

Project: Rio Blanco County, CO  
 Site: ELU A18 495 Pad  
 Well: ELU A18 FED 22A-13 496  
 Wellbore: Wellbore #1  
 Design: Design #2  
 Latitude: 39.708893  
 Longitude: -108.103536  
 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 - 22A-13(0.0N, 0.0E)  
 Measured Depth Reference: RKB @ 8059.0usft (30')  
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2800.0	2902.5	Wasatch
6452.0	6718.6	Wasatch G
6752.0	7032.1	Fort Union
8627.0	8974.5	Ohio Creek / TOG
9199.0	9546.6	Williams Fork
12226.0	12574.3	Cameo
12776.0	13124.5	Rollins

SECTION DETAILS

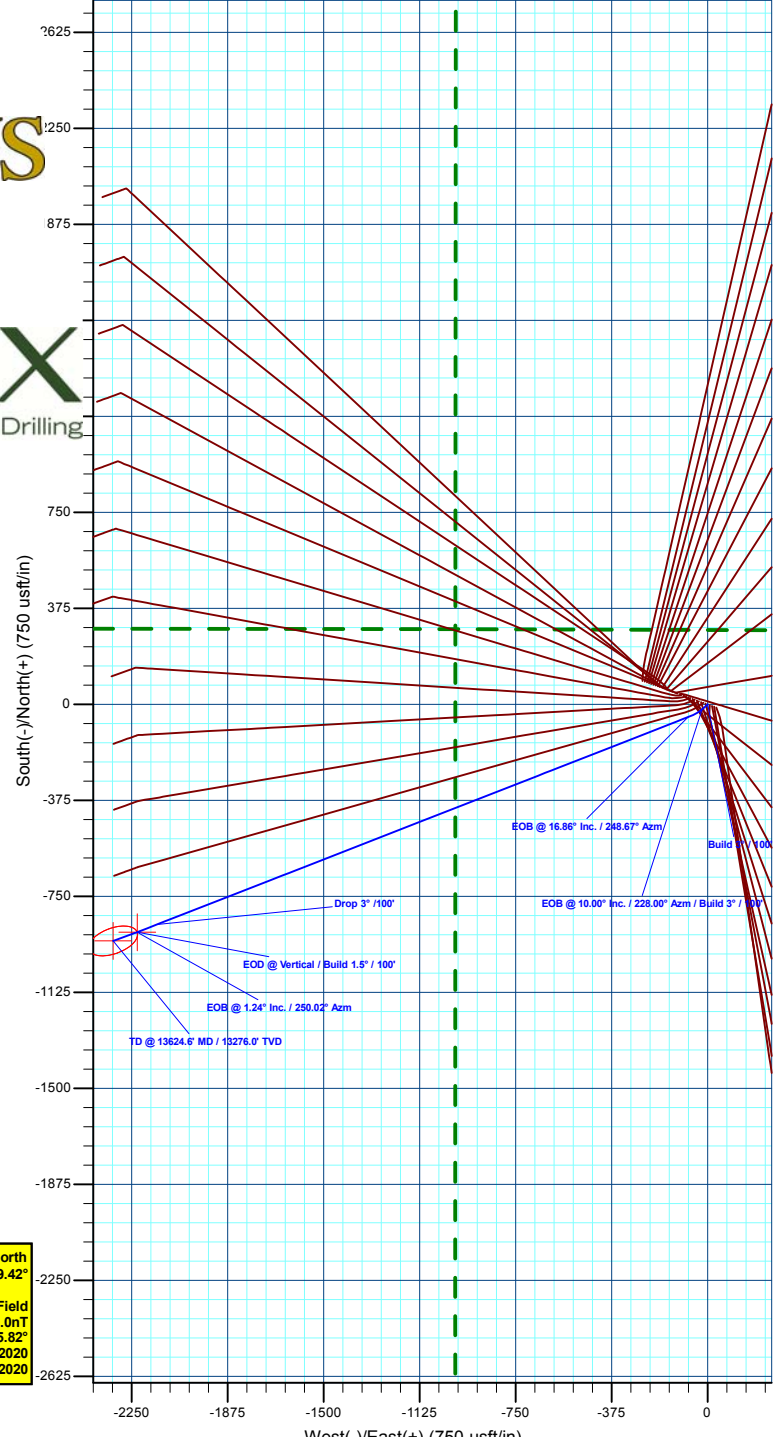
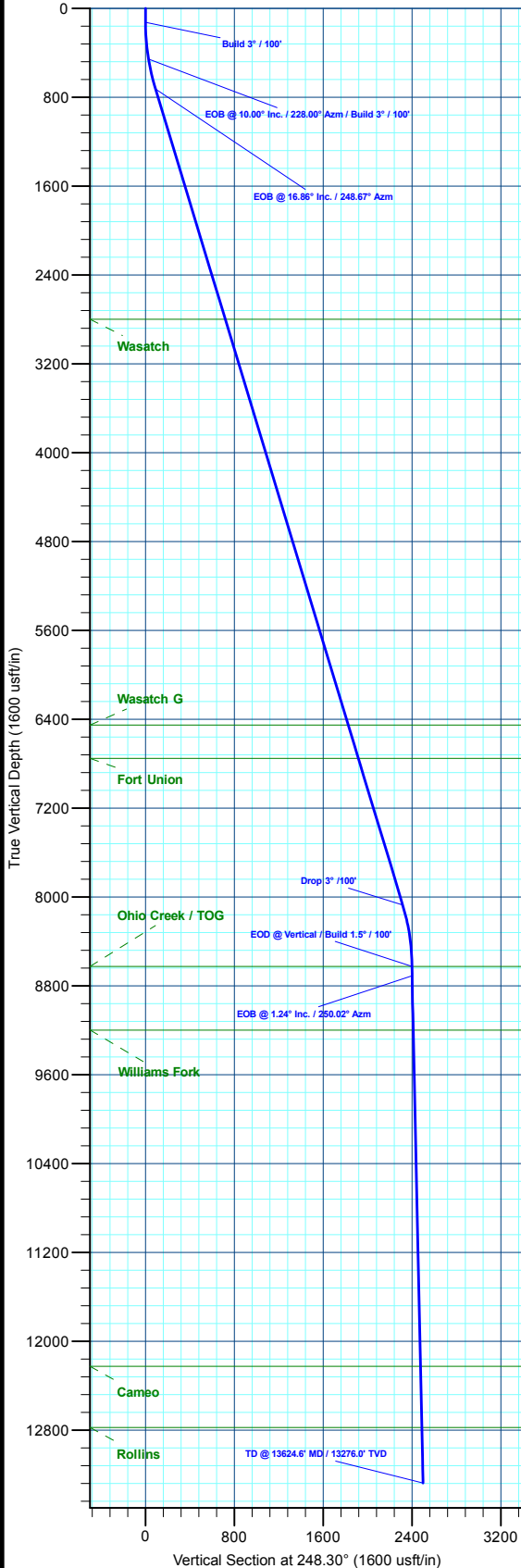
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
125.0	0.00	0.00	125.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
458.3	10.00	228.00	456.6	-19.4	-21.6	3.00	228.00	27.2	EOB @ 10.00° Inc. / 228.00° Azm / Build 3° / 100'
734.1	16.86	248.68	724.9	-50.0	-76.7	3.00	45.37	89.8	EOB @ 16.86° Inc. / 248.67° Azm
8412.4	16.86	248.68	8073.0	-860.0	-2151.6	0.00	0.00	2317.1	Drop 3° / 100'
8974.5	0.00	0.00	8627.0	-889.9	-2228.1	3.00	180.00	2399.2	EOD @ Vertical / Build 1.5° / 100'
9057.4	1.24	250.02	8709.9	-890.2	-2228.9	1.50	250.02	2400.1	EOB @ 1.24° Inc. / 250.02° Azm
13624.6	1.24	250.02	13276.0	-924.1	-2322.1	0.00	0.00	2499.2	TD @ 13624.6° MD / 13276.0° TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
22A-13 - OHCR8627.0	-889.9	-2228.1	14432246.09	2452895.63	39.706451	-108.114452	
22A-13 - PBH13276.0	-924.1	-2322.1	14432208.90	2452802.80	39.706357	-108.117786	

