

Project: Garfield County, CO
 Site: BJU M23A 496 Pad
 Well: BJU M23A FED 25B-22 496
 Wellbore: Wellbore #1
 Design: Design #1
 Latitude: 39.684059
 Longitude: -108.140220
 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 25B-22 496(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 8134.0usft (30')
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3288.0	3452.0	Wasatch
5688.0	6006.8	Wasatch G
5988.0	6326.2	Fort Union
7961.0	8397.8	Ohio Creek
7961.0	8397.8	TOG
8356.0	8792.9	William Fork
11116.0	11553.8	Cameo
11616.0	12054.0	Rollins

SECTION DETAILS

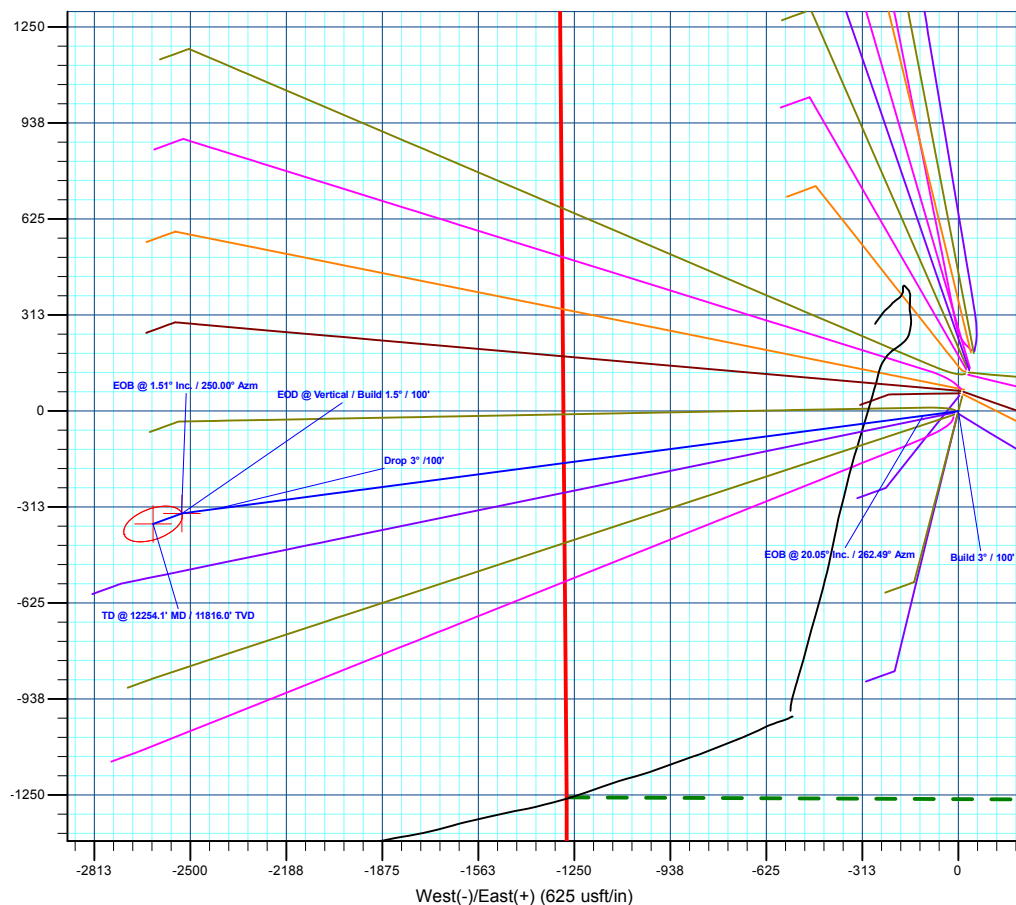
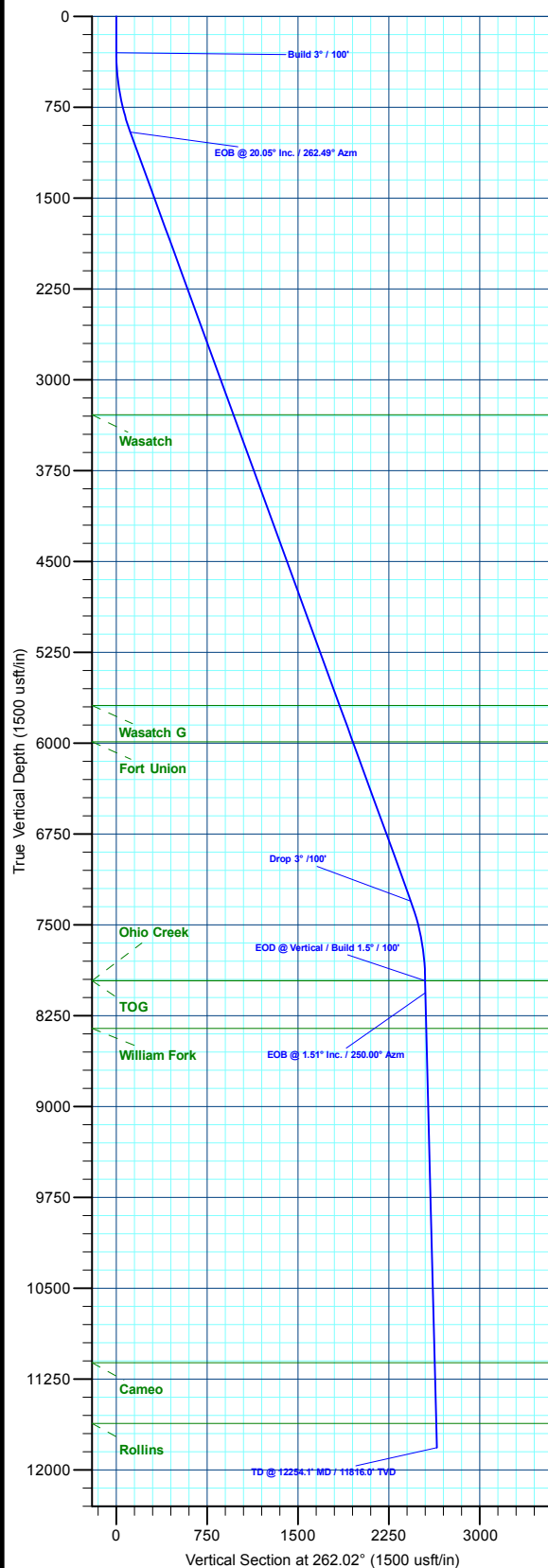
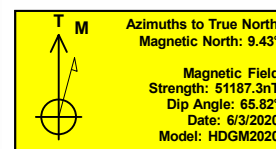
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	Build 3" / 100'
968.2	20.05	262.49	954.7	-15.1	-114.7	3.00	262.49	115.7	EOB @ 20.05° Inc. / 262.49° Azm
7729.5	20.05	262.49	7306.3	-318.1	-2412.6	0.00	0.00	2433.4	Drop 3" / 100'
8397.8	0.00	0.00	7961.0	-333.2	-2527.3	3.00	180.00	2549.1	EOD @ Vertical / Build 1.5" / 100'
8498.1	1.51	250.00	8061.4	-333.7	-2528.5	1.50	250.00	2550.4	EOB @ 1.51° Inc. / 250.00° Azm
12254.1	1.51	250.00	11816.0	-367.4	-2621.2	0.00	0.00	2646.9	TD @ 12254.1' MD / 11816.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 25B-22	7961.0	-333.2	-2527.3	14423417.78	2442547.63	39.683144	-108.149196
PBHL - 25B-22	11816.0	-367.4	-2621.2	14423380.60	2442454.80	39.683050	-108.149529

