

Project: Garfield County, CO
Site: BJU M23A 496 Pad
Well: BJU M23A FED 13A-23 496
Wellbore: Wellbore #1
Design: Design #1
Latitude: 39.684443
Longitude: -108.140085
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 - BJU M23A FED 13A-23 496(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8134.0usft (30')
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3462.0	3549.2	Wasatch
5862.0	6020.0	Wasatch G
6162.0	6328.8	Fort Union
8145.0	8361.3	Ohio Creek
8145.0	8361.3	TOG
8563.0	8779.4	William Fork
11356.0	11573.3	Cameo
11856.0	12073.5	Rollins

SECTION DETAILS

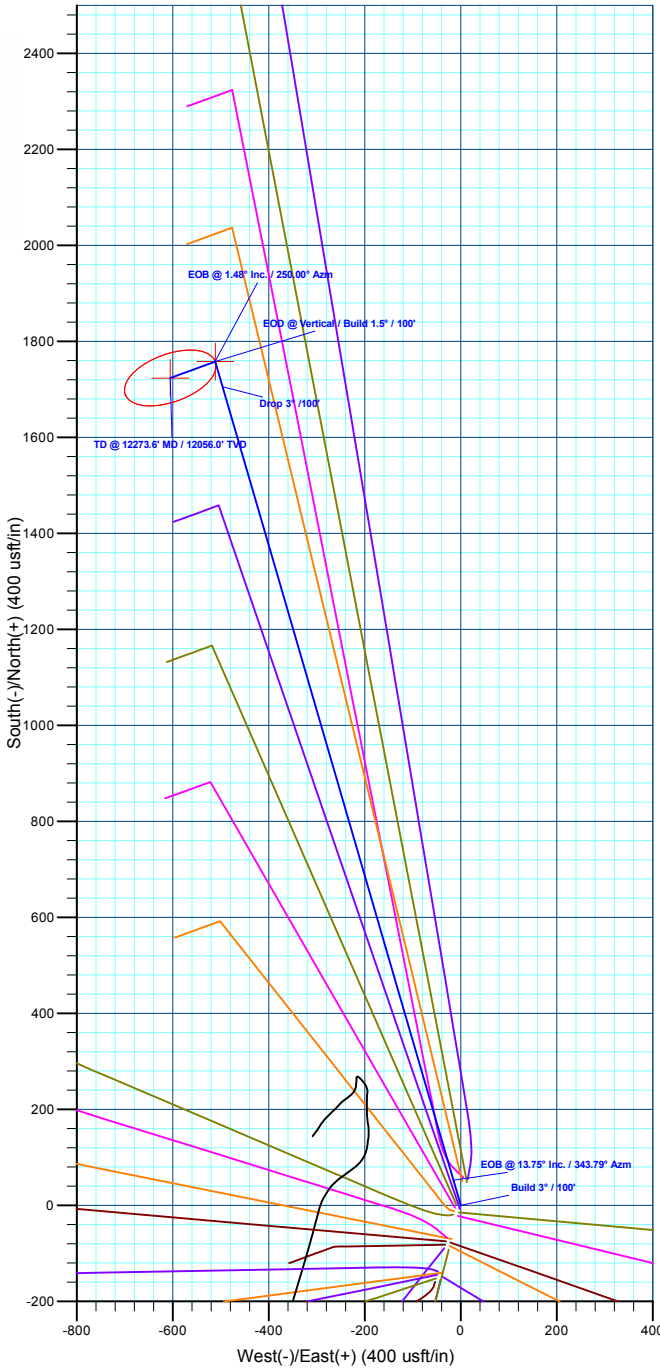
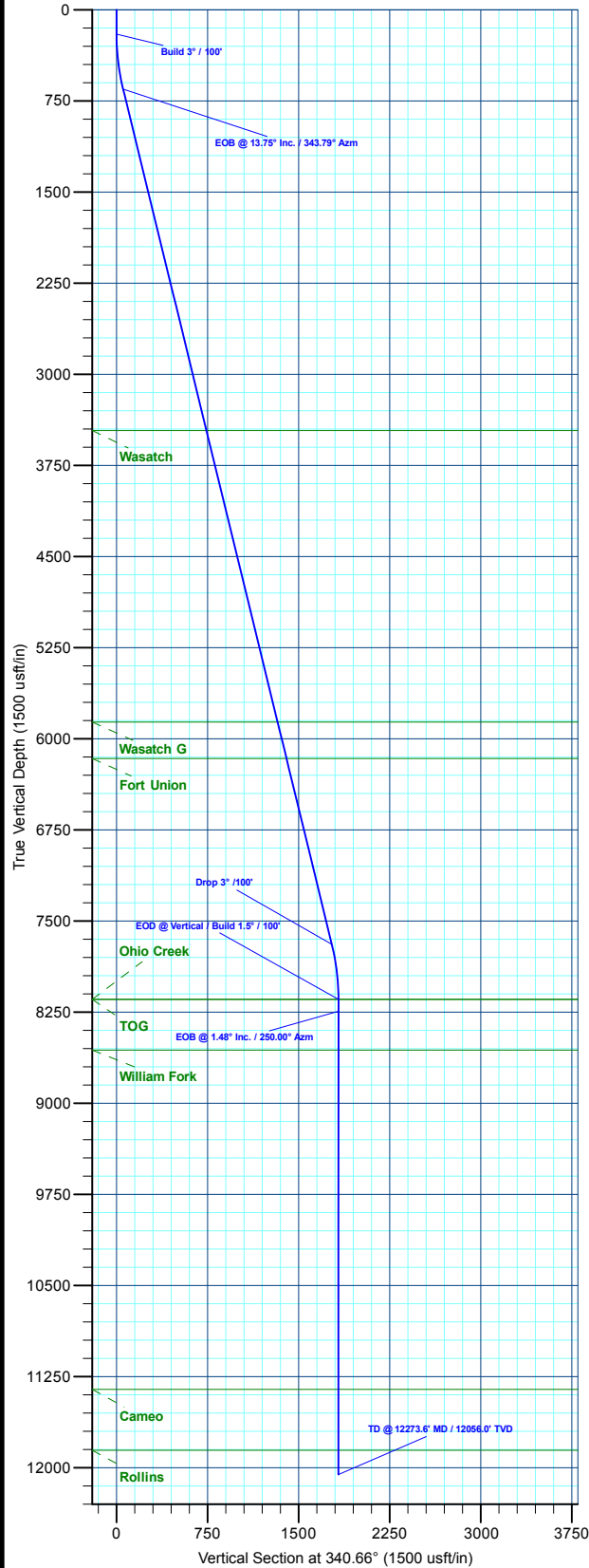
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
658.2	13.75	343.79	653.8	52.5	-15.3	3.00	343.79	54.6	EOB @ 13.75° Inc. / 343.79° Azm
7903.1	13.75	343.79	7691.2	1705.6	-495.9	0.00	0.00	1773.6	Drop 3° / 100'
8361.3	0.00	0.00	8145.0	1758.2	-511.2	3.00	180.00	1828.2	EOD @ Vertical / Build 1.5° / 100'
8460.2	1.48	250.00	8243.9	1757.7	-512.4	1.50	250.00	1828.2	EOB @ 1.48° Inc. / 250.00° Azm
12273.6	1.48	250.00	12056.0	1724.0	-605.1	0.00	0.00	1827.1	TD @ 12273.6° MD / 12056.0° TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 13A-23	8145.0	1758.2	-511.2	14425713.48	2444529.43	39.689268	-108.141901
PBHL - 13A-23	12056.0	1724.0	-605.1	14425676.30	2444436.60	39.689174	-108.142235

