

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 24D-12 496
Wellbore: Wellbore #1
Design: Design #4
Latitude: 39.709036
Longitude: -108.104047
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

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3489.0	3562.8	Wasatch
6544.0	6698.4	Wasatch G
6844.0	7006.3	Fort Union
8715.0	8919.0	Ohio Creek
9304.0	9508.1	Williams Fork
12402.0	12606.9	Cameo
13082.0	13287.0	Rollins

SECTION DETAILS

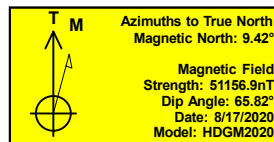
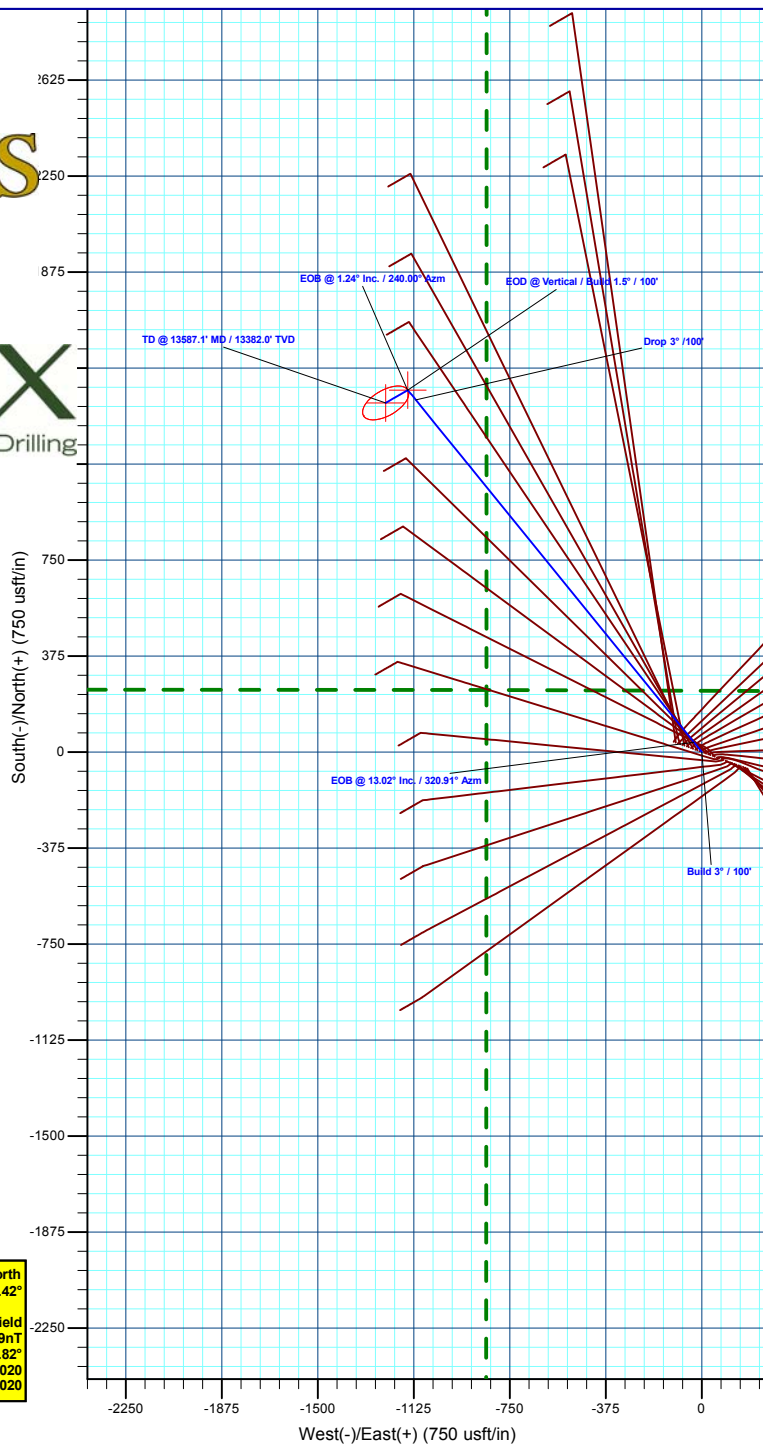
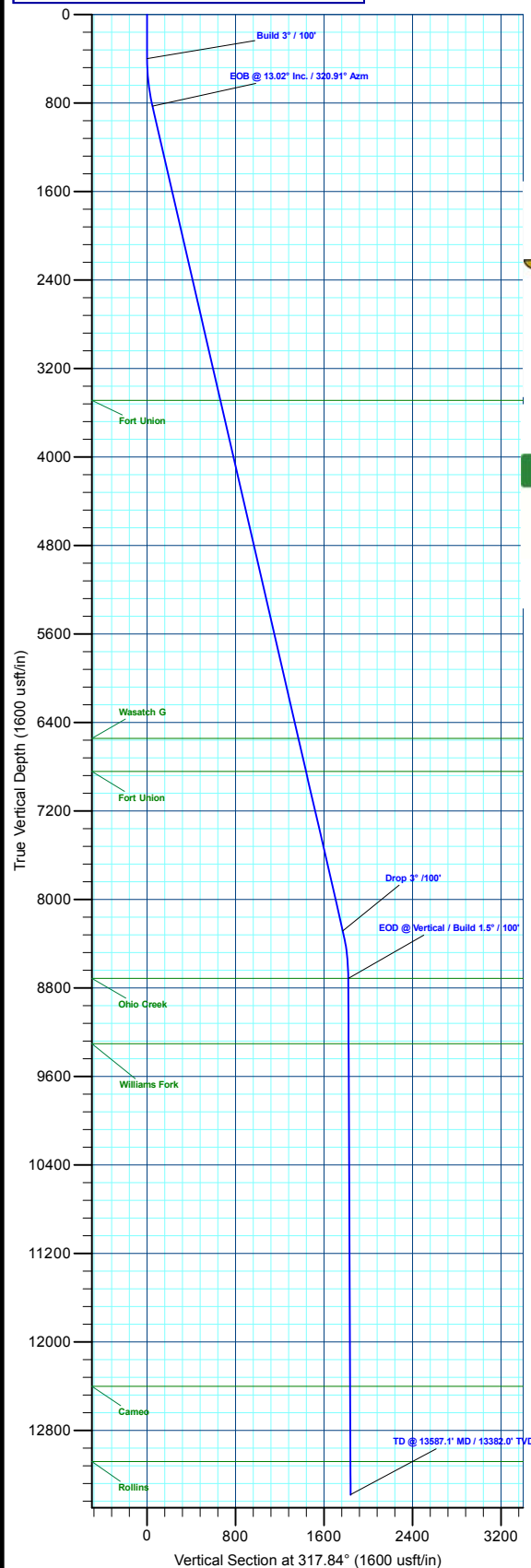
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	EOB @ 13.02° Inc. / 320.91° Azm
833.9	13.02	320.91	830.1	38.1	-30.9	3.00	320.91	49.0	Drop 3° / 100'
8485.2	13.02	320.91	8284.9	1375.6	-1117.4	0.00	0.00	1769.7	EOD @ Vertical / Build 1.5° / 100'
8919.0	0.00	0.00	8715.0	1413.7	-1148.4	3.00	180.00	1818.7	EOB @ 1.24° Inc. / 240.00° Azm
9001.6	1.24	240.00	8797.6	1413.3	-1149.2	1.50	240.00	1818.9	TD @ 13587.1' MD / 13382.0' TVD
13587.1	1.24	240.00	13382.0	1363.7	-1235.0	0.00	0.00	1839.8	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
24D-12 - OHCR	8715.0	1413.7	-1148.4	14434630.77	2453754.84	39.712916	-108.108128
24D-12 - PBHL	13382.0	1363.7	-1235.0	14434578.00	2453669.90	39.712779	-108.108436

