

Project: Garfield County, CO  
Site: BJU M23A 496 Pad  
Well: BJU M23A FED 13B-23 496  
Wellbore: Wellbore #1  
Design: Design #2  
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-23(0.0N, 0.0E)  
Measured Depth Reference: RKB @ 8134.0usft (30')  
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3420.0	3480.3	Wasatch
5820.0	5936.1	Wasatch G
6120.0	6243.1	Fort Union
8131.0	8294.5	Ohio Creek
8131.0	8294.5	TOG
8529.0	8692.6	William Fork
11331.0	11495.4	Cameo
11831.0	11995.6	Rollins

SECTION DETAILS

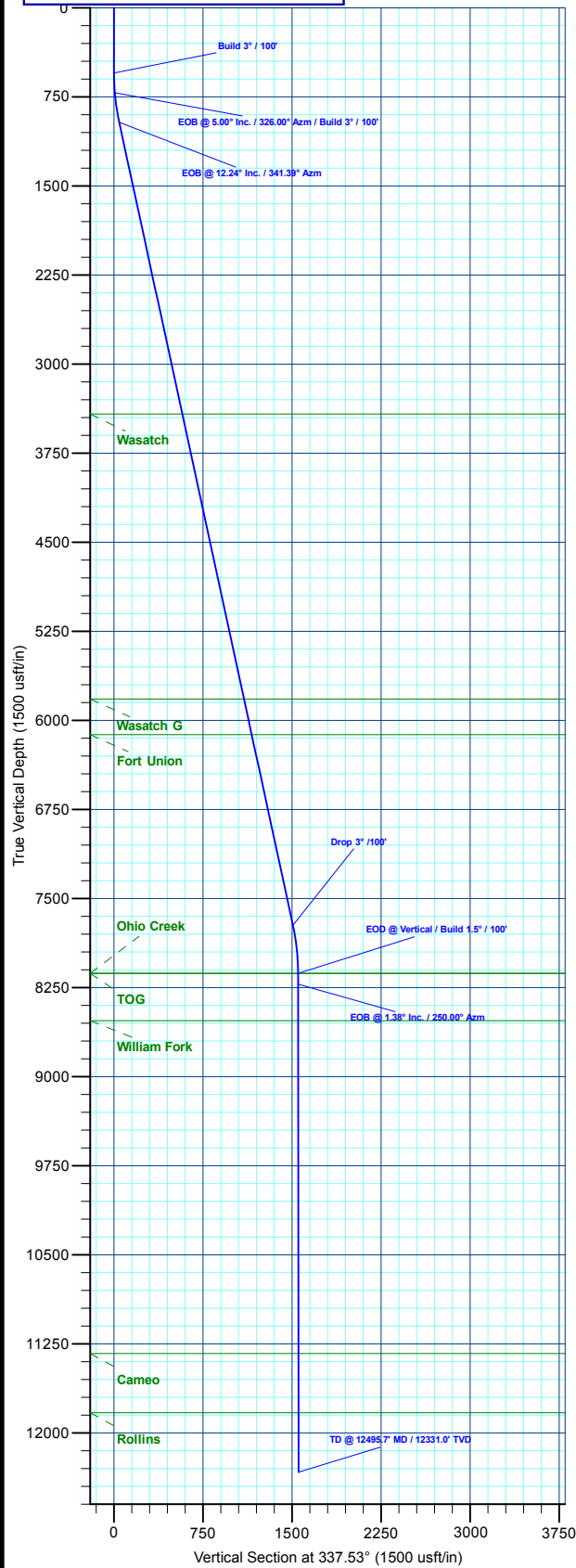
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
550.0	0.00	0.00	550.0	0.0	0.0	0.00	0.00	0.0	EOB @ 5.00° Inc. / 326.00° Azm / Build 3° / 100'
716.7	5.00	326.00	716.5	6.0	-4.1	3.00	326.00	7.1	EOB @ 12.24° Inc. / 341.39° Azm
967.8	12.24	341.39	964.6	40.4	-18.7	3.00	25.41	44.5	Drop 3° / 100'
7886.6	12.24	341.39	7726.1	1430.4	-486.8	0.00	0.00	1507.8	EOD @ Vertical / Build 1.5° / 100'
8294.5	0.00	0.00	8131.0	1471.5	-500.6	3.00	180.00	1551.1	EOB @ 1.38° Inc. / 250.00° Azm
8386.5	1.38	250.00	8222.9	1471.1	-501.6	1.50	250.00	1551.1	TD @ 12495.7° MD / 12331.0° TVD
12495.7	1.38	250.00	12331.0	1437.3	-594.6	0.00	0.00	1555.4	

