

Project: Garfield County, CO
 Site: BJU M23A 496 Pad
 Well: BJU M23A FED 25D-22 496
 Wellbore: Wellbore #1
 Design: Design #1
 Latitude: 39.684027
 Longitude: -108.140268
 Ground Level: 8104.0
 RKB @ 8134.0usft (30')

PROJECT DETAILS: Garfield County, US

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 25D-22 496(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 8134.0usft (30')
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3273.0	3462.5	Wasatch
5673.0	6038.5	Wasatch G
5973.0	6360.4	Fort Union
7945.0	8442.4	Ohio Creek
7945.0	8442.4	TOG
8335.0	8832.5	William Fork
11103.0	11601.4	Cameo
11603.0	12101.6	Rollins

SECTION DETAILS

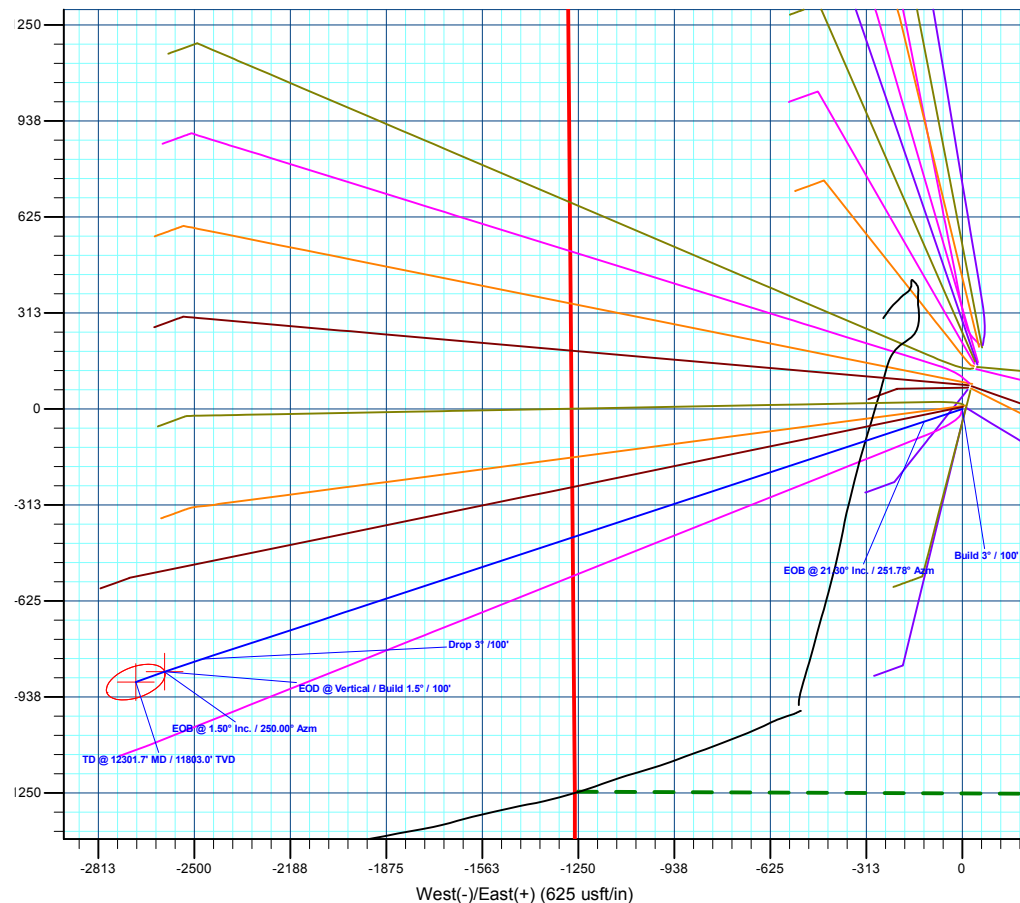
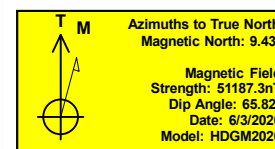
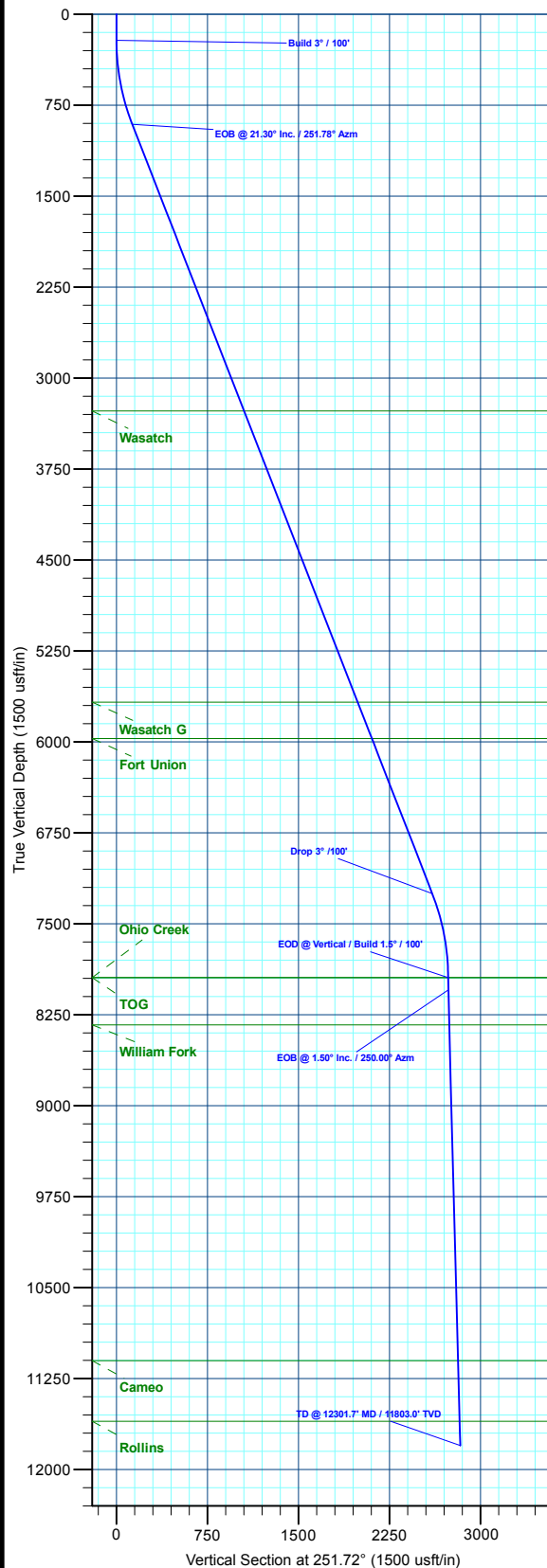
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
215.0	0.00	0.00	215.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
924.9	21.30	251.78	908.7	-40.8	-123.9	3.00	251.78	130.4	EOB @ 21.30° Inc. / 251.78° Azm
7732.5	21.30	251.78	7251.3	-813.7	-2472.5	0.00	0.00	2603.0	Drop 3° / 100'
8442.4	0.00	0.00	7945.0	-854.5	-2596.4	3.00	180.00	2733.0	EOD @ Vertical / Build 1.5° / 100'
8542.7	1.50	250.00	8045.3	-854.9	-2597.7	1.50	250.00	2734.7	EOB @ 1.50° Inc. / 250.00° Azm
12301.7	1.50	250.00	11803.0	-888.7	-2690.4	0.00	0.00	2833.4	TD @ 12301.7° MD / 11803.0° TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 25D-22	7945.0	-854.5	-2596.4	14422882.28	2442481.93	39.681681	-108.149489
PBHL - 25D-22	11803.0	-888.7	-2690.4	14422845.10	2442389.10	39.681587	-108.149823