WELL DETAILS: BJU M23A FED 25B-22 496

+N/-S	+E/-W	Ground Level : 8104.0	Northing	Easting	Latitude	Longitude
0.0	0.0		14423831.40	2445063.00	39.684059	-108.140220



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

Created By: Will Jircik

Date: 11:37, June 05 2020



Caerus Oil & Gas

Garfield County, CO

BJU M23A 496 Pad

BJU M23A FED 25B-22 496 - Slot BJU M23A FED 25B-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 25B-22 496 - Slot BJU M23A FED 25B-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 25B-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 25B-22 496 - Slot BJU M23A FED 25B-22 496		
Well Position	+N/-S	-195.5 usft	Northing: 14,423,831.40 usft
	+E/-W	-52.9 usft	Easting: 2,445,063.00 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	262.02	

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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
968.2	20.05	262.49	954.7	-15.1	-114.7	3.00	3.00	0.00	262.49	
7,729.5	20.05	262.49	7,306.3	-318.1	-2,412.6	0.00	0.00	0.00	0.00	
8,397.8	0.00	0.00	7,961.0	-333.2	-2,527.3	3.00	-3.00	0.00	180.00	OHCR - 25B-22
8,498.1	1.51	250.00	8,061.4	-333.7	-2,528.5	1.50	1.50	-109.60	250.00	
12,254.1	1.51	250.00	11,816.0	-367.4	-2,621.2	0.00	0.00	0.00	0.00	PBHL - 25B-22

