

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 24D-12 496
Wellbore: Wellbore #1
Design: Design #2
Latitude: 39.709045
Longitude: -108.104077
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 - 24D-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	
220.0	0.00	0.00	220.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
486.7	8.00	320.00	485.8	14.2	-11.9	3.00	320.00	17.7	EOB @ 8.00° Inc. / 320.00° Azm / Build 3° / 100'
841.1	18.07	303.52	830.7	63.6	-73.8	3.00	-28.48	96.3	EOB @ 18.07° Inc. / 303.52° Azm
8498.6	18.07	303.52	8110.7	1375.1	-2053.6	0.00	0.00	2470.2	Drop 3° / 100'
9100.8	0.00	0.00	8703.0	1427.1	-2132.1	3.00	180.00	2564.4	EOD @ Vertical / Build 1.5° / 100'
9181.9	1.22	250.02	8784.1	1426.8	-2132.9	1.50	250.02	2564.9	EOB @ 1.22° Inc. / 250.02° Azm
13850.9	1.22	250.02	13452.0	1392.9	-2226.0	0.00	0.00	2625.9	TD @ 13850.9' MD / 13452.0' TVD

FORMATION TOP DETAILS

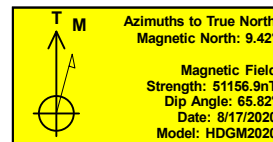
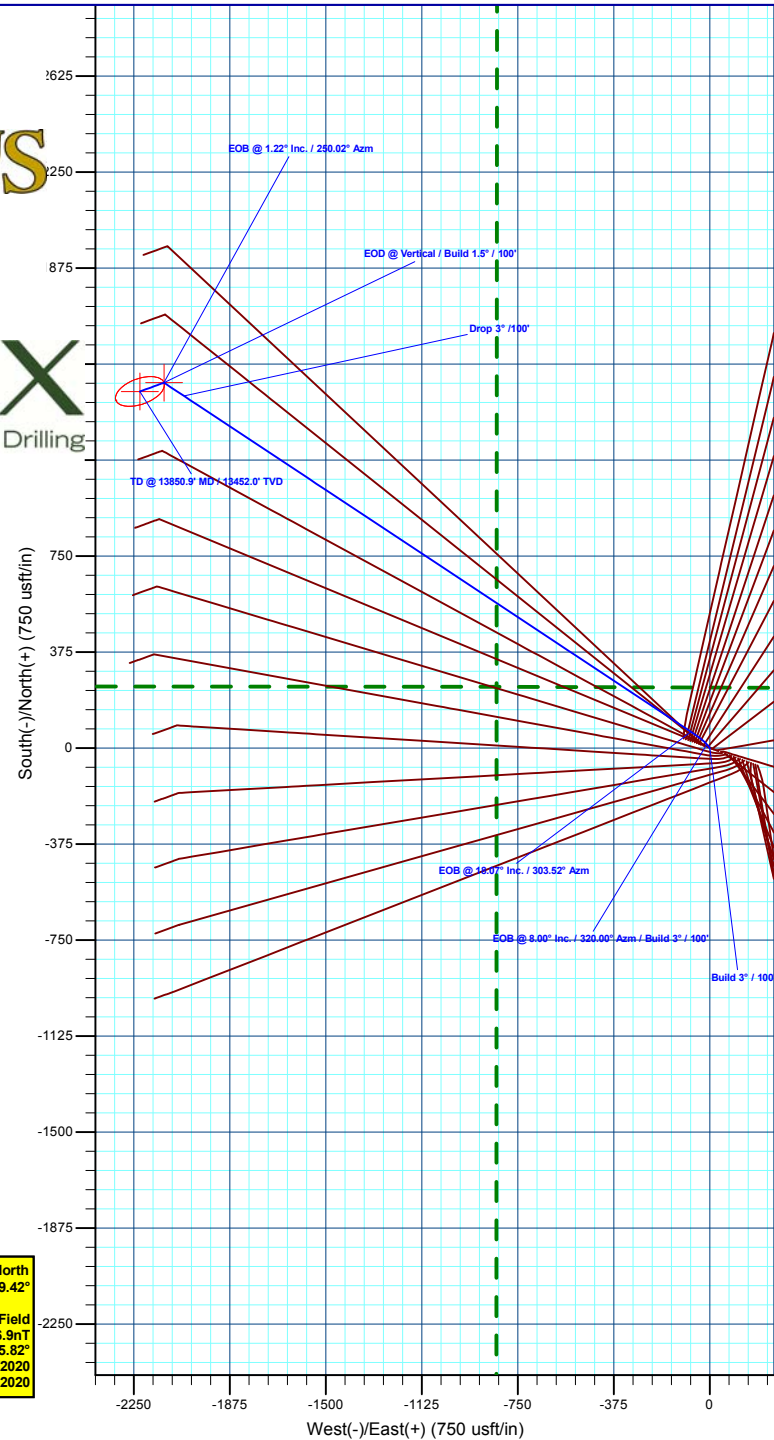
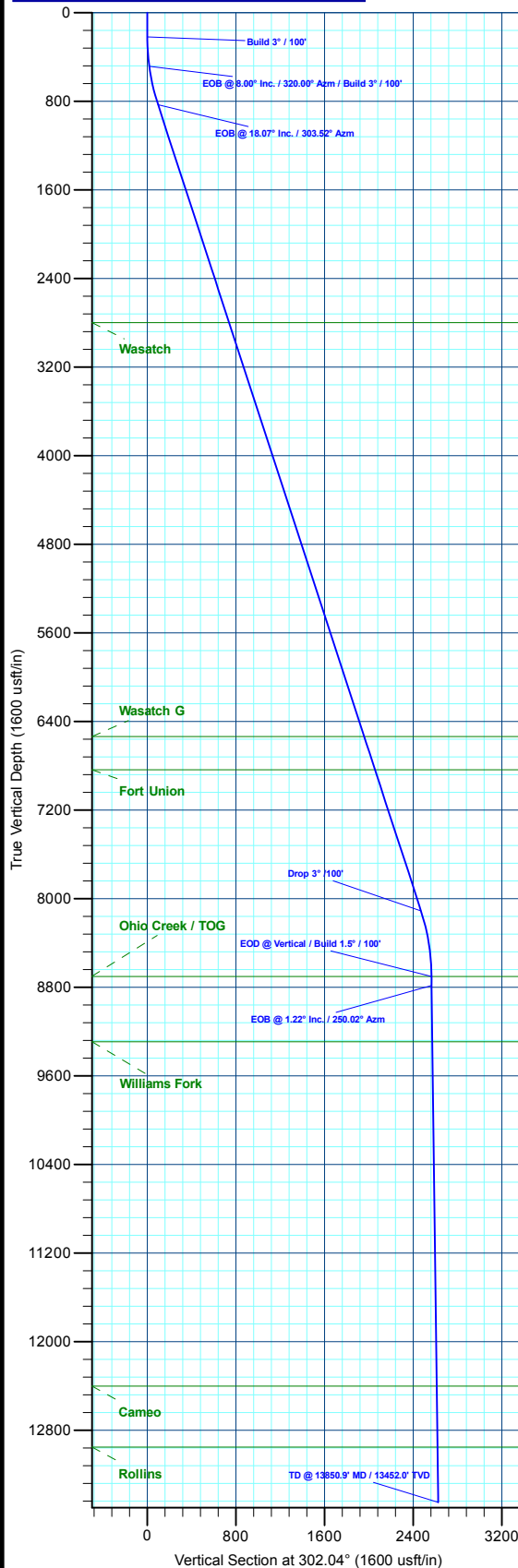
TVDPath	MDPath	Formation
2800.0	2912.5	Wasatch
6537.0	6843.3	Wasatch G
6837.0	7158.8	Fort Union
8703.0	9100.8	Ohio Creek / TOG
9293.0	9690.9	Williams Fork
12402.0	12800.6	Cameo
12952.0	13350.7	Rollins

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
24D-12 - OHCR8703.0	1427.1	-2132.1	14434615.19	2452762.73	39.712961	-108.111653	
24D-12 - PBH13452.0	1392.9	-2226.0	14434578.00	2452669.90	39.712867	-108.111987	

WELL DETAILS: ELU A18 FED 24D-12 496

+N/-S	+E/-W	Ground Level : 8029.0	Latitude	Longitude
0.0	0.0	Northing 14433257.72 Easting 2454939.77	39.709045	-108.104077



