

Project: Garfield County, CO  
 Site: BJU M23A 496 Pad  
 Well: BJU M23A FED 14A-23 496  
 Wellbore: Wellbore #1  
 Design: Design #3  
 Latitude: 39.684312  
 Longitude: -108.140131  
 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 - 14A-23(0.0N, 0.0E)  
 Measured Depth Reference: RKB @ 8134.0usft (30')  
 Calculation Method: Minimum Curvature

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3392.0	3430.7	Wasatch
5792.0	5863.8	Wasatch G
6092.0	6168.0	Fort Union
8098.0	8198.8	Ohio Creek
8476.0	8576.9	Williams Fork
11317.0	11418.7	Cameo
11817.0	11918.8	Rollins

#### SECTION DETAILS

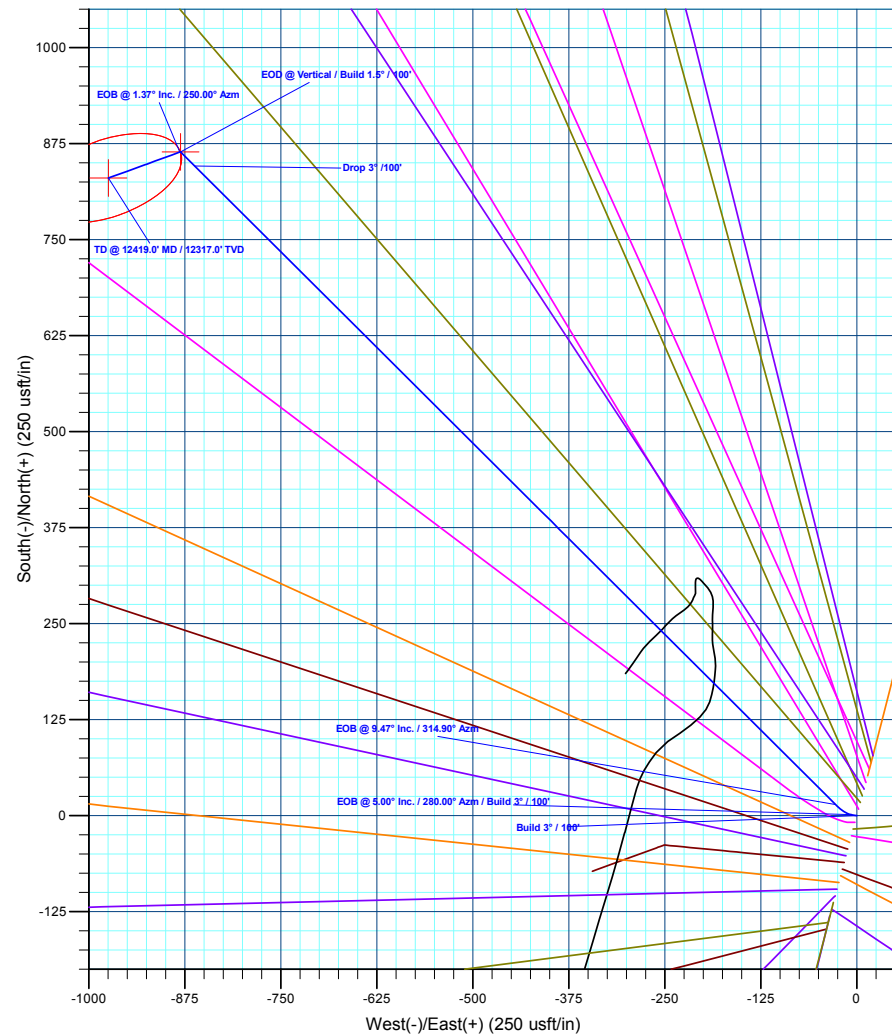
