

Project: Garfield County, CO  
Site: BJU M23A 496 Pad  
Well: BJU M23A FED 13B-22 496  
Wellbore: Wellbore #1  
Design: Design #3  
Latitude: 39.684408  
Longitude: -108.140098  
Ground Level: 8104.0  
RKB @ 8134.0usft (30')

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

REFERENCE INFORMATION  
Vertical (TVD) Reference: RKB @ 8134.0usft (30')  
Section (VS) Reference: Slot - 13B-22(0.0N, 0.0E)  
Measured Depth Reference: RKB @ 8134.0usft (30')  
Calculation Method: Minimum Curvature

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
959.6	21.29	326.68	943.4	108.9	-71.6	3.00	326.68	130.2	EOB @ 21.29° Inc. / 326.68° Azm
7925.1	21.29	326.68	7433.6	2221.8	-1460.8	0.00	0.00	2657.5	Drop 3° / 100'
8634.7	0.00	0.00	8127.0	2330.7	-1532.4	3.00	180.00	2787.7	EOD @ Vertical / Build 1.5° / 100'
8725.4	1.36	250.00	8217.8	2330.4	-1533.4	1.50	250.00	2788.0	EOB @ 1.36° Inc. / 250.00° Azm
12887.8	1.36	250.00	12379.0	2296.5	-1626.4	0.00	0.00	2814.1	TD @ 12887.8' MD / 12379.0' TVD

