

Project: Garfield County, CO
 Site: BJU M23A 496 Pad
 Well: BJU M23A FED 25C-23 496
 Wellbore: Wellbore #1
 Design: Design #1
 Latitude: 39.684212
 Longitude: -108.140166
 Ground Level: 8104.0
 WELL @ 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: WELL @ 8134.0usft (30')
 Section (VS) Reference: Slot - BJU M23A FED 21A-23 496(0.0N, 0.0E)
 Measured Depth Reference: WELL @ 8134.0usft (30')
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3407.0	3544.8	Wasatch
5807.0	6062.2	Wasatch G
6107.0	6376.9	Fort Union
8085.0	8432.5	Ohio Creek
8085.0	8432.5	TOG
8441.0	8788.6	William Fork
11392.0	11740.6	Cameo
11892.0	12240.7	Rollins

SECTION DETAILS

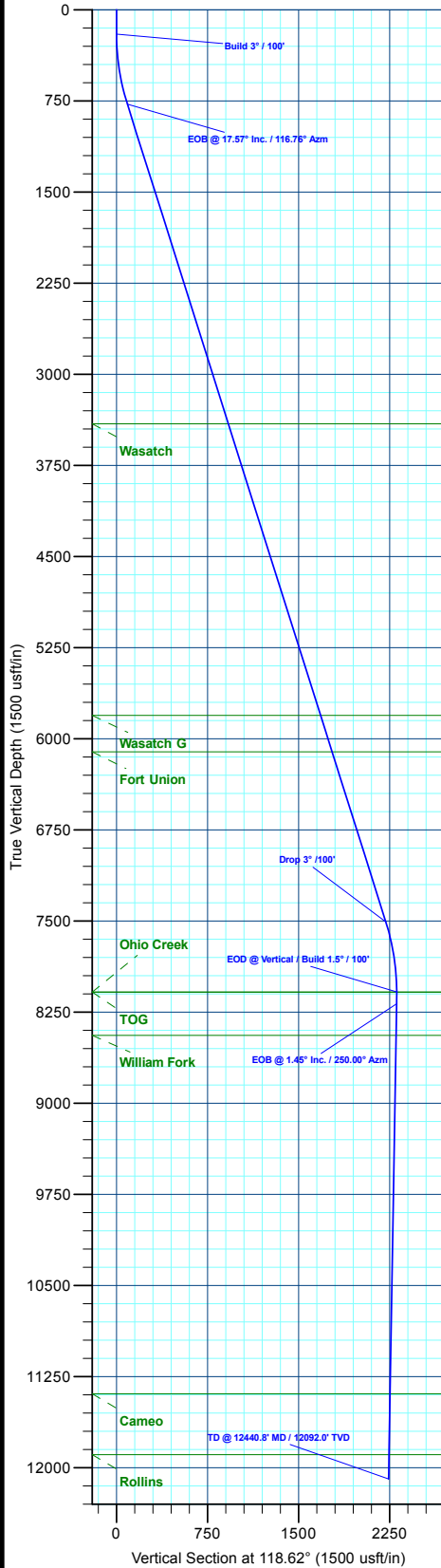
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
785.5	17.57	116.76	776.4	-40.1	79.5	3.00	116.76	89.0	EOB @ 17.57° Inc. / 116.76° Azm
7847.0	17.57	116.76	7508.6	-999.6	1982.5	0.00	0.00	2219.1	Drop 3° / 100'
8432.5	0.00	0.00	8085.0	-1039.7	2062.0	3.00	180.00	2308.1	EOD @ Vertical / Build 1.5° / 100'
8529.0	1.45	250.00	8181.5	-1040.1	2060.9	1.50	250.00	2307.3	EOB @ 1.45° Inc. / 250.00° Azm
12440.8	1.45	250.00	12092.0	-1073.9	1968.1	0.00	0.00	2242.0	TD @ 12440.8' MD / 12092.0' TVD

