

Project: Rio Blanco County, CO
 Site: ELU A18 495 Pad
 Well: ELU A18 FED 12C-18 495
 Wellbore: Wellbore #1
 Design: Design #2
 Latitude: 39.708919
 Longitude: -108.103626
 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 - 12C-18(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 8059.0usft (30')
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2800.0	2840.6	Wasatch
6489.0	6593.4	Wasatch G
6789.0	6896.5	Fort Union
8660.0	8797.8	Ohio Creek / TOG
9235.0	9373.0	Williams Fork
12391.0	12529.7	Cameo
12941.0	13079.8	Rollins

SECTION DETAILS

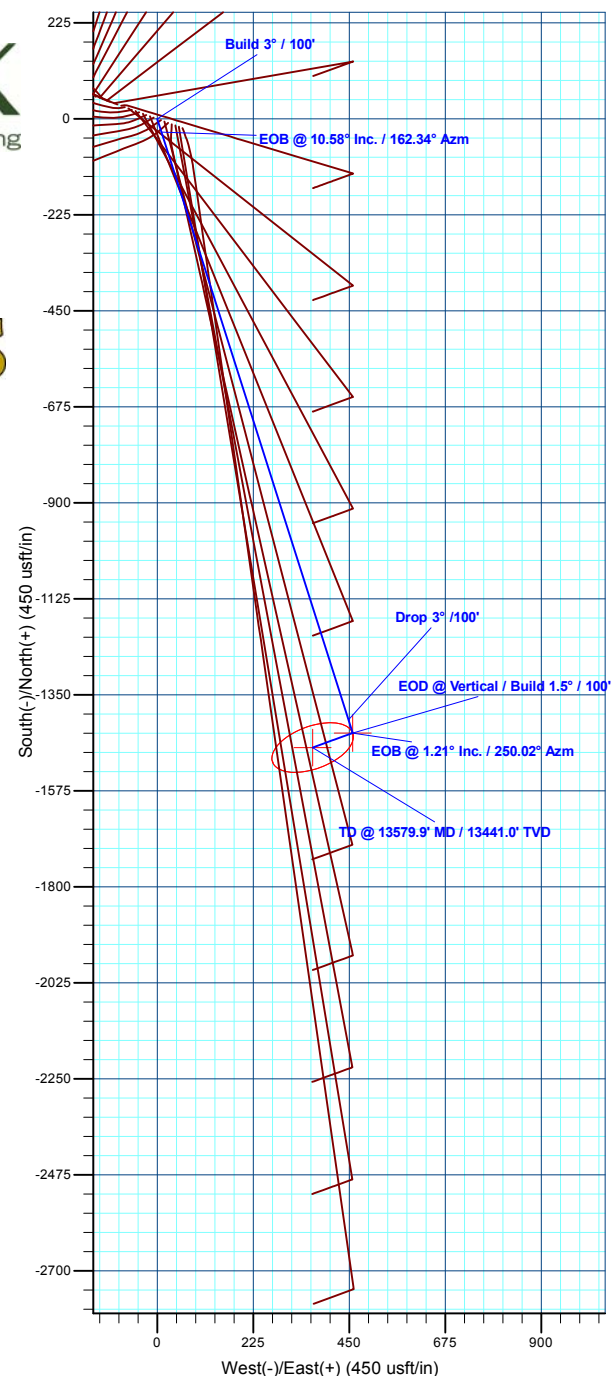
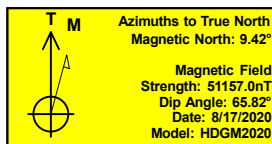
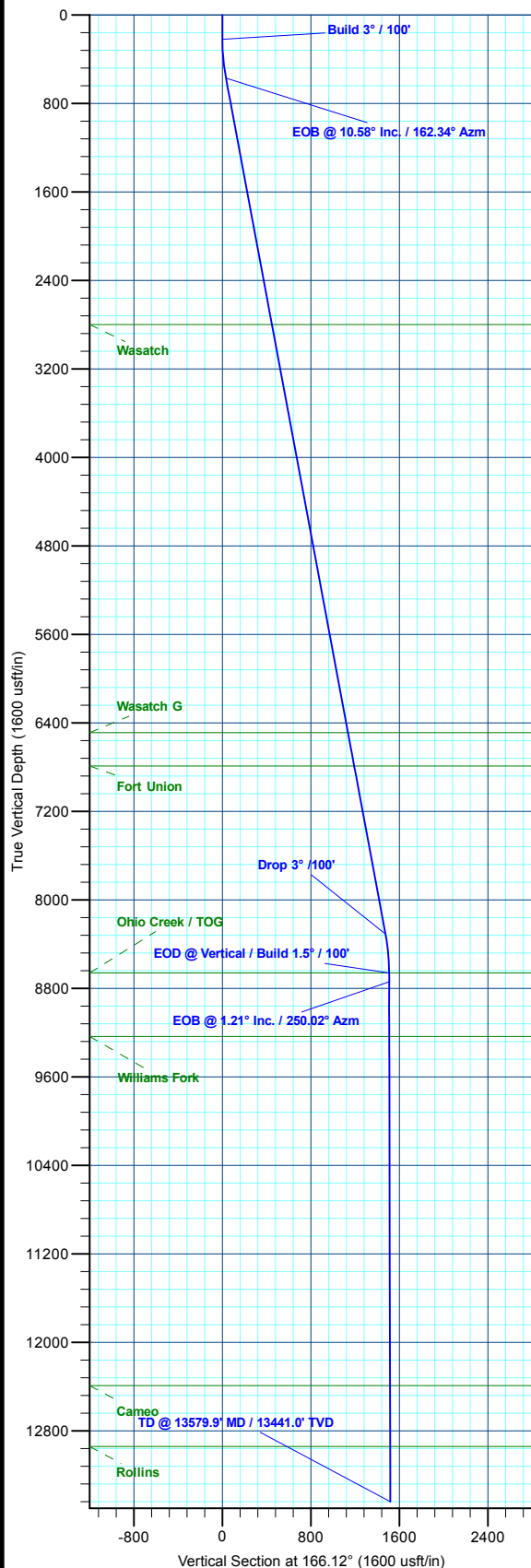
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
220.0	0.00	0.00	220.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
572.7	10.58	162.34	570.7	-30.9	9.8	3.00	162.34	32.4	EOB @ 10.58° Inc. / 162.34° Azm
8445.2	10.58	162.34	8309.3	-1408.3	448.3	0.00	0.00	1474.7	Drop 3° / 100'
8797.8	0.00	0.00	8660.0	-1439.2	458.1	3.00	180.00	1507.1	EOD @ Vertical / Build 1.5° / 100'
8878.4	1.21	250.02	8740.6	-1439.5	457.3	1.50	250.02	1507.2	EOB @ 1.21° Inc. / 250.02° Azm
13579.9	1.21	250.02	13441.0	-1473.4	364.2	0.00	0.00	1517.8	TD @ 13579.9' MD / 13441.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
12C-18 - OHCR	8660.0	-1439.2	458.1	14431792.19	2455572.53	39.704969	-108.101999
12C-18 - PBHL	13441.0	-1473.4	364.2	14431755.00	2455479.70	39.704875	-108.102333

WELL DETAILS: ELU A18 FED 12C-18 495

Ground Level : 8029.0							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude		
0.0	0.0	14433215.88	2455068.12	39.708919	-108.103626	12C-18	



Plan: Design #2 (ELU A18 FED 12C-18 495/Wellbore #1)

Created By: Will Jircik

Date: 10:50, May 18 2022



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 12C-18 495 - Slot 12C-18

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 12C-18 495 - Slot 12C-18
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 12C-18 495	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 12C-18 495 - Slot 12C-18					
Well Position	+N/-S	-69.2 usft	Northing:	14,433,215.88 usft	Latitude:	39.708919
	+E/-W	161.6 usft	Easting:	2,455,068.12 usft	Longitude:	-108.103627
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	51,157.00000000

