

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 12B-18 495
Wellbore: Wellbore #1
Design: Design #4
Latitude: 39.708927
Longitude: -108.103656
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 - 12B-18(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8059.0usft (30)
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3326.0	3428.8	Wasatch
6541.0	6772.2	Wasatch G
6841.0	7084.2	Fort Union
8703.0	9006.4	Ohio Creek
9285.0	9588.6	Williams Fork
12405.0	12709.3	Cameo
13142.0	13446.4	Rollins

SECTION DETAILS

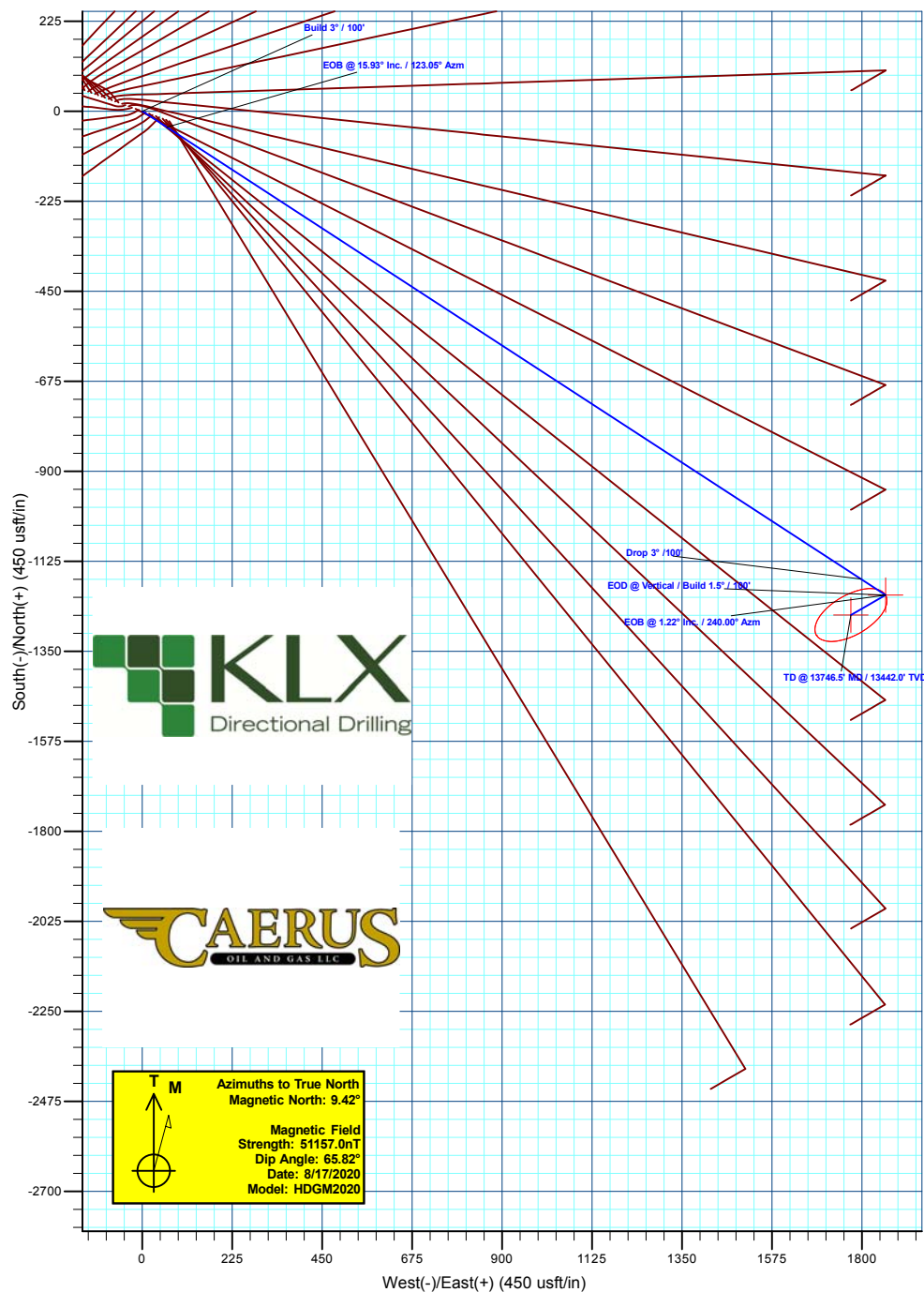
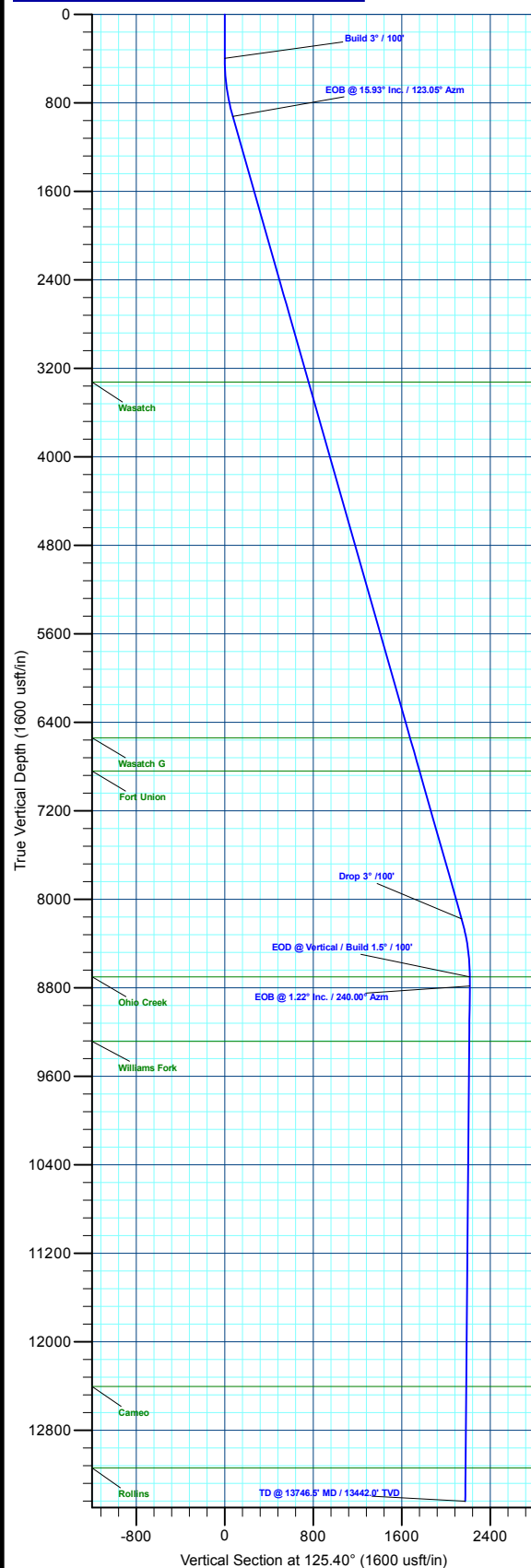
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
931.1	15.93	123.05	924.3	-40.0	61.5	3.00	123.05	73.3	EOB @ 15.93° Inc. / 123.05° Azm
8475.4	15.93	123.05	8178.7	-1169.3	1797.4	0.00	0.00	2142.5	Drop 3° / 100'
9006.4	0.00	0.00	8703.0	-1209.3	1858.9	3.00	180.00	2215.8	EOD @ Vertical / Build 1.5° / 100'
9087.7	1.22	240.00	8784.3	-1209.8	1858.2	1.50	240.00	2215.5	EOB @ 1.22° Inc. / 240.00° Azm
13746.5	1.22	240.00	13442.0	-1259.3	1772.3	0.00	0.00	2174.2	TD @ 13746.5' MD / 13442.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
12B-18 - OHCR	8703.0	-1209.3	1858.9	14432069.97	2456956.64	39.705608	-108.097052
12B-18 - PBHL	13442.0	-1259.3	1772.3	14432017.20	2456871.70	39.705471	-108.097360