DESIGN TARGET DETAILS

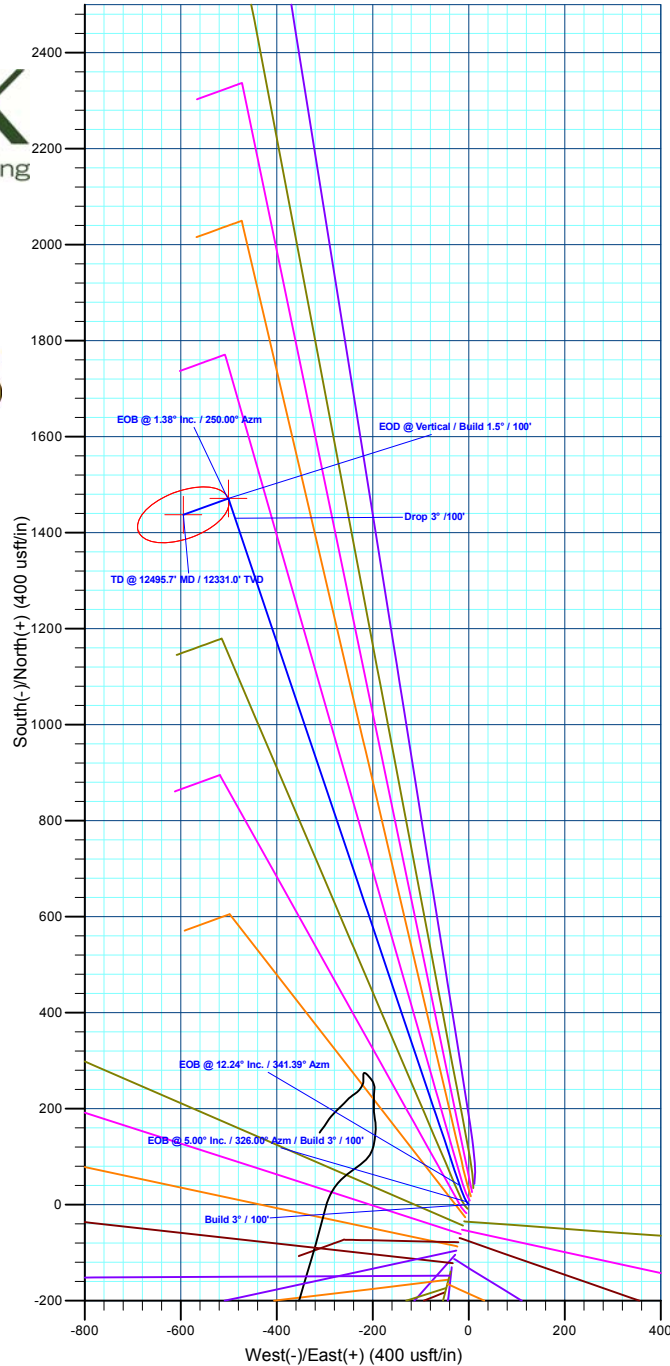
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 13B-23	8131.0	1471.5	-500.6	14425414.18	2444546.03	39.688446	-108.141876
PBHL - 13B-23	12331.0	1437.3	-594.6	14425377.00	2444453.20	39.688352	-108.142209

