

Project: Garfield County, CO
Site: BJU M23A 496 Pad
Well: BJU M23A FED 12B-23 496
Wellbore: Wellbore #1
Design: Design #2
Latitude: 39.684503
Longitude: -108.140064
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 - 12B-23(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8134.0usft (30')
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3569.0	3754.6	Wasatch
5969.0	6309.7	Wasatch G
6269.0	6629.0	Fort Union
8201.0	8657.1	Ohio Creek
8201.0	8657.1	TOG
8663.0	9119.3	William Fork
11442.0	11899.0	Cameo
11942.0	12399.2	Rollins

SECTION DETAILS

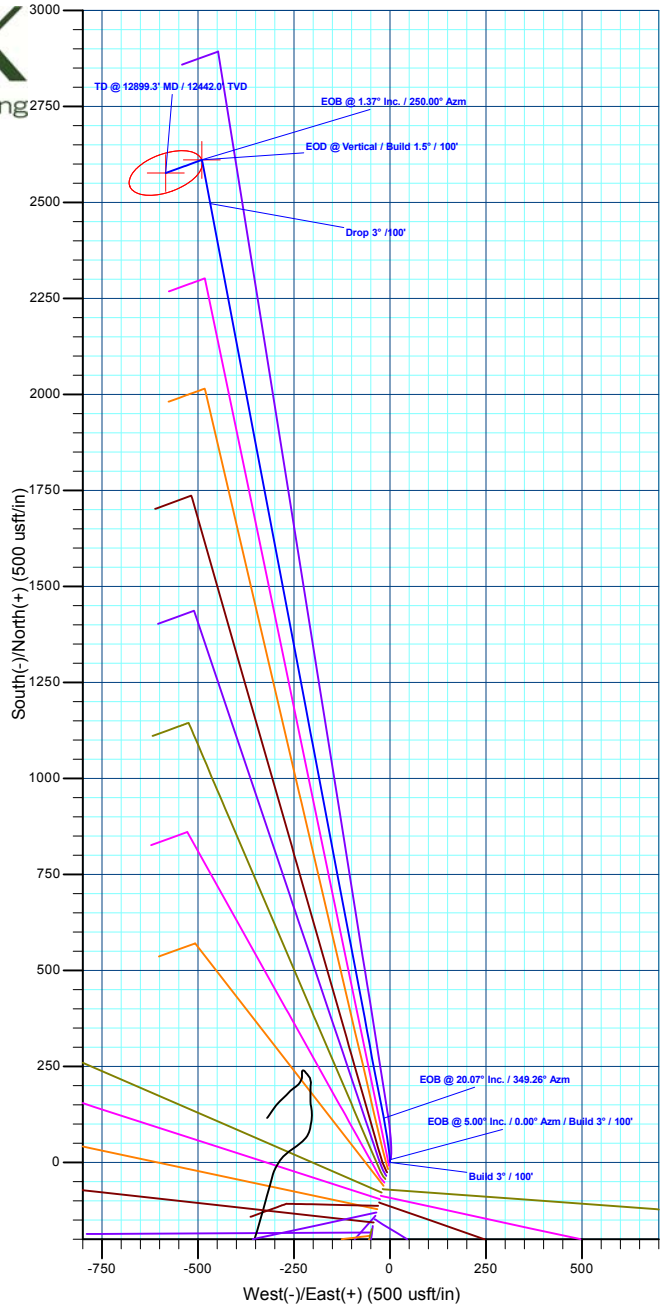
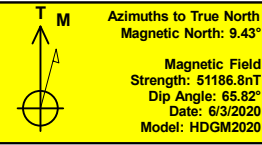
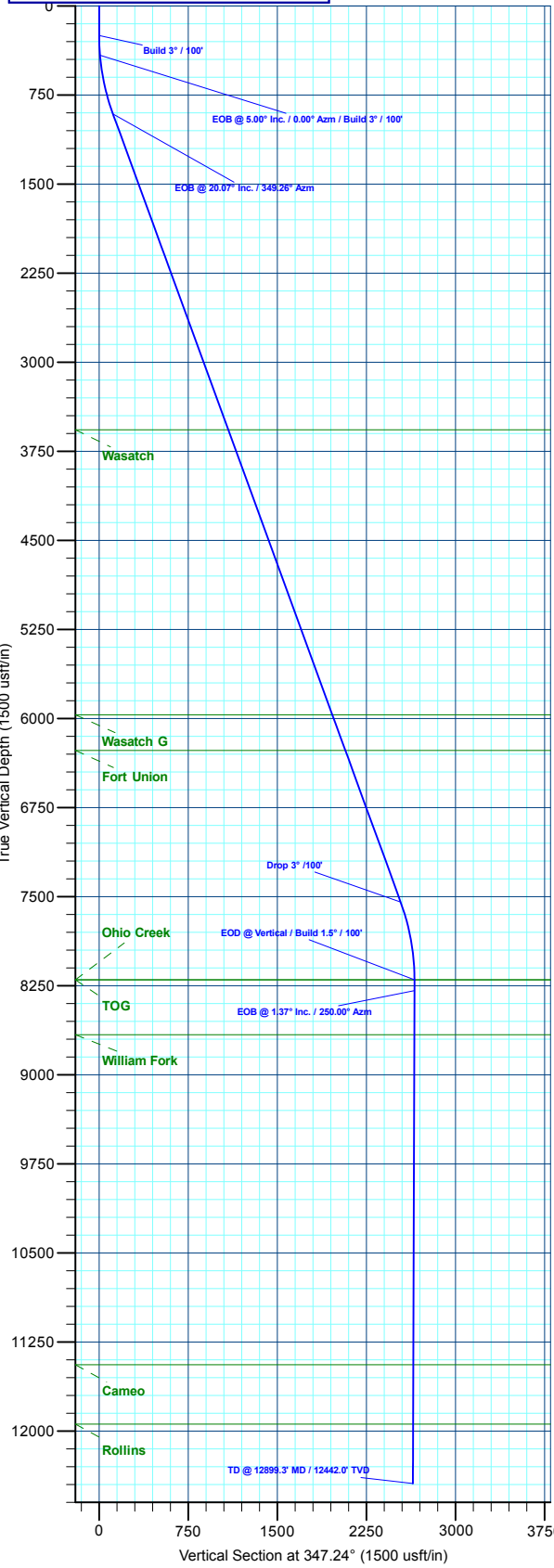
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
416.7	5.00	0.00	416.5	7.3	0.0	3.00	0.00	7.1	EOB @ 5.00° Inc. / 0.00° Azm / Build 3° / 100'