WELL DETAILS: ELU A18 FED 12B-18 495

Ground Level : 8029.0							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	12B-18	
0.0	0.0	14433218.60	2455059.60	39.708927	-108.103656		



Plan: Design #4 (ELU A18 FED 12B-18 495/Wellbore #1)

Created By: Will Jircik

Date: 4:20, October 05 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

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

Wellbore #1

Plan: Design #4

KLX Well Planning Report

04 October, 2023



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 12B-18 495 - Slot 12B-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 12B-18 495	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 12B-18 495 - Slot 12B-18					
Well Position	+N/-S	-66.2 usft	Northing:	14,433,218.60 usft	Latitude:	39.708927
	+E/-W	153.1 usft	Easting:	2,455,059.60 usft	Longitude:	-108.103657
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 #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	125.40

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	
931.1	15.93	123.05	924.3	-40.0	61.5	3.00	3.00	0.00	123.05	
8,475.4	15.93	123.05	8,178.7	-1,169.3	1,797.4	0.00	0.00	0.00	0.00	
9,006.4	0.00	0.00	8,703.0	-1,209.3	1,858.9	3.00	-3.00	0.00	180.00	12B-18 - OHCR
9,087.7	1.22	240.00	8,784.3	-1,209.8	1,858.2	1.50	1.50	-147.62	240.00	
13,746.5	1.22	240.00	13,442.0	-1,259.3	1,772.3	0.00	0.00	0.00	0.00	12B-18 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 12B-18 495 - Slot 12B-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 12B-18 495	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	123.05	500.0	-1.4	2.2	2.6	3.00	3.00	0.00
600.0	6.00	123.05	599.6	-5.7	8.8	10.5	3.00	3.00	0.00
700.0	9.00	123.05	698.8	-12.8	19.7	23.5	3.00	3.00	0.00
800.0	12.00	123.05	797.1	-22.8	35.0	41.7	3.00	3.00	0.00
900.0	15.00	123.05	894.3	-35.5	54.5	65.0	3.00	3.00	0.00
EOB @ 15.93° Inc. / 123.05° Azm									
931.1	15.93	123.05	924.3	-40.0	61.5	73.3	3.00	3.00	0.00
1,000.0	15.93	123.05	990.5	-50.3	77.4	92.2	0.00	0.00	0.00
1,100.0	15.93	123.05	1,086.7	-65.3	100.4	119.6	0.00	0.00	0.00
1,200.0	15.93	123.05	1,182.9	-80.3	123.4	147.1	0.00	0.00	0.00
1,300.0	15.93	123.05	1,279.0	-95.2	146.4	174.5	0.00	0.00	0.00
1,400.0	15.93	123.05	1,375.2	-110.2	169.4	201.9	0.00	0.00	0.00
1,500.0	15.93	123.05	1,471.3	-125.2	192.4	229.3	0.00	0.00	0.00
1,600.0	15.93	123.05	1,567.5	-140.1	215.4	256.8	0.00	0.00	0.00
1,700.0	15.93	123.05	1,663.6	-155.1	238.4	284.2	0.00	0.00	0.00
1,800.0	15.93	123.05	1,759.8	-170.1	261.4	311.6	0.00	0.00	0.00
1,900.0	15.93	123.05	1,856.0	-185.0	284.4	339.1	0.00	0.00	0.00