WELL DETAILS: ELU A18 FED 22A-13 496

		Ground Level : 8029.0			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14433207.51	2455093.79	39.708893	-108.103536 22A-13



**T M**  
 Azimuths to True North  
 Magnetic North: 9.42°  
 Magnetic Field  
 Strength: 51157.0nT  
 Dip Angle: 65.82°  
 Date: 8/17/2020  
 Model: HDGM2020



## **Caerus Oil & Gas**

**Rio Blanco County, CO**

**ELU A18 495 Pad**

**ELU A18 FED 22A-13 496 - Slot 22A-13**

**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 22A-13 496 - Slot 22A-13
<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 22A-13 496	<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)		

<b>Site</b>	ELU A18 495 Pad				
<b>Site Position:</b>		<b>Northing:</b>	14,433,279.80 usft	<b>Latitude:</b>	39.709109
<b>From:</b>	Map	<b>Easting:</b>	2,454,904.40 usft	<b>Longitude:</b>	-108.104201
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	1.85 °

<b>Well</b>	ELU A18 FED 22A-13 496 - Slot 22A-13					
<b>Well Position</b>	<b>+N/-S</b>	-78.4 usft	<b>Northing:</b>	14,433,207.51 usft	<b>Latitude:</b>	39.708894
	<b>+E/-W</b>	187.0 usft	<b>Easting:</b>	2,455,093.79 usft	<b>Longitude:</b>	-108.103537
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	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	248.30

<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	
125.0	0.00	0.00	125.0	0.0	0.0	0.00	0.00	0.00	0.00	
458.3	10.00	228.00	456.6	-19.4	-21.6	3.00	3.00	0.00	228.00	
734.1	16.86	248.68	724.9	-50.0	-76.7	3.00	2.49	7.50	45.37	
8,412.4	16.86	248.68	8,073.0	-860.0	-2,151.6	0.00	0.00	0.00	0.00	
8,974.5	0.00	0.00	8,627.0	-889.9	-2,228.1	3.00	-3.00	0.00	180.00	22A-13 - OHCR
9,057.4	1.24	250.02	8,709.9	-890.2	-2,228.9	1.50	1.50	-132.68	250.02	
13,624.6	1.24	250.02	13,276.0	-924.1	-2,322.1	0.00	0.00	0.00	0.00	22A-13 - PBHL

