

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 24C-12 496
Wellbore: Wellbore #1
Design: Design #2
Latitude: 39.709062
Longitude: -108.104138
Ground Level: 8029.0
RKB @ 8059.0usft (30')

PROJECT DETAILS: Rio Blanco 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 @ 8059.0usft (30')
Section (VS) Reference: Slot - 24C-12(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8059.0usft (30')
Calculation Method: Minimum Curvature

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	
210.0	0.00	0.00	210.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
842.7	18.98	308.64	831.2	64.8	-81.1	3.00	308.64	103.8	EOB @ 18.98° Inc. / 308.64° Azm
8512.4	18.98	308.64	8083.8	1622.4	-2029.8	0.00	0.00	2597.3	Drop 3° / 100'
9145.1	0.00	0.00	8705.0	1687.3	-2110.9	3.00	180.00	2701.1	EOD @ Vertical / Build 1.5° / 100'
9295.0	1.22	250.02	8786.1	1687.0	-2111.7	1.50	250.02	2701.6	EOB @ 1.22° Inc. / 250.02° Azm
12404.0	1.22	250.02	13454.0	1653.1	-2204.9	0.00	0.00	2755.8	TD @ 13895.1° MD / 13454.0° TVD

FORMATION TOP DETAILS

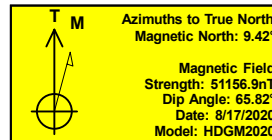
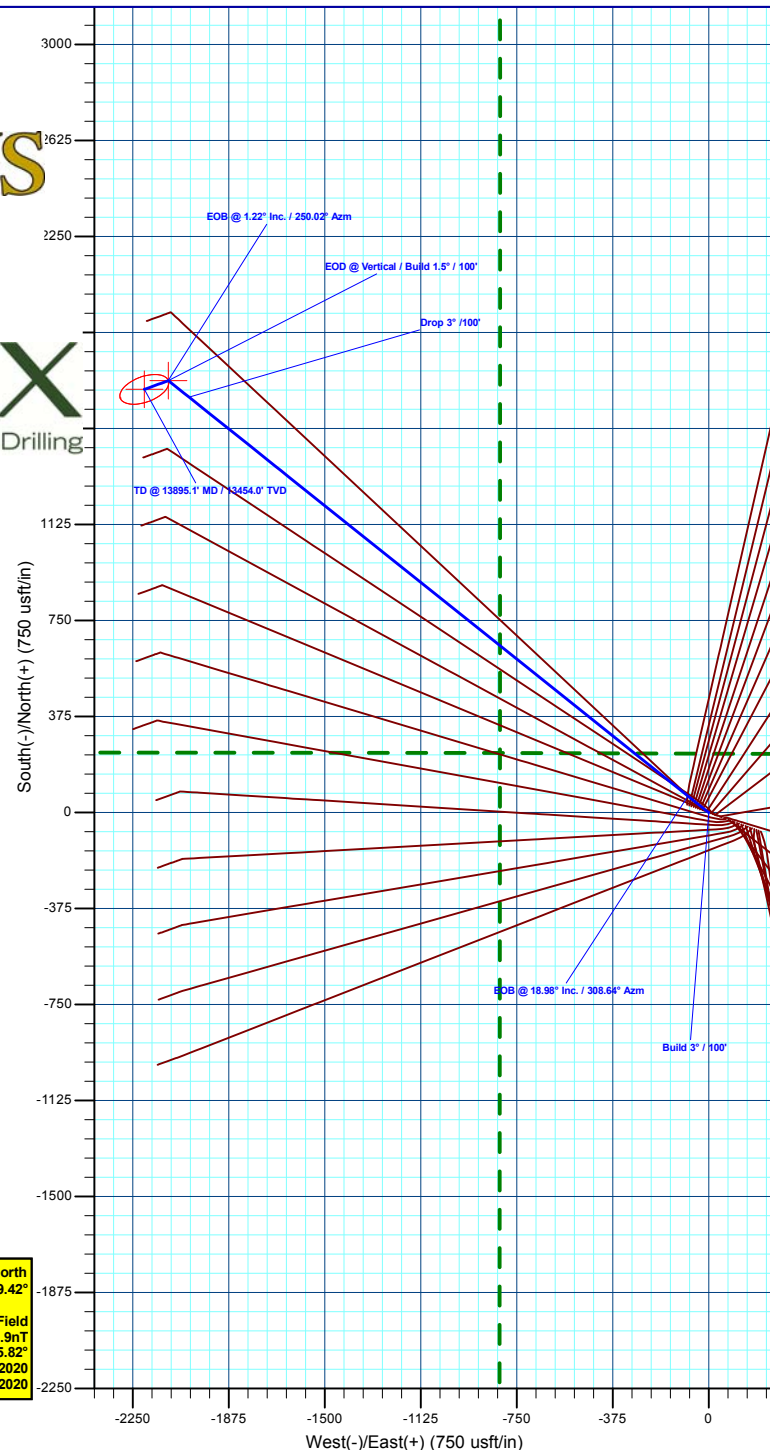
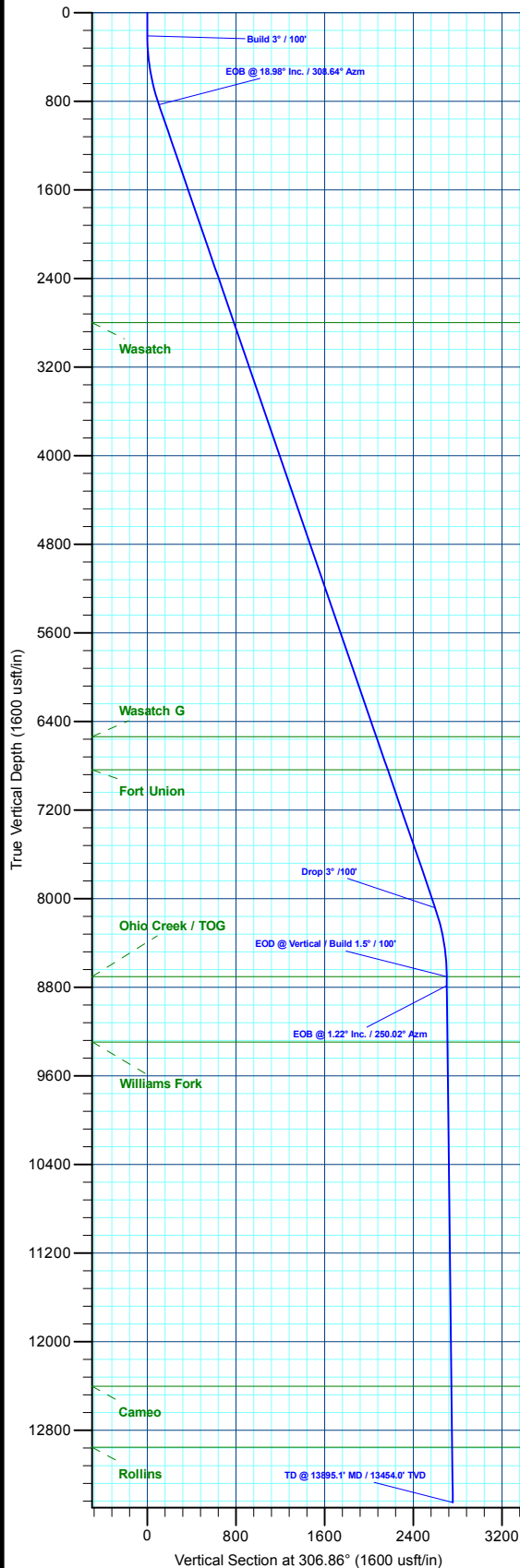
TVDPath	MDPath	Formation
2800.0	2924.7	Wasatch
6538.0	6877.7	Wasatch G
6838.0	7194.9	Fort Union
8705.0	9145.1	Ohio Creek / TOG
9295.0	9735.2	Williams Fork
12404.0	12844.9	Cameo
12954.0	13395.0	Rollins

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northings	Easting	Latitude	Longitude
24C-12 - OHCR8705.0	1687.3	-2110.9	14434881.49	2452758.33	39.713692	-108.111638	
24C-12 - PBH13454.0	1653.1	-2204.9	14434844.30	2452665.50	39.713598	-108.111972	

WELL DETAILS: ELU A18 FED 24C-12 496

+N/-S	+E/-W	Ground Level : 8029.0	Latitude	Longitude
0.0	0.0	Northings 14433263.30 Easting 2454922.66	39.709062	-108.104138
				24C-12



Plan: Design #2 (ELU A18 FED 24C-12 496/Wellbore #1)