922.7	20.07	349.26	909.1	115.2	-16.3	3.00	-14.13	116.0	EOB @ 20.07° Inc. / 349.26° Azm
7988.3	20.07	349.26	7545.7	2497.0	-468.1	0.00	0.00	2538.7	Drop 3° / 100'
8657.1	0.00	0.00	8201.0	2610.9	-489.7	3.00	180.00	2654.6	EOD @ Vertical / Build 1.5° / 100'
8748.2	1.37	250.00	8292.0	2610.6	-490.7	1.50	250.00	2654.5	EOB @ 1.37° Inc. / 250.00° Azm
12899.3	1.37	250.00	12442.0	2576.7	-583.6	0.00	0.00	2642.0	TD @ 12899.3' MD / 12442.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 12B-23	8201.0	2610.9	-489.7	14426588.38	2444528.93	39.691668	-108.141803
PBHL - 12B-23	12442.0	2576.7	-583.6	14426551.20	2444436.10	39.691574	-108.142137

WELL DETAILS: BJU M23A FED 12B-23 496

+N/-S	+E/-W	Ground Level : 8104.0	Northing	Easting	Latitude	Longitude
0.0	0.0		14423994.40	2445101.60	39.684503	-108.140064



Plan: Design #2 (BJU M23A FED 12B-23 496/Wellbore #1)