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

Created By: Will Jircik

Date: 13:56, May 18 2022



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 24D-12 496 - Slot 24D-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 24D-12 496 - Slot 24D-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 24D-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 24D-12 496 - Slot 24D-12					
Well Position	+N/-S	-23.2 usft	Northing:	14,433,257.72 usft	Latitude:	39.709045
	+E/-W	34.6 usft	Easting:	2,454,939.77 usft	Longitude:	-108.104078
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	302.04	

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	
220.0	0.00	0.00	220.0	0.0	0.0	0.00	0.00	0.00	0.00	
486.7	8.00	320.00	485.8	14.2	-11.9	3.00	3.00	0.00	320.00	
841.1	18.07	303.52	830.7	63.6	-73.8	3.00	2.84	-4.65	-28.48	
8,498.6	18.07	303.52	8,110.7	1,375.1	-2,053.6	0.00	0.00	0.00	0.00	
9,100.8	0.00	0.00	8,703.0	1,427.1	-2,132.1	3.00	-3.00	0.00	180.00	24D-12 - OHCR
9,181.9	1.22	250.02	8,784.1	1,426.8	-2,132.9	1.50	1.50	-135.59	250.02	
13,850.9	1.22	250.02	13,452.0	1,392.9	-2,226.0	0.00	0.00	0.00	0.00	24D-12 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24D-12 496 - Slot 24D-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 24D-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'									
220.0	0.00	0.00	220.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	2.40	320.00	300.0	1.3	-1.1	1.6	3.00	3.00	0.00
400.0	5.40	320.00	399.7	6.5	-5.4	8.1	3.00	3.00	0.00
EOB @ 8.00° Inc. / 320.00° Azm / Build 3° / 100'									
486.7	8.00	320.00	485.8	14.2	-11.9	17.7	3.00	3.00	0.00
500.0	8.35	318.69	499.0	15.7	-13.2	19.5	3.00	2.65	-9.85
600.0	11.11	311.56	597.6	27.5	-25.2	36.0	3.00	2.75	-7.13
700.0	13.96	307.27	695.2	41.2	-42.0	57.5	3.00	2.85	-4.29
800.0	16.87	304.43	791.6	56.7	-63.6	84.0	3.00	2.90	-2.84
EOB @ 18.07° Inc. / 303.52° Azm									
841.1	18.07	303.52	830.7	63.6	-73.8	96.3	3.00	2.93	-2.21
900.0	18.07	303.52	886.8	73.7	-89.0	114.6	0.00	0.00	0.00
1,000.0	18.07	303.52	981.8	90.8	-114.9	145.6	0.00	0.00	0.00
1,100.0	18.07	303.52	1,076.9	108.0	-140.7	176.6	0.00	0.00	0.00
1,200.0	18.07	303.52	1,172.0	125.1	-166.6	207.6	0.00	0.00	0.00
1,300.0	18.07	303.52	1,267.0	142.2	-192.4	238.6	0.00	0.00	0.00
1,400.0	18.07	303.52	1,362.1	159.3	-218.3	269.6	0.00	0.00	0.00
1,500.0	18.07	303.52	1,457.2	176.5	-244.2	300.6	0.00	0.00	0.00
1,600.0	18.07	303.52	1,552.2	193.6	-270.0	331.6	0.00	0.00	0.00
1,700.0	18.07	303.52	1,647.3	210.7	-295.9	362.6	0.00	0.00	0.00
1,800.0	18.07	303.52	1,742.4	227.9	-321.7	393.6	0.00	0.00	0.00
1,900.0	18.07	303.52	1,837.5	245.0	-347.6	424.6	0.00	0.00	0.00
2,000.0	18.07	303.52	1,932.5	262.1	-373.4	455.6	0.00	0.00	0.00