WELL DETAILS: BJU M23A FED 13A-23 496

+N/-S	+E/-W	Ground Level : 8104.0	Latitude	Longitude
0.0	0.0	Northing 14423972.50	39.684443	-108.140085
		Easting 2445096.40		



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

Created By: Will Jircik Date: 18:58, June 04 2020



Caerus Oil & Gas

Garfield County, CO

BJU M23A 496 Pad

BJU M23A FED 13A-23 496 - Slot BJU M23A FED 13A-23 496

Wellbore #1

Plan: Design #1

QES Well Planning Report

04 June, 2020



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 13A-23 496 - Slot BJU M23A FED 13A-23 496
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8134.0usft (30')
Project:	Garfield County, CO	MD Reference:	RKB @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 13A-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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
From:	Map	Easting:	2,445,109.60 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	39.684596
		Longitude:	-108.140032
		Grid Convergence:	1.83 °

Well	BJU M23A FED 13A-23 496 - Slot BJU M23A FED 13A-23 496		
Well Position	+N/-S	-55.6 usft	Northing: 14,423,972.50 usft
	+E/-W	-15.0 usft	Easting: 2,445,096.40 usft
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 #1				
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	340.66	

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
658.2	13.75	343.79	653.8	52.5	-15.3	3.00	3.00	0.00	343.79	
7,903.1	13.75	343.79	7,691.2	1,705.6	-495.9	0.00	0.00	0.00	0.00	
8,361.3	0.00	0.00	8,145.0	1,758.2	-511.2	3.00	-3.00	0.00	180.00	OHCR - 13A-23
8,460.2	1.48	250.00	8,243.9	1,757.7	-512.4	1.50	1.50	-111.23	250.00	
12,273.6	1.48	250.00	12,056.0	1,724.0	-605.1	0.00	0.00	0.00	0.00	PBHL - 13A-23