DESIGN TARGET DETAILS

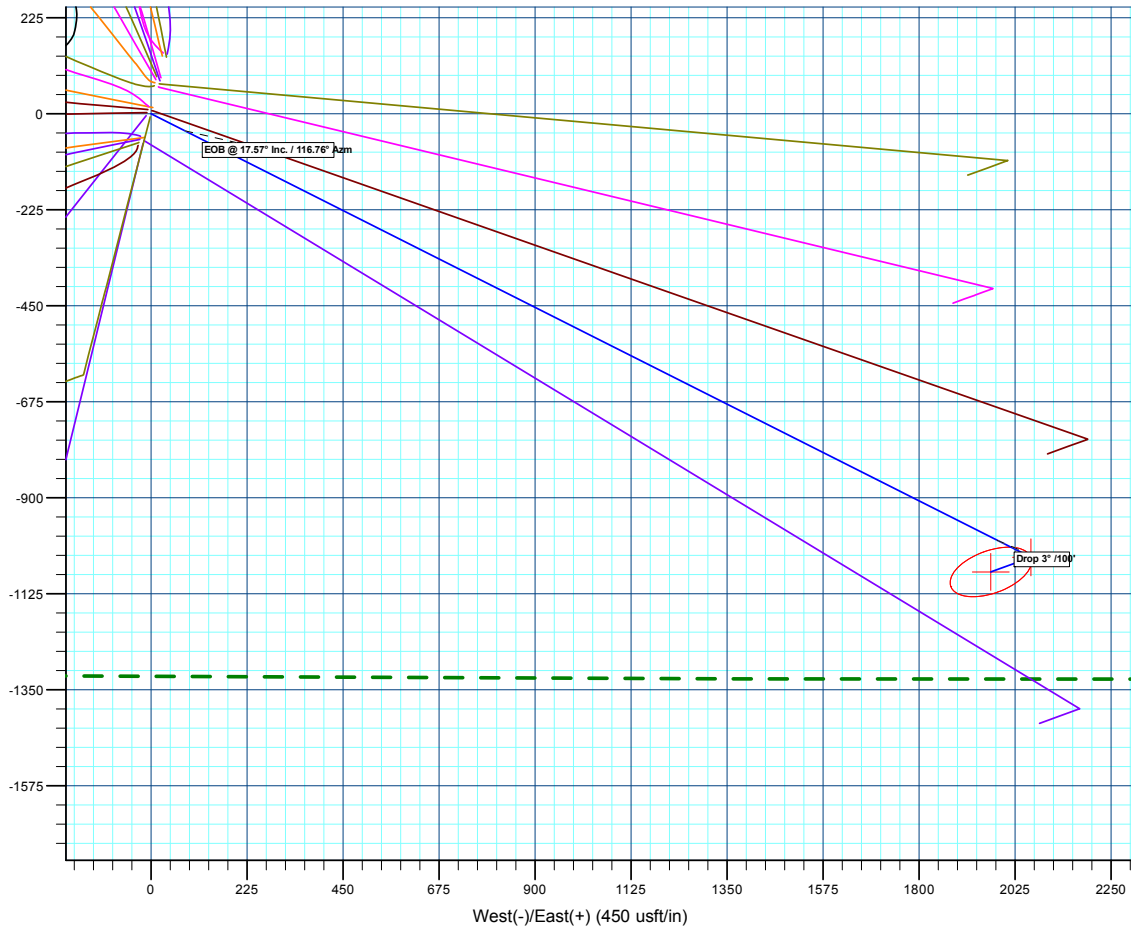
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 21A-23	8085.0	-1039.7	2062.0	14422913.98	2447170.43	39.681358	-108.132843
PBHL - 21A-23	2092.0	-1073.9	1968.1	14422876.80	2447077.60	39.681264	-108.133176

WELL DETAILS: BJU M23A FED 25C-23 496

+N/-S	+E/-W	Ground Level	Northing	Easting	Latitude	Longitude
0.0	0.0	8104.0	14423887.40	2445076.30	39.684212	-108.140166



T M
 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 #1 (BJU M23A FED 25C-23 496/Wellbore #1)