2,100.0	18.07	303.52	2,027.6	279.2	-399.3	486.6	0.00	0.00	0.00
2,200.0	18.07	303.52	2,122.7	296.4	-425.1	517.6	0.00	0.00	0.00
2,300.0	18.07	303.52	2,217.7	313.5	-451.0	548.6	0.00	0.00	0.00
2,400.0	18.07	303.52	2,312.8	330.6	-476.8	579.6	0.00	0.00	0.00
2,500.0	18.07	303.52	2,407.9	347.7	-502.7	610.6	0.00	0.00	0.00
2,600.0	18.07	303.52	2,502.9	364.9	-528.5	641.6	0.00	0.00	0.00
2,700.0	18.07	303.52	2,598.0	382.0	-554.4	672.6	0.00	0.00	0.00
2,800.0	18.07	303.52	2,693.1	399.1	-580.2	703.6	0.00	0.00	0.00
2,900.0	18.07	303.52	2,788.2	416.2	-606.1	734.6	0.00	0.00	0.00
Wasatch									
2,912.5	18.07	303.52	2,800.0	418.4	-609.3	738.5	0.00	0.00	0.00
3,000.0	18.07	303.52	2,883.2	433.4	-632.0	765.6	0.00	0.00	0.00
3,100.0	18.07	303.52	2,978.3	450.5	-657.8	796.6	0.00	0.00	0.00
3,200.0	18.07	303.52	3,073.4	467.6	-683.7	827.6	0.00	0.00	0.00
3,300.0	18.07	303.52	3,168.4	484.8	-709.5	858.6	0.00	0.00	0.00
3,400.0	18.07	303.52	3,263.5	501.9	-735.4	889.6	0.00	0.00	0.00
3,500.0	18.07	303.52	3,358.6	519.0	-761.2	920.6	0.00	0.00	0.00
3,600.0	18.07	303.52	3,453.6	536.1	-787.1	951.6	0.00	0.00	0.00
3,700.0	18.07	303.52	3,548.7	553.3	-812.9	982.6	0.00	0.00	0.00
3,800.0	18.07	303.52	3,643.8	570.4	-838.8	1,013.6	0.00	0.00	0.00
3,900.0	18.07	303.52	3,738.9	587.5	-864.6	1,044.6	0.00	0.00	0.00
4,000.0	18.07	303.52	3,833.9	604.6	-890.5	1,075.6	0.00	0.00	0.00
4,100.0	18.07	303.52	3,929.0	621.8	-916.3	1,106.6	0.00	0.00	0.00
4,200.0	18.07	303.52	4,024.1	638.9	-942.2	1,137.6	0.00	0.00	0.00
4,300.0	18.07	303.52	4,119.1	656.0	-968.1	1,168.6	0.00	0.00	0.00
4,400.0	18.07	303.52	4,214.2	673.1	-993.9	1,199.6	0.00	0.00	0.00
4,500.0	18.07	303.52	4,309.3	690.3	-1,019.8	1,230.6	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24D-12 496 - Slot 24D-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 24D-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)
4,600.0	18.07	303.52	4,404.3	707.4	-1,045.6	1,261.6	0.00	0.00	0.00
4,700.0	18.07	303.52	4,499.4	724.5	-1,071.5	1,292.6	0.00	0.00	0.00
4,800.0	18.07	303.52	4,594.5	741.6	-1,097.3	1,323.6	0.00	0.00	0.00
4,900.0	18.07	303.52	4,689.5	758.8	-1,123.2	1,354.6	0.00	0.00	0.00
5,000.0	18.07	303.52	4,784.6	775.9	-1,149.0	1,385.6	0.00	0.00	0.00
5,100.0	18.07	303.52	4,879.7	793.0	-1,174.9	1,416.6	0.00	0.00	0.00
5,200.0	18.07	303.52	4,974.8	810.2	-1,200.7	1,447.6	0.00	0.00	0.00
5,300.0	18.07	303.52	5,069.8	827.3	-1,226.6	1,478.6	0.00	0.00	0.00
5,400.0	18.07	303.52	5,164.9	844.4	-1,252.4	1,509.6	0.00	0.00	0.00
5,500.0	18.07	303.52	5,260.0	861.5	-1,278.3	1,540.6	0.00	0.00	0.00
5,600.0	18.07	303.52	5,355.0	878.7	-1,304.2	1,571.6	0.00	0.00	0.00
5,700.0	18.07	303.52	5,450.1	895.8	-1,330.0	1,602.6	0.00	0.00	0.00
