

Project: Rio Blanco County, CO  
 Site: ELU A18 495 Pad  
 Well: ELU A18 FED 12B-18 495  
 Wellbore: Wellbore #1  
 Design: Design #2  
 Latitude: 39.708936  
 Longitude: -108.103687  
 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
2800.0	2828.9	Wasatch
6498.0	6572.1	Wasatch G
6798.0	6875.7	Fort Union
8668.0	8766.2	Ohio Creek / TOG
9246.0	9344.3	Williams Fork
12405.0	12504.0	Cameo
12955.0	13054.1	Rollins

## SECTION DETAILS

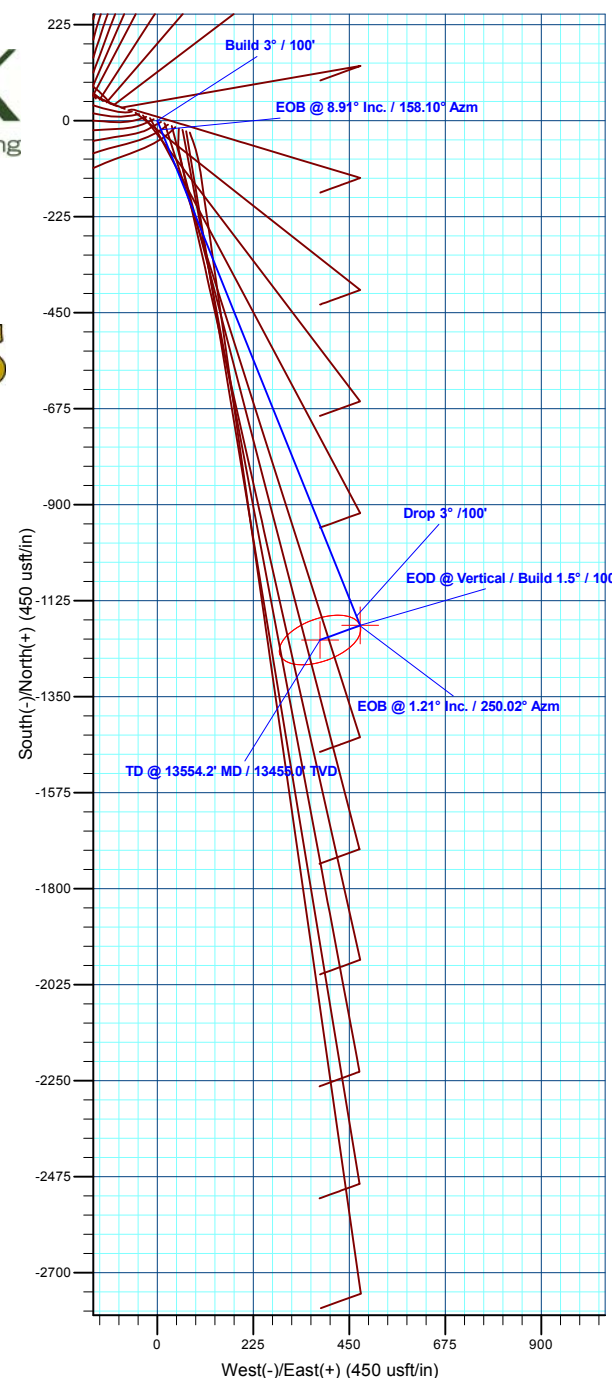
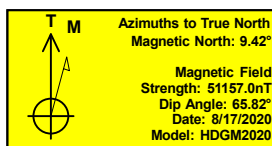
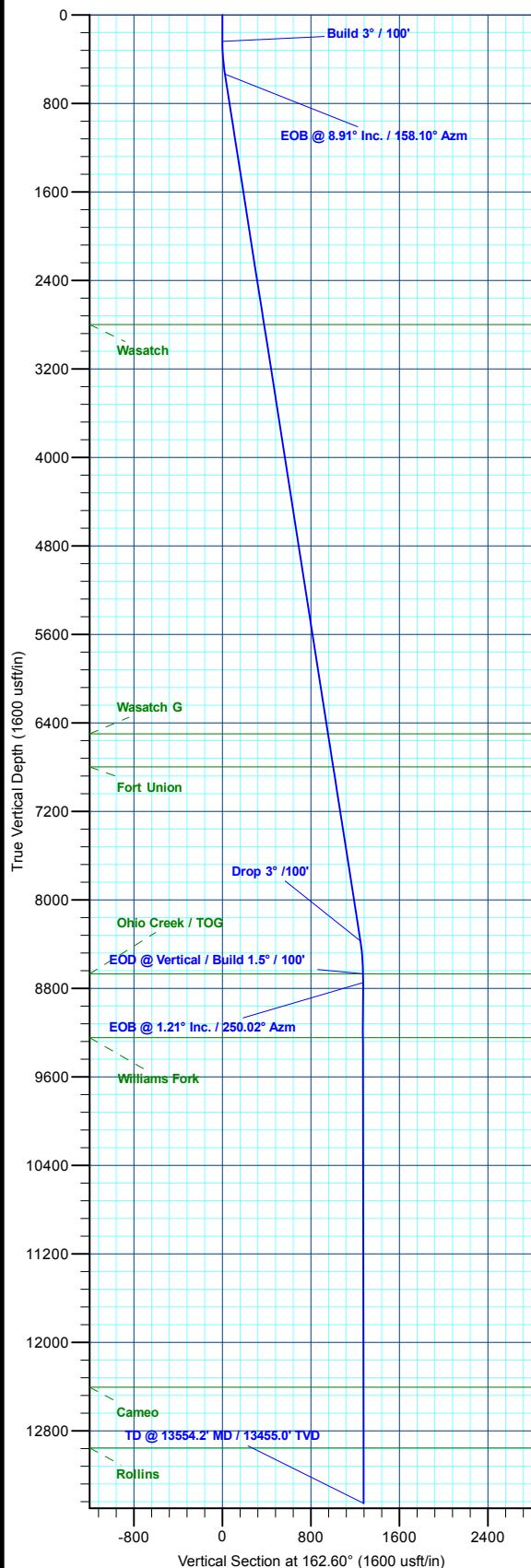
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
240.0	0.00	0.00	240.0	0.0	0.0	0.00	0.00	0.0	EOB @ 8.91° Inc. / 158.10° Azm
537.1	8.91	158.10	535.9	-21.4	8.6	3.00	158.10	23.0	Drop 3° / 100'
8469.1	8.91	158.10	8372.1	-1161.7	466.9	0.00	0.00	1248.1	EOD @ Vertical / Build 1.5° / 100'
8766.2	0.00	0.00	8668.0	-1183.1	475.5	3.00	180.00	1271.1	EOB @ 1.21° Inc. / 250.02° Azm
8846.6	1.21	250.02	8748.5	-1183.3	474.7	1.50	250.02	1271.2	TD @ 13554.2' MD / 13455.0' TVD
13554.2	1.21	250.02	13455.0	-1217.2	381.6	0.00	0.00	1275.6	

## DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
12B-18 - OHCR	8668.0	-1183.1	475.5	14432054.39	2455564.53	39.705689	-108.101997
12B-18 - PBHL	13455.0	-1217.2	381.6	14432017.20	2455471.70	39.705595	-108.102331

## WELL DETAILS: ELU A18 FED 12B-18 495

Ground Level : 8029.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14433221.46	2455051.01	39.708936	-108.103687



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

Created By: Will Jircik

Date: 10:44, May 18 2022



## **Caerus Oil & Gas**

**Rio Blanco County, CO**

**ELU A18 495 Pad**

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

**Wellbore #1**

**Plan: Design #2**

## **KLX Well Planning Report**

**18 May, 2022**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18 495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8059.0usft (30)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8059.0usft (30)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18 495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2		

<b>Project</b>	Rio Blanco County, CO		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Fee	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	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	-63.0 usft	Northing:	14,433,221.46 usft	Latitude:	39.708936
	+E/-W	144.6 usft	Easting:	2,455,051.01 usft	Longitude:	-108.103687
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	8,029.0 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM2020	8/17/2020	9.42	65.82	51,157.00000000

<b>Design</b>	Design #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	162.60

<b>Plan Sections</b>										
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	
240.0	0.00	0.00	240.0	0.0	0.0	0.00	0.00	0.00	0.00	
537.1	8.91	158.10	535.9	-21.4	8.6	3.00	3.00	0.00	158.10	
8,469.1	8.91	158.10	8,372.1	-1,161.7	466.9	0.00	0.00	0.00	0.00	
8,766.2	0.00	0.00	8,668.0	-1,183.1	475.5	3.00	-3.00	0.00	180.00	12B-18 - OHCR
8,846.6	1.21	250.02	8,748.5	-1,183.3	474.7	1.50	1.50	-136.69	250.02	
13,554.2	1.21	250.02	13,455.0	-1,217.2	381.6	0.00	0.00	0.00	0.00	12B-18 - PBHL

