

Project: Rio Blanco County, CO  
Site: ELU A18 495 Pad  
Well: ELU A18 FED 13B-7 495  
Wellbore: Wellbore #1  
Design: Design #2  
Latitude: 39.709146  
Longitude: -108.104438  
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 - 13B-7(0.0N, 0.0E)  
Measured Depth Reference: RKB @ 8059.0usft (30')  
Calculation Method: Minimum Curvature

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2800.0	2960.0	Wasatch
6643.0	7079.1	Wasatch G
6943.0	7400.7	Fort Union
8337.0	9397.2	Ohio Creek / TOG
9439.0	9999.3	Williams Fork
12517.0	13078.0	Cameo
13067.0	13628.1	Rollins

#### SECTION DETAILS

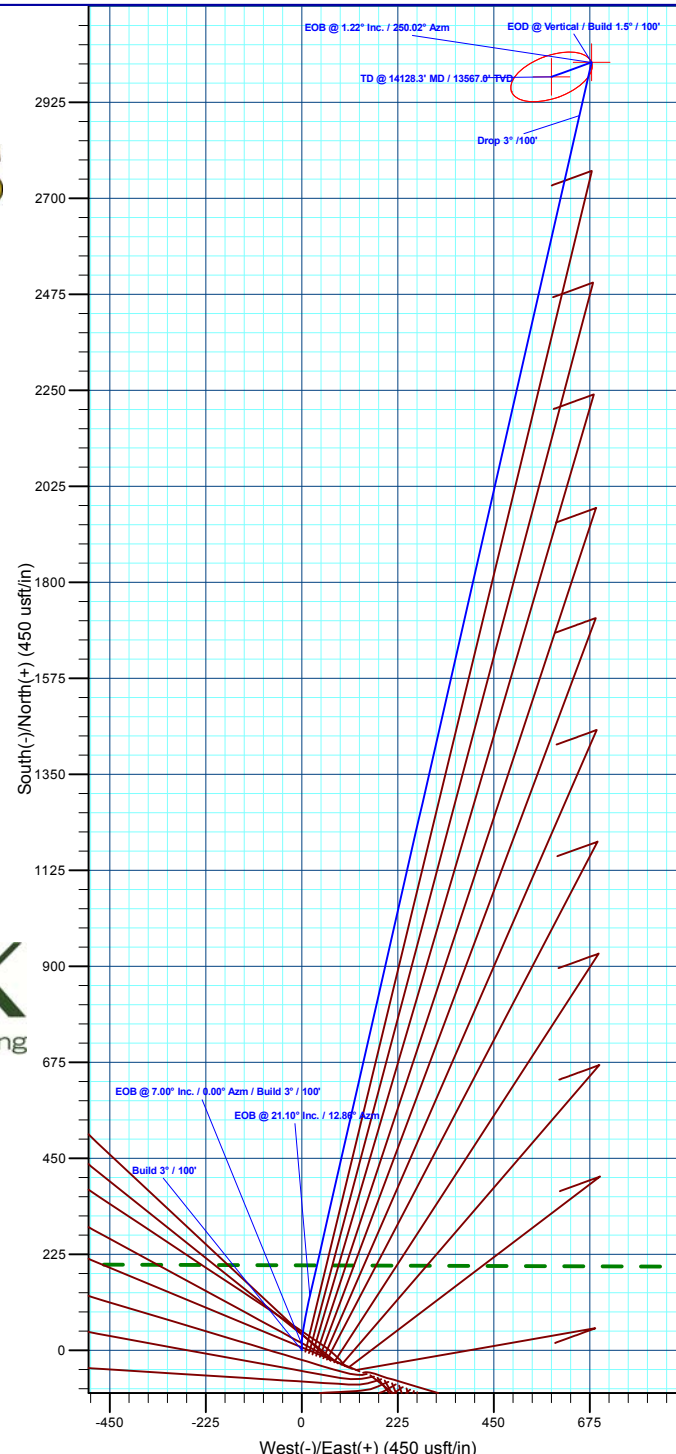
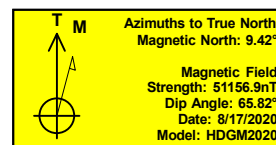
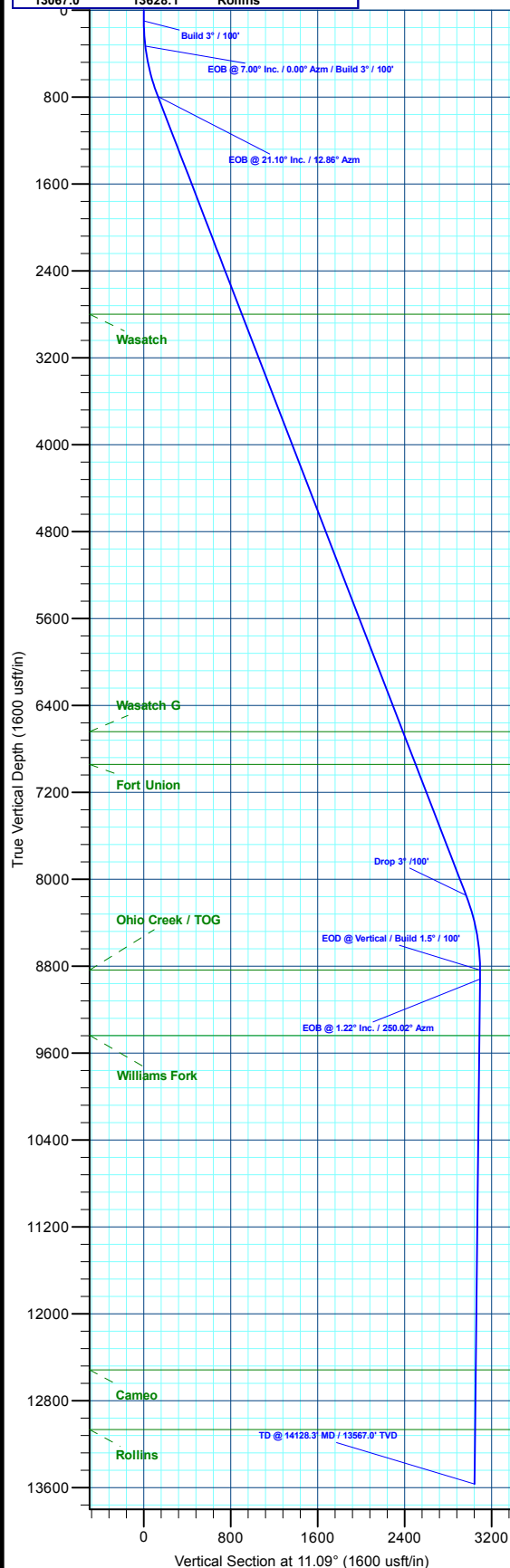
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
100.0	0.00	0.00	100.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
333.3	7.00	0.00	332.8	14.2	0.0	3.00	0.00	14.0	EOB @ 7.00° Inc. / 0.00° Azm / Build 3° / 100'
811.9	21.10	12.86	795.9	128.0	19.3	3.00	18.85	129.3	EOB @ 21.10° Inc. / 12.86° Azm
8693.9	21.10	12.86	8149.5	2894.2	650.8	0.00	0.00	2965.3	Drop 3° / 100'
9397.2	0.00	0.00	8837.0	3019.0	679.3	3.00	180.00	3093.3	EOD @ Vertical / Build 1.5° / 100'
9478.6	1.22	250.02	8918.4	3018.7	678.5	1.50	250.02	3092.9	EOB @ 1.22° Inc. / 250.02° Azm
14128.3	1.22	250.02	13567.0	2984.9	585.3	0.00	0.00	3041.7	TD @ 14128.3' MD / 13567.0' TVD