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	166.12	

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	
572.7	10.58	162.34	570.7	-30.9	9.8	3.00	3.00	0.00	162.34	
8,445.2	10.58	162.34	8,309.3	-1,408.3	448.3	0.00	0.00	0.00	0.00	
8,797.8	0.00	0.00	8,660.0	-1,439.2	458.1	3.00	-3.00	0.00	180.00	12C-18 - OHCR
8,878.4	1.21	250.02	8,740.6	-1,439.5	457.3	1.50	1.50	-136.52	250.02	
13,579.9	1.21	250.02	13,441.0	-1,473.4	364.2	0.00	0.00	0.00	0.00	12C-18 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 12C-18 495 - Slot 12C-18
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 12C-18 495	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	162.34	300.0	-1.6	0.5	1.7	3.00	3.00	0.00
400.0	5.40	162.34	399.7	-8.1	2.6	8.5	3.00	3.00	0.00
500.0	8.40	162.34	499.0	-19.5	6.2	20.4	3.00	3.00	0.00
EOB @ 10.58° Inc. / 162.34° Azm									
572.7	10.58	162.34	570.7	-30.9	9.8	32.4	3.00	3.00	0.00
600.0	10.58	162.34	597.5	-35.7	11.4	37.4	0.00	0.00	0.00
700.0	10.58	162.34	695.8	-53.2	16.9	55.7	0.00	0.00	0.00
800.0	10.58	162.34	794.1	-70.7	22.5	74.0	0.00	0.00	0.00
900.0	10.58	162.34	892.4	-88.2	28.1	92.4	0.00	0.00	0.00
1,000.0	10.58	162.34	990.7	-105.7	33.6	110.7	0.00	0.00	0.00
1,100.0	10.58	162.34	1,089.0	-123.2	39.2	129.0	0.00	0.00	0.00
1,200.0	10.58	162.34	1,187.3	-140.7	44.8	147.3	0.00	0.00	0.00
1,300.0	10.58	162.34	1,285.6	-158.2	50.4	165.7	0.00	0.00	0.00
1,400.0	10.58	162.34	1,383.9	-175.7	55.9	184.0	0.00	0.00	0.00
1,500.0	10.58	162.34	1,482.2	-193.2	61.5	202.3	0.00	0.00	0.00
1,600.0	10.58	162.34	1,580.5	-210.7	67.1	220.6	0.00	0.00	0.00
1,700.0	10.58	162.34	1,678.8	-228.2	72.6	238.9	0.00	0.00	0.00
1,800.0	10.58	162.34	1,777.1	-245.7	78.2	257.3	0.00	0.00	0.00
1,900.0	10.58	162.34	1,875.4	-263.2	83.8	275.6	0.00	0.00	0.00
2,000.0	10.58	162.34	1,973.7	-280.7	89.3	293.9	0.00	0.00	0.00
2,100.0	10.58	162.34	2,072.0	-298.2	94.9	312.2	0.00	0.00	0.00
2,200.0	10.58	162.34	2,170.3	-315.7	100.5	330.5	0.00	0.00	0.00
2,300.0	10.58	162.34	2,268.6	-333.2	106.1	348.9	0.00	0.00	0.00
2,400.0	10.58	162.34	2,366.9	-350.6	111.6	367.2	0.00	0.00	0.00
2,500.0	10.58	162.34	2,465.2	-368.1	117.2	385.5	0.00	0.00	0.00
2,600.0	10.58	162.34	2,563.5	-385.6	122.8	403.8	0.00	0.00	0.00
2,700.0	10.58	162.34	2,661.8	-403.1	128.3	422.1	0.00	0.00	0.00
2,800.0	10.58	162.34	2,760.1	-420.6	133.9	440.5	0.00	0.00	0.00
Wasatch									