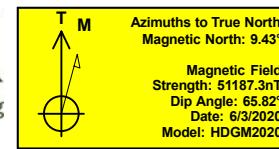
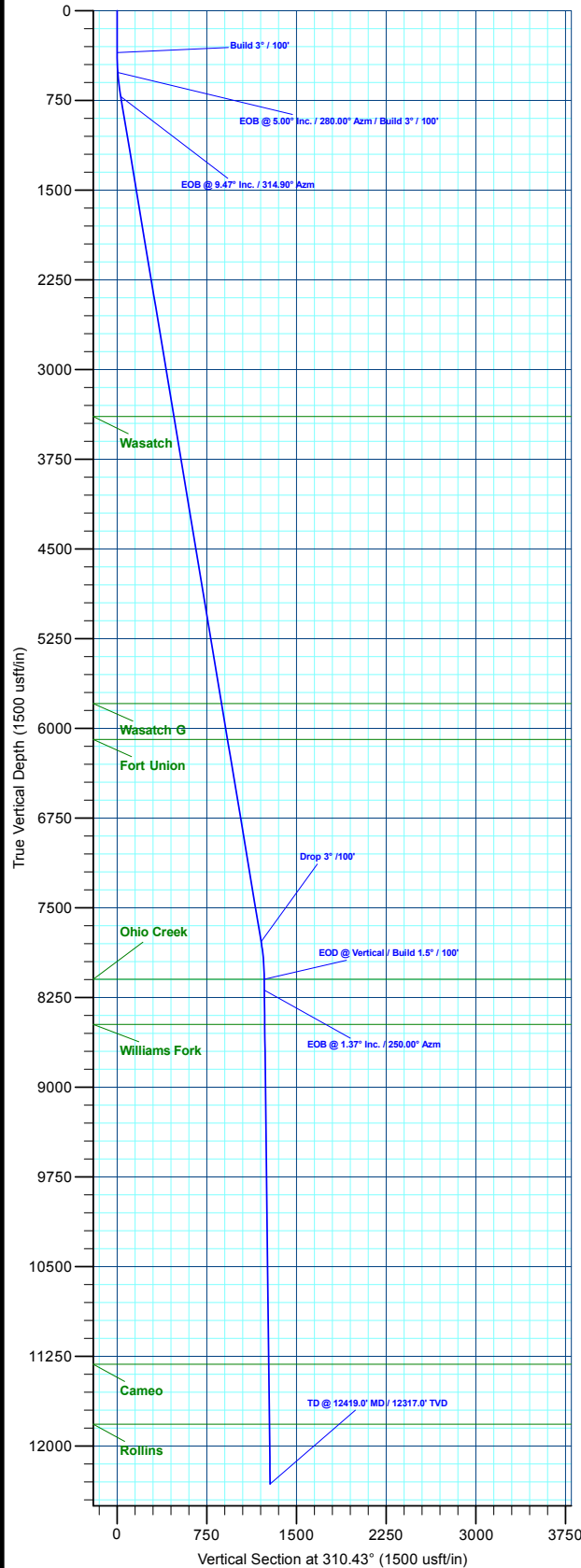
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.0	EOB @ 5.00° Inc. / 280.00° Azm / Build 3° / 100'
516.7	5.00	280.00	516.5	1.3	-7.2	3.00	280.00	6.3	EOB @ 9.47° Inc. / 314.90° Azm
719.1	9.47	314.90	717.3	14.6	-27.7	3.00	62.78	30.5	Drop 3° / 100'
7883.2	9.47	314.90	7783.9	846.1	-862.2	0.00	0.00	1205.1	EOD @ Vertical / Build 1.5° / 100'
8198.8	0.00	0.00	8098.0	864.5	-880.7	3.00	180.00	1231.0	EOB @ 1.37° Inc. / 250.00° Azm
8290.3	1.37	250.00	8189.5	864.1	-881.7	1.50	250.00	1231.5	TD @ 12419.0' MD / 12317.0' TVD
12419.0	1.37	250.00	12317.0	830.3	-974.6	0.00	0.00	1280.3	