5,800.0	18.07	303.52	5,545.2	912.9	-1,355.9	1,633.6	0.00	0.00	0.00
5,900.0	18.07	303.52	5,640.2	930.0	-1,381.7	1,664.6	0.00	0.00	0.00
6,000.0	18.07	303.52	5,735.3	947.2	-1,407.6	1,695.6	0.00	0.00	0.00
6,100.0	18.07	303.52	5,830.4	964.3	-1,433.4	1,726.6	0.00	0.00	0.00
6,200.0	18.07	303.52	5,925.5	981.4	-1,459.3	1,757.7	0.00	0.00	0.00
6,300.0	18.07	303.52	6,020.5	998.5	-1,485.1	1,788.7	0.00	0.00	0.00
6,400.0	18.07	303.52	6,115.6	1,015.7	-1,511.0	1,819.7	0.00	0.00	0.00
6,500.0	18.07	303.52	6,210.7	1,032.8	-1,536.8	1,850.7	0.00	0.00	0.00
6,600.0	18.07	303.52	6,305.7	1,049.9	-1,562.7	1,881.7	0.00	0.00	0.00
6,700.0	18.07	303.52	6,400.8	1,067.1	-1,588.5	1,912.7	0.00	0.00	0.00
6,800.0	18.07	303.52	6,495.9	1,084.2	-1,614.4	1,943.7	0.00	0.00	0.00
Wasatch G									
6,843.3	18.07	303.52	6,537.0	1,091.6	-1,625.6	1,957.1	0.00	0.00	0.00
6,900.0	18.07	303.52	6,590.9	1,101.3	-1,640.3	1,974.7	0.00	0.00	0.00
7,000.0	18.07	303.52	6,686.0	1,118.4	-1,666.1	2,005.7	0.00	0.00	0.00
7,100.0	18.07	303.52	6,781.1	1,135.6	-1,692.0	2,036.7	0.00	0.00	0.00
Fort Union									
7,158.8	18.07	303.52	6,837.0	1,145.6	-1,707.2	2,054.9	0.00	0.00	0.00
7,200.0	18.07	303.52	6,876.2	1,152.7	-1,717.8	2,067.7	0.00	0.00	0.00
7,300.0	18.07	303.52	6,971.2	1,169.8	-1,743.7	2,098.7	0.00	0.00	0.00
7,400.0	18.07	303.52	7,066.3	1,186.9	-1,769.5	2,129.7	0.00	0.00	0.00
7,500.0	18.07	303.52	7,161.4	1,204.1	-1,795.4	2,160.7	0.00	0.00	0.00
7,600.0	18.07	303.52	7,256.4	1,221.2	-1,821.2	2,191.7	0.00	0.00	0.00
7,700.0	18.07	303.52	7,351.5	1,238.3	-1,847.1	2,222.7	0.00	0.00	0.00
7,800.0	18.07	303.52	7,446.6	1,255.4	-1,872.9	2,253.7	0.00	0.00	0.00
7,900.0	18.07	303.52	7,541.6	1,272.6	-1,898.8	2,284.7	0.00	0.00	0.00
8,000.0	18.07	303.52	7,636.7	1,289.7	-1,924.6	2,315.7	0.00	0.00	0.00
8,100.0	18.07	303.52	7,731.8	1,306.8	-1,950.5	2,346.7	0.00	0.00	0.00
8,200.0	18.07	303.52	7,826.9	1,324.0	-1,976.4	2,377.7	0.00	0.00	0.00
8,300.0	18.07	303.52	7,921.9	1,341.1	-2,002.2	2,408.7	0.00	0.00	0.00
8,400.0	18.07	303.52	8,017.0	1,358.2	-2,028.1	2,439.7	0.00	0.00	0.00
Drop 3° /100'									
8,498.6	18.07	303.52	8,110.7	1,375.1	-2,053.6	2,470.2	0.00	0.00	0.00
8,500.0	18.02	303.52	8,112.1	1,375.3	-2,053.9	2,470.7	3.00	-3.00	0.00
8,600.0	15.02	303.52	8,207.9	1,391.0	-2,077.6	2,499.1	3.00	-3.00	0.00
8,700.0	12.02	303.52	8,305.1	1,403.9	-2,097.1	2,522.5	3.00	-3.00	0.00
8,800.0	9.02	303.52	8,403.4	1,414.0	-2,112.3	2,540.7	3.00	-3.00	0.00
8,900.0	6.02	303.52	8,502.6	1,421.3	-2,123.3	2,553.8	3.00	-3.00	0.00
9,000.0	3.02	303.52	8,602.2	1,425.6	-2,129.8	2,561.7	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100° - Ohio Creek / TOG									
9,100.8	0.00	0.00	8,703.0	1,427.1	-2,132.1	2,564.4	3.00	-3.00	56.03