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 13A-23 496 - Slot BJU M23A FED 13A-23 496
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8134.0usft (30')
Project:	Garfield County, CO	MD Reference:	RKB @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 13A-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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
Build 3° / 100'									
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	3.00	343.79	300.0	2.5	-0.7	2.6	3.00	3.00	0.00
400.0	6.00	343.79	399.6	10.0	-2.9	10.4	3.00	3.00	0.00
500.0	9.00	343.79	498.8	22.6	-6.6	23.5	3.00	3.00	0.00
600.0	12.00	343.79	597.1	40.1	-11.7	41.7	3.00	3.00	0.00
EOB @ 13.75° Inc. / 343.79° Azm									
658.2	13.75	343.79	653.8	52.5	-15.3	54.6	3.00	3.00	0.00
700.0	13.75	343.79	694.4	62.1	-18.0	64.5	0.00	0.00	0.00
800.0	13.75	343.79	791.6	84.9	-24.7	88.3	0.00	0.00	0.00
900.0	13.75	343.79	888.7	107.7	-31.3	112.0	0.00	0.00	0.00
1,000.0	13.75	343.79	985.8	130.5	-37.9	135.7	0.00	0.00	0.00
1,100.0	13.75	343.79	1,083.0	153.3	-44.6	159.4	0.00	0.00	0.00
1,200.0	13.75	343.79	1,180.1	176.2	-51.2	183.2	0.00	0.00	0.00
1,300.0	13.75	343.79	1,277.2	199.0	-57.8	206.9	0.00	0.00	0.00
1,400.0	13.75	343.79	1,374.4	221.8	-64.5	230.6	0.00	0.00	0.00
1,500.0	13.75	343.79	1,471.5	244.6	-71.1	254.4	0.00	0.00	0.00
1,600.0	13.75	343.79	1,568.6	267.4	-77.8	278.1	0.00	0.00	0.00
1,700.0	13.75	343.79	1,665.8	290.2	-84.4	301.8	0.00	0.00	0.00
1,800.0	13.75	343.79	1,762.9	313.1	-91.0	325.5	0.00	0.00	0.00
1,900.0	13.75	343.79	1,860.0	335.9	-97.7	349.3	0.00	0.00	0.00
2,000.0	13.75	343.79	1,957.2	358.7	-104.3	373.0	0.00	0.00	0.00
2,100.0	13.75	343.79	2,054.3	381.5	-110.9	396.7	0.00	0.00	0.00
2,200.0	13.75	343.79	2,151.5	404.3	-117.6	420.4	0.00	0.00	0.00
2,300.0	13.75	343.79	2,248.6	427.1	-124.2	444.2	0.00	0.00	0.00
2,400.0	13.75	343.79	2,345.7	450.0	-130.8	467.9	0.00	0.00	0.00
2,500.0	13.75	343.79	2,442.9	472.8	-137.5	491.6	0.00	0.00	0.00
2,600.0	13.75	343.79	2,540.0	495.6	-144.1	515.4	0.00	0.00	0.00
2,700.0	13.75	343.79	2,637.1	518.4	-150.7	539.1	0.00	0.00	0.00
2,800.0	13.75	343.79	2,734.3	541.2	-157.4	562.8	0.00	0.00	0.00
2,900.0	13.75	343.79	2,831.4	564.1	-164.0	586.5	0.00	0.00	0.00
3,000.0	13.75	343.79	2,928.5	586.9	-170.6	610.3	0.00	0.00	0.00
3,100.0	13.75	343.79	3,025.7	609.7	-177.3	634.0	0.00	0.00	0.00
3,200.0	13.75	343.79	3,122.8	632.5	-183.9	657.7	0.00	0.00	0.00
3,300.0	13.75	343.79	3,219.9	655.3	-190.5	681.4	0.00	0.00	0.00
3,400.0	13.75	343.79	3,317.1	678.1	-197.2	705.2	0.00	0.00	0.00
3,500.0	13.75	343.79	3,414.2	701.0	-203.8	728.9	0.00	0.00	0.00
Wasatch									
3,549.2	13.75	343.79	3,462.0	712.2	-207.1	740.6	0.00	0.00	0.00
3,600.0	13.75	343.79	3,511.4	723.8	-210.4	752.6	0.00	0.00	0.00
3,700.0	13.75	343.79	3,608.5	746.6	-217.1	776.4	0.00	0.00	0.00
3,800.0	13.75	343.79	3,705.6	769.4	-223.7	800.1	0.00	0.00	0.00
3,900.0	13.75	343.79	3,802.8	792.2	-230.3	823.8	0.00	0.00	0.00
4,000.0	13.75	343.79	3,899.9	815.1	-237.0	847.5	0.00	0.00	0.00
4,100.0	13.75	343.79	3,997.0	837.9	-243.6	871.3	0.00	0.00	0.00
4,200.0	13.75	343.79	4,094.2	860.7	-250.2	895.0	0.00	0.00	0.00
4,300.0	13.75	343.79	4,191.3	883.5	-256.9	918.7	0.00	0.00	0.00
4,400.0	13.75	343.79	4,288.4	906.3	-263.5	942.4	0.00	0.00	0.00
4,500.0	13.75	343.79	4,385.6	929.1	-270.1	966.2	0.00	0.00	0.00
4,600.0	13.75	343.79	4,482.7	952.0	-276.8	989.9	0.00	0.00	0.00
4,700.0	13.75	343.79	4,579.8	974.8	-283.4	1,013.6	0.00	0.00	0.00