WELL DETAILS: ELU A18 FED 24D-12 496

Ground Level : 8029.0		Latitude	Longitude
+N/-S	+E/-W		
0.0	0.0	39.709036	-108.104047
Northing		Easting	
14433254.90		2454948.30	
		24D-12	



Plan: Design #4 (ELU A18 FED 24D-12 496/Wellbore #1)

Created By: Will Jircik

Date: 3:25, October 05 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

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

Wellbore #1

Plan: Design #4

KLX Well Planning Report

05 October, 2023



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 #4		

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	-26.3 usft	Northing:	14,433,254.90 usft	Latitude:	39.709036
	+E/-W	43.1 usft	Easting:	2,454,948.30 usft	Longitude:	-108.104048
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 #4				
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	317.84	

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
833.9	13.02	320.91	830.1	38.1	-30.9	3.00	3.00	0.00	320.91	
8,485.2	13.02	320.91	8,284.9	1,375.6	-1,117.4	0.00	0.00	0.00	0.00	
8,919.0	0.00	0.00	8,715.0	1,413.7	-1,148.4	3.00	-3.00	0.00	180.00	24D-12 - OHCR
9,001.6	1.24	240.00	8,797.6	1,413.3	-1,149.2	1.50	1.50	-145.34	240.00	
13,587.1	1.24	240.00	13,382.0	1,363.7	-1,235.0	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 #4		

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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 3° / 100'									
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	3.00	320.91	500.0	2.0	-1.7	2.6	3.00	3.00	0.00
600.0	6.00	320.91	599.6	8.1	-6.6	10.4	3.00	3.00	0.00
700.0	9.00	320.91	698.8	18.3	-14.8	23.5	3.00	3.00	0.00
800.0	12.00	320.91	797.1	32.4	-26.3	41.7	3.00	3.00	0.00
EOB @ 13.02° Inc. / 320.91° Azm									
833.9	13.02	320.91	830.1	38.1	-30.9	49.0	3.00	3.00	0.00
900.0	13.02	320.91	894.6	49.6	-40.3	63.9	0.00	0.00	0.00
1,000.0	13.02	320.91	992.0	67.1	-54.5	86.4	0.00	0.00	0.00
1,100.0	13.02	320.91	1,089.4	84.6	-68.7	108.9	0.00	0.00	0.00
1,200.0	13.02	320.91	1,186.9	102.1	-82.9	131.3	0.00	0.00	0.00
1,300.0	13.02	320.91	1,284.3	119.6	-97.1	153.8	0.00	0.00	0.00
1,400.0	13.02	320.91	1,381.7	137.1	-111.3	176.3	0.00	0.00	0.00
1,500.0	13.02	320.91	1,479.2	154.5	-125.5	198.8	0.00	0.00	0.00