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	Easting	Latitude	Longitude
13B-7 - OHCR	8837.0	3019.0	679.3	14436330.59	2455418.53	39.717431	-108.102024
13B-7 - PBHL	13567.0	2984.9	585.3	14436293.40	2455325.70	39.717337	-108.102358

#### WELL DETAILS: ELU A18 FED 13B-7 495

Ground Level : 8029.0		North		Latitude		Longitude	
+N/-S	+E/-W	North	Easting	Latitude	Longitude		
0.0	0.0	14433291.20	2454837.10	39.709146	-108.104438	13B-7	



Plan: Design #2 (ELU A18 FED 13B-7 495/Wellbore #1)

Created By: Will Jircik

Date: 11:41, May 18 2022



## **Caerus Oil & Gas**

**Rio Blanco County, CO**

**ELU A18 495 Pad**

**ELU A18 FED 13B-7 495 - Slot 13B-7**

**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 13B-7 495 - Slot 13B-7
<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 13B-7 495	<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 13B-7 495 - Slot 13B-7					
Well Position	+N/-S	13.6 usft	Northing:	14,433,291.20 usft	Latitude:	39.709146
	+E/-W	-66.9 usft	Easting:	2,454,837.10 usft	Longitude:	-108.104438
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	51,156.90000000

<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	11.09

<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	
100.0	0.00	0.00	100.0	0.0	0.0	0.00	0.00	0.00	0.00	
333.3	7.00	0.00	332.8	14.2	0.0	3.00	3.00	0.00	0.00	
811.9	21.10	12.86	795.9	128.0	19.3	3.00	2.95	2.69	18.85	
8,693.9	21.10	12.86	8,149.5	2,894.2	650.8	0.00	0.00	0.00	0.00	
9,397.2	0.00	0.00	8,837.0	3,019.0	679.3	3.00	-3.00	0.00	180.00	13B-7 - OHCR
9,478.6	1.22	250.02	8,918.4	3,018.7	678.5	1.50	1.50	-135.04	250.02	
14,128.3	1.22	250.02	13,567.0	2,984.9	585.3	0.00	0.00	0.00	0.00	13B-7 - PBHL