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18 495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8059.0usft (30)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8059.0usft (30)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18 495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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
<b>Build 3° / 100'</b>									
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	1.80	158.10	300.0	-0.9	0.4	0.9	3.00	3.00	0.00
400.0	4.80	158.10	399.8	-6.2	2.5	6.7	3.00	3.00	0.00
500.0	7.80	158.10	499.2	-16.4	6.6	17.6	3.00	3.00	0.00
<b>EOB @ 8.91° Inc. / 158.10° Azm</b>									
537.1	8.91	158.10	535.9	-21.4	8.6	23.0	3.00	3.00	0.00
600.0	8.91	158.10	598.0	-30.4	12.2	32.7	0.00	0.00	0.00
700.0	8.91	158.10	696.8	-44.8	18.0	48.2	0.00	0.00	0.00
800.0	8.91	158.10	795.6	-59.2	23.8	63.6	0.00	0.00	0.00
900.0	8.91	158.10	894.4	-73.6	29.6	79.0	0.00	0.00	0.00
1,000.0	8.91	158.10	993.2	-87.9	35.3	94.5	0.00	0.00	0.00
1,100.0	8.91	158.10	1,092.0	-102.3	41.1	109.9	0.00	0.00	0.00
1,200.0	8.91	158.10	1,190.8	-116.7	46.9	125.4	0.00	0.00	0.00
1,300.0	8.91	158.10	1,289.6	-131.1	52.7	140.8	0.00	0.00	0.00
1,400.0	8.91	158.10	1,388.4	-145.4	58.5	156.3	0.00	0.00	0.00
1,500.0	8.91	158.10	1,487.2	-159.8	64.2	171.7	0.00	0.00	0.00
1,600.0	8.91	158.10	1,586.0	-174.2	70.0	187.2	0.00	0.00	0.00
1,700.0	8.91	158.10	1,684.8	-188.6	75.8	202.6	0.00	0.00	0.00
1,800.0	8.91	158.10	1,783.6	-202.9	81.6	218.1	0.00	0.00	0.00
1,900.0	8.91	158.10	1,882.3	-217.3	87.4	233.5	0.00	0.00	0.00
2,000.0	8.91	158.10	1,981.1	-231.7	93.1	248.9	0.00	0.00	0.00
2,100.0	8.91	158.10	2,079.9	-246.1	98.9	264.4	0.00	0.00	0.00
2,200.0	8.91	158.10	2,178.7	-260.4	104.7	279.8	0.00	0.00	0.00
2,300.0	8.91	158.10	2,277.5	-274.8	110.5	295.3	0.00	0.00	0.00
2,400.0	8.91	158.10	2,376.3	-289.2	116.2	310.7	0.00	0.00	0.00
2,500.0	8.91	158.10	2,475.1	-303.6	122.0	326.2	0.00	0.00	0.00
2,600.0	8.91	158.10	2,573.9	-317.9	127.8	341.6	0.00	0.00	0.00
2,700.0	8.91	158.10	2,672.7	-332.3	133.6	357.1	0.00	0.00	0.00
2,800.0	8.91	158.10	2,771.5	-346.7	139.4	372.5	0.00	0.00	0.00
<b>Wasatch</b>									
2,828.9	8.91	158.10	2,800.0	-350.9	141.0	377.0	0.00	0.00	0.00
2,900.0	8.91	158.10	2,870.3	-361.1	145.1	388.0	0.00	0.00	0.00
3,000.0	8.91	158.10	2,969.1	-375.5	150.9	403.4	0.00	0.00	0.00
3,100.0	8.91	158.10	3,067.9	-389.8	156.7	418.8	0.00	0.00	0.00
3,200.0	8.91	158.10	3,166.6	-404.2	162.5	434.3	0.00	0.00	0.00
3,300.0	8.91	158.10	3,265.4	-418.6	168.3	449.7	0.00	0.00	0.00
3,400.0	8.91	158.10	3,364.2	-433.0	174.0	465.2	0.00	0.00	0.00
3,500.0	8.91	158.10	3,463.0	-447.3	179.8	480.6	0.00	0.00	0.00
3,600.0	8.91	158.10	3,561.8	-461.7	185.6	496.1	0.00	0.00	0.00
3,700.0	8.91	158.10	3,660.6	-476.1	191.4	511.5	0.00	0.00	0.00
3,800.0	8.91	158.10	3,759.4	-490.5	197.1	527.0	0.00	0.00	0.00
3,900.0	8.91	158.10	3,858.2	-504.8	202.9	542.4	0.00	0.00	0.00
4,000.0	8.91	158.10	3,957.0	-519.2	208.7	557.9	0.00	0.00	0.00
4,100.0	8.91	158.10	4,055.8	-533.6	214.5	573.3	0.00	0.00	0.00