Created By: Will Jircik Date: 14:12, June 08 2020



Caerus Oil & Gas

Garfield County, CO

BJU M23A 496 Pad

BJU M23A FED 25C-23 496 - Slot BJU M23A FED 21A-23 496

Wellbore #1

Plan: Design #1

QES Well Planning Report

08 June, 2020



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25C-23 496 - Slot BJU M23A FED 21A-23 496
Company:	Caerus Oil & Gas	TVD Reference:	WELL @ 8134.0usft (30')
Project:	Garfield County, CO	MD Reference:	WELL @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 25C-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Garfield County, CO		
Map System:	Universal Transverse Mercator (US Survey Feet)	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 25C-23 496 - Slot BJU M23A FED 21A-23 496					
Well Position	+N/-S	-140.0 usft	Northing:	14,423,887.40 usft	Latitude:	39.684212
	+E/-W	-37.8 usft	Easting:	2,445,076.30 usft	Longitude:	-108.140166
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	118.62

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	
785.5	17.57	116.76	776.4	-40.1	79.5	3.00	3.00	0.00	116.76	
7,847.0	17.57	116.76	7,508.6	-999.6	1,982.5	0.00	0.00	0.00	0.00	
8,432.5	0.00	0.00	8,085.0	-1,039.7	2,062.0	3.00	-3.00	0.00	180.00	OHCR - 21A-23
8,529.0	1.45	250.00	8,181.5	-1,040.1	2,060.9	1.50	1.50	-114.03	250.00	
12,440.8	1.45	250.00	12,092.0	-1,073.9	1,968.1	0.00	0.00	0.00	0.00	PBHL - 21A-23