#### FORMATION TOP DETAILS

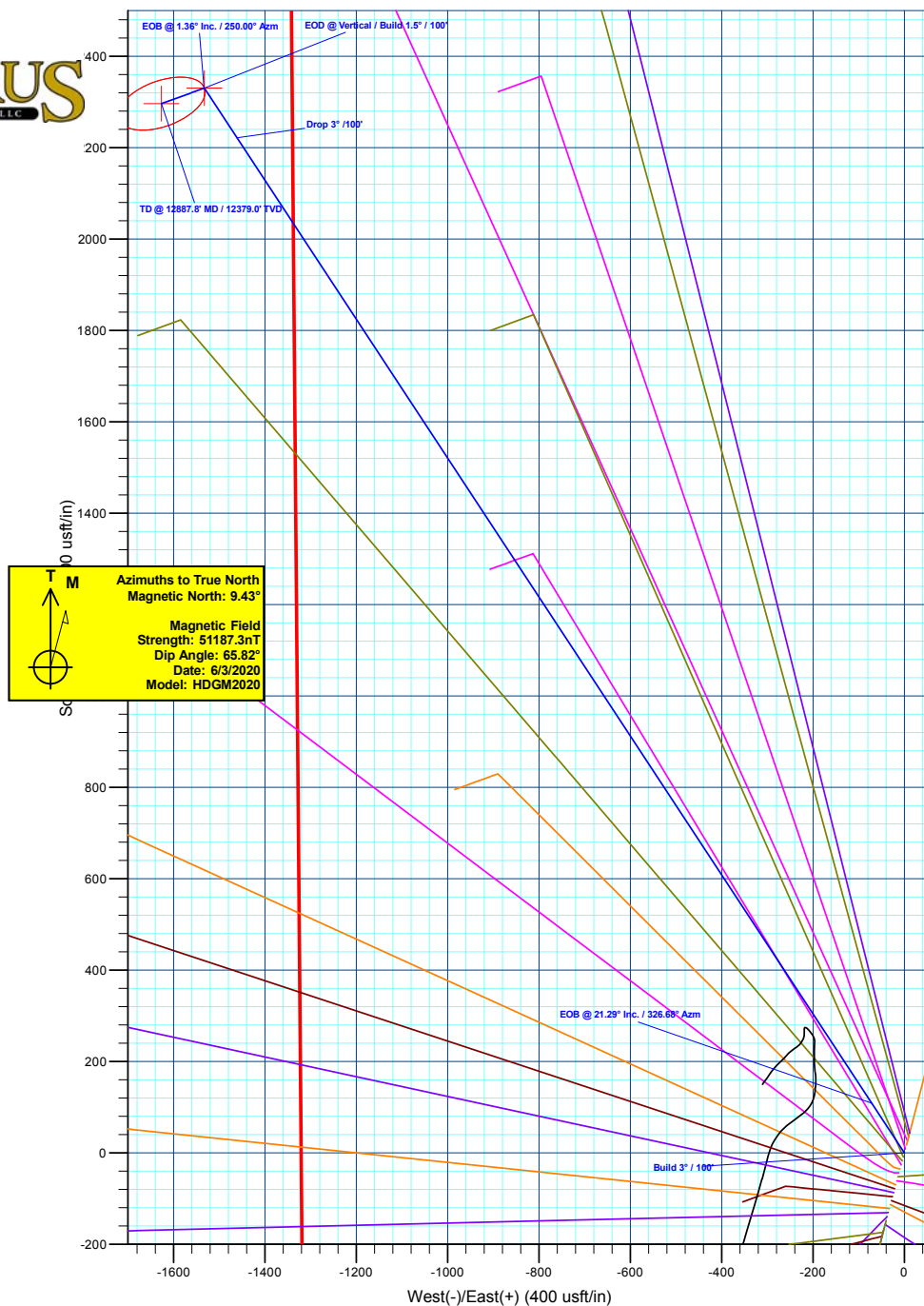
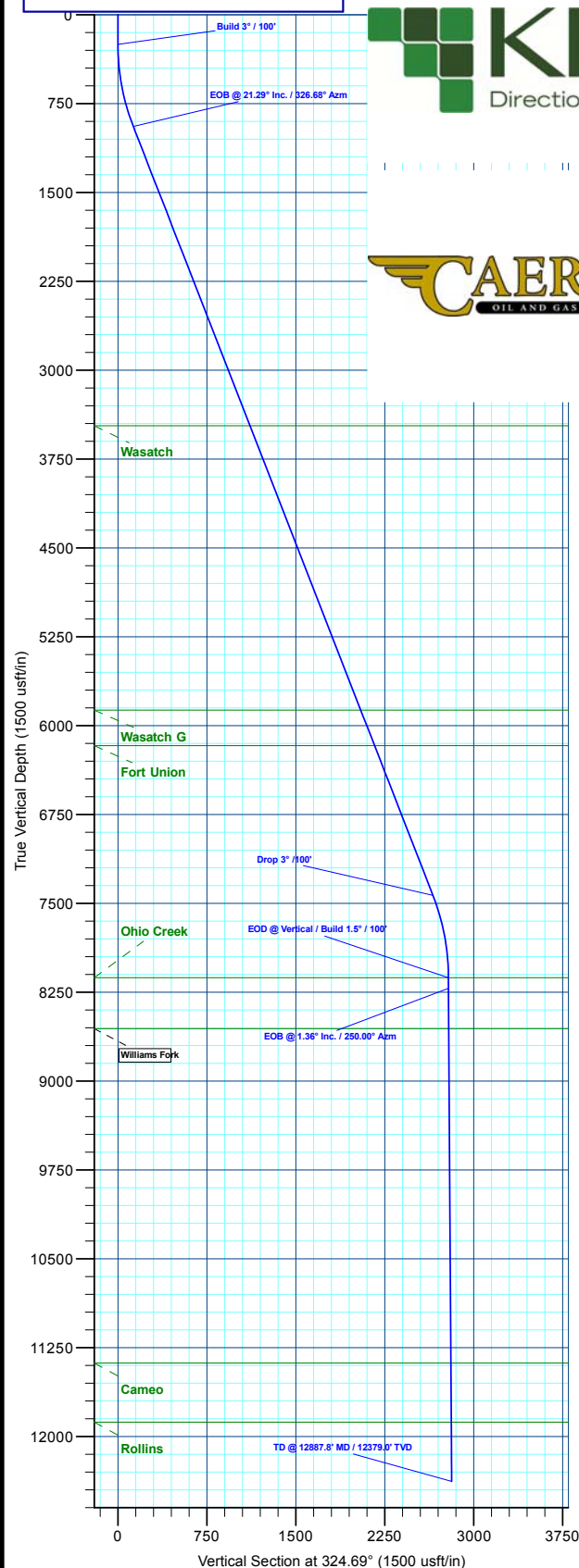
TVDPath	MDPath	Formation
3468.0	3669.1	Wasatch
5868.0	6244.8	Wasatch G
6168.0	6566.8	Fort Union
8127.0	8634.7	Ohio Creek
8558.0	9065.8	Williams Fork
11379.0	11887.6	Cameo
11879.0	12387.7	Rollins

