

Project: Garfield County, CO
Site: BJU M23A 496 Pad
Well: BJU M23A FED 25C-22 496
Wellbore: Wellbore #1
Design: Design #1
Latitude: 39.684046
Longitude: -108.140261
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 25C-22 496(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8134.0usft (30')
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3281.0	3476.0	Wasatch
5681.0	6055.7	Wasatch G
5981.0	6378.2	Fort Union
7952.0	8461.0	Ohio Creek
7952.0	8461.0	TOG
8345.0	8854.2	William Fork
11107.0	11617.1	Cameo
11607.0	12117.3	Rollins

SECTION DETAILS

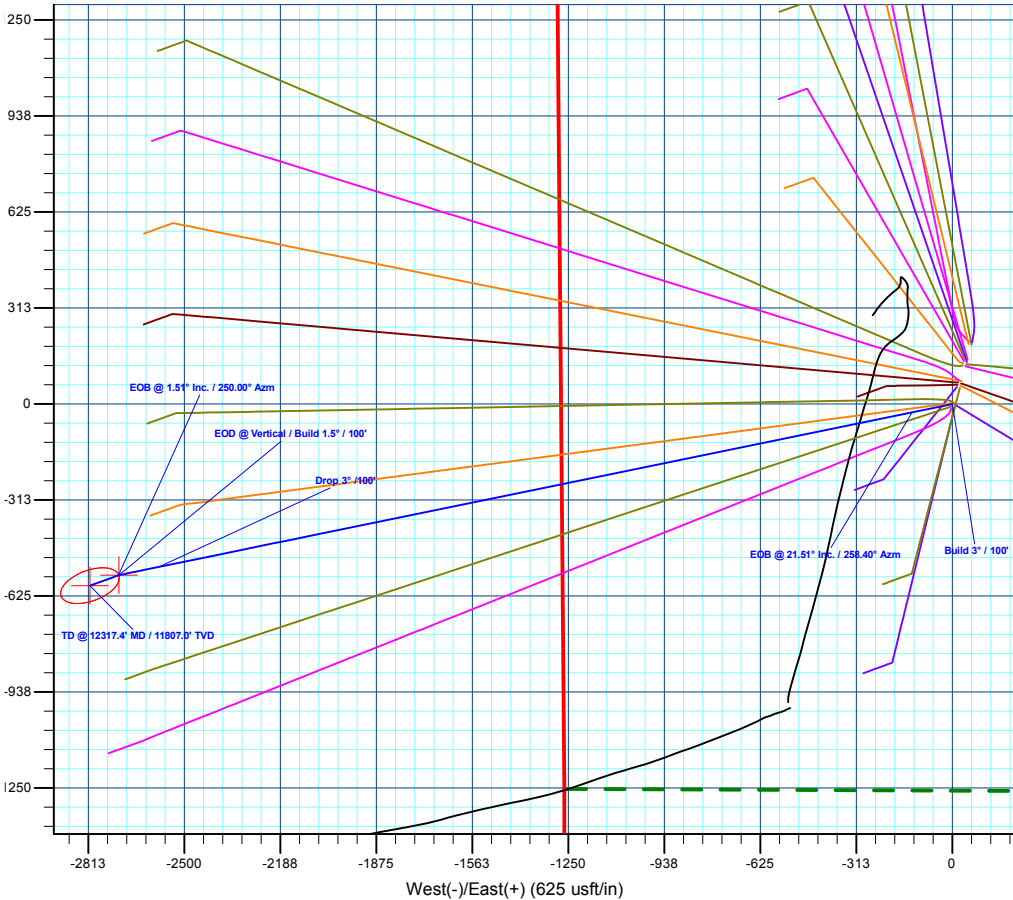
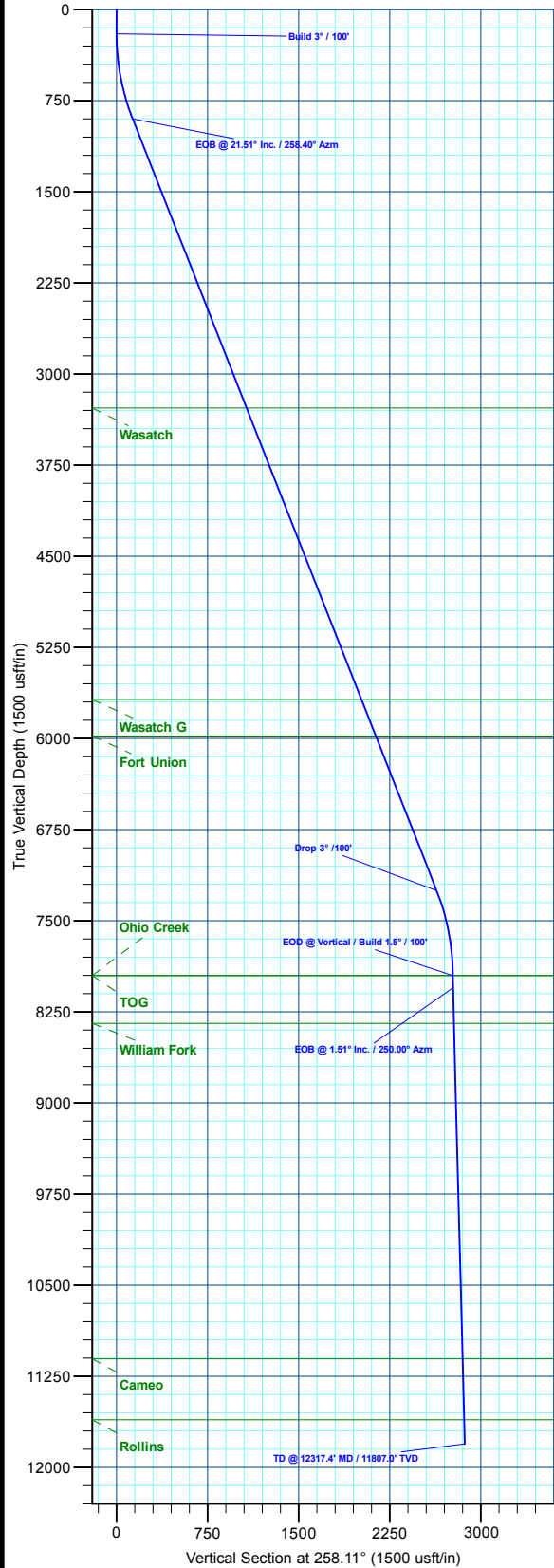
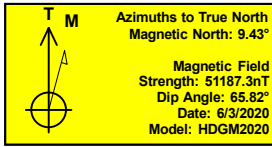
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
917.1	21.51	258.40	900.4	-26.7	-130.3	3.00	258.40	133.0	EOB @ 21.51° Inc. / 258.40° Azm
7744.0	21.51	258.40	7251.6	-530.1	-2582.7	0.00	0.00	2636.5	Drop 3° / 100'
8461.0	0.00	0.00	7952.0	-556.8	-2713.0	3.00	180.00	2769.5	EOD @ Vertical / Build 1.5° / 100'
8561.4	1.51	250.00	8052.4	-557.3	-2714.2	1.50	250.00	2770.8	EOB @ 1.51° Inc. / 250.00° Azm
12317.4	1.51	250.00	11807.0	-591.0	-2807.0	0.00	0.00	2868.5	TD @ 12317.4° MD / 11807.0° TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 25C-22	7952.0	-556.8	-2713.0	14423183.38	2442357.63	39.682518	-108.149897
PBHL - 25C-22	11807.0	-591.0	-2807.0	14423146.20	2442264.80	39.682424	-108.150230

WELL DETAILS: BJU M23A FED 25C-22 496

+N/-S	+E/-W	Ground Level : 8104.0	Northing	Easting	Latitude	Longitude
0.0	0.0		14423826.40	2445051.50	39.684046	-108.140261