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 13B-7 495 - Slot 13B-7
<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 13B-7 495	<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
<b>Build 3° / 100'</b>									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	3.00	0.00	200.0	2.6	0.0	2.6	3.00	3.00	0.00
300.0	6.00	0.00	299.6	10.5	0.0	10.3	3.00	3.00	0.00
<b>EOB @ 7.00° Inc. / 0.00° Azm / Build 3° / 100'</b>									
333.3	7.00	0.00	332.8	14.2	0.0	14.0	3.00	3.00	0.00
400.0	8.92	4.17	398.8	23.5	0.4	23.1	3.00	2.87	6.26
500.0	11.84	7.89	497.1	41.3	2.3	41.0	3.00	2.93	3.72
600.0	14.80	10.14	594.4	64.1	6.0	64.0	3.00	2.96	2.25
700.0	17.77	11.66	690.4	91.6	11.3	92.1	3.00	2.97	1.52
800.0	20.75	12.75	784.8	123.8	18.3	125.0	3.00	2.98	1.09
<b>EOB @ 21.10° Inc. / 12.86° Azm</b>									
811.9	21.10	12.86	795.9	128.0	19.3	129.3	3.00	2.98	0.93
900.0	21.10	12.86	878.1	158.9	26.3	161.0	0.00	0.00	0.00
1,000.0	21.10	12.86	971.4	194.0	34.3	197.0	0.00	0.00	0.00
1,100.0	21.10	12.86	1,064.7	229.1	42.4	233.0	0.00	0.00	0.00
1,200.0	21.10	12.86	1,158.0	264.2	50.4	268.9	0.00	0.00	0.00
1,300.0	21.10	12.86	1,251.3	299.3	58.4	304.9	0.00	0.00	0.00
1,400.0	21.10	12.86	1,344.6	334.4	66.4	340.9	0.00	0.00	0.00
1,500.0	21.10	12.86	1,437.9	369.5	74.4	376.9	0.00	0.00	0.00
1,600.0	21.10	12.86	1,531.2	404.6	82.4	412.9	0.00	0.00	0.00
1,700.0	21.10	12.86	1,624.5	439.7	90.4	448.8	0.00	0.00	0.00
1,800.0	21.10	12.86	1,717.8	474.8	98.4	484.8	0.00	0.00	0.00
1,900.0	21.10	12.86	1,811.1	509.8	106.5	520.8	0.00	0.00	0.00
2,000.0	21.10	12.86	1,904.4	544.9	114.5	556.8	0.00	0.00	0.00
2,100.0	21.10	12.86	1,997.7	580.0	122.5	592.8	0.00	0.00	0.00
2,200.0	21.10	12.86	2,091.0	615.1	130.5	628.7	0.00	0.00	0.00
2,300.0	21.10	12.86	2,184.3	650.2	138.5	664.7	0.00	0.00	0.00
2,400.0	21.10	12.86	2,277.5	685.3	146.5	700.7	0.00	0.00	0.00
2,500.0	21.10	12.86	2,370.8	720.4	154.5	736.7	0.00	0.00	0.00
2,600.0	21.10	12.86	2,464.1	755.5	162.5	772.7	0.00	0.00	0.00
2,700.0	21.10	12.86	2,557.4	790.6	170.6	808.7	0.00	0.00	0.00
2,800.0	21.10	12.86	2,650.7	825.7	178.6	844.6	0.00	0.00	0.00
2,900.0	21.10	12.86	2,744.0	860.8	186.6	880.6	0.00	0.00	0.00
<b>Wasatch</b>									
2,960.0	21.10	12.86	2,800.0	881.9	191.4	902.2	0.00	0.00	0.00
3,000.0	21.10	12.86	2,837.3	895.9	194.6	916.6	0.00	0.00	0.00
3,100.0	21.10	12.86	2,930.6	931.0	202.6	952.6	0.00	0.00	0.00
3,200.0	21.10	12.86	3,023.9	966.1	210.6	988.6	0.00	0.00	0.00
3,300.0	21.10	12.86	3,117.2	1,001.2	218.6	1,024.5	0.00	0.00	0.00
3,400.0	21.10	12.86	3,210.5	1,036.3	226.6	1,060.5	0.00	0.00	0.00
3,500.0	21.10	12.86	3,303.8	1,071.4	234.7	1,096.5	0.00	0.00	0.00
3,600.0	21.10	12.86	3,397.1	1,106.5	242.7	1,132.5	0.00	0.00	0.00
3,700.0	21.10	12.86	3,490.4	1,141.6	250.7	1,168.5	0.00	0.00	0.00
3,800.0	21.10	12.86	3,583.7	1,176.7	258.7	1,204.5	0.00	0.00	0.00