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 13B-22	8127.0	2330.7	-1532.4	14426240.08	2443487.33	39.690804	-108.145541
PBHL - 13B-22	12379.0	2296.5	-1626.4	14426202.90	2443394.50	39.690710	-108.145875

#### WELL DETAILS: BJU M23A FED 13B-22 496

+N/-S	+E/-W	Ground Level : 8104.0	Northing	Easting	Latitude	Longitude
0.0	0.0		14423959.40	2445093.30	39.684408	-108.140098
						13B-22



Plan: Design #3 (BJU M23A FED 13B-22 496/Wellbore #1)

Created By: Will Jircik

Date: 22:57, January 04 2023



## **Caerus Oil & Gas**

**Garfield County, CO**

**BJU M23A 496 Pad**

**BJU M23A FED 13B-22 496 - Slot 13B-22**

**Wellbore #1**

**Plan: Design #3**

## **KLX Well Planning Report**

**04 January, 2023**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M23A FED 13B-22 496 - Slot 13B-22
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8134.0usft (30')
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8134.0usft (30')
<b>Site:</b>	BJU M23A 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M23A FED 13B-22 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

<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)		

Site		BJU M23A 496 Pad			
Site Position:		Northing:	14,424,028.50 usft	Latitude:	39.684596
From:	Map	Easting:	2,445,109.60 usft	Longitude:	-108.140032
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.83 °

Well	BJU M23A FED 13B-22 496 - Slot 13B-22					
Well Position	+N/-S	-68.5 usft	Northing:	14,423,959.40 usft	Latitude:	39.684408
	+E/-W	-18.5 usft	Easting:	2,445,093.30 usft	Longitude:	-108.140098
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	8,104.0 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>
	HDGM2020	6/3/2020	9.43	65.82	51,187.30000000

<b>Design</b>	Design #3				
<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	324.69	

<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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
959.6	21.29	326.68	943.4	108.9	-71.6	3.00	3.00	0.00	326.68	
7,925.1	21.29	326.68	7,433.6	2,221.8	-1,460.8	0.00	0.00	0.00	0.00	
8,634.7	0.00	0.00	8,127.0	2,330.7	-1,532.4	3.00	-3.00	0.00	180.00	OHCR - 13B-22
8,725.4	1.36	250.00	8,217.8	2,330.4	-1,533.4	1.50	1.50	-121.17	250.00	
12,887.8	1.36	250.00	12,379.0	2,296.5	-1,626.4	0.00	0.00	0.00	0.00	PBHL - 13B-22

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M23A FED 13B-22 496 - Slot 13B-22
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8134.0usft (30')
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8134.0usft (30')
<b>Site:</b>	BJU M23A 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M23A FED 13B-22 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