4,200.0	8.91	158.10	4,154.6	-548.0	220.3	588.8	0.00	0.00	0.00
4,300.0	8.91	158.10	4,253.4	-562.3	226.0	604.2	0.00	0.00	0.00
4,400.0	8.91	158.10	4,352.2	-576.7	231.8	619.6	0.00	0.00	0.00
4,500.0	8.91	158.10	4,451.0	-591.1	237.6	635.1	0.00	0.00	0.00
4,600.0	8.91	158.10	4,549.7	-605.5	243.4	650.5	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18 495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8059.0usft (30)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8059.0usft (30)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18 495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	8.91	158.10	4,648.5	-619.8	249.2	666.0	0.00	0.00	0.00
4,800.0	8.91	158.10	4,747.3	-634.2	254.9	681.4	0.00	0.00	0.00
4,900.0	8.91	158.10	4,846.1	-648.6	260.7	696.9	0.00	0.00	0.00
5,000.0	8.91	158.10	4,944.9	-663.0	266.5	712.3	0.00	0.00	0.00
5,100.0	8.91	158.10	5,043.7	-677.3	272.3	727.8	0.00	0.00	0.00
5,200.0	8.91	158.10	5,142.5	-691.7	278.0	743.2	0.00	0.00	0.00
5,300.0	8.91	158.10	5,241.3	-706.1	283.8	758.7	0.00	0.00	0.00
5,400.0	8.91	158.10	5,340.1	-720.5	289.6	774.1	0.00	0.00	0.00
5,500.0	8.91	158.10	5,438.9	-734.8	295.4	789.5	0.00	0.00	0.00
5,600.0	8.91	158.10	5,537.7	-749.2	301.2	805.0	0.00	0.00	0.00
5,700.0	8.91	158.10	5,636.5	-763.6	306.9	820.4	0.00	0.00	0.00
5,800.0	8.91	158.10	5,735.3	-778.0	312.7	835.9	0.00	0.00	0.00
5,900.0	8.91	158.10	5,834.0	-792.3	318.5	851.3	0.00	0.00	0.00
6,000.0	8.91	158.10	5,932.8	-806.7	324.3	866.8	0.00	0.00	0.00
6,100.0	8.91	158.10	6,031.6	-821.1	330.0	882.2	0.00	0.00	0.00
6,200.0	8.91	158.10	6,130.4	-835.5	335.8	897.7	0.00	0.00	0.00
6,300.0	8.91	158.10	6,229.2	-849.8	341.6	913.1	0.00	0.00	0.00
6,400.0	8.91	158.10	6,328.0	-864.2	347.4	928.6	0.00	0.00	0.00
6,500.0	8.91	158.10	6,426.8	-878.6	353.2	944.0	0.00	0.00	0.00
<b>Wasatch G</b>									
6,572.1	8.91	158.10	6,498.0	-889.0	357.3	955.1	0.00	0.00	0.00
6,600.0	8.91	158.10	6,525.6	-893.0	358.9	959.4	0.00	0.00	0.00
6,700.0	8.91	158.10	6,624.4	-907.3	364.7	974.9	0.00	0.00	0.00
6,800.0	8.91	158.10	6,723.2	-921.7	370.5	990.3	0.00	0.00	0.00
<b>Fort Union</b>									
6,875.7	8.91	158.10	6,798.0	-932.6	374.9	1,002.0	0.00	0.00	0.00
6,900.0	8.91	158.10	6,822.0	-936.1	376.3	1,005.8	0.00	0.00	0.00
7,000.0	8.91	158.10	6,920.8	-950.5	382.1	1,021.2	0.00	0.00	0.00
7,100.0	8.91	158.10	7,019.6	-964.8	387.8	1,036.7	0.00	0.00	0.00
7,200.0	8.91	158.10	7,118.3	-979.2	393.6	1,052.1	0.00	0.00	0.00
7,300.0	8.91	158.10	7,217.1	-993.6	399.4	1,067.6	0.00	0.00	0.00
7,400.0	8.91	158.10	7,315.9	-1,008.0	405.2	1,083.0	0.00	0.00	0.00
7,500.0	8.91	158.10	7,414.7	-1,022.3	410.9	1,098.5	0.00	0.00	0.00
7,600.0	8.91	158.10	7,513.5	-1,036.7	416.7	1,113.9	0.00	0.00	0.00
7,700.0	8.91	158.10	7,612.3	-1,051.1	422.5	1,129.4	0.00	0.00	0.00
7,800.0	8.91	158.10	7,711.1	-1,065.5	428.3	1,144.8	0.00	0.00	0.00
7,900.0	8.91	158.10	7,809.9	-1,079.8	434.1	1,160.2	0.00	0.00	0.00
8,000.0	8.91	158.10	7,908.7	-1,094.2	439.8	1,175.7	0.00	0.00	0.00
8,100.0	8.91	158.10	8,007.5	-1,108.6	445.6	1,191.1	0.00	0.00	0.00