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 22A-13 496 - Slot 22A-13
<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 22A-13 496	<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
<b>Build 3° / 100'</b>									
125.0	0.00	0.00	125.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	2.25	228.00	200.0	-1.0	-1.1	1.4	3.00	3.00	0.00
300.0	5.25	228.00	299.8	-5.4	-6.0	7.5	3.00	3.00	0.00
400.0	8.25	228.00	399.1	-13.2	-14.7	18.5	3.00	3.00	0.00
<b>EOB @ 10.00° Inc. / 228.00° Azm / Build 3° / 100'</b>									
458.3	10.00	228.00	456.6	-19.4	-21.6	27.2	3.00	3.00	0.00
500.0	10.91	232.70	497.6	-24.2	-27.4	34.4	3.00	2.19	11.29
600.0	13.33	241.22	595.4	-35.5	-45.0	55.0	3.00	2.42	8.52
700.0	15.94	247.09	692.1	-46.4	-67.8	80.1	3.00	2.61	5.86
<b>EOB @ 16.86° Inc. / 248.67° Azm</b>									
734.1	16.86	248.68	724.9	-50.0	-76.7	89.8	3.00	2.70	4.65
800.0	16.86	248.68	787.9	-57.0	-94.5	108.9	0.00	0.00	0.00
900.0	16.86	248.68	883.6	-67.5	-121.5	137.9	0.00	0.00	0.00
1,000.0	16.86	248.68	979.3	-78.1	-148.6	166.9	0.00	0.00	0.00
1,100.0	16.86	248.68	1,075.0	-88.6	-175.6	195.9	0.00	0.00	0.00
1,200.0	16.86	248.68	1,170.7	-99.2	-202.6	224.9	0.00	0.00	0.00
1,300.0	16.86	248.68	1,266.4	-109.7	-229.6	253.9	0.00	0.00	0.00
1,400.0	16.86	248.68	1,362.1	-120.3	-256.7	282.9	0.00	0.00	0.00
1,500.0	16.86	248.68	1,457.8	-130.8	-283.7	311.9	0.00	0.00	0.00
1,600.0	16.86	248.68	1,553.5	-141.4	-310.7	341.0	0.00	0.00	0.00
1,700.0	16.86	248.68	1,649.2	-151.9	-337.7	370.0	0.00	0.00	0.00
1,800.0	16.86	248.68	1,744.9	-162.5	-364.7	399.0	0.00	0.00	0.00
1,900.0	16.86	248.68	1,840.6	-173.0	-391.8	428.0	0.00	0.00	0.00
2,000.0	16.86	248.68	1,936.3	-183.6	-418.8	457.0	0.00	0.00	0.00
2,100.0	16.86	248.68	2,032.0	-194.1	-445.8	486.0	0.00	0.00	0.00
2,200.0	16.86	248.68	2,127.7	-204.7	-472.8	515.0	0.00	0.00	0.00
2,300.0	16.86	248.68	2,223.4	-215.2	-499.9	544.0	0.00	0.00	0.00
2,400.0	16.86	248.68	2,319.1	-225.8	-526.9	573.0	0.00	0.00	0.00
2,500.0	16.86	248.68	2,414.8	-236.3	-553.9	602.0	0.00	0.00	0.00
2,600.0	16.86	248.68	2,510.5	-246.9	-580.9	631.0	0.00	0.00	0.00
2,700.0	16.86	248.68	2,606.2	-257.4	-607.9	660.0	0.00	0.00	0.00
2,800.0	16.86	248.68	2,701.9	-268.0	-635.0	689.0	0.00	0.00	0.00
2,900.0	16.86	248.68	2,797.6	-278.5	-662.0	718.1	0.00	0.00	0.00
<b>Wasatch</b>									
2,902.5	16.86	248.68	2,800.0	-278.8	-662.7	718.8	0.00	0.00	0.00