Created By: Will Jircik

Date: 13:52, May 18 2022



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 24C-12 496 - Slot 24C-12

Wellbore #1

Plan: Design #2

KLX Well Planning Report

18 May, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24C-12 496 - Slot 24C-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24C-12 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Project	Rio Blanco 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		ELU A18 495 Pad			
Site Position:		Northing:	14,433,279.80 usft	Latitude:	39.709109
From:	Map	Easting:	2,454,904.40 usft	Longitude:	-108.104201
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.85 °

Well	ELU A18 FED 24C-12 496 - Slot 24C-12					
Well Position	+N/-S	-17.1 usft	Northing:	14,433,263.30 usft	Latitude:	39.709062
	+E/-W	17.7 usft	Easting:	2,454,922.66 usft	Longitude:	-108.104138
Position Uncertainty	0.0 usft		Wellhead Elevation:		Ground Level:	8,029.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2020	8/17/2020	9.42	65.82	51,156.90000000

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	306.86

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	
210.0	0.00	0.00	210.0	0.0	0.0	0.00	0.00	0.00	0.00	
842.7	18.98	308.64	831.2	64.8	-81.1	3.00	3.00	0.00	308.64	
8,512.4	18.98	308.64	8,083.8	1,622.4	-2,029.8	0.00	0.00	0.00	0.00	
9,145.1	0.00	0.00	8,705.0	1,687.3	-2,110.9	3.00	-3.00	0.00	180.00	24C-12 - OHCR
9,226.2	1.22	250.02	8,786.1	1,687.0	-2,111.7	1.50	1.50	-135.59	250.02	
13,895.1	1.22	250.02	13,454.0	1,653.1	-2,204.9	0.00	0.00	0.00	0.00	24C-12 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24C-12 496 - Slot 24C-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24C-12 496	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'									
210.0	0.00	0.00	210.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	2.70	308.64	300.0	1.3	-1.7	2.1	3.00	3.00	0.00
400.0	5.70	308.64	399.7	5.9	-7.4	9.4	3.00	3.00	0.00
500.0	8.70	308.64	498.9	13.7	-17.2	22.0	3.00	3.00	0.00
600.0	11.70	308.64	597.3	24.8	-31.0	39.7	3.00	3.00	0.00
700.0	14.70	308.64	694.6	39.0	-48.8	62.5	3.00	3.00	0.00
800.0	17.70	308.64	790.7	56.4	-70.6	90.4	3.00	3.00	0.00
EOB @ 18.98° Inc. / 308.64° Azm									
842.7	18.98	308.64	831.2	64.8	-81.1	103.8	3.00	3.00	0.00
900.0	18.98	308.64	885.4	76.5	-95.7	122.4	0.00	0.00	0.00
1,000.0	18.98	308.64	979.9	96.8	-121.1	154.9	0.00	0.00	0.00
1,100.0	18.98	308.64	1,074.5	117.1	-146.5	187.4	0.00	0.00	0.00
1,200.0	18.98	308.64	1,169.1	137.4	-171.9	220.0	0.00	0.00	0.00
1,300.0	18.98	308.64	1,263.6	157.7	-197.3	252.5	0.00	0.00	0.00
1,400.0	18.98	308.64	1,358.2	178.0	-222.7	285.0	0.00	0.00	0.00
1,500.0	18.98	308.64	1,452.7	198.3	-248.1	317.5	0.00	0.00	0.00
1,600.0	18.98	308.64	1,547.3	218.6	-273.5	350.0	0.00	0.00	0.00