Created By: Will Jircik Date: 12:57, July 18 2022



Caerus Oil & Gas

Garfield County, CO

BJU M23A 496 Pad

BJU M23A FED 12B-23 496 - Slot 12B-23

Wellbore #1

Plan: Design #2

KLX Well Planning Report

18 July, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 12B-23 496 - Slot 12B-23
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 12B-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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 12B-23 496 - Slot 12B-23		
Well Position	+N/-S	-33.8 usft	Northing: 14,423,994.40 usft
	+E/-W	-9.1 usft	Easting: 2,445,101.60 usft
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Latitude: 39.684503
			Longitude: -108.140064
			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	51,186.80000000

Design	Design #2				
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	347.24	

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
416.7	5.00	0.00	416.5	7.3	0.0	3.00	3.00	0.00	0.00	
922.7	20.07	349.26	909.1	115.2	-16.3	3.00	2.98	-2.12	-14.13	
7,988.3	20.07	349.26	7,545.7	2,497.0	-468.1	0.00	0.00	0.00	0.00	
8,657.1	0.00	0.00	8,201.0	2,610.9	-489.7	3.00	-3.00	0.00	180.00	OHCR - 12B-23
8,748.2	1.37	250.00	8,292.0	2,610.6	-490.7	1.50	1.50	-120.85	250.00	
12,899.3	1.37	250.00	12,442.0	2,576.7	-583.6	0.00	0.00	0.00	0.00	PBHL - 12B-23