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>									
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	1.50	326.68	300.0	0.5	-0.4	0.7	3.00	3.00	0.00
400.0	4.50	326.68	399.8	4.9	-3.2	5.9	3.00	3.00	0.00
500.0	7.50	326.68	499.3	13.7	-9.0	16.3	3.00	3.00	0.00
600.0	10.50	326.68	598.0	26.7	-17.6	32.0	3.00	3.00	0.00
700.0	13.50	326.68	695.8	44.1	-29.0	52.7	3.00	3.00	0.00
800.0	16.50	326.68	792.4	65.7	-43.2	78.6	3.00	3.00	0.00
900.0	19.50	326.68	887.5	91.5	-60.2	109.5	3.00	3.00	0.00
<b>EOB @ 21.29° Inc. / 326.68° Azm</b>									
959.6	21.29	326.68	943.4	108.9	-71.6	130.2	3.00	3.00	0.00
1,000.0	21.29	326.68	981.0	121.1	-79.7	144.9	0.00	0.00	0.00
1,100.0	21.29	326.68	1,074.2	151.5	-99.6	181.2	0.00	0.00	0.00
1,200.0	21.29	326.68	1,167.4	181.8	-119.5	217.5	0.00	0.00	0.00
1,300.0	21.29	326.68	1,260.6	212.1	-139.5	253.7	0.00	0.00	0.00
1,400.0	21.29	326.68	1,353.7	242.5	-159.4	290.0	0.00	0.00	0.00
1,500.0	21.29	326.68	1,446.9	272.8	-179.4	326.3	0.00	0.00	0.00
1,600.0	21.29	326.68	1,540.1	303.2	-199.3	362.6	0.00	0.00	0.00
1,700.0	21.29	326.68	1,633.3	333.5	-219.3	398.9	0.00	0.00	0.00
1,800.0	21.29	326.68	1,726.4	363.8	-239.2	435.2	0.00	0.00	0.00
1,900.0	21.29	326.68	1,819.6	394.2	-259.2	471.4	0.00	0.00	0.00
2,000.0	21.29	326.68	1,912.8	424.5	-279.1	507.7	0.00	0.00	0.00
2,100.0	21.29	326.68	2,006.0	454.8	-299.0	544.0	0.00	0.00	0.00
2,200.0	21.29	326.68	2,099.2	485.2	-319.0	580.3	0.00	0.00	0.00
2,300.0	21.29	326.68	2,192.3	515.5	-338.9	616.6	0.00	0.00	0.00
2,400.0	21.29	326.68	2,285.5	545.8	-358.9	652.8	0.00	0.00	0.00
2,500.0	21.29	326.68	2,378.7	576.2	-378.8	689.1	0.00	0.00	0.00
2,600.0	21.29	326.68	2,471.9	606.5	-398.8	725.4	0.00	0.00	0.00
2,700.0	21.29	326.68	2,565.0	636.8	-418.7	761.7	0.00	0.00	0.00
2,800.0	21.29	326.68	2,658.2	667.2	-438.7	798.0	0.00	0.00	0.00
2,900.0	21.29	326.68	2,751.4	697.5	-458.6	834.3	0.00	0.00	0.00
3,000.0	21.29	326.68	2,844.6	727.8	-478.5	870.5	0.00	0.00	0.00
3,100.0	21.29	326.68	2,937.8	758.2	-498.5	906.8	0.00	0.00	0.00
3,200.0	21.29	326.68	3,030.9	788.5	-518.4	943.1	0.00	0.00	0.00
3,300.0	21.29	326.68	3,124.1	818.8	-538.4	979.4	0.00	0.00	0.00
3,400.0	21.29	326.68	3,217.3	849.2	-558.3	1,015.7	0.00	0.00	0.00
3,500.0	21.29	326.68	3,310.5	879.5	-578.3	1,052.0	0.00	0.00	0.00
3,600.0	21.29	326.68	3,403.6	909.8	-598.2	1,088.2	0.00	0.00	0.00
<b>Wasatch</b>									
3,669.1	21.29	326.68	3,468.0	930.8	-612.0	1,113.3	0.00	0.00	0.00
3,700.0	21.29	326.68	3,496.8	940.2	-618.2	1,124.5	0.00	0.00	0.00
3,800.0	21.29	326.68	3,590.0	970.5	-638.1	1,160.8	0.00	0.00	0.00
3,900.0	21.29	326.68	3,683.2	1,000.8	-658.0	1,197.1	0.00	0.00	0.00
4,000.0	21.29	326.68	3,776.3	1,031.2	-678.0	1,233.4	0.00	0.00	0.00
4,100.0	21.29	326.68	3,869.5	1,061.5	-697.9	1,269.7	0.00	0.00	0.00
4,200.0	21.29	326.68	3,962.7	1,091.9	-717.9	1,305.9	0.00	0.00	0.00
4,300.0	21.29	326.68	4,055.9	1,122.2	-737.8	1,342.2	0.00	0.00	0.00
4,400.0	21.29	326.68	4,149.1	1,152.5	-757.8	1,378.5	0.00	0.00	0.00
4,500.0	21.29	326.68	4,242.2	1,182.9	-777.7	1,414.8	0.00	0.00	0.00
4,600.0	21.29	326.68	4,335.4	1,213.2	-797.7	1,451.1	0.00	0.00	0.00

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<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8134.0usft (30')
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8134.0usft (30')
<b>Site:</b>	BJU M23A 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M23A FED 13B-22 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