WELL DETAILS: BJU M23A FED 25D-22 496

+N/-S	+E/-W	Ground Level : 8104.0	Northing	Easting	Latitude	Longitude
0.0	0.0		14423819.10	2445049.80	39.684027	-108.140268



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

Created By: Will Jircik Date: 11:50, June 05 2020



Caerus Oil & Gas

Garfield County, CO

BJU M23A 496 Pad

BJU M23A FED 25D-22 496 - Slot BJU M23A FED 25D-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 25D-22 496 - Slot BJU M23A FED 25D-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 25D-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 25D-22 496 - Slot BJU M23A FED 25D-22 496		
Well Position	+N/-S	-207.4 usft	Northing: 14,423,819.10 usft
	+E/-W	-66.4 usft	Easting: 2,445,049.80 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 39.684027
			Longitude: -108.140268
			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	251.72

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	
215.0	0.00	0.00	215.0	0.0	0.0	0.00	0.00	0.00	0.00	
924.9	21.30	251.78	908.7	-40.8	-123.9	3.00	3.00	0.00	251.78	
7,732.5	21.30	251.78	7,251.3	-813.7	-2,472.5	0.00	0.00	0.00	0.00	
8,442.4	0.00	0.00	7,945.0	-854.5	-2,596.4	3.00	-3.00	0.00	180.00	OHCR - 25D-22
8,542.7	1.50	250.00	8,045.3	-854.9	-2,597.7	1.50	1.50	-109.68	250.00	
12,301.7	1.50	250.00	11,803.0	-888.7	-2,690.4	0.00	0.00	0.00	0.00	PBHL - 25D-22