2,840.6	10.58	162.34	2,800.0	-427.7	136.2	447.9	0.00	0.00	0.00
2,900.0	10.58	162.34	2,858.4	-438.1	139.5	458.8	0.00	0.00	0.00
3,000.0	10.58	162.34	2,956.7	-455.6	145.0	477.1	0.00	0.00	0.00
3,100.0	10.58	162.34	3,055.0	-473.1	150.6	495.4	0.00	0.00	0.00
3,200.0	10.58	162.34	3,153.3	-490.6	156.2	513.8	0.00	0.00	0.00
3,300.0	10.58	162.34	3,251.6	-508.1	161.7	532.1	0.00	0.00	0.00
3,400.0	10.58	162.34	3,349.9	-525.6	167.3	550.4	0.00	0.00	0.00
3,500.0	10.58	162.34	3,448.2	-543.1	172.9	568.7	0.00	0.00	0.00
3,600.0	10.58	162.34	3,546.5	-560.6	178.5	587.0	0.00	0.00	0.00
3,700.0	10.58	162.34	3,644.8	-578.1	184.0	605.4	0.00	0.00	0.00
3,800.0	10.58	162.34	3,743.1	-595.6	189.6	623.7	0.00	0.00	0.00
3,900.0	10.58	162.34	3,841.4	-613.1	195.2	642.0	0.00	0.00	0.00
4,000.0	10.58	162.34	3,939.7	-630.6	200.7	660.3	0.00	0.00	0.00
4,100.0	10.58	162.34	4,038.0	-648.1	206.3	678.6	0.00	0.00	0.00
4,200.0	10.58	162.34	4,136.3	-665.6	211.9	697.0	0.00	0.00	0.00
4,300.0	10.58	162.34	4,234.6	-683.1	217.4	715.3	0.00	0.00	0.00
4,400.0	10.58	162.34	4,332.9	-700.6	223.0	733.6	0.00	0.00	0.00
4,500.0	10.58	162.34	4,431.2	-718.1	228.6	751.9	0.00	0.00	0.00
4,600.0	10.58	162.34	4,529.5	-735.6	234.1	770.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 12C-18 495 - Slot 12C-18
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 12C-18 495	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	10.58	162.34	4,627.8	-753.1	239.7	788.6	0.00	0.00	0.00
4,800.0	10.58	162.34	4,726.1	-770.5	245.3	806.9	0.00	0.00	0.00
4,900.0	10.58	162.34	4,824.4	-788.0	250.9	825.2	0.00	0.00	0.00
5,000.0	10.58	162.34	4,922.7	-805.5	256.4	843.5	0.00	0.00	0.00
5,100.0	10.58	162.34	5,021.0	-823.0	262.0	861.9	0.00	0.00	0.00
5,200.0	10.58	162.34	5,119.3	-840.5	267.6	880.2	0.00	0.00	0.00
5,300.0	10.58	162.34	5,217.6	-858.0	273.1	898.5	0.00	0.00	0.00
5,400.0	10.58	162.34	5,315.9	-875.5	278.7	916.8	0.00	0.00	0.00
5,500.0	10.58	162.34	5,414.2	-893.0	284.3	935.1	0.00	0.00	0.00
5,600.0	10.58	162.34	5,512.5	-910.5	289.8	953.5	0.00	0.00	0.00
5,700.0	10.58	162.34	5,610.8	-928.0	295.4	971.8	0.00	0.00	0.00
5,800.0	10.58	162.34	5,709.1	-945.5	301.0	990.1	0.00	0.00	0.00
5,900.0	10.58	162.34	5,807.4	-963.0	306.5	1,008.4	0.00	0.00	0.00
6,000.0	10.58	162.34	5,905.7	-980.5	312.1	1,026.7	0.00	0.00	0.00
6,100.0	10.58	162.34	6,004.0	-998.0	317.7	1,045.1	0.00	0.00	0.00
6,200.0	10.58	162.34	6,102.3	-1,015.5	323.3	1,063.4	0.00	0.00	0.00