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 12B-23 496 - Slot 12B-23
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 12B-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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'									
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	1.50	0.00	300.0	0.7	0.0	0.6	3.00	3.00	0.00
400.0	4.50	0.00	399.8	5.9	0.0	5.7	3.00	3.00	0.00
EOB @ 5.00° Inc. / 0.00° Azm / Build 3° / 100'									
416.7	5.00	0.00	416.5	7.3	0.0	7.1	3.00	3.00	0.00
500.0	7.45	355.29	499.3	16.3	-0.4	16.0	3.00	2.94	-5.65
600.0	10.42	352.57	598.1	31.7	-2.1	31.4	3.00	2.97	-2.72
700.0	13.40	351.04	695.9	52.1	-5.1	52.0	3.00	2.98	-1.52
800.0	16.39	350.07	792.5	77.5	-9.4	77.6	3.00	2.99	-0.98
900.0	19.39	349.39	887.7	107.7	-14.9	108.3	3.00	2.99	-0.68
EOB @ 20.07° Inc. / 349.26° Azm									
922.7	20.07	349.26	909.1	115.2	-16.3	116.0	3.00	2.99	-0.56
1,000.0	20.07	349.26	981.7	141.3	-21.2	142.5	0.00	0.00	0.00
1,100.0	20.07	349.26	1,075.6	175.0	-27.6	176.8	0.00	0.00	0.00
1,200.0	20.07	349.26	1,169.5	208.7	-34.0	211.1	0.00	0.00	0.00
1,300.0	20.07	349.26	1,263.4	242.4	-40.4	245.4	0.00	0.00	0.00
1,400.0	20.07	349.26	1,357.4	276.1	-46.8	279.7	0.00	0.00	0.00
1,500.0	20.07	349.26	1,451.3	309.8	-53.2	313.9	0.00	0.00	0.00
1,600.0	20.07	349.26	1,545.2	343.6	-59.6	348.2	0.00	0.00	0.00
1,700.0	20.07	349.26	1,639.2	377.3	-66.0	382.5	0.00	0.00	0.00
1,800.0	20.07	349.26	1,733.1	411.0	-72.4	416.8	0.00	0.00	0.00
1,900.0	20.07	349.26	1,827.0	444.7	-78.8	451.1	0.00	0.00	0.00
2,000.0	20.07	349.26	1,921.0	478.4	-85.2	485.4	0.00	0.00	0.00
2,100.0	20.07	349.26	2,014.9	512.1	-91.6	519.7	0.00	0.00	0.00
2,200.0	20.07	349.26	2,108.8	545.8	-97.9	554.0	0.00	0.00	0.00
2,300.0	20.07	349.26	2,202.7	579.5	-104.3	588.3	0.00	0.00	0.00
2,400.0	20.07	349.26	2,296.7	613.2	-110.7	622.5	0.00	0.00	0.00
2,500.0	20.07	349.26	2,390.6	646.9	-117.1	656.8	0.00	0.00	0.00
2,600.0	20.07	349.26	2,484.5	680.7	-123.5	691.1	0.00	0.00	0.00
2,700.0	20.07	349.26	2,578.5	714.4	-129.9	725.4	0.00	0.00	0.00
2,800.0	20.07	349.26	2,672.4	748.1	-136.3	759.7	0.00	0.00	0.00
2,900.0	20.07	349.26	2,766.3	781.8	-142.7	794.0	0.00	0.00	0.00
3,000.0	20.07	349.26	2,860.3	815.5	-149.1	828.3	0.00	0.00	0.00
3,100.0	20.07	349.26	2,954.2	849.2	-155.5	862.6	0.00	0.00	0.00
3,200.0	20.07	349.26	3,048.1	882.9	-161.9	896.9	0.00	0.00	0.00
3,300.0	20.07	349.26	3,142.0	916.6	-168.3	931.1	0.00	0.00	0.00
3,400.0	20.07	349.26	3,236.0	950.3	-174.7	965.4	0.00	0.00	0.00
3,500.0	20.07	349.26	3,329.9	984.0	-181.1	999.7	0.00	0.00	0.00
3,600.0	20.07	349.26	3,423.8	1,017.7	-187.5	1,034.0	0.00	0.00	0.00
3,700.0	20.07	349.26	3,517.8	1,051.5	-193.9	1,068.3	0.00	0.00	0.00
Wasatch									
3,754.6	20.07	349.26	3,569.0	1,069.8	-197.3	1,087.0	0.00	0.00	0.00
3,800.0	20.07	349.26	3,611.7	1,085.2	-200.3	1,102.6	0.00	0.00	0.00