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25D-22 496 - Slot BJU M23A FED 25D-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 25D-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'									
215.0	0.00	0.00	215.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	2.55	251.78	300.0	-0.6	-1.8	1.9	3.00	3.00	0.00
400.0	5.55	251.78	399.7	-2.8	-8.5	9.0	3.00	3.00	0.00
500.0	8.55	251.78	498.9	-6.6	-20.2	21.2	3.00	3.00	0.00
600.0	11.55	251.78	597.4	-12.1	-36.7	38.7	3.00	3.00	0.00
700.0	14.55	251.78	694.8	-19.1	-58.2	61.3	3.00	3.00	0.00
800.0	17.55	251.78	790.9	-27.8	-84.4	88.9	3.00	3.00	0.00
900.0	20.55	251.78	885.4	-38.0	-115.4	121.5	3.00	3.00	0.00
EOB @ 21.30° Inc. / 251.78° Azm									
924.9	21.30	251.78	908.7	-40.8	-123.9	130.4	3.00	3.00	0.00
1,000.0	21.30	251.78	978.6	-49.3	-149.8	157.7	0.00	0.00	0.00
1,100.0	21.30	251.78	1,071.8	-60.7	-184.3	194.0	0.00	0.00	0.00
1,200.0	21.30	251.78	1,165.0	-72.0	-218.8	230.3	0.00	0.00	0.00
1,300.0	21.30	251.78	1,258.1	-83.4	-253.3	266.7	0.00	0.00	0.00
1,400.0	21.30	251.78	1,351.3	-94.7	-287.8	303.0	0.00	0.00	0.00
1,500.0	21.30	251.78	1,444.5	-106.1	-322.3	339.3	0.00	0.00	0.00
1,600.0	21.30	251.78	1,537.7	-117.4	-356.8	375.6	0.00	0.00	0.00
1,700.0	21.30	251.78	1,630.8	-128.8	-391.3	411.9	0.00	0.00	0.00
1,800.0	21.30	251.78	1,724.0	-140.1	-425.8	448.3	0.00	0.00	0.00
1,900.0	21.30	251.78	1,817.2	-151.5	-460.3	484.6	0.00	0.00	0.00
2,000.0	21.30	251.78	1,910.3	-162.8	-494.8	520.9	0.00	0.00	0.00
2,100.0	21.30	251.78	2,003.5	-174.2	-529.3	557.2	0.00	0.00	0.00
2,200.0	21.30	251.78	2,096.7	-185.5	-563.8	593.6	0.00	0.00	0.00
2,300.0	21.30	251.78	2,189.9	-196.9	-598.3	629.9	0.00	0.00	0.00
2,400.0	21.30	251.78	2,283.0	-208.3	-632.8	666.2	0.00	0.00	0.00
2,500.0	21.30	251.78	2,376.2	-219.6	-667.3	702.5	0.00	0.00	0.00
2,600.0	21.30	251.78	2,469.4	-231.0	-701.8	738.8	0.00	0.00	0.00
2,700.0	21.30	251.78	2,562.5	-242.3	-736.3	775.2	0.00	0.00	0.00
2,800.0	21.30	251.78	2,655.7	-253.7	-770.8	811.5	0.00	0.00	0.00
2,900.0	21.30	251.78	2,748.9	-265.0	-805.3	847.8	0.00	0.00	0.00
3,000.0	21.30	251.78	2,842.1	-276.4	-839.8	884.1	0.00	0.00	0.00
3,100.0	21.30	251.78	2,935.2	-287.7	-874.3	920.4	0.00	0.00	0.00
3,200.0	21.30	251.78	3,028.4	-299.1	-908.8	956.8	0.00	0.00	0.00
3,300.0	21.30	251.78	3,121.6	-310.4	-943.3	993.1	0.00	0.00	0.00
3,400.0	21.30	251.78	3,214.7	-321.8	-977.8	1,029.4	0.00	0.00	0.00
Wasatch									
3,462.5	21.30	251.78	3,273.0	-328.9	-999.4	1,052.1	0.00	0.00	0.00
3,500.0	21.30	251.78	3,307.9	-333.1	-1,012.3	1,065.7	0.00	0.00	0.00
3,600.0	21.30	251.78	3,401.1	-344.5	-1,046.8	1,102.0	0.00	0.00	0.00
3,700.0	21.30	251.78	3,494.2	-355.9	-1,081.3	1,138.4	0.00	0.00	0.00