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Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8134.0usft (30')
Project:	Garfield County, CO	MD Reference:	RKB @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 13A-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
4,800.0	13.75	343.79	4,677.0	997.6	-290.0	1,037.3	0.00	0.00	0.00
4,900.0	13.75	343.79	4,774.1	1,020.4	-296.7	1,061.1	0.00	0.00	0.00
5,000.0	13.75	343.79	4,871.3	1,043.2	-303.3	1,084.8	0.00	0.00	0.00
5,100.0	13.75	343.79	4,968.4	1,066.0	-309.9	1,108.5	0.00	0.00	0.00
5,200.0	13.75	343.79	5,065.5	1,088.9	-316.6	1,132.3	0.00	0.00	0.00
5,300.0	13.75	343.79	5,162.7	1,111.7	-323.2	1,156.0	0.00	0.00	0.00
5,400.0	13.75	343.79	5,259.8	1,134.5	-329.8	1,179.7	0.00	0.00	0.00
5,500.0	13.75	343.79	5,356.9	1,157.3	-336.5	1,203.4	0.00	0.00	0.00
5,600.0	13.75	343.79	5,454.1	1,180.1	-343.1	1,227.2	0.00	0.00	0.00
5,700.0	13.75	343.79	5,551.2	1,203.0	-349.7	1,250.9	0.00	0.00	0.00
5,800.0	13.75	343.79	5,648.3	1,225.8	-356.4	1,274.6	0.00	0.00	0.00
5,900.0	13.75	343.79	5,745.5	1,248.6	-363.0	1,298.3	0.00	0.00	0.00
6,000.0	13.75	343.79	5,842.6	1,271.4	-369.6	1,322.1	0.00	0.00	0.00
Wasatch G									
6,020.0	13.75	343.79	5,862.0	1,276.0	-371.0	1,326.8	0.00	0.00	0.00
6,100.0	13.75	343.79	5,939.7	1,294.2	-376.3	1,345.8	0.00	0.00	0.00
6,200.0	13.75	343.79	6,036.9	1,317.0	-382.9	1,369.5	0.00	0.00	0.00
6,300.0	13.75	343.79	6,134.0	1,339.9	-389.5	1,393.3	0.00	0.00	0.00
Fort Union									
6,328.8	13.75	343.79	6,162.0	1,346.4	-391.5	1,400.1	0.00	0.00	0.00
6,400.0	13.75	343.79	6,231.2	1,362.7	-396.2	1,417.0	0.00	0.00	0.00
6,500.0	13.75	343.79	6,328.3	1,385.5	-402.8	1,440.7	0.00	0.00	0.00
6,600.0	13.75	343.79	6,425.4	1,408.3	-409.5	1,464.4	0.00	0.00	0.00
6,700.0	13.75	343.79	6,522.6	1,431.1	-416.1	1,488.2	0.00	0.00	0.00
6,800.0	13.75	343.79	6,619.7	1,453.9	-422.7	1,511.9	0.00	0.00	0.00
6,900.0	13.75	343.79	6,716.8	1,476.8	-429.4	1,535.6	0.00	0.00	0.00
7,000.0	13.75	343.79	6,814.0	1,499.6	-436.0	1,559.3	0.00	0.00	0.00
7,100.0	13.75	343.79	6,911.1	1,522.4	-442.6	1,583.1	0.00	0.00	0.00
7,200.0	13.75	343.79	7,008.2	1,545.2	-449.3	1,606.8	0.00	0.00	0.00
7,300.0	13.75	343.79	7,105.4	1,568.0	-455.9	1,630.5	0.00	0.00	0.00
7,400.0	13.75	343.79	7,202.5	1,590.9	-462.5	1,654.3	0.00	0.00	0.00
7,500.0	13.75	343.79	7,299.6	1,613.7	-469.2	1,678.0	0.00	0.00	0.00
7,600.0	13.75	343.79	7,396.8	1,636.5	-475.8	1,701.7	0.00	0.00	0.00
7,700.0	13.75	343.79	7,493.9	1,659.3	-482.4	1,725.4	0.00	0.00	0.00
7,800.0	13.75	343.79	7,591.1	1,682.1	-489.1	1,749.2	0.00	0.00	0.00
Drop 3° /100'									
7,903.1	13.75	343.79	7,691.2	1,705.6	-495.9	1,773.6	0.00	0.00	0.00
8,000.0	10.84	343.79	7,785.9	1,725.5	-501.7	1,794.2	3.00	-3.00	0.00
8,100.0	7.84	343.79	7,884.5	1,741.0	-506.2	1,810.4	3.00	-3.00	0.00
8,200.0	4.84	343.79	7,983.9	1,751.6	-509.3	1,821.4	3.00	-3.00	0.00
8,300.0	1.84	343.79	8,083.7	1,757.2	-510.9	1,827.3	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek - TOG									
8,361.3	0.00	0.00	8,145.0	1,758.2	-511.2	1,828.2	3.00	-3.00	0.00
8,400.0	0.58	250.00	8,183.7	1,758.1	-511.4	1,828.2	1.50	1.50	0.00
EOB @ 1.48° Inc. / 250.00° Azm									
8,460.2	1.48	250.00	8,243.9	1,757.7	-512.4	1,828.2	1.50	1.50	0.00
8,500.0	1.48	250.00	8,283.7	1,757.4	-513.3	1,828.2	0.00	0.00	0.00
8,600.0	1.48	250.00	8,383.7	1,756.5	-515.8	1,828.2	0.00	0.00	0.00
8,700.0	1.48	250.00	8,483.6	1,755.6	-518.2	1,828.2	0.00	0.00	0.00
William Fork									
8,779.4	1.48	250.00	8,563.0	1,754.9	-520.1	1,828.1	0.00	0.00	0.00
8,800.0	1.48	250.00	8,583.6	1,754.7	-520.6	1,828.1	0.00	0.00	0.00