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25C-23 496 - Slot BJU M23A FED 21A-23 496
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Project:	Garfield County, CO	MD Reference:	WELL @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 25C-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	116.76	300.0	-1.2	2.3	2.6	3.00	3.00	0.00	
400.0	6.00	116.76	399.6	-4.7	9.3	10.5	3.00	3.00	0.00	
500.0	9.00	116.76	498.8	-10.6	21.0	23.5	3.00	3.00	0.00	
600.0	12.00	116.76	597.1	-18.8	37.3	41.7	3.00	3.00	0.00	
700.0	15.00	116.76	694.3	-29.3	58.1	65.0	3.00	3.00	0.00	
EOB @ 17.57° Inc. / 116.76° Azm										
785.5	17.57	116.76	776.4	-40.1	79.5	89.0	3.00	3.00	0.00	
800.0	17.57	116.76	790.2	-42.1	83.4	93.4	0.00	0.00	0.00	
900.0	17.57	116.76	885.5	-55.6	110.4	123.5	0.00	0.00	0.00	
1,000.0	17.57	116.76	980.9	-69.2	137.3	153.7	0.00	0.00	0.00	
1,100.0	17.57	116.76	1,076.2	-82.8	164.3	183.9	0.00	0.00	0.00	
1,200.0	17.57	116.76	1,171.5	-96.4	191.2	214.0	0.00	0.00	0.00	
1,300.0	17.57	116.76	1,266.9	-110.0	218.2	244.2	0.00	0.00	0.00	
1,400.0	17.57	116.76	1,362.2	-123.6	245.1	274.4	0.00	0.00	0.00	
1,500.0	17.57	116.76	1,457.6	-137.2	272.1	304.5	0.00	0.00	0.00	
1,600.0	17.57	116.76	1,552.9	-150.8	299.0	334.7	0.00	0.00	0.00	
1,700.0	17.57	116.76	1,648.2	-164.4	326.0	364.9	0.00	0.00	0.00	
1,800.0	17.57	116.76	1,743.6	-177.9	352.9	395.0	0.00	0.00	0.00	
1,900.0	17.57	116.76	1,838.9	-191.5	379.9	425.2	0.00	0.00	0.00	
2,000.0	17.57	116.76	1,934.2	-205.1	406.8	455.4	0.00	0.00	0.00	
2,100.0	17.57	116.76	2,029.6	-218.7	433.8	485.5	0.00	0.00	0.00	
2,200.0	17.57	116.76	2,124.9	-232.3	460.7	515.7	0.00	0.00	0.00	
2,300.0	17.57	116.76	2,220.2	-245.9	487.7	545.8	0.00	0.00	0.00	
2,400.0	17.57	116.76	2,315.6	-259.5	514.6	576.0	0.00	0.00	0.00	
2,500.0	17.57	116.76	2,410.9	-273.1	541.5	606.2	0.00	0.00	0.00	
2,600.0	17.57	116.76	2,506.3	-286.6	568.5	636.3	0.00	0.00	0.00	
2,700.0	17.57	116.76	2,601.6	-300.2	595.4	666.5	0.00	0.00	0.00	
2,800.0	17.57	116.76	2,696.9	-313.8	622.4	696.7	0.00	0.00	0.00	
2,900.0	17.57	116.76	2,792.3	-327.4	649.3	726.8	0.00	0.00	0.00	
3,000.0	17.57	116.76	2,887.6	-341.0	676.3	757.0	0.00	0.00	0.00	
3,100.0	17.57	116.76	2,982.9	-354.6	703.2	787.2	0.00	0.00	0.00	
3,200.0	17.57	116.76	3,078.3	-368.2	730.2	817.3	0.00	0.00	0.00	
3,300.0	17.57	116.76	3,173.6	-381.8	757.1	847.5	0.00	0.00	0.00	
3,400.0	17.57	116.76	3,269.0	-395.3	784.1	877.7	0.00	0.00	0.00	
3,500.0	17.57	116.76	3,364.3	-408.9	811.0	907.8	0.00	0.00	0.00	
Wasatch										
3,544.8	17.57	116.76	3,407.0	-415.0	823.1	921.3	0.00	0.00	0.00	
3,600.0	17.57	116.76	3,459.6	-422.5	838.0	938.0	0.00	0.00	0.00	
3,700.0	17.57	116.76	3,555.0	-436.1	864.9	968.2	0.00	0.00	0.00	
3,800.0	17.57	116.76	3,650.3	-449.7	891.9	998.3	0.00	0.00	0.00	
3,900.0	17.57	116.76	3,745.6	-463.3	918.8	1,028.5	0.00	0.00	0.00	
4,000.0	17.57	116.76	3,841.0	-476.9	945.8	1,058.6	0.00	0.00	0.00	
4,100.0	17.57	116.76	3,936.3	-490.5	972.7	1,088.8	0.00	0.00	0.00	
4,200.0	17.57	116.76	4,031.7	-504.0	999.7	1,119.0	0.00	0.00	0.00	
4,300.0	17.57	116.76	4,127.0	-517.6	1,026.6	1,149.1	0.00	0.00	0.00	
4,400.0	17.57	116.76	4,222.3	-531.2	1,053.6	1,179.3	0.00	0.00	0.00	
4,500.0	17.57	116.76	4,317.7	-544.8	1,080.5	1,209.5	0.00	0.00	0.00	
4,600.0	17.57	116.76	4,413.0	-558.4	1,107.5	1,239.6	0.00	0.00	0.00	
4,700.0	17.57	116.76	4,508.3	-572.0	1,134.4	1,269.8	0.00	0.00	0.00	