3,000.0	16.86	248.68	2,893.3	-289.1	-689.0	747.1	0.00	0.00	0.00
3,100.0	16.86	248.68	2,989.0	-299.6	-716.0	776.1	0.00	0.00	0.00
3,200.0	16.86	248.68	3,084.7	-310.2	-743.1	805.1	0.00	0.00	0.00
3,300.0	16.86	248.68	3,180.4	-320.7	-770.1	834.1	0.00	0.00	0.00
3,400.0	16.86	248.68	3,276.1	-331.3	-797.1	863.1	0.00	0.00	0.00
3,500.0	16.86	248.68	3,371.8	-341.8	-824.1	892.1	0.00	0.00	0.00
3,600.0	16.86	248.68	3,467.5	-352.4	-851.1	921.1	0.00	0.00	0.00
3,700.0	16.86	248.68	3,563.2	-362.9	-878.2	950.1	0.00	0.00	0.00
3,800.0	16.86	248.68	3,658.9	-373.5	-905.2	979.1	0.00	0.00	0.00
3,900.0	16.86	248.68	3,754.6	-384.0	-932.2	1,008.1	0.00	0.00	0.00
4,000.0	16.86	248.68	3,850.3	-394.6	-959.2	1,037.1	0.00	0.00	0.00
4,100.0	16.86	248.68	3,946.0	-405.1	-986.3	1,066.2	0.00	0.00	0.00
4,200.0	16.86	248.68	4,041.7	-415.7	-1,013.3	1,095.2	0.00	0.00	0.00
4,300.0	16.86	248.68	4,137.4	-426.2	-1,040.3	1,124.2	0.00	0.00	0.00
4,400.0	16.86	248.68	4,233.1	-436.8	-1,067.3	1,153.2	0.00	0.00	0.00
4,500.0	16.86	248.68	4,328.8	-447.3	-1,094.4	1,182.2	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 22A-13 496 - Slot 22A-13
<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 22A-13 496	<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)
4,600.0	16.86	248.68	4,424.5	-457.9	-1,121.4	1,211.2	0.00	0.00	0.00
4,700.0	16.86	248.68	4,520.2	-468.4	-1,148.4	1,240.2	0.00	0.00	0.00
4,800.0	16.86	248.68	4,615.9	-479.0	-1,175.4	1,269.2	0.00	0.00	0.00
4,900.0	16.86	248.68	4,711.6	-489.5	-1,202.4	1,298.2	0.00	0.00	0.00
5,000.0	16.86	248.68	4,807.3	-500.1	-1,229.5	1,327.2	0.00	0.00	0.00
5,100.0	16.86	248.68	4,903.0	-510.6	-1,256.5	1,356.2	0.00	0.00	0.00
5,200.0	16.86	248.68	4,998.7	-521.2	-1,283.5	1,385.2	0.00	0.00	0.00
5,300.0	16.86	248.68	5,094.4	-531.7	-1,310.5	1,414.3	0.00	0.00	0.00
5,400.0	16.86	248.68	5,190.1	-542.2	-1,337.6	1,443.3	0.00	0.00	0.00
5,500.0	16.86	248.68	5,285.8	-552.8	-1,364.6	1,472.3	0.00	0.00	0.00
5,600.0	16.86	248.68	5,381.5	-563.3	-1,391.6	1,501.3	0.00	0.00	0.00
5,700.0	16.86	248.68	5,477.2	-573.9	-1,418.6	1,530.3	0.00	0.00	0.00
5,800.0	16.86	248.68	5,572.9	-584.4	-1,445.6	1,559.3	0.00	0.00	0.00
5,900.0	16.86	248.68	5,668.6	-595.0	-1,472.7	1,588.3	0.00	0.00	0.00
6,000.0	16.86	248.68	5,764.3	-605.5	-1,499.7	1,617.3	0.00	0.00	0.00
6,100.0	16.86	248.68	5,860.0	-616.1	-1,526.7	1,646.3	0.00	0.00	0.00
6,200.0	16.86	248.68	5,955.7	-626.6	-1,553.7	1,675.3	0.00	0.00	0.00