**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	21.29	326.68	4,428.6	1,243.5	-817.6	1,487.3	0.00	0.00	0.00
4,800.0	21.29	326.68	4,521.8	1,273.9	-837.6	1,523.6	0.00	0.00	0.00
4,900.0	21.29	326.68	4,614.9	1,304.2	-857.5	1,559.9	0.00	0.00	0.00
5,000.0	21.29	326.68	4,708.1	1,334.5	-877.4	1,596.2	0.00	0.00	0.00
5,100.0	21.29	326.68	4,801.3	1,364.9	-897.4	1,632.5	0.00	0.00	0.00
5,200.0	21.29	326.68	4,894.5	1,395.2	-917.3	1,668.8	0.00	0.00	0.00
5,300.0	21.29	326.68	4,987.7	1,425.5	-937.3	1,705.0	0.00	0.00	0.00
5,400.0	21.29	326.68	5,080.8	1,455.9	-957.2	1,741.3	0.00	0.00	0.00
5,500.0	21.29	326.68	5,174.0	1,486.2	-977.2	1,777.6	0.00	0.00	0.00
5,600.0	21.29	326.68	5,267.2	1,516.5	-997.1	1,813.9	0.00	0.00	0.00
5,700.0	21.29	326.68	5,360.4	1,546.9	-1,017.1	1,850.2	0.00	0.00	0.00
5,800.0	21.29	326.68	5,453.5	1,577.2	-1,037.0	1,886.5	0.00	0.00	0.00
5,900.0	21.29	326.68	5,546.7	1,607.5	-1,056.9	1,922.7	0.00	0.00	0.00
6,000.0	21.29	326.68	5,639.9	1,637.9	-1,076.9	1,959.0	0.00	0.00	0.00
6,100.0	21.29	326.68	5,733.1	1,668.2	-1,096.8	1,995.3	0.00	0.00	0.00
6,200.0	21.29	326.68	5,826.2	1,698.5	-1,116.8	2,031.6	0.00	0.00	0.00
<b>Wasatch G</b>									
6,244.8	21.29	326.68	5,868.0	1,712.1	-1,125.7	2,047.8	0.00	0.00	0.00
6,300.0	21.29	326.68	5,919.4	1,728.9	-1,136.7	2,067.9	0.00	0.00	0.00
6,400.0	21.29	326.68	6,012.6	1,759.2	-1,156.7	2,104.1	0.00	0.00	0.00
6,500.0	21.29	326.68	6,105.8	1,789.6	-1,176.6	2,140.4	0.00	0.00	0.00
<b>Fort Union</b>									
6,566.8	21.29	326.68	6,168.0	1,809.8	-1,189.9	2,164.7	0.00	0.00	0.00
6,600.0	21.29	326.68	6,199.0	1,819.9	-1,196.6	2,176.7	0.00	0.00	0.00
6,700.0	21.29	326.68	6,292.1	1,850.2	-1,216.5	2,213.0	0.00	0.00	0.00
6,800.0	21.29	326.68	6,385.3	1,880.6	-1,236.4	2,249.3	0.00	0.00	0.00
6,900.0	21.29	326.68	6,478.5	1,910.9	-1,256.4	2,285.6	0.00	0.00	0.00
7,000.0	21.29	326.68	6,571.7	1,941.2	-1,276.3	2,321.8	0.00	0.00	0.00
7,100.0	21.29	326.68	6,664.8	1,971.6	-1,296.3	2,358.1	0.00	0.00	0.00
7,200.0	21.29	326.68	6,758.0	2,001.9	-1,316.2	2,394.4	0.00	0.00	0.00
7,300.0	21.29	326.68	6,851.2	2,032.2	-1,336.2	2,430.7	0.00	0.00	0.00
7,400.0	21.29	326.68	6,944.4	2,062.6	-1,356.1	2,467.0	0.00	0.00	0.00
7,500.0	21.29	326.68	7,037.6	2,092.9	-1,376.1	2,503.3	0.00	0.00	0.00
7,600.0	21.29	326.68	7,130.7	2,123.2	-1,396.0	2,539.5	0.00	0.00	0.00
7,700.0	21.29	326.68	7,223.9	2,153.6	-1,416.0	2,575.8	0.00	0.00	0.00
7,800.0	21.29	326.68	7,317.1	2,183.9	-1,435.9	2,612.1	0.00	0.00	0.00
7,900.0	21.29	326.68	7,410.3	2,214.2	-1,455.8	2,648.4	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
7,925.1	21.29	326.68	7,433.6	2,221.8	-1,460.8	2,657.5	0.00	0.00	0.00
8,000.0	19.04	326.68	7,504.0	2,243.4	-1,475.0	2,683.3	3.00	-3.00	0.00
8,100.0	16.04	326.68	7,599.3	2,268.6	-1,491.6	2,713.4	3.00	-3.00	0.00
8,200.0	13.04	326.68	7,696.1	2,289.6	-1,505.4	2,738.5	3.00	-3.00	0.00
8,300.0	10.04	326.68	7,794.0	2,306.3	-1,516.4	2,758.5	3.00	-3.00	0.00
8,400.0	7.04	326.68	7,892.9	2,318.7	-1,524.5	2,773.3	3.00	-3.00	0.00
8,500.0	4.04	326.68	7,992.5	2,326.8	-1,529.8	2,783.0	3.00	-3.00	0.00
8,600.0	1.04	326.68	8,092.3	2,330.5	-1,532.3	2,787.4	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek</b>									
8,634.7	0.00	0.00	8,127.0	2,330.7	-1,532.4	2,787.7	3.00	-3.00	0.00
8,700.0	0.98	250.00	8,192.3	2,330.5	-1,533.0	2,787.9	1.50	1.50	0.00
<b>EOB @ 1.36° Inc. / 250.00° Azm</b>									
8,725.4	1.36	250.00	8,217.8	2,330.4	-1,533.4	2,788.0	1.50	1.50	0.00
8,800.0	1.36	250.00	8,292.3	2,329.8	-1,535.1	2,788.5	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M23A FED 13B-22 496 - Slot 13B-22
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8134.0usft (30')
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8134.0usft (30')
<b>Site:</b>	BJU M23A 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M23A FED 13B-22 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