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 14A-23	8098.0	864.5	-880.7	14424760.38	2444177.23	39.686685	-108.143259
PBHL - 14A-23	12317.0	830.3	-974.6	14424723.20	2444084.40	39.686591	-108.143593

#### WELL DETAILS: BJU M23A FED 14A-23 496

+N/-S	+E/-W	Ground Level : 8104.0	Northing	Easting	Latitude	Longitude
0.0	0.0		14423924.40	2445085.00	39.664312	-108.140131



Plan: Design #3 (BJU M23A FED 14A-23 496/Wellbore #1)

Created By: Will Jircik

Date: 23:31, January 04 2023



## **Caerus Oil & Gas**

**Garfield County, CO**

**BJU M23A 496 Pad**

**BJU M23A FED 14A-23 496 - Slot 14A-23**

**Wellbore #1**

**Plan: Design #3**

## **KLX Well Planning Report**

**04 January, 2023**





# KLX Directional Drilling

## Well Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M23A FED 14A-23 496 - Slot 14A-23
<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 14A-23 496	<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)		

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

<b>Well</b>	BJU M23A FED 14A-23 496 - Slot 14A-23		
<b>Well Position</b>	<b>+N/-S</b>	-103.3 usft	<b>Northing:</b> 14,423,924.40 usft
	<b>+E/-W</b>	-27.9 usft	<b>Easting:</b> 2,445,085.00 usft
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b> 39.684312
			<b>Longitude:</b> -108.140131
			<b>Ground Level:</b> 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	310.43	

<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	
350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.00	0.00	
516.7	5.00	280.00	516.5	1.3	-7.2	3.00	3.00	0.00	280.00	
719.1	9.47	314.90	717.3	14.6	-27.7	3.00	2.21	17.24	62.78	
7,883.2	9.47	314.90	7,783.9	846.1	-862.2	0.00	0.00	0.00	0.00	
8,198.8	0.00	0.00	8,098.0	864.5	-880.7	3.00	-3.00	0.00	180.00	OHCR - 14A-23
8,290.3	1.37	250.00	8,189.5	864.1	-881.7	1.50	1.50	-120.20	250.00	
12,419.0	1.37	250.00	12,317.0	830.3	-974.6	0.00	0.00	0.00	0.00	PBHL - 14A-23