8,200.0	8.91	158.10	8,106.3	-1,123.0	451.4	1,206.6	0.00	0.00	0.00
8,300.0	8.91	158.10	8,205.1	-1,137.3	457.2	1,222.0	0.00	0.00	0.00
8,400.0	8.91	158.10	8,303.9	-1,151.7	463.0	1,237.5	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
8,469.1	8.91	158.10	8,372.1	-1,161.7	466.9	1,248.1	0.00	0.00	0.00
8,500.0	7.99	158.10	8,402.7	-1,165.9	468.6	1,252.7	3.00	-3.00	0.00
8,600.0	4.99	158.10	8,502.0	-1,176.3	472.8	1,263.9	3.00	-3.00	0.00
8,700.0	1.99	158.10	8,601.8	-1,182.0	475.1	1,270.0	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek / TOG</b>									
8,766.2	0.00	0.00	8,668.0	-1,183.1	475.5	1,271.1	3.00	-3.00	0.00
8,800.0	0.51	250.02	8,701.8	-1,183.1	475.4	1,271.1	1.50	1.50	0.00
<b>EOB @ 1.21° Inc. / 250.02° Azm</b>									
8,846.6	1.21	250.02	8,748.5	-1,183.3	474.7	1,271.2	1.50	1.50	0.00
8,900.0	1.21	250.02	8,801.8	-1,183.7	473.7	1,271.2	0.00	0.00	0.00
9,000.0	1.21	250.02	8,901.8	-1,184.4	471.7	1,271.3	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18 495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8059.0usft (30)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8059.0usft (30)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18 495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	9,001.8	-1,185.2	469.7	1,271.4	0.00	0.00	0.00
9,200.0	1.21	250.02	9,101.7	-1,185.9	467.8	1,271.5	0.00	0.00	0.00
9,300.0	1.21	250.02	9,201.7	-1,186.6	465.8	1,271.6	0.00	0.00	0.00
<b>Williams Fork</b>									
9,344.3	1.21	250.02	9,246.0	-1,186.9	464.9	1,271.6	0.00	0.00	0.00
9,400.0	1.21	250.02	9,301.7	-1,187.3	463.8	1,271.7	0.00	0.00	0.00
9,500.0	1.21	250.02	9,401.7	-1,188.0	461.8	1,271.8	0.00	0.00	0.00
9,600.0	1.21	250.02	9,501.7	-1,188.8	459.8	1,271.9	0.00	0.00	0.00
9,700.0	1.21	250.02	9,601.6	-1,189.5	457.9	1,272.0	0.00	0.00	0.00
9,800.0	1.21	250.02	9,701.6	-1,190.2	455.9	1,272.1	0.00	0.00	0.00
9,900.0	1.21	250.02	9,801.6	-1,190.9	453.9	1,272.2	0.00	0.00	0.00
10,000.0	1.21	250.02	9,901.6	-1,191.6	451.9	1,272.3	0.00	0.00	0.00
10,100.0	1.21	250.02	10,001.5	-1,192.4	449.9	1,272.4	0.00	0.00	0.00
10,200.0	1.21	250.02	10,101.5	-1,193.1	448.0	1,272.5	0.00	0.00	0.00
10,300.0	1.21	250.02	10,201.5	-1,193.8	446.0	1,272.5	0.00	0.00	0.00
10,400.0	1.21	250.02	10,301.5	-1,194.5	444.0	1,272.6	0.00	0.00	0.00
10,500.0	1.21	250.02	10,401.5	-1,195.2	442.0	1,272.7	0.00	0.00	0.00
10,600.0	1.21	250.02	10,501.4	-1,196.0	440.0	1,272.8	0.00	0.00	0.00
10,700.0	1.21	250.02	10,601.4	-1,196.7	438.1	1,272.9	0.00	0.00	0.00
10,800.0	1.21	250.02	10,701.4	-1,197.4	436.1	1,273.0	0.00	0.00	0.00
10,900.0	1.21	250.02	10,801.4	-1,198.1	434.1	1,273.1	0.00	0.00	0.00
11,000.0	1.21	250.02	10,901.3	-1,198.8	432.1	1,273.2	0.00	0.00	0.00
11,100.0	1.21	250.02	11,001.3	-1,199.6	430.1	1,273.3	0.00	0.00	0.00
11,200.0	1.21	250.02	11,101.3	-1,200.3	428.2	1,273.4	0.00	0.00	0.00
11,300.0	1.21	250.02	11,201.3	-1,201.0	426.2	1,273.5	0.00	0.00	0.00
11,400.0	1.21	250.02	11,301.3	-1,201.7	424.2	1,273.6	0.00	0.00	0.00
11,500.0	1.21	250.02	11,401.2	-1,202.4	422.2	1,273.7	0.00	0.00	0.00