Plan: Design #1 (BJU M23A FED 25C-22 496/Wellbore #1)

Created By: Will Jircik Date: 11:44, June 05 2020



Caerus Oil & Gas

Garfield County, CO

BJU M23A 496 Pad

BJU M23A FED 25C-22 496 - Slot BJU M23A FED 25C-22 496

Wellbore #1

Plan: Design #1

QES Well Planning Report

05 June, 2020



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25C-22 496 - Slot BJU M23A FED 25C-22 496
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 25C-22 496	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 25C-22 496 - Slot BJU M23A FED 25C-22 496		
Well Position	+N/-S	-200.1 usft	Northing: 14,423,826.40 usft
	+E/-W	-64.5 usft	Easting: 2,445,051.50 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	258.11	

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	
917.1	21.51	258.40	900.4	-26.7	-130.3	3.00	3.00	0.00	258.40	
7,744.0	21.51	258.40	7,251.6	-530.1	-2,582.7	0.00	0.00	0.00	0.00	
8,461.0	0.00	0.00	7,952.0	-556.8	-2,713.0	3.00	-3.00	0.00	180.00	OHCR - 25C-22
8,561.4	1.51	250.00	8,052.4	-557.3	-2,714.2	1.50	1.50	-109.60	250.00	
12,317.4	1.51	250.00	11,807.0	-591.0	-2,807.0	0.00	0.00	0.00	0.00	PBHL - 25C-22