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24D-12 496 - Slot 24D-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 24D-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									
9,181.9	1.22	250.02	8,784.1	1,426.8	-2,132.9	2,564.9	1.50	1.50	-135.59
9,200.0	1.22	250.02	8,802.2	1,426.7	-2,133.2	2,565.1	0.00	0.00	0.00
9,300.0	1.22	250.02	8,902.2	1,425.9	-2,135.2	2,566.4	0.00	0.00	0.00
9,400.0	1.22	250.02	9,002.1	1,425.2	-2,137.2	2,567.8	0.00	0.00	0.00
9,500.0	1.22	250.02	9,102.1	1,424.5	-2,139.2	2,569.1	0.00	0.00	0.00
9,600.0	1.22	250.02	9,202.1	1,423.8	-2,141.2	2,570.4	0.00	0.00	0.00
Williams Fork									
9,690.9	1.22	250.02	9,293.0	1,423.1	-2,143.0	2,571.6	0.00	0.00	0.00
9,700.0	1.22	250.02	9,302.1	1,423.0	-2,143.2	2,571.7	0.00	0.00	0.00
9,800.0	1.22	250.02	9,402.1	1,422.3	-2,145.2	2,573.0	0.00	0.00	0.00
9,900.0	1.22	250.02	9,502.0	1,421.6	-2,147.2	2,574.3	0.00	0.00	0.00
10,000.0	1.22	250.02	9,602.0	1,420.9	-2,149.2	2,575.6	0.00	0.00	0.00
10,100.0	1.22	250.02	9,702.0	1,420.1	-2,151.2	2,576.9	0.00	0.00	0.00
10,200.0	1.22	250.02	9,802.0	1,419.4	-2,153.2	2,578.2	0.00	0.00	0.00
10,300.0	1.22	250.02	9,901.9	1,418.7	-2,155.2	2,579.5	0.00	0.00	0.00
10,400.0	1.22	250.02	10,001.9	1,418.0	-2,157.2	2,580.8	0.00	0.00	0.00
10,500.0	1.22	250.02	10,101.9	1,417.2	-2,159.2	2,582.1	0.00	0.00	0.00
10,600.0	1.22	250.02	10,201.9	1,416.5	-2,161.2	2,583.4	0.00	0.00	0.00
10,700.0	1.22	250.02	10,301.9	1,415.8	-2,163.2	2,584.7	0.00	0.00	0.00
10,800.0	1.22	250.02	10,401.8	1,415.1	-2,165.2	2,586.1	0.00	0.00	0.00
10,900.0	1.22	250.02	10,501.8	1,414.3	-2,167.1	2,587.4	0.00	0.00	0.00
11,000.0	1.22	250.02	10,601.8	1,413.6	-2,169.1	2,588.7	0.00	0.00	0.00
11,100.0	1.22	250.02	10,701.8	1,412.9	-2,171.1	2,590.0	0.00	0.00	0.00
11,200.0	1.22	250.02	10,801.7	1,412.2	-2,173.1	2,591.3	0.00	0.00	0.00
11,300.0	1.22	250.02	10,901.7	1,411.4	-2,175.1	2,592.6	0.00	0.00	0.00
11,400.0	1.22	250.02	11,001.7	1,410.7	-2,177.1	2,593.9	0.00	0.00	0.00
11,500.0	1.22	250.02	11,101.7	1,410.0	-2,179.1	2,595.2	0.00	0.00	0.00
11,600.0	1.22	250.02	11,201.6	1,409.2	-2,181.1	2,596.5	0.00	0.00	0.00
11,700.0	1.22	250.02	11,301.6	1,408.5	-2,183.1	2,597.8	0.00	0.00	0.00
11,800.0	1.22	250.02	11,401.6	1,407.8	-2,185.1	2,599.1	0.00	0.00	0.00
11,900.0	1.22	250.02	11,501.6	1,407.1	-2,187.1	2,600.4	0.00	0.00	0.00
12,000.0	1.22	250.02	11,601.6	1,406.3	-2,189.1	2,601.7	0.00	0.00	0.00
12,100.0	1.22	250.02	11,701.5	1,405.6	-2,191.1	2,603.0	0.00	0.00	0.00
12,200.0	1.22	250.02	11,801.5	1,404.9	-2,193.1	2,604.3	0.00	0.00	0.00
12,300.0	1.22	250.02	11,901.5	1,404.2	-2,195.1	2,605.7	0.00	0.00	0.00