1,700.0	18.98	308.64	1,641.9	238.9	-298.9	382.5	0.00	0.00	0.00
1,800.0	18.98	308.64	1,736.4	259.2	-324.3	415.0	0.00	0.00	0.00
1,900.0	18.98	308.64	1,831.0	279.6	-349.8	447.5	0.00	0.00	0.00
2,000.0	18.98	308.64	1,925.6	299.9	-375.2	480.0	0.00	0.00	0.00
2,100.0	18.98	308.64	2,020.1	320.2	-400.6	512.6	0.00	0.00	0.00
2,200.0	18.98	308.64	2,114.7	340.5	-426.0	545.1	0.00	0.00	0.00
2,300.0	18.98	308.64	2,209.2	360.8	-451.4	577.6	0.00	0.00	0.00
2,400.0	18.98	308.64	2,303.8	381.1	-476.8	610.1	0.00	0.00	0.00
2,500.0	18.98	308.64	2,398.4	401.4	-502.2	642.6	0.00	0.00	0.00
2,600.0	18.98	308.64	2,492.9	421.7	-527.6	675.1	0.00	0.00	0.00
2,700.0	18.98	308.64	2,587.5	442.0	-553.0	707.6	0.00	0.00	0.00
2,800.0	18.98	308.64	2,682.1	462.3	-578.4	740.1	0.00	0.00	0.00
2,900.0	18.98	308.64	2,776.6	482.6	-603.8	772.6	0.00	0.00	0.00
Wasatch									
2,924.7	18.98	308.64	2,800.0	487.7	-610.1	780.7	0.00	0.00	0.00
3,000.0	18.98	308.64	2,871.2	502.9	-629.2	805.2	0.00	0.00	0.00
3,100.0	18.98	308.64	2,965.7	523.3	-654.6	837.7	0.00	0.00	0.00
3,200.0	18.98	308.64	3,060.3	543.6	-680.1	870.2	0.00	0.00	0.00
3,300.0	18.98	308.64	3,154.9	563.9	-705.5	902.7	0.00	0.00	0.00
3,400.0	18.98	308.64	3,249.4	584.2	-730.9	935.2	0.00	0.00	0.00
3,500.0	18.98	308.64	3,344.0	604.5	-756.3	967.7	0.00	0.00	0.00
3,600.0	18.98	308.64	3,438.6	624.8	-781.7	1,000.2	0.00	0.00	0.00
3,700.0	18.98	308.64	3,533.1	645.1	-807.1	1,032.7	0.00	0.00	0.00
3,800.0	18.98	308.64	3,627.7	665.4	-832.5	1,065.2	0.00	0.00	0.00
3,900.0	18.98	308.64	3,722.2	685.7	-857.9	1,097.8	0.00	0.00	0.00
4,000.0	18.98	308.64	3,816.8	706.0	-883.3	1,130.3	0.00	0.00	0.00
4,100.0	18.98	308.64	3,911.4	726.3	-908.7	1,162.8	0.00	0.00	0.00
4,200.0	18.98	308.64	4,005.9	746.7	-934.1	1,195.3	0.00	0.00	0.00
4,300.0	18.98	308.64	4,100.5	767.0	-959.5	1,227.8	0.00	0.00	0.00
4,400.0	18.98	308.64	4,195.1	787.3	-984.9	1,260.3	0.00	0.00	0.00
4,500.0	18.98	308.64	4,289.6	807.6	-1,010.4	1,292.8	0.00	0.00	0.00
4,600.0	18.98	308.64	4,384.2	827.9	-1,035.8	1,325.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24C-12 496 - Slot 24C-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24C-12 496	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)
4,700.0	18.98	308.64	4,478.7	848.2	-1,061.2	1,357.8	0.00	0.00	0.00
4,800.0	18.98	308.64	4,573.3	868.5	-1,086.6	1,390.4	0.00	0.00	0.00
4,900.0	18.98	308.64	4,667.9	888.8	-1,112.0	1,422.9	0.00	0.00	0.00
5,000.0	18.98	308.64	4,762.4	909.1	-1,137.4	1,455.4	0.00	0.00	0.00
5,100.0	18.98	308.64	4,857.0	929.4	-1,162.8	1,487.9	0.00	0.00	0.00
5,200.0	18.98	308.64	4,951.6	949.7	-1,188.2	1,520.4	0.00	0.00	0.00
5,300.0	18.98	308.64	5,046.1	970.0	-1,213.6	1,552.9	0.00	0.00	0.00
5,400.0	18.98	308.64	5,140.7	990.4	-1,239.0	1,585.4	0.00	0.00	0.00