6,300.0	16.86	248.68	6,051.4	-637.2	-1,580.8	1,704.3	0.00	0.00	0.00
6,400.0	16.86	248.68	6,147.1	-647.7	-1,607.8	1,733.3	0.00	0.00	0.00
6,500.0	16.86	248.68	6,242.8	-658.3	-1,634.8	1,762.3	0.00	0.00	0.00
6,600.0	16.86	248.68	6,338.5	-668.8	-1,661.8	1,791.4	0.00	0.00	0.00
6,700.0	16.86	248.68	6,434.2	-679.4	-1,688.8	1,820.4	0.00	0.00	0.00
<b>Wasatch G</b>									
6,718.6	16.86	248.68	6,452.0	-681.3	-1,693.9	1,825.8	0.00	0.00	0.00
6,800.0	16.86	248.68	6,529.9	-689.9	-1,715.9	1,849.4	0.00	0.00	0.00
6,900.0	16.86	248.68	6,625.6	-700.5	-1,742.9	1,878.4	0.00	0.00	0.00
7,000.0	16.86	248.68	6,721.3	-711.0	-1,769.9	1,907.4	0.00	0.00	0.00
<b>Fort Union</b>									
7,032.1	16.86	248.68	6,752.0	-714.4	-1,778.6	1,916.7	0.00	0.00	0.00
7,100.0	16.86	248.68	6,817.0	-721.6	-1,796.9	1,936.4	0.00	0.00	0.00
7,200.0	16.86	248.68	6,912.7	-732.1	-1,824.0	1,965.4	0.00	0.00	0.00
7,300.0	16.86	248.68	7,008.4	-742.7	-1,851.0	1,994.4	0.00	0.00	0.00
7,400.0	16.86	248.68	7,104.1	-753.2	-1,878.0	2,023.4	0.00	0.00	0.00
7,500.0	16.86	248.68	7,199.8	-763.8	-1,905.0	2,052.4	0.00	0.00	0.00
7,600.0	16.86	248.68	7,295.5	-774.3	-1,932.0	2,081.4	0.00	0.00	0.00
7,700.0	16.86	248.68	7,391.2	-784.9	-1,959.1	2,110.4	0.00	0.00	0.00
7,800.0	16.86	248.68	7,486.9	-795.4	-1,986.1	2,139.5	0.00	0.00	0.00
7,900.0	16.86	248.68	7,582.6	-806.0	-2,013.1	2,168.5	0.00	0.00	0.00
8,000.0	16.86	248.68	7,678.3	-816.5	-2,040.1	2,197.5	0.00	0.00	0.00
8,100.0	16.86	248.68	7,774.0	-827.1	-2,067.2	2,226.5	0.00	0.00	0.00
8,200.0	16.86	248.68	7,869.7	-837.6	-2,094.2	2,255.5	0.00	0.00	0.00
8,300.0	16.86	248.68	7,965.4	-848.2	-2,121.2	2,284.5	0.00	0.00	0.00
8,400.0	16.86	248.68	8,061.1	-858.7	-2,148.2	2,313.5	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
8,412.4	16.86	248.68	8,073.0	-860.0	-2,151.6	2,317.1	0.00	0.00	0.00
8,500.0	14.23	248.68	8,157.4	-868.6	-2,173.5	2,340.6	3.00	-3.00	0.00
8,600.0	11.23	248.68	8,254.9	-876.6	-2,194.0	2,362.6	3.00	-3.00	0.00
8,700.0	8.23	248.68	8,353.5	-882.7	-2,209.7	2,379.5	3.00	-3.00	0.00
8,800.0	5.23	248.68	8,452.8	-887.0	-2,220.7	2,391.2	3.00	-3.00	0.00
8,900.0	2.23	248.68	8,552.5	-889.4	-2,226.7	2,397.8	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek / TOG</b>									
8,974.5	0.00	0.00	8,627.0	-889.9	-2,228.1	2,399.2	3.00	-3.00	149.45
9,000.0	0.38	250.02	8,652.5	-889.9	-2,228.2	2,399.3	1.50	1.50	-431.13