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25B-22 496 - Slot BJU M23A FED 25B-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 25B-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
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 3° / 100'									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	3.00	262.49	400.0	-0.3	-2.6	2.6	3.00	3.00	0.00
500.0	6.00	262.49	499.6	-1.4	-10.4	10.5	3.00	3.00	0.00
600.0	9.00	262.49	598.8	-3.1	-23.3	23.5	3.00	3.00	0.00
700.0	12.00	262.49	697.1	-5.5	-41.4	41.7	3.00	3.00	0.00
800.0	15.00	262.49	794.3	-8.5	-64.5	65.1	3.00	3.00	0.00
900.0	18.00	262.49	890.2	-12.2	-92.7	93.5	3.00	3.00	0.00
EOB @ 20.05° Inc. / 262.49° Azm									
968.2	20.05	262.49	954.7	-15.1	-114.7	115.7	3.00	3.00	0.00
1,000.0	20.05	262.49	984.5	-16.5	-125.5	126.6	0.00	0.00	0.00
1,100.0	20.05	262.49	1,078.5	-21.0	-159.5	160.9	0.00	0.00	0.00
1,200.0	20.05	262.49	1,172.4	-25.5	-193.5	195.2	0.00	0.00	0.00
1,300.0	20.05	262.49	1,266.3	-30.0	-227.5	229.4	0.00	0.00	0.00
1,400.0	20.05	262.49	1,360.3	-34.5	-261.5	263.7	0.00	0.00	0.00
1,500.0	20.05	262.49	1,454.2	-39.0	-295.4	298.0	0.00	0.00	0.00
1,600.0	20.05	262.49	1,548.2	-43.4	-329.4	332.3	0.00	0.00	0.00
1,700.0	20.05	262.49	1,642.1	-47.9	-363.4	366.5	0.00	0.00	0.00
1,800.0	20.05	262.49	1,736.1	-52.4	-397.4	400.8	0.00	0.00	0.00
1,900.0	20.05	262.49	1,830.0	-56.9	-431.4	435.1	0.00	0.00	0.00
2,000.0	20.05	262.49	1,923.9	-61.4	-465.4	469.4	0.00	0.00	0.00
2,100.0	20.05	262.49	2,017.9	-65.8	-499.4	503.7	0.00	0.00	0.00
2,200.0	20.05	262.49	2,111.8	-70.3	-533.3	537.9	0.00	0.00	0.00
2,300.0	20.05	262.49	2,205.8	-74.8	-567.3	572.2	0.00	0.00	0.00
2,400.0	20.05	262.49	2,299.7	-79.3	-601.3	606.5	0.00	0.00	0.00
2,500.0	20.05	262.49	2,393.6	-83.8	-635.3	640.8	0.00	0.00	0.00
2,600.0	20.05	262.49	2,487.6	-88.2	-669.3	675.0	0.00	0.00	0.00
2,700.0	20.05	262.49	2,581.5	-92.7	-703.3	709.3	0.00	0.00	0.00
2,800.0	20.05	262.49	2,675.5	-97.2	-737.3	743.6	0.00	0.00	0.00
2,900.0	20.05	262.49	2,769.4	-101.7	-771.2	777.9	0.00	0.00	0.00
3,000.0	20.05	262.49	2,863.3	-106.2	-805.2	812.2	0.00	0.00	0.00
3,100.0	20.05	262.49	2,957.3	-110.6	-839.2	846.4	0.00	0.00	0.00
3,200.0	20.05	262.49	3,051.2	-115.1	-873.2	880.7	0.00	0.00	0.00
3,300.0	20.05	262.49	3,145.2	-119.6	-907.2	915.0	0.00	0.00	0.00
3,400.0	20.05	262.49	3,239.1	-124.1	-941.2	949.3	0.00	0.00	0.00
Wasatch									
3,452.0	20.05	262.49	3,288.0	-126.4	-958.8	967.1	0.00	0.00	0.00
3,500.0	20.05	262.49	3,333.1	-128.6	-975.1	983.6	0.00	0.00	0.00
3,600.0	20.05	262.49	3,427.0	-133.0	-1,009.1	1,017.8	0.00	0.00	0.00
3,700.0	20.05	262.49	3,520.9	-137.5	-1,043.1	1,052.1	0.00	0.00	0.00