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M23A FED 14A-23 496 - Slot 14A-23
<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 14A-23 496	<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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Build 3° / 100'</b>									
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	1.50	280.00	400.0	0.1	-0.6	0.6	3.00	3.00	0.00
500.0	4.50	280.00	499.8	1.0	-5.8	5.1	3.00	3.00	0.00
<b>EOB @ 5.00° Inc. / 280.00° Azm / Build 3° / 100'</b>									
516.7	5.00	280.00	516.5	1.3	-7.2	6.3	3.00	3.00	0.00
600.0	6.53	299.93	599.4	4.3	-14.8	14.1	3.00	1.84	23.92
700.0	8.96	313.16	698.5	12.4	-25.5	27.4	3.00	2.43	13.23
<b>EOB @ 9.47° Inc. / 314.90° Azm</b>									
719.1	9.47	314.90	717.3	14.6	-27.7	30.5	3.00	2.62	9.08
800.0	9.47	314.90	797.1	23.9	-37.1	43.8	0.00	0.00	0.00
900.0	9.47	314.90	895.8	35.6	-48.7	60.1	0.00	0.00	0.00
1,000.0	9.47	314.90	994.4	47.2	-60.4	76.5	0.00	0.00	0.00
1,100.0	9.47	314.90	1,093.0	58.8	-72.0	92.9	0.00	0.00	0.00
1,200.0	9.47	314.90	1,191.7	70.4	-83.7	109.3	0.00	0.00	0.00
1,300.0	9.47	314.90	1,290.3	82.0	-95.3	125.7	0.00	0.00	0.00
1,400.0	9.47	314.90	1,388.9	93.6	-107.0	142.1	0.00	0.00	0.00
1,500.0	9.47	314.90	1,487.6	105.2	-118.6	158.5	0.00	0.00	0.00
1,600.0	9.47	314.90	1,586.2	116.8	-130.3	174.9	0.00	0.00	0.00
1,700.0	9.47	314.90	1,684.9	128.4	-141.9	191.3	0.00	0.00	0.00
1,800.0	9.47	314.90	1,783.5	140.0	-153.6	207.7	0.00	0.00	0.00
1,900.0	9.47	314.90	1,882.1	151.6	-165.2	224.1	0.00	0.00	0.00
2,000.0	9.47	314.90	1,980.8	163.2	-176.9	240.5	0.00	0.00	0.00
2,100.0	9.47	314.90	2,079.4	174.8	-188.5	256.9	0.00	0.00	0.00
2,200.0	9.47	314.90	2,178.1	186.5	-200.2	273.3	0.00	0.00	0.00
2,300.0	9.47	314.90	2,276.7	198.1	-211.8	289.7	0.00	0.00	0.00
2,400.0	9.47	314.90	2,375.3	209.7	-223.5	306.1	0.00	0.00	0.00
2,500.0	9.47	314.90	2,474.0	221.3	-235.1	322.5	0.00	0.00	0.00
2,600.0	9.47	314.90	2,572.6	232.9	-246.8	338.9	0.00	0.00	0.00
2,700.0	9.47	314.90	2,671.2	244.5	-258.4	355.3	0.00	0.00	0.00
2,800.0	9.47	314.90	2,769.9	256.1	-270.1	371.7	0.00	0.00	0.00
2,900.0	9.47	314.90	2,868.5	267.7	-281.7	388.1	0.00	0.00	0.00
3,000.0	9.47	314.90	2,967.2	279.3	-293.4	404.4	0.00	0.00	0.00