6,300.0	10.58	162.34	6,200.6	-1,033.0	328.8	1,081.7	0.00	0.00	0.00
6,400.0	10.58	162.34	6,298.9	-1,050.5	334.4	1,100.0	0.00	0.00	0.00
6,500.0	10.58	162.34	6,397.2	-1,068.0	340.0	1,118.4	0.00	0.00	0.00
Wasatch G									
6,593.4	10.58	162.34	6,489.0	-1,084.3	345.2	1,135.5	0.00	0.00	0.00
6,600.0	10.58	162.34	6,495.5	-1,085.5	345.5	1,136.7	0.00	0.00	0.00
6,700.0	10.58	162.34	6,593.8	-1,103.0	351.1	1,155.0	0.00	0.00	0.00
6,800.0	10.58	162.34	6,692.1	-1,120.5	356.7	1,173.3	0.00	0.00	0.00
Fort Union									
6,898.5	10.58	162.34	6,789.0	-1,137.7	362.2	1,191.4	0.00	0.00	0.00
6,900.0	10.58	162.34	6,790.4	-1,138.0	362.2	1,191.6	0.00	0.00	0.00
7,000.0	10.58	162.34	6,888.7	-1,155.5	367.8	1,210.0	0.00	0.00	0.00
7,100.0	10.58	162.34	6,987.0	-1,173.0	373.4	1,228.3	0.00	0.00	0.00
7,200.0	10.58	162.34	7,085.3	-1,190.5	379.0	1,246.6	0.00	0.00	0.00
7,300.0	10.58	162.34	7,183.6	-1,207.9	384.5	1,264.9	0.00	0.00	0.00
7,400.0	10.58	162.34	7,281.9	-1,225.4	390.1	1,283.2	0.00	0.00	0.00
7,500.0	10.58	162.34	7,380.2	-1,242.9	395.7	1,301.6	0.00	0.00	0.00
7,600.0	10.58	162.34	7,478.5	-1,260.4	401.2	1,319.9	0.00	0.00	0.00
7,700.0	10.58	162.34	7,576.8	-1,277.9	406.8	1,338.2	0.00	0.00	0.00
7,800.0	10.58	162.34	7,675.1	-1,295.4	412.4	1,356.5	0.00	0.00	0.00
7,900.0	10.58	162.34	7,773.4	-1,312.9	417.9	1,374.8	0.00	0.00	0.00
8,000.0	10.58	162.34	7,871.7	-1,330.4	423.5	1,393.2	0.00	0.00	0.00
8,100.0	10.58	162.34	7,970.0	-1,347.9	429.1	1,411.5	0.00	0.00	0.00
8,200.0	10.58	162.34	8,068.3	-1,365.4	434.6	1,429.8	0.00	0.00	0.00
8,300.0	10.58	162.34	8,166.6	-1,382.9	440.2	1,448.1	0.00	0.00	0.00
8,400.0	10.58	162.34	8,264.9	-1,400.4	445.8	1,466.5	0.00	0.00	0.00
Drop 3° /100'									
8,445.2	10.58	162.34	8,309.3	-1,408.3	448.3	1,474.7	0.00	0.00	0.00
8,500.0	8.94	162.34	8,363.4	-1,417.2	451.1	1,484.0	3.00	-3.00	0.00
8,600.0	5.94	162.34	8,462.5	-1,429.5	455.0	1,496.9	3.00	-3.00	0.00
8,700.0	2.94	162.34	8,562.2	-1,436.9	457.4	1,504.6	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek / TOG									
8,797.8	0.00	0.00	8,660.0	-1,439.2	458.1	1,507.1	3.00	-3.00	-165.93
8,800.0	0.03	250.02	8,662.2	-1,439.2	458.1	1,507.1	1.50	1.50	-5,091.89
EOB @ 1.21° Inc. / 250.02° Azm									
8,878.4	1.21	250.02	8,740.6	-1,439.5	457.3	1,507.2	1.50	1.50	0.00
8,900.0	1.21	250.02	8,762.1	-1,439.7	456.9	1,507.3	0.00	0.00	0.00