WELL DETAILS: BJU M23A FED 13B-23 496

+N/-S	+E/-W	Ground Level : 8104.0	Latitude	Longitude
0.0	0.0	Northing 14423959.40 Easting 2445093.30	39.684408	-108.140098 13B-23



**Azimuths to True North**  
Magnetic North: 9.43°  
Magnetic Field Strength: 51187.3nT  
Dip Angle: 65.82°  
Date: 6/3/2020  
Model: HDGM2020



Plan: Design #2 (BJU M23A FED 13B-23 496/Wellbore #1)

Created By: Will Jircik Date: 13:15, July 18 2022



## **Caerus Oil & Gas**

**Garfield County, CO**

**BJU M23A 496 Pad**

**BJU M23A FED 13B-23 496 - Slot 13B-23**

**Wellbore #1**

**Plan: Design #2**

## **KLX Well Planning Report**

**18 July, 2022**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M23A FED 13B-23 496 - Slot 13B-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 13B-23 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2		

Project	Garfield County, CO		
Map System:	Universal Transverse Mercator (US Survey Fee	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	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-23 496 - Slot 13B-23					
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

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2020	6/3/2020	9.43	65.82	51,187.30000000

Design	Design #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	337.53

Plan Sections										
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	
550.0	0.00	0.00	550.0	0.0	0.0	0.00	0.00	0.00	0.00	
716.7	5.00	326.00	716.5	6.0	-4.1	3.00	3.00	0.00	326.00	
967.8	12.24	341.39	964.6	40.4	-18.7	3.00	2.88	6.13	25.41	
7,886.6	12.24	341.39	7,726.1	1,430.4	-486.8	0.00	0.00	0.00	0.00	
8,294.5	0.00	0.00	8,131.0	1,471.5	-500.6	3.00	-3.00	0.00	180.00	OHCR - 13B-23
8,386.5	1.38	250.00	8,222.9	1,471.1	-501.6	1.50	1.50	-119.65	250.00	
12,495.7	1.38	250.00	12,331.0	1,437.3	-594.6	0.00	0.00	0.00	0.00	PBHL - 13B-23