12,400.0	1.22	250.02	12,001.5	1,403.4	-2,197.1	2,607.0	0.00	0.00	0.00
12,500.0	1.22	250.02	12,101.4	1,402.7	-2,199.1	2,608.3	0.00	0.00	0.00
12,600.0	1.22	250.02	12,201.4	1,402.0	-2,201.1	2,609.6	0.00	0.00	0.00
12,700.0	1.22	250.02	12,301.4	1,401.3	-2,203.1	2,610.9	0.00	0.00	0.00
12,800.0	1.22	250.02	12,401.4	1,400.5	-2,205.1	2,612.2	0.00	0.00	0.00
Cameo									
12,800.6	1.22	250.02	12,402.0	1,400.5	-2,205.1	2,612.2	0.00	0.00	0.00
12,900.0	1.22	250.02	12,501.4	1,399.8	-2,207.1	2,613.5	0.00	0.00	0.00
13,000.0	1.22	250.02	12,601.3	1,399.1	-2,209.1	2,614.8	0.00	0.00	0.00
13,100.0	1.22	250.02	12,701.3	1,398.4	-2,211.1	2,616.1	0.00	0.00	0.00
13,200.0	1.22	250.02	12,801.3	1,397.6	-2,213.0	2,617.4	0.00	0.00	0.00
13,300.0	1.22	250.02	12,901.3	1,396.9	-2,215.0	2,618.7	0.00	0.00	0.00
Rollins									
13,350.7	1.22	250.02	12,952.0	1,396.5	-2,216.1	2,619.4	0.00	0.00	0.00
13,400.0	1.22	250.02	13,001.2	1,396.2	-2,217.0	2,620.0	0.00	0.00	0.00
13,500.0	1.22	250.02	13,101.2	1,395.5	-2,219.0	2,621.3	0.00	0.00	0.00
13,600.0	1.22	250.02	13,201.2	1,394.7	-2,221.0	2,622.6	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24D-12 496 - Slot 24D-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 24D-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)	
13,700.0	1.22	250.02	13,301.2	1,394.0	-2,223.0	2,623.9	0.00	0.00	0.00	
13,800.0	1.22	250.02	13,401.2	1,393.3	-2,225.0	2,625.3	0.00	0.00	0.00	
TD @ 13850.9' MD / 13452.0' TVD										
13,850.9	1.22	250.02	13,452.0	1,392.9	-2,226.0	2,625.9	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	
24D-12 - OHCR - hit/miss target - Shape - Point	0.00	0.00	8,703.0	1,427.1	-2,132.1	14,434,615.19	2,452,762.73	39.712961	-108.111653	
24D-12 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	13,452.0	1,392.9	-2,226.0	14,434,578.00	2,452,669.90	39.712867	-108.111987	

Formations							
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)		
2,912.5	2,800.0	Wasatch					
6,843.3	6,537.0	Wasatch G					
7,158.8	6,837.0	Fort Union					
9,100.8	8,703.0	Ohio Creek / TOG					
9,690.9	9,293.0	Williams Fork					
12,800.6	12,402.0	Cameo					
13,350.7	12,952.0	Rollins					

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
220.0	220.0	0.0	0.0	Build 3° / 100'	
486.7	485.8	14.2	-11.9	EOB @ 8.00° Inc. / 320.00° Azm / Build 3° / 100'	
841.1	830.7	63.6	-73.8	EOB @ 18.07° Inc. / 303.52° Azm	
8,498.6	8,110.7	1,375.1	-2,053.6	Drop 3° / 100'	
9,100.8	8,703.0	1,427.1	-2,132.1	EOD @ Vertical / Build 1.5° / 100'	
9,181.9	8,784.1	1,426.8	-2,132.9	EOB @ 1.22° Inc. / 250.02° Azm	
13,850.9	13,452.0	1,392.9	-2,226.0	TD @ 13850.9' MD / 13452.0' TVD	