5,500.0	18.98	308.64	5,235.2	1,010.7	-1,264.4	1,617.9	0.00	0.00	0.00
5,600.0	18.98	308.64	5,329.8	1,031.0	-1,289.8	1,650.4	0.00	0.00	0.00
5,700.0	18.98	308.64	5,424.4	1,051.3	-1,315.2	1,683.0	0.00	0.00	0.00
5,800.0	18.98	308.64	5,518.9	1,071.6	-1,340.7	1,715.5	0.00	0.00	0.00
5,900.0	18.98	308.64	5,613.5	1,091.9	-1,366.1	1,748.0	0.00	0.00	0.00
6,000.0	18.98	308.64	5,708.0	1,112.2	-1,391.5	1,780.5	0.00	0.00	0.00
6,100.0	18.98	308.64	5,802.6	1,132.5	-1,416.9	1,813.0	0.00	0.00	0.00
6,200.0	18.98	308.64	5,897.2	1,152.8	-1,442.3	1,845.5	0.00	0.00	0.00
6,300.0	18.98	308.64	5,991.7	1,173.1	-1,467.7	1,878.0	0.00	0.00	0.00
6,400.0	18.98	308.64	6,086.3	1,193.4	-1,493.1	1,910.5	0.00	0.00	0.00
6,500.0	18.98	308.64	6,180.9	1,213.7	-1,518.5	1,943.0	0.00	0.00	0.00
6,600.0	18.98	308.64	6,275.4	1,234.1	-1,543.9	1,975.6	0.00	0.00	0.00
6,700.0	18.98	308.64	6,370.0	1,254.4	-1,569.3	2,008.1	0.00	0.00	0.00
6,800.0	18.98	308.64	6,464.5	1,274.7	-1,594.7	2,040.6	0.00	0.00	0.00
Wasatch G									
6,877.7	18.98	308.64	6,538.0	1,290.4	-1,614.5	2,065.8	0.00	0.00	0.00
6,900.0	18.98	308.64	6,559.1	1,295.0	-1,620.1	2,073.1	0.00	0.00	0.00
7,000.0	18.98	308.64	6,653.7	1,315.3	-1,645.5	2,105.6	0.00	0.00	0.00
7,100.0	18.98	308.64	6,748.2	1,335.6	-1,671.0	2,138.1	0.00	0.00	0.00
Fort Union									
7,194.9	18.98	308.64	6,838.0	1,354.9	-1,695.1	2,169.0	0.00	0.00	0.00
7,200.0	18.98	308.64	6,842.8	1,355.9	-1,696.4	2,170.6	0.00	0.00	0.00
7,300.0	18.98	308.64	6,937.4	1,376.2	-1,721.8	2,203.1	0.00	0.00	0.00
7,400.0	18.98	308.64	7,031.9	1,396.5	-1,747.2	2,235.6	0.00	0.00	0.00
7,500.0	18.98	308.64	7,126.5	1,416.8	-1,772.6	2,268.2	0.00	0.00	0.00
7,600.0	18.98	308.64	7,221.0	1,437.1	-1,798.0	2,300.7	0.00	0.00	0.00
7,700.0	18.98	308.64	7,315.6	1,457.4	-1,823.4	2,333.2	0.00	0.00	0.00
7,800.0	18.98	308.64	7,410.2	1,477.8	-1,848.8	2,365.7	0.00	0.00	0.00
7,900.0	18.98	308.64	7,504.7	1,498.1	-1,874.2	2,398.2	0.00	0.00	0.00
8,000.0	18.98	308.64	7,599.3	1,518.4	-1,899.6	2,430.7	0.00	0.00	0.00
8,100.0	18.98	308.64	7,693.9	1,538.7	-1,925.0	2,463.2	0.00	0.00	0.00
8,200.0	18.98	308.64	7,788.4	1,559.0	-1,950.4	2,495.7	0.00	0.00	0.00
8,300.0	18.98	308.64	7,883.0	1,579.3	-1,975.8	2,528.2	0.00	0.00	0.00
8,400.0	18.98	308.64	7,977.5	1,599.6	-2,001.3	2,560.8	0.00	0.00	0.00
8,500.0	18.98	308.64	8,072.1	1,619.9	-2,026.7	2,593.3	0.00	0.00	0.00
Drop 3° /100'									
8,512.4	18.98	308.64	8,083.8	1,622.4	-2,029.8	2,597.3	0.00	0.00	0.00
8,600.0	16.35	308.64	8,167.3	1,639.0	-2,050.6	2,623.9	3.00	-3.00	0.00
8,700.0	13.35	308.64	8,263.9	1,655.0	-2,070.6	2,649.5	3.00	-3.00	0.00
8,800.0	10.35	308.64	8,361.8	1,667.9	-2,086.6	2,670.0	3.00	-3.00	0.00
8,900.0	7.35	308.64	8,460.6	1,677.5	-2,098.7	2,685.4	3.00	-3.00	0.00