3,900.0	21.10	12.86	3,677.0	1,211.8	266.7	1,240.4	0.00	0.00	0.00
4,000.0	21.10	12.86	3,770.3	1,246.9	274.7	1,276.4	0.00	0.00	0.00
4,100.0	21.10	12.86	3,863.6	1,281.9	282.7	1,312.4	0.00	0.00	0.00
4,200.0	21.10	12.86	3,956.9	1,317.0	290.7	1,348.4	0.00	0.00	0.00
4,300.0	21.10	12.86	4,050.2	1,352.1	298.8	1,384.4	0.00	0.00	0.00
4,400.0	21.10	12.86	4,143.5	1,387.2	306.8	1,420.3	0.00	0.00	0.00
4,500.0	21.10	12.86	4,236.8	1,422.3	314.8	1,456.3	0.00	0.00	0.00
4,600.0	21.10	12.86	4,330.1	1,457.4	322.8	1,492.3	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 13B-7 495 - Slot 13B-7
<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 13B-7 495	<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	21.10	12.86	4,423.4	1,492.5	330.8	1,528.3	0.00	0.00	0.00
4,800.0	21.10	12.86	4,516.6	1,527.6	338.8	1,564.3	0.00	0.00	0.00
4,900.0	21.10	12.86	4,609.9	1,562.7	346.8	1,600.2	0.00	0.00	0.00
5,000.0	21.10	12.86	4,703.2	1,597.8	354.8	1,636.2	0.00	0.00	0.00
5,100.0	21.10	12.86	4,796.5	1,632.9	362.8	1,672.2	0.00	0.00	0.00
5,200.0	21.10	12.86	4,889.8	1,668.0	370.9	1,708.2	0.00	0.00	0.00
5,300.0	21.10	12.86	4,983.1	1,703.1	378.9	1,744.2	0.00	0.00	0.00
5,400.0	21.10	12.86	5,076.4	1,738.2	386.9	1,780.2	0.00	0.00	0.00
5,500.0	21.10	12.86	5,169.7	1,773.3	394.9	1,816.1	0.00	0.00	0.00
5,600.0	21.10	12.86	5,263.0	1,808.4	402.9	1,852.1	0.00	0.00	0.00
5,700.0	21.10	12.86	5,356.3	1,843.5	410.9	1,888.1	0.00	0.00	0.00
5,800.0	21.10	12.86	5,449.6	1,878.6	418.9	1,924.1	0.00	0.00	0.00
5,900.0	21.10	12.86	5,542.9	1,913.7	426.9	1,960.1	0.00	0.00	0.00
6,000.0	21.10	12.86	5,636.2	1,948.8	435.0	1,996.0	0.00	0.00	0.00
6,100.0	21.10	12.86	5,729.5	1,983.9	443.0	2,032.0	0.00	0.00	0.00
6,200.0	21.10	12.86	5,822.8	2,019.0	451.0	2,068.0	0.00	0.00	0.00
6,300.0	21.10	12.86	5,916.1	2,054.1	459.0	2,104.0	0.00	0.00	0.00
6,400.0	21.10	12.86	6,009.4	2,089.1	467.0	2,140.0	0.00	0.00	0.00
6,500.0	21.10	12.86	6,102.7	2,124.2	475.0	2,175.9	0.00	0.00	0.00
6,600.0	21.10	12.86	6,196.0	2,159.3	483.0	2,211.9	0.00	0.00	0.00
6,700.0	21.10	12.86	6,289.3	2,194.4	491.0	2,247.9	0.00	0.00	0.00
6,800.0	21.10	12.86	6,382.6	2,229.5	499.1	2,283.9	0.00	0.00	0.00
6,900.0	21.10	12.86	6,475.9	2,264.6	507.1	2,319.9	0.00	0.00	0.00
7,000.0	21.10	12.86	6,569.2	2,299.7	515.1	2,355.9	0.00	0.00	0.00
<b>Wasatch G</b>									
7,079.1	21.10	12.86	6,643.0	2,327.5	521.4	2,384.3	0.00	0.00	0.00
7,100.0	21.10	12.86	6,662.5	2,334.8	523.1	2,391.8	0.00	0.00	0.00
7,200.0	21.10	12.86	6,755.7	2,369.9	531.1	2,427.8	0.00	0.00	0.00
7,300.0	21.10	12.86	6,849.0	2,405.0	539.1	2,463.8	0.00	0.00	0.00
7,400.0	21.10	12.86	6,942.3	2,440.1	547.1	2,499.8	0.00	0.00	0.00
<b>Fort Union</b>									
7,400.7	21.10	12.86	6,943.0	2,440.3	547.2	2,500.0	0.00	0.00	0.00