**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	1.36	250.00	8,392.3	2,328.9	-1,537.3	2,789.1	0.00	0.00	0.00
9,000.0	1.36	250.00	8,492.3	2,328.1	-1,539.6	2,789.7	0.00	0.00	0.00
<b>Williams Fork</b>									
9,065.8	1.36	250.00	8,558.0	2,327.6	-1,541.0	2,790.1	0.00	0.00	0.00
9,100.0	1.36	250.00	8,592.2	2,327.3	-1,541.8	2,790.3	0.00	0.00	0.00
9,200.0	1.36	250.00	8,692.2	2,326.5	-1,544.0	2,791.0	0.00	0.00	0.00
9,300.0	1.36	250.00	8,792.2	2,325.7	-1,546.3	2,791.6	0.00	0.00	0.00
9,400.0	1.36	250.00	8,892.1	2,324.9	-1,548.5	2,792.2	0.00	0.00	0.00
9,500.0	1.36	250.00	8,992.1	2,324.1	-1,550.7	2,792.9	0.00	0.00	0.00
9,600.0	1.36	250.00	9,092.1	2,323.3	-1,553.0	2,793.5	0.00	0.00	0.00
9,700.0	1.36	250.00	9,192.1	2,322.4	-1,555.2	2,794.1	0.00	0.00	0.00
9,800.0	1.36	250.00	9,292.0	2,321.6	-1,557.4	2,794.7	0.00	0.00	0.00
9,900.0	1.36	250.00	9,392.0	2,320.8	-1,559.7	2,795.4	0.00	0.00	0.00
10,000.0	1.36	250.00	9,492.0	2,320.0	-1,561.9	2,796.0	0.00	0.00	0.00
10,100.0	1.36	250.00	9,591.9	2,319.2	-1,564.1	2,796.6	0.00	0.00	0.00
10,200.0	1.36	250.00	9,691.9	2,318.4	-1,566.4	2,797.2	0.00	0.00	0.00
10,300.0	1.36	250.00	9,791.9	2,317.6	-1,568.6	2,797.9	0.00	0.00	0.00
10,400.0	1.36	250.00	9,891.9	2,316.7	-1,570.8	2,798.5	0.00	0.00	0.00
10,500.0	1.36	250.00	9,991.8	2,315.9	-1,573.1	2,799.1	0.00	0.00	0.00
10,600.0	1.36	250.00	10,091.8	2,315.1	-1,575.3	2,799.8	0.00	0.00	0.00
10,700.0	1.36	250.00	10,191.8	2,314.3	-1,577.5	2,800.4	0.00	0.00	0.00
10,800.0	1.36	250.00	10,291.7	2,313.5	-1,579.8	2,801.0	0.00	0.00	0.00
10,900.0	1.36	250.00	10,391.7	2,312.7	-1,582.0	2,801.6	0.00	0.00	0.00
11,000.0	1.36	250.00	10,491.7	2,311.9	-1,584.2	2,802.3	0.00	0.00	0.00
11,100.0	1.36	250.00	10,591.7	2,311.1	-1,586.5	2,802.9	0.00	0.00	0.00
11,200.0	1.36	250.00	10,691.6	2,310.2	-1,588.7	2,803.5	0.00	0.00	0.00
11,300.0	1.36	250.00	10,791.6	2,309.4	-1,590.9	2,804.1	0.00	0.00	0.00
11,400.0	1.36	250.00	10,891.6	2,308.6	-1,593.2	2,804.8	0.00	0.00	0.00
11,500.0	1.36	250.00	10,991.5	2,307.8	-1,595.4	2,805.4	0.00	0.00	0.00
11,600.0	1.36	250.00	11,091.5	2,307.0	-1,597.6	2,806.0	0.00	0.00	0.00
11,700.0	1.36	250.00	11,191.5	2,306.2	-1,599.9	2,806.7	0.00	0.00	0.00
11,800.0	1.36	250.00	11,291.5	2,305.4	-1,602.1	2,807.3	0.00	0.00	0.00
<b>Cameo</b>									
11,887.6	1.36	250.00	11,379.0	2,304.7	-1,604.1	2,807.8	0.00	0.00	0.00
11,900.0	1.36	250.00	11,391.4	2,304.6	-1,604.3	2,807.9	0.00	0.00	0.00
12,000.0	1.36	250.00	11,491.4	2,303.7	-1,606.6	2,808.5	0.00	0.00	0.00
12,100.0	1.36	250.00	11,591.4	2,302.9	-1,608.8	2,809.2	0.00	0.00	0.00
12,200.0	1.36	250.00	11,691.3	2,302.1	-1,611.0	2,809.8	0.00	0.00	0.00
12,300.0	1.36	250.00	11,791.3	2,301.3	-1,613.3	2,810.4	0.00	0.00	0.00
<b>Rollins</b>									
12,387.7	1.36	250.00	11,879.0	2,300.6	-1,615.2	2,811.0	0.00	0.00	0.00
12,400.0	1.36	250.00	11,891.3	2,300.5	-1,615.5	2,811.0	0.00	0.00	0.00
12,500.0	1.36	250.00	11,991.3	2,299.7	-1,617.7	2,811.7	0.00	0.00	0.00
12,600.0	1.36	250.00	12,091.2	2,298.9	-1,620.0	2,812.3	0.00	0.00	0.00
12,700.0	1.36	250.00	12,191.2	2,298.1	-1,622.2	2,812.9	0.00	0.00	0.00
12,800.0	1.36	250.00	12,291.2	2,297.2	-1,624.4	2,813.6	0.00	0.00	0.00
<b>TD @ 12887.8' MD / 12379.0' TVD</b>									
12,887.8	1.36	250.00	12,379.0	2,296.5	-1,626.4	2,814.1	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M23A FED 13B-22 496 - Slot 13B-22
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8134.0usft (30')
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	RKB @ 8134.0usft (30')
<b>Site:</b>	BJU M23A 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	BJU M23A FED 13B-22 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