3,100.0	9.47	314.90	3,065.8	290.9	-305.0	420.8	0.00	0.00	0.00
3,200.0	9.47	314.90	3,164.4	302.5	-316.7	437.2	0.00	0.00	0.00
3,300.0	9.47	314.90	3,263.1	314.1	-328.3	453.6	0.00	0.00	0.00
3,400.0	9.47	314.90	3,361.7	325.7	-340.0	470.0	0.00	0.00	0.00
<b>Wasatch</b>									
3,430.7	9.47	314.90	3,392.0	329.3	-343.5	475.1	0.00	0.00	0.00
3,500.0	9.47	314.90	3,460.4	337.4	-351.6	486.4	0.00	0.00	0.00
3,600.0	9.47	314.90	3,559.0	349.0	-363.3	502.8	0.00	0.00	0.00
3,700.0	9.47	314.90	3,657.6	360.6	-374.9	519.2	0.00	0.00	0.00
3,800.0	9.47	314.90	3,756.3	372.2	-386.6	535.6	0.00	0.00	0.00
3,900.0	9.47	314.90	3,854.9	383.8	-398.2	552.0	0.00	0.00	0.00
4,000.0	9.47	314.90	3,953.5	395.4	-409.9	568.4	0.00	0.00	0.00
4,100.0	9.47	314.90	4,052.2	407.0	-421.5	584.8	0.00	0.00	0.00
4,200.0	9.47	314.90	4,150.8	418.6	-433.2	601.2	0.00	0.00	0.00
4,300.0	9.47	314.90	4,249.5	430.2	-444.8	617.6	0.00	0.00	0.00
4,400.0	9.47	314.90	4,348.1	441.8	-456.5	634.0	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 14A-23 496 - Slot 14A-23
<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 14A-23 496	<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)
4,500.0	9.47	314.90	4,446.7	453.4	-468.1	650.4	0.00	0.00	0.00
4,600.0	9.47	314.90	4,545.4	465.0	-479.8	666.8	0.00	0.00	0.00
4,700.0	9.47	314.90	4,644.0	476.6	-491.4	683.2	0.00	0.00	0.00
4,800.0	9.47	314.90	4,742.7	488.3	-503.1	699.6	0.00	0.00	0.00
4,900.0	9.47	314.90	4,841.3	499.9	-514.7	716.0	0.00	0.00	0.00
5,000.0	9.47	314.90	4,939.9	511.5	-526.4	732.4	0.00	0.00	0.00
5,100.0	9.47	314.90	5,038.6	523.1	-538.0	748.7	0.00	0.00	0.00
5,200.0	9.47	314.90	5,137.2	534.7	-549.7	765.1	0.00	0.00	0.00
5,300.0	9.47	314.90	5,235.8	546.3	-561.3	781.5	0.00	0.00	0.00
5,400.0	9.47	314.90	5,334.5	557.9	-573.0	797.9	0.00	0.00	0.00
5,500.0	9.47	314.90	5,433.1	569.5	-584.6	814.3	0.00	0.00	0.00
5,600.0	9.47	314.90	5,531.8	581.1	-596.2	830.7	0.00	0.00	0.00
5,700.0	9.47	314.90	5,630.4	592.7	-607.9	847.1	0.00	0.00	0.00
5,800.0	9.47	314.90	5,729.0	604.3	-619.5	863.5	0.00	0.00	0.00
<b>Wasatch G</b>									
5,863.8	9.47	314.90	5,792.0	611.7	-627.0	874.0	0.00	0.00	0.00