7,500.0	21.10	12.86	7,035.6	2,475.2	555.1	2,535.8	0.00	0.00	0.00
7,600.0	21.10	12.86	7,128.9	2,510.3	563.2	2,571.7	0.00	0.00	0.00
7,700.0	21.10	12.86	7,222.2	2,545.4	571.2	2,607.7	0.00	0.00	0.00
7,800.0	21.10	12.86	7,315.5	2,580.5	579.2	2,643.7	0.00	0.00	0.00
7,900.0	21.10	12.86	7,408.8	2,615.6	587.2	2,679.7	0.00	0.00	0.00
8,000.0	21.10	12.86	7,502.1	2,650.7	595.2	2,715.7	0.00	0.00	0.00
8,100.0	21.10	12.86	7,595.4	2,685.8	603.2	2,751.7	0.00	0.00	0.00
8,200.0	21.10	12.86	7,688.7	2,720.9	611.2	2,787.6	0.00	0.00	0.00
8,300.0	21.10	12.86	7,782.0	2,756.0	619.2	2,823.6	0.00	0.00	0.00
8,400.0	21.10	12.86	7,875.3	2,791.1	627.3	2,859.6	0.00	0.00	0.00
8,500.0	21.10	12.86	7,968.6	2,826.2	635.3	2,895.6	0.00	0.00	0.00
8,600.0	21.10	12.86	8,061.9	2,861.2	643.3	2,931.6	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
8,693.9	21.10	12.86	8,149.5	2,894.2	650.8	2,965.3	0.00	0.00	0.00
8,700.0	20.92	12.86	8,155.2	2,896.3	651.3	2,967.5	3.00	-3.00	0.00
8,800.0	17.92	12.86	8,249.5	2,928.7	658.7	3,000.8	3.00	-3.00	0.00
8,900.0	14.92	12.86	8,345.4	2,956.3	665.0	3,029.0	3.00	-3.00	0.00
9,000.0	11.92	12.86	8,442.7	2,978.9	670.1	3,052.2	3.00	-3.00	0.00
9,100.0	8.92	12.86	8,541.0	2,996.5	674.2	3,070.3	3.00	-3.00	0.00
9,200.0	5.92	12.86	8,640.2	3,009.1	677.0	3,083.2	3.00	-3.00	0.00
9,300.0	2.92	12.86	8,739.8	3,016.6	678.7	3,090.8	3.00	-3.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 13B-7 495 - Slot 13B-7
<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 13B-7 495	<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)
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek / TOG									
9,397.2	0.00	0.00	8,837.0	3,019.0	679.3	3,093.3	3.00	-3.00	-13.23
9,400.0	0.04	250.02	8,839.8	3,019.0	679.3	3,093.3	1.50	1.50	-3,916.72
EOB @ 1.22° Inc. / 250.02° Azm									
9,478.6	1.22	250.02	8,918.4	3,018.7	678.5	3,092.9	1.50	1.50	0.00
9,500.0	1.22	250.02	8,939.8	3,018.6	678.1	3,092.6	0.00	0.00	0.00
9,600.0	1.22	250.02	9,039.8	3,017.8	676.1	3,091.5	0.00	0.00	0.00
9,700.0	1.22	250.02	9,139.8	3,017.1	674.0	3,090.4	0.00	0.00	0.00
9,800.0	1.22	250.02	9,239.7	3,016.4	672.0	3,089.3	0.00	0.00	0.00
9,900.0	1.22	250.02	9,339.7	3,015.7	670.0	3,088.2	0.00	0.00	0.00
Williams Fork									
9,999.3	1.22	250.02	9,439.0	3,014.9	668.1	3,087.1	0.00	0.00	0.00
10,000.0	1.22	250.02	9,439.7	3,014.9	668.0	3,087.1	0.00	0.00	0.00
10,100.0	1.22	250.02	9,539.7	3,014.2	666.0	3,086.0	0.00	0.00	0.00
10,200.0	1.22	250.02	9,639.6	3,013.5	664.0	3,084.9	0.00	0.00	0.00
10,300.0	1.22	250.02	9,739.6	3,012.7	662.0	3,083.8	0.00	0.00	0.00
10,400.0	1.22	250.02	9,839.6	3,012.0	660.0	3,082.7	0.00	0.00	0.00
10,500.0	1.22	250.02	9,939.6	3,011.3	658.0	3,081.6	0.00	0.00	0.00
10,600.0	1.22	250.02	10,039.5	3,010.6	656.0	3,080.5	0.00	0.00	0.00
10,700.0	1.22	250.02	10,139.5	3,009.8	654.0	3,079.4	0.00	0.00	0.00