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Well:	BJU M23A FED 13A-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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	1.48	250.00	8,683.6	1,753.8	-523.1	1,828.1	0.00	0.00	0.00
9,000.0	1.48	250.00	8,783.5	1,753.0	-525.5	1,828.1	0.00	0.00	0.00
9,100.0	1.48	250.00	8,883.5	1,752.1	-527.9	1,828.0	0.00	0.00	0.00
9,200.0	1.48	250.00	8,983.5	1,751.2	-530.4	1,828.0	0.00	0.00	0.00
9,300.0	1.48	250.00	9,083.4	1,750.3	-532.8	1,828.0	0.00	0.00	0.00
9,400.0	1.48	250.00	9,183.4	1,749.4	-535.2	1,827.9	0.00	0.00	0.00
9,500.0	1.48	250.00	9,283.4	1,748.5	-537.7	1,827.9	0.00	0.00	0.00
9,600.0	1.48	250.00	9,383.3	1,747.6	-540.1	1,827.9	0.00	0.00	0.00
9,700.0	1.48	250.00	9,483.3	1,746.8	-542.5	1,827.9	0.00	0.00	0.00
9,800.0	1.48	250.00	9,583.3	1,745.9	-545.0	1,827.8	0.00	0.00	0.00
9,900.0	1.48	250.00	9,683.2	1,745.0	-547.4	1,827.8	0.00	0.00	0.00
10,000.0	1.48	250.00	9,783.2	1,744.1	-549.8	1,827.8	0.00	0.00	0.00
10,100.0	1.48	250.00	9,883.2	1,743.2	-552.3	1,827.7	0.00	0.00	0.00
10,200.0	1.48	250.00	9,983.1	1,742.3	-554.7	1,827.7	0.00	0.00	0.00
10,300.0	1.48	250.00	10,083.1	1,741.4	-557.1	1,827.7	0.00	0.00	0.00
10,400.0	1.48	250.00	10,183.1	1,740.6	-559.6	1,827.7	0.00	0.00	0.00
10,500.0	1.48	250.00	10,283.0	1,739.7	-562.0	1,827.6	0.00	0.00	0.00
10,600.0	1.48	250.00	10,383.0	1,738.8	-564.4	1,827.6	0.00	0.00	0.00
10,700.0	1.48	250.00	10,483.0	1,737.9	-566.9	1,827.6	0.00	0.00	0.00
10,800.0	1.48	250.00	10,582.9	1,737.0	-569.3	1,827.5	0.00	0.00	0.00
10,900.0	1.48	250.00	10,682.9	1,736.1	-571.7	1,827.5	0.00	0.00	0.00
11,000.0	1.48	250.00	10,782.9	1,735.2	-574.2	1,827.5	0.00	0.00	0.00
11,100.0	1.48	250.00	10,882.8	1,734.4	-576.6	1,827.4	0.00	0.00	0.00
11,200.0	1.48	250.00	10,982.8	1,733.5	-579.0	1,827.4	0.00	0.00	0.00
11,300.0	1.48	250.00	11,082.8	1,732.6	-581.5	1,827.4	0.00	0.00	0.00
11,400.0	1.48	250.00	11,182.7	1,731.7	-583.9	1,827.4	0.00	0.00	0.00
11,500.0	1.48	250.00	11,282.7	1,730.8	-586.3	1,827.3	0.00	0.00	0.00
Cameo									