2,000.0	15.93	123.05	1,952.1	-200.0	307.5	366.5	0.00	0.00	0.00
2,100.0	15.93	123.05	2,048.3	-215.0	330.5	393.9	0.00	0.00	0.00
2,200.0	15.93	123.05	2,144.4	-230.0	353.5	421.3	0.00	0.00	0.00
2,300.0	15.93	123.05	2,240.6	-244.9	376.5	448.8	0.00	0.00	0.00
2,400.0	15.93	123.05	2,336.8	-259.9	399.5	476.2	0.00	0.00	0.00
2,500.0	15.93	123.05	2,432.9	-274.9	422.5	503.6	0.00	0.00	0.00
2,600.0	15.93	123.05	2,529.1	-289.8	445.5	531.0	0.00	0.00	0.00
2,700.0	15.93	123.05	2,625.2	-304.8	468.5	558.5	0.00	0.00	0.00
2,800.0	15.93	123.05	2,721.4	-319.8	491.5	585.9	0.00	0.00	0.00
2,900.0	15.93	123.05	2,817.5	-334.7	514.5	613.3	0.00	0.00	0.00
3,000.0	15.93	123.05	2,913.7	-349.7	537.6	640.8	0.00	0.00	0.00
3,100.0	15.93	123.05	3,009.9	-364.7	560.6	668.2	0.00	0.00	0.00
3,200.0	15.93	123.05	3,106.0	-379.6	583.6	695.6	0.00	0.00	0.00
3,300.0	15.93	123.05	3,202.2	-394.6	606.6	723.0	0.00	0.00	0.00
3,400.0	15.93	123.05	3,298.3	-409.6	629.6	750.5	0.00	0.00	0.00
Wasatch									
3,428.8	15.93	123.05	3,326.0	-413.9	636.2	758.4	0.00	0.00	0.00
3,500.0	15.93	123.05	3,394.5	-424.5	652.6	777.9	0.00	0.00	0.00
3,600.0	15.93	123.05	3,490.7	-439.5	675.6	805.3	0.00	0.00	0.00
3,700.0	15.93	123.05	3,586.8	-454.5	698.6	832.8	0.00	0.00	0.00
3,800.0	15.93	123.05	3,683.0	-469.5	721.6	860.2	0.00	0.00	0.00
3,900.0	15.93	123.05	3,779.1	-484.4	744.6	887.6	0.00	0.00	0.00
4,000.0	15.93	123.05	3,875.3	-499.4	767.7	915.0	0.00	0.00	0.00
4,100.0	15.93	123.05	3,971.4	-514.4	790.7	942.5	0.00	0.00	0.00
4,200.0	15.93	123.05	4,067.6	-529.3	813.7	969.9	0.00	0.00	0.00
4,300.0	15.93	123.05	4,163.8	-544.3	836.7	997.3	0.00	0.00	0.00
4,400.0	15.93	123.05	4,259.9	-559.3	859.7	1,024.7	0.00	0.00	0.00
4,500.0	15.93	123.05	4,356.1	-574.2	882.7	1,052.2	0.00	0.00	0.00
4,600.0	15.93	123.05	4,452.2	-589.2	905.7	1,079.6	0.00	0.00	0.00
4,700.0	15.93	123.05	4,548.4	-604.2	928.7	1,107.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 12B-18 495 - Slot 12B-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 12B-18 495	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	15.93	123.05	4,644.6	-619.1	951.7	1,134.5	0.00	0.00	0.00
4,900.0	15.93	123.05	4,740.7	-634.1	974.7	1,161.9	0.00	0.00	0.00
5,000.0	15.93	123.05	4,836.9	-649.1	997.8	1,189.3	0.00	0.00	0.00
5,100.0	15.93	123.05	4,933.0	-664.1	1,020.8	1,216.7	0.00	0.00	0.00
5,200.0	15.93	123.05	5,029.2	-679.0	1,043.8	1,244.2	0.00	0.00	0.00
5,300.0	15.93	123.05	5,125.4	-694.0	1,066.8	1,271.6	0.00	0.00	0.00
5,400.0	15.93	123.05	5,221.5	-709.0	1,089.8	1,299.0	0.00	0.00	0.00
5,500.0	15.93	123.05	5,317.7	-723.9	1,112.8	1,326.4	0.00	0.00	0.00