9,000.0	4.35	308.64	8,560.1	1,683.8	-2,106.6	2,695.6	3.00	-3.00	0.00
9,100.0	1.35	308.64	8,659.9	1,686.9	-2,110.5	2,700.6	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek / TOG									
9,145.1	0.00	0.00	8,705.0	1,687.3	-2,110.9	2,701.1	3.00	-3.00	0.00
9,200.0	0.82	250.02	8,759.9	1,687.1	-2,111.3	2,701.3	1.50	1.50	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24C-12 496 - Slot 24C-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24C-12 496	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)	
EOB @ 1.22° Inc. / 250.02° Azm										
9,226.2	1.22	250.02	8,786.1	1,687.0	-2,111.7	2,701.6	1.50	1.50	0.00	
9,300.0	1.22	250.02	8,859.9	1,686.4	-2,113.2	2,702.4	0.00	0.00	0.00	
9,400.0	1.22	250.02	8,959.9	1,685.7	-2,115.2	2,703.6	0.00	0.00	0.00	
9,500.0	1.22	250.02	9,059.9	1,685.0	-2,117.2	2,704.7	0.00	0.00	0.00	
9,600.0	1.22	250.02	9,159.8	1,684.3	-2,119.2	2,705.9	0.00	0.00	0.00	
9,700.0	1.22	250.02	9,259.8	1,683.5	-2,121.2	2,707.1	0.00	0.00	0.00	
Williams Fork										
9,735.2	1.22	250.02	9,295.0	1,683.3	-2,121.9	2,707.5	0.00	0.00	0.00	
9,800.0	1.22	250.02	9,359.8	1,682.8	-2,123.2	2,708.2	0.00	0.00	0.00	
9,900.0	1.22	250.02	9,459.8	1,682.1	-2,125.2	2,709.4	0.00	0.00	0.00	
10,000.0	1.22	250.02	9,559.7	1,681.4	-2,127.2	2,710.5	0.00	0.00	0.00	
10,100.0	1.22	250.02	9,659.7	1,680.6	-2,129.2	2,711.7	0.00	0.00	0.00	
10,200.0	1.22	250.02	9,759.7	1,679.9	-2,131.2	2,712.9	0.00	0.00	0.00	
10,300.0	1.22	250.02	9,859.7	1,679.2	-2,133.2	2,714.0	0.00	0.00	0.00	
10,400.0	1.22	250.02	9,959.7	1,678.5	-2,135.2	2,715.2	0.00	0.00	0.00	
10,500.0	1.22	250.02	10,059.6	1,677.7	-2,137.2	2,716.3	0.00	0.00	0.00	
10,600.0	1.22	250.02	10,159.6	1,677.0	-2,139.2	2,717.5	0.00	0.00	0.00	
10,700.0	1.22	250.02	10,259.6	1,676.3	-2,141.1	2,718.7	0.00	0.00	0.00	
10,800.0	1.22	250.02	10,359.6	1,675.5	-2,143.1	2,719.8	0.00	0.00	0.00	
10,900.0	1.22	250.02	10,459.5	1,674.8	-2,145.1	2,721.0	0.00	0.00	0.00	
11,000.0	1.22	250.02	10,559.5	1,674.1	-2,147.1	2,722.2	0.00	0.00	0.00	
11,100.0	1.22	250.02	10,659.5	1,673.4	-2,149.1	2,723.3	0.00	0.00	0.00	
11,200.0	1.22	250.02	10,759.5	1,672.6	-2,151.1	2,724.5	0.00	0.00	0.00	
11,300.0	1.22	250.02	10,859.4	1,671.9	-2,153.1	2,725.6	0.00	0.00	0.00	
11,400.0	1.22	250.02	10,959.4	1,671.2	-2,155.1	2,726.8	0.00	0.00	0.00	
11,500.0	1.22	250.02	11,059.4	1,670.5	-2,157.1	2,728.0	0.00	0.00	0.00	
11,600.0	1.22	250.02	11,159.4	1,669.7	-2,159.1	2,729.1	0.00	0.00	0.00	
11,700.0	1.22	250.02	11,259.4	1,669.0	-2,161.1	2,730.3	0.00	0.00	0.00	
11,800.0	1.22	250.02	11,359.3	1,668.3	-2,163.1	2,731.4	0.00	0.00	0.00	
11,900.0	1.22	250.02	11,459.3	1,667.6	-2,165.1	2,732.6	0.00	0.00	0.00	
12,000.0	1.22	250.02	11,559.3	1,666.8	-2,167.1	2,733.8	0.00	0.00	0.00	