3,800.0	20.05	262.49	3,614.9	-142.0	-1,077.1	1,086.4	0.00	0.00	0.00
3,900.0	20.05	262.49	3,708.8	-146.5	-1,111.1	1,120.7	0.00	0.00	0.00
4,000.0	20.05	262.49	3,802.8	-151.0	-1,145.1	1,154.9	0.00	0.00	0.00
4,100.0	20.05	262.49	3,896.7	-155.5	-1,179.1	1,189.2	0.00	0.00	0.00
4,200.0	20.05	262.49	3,990.6	-159.9	-1,213.0	1,223.5	0.00	0.00	0.00
4,300.0	20.05	262.49	4,084.6	-164.4	-1,247.0	1,257.8	0.00	0.00	0.00
4,400.0	20.05	262.49	4,178.5	-168.9	-1,281.0	1,292.1	0.00	0.00	0.00
4,500.0	20.05	262.49	4,272.5	-173.4	-1,315.0	1,326.3	0.00	0.00	0.00
4,600.0	20.05	262.49	4,366.4	-177.9	-1,349.0	1,360.6	0.00	0.00	0.00
4,700.0	20.05	262.49	4,460.3	-182.3	-1,383.0	1,394.9	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 25B-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	20.05	262.49	4,554.3	-186.8	-1,417.0	1,429.2	0.00	0.00	0.00
4,900.0	20.05	262.49	4,648.2	-191.3	-1,450.9	1,463.4	0.00	0.00	0.00
5,000.0	20.05	262.49	4,742.2	-195.8	-1,484.9	1,497.7	0.00	0.00	0.00
5,100.0	20.05	262.49	4,836.1	-200.3	-1,518.9	1,532.0	0.00	0.00	0.00
5,200.0	20.05	262.49	4,930.1	-204.7	-1,552.9	1,566.3	0.00	0.00	0.00
5,300.0	20.05	262.49	5,024.0	-209.2	-1,586.9	1,600.6	0.00	0.00	0.00
5,400.0	20.05	262.49	5,117.9	-213.7	-1,620.9	1,634.8	0.00	0.00	0.00
5,500.0	20.05	262.49	5,211.9	-218.2	-1,654.8	1,669.1	0.00	0.00	0.00
5,600.0	20.05	262.49	5,305.8	-222.7	-1,688.8	1,703.4	0.00	0.00	0.00
5,700.0	20.05	262.49	5,399.8	-227.1	-1,722.8	1,737.7	0.00	0.00	0.00
5,800.0	20.05	262.49	5,493.7	-231.6	-1,756.8	1,771.9	0.00	0.00	0.00
5,900.0	20.05	262.49	5,587.6	-236.1	-1,790.8	1,806.2	0.00	0.00	0.00
6,000.0	20.05	262.49	5,681.6	-240.6	-1,824.8	1,840.5	0.00	0.00	0.00
Wasatch G									
6,006.8	20.05	262.49	5,688.0	-240.9	-1,827.1	1,842.8	0.00	0.00	0.00
6,100.0	20.05	262.49	5,775.5	-245.1	-1,858.8	1,874.8	0.00	0.00	0.00
6,200.0	20.05	262.49	5,869.5	-249.5	-1,892.7	1,909.1	0.00	0.00	0.00
6,300.0	20.05	262.49	5,963.4	-254.0	-1,926.7	1,943.3	0.00	0.00	0.00
Fort Union									
6,326.2	20.05	262.49	5,988.0	-255.2	-1,935.6	1,952.3	0.00	0.00	0.00
6,400.0	20.05	262.49	6,057.3	-258.5	-1,960.7	1,977.6	0.00	0.00	0.00
6,500.0	20.05	262.49	6,151.3	-263.0	-1,994.7	2,011.9	0.00	0.00	0.00
6,600.0	20.05	262.49	6,245.2	-267.5	-2,028.7	2,046.2	0.00	0.00	0.00
6,700.0	20.05	262.49	6,339.2	-272.0	-2,062.7	2,080.5	0.00	0.00	0.00
6,800.0	20.05	262.49	6,433.1	-276.4	-2,096.7	2,114.7	0.00	0.00	0.00
6,900.0	20.05	262.49	6,527.1	-280.9	-2,130.6	2,149.0	0.00	0.00	0.00
7,000.0	20.05	262.49	6,621.0	-285.4	-2,164.6	2,183.3	0.00	0.00	0.00
7,100.0	20.05	262.49	6,714.9	-289.9	-2,198.6	2,217.6	0.00	0.00	0.00
7,200.0	20.05	262.49	6,808.9	-294.4	-2,232.6	2,251.8	0.00	0.00	0.00