#### 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 - 13B-22 - plan hits target center - Point	0.00	0.00	8,127.0	2,330.7	-1,532.4	14,426,240.08	2,443,487.33	39.690804	-108.145541
PBHL - 13B-22 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	12,379.0	2,296.5	-1,626.4	14,426,202.90	2,443,394.50	39.690710	-108.145875

#### Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,669.1	3,468.0	Wasatch			
6,244.8	5,868.0	Wasatch G			
6,566.8	6,168.0	Fort Union			
8,634.7	8,127.0	Ohio Creek			
9,065.8	8,558.0	Williams Fork			
11,887.6	11,379.0	Cameo			
12,387.7	11,879.0	Rollins			

#### Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
250.0	250.0	0.0	0.0	Build 3° / 100'
959.6	943.4	108.9	-71.6	EOB @ 21.29° Inc. / 326.68° Azm
7,925.1	7,433.6	2,221.8	-1,460.8	Drop 3° / 100'
8,634.7	8,127.0	2,330.7	-1,532.4	EOD @ Vertical / Build 1.5° / 100'
8,725.4	8,217.8	2,330.4	-1,533.4	EOB @ 1.36° Inc. / 250.00° Azm
12,887.8	12,379.0	2,296.5	-1,626.4	TD @ 12887.8' MD / 12379.0' TVD