1,600.0	13.02	320.91	1,576.6	172.0	-139.7	221.3	0.00	0.00	0.00
1,700.0	13.02	320.91	1,674.0	189.5	-153.9	243.8	0.00	0.00	0.00
1,800.0	13.02	320.91	1,771.5	207.0	-168.1	266.3	0.00	0.00	0.00
1,900.0	13.02	320.91	1,868.9	224.5	-182.3	288.8	0.00	0.00	0.00
2,000.0	13.02	320.91	1,966.3	241.9	-196.5	311.3	0.00	0.00	0.00
2,100.0	13.02	320.91	2,063.7	259.4	-210.7	333.7	0.00	0.00	0.00
2,200.0	13.02	320.91	2,161.2	276.9	-224.9	356.2	0.00	0.00	0.00
2,300.0	13.02	320.91	2,258.6	294.4	-239.1	378.7	0.00	0.00	0.00
2,400.0	13.02	320.91	2,356.0	311.9	-253.3	401.2	0.00	0.00	0.00
2,500.0	13.02	320.91	2,453.5	329.3	-267.5	423.7	0.00	0.00	0.00
2,600.0	13.02	320.91	2,550.9	346.8	-281.7	446.2	0.00	0.00	0.00
2,700.0	13.02	320.91	2,648.3	364.3	-295.9	468.7	0.00	0.00	0.00
2,800.0	13.02	320.91	2,745.8	381.8	-310.1	491.2	0.00	0.00	0.00
2,900.0	13.02	320.91	2,843.2	399.3	-324.3	513.7	0.00	0.00	0.00
3,000.0	13.02	320.91	2,940.6	416.8	-338.5	536.2	0.00	0.00	0.00
3,100.0	13.02	320.91	3,038.1	434.2	-352.7	558.6	0.00	0.00	0.00
3,200.0	13.02	320.91	3,135.5	451.7	-366.9	581.1	0.00	0.00	0.00
3,300.0	13.02	320.91	3,232.9	469.2	-381.1	603.6	0.00	0.00	0.00
3,400.0	13.02	320.91	3,330.3	486.7	-395.3	626.1	0.00	0.00	0.00
3,500.0	13.02	320.91	3,427.8	504.2	-409.5	648.6	0.00	0.00	0.00
Wasatch									
3,562.8	13.02	320.91	3,489.0	515.1	-418.5	662.7	0.00	0.00	0.00
3,600.0	13.02	320.91	3,525.2	521.6	-423.7	671.1	0.00	0.00	0.00
3,700.0	13.02	320.91	3,622.6	539.1	-437.9	693.6	0.00	0.00	0.00
3,800.0	13.02	320.91	3,720.1	556.6	-452.1	716.1	0.00	0.00	0.00
3,900.0	13.02	320.91	3,817.5	574.1	-466.3	738.6	0.00	0.00	0.00
4,000.0	13.02	320.91	3,914.9	591.6	-480.5	761.0	0.00	0.00	0.00
4,100.0	13.02	320.91	4,012.4	609.0	-494.7	783.5	0.00	0.00	0.00
4,200.0	13.02	320.91	4,109.8	626.5	-508.9	806.0	0.00	0.00	0.00
4,300.0	13.02	320.91	4,207.2	644.0	-523.1	828.5	0.00	0.00	0.00
4,400.0	13.02	320.91	4,304.7	661.5	-537.3	851.0	0.00	0.00	0.00
4,500.0	13.02	320.91	4,402.1	679.0	-551.5	873.5	0.00	0.00	0.00
4,600.0	13.02	320.91	4,499.5	696.4	-565.7	896.0	0.00	0.00	0.00
4,700.0	13.02	320.91	4,596.9	713.9	-579.9	918.5	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 #4		