3,900.0	20.07	349.26	3,705.6	1,118.9	-206.6	1,136.9	0.00	0.00	0.00
4,000.0	20.07	349.26	3,799.5	1,152.6	-213.0	1,171.2	0.00	0.00	0.00
4,100.0	20.07	349.26	3,893.5	1,186.3	-219.4	1,205.5	0.00	0.00	0.00
4,200.0	20.07	349.26	3,987.4	1,220.0	-225.8	1,239.8	0.00	0.00	0.00
4,300.0	20.07	349.26	4,081.3	1,253.7	-232.2	1,274.0	0.00	0.00	0.00
4,400.0	20.07	349.26	4,175.3	1,287.4	-238.6	1,308.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 12B-23 496 - Slot 12B-23
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 12B-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
4,500.0	20.07	349.26	4,269.2	1,321.1	-245.0	1,342.6	0.00	0.00	0.00
4,600.0	20.07	349.26	4,363.1	1,354.8	-251.4	1,376.9	0.00	0.00	0.00
4,700.0	20.07	349.26	4,457.1	1,388.6	-257.8	1,411.2	0.00	0.00	0.00
4,800.0	20.07	349.26	4,551.0	1,422.3	-264.2	1,445.5	0.00	0.00	0.00
4,900.0	20.07	349.26	4,644.9	1,456.0	-270.6	1,479.8	0.00	0.00	0.00
5,000.0	20.07	349.26	4,738.8	1,489.7	-277.0	1,514.1	0.00	0.00	0.00
5,100.0	20.07	349.26	4,832.8	1,523.4	-283.4	1,548.4	0.00	0.00	0.00
5,200.0	20.07	349.26	4,926.7	1,557.1	-289.8	1,582.6	0.00	0.00	0.00
5,300.0	20.07	349.26	5,020.6	1,590.8	-296.2	1,616.9	0.00	0.00	0.00
5,400.0	20.07	349.26	5,114.6	1,624.5	-302.6	1,651.2	0.00	0.00	0.00
5,500.0	20.07	349.26	5,208.5	1,658.2	-309.0	1,685.5	0.00	0.00	0.00
5,600.0	20.07	349.26	5,302.4	1,691.9	-315.3	1,719.8	0.00	0.00	0.00
5,700.0	20.07	349.26	5,396.4	1,725.7	-321.7	1,754.1	0.00	0.00	0.00
5,800.0	20.07	349.26	5,490.3	1,759.4	-328.1	1,788.4	0.00	0.00	0.00
5,900.0	20.07	349.26	5,584.2	1,793.1	-334.5	1,822.7	0.00	0.00	0.00
6,000.0	20.07	349.26	5,678.1	1,826.8	-340.9	1,857.0	0.00	0.00	0.00
6,100.0	20.07	349.26	5,772.1	1,860.5	-347.3	1,891.3	0.00	0.00	0.00
6,200.0	20.07	349.26	5,866.0	1,894.2	-353.7	1,925.5	0.00	0.00	0.00
6,300.0	20.07	349.26	5,959.9	1,927.9	-360.1	1,959.8	0.00	0.00	0.00
Wasatch G									
6,309.7	20.07	349.26	5,969.0	1,931.2	-360.7	1,963.1	0.00	0.00	0.00
6,400.0	20.07	349.26	6,053.9	1,961.6	-366.5	1,994.1	0.00	0.00	0.00
6,500.0	20.07	349.26	6,147.8	1,995.3	-372.9	2,028.4	0.00	0.00	0.00
6,600.0	20.07	349.26	6,241.7	2,029.0	-379.3	2,062.7	0.00	0.00	0.00
Fort Union									
6,629.0	20.07	349.26	6,269.0	2,038.8	-381.1	2,072.7	0.00	0.00	0.00
6,700.0	20.07	349.26	6,335.6	2,062.7	-385.7	2,097.0	0.00	0.00	0.00
6,800.0	20.07	349.26	6,429.6	2,096.5	-392.1	2,131.3	0.00	0.00	0.00
6,900.0	20.07	349.26	6,523.5	2,130.2	-398.5	2,165.6	0.00	0.00	0.00
7,000.0	20.07	349.26	6,617.4	2,163.9	-404.9	2,199.9	0.00	0.00	0.00
7,100.0	20.07	349.26	6,711.4	2,197.6	-411.3	2,234.1	0.00	0.00	0.00
7,200.0	20.07	349.26	6,805.3	2,231.3	-417.7	2,268.4	0.00	0.00	0.00
7,300.0	20.07	349.26	6,899.2	2,265.0	-424.1	2,302.7	0.00	0.00	0.00
7,400.0	20.07	349.26	6,993.2	2,298.7	-430.4	2,337.0	0.00	0.00	0.00
7,500.0	20.07	349.26	7,087.1	2,332.4	-436.8	2,371.3	0.00	0.00	0.00