5,600.0	15.93	123.05	5,413.8	-738.9	1,135.8	1,353.9	0.00	0.00	0.00
5,700.0	15.93	123.05	5,510.0	-753.9	1,158.8	1,381.3	0.00	0.00	0.00
5,800.0	15.93	123.05	5,606.1	-768.8	1,181.8	1,408.7	0.00	0.00	0.00
5,900.0	15.93	123.05	5,702.3	-783.8	1,204.9	1,436.2	0.00	0.00	0.00
6,000.0	15.93	123.05	5,798.5	-798.8	1,227.9	1,463.6	0.00	0.00	0.00
6,100.0	15.93	123.05	5,894.6	-813.7	1,250.9	1,491.0	0.00	0.00	0.00
6,200.0	15.93	123.05	5,990.8	-828.7	1,273.9	1,518.4	0.00	0.00	0.00
6,300.0	15.93	123.05	6,086.9	-843.7	1,296.9	1,545.9	0.00	0.00	0.00
6,400.0	15.93	123.05	6,183.1	-858.7	1,319.9	1,573.3	0.00	0.00	0.00
6,500.0	15.93	123.05	6,279.3	-873.6	1,342.9	1,600.7	0.00	0.00	0.00
6,600.0	15.93	123.05	6,375.4	-888.6	1,365.9	1,628.1	0.00	0.00	0.00
6,700.0	15.93	123.05	6,471.6	-903.6	1,388.9	1,655.6	0.00	0.00	0.00
Wasatch G									
6,772.2	15.93	123.05	6,541.0	-914.4	1,405.5	1,675.4	0.00	0.00	0.00
6,800.0	15.93	123.05	6,567.7	-918.5	1,411.9	1,683.0	0.00	0.00	0.00
6,900.0	15.93	123.05	6,663.9	-933.5	1,435.0	1,710.4	0.00	0.00	0.00
7,000.0	15.93	123.05	6,760.0	-948.5	1,458.0	1,737.9	0.00	0.00	0.00
Fort Union									
7,084.2	15.93	123.05	6,841.0	-961.1	1,477.3	1,760.9	0.00	0.00	0.00
7,100.0	15.93	123.05	6,856.2	-963.4	1,481.0	1,765.3	0.00	0.00	0.00
7,200.0	15.93	123.05	6,952.4	-978.4	1,504.0	1,792.7	0.00	0.00	0.00
7,300.0	15.93	123.05	7,048.5	-993.4	1,527.0	1,820.1	0.00	0.00	0.00
7,400.0	15.93	123.05	7,144.7	-1,008.3	1,550.0	1,847.6	0.00	0.00	0.00
7,500.0	15.93	123.05	7,240.8	-1,023.3	1,573.0	1,875.0	0.00	0.00	0.00
7,600.0	15.93	123.05	7,337.0	-1,038.3	1,596.0	1,902.4	0.00	0.00	0.00
7,700.0	15.93	123.05	7,433.2	-1,053.3	1,619.0	1,929.9	0.00	0.00	0.00
7,800.0	15.93	123.05	7,529.3	-1,068.2	1,642.0	1,957.3	0.00	0.00	0.00
7,900.0	15.93	123.05	7,625.5	-1,083.2	1,665.1	1,984.7	0.00	0.00	0.00
8,000.0	15.93	123.05	7,721.6	-1,098.2	1,688.1	2,012.1	0.00	0.00	0.00
8,100.0	15.93	123.05	7,817.8	-1,113.1	1,711.1	2,039.6	0.00	0.00	0.00
8,200.0	15.93	123.05	7,913.9	-1,128.1	1,734.1	2,067.0	0.00	0.00	0.00
8,300.0	15.93	123.05	8,010.1	-1,143.1	1,757.1	2,094.4	0.00	0.00	0.00
8,400.0	15.93	123.05	8,106.3	-1,158.0	1,780.1	2,121.8	0.00	0.00	0.00
Drop 3° /100'									
8,475.4	15.93	123.05	8,178.7	-1,169.3	1,797.4	2,142.5	0.00	0.00	0.00
8,500.0	15.19	123.05	8,202.5	-1,172.9	1,803.0	2,149.1	3.00	-3.00	0.00
8,600.0	12.19	123.05	8,299.6	-1,185.8	1,822.8	2,172.8	3.00	-3.00	0.00
8,700.0	9.19	123.05	8,397.9	-1,195.9	1,838.4	2,191.3	3.00	-3.00	0.00
8,800.0	6.19	123.05	8,497.0	-1,203.2	1,849.6	2,204.7	3.00	-3.00	0.00