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BJU M23A FED 13B-23 496 - Slot 13B-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 13B-23 496	<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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Build 3° / 100'</b>									
550.0	0.00	0.00	550.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	1.50	326.00	600.0	0.5	-0.4	0.6	3.00	3.00	0.00
700.0	4.50	326.00	699.8	4.9	-3.3	5.8	3.00	3.00	0.00
<b>EOB @ 5.00° Inc. / 326.00° Azm / Build 3° / 100'</b>									
716.7	5.00	326.00	716.5	6.0	-4.1	7.1	3.00	3.00	0.00
800.0	7.34	334.43	799.3	13.8	-8.4	16.0	3.00	2.80	10.11
900.0	10.24	339.37	898.1	27.9	-14.3	31.3	3.00	2.91	4.94
<b>EOB @ 12.24° Inc. / 341.39° Azm</b>									
967.8	12.24	341.39	964.6	40.4	-18.7	44.5	3.00	2.94	2.98
1,000.0	12.24	341.39	996.1	46.8	-20.9	51.3	0.00	0.00	0.00
1,100.0	12.24	341.39	1,093.8	66.9	-27.6	72.4	0.00	0.00	0.00
1,200.0	12.24	341.39	1,191.5	87.0	-34.4	93.6	0.00	0.00	0.00
1,300.0	12.24	341.39	1,289.3	107.1	-41.2	114.7	0.00	0.00	0.00
1,400.0	12.24	341.39	1,387.0	127.2	-47.9	135.9	0.00	0.00	0.00
1,500.0	12.24	341.39	1,484.7	147.3	-54.7	157.0	0.00	0.00	0.00
1,600.0	12.24	341.39	1,582.4	167.4	-61.5	178.2	0.00	0.00	0.00
1,700.0	12.24	341.39	1,680.2	187.5	-68.2	199.3	0.00	0.00	0.00
1,800.0	12.24	341.39	1,777.9	207.6	-75.0	220.5	0.00	0.00	0.00
1,900.0	12.24	341.39	1,875.6	227.7	-81.8	241.6	0.00	0.00	0.00
2,000.0	12.24	341.39	1,973.4	247.7	-88.5	262.8	0.00	0.00	0.00
2,100.0	12.24	341.39	2,071.1	267.8	-95.3	283.9	0.00	0.00	0.00
2,200.0	12.24	341.39	2,168.8	287.9	-102.1	305.1	0.00	0.00	0.00
2,300.0	12.24	341.39	2,266.5	308.0	-108.8	326.2	0.00	0.00	0.00
2,400.0	12.24	341.39	2,364.3	328.1	-115.6	347.4	0.00	0.00	0.00
2,500.0	12.24	341.39	2,462.0	348.2	-122.4	368.5	0.00	0.00	0.00
2,600.0	12.24	341.39	2,559.7	368.3	-129.1	389.7	0.00	0.00	0.00
2,700.0	12.24	341.39	2,657.4	388.4	-135.9	410.8	0.00	0.00	0.00
2,800.0	12.24	341.39	2,755.2	408.5	-142.6	432.0	0.00	0.00	0.00
2,900.0	12.24	341.39	2,852.9	428.6	-149.4	453.1	0.00	0.00	0.00
3,000.0	12.24	341.39	2,950.6	448.6	-156.2	474.3	0.00	0.00	0.00
3,100.0	12.24	341.39	3,048.4	468.7	-162.9	495.4	0.00	0.00	0.00
3,200.0	12.24	341.39	3,146.1	488.8	-169.7	516.6	0.00	0.00	0.00
3,300.0	12.24	341.39	3,243.8	508.9	-176.5	537.7	0.00	0.00	0.00
3,400.0	12.24	341.39	3,341.5	529.0	-183.2	558.9	0.00	0.00	0.00
<b>Wasatch</b>									
3,480.3	12.24	341.39	3,420.0	545.1	-188.7	575.9	0.00	0.00	0.00
3,500.0	12.24	341.39	3,439.3	549.1	-190.0	580.0	0.00	0.00	0.00
3,600.0	12.24	341.39	3,537.0	569.2	-196.8	601.2	0.00	0.00	0.00
3,700.0	12.24	341.39	3,634.7	589.3	-203.5	622.3	0.00	0.00	0.00
3,800.0	12.24	341.39	3,732.4	609.4	-210.3	643.5	0.00	0.00	0.00
3,900.0	12.24	341.39	3,830.2	629.5	-217.1	664.6	0.00	0.00	0.00
4,000.0	12.24	341.39	3,927.9	649.5	-223.8	685.8	0.00	0.00	0.00
4,100.0	12.24	341.39	4,025.6	669.6	-230.6	706.9	0.00	0.00	0.00
4,200.0	12.24	341.39	4,123.4	689.7	-237.4	728.1	0.00	0.00	0.00
4,300.0	12.24	341.39	4,221.1	709.8	-244.1	749.2	0.00	0.00	0.00
4,400.0	12.24	341.39	4,318.8	729.9	-250.9	770.4	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-23 496	<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)
4,500.0	12.24	341.39	4,416.5	750.0	-257.7	791.5	0.00	0.00	0.00