3,800.0	21.30	251.78	3,587.4	-367.2	-1,115.8	1,174.7	0.00	0.00	0.00
3,900.0	21.30	251.78	3,680.6	-378.6	-1,150.3	1,211.0	0.00	0.00	0.00
4,000.0	21.30	251.78	3,773.8	-389.9	-1,184.8	1,247.3	0.00	0.00	0.00
4,100.0	21.30	251.78	3,866.9	-401.3	-1,219.3	1,283.6	0.00	0.00	0.00
4,200.0	21.30	251.78	3,960.1	-412.6	-1,253.8	1,320.0	0.00	0.00	0.00
4,300.0	21.30	251.78	4,053.3	-424.0	-1,288.3	1,356.3	0.00	0.00	0.00
4,400.0	21.30	251.78	4,146.4	-435.3	-1,322.8	1,392.6	0.00	0.00	0.00
4,500.0	21.30	251.78	4,239.6	-446.7	-1,357.3	1,428.9	0.00	0.00	0.00
4,600.0	21.30	251.78	4,332.8	-458.0	-1,391.8	1,465.3	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 25D-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)
4,700.0	21.30	251.78	4,426.0	-469.4	-1,426.3	1,501.6	0.00	0.00	0.00
4,800.0	21.30	251.78	4,519.1	-480.7	-1,460.8	1,537.9	0.00	0.00	0.00
4,900.0	21.30	251.78	4,612.3	-492.1	-1,495.3	1,574.2	0.00	0.00	0.00
5,000.0	21.30	251.78	4,705.5	-503.5	-1,529.8	1,610.5	0.00	0.00	0.00
5,100.0	21.30	251.78	4,798.6	-514.8	-1,564.3	1,646.9	0.00	0.00	0.00
5,200.0	21.30	251.78	4,891.8	-526.2	-1,598.8	1,683.2	0.00	0.00	0.00
5,300.0	21.30	251.78	4,985.0	-537.5	-1,633.3	1,719.5	0.00	0.00	0.00
5,400.0	21.30	251.78	5,078.2	-548.9	-1,667.8	1,755.8	0.00	0.00	0.00
5,500.0	21.30	251.78	5,171.3	-560.2	-1,702.3	1,792.1	0.00	0.00	0.00
5,600.0	21.30	251.78	5,264.5	-571.6	-1,736.8	1,828.5	0.00	0.00	0.00
5,700.0	21.30	251.78	5,357.7	-582.9	-1,771.3	1,864.8	0.00	0.00	0.00
5,800.0	21.30	251.78	5,450.8	-594.3	-1,805.8	1,901.1	0.00	0.00	0.00
5,900.0	21.30	251.78	5,544.0	-605.6	-1,840.3	1,937.4	0.00	0.00	0.00
6,000.0	21.30	251.78	5,637.2	-617.0	-1,874.8	1,973.7	0.00	0.00	0.00
Wasatch G									
6,038.5	21.30	251.78	5,673.0	-621.4	-1,888.1	1,987.7	0.00	0.00	0.00
6,100.0	21.30	251.78	5,730.3	-628.3	-1,909.3	2,010.1	0.00	0.00	0.00
6,200.0	21.30	251.78	5,823.5	-639.7	-1,943.8	2,046.4	0.00	0.00	0.00
6,300.0	21.30	251.78	5,916.7	-651.1	-1,978.3	2,082.7	0.00	0.00	0.00
Fort Union									
6,360.4	21.30	251.78	5,973.0	-657.9	-1,999.2	2,104.7	0.00	0.00	0.00
6,400.0	21.30	251.78	6,009.9	-662.4	-2,012.8	2,119.0	0.00	0.00	0.00
6,500.0	21.30	251.78	6,103.0	-673.8	-2,047.3	2,155.3	0.00	0.00	0.00
6,600.0	21.30	251.78	6,196.2	-685.1	-2,081.8	2,191.7	0.00	0.00	0.00
6,700.0	21.30	251.78	6,289.4	-696.5	-2,116.3	2,228.0	0.00	0.00	0.00
6,800.0	21.30	251.78	6,382.5	-707.8	-2,150.8	2,264.3	0.00	0.00	0.00
6,900.0	21.30	251.78	6,475.7	-719.2	-2,185.3	2,300.6	0.00	0.00	0.00
7,000.0	21.30	251.78	6,568.9	-730.5	-2,219.8	2,337.0	0.00	0.00	0.00
7,100.0	21.30	251.78	6,662.1	-741.9	-2,254.3	2,373.3	0.00	0.00	0.00
7,200.0	21.30	251.78	6,755.2	-753.2	-2,288.8	2,409.6	0.00	0.00	0.00