11,573.3	1.48	250.00	11,356.0	1,730.2	-588.1	1,827.3	0.00	0.00	0.00
11,600.0	1.48	250.00	11,382.7	1,729.9	-588.8	1,827.3	0.00	0.00	0.00
11,700.0	1.48	250.00	11,482.6	1,729.1	-591.2	1,827.3	0.00	0.00	0.00
11,800.0	1.48	250.00	11,582.6	1,728.2	-593.6	1,827.2	0.00	0.00	0.00
11,900.0	1.48	250.00	11,682.6	1,727.3	-596.0	1,827.2	0.00	0.00	0.00
12,000.0	1.48	250.00	11,782.5	1,726.4	-598.5	1,827.2	0.00	0.00	0.00
Rollins									
12,073.5	1.48	250.00	11,856.0	1,725.7	-600.3	1,827.2	0.00	0.00	0.00
12,100.0	1.48	250.00	11,882.5	1,725.5	-600.9	1,827.1	0.00	0.00	0.00
12,200.0	1.48	250.00	11,982.5	1,724.6	-603.3	1,827.1	0.00	0.00	0.00
TD @ 12273.6' MD / 12056.0' TVD									
12,273.6	1.48	250.00	12,056.0	1,724.0	-605.1	1,827.1	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 13A-23 496 - Slot BJU M23A FED 13A-23 496
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8134.0usft (30')
Project:	Garfield County, CO	MD Reference:	RKB @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 13A-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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 - 13A-23 - plan hits target center - Point	0.00	0.00	8,145.0	1,758.2	-511.2	14,425,713.48	2,444,529.43	39.689268	-108.141901
PBHL - 13A-23 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	12,056.0	1,724.0	-605.1	14,425,676.30	2,444,436.60	39.689174	-108.142235

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,549.2	3,462.0	Wasatch			
6,020.0	5,862.0	Wasatch G			
6,328.8	6,162.0	Fort Union			
8,361.3	8,145.0	Ohio Creek			
8,361.3	8,145.0	TOG			
8,779.4	8,563.0	William Fork			
11,573.3	11,356.0	Cameo			
12,073.5	11,856.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.0	200.0	0.0	0.0	Build 3° / 100'
658.2	653.8	52.5	-15.3	EOB @ 13.75° Inc. / 343.79° Azm
7,903.1	7,691.2	1,705.6	-495.9	Drop 3° / 100'
8,361.3	8,145.0	1,758.2	-511.2	EOD @ Vertical / Build 1.5° / 100'
8,460.2	8,243.9	1,757.7	-512.4	EOB @ 1.48° Inc. / 250.00° Azm
12,273.6	12,056.0	1,724.0	-605.1	TD @ 12273.6' MD / 12056.0' TVD