11,600.0	1.21	250.02	11,501.2	-1,203.2	420.2	1,273.8	0.00	0.00	0.00
11,700.0	1.21	250.02	11,601.2	-1,203.9	418.3	1,273.9	0.00	0.00	0.00
11,800.0	1.21	250.02	11,701.2	-1,204.6	416.3	1,274.0	0.00	0.00	0.00
11,900.0	1.21	250.02	11,801.1	-1,205.3	414.3	1,274.1	0.00	0.00	0.00
12,000.0	1.21	250.02	11,901.1	-1,206.0	412.3	1,274.2	0.00	0.00	0.00
12,100.0	1.21	250.02	12,001.1	-1,206.8	410.3	1,274.2	0.00	0.00	0.00
12,200.0	1.21	250.02	12,101.1	-1,207.5	408.4	1,274.3	0.00	0.00	0.00
12,300.0	1.21	250.02	12,201.1	-1,208.2	406.4	1,274.4	0.00	0.00	0.00
12,400.0	1.21	250.02	12,301.0	-1,208.9	404.4	1,274.5	0.00	0.00	0.00
12,500.0	1.21	250.02	12,401.0	-1,209.6	402.4	1,274.6	0.00	0.00	0.00
<b>Cameo</b>									
12,504.0	1.21	250.02	12,405.0	-1,209.7	402.4	1,274.6	0.00	0.00	0.00
12,600.0	1.21	250.02	12,501.0	-1,210.4	400.5	1,274.7	0.00	0.00	0.00
12,700.0	1.21	250.02	12,601.0	-1,211.1	398.5	1,274.8	0.00	0.00	0.00
12,800.0	1.21	250.02	12,700.9	-1,211.8	396.5	1,274.9	0.00	0.00	0.00
12,900.0	1.21	250.02	12,800.9	-1,212.5	394.5	1,275.0	0.00	0.00	0.00
13,000.0	1.21	250.02	12,900.9	-1,213.2	392.5	1,275.1	0.00	0.00	0.00
<b>Rollins</b>									
13,054.1	1.21	250.02	12,955.0	-1,213.6	391.5	1,275.2	0.00	0.00	0.00
13,100.0	1.21	250.02	13,000.9	-1,214.0	390.6	1,275.2	0.00	0.00	0.00
13,200.0	1.21	250.02	13,100.9	-1,214.7	388.6	1,275.3	0.00	0.00	0.00
13,300.0	1.21	250.02	13,200.8	-1,215.4	386.6	1,275.4	0.00	0.00	0.00
13,400.0	1.21	250.02	13,300.8	-1,216.1	384.6	1,275.5	0.00	0.00	0.00
13,500.0	1.21	250.02	13,400.8	-1,216.8	382.6	1,275.6	0.00	0.00	0.00
<b>TD @ 13554.2' MD / 13455.0' TVD</b>									
13,554.2	1.21	250.02	13,455.0	-1,217.2	381.6	1,275.6	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18 495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8059.0usft (30)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8059.0usft (30)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18 495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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									
12B-18 - OHCR	0.00	0.00	8,668.0	-1,183.1	475.5	14,432,054.39	2,455,564.53	39.705689	-108.101997
- plan hits target center									
- Point									
12B-18 - PBHL	0.00	0.00	13,455.0	-1,217.2	381.6	14,432,017.20	2,455,471.70	39.705595	-108.102331
- plan hits target center									
- Point									

### Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,828.9	2,800.0	Wasatch			
6,572.1	6,498.0	Wasatch G			
6,875.7	6,798.0	Fort Union			
8,766.2	8,668.0	Ohio Creek / TOG			
9,344.3	9,246.0	Williams Fork			
12,504.0	12,405.0	Cameo			
13,054.1	12,955.0	Rollins			

### Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
240.0	240.0	0.0	0.0	Build 3° / 100'
537.1	535.9	-21.4	8.6	EOB @ 8.91° Inc. / 158.10° Azm
8,469.1	8,372.1	-1,161.7	466.9	Drop 3° / 100'
8,766.2	8,668.0	-1,183.1	475.5	EOD @ Vertical / Build 1.5° / 100'
8,846.6	8,748.5	-1,183.3	474.7	EOB @ 1.21° Inc. / 250.02° Azm
13,554.2	13,455.0	-1,217.2	381.6	TD @ 13554.2' MD / 13455.0' TVD