7,600.0	20.07	349.26	7,181.0	2,366.1	-443.2	2,405.6	0.00	0.00	0.00
7,700.0	20.07	349.26	7,274.9	2,399.8	-449.6	2,439.9	0.00	0.00	0.00
7,800.0	20.07	349.26	7,368.9	2,433.6	-456.0	2,474.2	0.00	0.00	0.00
7,900.0	20.07	349.26	7,462.8	2,467.3	-462.4	2,508.5	0.00	0.00	0.00
Drop 3° /100'									
7,988.3	20.07	349.26	7,545.7	2,497.0	-468.1	2,538.7	0.00	0.00	0.00
8,000.0	19.71	349.26	7,556.7	2,500.9	-468.8	2,542.7	3.00	-3.00	0.00
8,100.0	16.71	349.26	7,651.7	2,531.6	-474.6	2,573.9	3.00	-3.00	0.00
8,200.0	13.71	349.26	7,748.2	2,557.4	-479.5	2,600.2	3.00	-3.00	0.00
8,300.0	10.71	349.26	7,845.9	2,578.2	-483.5	2,621.3	3.00	-3.00	0.00
8,400.0	7.71	349.26	7,944.6	2,593.9	-486.4	2,637.3	3.00	-3.00	0.00
8,500.0	4.71	349.26	8,044.0	2,604.6	-488.5	2,648.1	3.00	-3.00	0.00
8,600.0	1.71	349.26	8,143.9	2,610.1	-489.5	2,653.7	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek - TOG									
8,657.1	0.00	0.00	8,201.0	2,610.9	-489.7	2,654.6	3.00	-3.00	0.00
8,700.0	0.64	250.00	8,243.9	2,610.8	-489.9	2,654.6	1.50	1.50	0.00
EOB @ 1.37° Inc. / 250.00° Azm									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 12B-23 496 - Slot 12B-23
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 12B-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
8,748.2	1.37	250.00	8,292.0	2,610.6	-490.7	2,654.5	1.50	1.50	0.00
8,800.0	1.37	250.00	8,343.8	2,610.1	-491.8	2,654.3	0.00	0.00	0.00
8,900.0	1.37	250.00	8,443.8	2,609.3	-494.1	2,654.0	0.00	0.00	0.00
9,000.0	1.37	250.00	8,543.8	2,608.5	-496.3	2,653.7	0.00	0.00	0.00
9,100.0	1.37	250.00	8,643.7	2,607.7	-498.6	2,653.4	0.00	0.00	0.00
William Fork									
9,119.3	1.37	250.00	8,663.0	2,607.5	-499.0	2,653.3	0.00	0.00	0.00
9,200.0	1.37	250.00	8,743.7	2,606.9	-500.8	2,653.1	0.00	0.00	0.00
9,300.0	1.37	250.00	8,843.7	2,606.1	-503.0	2,652.8	0.00	0.00	0.00
9,400.0	1.37	250.00	8,943.7	2,605.2	-505.3	2,652.5	0.00	0.00	0.00
9,500.0	1.37	250.00	9,043.6	2,604.4	-507.5	2,652.2	0.00	0.00	0.00
9,600.0	1.37	250.00	9,143.6	2,603.6	-509.8	2,651.9	0.00	0.00	0.00
9,700.0	1.37	250.00	9,243.6	2,602.8	-512.0	2,651.6	0.00	0.00	0.00
9,800.0	1.37	250.00	9,343.5	2,602.0	-514.2	2,651.3	0.00	0.00	0.00
9,900.0	1.37	250.00	9,443.5	2,601.2	-516.5	2,651.0	0.00	0.00	0.00
10,000.0	1.37	250.00	9,543.5	2,600.3	-518.7	2,650.7	0.00	0.00	0.00
10,100.0	1.37	250.00	9,643.5	2,599.5	-521.0	2,650.4	0.00	0.00	0.00
10,200.0	1.37	250.00	9,743.4	2,598.7	-523.2	2,650.1	0.00	0.00	0.00
10,300.0	1.37	250.00	9,843.4	2,597.9	-525.4	2,649.8	0.00	0.00	0.00
10,400.0	1.37	250.00	9,943.4	2,597.1	-527.7	2,649.5	0.00	0.00	0.00
10,500.0	1.37	250.00	10,043.4	2,596.3	-529.9	2,649.2	0.00	0.00	0.00
10,600.0	1.37	250.00	10,143.3	2,595.5	-532.2	2,648.9	0.00	0.00	0.00
10,700.0	1.37	250.00	10,243.3	2,594.6	-534.4	2,648.6	0.00	0.00	0.00
10,800.0	1.37	250.00	10,343.3	2,593.8	-536.6	2,648.3	0.00	0.00	0.00
10,900.0	1.37	250.00	10,443.2	2,593.0	-538.9	2,648.0	0.00	0.00	0.00