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Project:	Garfield County, CO	MD Reference:	WELL @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 25C-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	17.57	116.76	4,603.7	-585.6	1,161.4	1,300.0	0.00	0.00	0.00
4,900.0	17.57	116.76	4,699.0	-599.2	1,188.3	1,330.1	0.00	0.00	0.00
5,000.0	17.57	116.76	4,794.3	-612.8	1,215.3	1,360.3	0.00	0.00	0.00
5,100.0	17.57	116.76	4,889.7	-626.3	1,242.2	1,390.5	0.00	0.00	0.00
5,200.0	17.57	116.76	4,985.0	-639.9	1,269.2	1,420.6	0.00	0.00	0.00
5,300.0	17.57	116.76	5,080.4	-653.5	1,296.1	1,450.8	0.00	0.00	0.00
5,400.0	17.57	116.76	5,175.7	-667.1	1,323.1	1,481.0	0.00	0.00	0.00
5,500.0	17.57	116.76	5,271.0	-680.7	1,350.0	1,511.1	0.00	0.00	0.00
5,600.0	17.57	116.76	5,366.4	-694.3	1,377.0	1,541.3	0.00	0.00	0.00
5,700.0	17.57	116.76	5,461.7	-707.9	1,403.9	1,571.4	0.00	0.00	0.00
5,800.0	17.57	116.76	5,557.0	-721.5	1,430.9	1,601.6	0.00	0.00	0.00
5,900.0	17.57	116.76	5,652.4	-735.0	1,457.8	1,631.8	0.00	0.00	0.00
6,000.0	17.57	116.76	5,747.7	-748.6	1,484.8	1,661.9	0.00	0.00	0.00
Wasatch G									
6,062.2	17.57	116.76	5,807.0	-757.1	1,501.5	1,680.7	0.00	0.00	0.00
6,100.0	17.57	116.76	5,843.1	-762.2	1,511.7	1,692.1	0.00	0.00	0.00
6,200.0	17.57	116.76	5,938.4	-775.8	1,538.7	1,722.3	0.00	0.00	0.00
6,300.0	17.57	116.76	6,033.7	-789.4	1,565.6	1,752.4	0.00	0.00	0.00
Fort Union									
6,376.9	17.57	116.76	6,107.0	-799.8	1,586.3	1,775.6	0.00	0.00	0.00
6,400.0	17.57	116.76	6,129.1	-803.0	1,592.6	1,782.6	0.00	0.00	0.00
6,500.0	17.57	116.76	6,224.4	-816.6	1,619.5	1,812.8	0.00	0.00	0.00
6,600.0	17.57	116.76	6,319.7	-830.2	1,646.5	1,842.9	0.00	0.00	0.00
6,700.0	17.57	116.76	6,415.1	-843.7	1,673.4	1,873.1	0.00	0.00	0.00
6,800.0	17.57	116.76	6,510.4	-857.3	1,700.4	1,903.3	0.00	0.00	0.00
6,900.0	17.57	116.76	6,605.7	-870.9	1,727.3	1,933.4	0.00	0.00	0.00
7,000.0	17.57	116.76	6,701.1	-884.5	1,754.2	1,963.6	0.00	0.00	0.00
7,100.0	17.57	116.76	6,796.4	-898.1	1,781.2	1,993.8	0.00	0.00	0.00
7,200.0	17.57	116.76	6,891.8	-911.7	1,808.1	2,023.9	0.00	0.00	0.00
7,300.0	17.57	116.76	6,987.1	-925.3	1,835.1	2,054.1	0.00	0.00	0.00
7,400.0	17.57	116.76	7,082.4	-938.9	1,862.0	2,084.2	0.00	0.00	0.00
7,500.0	17.57	116.76	7,177.8	-952.5	1,889.0	2,114.4	0.00	0.00	0.00
7,600.0	17.57	116.76	7,273.1	-966.0	1,915.9	2,144.6	0.00	0.00	0.00
7,700.0	17.57	116.76	7,368.4	-979.6	1,942.9	2,174.7	0.00	0.00	0.00
7,800.0	17.57	116.76	7,463.8	-993.2	1,969.8	2,204.9	0.00	0.00	0.00
Drop 3° /100'									
7,847.0	17.57	116.76	7,508.6	-999.6	1,982.5	2,219.1	0.00	0.00	0.00
7,900.0	15.98	116.76	7,559.3	-1,006.5	1,996.2	2,234.4	3.00	-3.00	0.00
8,000.0	12.98	116.76	7,656.1	-1,017.7	2,018.5	2,259.3	3.00	-3.00	0.00
8,100.0	9.98	116.76	7,754.1	-1,026.7	2,036.2	2,279.2	3.00	-3.00	0.00
8,200.0	6.98	116.76	7,853.0	-1,033.3	2,049.4	2,294.0	3.00	-3.00	0.00
8,300.0	3.98	116.76	7,952.6	-1,037.6	2,057.9	2,303.5	3.00	-3.00	0.00
8,400.0	0.98	116.76	8,052.5	-1,039.6	2,061.8	2,307.8	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek - TOG									
8,432.5	0.00	0.00	8,085.0	-1,039.7	2,062.0	2,308.1	3.00	-3.00	0.00
8,500.0	1.01	250.00	8,152.5	-1,039.9	2,061.5	2,307.7	1.50	1.50	0.00
EOB @ 1.45° Inc. / 250.00° Azm									
8,529.0	1.45	250.00	8,181.5	-1,040.1	2,060.9	2,307.3	1.50	1.50	0.00
8,600.0	1.45	250.00	8,252.4	-1,040.7	2,059.2	2,306.1	0.00	0.00	0.00
8,700.0	1.45	250.00	8,352.4	-1,041.6	2,056.8	2,304.4	0.00	0.00	0.00
William Fork									
8,788.6	1.45	250.00	8,441.0	-1,042.4	2,054.7	2,303.0	0.00	0.00	0.00