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25C-22 496 - Slot BJU M23A FED 25C-22 496
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 25C-22 496	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	258.40	300.0	-0.5	-2.6	2.6	3.00	3.00	0.00
400.0	6.00	258.40	399.6	-2.1	-10.2	10.5	3.00	3.00	0.00
500.0	9.00	258.40	498.8	-4.7	-23.0	23.5	3.00	3.00	0.00
600.0	12.00	258.40	597.1	-8.4	-40.9	41.7	3.00	3.00	0.00
700.0	15.00	258.40	694.3	-13.1	-63.7	65.1	3.00	3.00	0.00
800.0	18.00	258.40	790.2	-18.8	-91.6	93.5	3.00	3.00	0.00
900.0	21.00	258.40	884.4	-25.5	-124.3	126.9	3.00	3.00	0.00
EOB @ 21.51° Inc. / 258.40° Azm									
917.1	21.51	258.40	900.4	-26.7	-130.3	133.0	3.00	3.00	0.00
1,000.0	21.51	258.40	977.5	-32.9	-160.1	163.4	0.00	0.00	0.00
1,100.0	21.51	258.40	1,070.5	-40.2	-196.0	200.1	0.00	0.00	0.00
1,200.0	21.51	258.40	1,163.6	-47.6	-232.0	236.8	0.00	0.00	0.00
1,300.0	21.51	258.40	1,256.6	-55.0	-267.9	273.5	0.00	0.00	0.00
1,400.0	21.51	258.40	1,349.6	-62.4	-303.8	310.1	0.00	0.00	0.00
1,500.0	21.51	258.40	1,442.7	-69.7	-339.7	346.8	0.00	0.00	0.00
1,600.0	21.51	258.40	1,535.7	-77.1	-375.6	383.5	0.00	0.00	0.00
1,700.0	21.51	258.40	1,628.7	-84.5	-411.6	420.1	0.00	0.00	0.00
1,800.0	21.51	258.40	1,721.8	-91.8	-447.5	456.8	0.00	0.00	0.00
1,900.0	21.51	258.40	1,814.8	-99.2	-483.4	493.5	0.00	0.00	0.00
2,000.0	21.51	258.40	1,907.8	-106.6	-519.3	530.2	0.00	0.00	0.00
2,100.0	21.51	258.40	2,000.9	-114.0	-555.3	566.8	0.00	0.00	0.00
2,200.0	21.51	258.40	2,093.9	-121.3	-591.2	603.5	0.00	0.00	0.00
2,300.0	21.51	258.40	2,186.9	-128.7	-627.1	640.2	0.00	0.00	0.00
2,400.0	21.51	258.40	2,280.0	-136.1	-663.0	676.8	0.00	0.00	0.00
2,500.0	21.51	258.40	2,373.0	-143.4	-698.9	713.5	0.00	0.00	0.00
2,600.0	21.51	258.40	2,466.0	-150.8	-734.9	750.2	0.00	0.00	0.00
2,700.0	21.51	258.40	2,559.1	-158.2	-770.8	786.8	0.00	0.00	0.00
2,800.0	21.51	258.40	2,652.1	-165.6	-806.7	823.5	0.00	0.00	0.00
2,900.0	21.51	258.40	2,745.1	-172.9	-842.6	860.2	0.00	0.00	0.00
3,000.0	21.51	258.40	2,838.2	-180.3	-878.6	896.9	0.00	0.00	0.00
3,100.0	21.51	258.40	2,931.2	-187.7	-914.5	933.5	0.00	0.00	0.00
3,200.0	21.51	258.40	3,024.2	-195.1	-950.4	970.2	0.00	0.00	0.00
3,300.0	21.51	258.40	3,117.3	-202.4	-986.3	1,006.9	0.00	0.00	0.00
3,400.0	21.51	258.40	3,210.3	-209.8	-1,022.2	1,043.5	0.00	0.00	0.00
Wasatch									
3,476.0	21.51	258.40	3,281.0	-215.4	-1,049.5	1,071.4	0.00	0.00	0.00
3,500.0	21.51	258.40	3,303.3	-217.2	-1,058.2	1,080.2	0.00	0.00	0.00
3,600.0	21.51	258.40	3,396.4	-224.5	-1,094.1	1,116.9	0.00	0.00	0.00
3,700.0	21.51	258.40	3,489.4	-231.9	-1,130.0	1,153.5	0.00	0.00	0.00
3,800.0	21.51	258.40	3,582.4	-239.3	-1,165.9	1,190.2	0.00	0.00	0.00
3,900.0	21.51	258.40	3,675.5	-246.7	-1,201.8	1,226.9	0.00	0.00	0.00
4,000.0	21.51	258.40	3,768.5	-254.0	-1,237.8	1,263.6	0.00	0.00	0.00
4,100.0	21.51	258.40	3,861.5	-261.4	-1,273.7	1,300.2	0.00	0.00	0.00
4,200.0	21.51	258.40	3,954.6	-268.8	-1,309.6	1,336.9	0.00	0.00	0.00
4,300.0	21.51	258.40	4,047.6	-276.2	-1,345.5	1,373.6	0.00	0.00	0.00
4,400.0	21.51	258.40	4,140.6	-283.5	-1,381.5	1,410.2	0.00	0.00	0.00
4,500.0	21.51	258.40	4,233.7	-290.9	-1,417.4	1,446.9	0.00	0.00	0.00
4,600.0	21.51	258.40	4,326.7	-298.3	-1,453.3	1,483.6	0.00	0.00	0.00
4,700.0	21.51	258.40	4,419.7	-305.6	-1,489.2	1,520.2	0.00	0.00	0.00