9,000.0	1.21	250.02	8,862.1	-1,440.4	454.9	1,507.5	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 12C-18 495	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)
9,100.0	1.21	250.02	8,962.1	-1,441.1	453.0	1,507.7	0.00	0.00	0.00
9,200.0	1.21	250.02	9,062.1	-1,441.9	451.0	1,507.9	0.00	0.00	0.00
9,300.0	1.21	250.02	9,162.1	-1,442.6	449.0	1,508.2	0.00	0.00	0.00
Williams Fork									
9,373.0	1.21	250.02	9,235.0	-1,443.1	447.5	1,508.3	0.00	0.00	0.00
9,400.0	1.21	250.02	9,262.0	-1,443.3	447.0	1,508.4	0.00	0.00	0.00
9,500.0	1.21	250.02	9,362.0	-1,444.0	445.0	1,508.6	0.00	0.00	0.00
9,600.0	1.21	250.02	9,462.0	-1,444.7	443.0	1,508.8	0.00	0.00	0.00
9,700.0	1.21	250.02	9,562.0	-1,445.5	441.1	1,509.1	0.00	0.00	0.00
9,800.0	1.21	250.02	9,661.9	-1,446.2	439.1	1,509.3	0.00	0.00	0.00
9,900.0	1.21	250.02	9,761.9	-1,446.9	437.1	1,509.5	0.00	0.00	0.00
10,000.0	1.21	250.02	9,861.9	-1,447.6	435.1	1,509.7	0.00	0.00	0.00
10,100.0	1.21	250.02	9,961.9	-1,448.3	433.1	1,510.0	0.00	0.00	0.00
10,200.0	1.21	250.02	10,061.9	-1,449.1	431.2	1,510.2	0.00	0.00	0.00
10,300.0	1.21	250.02	10,161.8	-1,449.8	429.2	1,510.4	0.00	0.00	0.00
10,400.0	1.21	250.02	10,261.8	-1,450.5	427.2	1,510.6	0.00	0.00	0.00
10,500.0	1.21	250.02	10,361.8	-1,451.2	425.2	1,510.9	0.00	0.00	0.00
10,600.0	1.21	250.02	10,461.8	-1,451.9	423.2	1,511.1	0.00	0.00	0.00
10,700.0	1.21	250.02	10,561.7	-1,452.7	421.2	1,511.3	0.00	0.00	0.00
10,800.0	1.21	250.02	10,661.7	-1,453.4	419.3	1,511.5	0.00	0.00	0.00
10,900.0	1.21	250.02	10,761.7	-1,454.1	417.3	1,511.7	0.00	0.00	0.00
11,000.0	1.21	250.02	10,861.7	-1,454.8	415.3	1,512.0	0.00	0.00	0.00
11,100.0	1.21	250.02	10,961.7	-1,455.5	413.3	1,512.2	0.00	0.00	0.00
11,200.0	1.21	250.02	11,061.6	-1,456.3	411.3	1,512.4	0.00	0.00	0.00
11,300.0	1.21	250.02	11,161.6	-1,457.0	409.4	1,512.6	0.00	0.00	0.00
11,400.0	1.21	250.02	11,261.6	-1,457.7	407.4	1,512.9	0.00	0.00	0.00
11,500.0	1.21	250.02	11,361.6	-1,458.4	405.4	1,513.1	0.00	0.00	0.00
11,600.0	1.21	250.02	11,461.5	-1,459.1	403.4	1,513.3	0.00	0.00	0.00
11,700.0	1.21	250.02	11,561.5	-1,459.9	401.4	1,513.5	0.00	0.00	0.00
11,800.0	1.21	250.02	11,661.5	-1,460.6	399.4	1,513.8	0.00	0.00	0.00
11,900.0	1.21	250.02	11,761.5	-1,461.3	397.5	1,514.0	0.00	0.00	0.00
12,000.0	1.21	250.02	11,861.5	-1,462.0	395.5	1,514.2	0.00	0.00	0.00
12,100.0	1.21	250.02	11,961.4	-1,462.8	393.5	1,514.4	0.00	0.00	0.00