7,300.0	21.30	251.78	6,848.4	-764.6	-2,323.3	2,445.9	0.00	0.00	0.00
7,400.0	21.30	251.78	6,941.6	-776.0	-2,357.8	2,482.2	0.00	0.00	0.00
7,500.0	21.30	251.78	7,034.7	-787.3	-2,392.3	2,518.6	0.00	0.00	0.00
7,600.0	21.30	251.78	7,127.9	-798.7	-2,426.8	2,554.9	0.00	0.00	0.00
7,700.0	21.30	251.78	7,221.1	-810.0	-2,461.3	2,591.2	0.00	0.00	0.00
Drop 3° /100'									
7,732.5	21.30	251.78	7,251.3	-813.7	-2,472.5	2,603.0	0.00	0.00	0.00
7,800.0	19.27	251.78	7,314.7	-821.0	-2,494.8	2,626.4	3.00	-3.00	0.00
7,900.0	16.27	251.78	7,409.9	-830.6	-2,523.8	2,656.9	3.00	-3.00	0.00
8,000.0	13.27	251.78	7,506.6	-838.5	-2,548.0	2,682.4	3.00	-3.00	0.00
8,100.0	10.27	251.78	7,604.5	-844.9	-2,567.4	2,702.8	3.00	-3.00	0.00
8,200.0	7.27	251.78	7,703.3	-849.7	-2,581.8	2,718.1	3.00	-3.00	0.00
8,300.0	4.27	251.78	7,802.8	-852.8	-2,591.4	2,728.1	3.00	-3.00	0.00
8,400.0	1.27	251.78	7,902.6	-854.3	-2,596.0	2,732.9	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek - TOG									
8,442.4	0.00	0.00	7,945.0	-854.5	-2,596.4	2,733.4	3.00	-3.00	0.00
8,500.0	0.86	250.00	8,002.6	-854.6	-2,596.8	2,733.9	1.50	1.50	0.00
EOB @ 1.50° Inc. / 250.00° Azm									
8,542.7	1.50	250.00	8,045.3	-854.9	-2,597.7	2,734.7	1.50	1.50	0.00
8,600.0	1.50	250.00	8,102.6	-855.4	-2,599.1	2,736.2	0.00	0.00	0.00
8,700.0	1.50	250.00	8,202.6	-856.3	-2,601.6	2,738.9	0.00	0.00	0.00
8,800.0	1.50	250.00	8,302.5	-857.2	-2,604.0	2,741.5	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 25D-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)
William Fork									
8,832.5	1.50	250.00	8,335.0	-857.5	-2,604.8	2,742.3	0.00	0.00	0.00
8,900.0	1.50	250.00	8,402.5	-858.1	-2,606.5	2,744.1	0.00	0.00	0.00
9,000.0	1.50	250.00	8,502.5	-859.0	-2,609.0	2,746.7	0.00	0.00	0.00
9,100.0	1.50	250.00	8,602.4	-859.9	-2,611.4	2,749.4	0.00	0.00	0.00
9,200.0	1.50	250.00	8,702.4	-860.8	-2,613.9	2,752.0	0.00	0.00	0.00
9,300.0	1.50	250.00	8,802.4	-861.7	-2,616.4	2,754.6	0.00	0.00	0.00
9,400.0	1.50	250.00	8,902.3	-862.6	-2,618.8	2,757.2	0.00	0.00	0.00
9,500.0	1.50	250.00	9,002.3	-863.5	-2,621.3	2,759.9	0.00	0.00	0.00
9,600.0	1.50	250.00	9,102.2	-864.4	-2,623.8	2,762.5	0.00	0.00	0.00
9,700.0	1.50	250.00	9,202.2	-865.3	-2,626.2	2,765.1	0.00	0.00	0.00
9,800.0	1.50	250.00	9,302.2	-866.2	-2,628.7	2,767.7	0.00	0.00	0.00
9,900.0	1.50	250.00	9,402.1	-867.1	-2,631.2	2,770.4	0.00	0.00	0.00
10,000.0	1.50	250.00	9,502.1	-868.0	-2,633.6	2,773.0	0.00	0.00	0.00
10,100.0	1.50	250.00	9,602.1	-868.9	-2,636.1	2,775.6	0.00	0.00	0.00
10,200.0	1.50	250.00	9,702.0	-869.8	-2,638.6	2,778.2	0.00	0.00	0.00
10,300.0	1.50	250.00	9,802.0	-870.7	-2,641.0	2,780.8	0.00	0.00	0.00
10,400.0	1.50	250.00	9,902.0	-871.6	-2,643.5	2,783.5	0.00	0.00	0.00