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 22A-13 496 - Slot 22A-13
<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 22A-13 496	<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)	
<b>EOB @ 1.24° Inc. / 250.02° Azm</b>										
9,057.4	1.24	250.02	8,709.9	-890.2	-2,228.9	2,400.1	1.50	1.50	0.00	
9,100.0	1.24	250.02	8,752.5	-890.5	-2,229.8	2,401.0	0.00	0.00	0.00	
9,200.0	1.24	250.02	8,852.5	-891.3	-2,231.8	2,403.2	0.00	0.00	0.00	
9,300.0	1.24	250.02	8,952.4	-892.0	-2,233.9	2,405.4	0.00	0.00	0.00	
9,400.0	1.24	250.02	9,052.4	-892.7	-2,235.9	2,407.5	0.00	0.00	0.00	
9,500.0	1.24	250.02	9,152.4	-893.5	-2,237.9	2,409.7	0.00	0.00	0.00	
<b>Williams Fork</b>										
9,546.6	1.24	250.02	9,199.0	-893.8	-2,238.9	2,410.7	0.00	0.00	0.00	
9,600.0	1.24	250.02	9,252.4	-894.2	-2,240.0	2,411.9	0.00	0.00	0.00	
9,700.0	1.24	250.02	9,352.4	-895.0	-2,242.0	2,414.1	0.00	0.00	0.00	
9,800.0	1.24	250.02	9,452.3	-895.7	-2,244.1	2,416.2	0.00	0.00	0.00	
9,900.0	1.24	250.02	9,552.3	-896.4	-2,246.1	2,418.4	0.00	0.00	0.00	
10,000.0	1.24	250.02	9,652.3	-897.2	-2,248.1	2,420.6	0.00	0.00	0.00	
10,100.0	1.24	250.02	9,752.3	-897.9	-2,250.2	2,422.7	0.00	0.00	0.00	
10,200.0	1.24	250.02	9,852.2	-898.7	-2,252.2	2,424.9	0.00	0.00	0.00	
10,300.0	1.24	250.02	9,952.2	-899.4	-2,254.3	2,427.1	0.00	0.00	0.00	
10,400.0	1.24	250.02	10,052.2	-900.2	-2,256.3	2,429.2	0.00	0.00	0.00	
10,500.0	1.24	250.02	10,152.2	-900.9	-2,258.3	2,431.4	0.00	0.00	0.00	
10,600.0	1.24	250.02	10,252.1	-901.6	-2,260.4	2,433.6	0.00	0.00	0.00	
10,700.0	1.24	250.02	10,352.1	-902.4	-2,262.4	2,435.7	0.00	0.00	0.00	
10,800.0	1.24	250.02	10,452.1	-903.1	-2,264.5	2,437.9	0.00	0.00	0.00	
10,900.0	1.24	250.02	10,552.1	-903.9	-2,266.5	2,440.1	0.00	0.00	0.00	
11,000.0	1.24	250.02	10,652.0	-904.6	-2,268.5	2,442.2	0.00	0.00	0.00	
11,100.0	1.24	250.02	10,752.0	-905.3	-2,270.6	2,444.4	0.00	0.00	0.00	
11,200.0	1.24	250.02	10,852.0	-906.1	-2,272.6	2,446.6	0.00	0.00	0.00	
11,300.0	1.24	250.02	10,952.0	-906.8	-2,274.7	2,448.8	0.00	0.00	0.00	
11,400.0	1.24	250.02	11,052.0	-907.6	-2,276.7	2,450.9	0.00	0.00	0.00	
11,500.0	1.24	250.02	11,151.9	-908.3	-2,278.7	2,453.1	0.00	0.00	0.00	
11,600.0	1.24	250.02	11,251.9	-909.1	-2,280.8	2,455.3	0.00	0.00	0.00	
11,700.0	1.24	250.02	11,351.9	-909.8	-2,282.8	2,457.4	0.00	0.00	0.00	
11,800.0	1.24	250.02	11,451.9	-910.5	-2,284.9	2,459.6	0.00	0.00	0.00	
11,900.0	1.24	250.02	11,551.8	-911.3	-2,286.9	2,461.8	0.00	0.00	0.00	
12,000.0	1.24	250.02	11,651.8	-912.0	-2,288.9	2,463.9	0.00	0.00	0.00	
12,100.0	1.24	250.02	11,751.8	-912.8	-2,291.0	2,466.1	0.00	0.00	0.00	