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Project:	Garfield County, CO	MD Reference:	RKB @ 8134.0usft (30')
Site:	BJU M23A 496 Pad	North Reference:	True
Well:	BJU M23A FED 25C-22 496	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	21.51	258.40	4,512.8	-313.0	-1,525.1	1,556.9	0.00	0.00	0.00
4,900.0	21.51	258.40	4,605.8	-320.4	-1,561.1	1,593.6	0.00	0.00	0.00
5,000.0	21.51	258.40	4,698.8	-327.8	-1,597.0	1,630.3	0.00	0.00	0.00
5,100.0	21.51	258.40	4,791.9	-335.1	-1,632.9	1,666.9	0.00	0.00	0.00
5,200.0	21.51	258.40	4,884.9	-342.5	-1,668.8	1,703.6	0.00	0.00	0.00
5,300.0	21.51	258.40	4,977.9	-349.9	-1,704.8	1,740.3	0.00	0.00	0.00
5,400.0	21.51	258.40	5,071.0	-357.2	-1,740.7	1,776.9	0.00	0.00	0.00
5,500.0	21.51	258.40	5,164.0	-364.6	-1,776.6	1,813.6	0.00	0.00	0.00
5,600.0	21.51	258.40	5,257.0	-372.0	-1,812.5	1,850.3	0.00	0.00	0.00
5,700.0	21.51	258.40	5,350.1	-379.4	-1,848.4	1,886.9	0.00	0.00	0.00
5,800.0	21.51	258.40	5,443.1	-386.7	-1,884.4	1,923.6	0.00	0.00	0.00
5,900.0	21.51	258.40	5,536.1	-394.1	-1,920.3	1,960.3	0.00	0.00	0.00
6,000.0	21.51	258.40	5,629.2	-401.5	-1,956.2	1,997.0	0.00	0.00	0.00
Wasatch G									
6,055.7	21.51	258.40	5,681.0	-405.6	-1,976.2	2,017.4	0.00	0.00	0.00
6,100.0	21.51	258.40	5,722.2	-408.9	-1,992.1	2,033.6	0.00	0.00	0.00
6,200.0	21.51	258.40	5,815.2	-416.2	-2,028.1	2,070.3	0.00	0.00	0.00
6,300.0	21.51	258.40	5,908.3	-423.6	-2,064.0	2,107.0	0.00	0.00	0.00
Fort Union									
6,378.2	21.51	258.40	5,981.0	-429.4	-2,092.1	2,135.6	0.00	0.00	0.00
6,400.0	21.51	258.40	6,001.3	-431.0	-2,099.9	2,143.6	0.00	0.00	0.00
6,500.0	21.51	258.40	6,094.3	-438.3	-2,135.8	2,180.3	0.00	0.00	0.00
6,600.0	21.51	258.40	6,187.4	-445.7	-2,171.7	2,217.0	0.00	0.00	0.00
6,700.0	21.51	258.40	6,280.4	-453.1	-2,207.7	2,253.6	0.00	0.00	0.00
6,800.0	21.51	258.40	6,373.4	-460.5	-2,243.6	2,290.3	0.00	0.00	0.00
6,900.0	21.51	258.40	6,466.5	-467.8	-2,279.5	2,327.0	0.00	0.00	0.00
7,000.0	21.51	258.40	6,559.5	-475.2	-2,315.4	2,363.7	0.00	0.00	0.00
7,100.0	21.51	258.40	6,652.5	-482.6	-2,351.4	2,400.3	0.00	0.00	0.00
7,200.0	21.51	258.40	6,745.6	-490.0	-2,387.3	2,437.0	0.00	0.00	0.00
7,300.0	21.51	258.40	6,838.6	-497.3	-2,423.2	2,473.7	0.00	0.00	0.00
7,400.0	21.51	258.40	6,931.6	-504.7	-2,459.1	2,510.3	0.00	0.00	0.00
7,500.0	21.51	258.40	7,024.7	-512.1	-2,495.0	2,547.0	0.00	0.00	0.00
7,600.0	21.51	258.40	7,117.7	-519.4	-2,531.0	2,583.7	0.00	0.00	0.00
7,700.0	21.51	258.40	7,210.7	-526.8	-2,566.9	2,620.4	0.00	0.00	0.00
Drop 3° /100'									
7,744.0	21.51	258.40	7,251.6	-530.1	-2,582.7	2,636.5	0.00	0.00	0.00
7,800.0	19.83	258.40	7,304.1	-534.0	-2,602.1	2,656.3	3.00	-3.00	0.00
7,900.0	16.83	258.40	7,399.0	-540.4	-2,632.9	2,687.7	3.00	-3.00	0.00
8,000.0	13.83	258.40	7,495.4	-545.7	-2,658.8	2,714.1	3.00	-3.00	0.00
8,100.0	10.83	258.40	7,593.1	-550.0	-2,679.7	2,735.5	3.00	-3.00	0.00
8,200.0	7.83	258.40	7,691.8	-553.2	-2,695.6	2,751.7	3.00	-3.00	0.00
8,300.0	4.83	258.40	7,791.1	-555.4	-2,706.4	2,762.7	3.00	-3.00	0.00
8,400.0	1.83	258.40	7,891.0	-556.6	-2,712.0	2,768.5	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek - TOG									
8,461.0	0.00	0.00	7,952.0	-556.8	-2,713.0	2,769.5	3.00	-3.00	0.00
8,500.0	0.58	250.00	7,991.0	-556.9	-2,713.2	2,769.7	1.50	1.50	0.00
EOB @ 1.51° Inc. / 250.00° Azm									
8,561.4	1.51	250.00	8,052.4	-557.3	-2,714.2	2,770.8	1.50	1.50	0.00
8,600.0	1.51	250.00	8,090.9	-557.6	-2,715.2	2,771.8	0.00	0.00	0.00
8,700.0	1.51	250.00	8,190.9	-558.5	-2,717.7	2,774.4	0.00	0.00	0.00
8,800.0	1.51	250.00	8,290.9	-559.4	-2,720.1	2,777.0	0.00	0.00	0.00
William Fork									