10,500.0	1.50	250.00	10,001.9	-872.5	-2,646.0	2,786.1	0.00	0.00	0.00
10,600.0	1.50	250.00	10,101.9	-873.4	-2,648.4	2,788.7	0.00	0.00	0.00
10,700.0	1.50	250.00	10,201.9	-874.3	-2,650.9	2,791.3	0.00	0.00	0.00
10,800.0	1.50	250.00	10,301.8	-875.2	-2,653.4	2,794.0	0.00	0.00	0.00
10,900.0	1.50	250.00	10,401.8	-876.1	-2,655.8	2,796.6	0.00	0.00	0.00
11,000.0	1.50	250.00	10,501.8	-877.0	-2,658.3	2,799.2	0.00	0.00	0.00
11,100.0	1.50	250.00	10,601.7	-877.9	-2,660.8	2,801.8	0.00	0.00	0.00
11,200.0	1.50	250.00	10,701.7	-878.8	-2,663.2	2,804.5	0.00	0.00	0.00
11,300.0	1.50	250.00	10,801.7	-879.7	-2,665.7	2,807.1	0.00	0.00	0.00
11,400.0	1.50	250.00	10,901.6	-880.6	-2,668.2	2,809.7	0.00	0.00	0.00
11,500.0	1.50	250.00	11,001.6	-881.5	-2,670.6	2,812.3	0.00	0.00	0.00
11,600.0	1.50	250.00	11,101.6	-882.4	-2,673.1	2,815.0	0.00	0.00	0.00
Cameo									
11,601.4	1.50	250.00	11,103.0	-882.4	-2,673.1	2,815.0	0.00	0.00	0.00
11,700.0	1.50	250.00	11,201.5	-883.3	-2,675.6	2,817.6	0.00	0.00	0.00
11,800.0	1.50	250.00	11,301.5	-884.2	-2,678.0	2,820.2	0.00	0.00	0.00
11,900.0	1.50	250.00	11,401.5	-885.1	-2,680.5	2,822.8	0.00	0.00	0.00
12,000.0	1.50	250.00	11,501.4	-886.0	-2,683.0	2,825.5	0.00	0.00	0.00
12,100.0	1.50	250.00	11,601.4	-886.9	-2,685.4	2,828.1	0.00	0.00	0.00
Rollins									
12,101.6	1.50	250.00	11,603.0	-886.9	-2,685.5	2,828.1	0.00	0.00	0.00
12,200.0	1.50	250.00	11,701.4	-887.8	-2,687.9	2,830.7	0.00	0.00	0.00
TD @ 12301.7' MD / 11803.0' TVD									
12,301.7	1.50	250.00	11,803.0	-888.7	-2,690.4	2,833.4	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 25D-22 496 - Slot BJU M23A FED 25D-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 25D-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 - 25D-22 - plan hits target center - Point	0.00	0.00	7,945.0	-854.5	-2,596.4	14,422,882.28	2,442,481.93	39.681681	-108.149490
PBHL - 25D-22 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	11,803.0	-888.7	-2,690.4	14,422,845.10	2,442,389.10	39.681587	-108.149823

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,462.5	3,273.0	Wasatch			
6,038.5	5,673.0	Wasatch G			
6,360.4	5,973.0	Fort Union			
8,442.4	7,945.0	Ohio Creek			
8,442.4	7,945.0	TOG			
8,832.5	8,335.0	William Fork			
11,601.4	11,103.0	Cameo			
12,101.6	11,603.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
215.0	215.0	0.0	0.0	Build 3° / 100'
924.9	908.7	-40.8	-123.9	EOB @ 21.30° Inc. / 251.78° Azm
7,732.5	7,251.3	-813.7	-2,472.5	Drop 3° / 100'
8,442.4	7,945.0	-854.5	-2,596.4	EOD @ Vertical / Build 1.5° / 100'
8,542.7	8,045.3	-854.9	-2,597.7	EOB @ 1.50° Inc. / 250.00° Azm
12,301.7	11,803.0	-888.7	-2,690.4	TD @ 12301.7' MD / 11803.0' TVD