12,200.0	1.21	250.02	12,061.4	-1,463.5	391.5	1,514.7	0.00	0.00	0.00
12,300.0	1.21	250.02	12,161.4	-1,464.2	389.5	1,514.9	0.00	0.00	0.00
12,400.0	1.21	250.02	12,261.4	-1,464.9	387.6	1,515.1	0.00	0.00	0.00
12,500.0	1.21	250.02	12,361.3	-1,465.6	385.6	1,515.3	0.00	0.00	0.00
Cameo									
12,529.7	1.21	250.02	12,391.0	-1,465.8	385.0	1,515.4	0.00	0.00	0.00
12,600.0	1.21	250.02	12,461.3	-1,466.4	383.6	1,515.6	0.00	0.00	0.00
12,700.0	1.21	250.02	12,561.3	-1,467.1	381.6	1,515.8	0.00	0.00	0.00
12,800.0	1.21	250.02	12,661.3	-1,467.8	379.6	1,516.0	0.00	0.00	0.00
12,900.0	1.21	250.02	12,761.3	-1,468.5	377.6	1,516.2	0.00	0.00	0.00
13,000.0	1.21	250.02	12,861.2	-1,469.2	375.7	1,516.5	0.00	0.00	0.00
Rollins									
13,079.8	1.21	250.02	12,941.0	-1,469.8	374.1	1,516.6	0.00	0.00	0.00
13,100.0	1.21	250.02	12,961.2	-1,470.0	373.7	1,516.7	0.00	0.00	0.00
13,200.0	1.21	250.02	13,061.2	-1,470.7	371.7	1,516.9	0.00	0.00	0.00
13,300.0	1.21	250.02	13,161.2	-1,471.4	369.7	1,517.1	0.00	0.00	0.00
13,400.0	1.21	250.02	13,261.1	-1,472.1	367.7	1,517.3	0.00	0.00	0.00
13,500.0	1.21	250.02	13,361.1	-1,472.8	365.7	1,517.6	0.00	0.00	0.00
TD @ 13579.9' MD / 13441.0' TVD									
13,579.9	1.21	250.02	13,441.0	-1,473.4	364.2	1,517.8	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 12C-18 495 - Slot 12C-18
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 12C-18 495	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
12C-18 - OHCR	0.00	0.00	8,660.0	-1,439.2	458.1	14,431,792.19	2,455,572.53	39.704969	-108.101999
- plan hits target center									
- Point									
12C-18 - PBHL	0.00	0.00	13,441.0	-1,473.4	364.2	14,431,755.00	2,455,479.70	39.704875	-108.102333
- plan hits target center									
- Ellipse (radii L100.0 W50.0 on 250.00 azi)									

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,840.6	2,800.0	Wasatch			
6,593.4	6,489.0	Wasatch G			
6,898.5	6,789.0	Fort Union			
8,797.8	8,660.0	Ohio Creek / TOG			
9,373.0	9,235.0	Williams Fork			
12,529.7	12,391.0	Cameo			
13,079.8	12,941.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
220.0	220.0	0.0	0.0	Build 3° / 100'
572.7	570.7	-30.9	9.8	EOB @ 10.58° Inc. / 162.34° Azm
8,445.2	8,309.3	-1,408.3	448.3	Drop 3° / 100'
8,797.8	8,660.0	-1,439.2	458.1	EOD @ Vertical / Build 1.5° / 100'
8,878.4	8,740.6	-1,439.5	457.3	EOB @ 1.21° Inc. / 250.02° Azm
13,579.9	13,441.0	-1,473.4	364.2	TD @ 13579.9' MD / 13441.0' TVD