10,800.0	1.22	250.02	10,239.5	3,009.1	652.0	3,078.3	0.00	0.00	0.00
10,900.0	1.22	250.02	10,339.5	3,008.4	650.0	3,077.2	0.00	0.00	0.00
11,000.0	1.22	250.02	10,439.5	3,007.6	648.0	3,076.1	0.00	0.00	0.00
11,100.0	1.22	250.02	10,539.4	3,006.9	646.0	3,075.0	0.00	0.00	0.00
11,200.0	1.22	250.02	10,639.4	3,006.2	644.0	3,073.9	0.00	0.00	0.00
11,300.0	1.22	250.02	10,739.4	3,005.5	642.0	3,072.8	0.00	0.00	0.00
11,400.0	1.22	250.02	10,839.4	3,004.7	640.0	3,071.7	0.00	0.00	0.00
11,500.0	1.22	250.02	10,939.3	3,004.0	638.0	3,070.6	0.00	0.00	0.00
11,600.0	1.22	250.02	11,039.3	3,003.3	636.0	3,069.5	0.00	0.00	0.00
11,700.0	1.22	250.02	11,139.3	3,002.5	634.0	3,068.4	0.00	0.00	0.00
11,800.0	1.22	250.02	11,239.3	3,001.8	632.0	3,067.3	0.00	0.00	0.00
11,900.0	1.22	250.02	11,339.3	3,001.1	630.0	3,066.2	0.00	0.00	0.00
12,000.0	1.22	250.02	11,439.2	3,000.4	628.0	3,065.1	0.00	0.00	0.00
12,100.0	1.22	250.02	11,539.2	2,999.6	626.0	3,064.0	0.00	0.00	0.00
12,200.0	1.22	250.02	11,639.2	2,998.9	624.0	3,062.9	0.00	0.00	0.00
12,300.0	1.22	250.02	11,739.2	2,998.2	622.0	3,061.8	0.00	0.00	0.00
12,400.0	1.22	250.02	11,839.1	2,997.4	619.9	3,060.7	0.00	0.00	0.00
12,500.0	1.22	250.02	11,939.1	2,996.7	617.9	3,059.6	0.00	0.00	0.00
12,600.0	1.22	250.02	12,039.1	2,996.0	615.9	3,058.5	0.00	0.00	0.00
12,700.0	1.22	250.02	12,139.1	2,995.3	613.9	3,057.4	0.00	0.00	0.00
12,800.0	1.22	250.02	12,239.0	2,994.5	611.9	3,056.3	0.00	0.00	0.00
12,900.0	1.22	250.02	12,339.0	2,993.8	609.9	3,055.2	0.00	0.00	0.00
13,000.0	1.22	250.02	12,439.0	2,993.1	607.9	3,054.1	0.00	0.00	0.00
Cameo									
13,078.0	1.22	250.02	12,517.0	2,992.5	606.4	3,053.3	0.00	0.00	0.00
13,100.0	1.22	250.02	12,539.0	2,992.3	605.9	3,053.0	0.00	0.00	0.00
13,200.0	1.22	250.02	12,639.0	2,991.6	603.9	3,051.9	0.00	0.00	0.00
13,300.0	1.22	250.02	12,738.9	2,990.9	601.9	3,050.8	0.00	0.00	0.00
13,400.0	1.22	250.02	12,838.9	2,990.2	599.9	3,049.7	0.00	0.00	0.00
13,500.0	1.22	250.02	12,938.9	2,989.4	597.9	3,048.6	0.00	0.00	0.00
13,600.0	1.22	250.02	13,038.9	2,988.7	595.9	3,047.5	0.00	0.00	0.00
Rollins									
13,628.1	1.22	250.02	13,067.0	2,988.5	595.3	3,047.2	0.00	0.00	0.00
13,700.0	1.22	250.02	13,138.8	2,988.0	593.9	3,046.4	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 13B-7 495 - Slot 13B-7
<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 13B-7 495	<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)
13,800.0	1.22	250.02	13,238.8	2,987.2	591.9	3,045.3	0.00	0.00	0.00
13,900.0	1.22	250.02	13,338.8	2,986.5	589.9	3,044.2	0.00	0.00	0.00
14,000.0	1.22	250.02	13,438.8	2,985.8	587.9	3,043.1	0.00	0.00	0.00
14,100.0	1.22	250.02	13,538.8	2,985.1	585.9	3,042.0	0.00	0.00	0.00
<b>TD @ 14128.3' MD / 13567.0' TVD</b>									
14,128.3	1.22	250.02	13,567.0	2,984.9	585.3	3,041.7	0.00	0.00	0.00