5,900.0	9.47	314.90	5,827.7	615.9	-631.2	879.9	0.00	0.00	0.00
6,000.0	9.47	314.90	5,926.3	627.5	-642.8	896.3	0.00	0.00	0.00
6,100.0	9.47	314.90	6,025.0	639.2	-654.5	912.7	0.00	0.00	0.00
<b>Fort Union</b>									
6,168.0	9.47	314.90	6,092.0	647.0	-662.4	923.8	0.00	0.00	0.00
6,200.0	9.47	314.90	6,123.6	650.8	-666.1	929.1	0.00	0.00	0.00
6,300.0	9.47	314.90	6,222.2	662.4	-677.8	945.5	0.00	0.00	0.00
6,400.0	9.47	314.90	6,320.9	674.0	-689.4	961.9	0.00	0.00	0.00
6,500.0	9.47	314.90	6,419.5	685.6	-701.1	978.3	0.00	0.00	0.00
6,600.0	9.47	314.90	6,518.1	697.2	-712.7	994.7	0.00	0.00	0.00
6,700.0	9.47	314.90	6,616.8	708.8	-724.4	1,011.1	0.00	0.00	0.00
6,800.0	9.47	314.90	6,715.4	720.4	-736.0	1,027.5	0.00	0.00	0.00
6,900.0	9.47	314.90	6,814.1	732.0	-747.7	1,043.9	0.00	0.00	0.00
7,000.0	9.47	314.90	6,912.7	743.6	-759.3	1,060.3	0.00	0.00	0.00
7,100.0	9.47	314.90	7,011.3	755.2	-771.0	1,076.7	0.00	0.00	0.00
7,200.0	9.47	314.90	7,110.0	766.8	-782.6	1,093.0	0.00	0.00	0.00
7,300.0	9.47	314.90	7,208.6	778.4	-794.3	1,109.4	0.00	0.00	0.00
7,400.0	9.47	314.90	7,307.3	790.1	-805.9	1,125.8	0.00	0.00	0.00
7,500.0	9.47	314.90	7,405.9	801.7	-817.6	1,142.2	0.00	0.00	0.00
7,600.0	9.47	314.90	7,504.5	813.3	-829.2	1,158.6	0.00	0.00	0.00
7,700.0	9.47	314.90	7,603.2	824.9	-840.9	1,175.0	0.00	0.00	0.00
7,800.0	9.47	314.90	7,701.8	836.5	-852.5	1,191.4	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
7,883.2	9.47	314.90	7,783.9	846.1	-862.2	1,205.1	0.00	0.00	0.00
7,900.0	8.96	314.90	7,800.5	848.0	-864.1	1,207.7	3.00	-3.00	0.00
8,000.0	5.96	314.90	7,899.6	857.2	-873.3	1,220.7	3.00	-3.00	0.00
8,100.0	2.96	314.90	7,999.3	862.7	-878.8	1,228.4	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek</b>									
8,198.8	0.00	0.00	8,098.0	864.5	-880.7	1,231.0	3.00	-3.00	0.00
8,200.0	0.02	250.00	8,099.2	864.5	-880.7	1,231.0	1.50	1.50	0.00
<b>EOB @ 1.37° Inc. / 250.00° Azm</b>									
8,290.3	1.37	250.00	8,189.5	864.1	-881.7	1,231.5	1.50	1.50	0.00
8,300.0	1.37	250.00	8,199.2	864.0	-881.9	1,231.6	0.00	0.00	0.00
8,400.0	1.37	250.00	8,299.2	863.2	-884.2	1,232.8	0.00	0.00	0.00
8,500.0	1.37	250.00	8,399.2	862.4	-886.4	1,234.0	0.00	0.00	0.00
<b>Williams Fork</b>									