8,900.0	3.19	123.05	8,596.6	-1,207.7	1,856.5	2,212.9	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
9,006.4	0.00	0.00	8,703.0	-1,209.3	1,858.9	2,215.8	3.00	-3.00	0.00
EOB @ 1.22° Inc. / 240.00° Azm									
9,087.7	1.22	240.00	8,784.3	-1,209.8	1,858.2	2,215.5	1.50	1.50	0.00
9,100.0	1.22	240.00	8,796.5	-1,209.9	1,858.0	2,215.4	0.00	0.00	0.00
9,200.0	1.22	240.00	8,896.5	-1,210.9	1,856.1	2,214.5	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 12B-18 495	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	1.22	240.00	8,996.5	-1,212.0	1,854.3	2,213.6	0.00	0.00	0.00
9,400.0	1.22	240.00	9,096.5	-1,213.1	1,852.4	2,212.7	0.00	0.00	0.00
9,500.0	1.22	240.00	9,196.5	-1,214.1	1,850.6	2,211.8	0.00	0.00	0.00
Williams Fork									
9,588.6	1.22	240.00	9,285.0	-1,215.1	1,849.0	2,211.0	0.00	0.00	0.00
9,600.0	1.22	240.00	9,296.4	-1,215.2	1,848.8	2,210.9	0.00	0.00	0.00
9,700.0	1.22	240.00	9,396.4	-1,216.3	1,846.9	2,210.0	0.00	0.00	0.00
9,800.0	1.22	240.00	9,496.4	-1,217.3	1,845.1	2,209.1	0.00	0.00	0.00
9,900.0	1.22	240.00	9,596.4	-1,218.4	1,843.2	2,208.3	0.00	0.00	0.00
10,000.0	1.22	240.00	9,696.3	-1,219.5	1,841.4	2,207.4	0.00	0.00	0.00
10,100.0	1.22	240.00	9,796.3	-1,220.5	1,839.5	2,206.5	0.00	0.00	0.00
10,200.0	1.22	240.00	9,896.3	-1,221.6	1,837.7	2,205.6	0.00	0.00	0.00
10,300.0	1.22	240.00	9,996.3	-1,222.7	1,835.9	2,204.7	0.00	0.00	0.00
10,400.0	1.22	240.00	10,096.2	-1,223.7	1,834.0	2,203.8	0.00	0.00	0.00
10,500.0	1.22	240.00	10,196.2	-1,224.8	1,832.2	2,202.9	0.00	0.00	0.00
10,600.0	1.22	240.00	10,296.2	-1,225.8	1,830.3	2,202.1	0.00	0.00	0.00
10,700.0	1.22	240.00	10,396.2	-1,226.9	1,828.5	2,201.2	0.00	0.00	0.00
10,800.0	1.22	240.00	10,496.2	-1,228.0	1,826.6	2,200.3	0.00	0.00	0.00
10,900.0	1.22	240.00	10,596.1	-1,229.0	1,824.8	2,199.4	0.00	0.00	0.00
11,000.0	1.22	240.00	10,696.1	-1,230.1	1,823.0	2,198.5	0.00	0.00	0.00
11,100.0	1.22	240.00	10,796.1	-1,231.2	1,821.1	2,197.6	0.00	0.00	0.00
11,200.0	1.22	240.00	10,896.1	-1,232.2	1,819.3	2,196.7	0.00	0.00	0.00
11,300.0	1.22	240.00	10,996.0	-1,233.3	1,817.4	2,195.9	0.00	0.00	0.00
11,400.0	1.22	240.00	11,096.0	-1,234.4	1,815.6	2,195.0	0.00	0.00	0.00
11,500.0	1.22	240.00	11,196.0	-1,235.4	1,813.7	2,194.1	0.00	0.00	0.00
11,600.0	1.22	240.00	11,296.0	-1,236.5	1,811.9	2,193.2	0.00	0.00	0.00
11,700.0	1.22	240.00	11,396.0	-1,237.5	1,810.1	2,192.3	0.00	0.00	0.00
11,800.0	1.22	240.00	11,495.9	-1,238.6	1,808.2	2,191.4	0.00	0.00	0.00
11,900.0	1.22	240.00	11,595.9	-1,239.7	1,806.4	2,190.5	0.00	0.00	0.00
12,000.0	1.22	240.00	11,695.9	-1,240.7	1,804.5	2,189.7	0.00	0.00	0.00
12,100.0	1.22	240.00	11,795.9	-1,241.8	1,802.7	2,188.8	0.00	0.00	0.00