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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 25C-22 496	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)
8,854.2	1.51	250.00	8,345.0	-559.9	-2,721.5	2,778.4	0.00	0.00	0.00
8,900.0	1.51	250.00	8,390.8	-560.3	-2,722.6	2,779.6	0.00	0.00	0.00
9,000.0	1.51	250.00	8,490.8	-561.2	-2,725.1	2,782.2	0.00	0.00	0.00
9,100.0	1.51	250.00	8,590.8	-562.1	-2,727.5	2,784.8	0.00	0.00	0.00
9,200.0	1.51	250.00	8,690.7	-563.0	-2,730.0	2,787.4	0.00	0.00	0.00
9,300.0	1.51	250.00	8,790.7	-563.9	-2,732.5	2,790.0	0.00	0.00	0.00
9,400.0	1.51	250.00	8,890.7	-564.8	-2,734.9	2,792.6	0.00	0.00	0.00
9,500.0	1.51	250.00	8,990.6	-565.7	-2,737.4	2,795.2	0.00	0.00	0.00
9,600.0	1.51	250.00	9,090.6	-566.6	-2,739.9	2,797.8	0.00	0.00	0.00
9,700.0	1.51	250.00	9,190.6	-567.5	-2,742.4	2,800.4	0.00	0.00	0.00
9,800.0	1.51	250.00	9,290.5	-568.4	-2,744.8	2,803.0	0.00	0.00	0.00
9,900.0	1.51	250.00	9,390.5	-569.3	-2,747.3	2,805.6	0.00	0.00	0.00
10,000.0	1.51	250.00	9,490.4	-570.2	-2,749.8	2,808.2	0.00	0.00	0.00
10,100.0	1.51	250.00	9,590.4	-571.1	-2,752.2	2,810.8	0.00	0.00	0.00
10,200.0	1.51	250.00	9,690.4	-572.0	-2,754.7	2,813.4	0.00	0.00	0.00
10,300.0	1.51	250.00	9,790.3	-572.9	-2,757.2	2,816.0	0.00	0.00	0.00
10,400.0	1.51	250.00	9,890.3	-573.8	-2,759.6	2,818.6	0.00	0.00	0.00
10,500.0	1.51	250.00	9,990.3	-574.7	-2,762.1	2,821.2	0.00	0.00	0.00
10,600.0	1.51	250.00	10,090.2	-575.6	-2,764.6	2,823.8	0.00	0.00	0.00
10,700.0	1.51	250.00	10,190.2	-576.5	-2,767.0	2,826.4	0.00	0.00	0.00
10,800.0	1.51	250.00	10,290.2	-577.4	-2,769.5	2,829.0	0.00	0.00	0.00
10,900.0	1.51	250.00	10,390.1	-578.3	-2,772.0	2,831.6	0.00	0.00	0.00
11,000.0	1.51	250.00	10,490.1	-579.2	-2,774.4	2,834.2	0.00	0.00	0.00
11,100.0	1.51	250.00	10,590.1	-580.1	-2,776.9	2,836.8	0.00	0.00	0.00
11,200.0	1.51	250.00	10,690.0	-581.0	-2,779.4	2,839.5	0.00	0.00	0.00
11,300.0	1.51	250.00	10,790.0	-581.9	-2,781.9	2,842.1	0.00	0.00	0.00
11,400.0	1.51	250.00	10,890.0	-582.8	-2,784.3	2,844.7	0.00	0.00	0.00