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M23A FED 14A-23 496 - Slot 14A-23
<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 14A-23 496	<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)
8,576.9	1.37	250.00	8,476.0	861.8	-888.1	1,234.9	0.00	0.00	0.00
8,600.0	1.37	250.00	8,499.1	861.6	-888.7	1,235.2	0.00	0.00	0.00
8,700.0	1.37	250.00	8,599.1	860.8	-890.9	1,236.4	0.00	0.00	0.00
8,800.0	1.37	250.00	8,699.1	859.9	-893.2	1,237.6	0.00	0.00	0.00
8,900.0	1.37	250.00	8,799.1	859.1	-895.4	1,238.7	0.00	0.00	0.00
9,000.0	1.37	250.00	8,899.0	858.3	-897.7	1,239.9	0.00	0.00	0.00
9,100.0	1.37	250.00	8,999.0	857.5	-899.9	1,241.1	0.00	0.00	0.00
9,200.0	1.37	250.00	9,099.0	856.7	-902.2	1,242.3	0.00	0.00	0.00
9,300.0	1.37	250.00	9,198.9	855.9	-904.4	1,243.5	0.00	0.00	0.00
9,400.0	1.37	250.00	9,298.9	855.0	-906.7	1,244.7	0.00	0.00	0.00
9,500.0	1.37	250.00	9,398.9	854.2	-908.9	1,245.8	0.00	0.00	0.00
9,600.0	1.37	250.00	9,498.9	853.4	-911.2	1,247.0	0.00	0.00	0.00
9,700.0	1.37	250.00	9,598.8	852.6	-913.4	1,248.2	0.00	0.00	0.00
9,800.0	1.37	250.00	9,698.8	851.8	-915.7	1,249.4	0.00	0.00	0.00
9,900.0	1.37	250.00	9,798.8	850.9	-917.9	1,250.6	0.00	0.00	0.00
10,000.0	1.37	250.00	9,898.7	850.1	-920.2	1,251.7	0.00	0.00	0.00
10,100.0	1.37	250.00	9,998.7	849.3	-922.4	1,252.9	0.00	0.00	0.00
10,200.0	1.37	250.00	10,098.7	848.5	-924.7	1,254.1	0.00	0.00	0.00
10,300.0	1.37	250.00	10,198.7	847.7	-926.9	1,255.3	0.00	0.00	0.00
10,400.0	1.37	250.00	10,298.6	846.8	-929.2	1,256.5	0.00	0.00	0.00
10,500.0	1.37	250.00	10,398.6	846.0	-931.4	1,257.7	0.00	0.00	0.00
10,600.0	1.37	250.00	10,498.6	845.2	-933.7	1,258.8	0.00	0.00	0.00
10,700.0	1.37	250.00	10,598.5	844.4	-935.9	1,260.0	0.00	0.00	0.00
10,800.0	1.37	250.00	10,698.5	843.6	-938.2	1,261.2	0.00	0.00	0.00
10,900.0	1.37	250.00	10,798.5	842.7	-940.4	1,262.4	0.00	0.00	0.00
11,000.0	1.37	250.00	10,898.5	841.9	-942.7	1,263.6	0.00	0.00	0.00
11,100.0	1.37	250.00	10,998.4	841.1	-944.9	1,264.8	0.00	0.00	0.00
11,200.0	1.37	250.00	11,098.4	840.3	-947.2	1,265.9	0.00	0.00	0.00
11,300.0	1.37	250.00	11,198.4	839.5	-949.4	1,267.1	0.00	0.00	0.00
11,400.0	1.37	250.00	11,298.3	838.6	-951.7	1,268.3	0.00	0.00	0.00
<b>Cameo</b>									
11,418.7	1.37	250.00	11,317.0	838.5	-952.1	1,268.5	0.00	0.00	0.00
11,500.0	1.37	250.00	11,398.3	837.8	-953.9	1,269.5	0.00	0.00	0.00
11,600.0	1.37	250.00	11,498.3	837.0	-956.2	1,270.7	0.00	0.00	0.00
11,700.0	1.37	250.00	11,598.3	836.2	-958.4	1,271.8	0.00	0.00	0.00
11,800.0	1.37	250.00	11,698.2	835.4	-960.7	1,273.0	0.00	0.00	0.00
11,900.0	1.37	250.00	11,798.2	834.6	-962.9	1,274.2	0.00	0.00	0.00
<b>Rollins</b>									
11,918.8	1.37	250.00	11,817.0	834.4	-963.4	1,274.4	0.00	0.00	0.00
12,000.0	1.37	250.00	11,898.2	833.7	-965.2	1,275.4	0.00	0.00	0.00
12,100.0	1.37	250.00	11,998.1	832.9	-967.4	1,276.6	0.00	0.00	0.00
12,200.0	1.37	250.00	12,098.1	832.1	-969.7	1,277.8	0.00	0.00	0.00
12,300.0	1.37	250.00	12,198.1	831.3	-971.9	1,278.9	0.00	0.00	0.00
12,400.0	1.37	250.00	12,298.1	830.5	-974.2	1,280.1	0.00	0.00	0.00
<b>TD @ 12419.0' MD / 12317.0' TVD</b>									
12,419.0	1.37	250.00	12,317.0	830.3	-974.6	1,280.3	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 14A-23 496 - Slot 14A-23
<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 14A-23 496	<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 - 14A-23 - plan hits target center - Point	0.00	0.00	8,098.0	864.5	-880.7	14,424,760.38	2,444,177.23	39.686685	-108.143259
PBHL - 14A-23 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	12,317.0	830.3	-974.6	14,424,723.20	2,444,084.40	39.686591	-108.143593

#### Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,430.7	3,392.0	Wasatch			
5,863.8	5,792.0	Wasatch G			
6,168.0	6,092.0	Fort Union			
8,198.8	8,098.0	Ohio Creek			
8,576.9	8,476.0	Williams Fork			
11,418.7	11,317.0	Cameo			
11,918.8	11,817.0	Rollins			

#### Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
350.0	350.0	0.0	0.0	Build 3° / 100'
516.7	516.5	1.3	-7.2	EOB @ 5.00° Inc. / 280.00° Azm / Build 3° / 100'
719.1	717.3	14.6	-27.7	EOB @ 9.47° Inc. / 314.90° Azm
7,883.2	7,783.9	846.1	-862.2	Drop 3° / 100'
8,198.8	8,098.0	864.5	-880.7	EOD @ Vertical / Build 1.5° / 100'
8,290.3	8,189.5	864.1	-881.7	EOB @ 1.37° Inc. / 250.00° Azm
12,419.0	12,317.0	830.3	-974.6	TD @ 12419.0' MD / 12317.0' TVD