4,600.0	12.24	341.39	4,514.3	770.1	-264.4	812.7	0.00	0.00	0.00
4,700.0	12.24	341.39	4,612.0	790.2	-271.2	833.8	0.00	0.00	0.00
4,800.0	12.24	341.39	4,709.7	810.3	-277.9	855.0	0.00	0.00	0.00
4,900.0	12.24	341.39	4,807.4	830.4	-284.7	876.1	0.00	0.00	0.00
5,000.0	12.24	341.39	4,905.2	850.4	-291.5	897.3	0.00	0.00	0.00
5,100.0	12.24	341.39	5,002.9	870.5	-298.2	918.4	0.00	0.00	0.00
5,200.0	12.24	341.39	5,100.6	890.6	-305.0	939.6	0.00	0.00	0.00
5,300.0	12.24	341.39	5,198.4	910.7	-311.8	960.7	0.00	0.00	0.00
5,400.0	12.24	341.39	5,296.1	930.8	-318.5	981.9	0.00	0.00	0.00
5,500.0	12.24	341.39	5,393.8	950.9	-325.3	1,003.0	0.00	0.00	0.00
5,600.0	12.24	341.39	5,491.5	971.0	-332.1	1,024.2	0.00	0.00	0.00
5,700.0	12.24	341.39	5,589.3	991.1	-338.8	1,045.3	0.00	0.00	0.00
5,800.0	12.24	341.39	5,687.0	1,011.2	-345.6	1,066.5	0.00	0.00	0.00
5,900.0	12.24	341.39	5,784.7	1,031.3	-352.4	1,087.6	0.00	0.00	0.00
<b>Wasatch G</b>									
5,936.1	12.24	341.39	5,820.0	1,038.5	-354.8	1,095.3	0.00	0.00	0.00
6,000.0	12.24	341.39	5,882.4	1,051.3	-359.1	1,108.8	0.00	0.00	0.00
6,100.0	12.24	341.39	5,980.2	1,071.4	-365.9	1,129.9	0.00	0.00	0.00
6,200.0	12.24	341.39	6,077.9	1,091.5	-372.7	1,151.1	0.00	0.00	0.00
<b>Fort Union</b>									
6,243.1	12.24	341.39	6,120.0	1,100.2	-375.6	1,160.2	0.00	0.00	0.00
6,300.0	12.24	341.39	6,175.6	1,111.6	-379.4	1,172.2	0.00	0.00	0.00
6,400.0	12.24	341.39	6,273.4	1,131.7	-386.2	1,193.4	0.00	0.00	0.00
6,500.0	12.24	341.39	6,371.1	1,151.8	-393.0	1,214.5	0.00	0.00	0.00
6,600.0	12.24	341.39	6,468.8	1,171.9	-399.7	1,235.7	0.00	0.00	0.00
6,700.0	12.24	341.39	6,566.5	1,192.0	-406.5	1,256.8	0.00	0.00	0.00
6,800.0	12.24	341.39	6,664.3	1,212.1	-413.2	1,278.0	0.00	0.00	0.00
6,900.0	12.24	341.39	6,762.0	1,232.2	-420.0	1,299.1	0.00	0.00	0.00
7,000.0	12.24	341.39	6,859.7	1,252.2	-426.8	1,320.3	0.00	0.00	0.00
7,100.0	12.24	341.39	6,957.4	1,272.3	-433.5	1,341.4	0.00	0.00	0.00
7,200.0	12.24	341.39	7,055.2	1,292.4	-440.3	1,362.6	0.00	0.00	0.00
7,300.0	12.24	341.39	7,152.9	1,312.5	-447.1	1,383.7	0.00	0.00	0.00
7,400.0	12.24	341.39	7,250.6	1,332.6	-453.8	1,404.9	0.00	0.00	0.00
7,500.0	12.24	341.39	7,348.4	1,352.7	-460.6	1,426.0	0.00	0.00	0.00
7,600.0	12.24	341.39	7,446.1	1,372.8	-467.4	1,447.2	0.00	0.00	0.00
7,700.0	12.24	341.39	7,543.8	1,392.9	-474.1	1,468.3	0.00	0.00	0.00
7,800.0	12.24	341.39	7,641.5	1,413.0	-480.9	1,489.5	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
7,886.6	12.24	341.39	7,726.1	1,430.4	-486.8	1,507.8	0.00	0.00	0.00
7,900.0	11.84	341.39	7,739.3	1,433.0	-487.6	1,510.6	3.00	-3.00	0.00
8,000.0	8.84	341.39	7,837.6	1,450.0	-493.4	1,528.5	3.00	-3.00	0.00
8,100.0	5.84	341.39	7,936.8	1,462.1	-497.4	1,541.2	3.00	-3.00	0.00
8,200.0	2.84	341.39	8,036.5	1,469.3	-499.9	1,548.8	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek - TOG</b>									
8,294.5	0.00	0.00	8,131.0	1,471.5	-500.6	1,551.1	3.00	-3.00	0.00
8,300.0	0.08	250.00	8,136.5	1,471.5	-500.6	1,551.1	1.50	1.50	0.00
<b>EOB @ 1.38° Inc. / 250.00° Azm</b>									
8,386.5	1.38	250.00	8,222.9	1,471.1	-501.6	1,551.1	1.50	1.50	0.00
8,400.0	1.38	250.00	8,236.5	1,471.0	-502.0	1,551.2	0.00	0.00	0.00
8,500.0	1.38	250.00	8,336.4	1,470.2	-504.2	1,551.3	0.00	0.00	0.00