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Project:	Garfield County, CO	MD Reference:	WELL @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 25C-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)	
8,800.0	1.45	250.00	8,452.4	-1,042.5	2,054.5	2,302.8	0.00	0.00	0.00	
8,900.0	1.45	250.00	8,552.3	-1,043.3	2,052.1	2,301.1	0.00	0.00	0.00	
9,000.0	1.45	250.00	8,652.3	-1,044.2	2,049.7	2,299.4	0.00	0.00	0.00	
9,100.0	1.45	250.00	8,752.3	-1,045.0	2,047.3	2,297.8	0.00	0.00	0.00	
9,200.0	1.45	250.00	8,852.2	-1,045.9	2,045.0	2,296.1	0.00	0.00	0.00	
9,300.0	1.45	250.00	8,952.2	-1,046.8	2,042.6	2,294.4	0.00	0.00	0.00	
9,400.0	1.45	250.00	9,052.2	-1,047.6	2,040.2	2,292.7	0.00	0.00	0.00	
9,500.0	1.45	250.00	9,152.1	-1,048.5	2,037.8	2,291.1	0.00	0.00	0.00	
9,600.0	1.45	250.00	9,252.1	-1,049.4	2,035.5	2,289.4	0.00	0.00	0.00	
9,700.0	1.45	250.00	9,352.1	-1,050.2	2,033.1	2,287.7	0.00	0.00	0.00	
9,800.0	1.45	250.00	9,452.0	-1,051.1	2,030.7	2,286.1	0.00	0.00	0.00	
9,900.0	1.45	250.00	9,552.0	-1,052.0	2,028.4	2,284.4	0.00	0.00	0.00	
10,000.0	1.45	250.00	9,652.0	-1,052.8	2,026.0	2,282.7	0.00	0.00	0.00	
10,100.0	1.45	250.00	9,751.9	-1,053.7	2,023.6	2,281.1	0.00	0.00	0.00	
10,200.0	1.45	250.00	9,851.9	-1,054.5	2,021.2	2,279.4	0.00	0.00	0.00	
10,300.0	1.45	250.00	9,951.9	-1,055.4	2,018.9	2,277.7	0.00	0.00	0.00	
10,400.0	1.45	250.00	10,051.9	-1,056.3	2,016.5	2,276.1	0.00	0.00	0.00	
10,500.0	1.45	250.00	10,151.8	-1,057.1	2,014.1	2,274.4	0.00	0.00	0.00	
10,600.0	1.45	250.00	10,251.8	-1,058.0	2,011.7	2,272.7	0.00	0.00	0.00	
10,700.0	1.45	250.00	10,351.8	-1,058.9	2,009.4	2,271.0	0.00	0.00	0.00	
10,800.0	1.45	250.00	10,451.7	-1,059.7	2,007.0	2,269.4	0.00	0.00	0.00	
10,900.0	1.45	250.00	10,551.7	-1,060.6	2,004.6	2,267.7	0.00	0.00	0.00	
11,000.0	1.45	250.00	10,651.7	-1,061.5	2,002.2	2,266.0	0.00	0.00	0.00	
11,100.0	1.45	250.00	10,751.6	-1,062.3	1,999.9	2,264.4	0.00	0.00	0.00	
11,200.0	1.45	250.00	10,851.6	-1,063.2	1,997.5	2,262.7	0.00	0.00	0.00	
11,300.0	1.45	250.00	10,951.6	-1,064.0	1,995.1	2,261.0	0.00	0.00	0.00	
11,400.0	1.45	250.00	11,051.5	-1,064.9	1,992.8	2,259.4	0.00	0.00	0.00	
11,500.0	1.45	250.00	11,151.5	-1,065.8	1,990.4	2,257.7	0.00	0.00	0.00	