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	13.02	320.91	4,694.4	731.4	-594.1	941.0	0.00	0.00	0.00
4,900.0	13.02	320.91	4,791.8	748.9	-608.3	963.5	0.00	0.00	0.00
5,000.0	13.02	320.91	4,889.2	766.4	-622.5	985.9	0.00	0.00	0.00
5,100.0	13.02	320.91	4,986.7	783.9	-636.7	1,008.4	0.00	0.00	0.00
5,200.0	13.02	320.91	5,084.1	801.3	-650.9	1,030.9	0.00	0.00	0.00
5,300.0	13.02	320.91	5,181.5	818.8	-665.1	1,053.4	0.00	0.00	0.00
5,400.0	13.02	320.91	5,279.0	836.3	-679.3	1,075.9	0.00	0.00	0.00
5,500.0	13.02	320.91	5,376.4	853.8	-693.5	1,098.4	0.00	0.00	0.00
5,600.0	13.02	320.91	5,473.8	871.3	-707.7	1,120.9	0.00	0.00	0.00
5,700.0	13.02	320.91	5,571.3	888.7	-721.9	1,143.4	0.00	0.00	0.00
5,800.0	13.02	320.91	5,668.7	906.2	-736.1	1,165.9	0.00	0.00	0.00
5,900.0	13.02	320.91	5,766.1	923.7	-750.3	1,188.3	0.00	0.00	0.00
6,000.0	13.02	320.91	5,863.5	941.2	-764.5	1,210.8	0.00	0.00	0.00
6,100.0	13.02	320.91	5,961.0	958.7	-778.7	1,233.3	0.00	0.00	0.00
6,200.0	13.02	320.91	6,058.4	976.1	-792.9	1,255.8	0.00	0.00	0.00
6,300.0	13.02	320.91	6,155.8	993.6	-807.1	1,278.3	0.00	0.00	0.00
6,400.0	13.02	320.91	6,253.3	1,011.1	-821.3	1,300.8	0.00	0.00	0.00
6,500.0	13.02	320.91	6,350.7	1,028.6	-835.5	1,323.3	0.00	0.00	0.00
6,600.0	13.02	320.91	6,448.1	1,046.1	-849.7	1,345.8	0.00	0.00	0.00
Wasatch G									
6,698.4	13.02	320.91	6,544.0	1,063.3	-863.7	1,367.9	0.00	0.00	0.00
6,700.0	13.02	320.91	6,545.6	1,063.6	-863.9	1,368.3	0.00	0.00	0.00
6,800.0	13.02	320.91	6,643.0	1,081.0	-878.2	1,390.8	0.00	0.00	0.00
6,900.0	13.02	320.91	6,740.4	1,098.5	-892.4	1,413.2	0.00	0.00	0.00
7,000.0	13.02	320.91	6,837.9	1,116.0	-906.6	1,435.7	0.00	0.00	0.00
Fort Union									
7,006.3	13.02	320.91	6,844.0	1,117.1	-907.4	1,437.2	0.00	0.00	0.00
7,100.0	13.02	320.91	6,935.3	1,133.5	-920.8	1,458.2	0.00	0.00	0.00
7,200.0	13.02	320.91	7,032.7	1,151.0	-935.0	1,480.7	0.00	0.00	0.00
7,300.0	13.02	320.91	7,130.1	1,168.4	-949.2	1,503.2	0.00	0.00	0.00
7,400.0	13.02	320.91	7,227.6	1,185.9	-963.4	1,525.7	0.00	0.00	0.00
7,500.0	13.02	320.91	7,325.0	1,203.4	-977.6	1,548.2	0.00	0.00	0.00
7,600.0	13.02	320.91	7,422.4	1,220.9	-991.8	1,570.7	0.00	0.00	0.00
7,700.0	13.02	320.91	7,519.9	1,238.4	-1,006.0	1,593.2	0.00	0.00	0.00
7,800.0	13.02	320.91	7,617.3	1,255.8	-1,020.2	1,615.6	0.00	0.00	0.00
7,900.0	13.02	320.91	7,714.7	1,273.3	-1,034.4	1,638.1	0.00	0.00	0.00
8,000.0	13.02	320.91	7,812.2	1,290.8	-1,048.6	1,660.6	0.00	0.00	0.00
8,100.0	13.02	320.91	7,909.6	1,308.3	-1,062.8	1,683.1	0.00	0.00	0.00
8,200.0	13.02	320.91	8,007.0	1,325.8	-1,077.0	1,705.6	0.00	0.00	0.00
8,300.0	13.02	320.91	8,104.5	1,343.3	-1,091.2	1,728.1	0.00	0.00	0.00
8,400.0	13.02	320.91	8,201.9	1,360.7	-1,105.4	1,750.6	0.00	0.00	0.00
Drop 3° /100'									
8,485.2	13.02	320.91	8,284.9	1,375.6	-1,117.4	1,769.7	0.00	0.00	0.00
8,500.0	12.57	320.91	8,299.3	1,378.2	-1,119.5	1,773.0	3.00	-3.00	0.00
8,600.0	9.57	320.91	8,397.5	1,393.1	-1,131.6	1,792.2	3.00	-3.00	0.00
8,700.0	6.57	320.91	8,496.5	1,404.0	-1,140.5	1,806.2	3.00	-3.00	0.00
8,800.0	3.57	320.91	8,596.1	1,410.8	-1,146.0	1,815.0	3.00	-3.00	0.00
8,900.0	0.57	320.91	8,696.0	1,413.6	-1,148.3	1,818.6	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,919.0	0.00	0.00	8,715.0	1,413.7	-1,148.4	1,818.7	3.00	-3.00	0.00
EOB @ 1.24° Inc. / 240.00° Azm									
9,001.6	1.24	240.00	8,797.6	1,413.3	-1,149.2	1,818.9	1.50	1.50	0.00
9,100.0	1.24	240.00	8,895.9	1,412.2	-1,151.0	1,819.4	0.00	0.00	0.00
9,200.0	1.24	240.00	8,995.9	1,411.1	-1,152.9	1,819.8	0.00	0.00	0.00