8,600.0	1.38	250.00	8,436.4	1,469.4	-506.5	1,551.4	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-23 496	<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)
<b>William Fork</b>									
8,692.6	1.38	250.00	8,529.0	1,468.6	-508.6	1,551.5	0.00	0.00	0.00
8,700.0	1.38	250.00	8,536.4	1,468.5	-508.7	1,551.5	0.00	0.00	0.00
8,800.0	1.38	250.00	8,636.3	1,467.7	-511.0	1,551.6	0.00	0.00	0.00
8,900.0	1.38	250.00	8,736.3	1,466.9	-513.3	1,551.7	0.00	0.00	0.00
9,000.0	1.38	250.00	8,836.3	1,466.1	-515.5	1,551.8	0.00	0.00	0.00
9,100.0	1.38	250.00	8,936.3	1,465.2	-517.8	1,551.9	0.00	0.00	0.00
9,200.0	1.38	250.00	9,036.2	1,464.4	-520.0	1,552.0	0.00	0.00	0.00
9,300.0	1.38	250.00	9,136.2	1,463.6	-522.3	1,552.1	0.00	0.00	0.00
9,400.0	1.38	250.00	9,236.2	1,462.8	-524.6	1,552.2	0.00	0.00	0.00
9,500.0	1.38	250.00	9,336.1	1,461.9	-526.8	1,552.3	0.00	0.00	0.00
9,600.0	1.38	250.00	9,436.1	1,461.1	-529.1	1,552.4	0.00	0.00	0.00
9,700.0	1.38	250.00	9,536.1	1,460.3	-531.3	1,552.5	0.00	0.00	0.00
9,800.0	1.38	250.00	9,636.1	1,459.5	-533.6	1,552.6	0.00	0.00	0.00
9,900.0	1.38	250.00	9,736.0	1,458.7	-535.9	1,552.7	0.00	0.00	0.00
10,000.0	1.38	250.00	9,836.0	1,457.8	-538.1	1,552.8	0.00	0.00	0.00
10,100.0	1.38	250.00	9,936.0	1,457.0	-540.4	1,552.9	0.00	0.00	0.00
10,200.0	1.38	250.00	10,035.9	1,456.2	-542.7	1,553.0	0.00	0.00	0.00
10,300.0	1.38	250.00	10,135.9	1,455.4	-544.9	1,553.1	0.00	0.00	0.00
10,400.0	1.38	250.00	10,235.9	1,454.5	-547.2	1,553.2	0.00	0.00	0.00
10,500.0	1.38	250.00	10,335.9	1,453.7	-549.4	1,553.3	0.00	0.00	0.00
10,600.0	1.38	250.00	10,435.8	1,452.9	-551.7	1,553.4	0.00	0.00	0.00
10,700.0	1.38	250.00	10,535.8	1,452.1	-554.0	1,553.6	0.00	0.00	0.00
10,800.0	1.38	250.00	10,635.8	1,451.2	-556.2	1,553.7	0.00	0.00	0.00
10,900.0	1.38	250.00	10,735.7	1,450.4	-558.5	1,553.8	0.00	0.00	0.00
11,000.0	1.38	250.00	10,835.7	1,449.6	-560.7	1,553.9	0.00	0.00	0.00
11,100.0	1.38	250.00	10,935.7	1,448.8	-563.0	1,554.0	0.00	0.00	0.00
11,200.0	1.38	250.00	11,035.7	1,448.0	-565.3	1,554.1	0.00	0.00	0.00
11,300.0	1.38	250.00	11,135.6	1,447.1	-567.5	1,554.2	0.00	0.00	0.00
11,400.0	1.38	250.00	11,235.6	1,446.3	-569.8	1,554.3	0.00	0.00	0.00
<b>Cameo</b>									
11,495.4	1.38	250.00	11,331.0	1,445.5	-572.0	1,554.4	0.00	0.00	0.00
11,500.0	1.38	250.00	11,335.6	1,445.5	-572.1	1,554.4	0.00	0.00	0.00
11,600.0	1.38	250.00	11,435.5	1,444.7	-574.3	1,554.5	0.00	0.00	0.00
11,700.0	1.38	250.00	11,535.5	1,443.8	-576.6	1,554.6	0.00	0.00	0.00
11,800.0	1.38	250.00	11,635.5	1,443.0	-578.8	1,554.7	0.00	0.00	0.00
11,900.0	1.38	250.00	11,735.5	1,442.2	-581.1	1,554.8	0.00	0.00	0.00
<b>Rollins</b>									
11,995.6	1.38	250.00	11,831.0	1,441.4	-583.3	1,554.9	0.00	0.00	0.00
12,000.0	1.38	250.00	11,835.4	1,441.4	-583.4	1,554.9	0.00	0.00	0.00
12,100.0	1.38	250.00	11,935.4	1,440.5	-585.6	1,555.0	0.00	0.00	0.00
12,200.0	1.38	250.00	12,035.4	1,439.7	-587.9	1,555.1	0.00	0.00	0.00
12,300.0	1.38	250.00	12,135.3	1,438.9	-590.1	1,555.2	0.00	0.00	0.00
12,400.0	1.38	250.00	12,235.3	1,438.1	-592.4	1,555.3	0.00	0.00	0.00
<b>TD @ 12495.7' MD / 12331.0' TVD</b>									
12,495.7	1.38	250.00	12,331.0	1,437.3	-594.6	1,555.4	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-23 496 - Slot 13B-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 13B-23 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2		