11,600.0	1.45	250.00	11,251.5	-1,066.6	1,988.0	2,256.0	0.00	0.00	0.00	
11,700.0	1.45	250.00	11,351.4	-1,067.5	1,985.6	2,254.4	0.00	0.00	0.00	
Cameo										
11,740.6	1.45	250.00	11,392.0	-1,067.8	1,984.7	2,253.7	0.00	0.00	0.00	
11,800.0	1.45	250.00	11,451.4	-1,068.4	1,983.3	2,252.7	0.00	0.00	0.00	
11,900.0	1.45	250.00	11,551.4	-1,069.2	1,980.9	2,251.0	0.00	0.00	0.00	
12,000.0	1.45	250.00	11,651.3	-1,070.1	1,978.5	2,249.3	0.00	0.00	0.00	
12,100.0	1.45	250.00	11,751.3	-1,071.0	1,976.1	2,247.7	0.00	0.00	0.00	
12,200.0	1.45	250.00	11,851.3	-1,071.8	1,973.8	2,246.0	0.00	0.00	0.00	
Rollins										
12,240.7	1.45	250.00	11,892.0	-1,072.2	1,972.8	2,245.3	0.00	0.00	0.00	
12,300.0	1.45	250.00	11,951.2	-1,072.7	1,971.4	2,244.3	0.00	0.00	0.00	
12,400.0	1.45	250.00	12,051.2	-1,073.5	1,969.0	2,242.7	0.00	0.00	0.00	
TD @ 12440.8' MD / 12092.0' TVD										
12,440.8	1.45	250.00	12,092.0	-1,073.9	1,968.1	2,242.0	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25C-23 496 - Slot BJU M23A FED 21A-23 496
Company:	Caerus Oil & Gas	TVD Reference:	WELL @ 8134.0usft (30')
Project:	Garfield County, CO	MD Reference:	WELL @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 25C-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 - 21A-23 - plan hits target center - Point	0.00	0.00	8,085.0	-1,039.7	2,062.0	14,422,913.98	2,447,170.43	39.681358	-108.132843
PBHL - 21A-23 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	12,092.0	-1,073.9	1,968.1	14,422,876.80	2,447,077.60	39.681264	-108.133177

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,544.8	3,407.0	Wasatch				
6,062.2	5,807.0	Wasatch G				
6,376.9	6,107.0	Fort Union				
8,432.5	8,085.0	Ohio Creek				
8,432.5	8,085.0	TOG				
8,788.6	8,441.0	William Fork				
11,740.6	11,392.0	Cameo				
12,240.7	11,892.0	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'	
785.5	776.4	-40.1	79.5	EOB @ 17.57° Inc. / 116.76° Azm	
7,847.0	7,508.6	-999.6	1,982.5	Drop 3° / 100'	
8,432.5	8,085.0	-1,039.7	2,062.0	EOD @ Vertical / Build 1.5° / 100'	
8,529.0	8,181.5	-1,040.1	2,060.9	EOB @ 1.45° Inc. / 250.00° Azm	
12,440.8	12,092.0	-1,073.9	1,968.1	TD @ 12440.8' MD / 12092.0' TVD	