7,300.0	20.05	262.49	6,902.8	-298.8	-2,266.6	2,286.1	0.00	0.00	0.00
7,400.0	20.05	262.49	6,996.8	-303.3	-2,300.6	2,320.4	0.00	0.00	0.00
7,500.0	20.05	262.49	7,090.7	-307.8	-2,334.6	2,354.7	0.00	0.00	0.00
7,600.0	20.05	262.49	7,184.6	-312.3	-2,368.5	2,389.0	0.00	0.00	0.00
7,700.0	20.05	262.49	7,278.6	-316.8	-2,402.5	2,423.2	0.00	0.00	0.00
Drop 3° /100'									
7,729.5	20.05	262.49	7,306.3	-318.1	-2,412.6	2,433.4	0.00	0.00	0.00
7,800.0	17.93	262.49	7,373.0	-321.1	-2,435.3	2,456.3	3.00	-3.00	0.00
7,900.0	14.93	262.49	7,468.9	-324.8	-2,463.3	2,484.6	3.00	-3.00	0.00
8,000.0	11.93	262.49	7,566.1	-327.8	-2,486.4	2,507.8	3.00	-3.00	0.00
8,100.0	8.93	262.49	7,664.4	-330.2	-2,504.3	2,525.9	3.00	-3.00	0.00
8,200.0	5.93	262.49	7,763.6	-331.9	-2,517.1	2,538.8	3.00	-3.00	0.00
8,300.0	2.93	262.49	7,863.3	-332.9	-2,524.8	2,546.6	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek - TOG									
8,397.8	0.00	0.00	7,961.0	-333.2	-2,527.3	2,549.1	3.00	-3.00	0.00
8,400.0	0.03	250.00	7,963.2	-333.2	-2,527.3	2,549.1	1.50	1.50	0.00
EOB @ 1.51° Inc. / 250.00° Azm									
8,498.1	1.51	250.00	8,061.4	-333.7	-2,528.5	2,550.4	1.50	1.50	0.00
8,500.0	1.51	250.00	8,063.2	-333.7	-2,528.6	2,550.4	0.00	0.00	0.00
8,600.0	1.51	250.00	8,163.2	-334.6	-2,531.0	2,553.0	0.00	0.00	0.00
8,700.0	1.51	250.00	8,263.2	-335.5	-2,533.5	2,555.5	0.00	0.00	0.00
William Fork									
8,792.9	1.51	250.00	8,356.0	-336.3	-2,535.8	2,557.9	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 25B-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)
8,800.0	1.51	250.00	8,363.1	-336.4	-2,536.0	2,558.1	0.00	0.00	0.00
8,900.0	1.51	250.00	8,463.1	-337.3	-2,538.4	2,560.7	0.00	0.00	0.00
9,000.0	1.51	250.00	8,563.1	-338.2	-2,540.9	2,563.3	0.00	0.00	0.00
9,100.0	1.51	250.00	8,663.0	-339.1	-2,543.4	2,565.8	0.00	0.00	0.00
9,200.0	1.51	250.00	8,763.0	-340.0	-2,545.8	2,568.4	0.00	0.00	0.00
9,300.0	1.51	250.00	8,863.0	-340.9	-2,548.3	2,571.0	0.00	0.00	0.00
9,400.0	1.51	250.00	8,962.9	-341.8	-2,550.8	2,573.5	0.00	0.00	0.00
9,500.0	1.51	250.00	9,062.9	-342.7	-2,553.3	2,576.1	0.00	0.00	0.00
9,600.0	1.51	250.00	9,162.8	-343.6	-2,555.7	2,578.7	0.00	0.00	0.00
9,700.0	1.51	250.00	9,262.8	-344.5	-2,558.2	2,581.2	0.00	0.00	0.00
9,800.0	1.51	250.00	9,362.8	-345.4	-2,560.7	2,583.8	0.00	0.00	0.00
9,900.0	1.51	250.00	9,462.7	-346.3	-2,563.1	2,586.4	0.00	0.00	0.00
10,000.0	1.51	250.00	9,562.7	-347.2	-2,565.6	2,588.9	0.00	0.00	0.00
10,100.0	1.51	250.00	9,662.7	-348.1	-2,568.1	2,591.5	0.00	0.00	0.00
10,200.0	1.51	250.00	9,762.6	-349.0	-2,570.5	2,594.1	0.00	0.00	0.00
10,300.0	1.51	250.00	9,862.6	-349.9	-2,573.0	2,596.7	0.00	0.00	0.00
10,400.0	1.51	250.00	9,962.6	-350.7	-2,575.5	2,599.2	0.00	0.00	0.00