11,000.0	1.37	250.00	10,543.2	2,592.2	-541.1	2,647.7	0.00	0.00	0.00
11,100.0	1.37	250.00	10,643.2	2,591.4	-543.3	2,647.4	0.00	0.00	0.00
11,200.0	1.37	250.00	10,743.2	2,590.6	-545.6	2,647.1	0.00	0.00	0.00
11,300.0	1.37	250.00	10,843.1	2,589.8	-547.8	2,646.8	0.00	0.00	0.00
11,400.0	1.37	250.00	10,943.1	2,588.9	-550.1	2,646.5	0.00	0.00	0.00
11,500.0	1.37	250.00	11,043.1	2,588.1	-552.3	2,646.2	0.00	0.00	0.00
11,600.0	1.37	250.00	11,143.0	2,587.3	-554.5	2,645.9	0.00	0.00	0.00
11,700.0	1.37	250.00	11,243.0	2,586.5	-556.8	2,645.6	0.00	0.00	0.00
11,800.0	1.37	250.00	11,343.0	2,585.7	-559.0	2,645.3	0.00	0.00	0.00
Cameo									
11,899.0	1.37	250.00	11,442.0	2,584.9	-561.2	2,645.0	0.00	0.00	0.00
11,900.0	1.37	250.00	11,443.0	2,584.9	-561.3	2,645.0	0.00	0.00	0.00
12,000.0	1.37	250.00	11,542.9	2,584.0	-563.5	2,644.7	0.00	0.00	0.00
12,100.0	1.37	250.00	11,642.9	2,583.2	-565.7	2,644.4	0.00	0.00	0.00
12,200.0	1.37	250.00	11,742.9	2,582.4	-568.0	2,644.1	0.00	0.00	0.00
12,300.0	1.37	250.00	11,842.8	2,581.6	-570.2	2,643.8	0.00	0.00	0.00
Rollins									
12,399.2	1.37	250.00	11,942.0	2,580.8	-572.4	2,643.5	0.00	0.00	0.00
12,400.0	1.37	250.00	11,942.8	2,580.8	-572.5	2,643.5	0.00	0.00	0.00
12,500.0	1.37	250.00	12,042.8	2,580.0	-574.7	2,643.2	0.00	0.00	0.00
12,600.0	1.37	250.00	12,142.8	2,579.2	-576.9	2,642.9	0.00	0.00	0.00
12,700.0	1.37	250.00	12,242.7	2,578.3	-579.2	2,642.6	0.00	0.00	0.00
12,800.0	1.37	250.00	12,342.7	2,577.5	-581.4	2,642.3	0.00	0.00	0.00
TD @ 12899.3' MD / 12442.0' TVD									
12,899.3	1.37	250.00	12,442.0	2,576.7	-583.6	2,642.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M23A FED 12B-23 496 - Slot 12B-23
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 12B-23 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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 - 12B-23 - plan hits target center - Point	0.00	0.00	8,201.0	2,610.9	-489.7	14,426,588.38	2,444,528.93	39.691668	-108.141804
PBHL - 12B-23 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	12,442.0	2,576.7	-583.6	14,426,551.20	2,444,436.10	39.691574	-108.142138

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,754.6	3,569.0	Wasatch			
6,309.7	5,969.0	Wasatch G			
6,629.0	6,269.0	Fort Union			
8,657.1	8,201.0	Ohio Creek			
8,657.1	8,201.0	TOG			
9,119.3	8,663.0	William Fork			
11,899.0	11,442.0	Cameo			
12,399.2	11,942.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
250.0	250.0	0.0	0.0	Build 3° / 100'
416.7	416.5	7.3	0.0	EOB @ 5.00° Inc. / 0.00° Azm / Build 3° / 100'
922.7	909.1	115.2	-16.3	EOB @ 20.07° Inc. / 349.26° Azm
7,988.3	7,545.7	2,497.0	-468.1	Drop 3° / 100'
8,657.1	8,201.0	2,610.9	-489.7	EOD @ Vertical / Build 1.5° / 100'
8,748.2	8,292.0	2,610.6	-490.7	EOB @ 1.37° Inc. / 250.00° Azm
12,899.3	12,442.0	2,576.7	-583.6	TD @ 12899.3' MD / 12442.0' TVD