11,500.0	1.51	250.00	10,989.9	-583.7	-2,786.8	2,847.3	0.00	0.00	0.00
11,600.0	1.51	250.00	11,089.9	-584.6	-2,789.3	2,849.9	0.00	0.00	0.00
Cameo									
11,617.1	1.51	250.00	11,107.0	-584.7	-2,789.7	2,850.3	0.00	0.00	0.00
11,700.0	1.51	250.00	11,189.9	-585.5	-2,791.7	2,852.5	0.00	0.00	0.00
11,800.0	1.51	250.00	11,289.8	-586.4	-2,794.2	2,855.1	0.00	0.00	0.00
11,900.0	1.51	250.00	11,389.8	-587.3	-2,796.7	2,857.7	0.00	0.00	0.00
12,000.0	1.51	250.00	11,489.8	-588.2	-2,799.1	2,860.3	0.00	0.00	0.00
12,100.0	1.51	250.00	11,589.7	-589.1	-2,801.6	2,862.9	0.00	0.00	0.00
Rollins									
12,117.3	1.51	250.00	11,607.0	-589.2	-2,802.0	2,863.3	0.00	0.00	0.00
12,200.0	1.51	250.00	11,689.7	-589.9	-2,804.1	2,865.5	0.00	0.00	0.00
12,300.0	1.51	250.00	11,789.7	-590.8	-2,806.5	2,868.1	0.00	0.00	0.00
TD @ 12317.4' MD / 11807.0' TVD									
12,317.4	1.51	250.00	11,807.0	-591.0	-2,807.0	2,868.5	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25C-22 496 - Slot BJU M23A FED 25C-22 496
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 25C-22 496	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 - 25C-22 - plan hits target center - Point	0.00	0.00	7,952.0	-556.8	-2,713.0	14,423,183.38	2,442,357.63	39.682518	-108.149897
PBHL - 25C-22 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	11,807.0	-591.0	-2,807.0	14,423,146.20	2,442,264.80	39.682424	-108.150231

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,476.0	3,281.0	Wasatch			
6,055.7	5,681.0	Wasatch G			
6,378.2	5,981.0	Fort Union			
8,461.0	7,952.0	Ohio Creek			
8,461.0	7,952.0	TOG			
8,854.2	8,345.0	William Fork			
11,617.1	11,107.0	Cameo			
12,117.3	11,607.0	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'
917.1	900.4	-26.7	-130.3	EOB @ 21.51° Inc. / 258.40° Azm
7,744.0	7,251.6	-530.1	-2,582.7	Drop 3° / 100'
8,461.0	7,952.0	-556.8	-2,713.0	EOD @ Vertical / Build 1.5° / 100'
8,561.4	8,052.4	-557.3	-2,714.2	EOB @ 1.51° Inc. / 250.00° Azm
12,317.4	11,807.0	-591.0	-2,807.0	TD @ 12317.4' MD / 11807.0' TVD