12,100.0	1.22	250.02	11,659.3	1,666.1	-2,169.1	2,734.9	0.00	0.00	0.00	
12,200.0	1.22	250.02	11,759.2	1,665.4	-2,171.1	2,736.1	0.00	0.00	0.00	
12,300.0	1.22	250.02	11,859.2	1,664.7	-2,173.1	2,737.3	0.00	0.00	0.00	
12,400.0	1.22	250.02	11,959.2	1,663.9	-2,175.1	2,738.4	0.00	0.00	0.00	
12,500.0	1.22	250.02	12,059.2	1,663.2	-2,177.1	2,739.6	0.00	0.00	0.00	
12,600.0	1.22	250.02	12,159.2	1,662.5	-2,179.1	2,740.7	0.00	0.00	0.00	
12,700.0	1.22	250.02	12,259.1	1,661.8	-2,181.1	2,741.9	0.00	0.00	0.00	
12,800.0	1.22	250.02	12,359.1	1,661.0	-2,183.1	2,743.1	0.00	0.00	0.00	
Cameo										
12,844.9	1.22	250.02	12,404.0	1,660.7	-2,184.0	2,743.6	0.00	0.00	0.00	
12,900.0	1.22	250.02	12,459.1	1,660.3	-2,185.1	2,744.2	0.00	0.00	0.00	
13,000.0	1.22	250.02	12,559.1	1,659.6	-2,187.0	2,745.4	0.00	0.00	0.00	
13,100.0	1.22	250.02	12,659.0	1,658.9	-2,189.0	2,746.5	0.00	0.00	0.00	
13,200.0	1.22	250.02	12,759.0	1,658.1	-2,191.0	2,747.7	0.00	0.00	0.00	
13,300.0	1.22	250.02	12,859.0	1,657.4	-2,193.0	2,748.9	0.00	0.00	0.00	
Rollins										
13,395.0	1.22	250.02	12,954.0	1,656.7	-2,194.9	2,750.0	0.00	0.00	0.00	
13,400.0	1.22	250.02	12,959.0	1,656.7	-2,195.0	2,750.0	0.00	0.00	0.00	
13,500.0	1.22	250.02	13,059.0	1,656.0	-2,197.0	2,751.2	0.00	0.00	0.00	
13,600.0	1.22	250.02	13,158.9	1,655.2	-2,199.0	2,752.4	0.00	0.00	0.00	
13,700.0	1.22	250.02	13,258.9	1,654.5	-2,201.0	2,753.5	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24C-12 496 - Slot 24C-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24C-12 496	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)
13,800.0	1.22	250.02	13,358.9	1,653.8	-2,203.0	2,754.7	0.00	0.00	0.00
TD @ 13895.1' MD / 13454.0' TVD									
13,895.1	1.22	250.02	13,454.0	1,653.1	-2,204.9	2,755.8	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
24C-12 - OHCR - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	8,705.0	1,687.3	-2,110.9	14,434,881.49	2,452,758.33	39.713692	-108.111638
24C-12 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	13,454.0	1,653.1	-2,204.9	14,434,844.30	2,452,665.50	39.713598	-108.111972

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,924.7	2,800.0	Wasatch				
6,877.7	6,538.0	Wasatch G				
7,194.9	6,838.0	Fort Union				
9,145.1	8,705.0	Ohio Creek / TOG				
9,735.2	9,295.0	Williams Fork				
12,844.9	12,404.0	Cameo				
13,395.0	12,954.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
210.0	210.0	0.0	0.0	Build 3° / 100'
842.7	831.2	64.8	-81.1	EOB @ 18.98° Inc. / 308.64° Azm
8,512.4	8,083.8	1,622.4	-2,029.8	Drop 3° / 100'
9,145.1	8,705.0	1,687.3	-2,110.9	EOD @ Vertical / Build 1.5° / 100'
9,226.2	8,786.1	1,687.0	-2,111.7	EOB @ 1.22° Inc. / 250.02° Azm
13,895.1	13,454.0	1,653.1	-2,204.9	TD @ 13895.1' MD / 13454.0' TVD