10,500.0	1.51	250.00	10,062.5	-351.6	-2,577.9	2,601.8	0.00	0.00	0.00
10,600.0	1.51	250.00	10,162.5	-352.5	-2,580.4	2,604.4	0.00	0.00	0.00
10,700.0	1.51	250.00	10,262.5	-353.4	-2,582.9	2,606.9	0.00	0.00	0.00
10,800.0	1.51	250.00	10,362.4	-354.3	-2,585.3	2,609.5	0.00	0.00	0.00
10,900.0	1.51	250.00	10,462.4	-355.2	-2,587.8	2,612.1	0.00	0.00	0.00
11,000.0	1.51	250.00	10,562.4	-356.1	-2,590.3	2,614.6	0.00	0.00	0.00
11,100.0	1.51	250.00	10,662.3	-357.0	-2,592.8	2,617.2	0.00	0.00	0.00
11,200.0	1.51	250.00	10,762.3	-357.9	-2,595.2	2,619.8	0.00	0.00	0.00
11,300.0	1.51	250.00	10,862.3	-358.8	-2,597.7	2,622.4	0.00	0.00	0.00
11,400.0	1.51	250.00	10,962.2	-359.7	-2,600.2	2,624.9	0.00	0.00	0.00
11,500.0	1.51	250.00	11,062.2	-360.6	-2,602.6	2,627.5	0.00	0.00	0.00
Cameo									
11,553.8	1.51	250.00	11,116.0	-361.1	-2,604.0	2,628.9	0.00	0.00	0.00
11,600.0	1.51	250.00	11,162.2	-361.5	-2,605.1	2,630.1	0.00	0.00	0.00
11,700.0	1.51	250.00	11,262.1	-362.4	-2,607.6	2,632.6	0.00	0.00	0.00
11,800.0	1.51	250.00	11,362.1	-363.3	-2,610.0	2,635.2	0.00	0.00	0.00
11,900.0	1.51	250.00	11,462.1	-364.2	-2,612.5	2,637.8	0.00	0.00	0.00
12,000.0	1.51	250.00	11,562.0	-365.1	-2,615.0	2,640.3	0.00	0.00	0.00
Rollins									
12,054.0	1.51	250.00	11,616.0	-365.6	-2,616.3	2,641.7	0.00	0.00	0.00
12,100.0	1.51	250.00	11,662.0	-366.0	-2,617.4	2,642.9	0.00	0.00	0.00
12,200.0	1.51	250.00	11,761.9	-366.9	-2,619.9	2,645.5	0.00	0.00	0.00
TD @ 12254.1' MD / 11816.0' TVD									
12,254.1	1.51	250.00	11,816.0	-367.4	-2,621.2	2,646.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25B-22 496 - Slot BJU M23A FED 25B-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 25B-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 - 25B-22 - plan hits target center - Point	0.00	0.00	7,961.0	-333.2	-2,527.3	14,423,417.78	2,442,547.63	39.683144	-108.149196
PBHL - 25B-22 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	11,816.0	-367.4	-2,621.2	14,423,380.60	2,442,454.80	39.683051	-108.149530

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,452.0	3,288.0	Wasatch			
6,006.8	5,688.0	Wasatch G			
6,326.2	5,988.0	Fort Union			
8,397.8	7,961.0	Ohio Creek			
8,397.8	7,961.0	TOG			
8,792.9	8,356.0	William Fork			
11,553.8	11,116.0	Cameo			
12,054.0	11,616.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
300.0	300.0	0.0	0.0	Build 3° / 100'
968.2	954.7	-15.1	-114.7	EOB @ 20.05° Inc. / 262.49° Azm
7,729.5	7,306.3	-318.1	-2,412.6	Drop 3° / 100'
8,397.8	7,961.0	-333.2	-2,527.3	EOD @ Vertical / Build 1.5° / 100'
8,498.1	8,061.4	-333.7	-2,528.5	EOB @ 1.51° Inc. / 250.00° Azm
12,254.1	11,816.0	-367.4	-2,621.2	TD @ 12254.1' MD / 11816.0' TVD