	0.00	0.00	
11,900.0	1.46	249.98	11,355.9	1,460.6	-2,359.0	2,774.5	0.00	0.00	0.00	
<b>TD at 11911.1</b>										
11,911.1	1.46	249.98	11,367.0	1,460.5	-2,359.2	2,774.7	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 24A-32 496 - Slot 24A-32
<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>	BJU M33 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M33 FED 24A-32 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #4		

**Design Targets**

**Target Name**

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
OHCR - 24A-32 - plan hits target center - Point	0.00	0.00	7,403.0	1,494.8	-2,265.3	14,413,775.38	2,432,532.73	39.657563	-108.185823
PBHL - 24A-32 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	11,367.0	1,460.5	-2,359.2	14,413,738.20	2,432,439.90	39.657469	-108.186156

**Formations**

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,389.1	2,265.0	Wasatch			
5,674.3	5,277.0	Wasatch G			
5,976.5	5,554.0	Fort Union			
7,945.9	7,403.0	Ohio Creek			
8,204.9	7,662.0	TOG			
8,215.9	7,673.0	Williams Fork			
10,764.8	10,221.0	Cameo			
11,411.0	10,867.0	Rollins			

**Plan Annotations**

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
375.0	375.0	0.0	0.0	Start Build 3.00
1,159.4	1,137.5	87.5	-132.6	Start 6002.1 hold at 1159.4 MD
7,161.5	6,640.5	1,407.3	-2,132.7	Start Drop -3.00
7,945.9	7,403.0	1,494.8	-2,265.3	Start DLS 1.50 TFO 249.98
8,043.4	7,500.5	1,494.3	-2,266.5	Start 3867.7 hold at 8043.4 MD
11,911.1	11,367.0	1,460.5	-2,359.2	TD at 11911.1