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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 #4		

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)
9,300.0	1.24	240.00	9,095.9	1,410.0	-1,154.7	1,820.3	0.00	0.00	0.00
9,400.0	1.24	240.00	9,195.9	1,409.0	-1,156.6	1,820.7	0.00	0.00	0.00
9,500.0	1.24	240.00	9,295.9	1,407.9	-1,158.5	1,821.2	0.00	0.00	0.00
Williams Fork									
9,508.1	1.24	240.00	9,304.0	1,407.8	-1,158.6	1,821.2	0.00	0.00	0.00
9,600.0	1.24	240.00	9,395.8	1,406.8	-1,160.4	1,821.6	0.00	0.00	0.00
9,700.0	1.24	240.00	9,495.8	1,405.7	-1,162.2	1,822.1	0.00	0.00	0.00
9,800.0	1.24	240.00	9,595.8	1,404.6	-1,164.1	1,822.6	0.00	0.00	0.00
9,900.0	1.24	240.00	9,695.8	1,403.6	-1,166.0	1,823.0	0.00	0.00	0.00
10,000.0	1.24	240.00	9,795.7	1,402.5	-1,167.8	1,823.5	0.00	0.00	0.00
10,100.0	1.24	240.00	9,895.7	1,401.4	-1,169.7	1,823.9	0.00	0.00	0.00
10,200.0	1.24	240.00	9,995.7	1,400.3	-1,171.6	1,824.4	0.00	0.00	0.00
10,300.0	1.24	240.00	10,095.7	1,399.2	-1,173.5	1,824.8	0.00	0.00	0.00
10,400.0	1.24	240.00	10,195.6	1,398.1	-1,175.3	1,825.3	0.00	0.00	0.00
10,500.0	1.24	240.00	10,295.6	1,397.1	-1,177.2	1,825.7	0.00	0.00	0.00
10,600.0	1.24	240.00	10,395.6	1,396.0	-1,179.1	1,826.2	0.00	0.00	0.00
10,700.0	1.24	240.00	10,495.6	1,394.9	-1,181.0	1,826.7	0.00	0.00	0.00
10,800.0	1.24	240.00	10,595.6	1,393.8	-1,182.8	1,827.1	0.00	0.00	0.00
10,900.0	1.24	240.00	10,695.5	1,392.7	-1,184.7	1,827.6	0.00	0.00	0.00
11,000.0	1.24	240.00	10,795.5	1,391.7	-1,186.6	1,828.0	0.00	0.00	0.00
11,100.0	1.24	240.00	10,895.5	1,390.6	-1,188.4	1,828.5	0.00	0.00	0.00
11,200.0	1.24	240.00	10,995.5	1,389.5	-1,190.3	1,828.9	0.00	0.00	0.00
11,300.0	1.24	240.00	11,095.4	1,388.4	-1,192.2	1,829.4	0.00	0.00	0.00
11,400.0	1.24	240.00	11,195.4	1,387.3	-1,194.1	1,829.8	0.00	0.00	0.00
11,500.0	1.24	240.00	11,295.4	1,386.3	-1,195.9	1,830.3	0.00	0.00	0.00
11,600.0	1.24	240.00	11,395.4	1,385.2	-1,197.8	1,830.8	0.00	0.00	0.00
11,700.0	1.24	240.00	11,495.3	1,384.1	-1,199.7	1,831.2	0.00	0.00	0.00
11,800.0	1.24	240.00	11,595.3	1,383.0	-1,201.5	1,831.7	0.00	0.00	0.00
11,900.0	1.24	240.00	11,695.3	1,381.9	-1,203.4	1,832.1	0.00	0.00	0.00
12,000.0	1.24	240.00	11,795.3	1,380.9	-1,205.3	1,832.6	0.00	0.00	0.00
12,100.0	1.24	240.00	11,895.2	1,379.8	-1,207.2	1,833.0	0.00	0.00	0.00