12,200.0	1.22	240.00	11,895.8	-1,242.9	1,800.8	2,187.9	0.00	0.00	0.00
12,300.0	1.22	240.00	11,995.8	-1,243.9	1,799.0	2,187.0	0.00	0.00	0.00
12,400.0	1.22	240.00	12,095.8	-1,245.0	1,797.2	2,186.1	0.00	0.00	0.00
12,500.0	1.22	240.00	12,195.8	-1,246.1	1,795.3	2,185.2	0.00	0.00	0.00
12,600.0	1.22	240.00	12,295.8	-1,247.1	1,793.5	2,184.3	0.00	0.00	0.00
12,700.0	1.22	240.00	12,395.7	-1,248.2	1,791.6	2,183.5	0.00	0.00	0.00
Cameo									
12,709.3	1.22	240.00	12,405.0	-1,248.3	1,791.5	2,183.4	0.00	0.00	0.00
12,800.0	1.22	240.00	12,495.7	-1,249.2	1,789.8	2,182.6	0.00	0.00	0.00
12,900.0	1.22	240.00	12,595.7	-1,250.3	1,787.9	2,181.7	0.00	0.00	0.00
13,000.0	1.22	240.00	12,695.7	-1,251.4	1,786.1	2,180.8	0.00	0.00	0.00
13,100.0	1.22	240.00	12,795.6	-1,252.4	1,784.3	2,179.9	0.00	0.00	0.00
13,200.0	1.22	240.00	12,895.6	-1,253.5	1,782.4	2,179.0	0.00	0.00	0.00
13,300.0	1.22	240.00	12,995.6	-1,254.6	1,780.6	2,178.1	0.00	0.00	0.00
13,400.0	1.22	240.00	13,095.6	-1,255.6	1,778.7	2,177.3	0.00	0.00	0.00
Rollins									
13,446.4	1.22	240.00	13,142.0	-1,256.1	1,777.9	2,176.8	0.00	0.00	0.00
13,500.0	1.22	240.00	13,195.5	-1,256.7	1,776.9	2,176.4	0.00	0.00	0.00
13,600.0	1.22	240.00	13,295.5	-1,257.8	1,775.0	2,175.5	0.00	0.00	0.00
13,700.0	1.22	240.00	13,395.5	-1,258.8	1,773.2	2,174.6	0.00	0.00	0.00
TD @ 13746.5' MD / 13442.0' TVD									
13,746.5	1.22	240.00	13,442.0	-1,259.3	1,772.3	2,174.2	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 12B-18 495 - Slot 12B-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 12B-18 495	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

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
12B-18 - OHCR - plan hits target center - Point	0.00	0.00	8,703.0	-1,209.3	1,858.9	14,432,069.97	2,456,956.65	39.705608	-108.097052
12B-18 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 240.00 azi)	0.00	0.00	13,442.0	-1,259.3	1,772.3	14,432,017.20	2,456,871.70	39.705471	-108.097360

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,428.8	3,326.0	Wasatch			
6,772.2	6,541.0	Wasatch G			
7,084.2	6,841.0	Fort Union			
9,006.4	8,703.0	Ohio Creek			
9,588.6	9,285.0	Williams Fork			
12,709.3	12,405.0	Cameo			
13,446.4	13,142.0	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'
931.1	924.3	-40.0	61.5	EOB @ 15.93° Inc. / 123.05° Azm
8,475.4	8,178.7	-1,169.3	1,797.4	Drop 3° / 100'
9,006.4	8,703.0	-1,209.3	1,858.9	EOD @ Vertical / Build 1.5° / 100'
9,087.7	8,784.3	-1,209.8	1,858.2	EOB @ 1.22° Inc. / 240.00° Azm
13,746.5	13,442.0	-1,259.3	1,772.3	TD @ 13746.5' MD / 13442.0' TVD