Design Targets									
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	
- Shape									Latitude Longitude
13B-7 - OHCR	- plan hits target center	0.00	0.00	8,837.0	3,019.0	679.3	14,436,330.59	2,455,418.53	39.717431 -108.102025
	- Point								
13B-7 - PBHL	- plan hits target center	0.00	0.00	13,567.0	2,984.9	585.3	14,436,293.40	2,455,325.70	39.717337 -108.102359
	- Ellipse (radii L100.0 W50.0 on 250.00 azi)								

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,960.0	2,800.0	Wasatch				
7,079.1	6,643.0	Wasatch G				
7,400.7	6,943.0	Fort Union				
9,397.2	8,837.0	Ohio Creek / TOG				
9,999.3	9,439.0	Williams Fork				
13,078.0	12,517.0	Cameo				
13,628.1	13,067.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
100.0	100.0	0.0	0.0	Build 3° / 100'
333.3	332.8	14.2	0.0	EOB @ 7.00° Inc. / 0.00° Azm / Build 3° / 100'
811.9	795.9	128.0	19.3	EOB @ 21.10° Inc. / 12.86° Azm
8,693.9	8,149.5	2,894.2	650.8	Drop 3° / 100'
9,397.2	8,837.0	3,019.0	679.3	EOD @ Vertical / Build 1.5° / 100'
9,478.6	8,918.4	3,018.7	678.5	EOB @ 1.22° Inc. / 250.02° Azm
14,128.3	13,567.0	2,984.9	585.3	TD @ 14128.3' MD / 13567.0' TVD