12,200.0	1.24	250.02	11,851.8	-913.5	-2,293.0	2,468.3	0.00	0.00	0.00	
12,300.0	1.24	250.02	11,951.7	-914.2	-2,295.0	2,470.4	0.00	0.00	0.00	
12,400.0	1.24	250.02	12,051.7	-915.0	-2,297.1	2,472.6	0.00	0.00	0.00	
12,500.0	1.24	250.02	12,151.7	-915.7	-2,299.1	2,474.8	0.00	0.00	0.00	
<b>Cameo</b>										
12,574.3	1.24	250.02	12,226.0	-916.3	-2,300.6	2,476.4	0.00	0.00	0.00	
12,600.0	1.24	250.02	12,251.7	-916.5	-2,301.2	2,476.9	0.00	0.00	0.00	
12,700.0	1.24	250.02	12,351.6	-917.2	-2,303.2	2,479.1	0.00	0.00	0.00	
12,800.0	1.24	250.02	12,451.6	-918.0	-2,305.2	2,481.3	0.00	0.00	0.00	
12,900.0	1.24	250.02	12,551.6	-918.7	-2,307.3	2,483.5	0.00	0.00	0.00	
13,000.0	1.24	250.02	12,651.6	-919.4	-2,309.3	2,485.6	0.00	0.00	0.00	
13,100.0	1.24	250.02	12,751.6	-920.2	-2,311.4	2,487.8	0.00	0.00	0.00	
<b>Rollins</b>										
13,124.5	1.24	250.02	12,776.0	-920.4	-2,311.9	2,488.3	0.00	0.00	0.00	
13,200.0	1.24	250.02	12,851.5	-920.9	-2,313.4	2,490.0	0.00	0.00	0.00	
13,300.0	1.24	250.02	12,951.5	-921.7	-2,315.4	2,492.1	0.00	0.00	0.00	
13,400.0	1.24	250.02	13,051.5	-922.4	-2,317.5	2,494.3	0.00	0.00	0.00	
13,500.0	1.24	250.02	13,151.5	-923.1	-2,319.5	2,496.5	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 22A-13 496 - Slot 22A-13
<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 22A-13 496	<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)	
13,600.0	1.24	250.02	13,251.4	-923.9	-2,321.6	2,498.6	0.00	0.00	0.00	
<b>TD @ 13624.6' MD / 13276.0' TVD</b>										
13,624.6	1.24	250.02	13,276.0	-924.1	-2,322.1	2,499.2	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
22A-13 - OHCR - hit/miss target - Shape - Point	0.00	0.00	8,627.0	-889.9	-2,228.1	14,432,246.09	2,452,895.63	39.706451	-108.111452	
22A-13 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	13,276.0	-924.1	-2,322.1	14,432,208.90	2,452,802.80	39.706357	-108.111786	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,902.5	2,800.0	Wasatch				
6,718.6	6,452.0	Wasatch G				
7,032.1	6,752.0	Fort Union				
8,974.5	8,627.0	Ohio Creek / TOG				
9,546.6	9,199.0	Williams Fork				
12,574.3	12,226.0	Cameo				
13,124.5	12,776.0	Rollins				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
125.0	125.0	0.0	0.0	Build 3° / 100'	
458.3	456.6	-19.4	-21.6	EOB @ 10.00° Inc. / 228.00° Azm / Build 3° / 100'	
734.1	724.9	-50.0	-76.7	EOB @ 16.86° Inc. / 248.67° Azm	
8,412.4	8,073.0	-860.0	-2,151.6	Drop 3° / 100'	
8,974.5	8,627.0	-889.9	-2,228.1	EOD @ Vertical / Build 1.5° / 100'	
9,057.4	8,709.9	-890.2	-2,228.9	EOB @ 1.24° Inc. / 250.02° Azm	
13,624.6	13,276.0	-924.1	-2,322.1	TD @ 13624.6' MD / 13276.0' TVD	