12,200.0	1.24	240.00	11,995.2	1,378.7	-1,209.0	1,833.5	0.00	0.00	0.00
12,300.0	1.24	240.00	12,095.2	1,377.6	-1,210.9	1,833.9	0.00	0.00	0.00
12,400.0	1.24	240.00	12,195.2	1,376.5	-1,212.8	1,834.4	0.00	0.00	0.00
12,500.0	1.24	240.00	12,295.2	1,375.5	-1,214.6	1,834.9	0.00	0.00	0.00
12,600.0	1.24	240.00	12,395.1	1,374.4	-1,216.5	1,835.3	0.00	0.00	0.00
Cameo									
12,606.9	1.24	240.00	12,402.0	1,374.3	-1,216.6	1,835.3	0.00	0.00	0.00
12,700.0	1.24	240.00	12,495.1	1,373.3	-1,218.4	1,835.8	0.00	0.00	0.00
12,800.0	1.24	240.00	12,595.1	1,372.2	-1,220.3	1,836.2	0.00	0.00	0.00
12,900.0	1.24	240.00	12,695.1	1,371.1	-1,222.1	1,836.7	0.00	0.00	0.00
13,000.0	1.24	240.00	12,795.0	1,370.1	-1,224.0	1,837.1	0.00	0.00	0.00
13,100.0	1.24	240.00	12,895.0	1,369.0	-1,225.9	1,837.6	0.00	0.00	0.00
13,200.0	1.24	240.00	12,995.0	1,367.9	-1,227.7	1,838.0	0.00	0.00	0.00
Rollins									
13,287.0	1.24	240.00	13,082.0	1,367.0	-1,229.4	1,838.4	0.00	0.00	0.00
13,300.0	1.24	240.00	13,095.0	1,366.8	-1,229.6	1,838.5	0.00	0.00	0.00
13,400.0	1.24	240.00	13,194.9	1,365.7	-1,231.5	1,839.0	0.00	0.00	0.00
13,500.0	1.24	240.00	13,294.9	1,364.6	-1,233.4	1,839.4	0.00	0.00	0.00
TD @ 13587.1' MD / 13382.0' TVD									
13,587.1	1.24	240.00	13,382.0	1,363.7	-1,235.0	1,839.8	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 #4		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
24D-12 - OHCR	0.00	0.00	8,715.0	1,413.7	-1,148.4	14,434,630.77	2,453,754.85	39.712916	-108.108128
- plan hits target center									
- Point									
24D-12 - PBHL	0.00	0.00	13,382.0	1,363.7	-1,235.0	14,434,578.00	2,453,669.90	39.712779	-108.108436
- plan hits target center									
- Ellipse (radii L100.0 W50.0 on 240.00 azi)									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,562.8	3,489.0	Wasatch				
6,698.4	6,544.0	Wasatch G				
7,006.3	6,844.0	Fort Union				
8,919.0	8,715.0	Ohio Creek				
9,508.1	9,304.0	Williams Fork				
12,606.9	12,402.0	Cameo				
13,287.0	13,082.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
400.0	400.0	0.0	0.0	Build 3° / 100'
833.9	830.1	38.1	-30.9	EOB @ 13.02° Inc. / 320.91° Azm
8,485.2	8,284.9	1,375.6	-1,117.4	Drop 3° / 100'
8,919.0	8,715.0	1,413.7	-1,148.4	EOD @ Vertical / Build 1.5° / 100'
9,001.6	8,797.6	1,413.3	-1,149.2	EOB @ 1.24° Inc. / 240.00° Azm
13,587.1	13,382.0	1,363.7	-1,235.0	TD @ 13587.1' MD / 13382.0' TVD