## 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-23 - plan hits target center - Point	0.00	0.00	8,131.0	1,471.5	-500.6	14,425,414.18	2,444,546.03	39.688446	-108.141876
PBHL - 13B-23 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	12,331.0	1,437.3	-594.6	14,425,377.00	2,444,453.20	39.688352	-108.142210

## Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,480.3	3,420.0	Wasatch			
5,936.1	5,820.0	Wasatch G			
6,243.1	6,120.0	Fort Union			
8,294.5	8,131.0	Ohio Creek			
8,294.5	8,131.0	TOG			
8,692.6	8,529.0	William Fork			
11,495.4	11,331.0	Cameo			
11,995.6	11,831.0	Rollins			

## Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
550.0	550.0	0.0	0.0	Build 3° / 100'
716.7	716.5	6.0	-4.1	EOB @ 5.00° Inc. / 326.00° Azm / Build 3° / 100'
967.8	964.6	40.4	-18.7	EOB @ 12.24° Inc. / 341.39° Azm
7,886.6	7,726.1	1,430.4	-486.8	Drop 3° / 100'
8,294.5	8,131.0	1,471.5	-500.6	EOD @ Vertical / Build 1.5° / 100'
8,386.5	8,222.9	1,471.1	-501.6	EOB @ 1.38° Inc. / 250.00° Azm
12,495.7	12,331.0	1,437.3	-594.6	TD @ 12495.7' MD / 12331.0' TVD