

Project: Rio Blanco County, CO  
 Site: ELU J14 496 Pad  
 Well: ELU J14 FED 12A-14 496  
 Wellbore: Wellbore #1  
 Design: Design #2  
 Latitude: 39.700866  
 Longitude: -108.136216  
 Ground Level: 7902.0  
 RKB @ 7932.0usft (H&P #330)

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  
 Co-ordinate (N/E) Reference: Well ELU J14 FED 12A-14 496 - Slot 12A-14, True North  
 Vertical (TVD) Reference: RKB @ 7932.0usft (H&P #330)  
 Section (VS) Reference: Slot - 12A-14(0.0N, 0.0E)  
 Measured Depth Reference: RKB @ 7932.0usft (H&P #330)  
 Calculation Method: Minimum Curvature

#### SECTION DETAILS

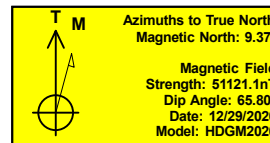
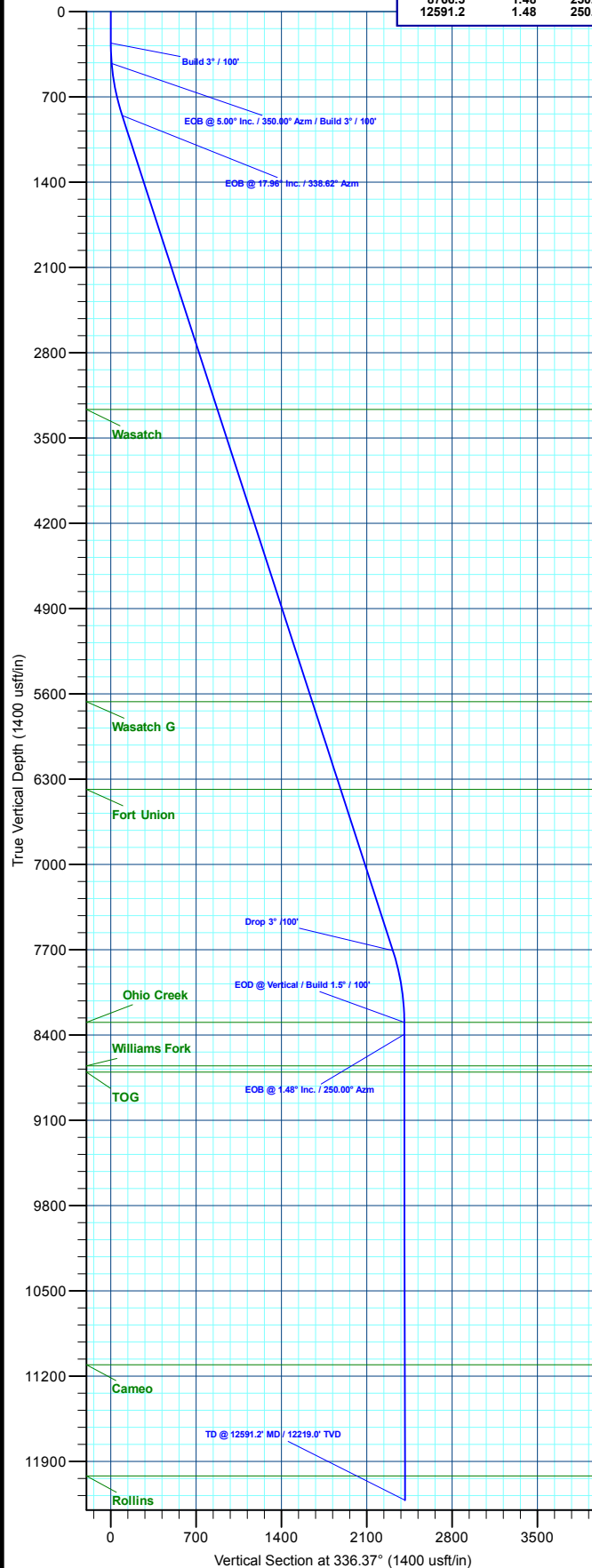
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	260.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
260.0	0.00	0.00	426.7	0.0	-1.3	3.00	350.00	7.1	EOB @ 5.00° Inc. / 350.00° Azm / Build 3° / 100'
426.7	5.00	350.00	863.3	7.2	-29.2	3.00	-15.58	93.2	EOB @ 17.96° Inc. / 338.62° Azm
863.3	17.96	338.62	8069.1	2158.4	-839.5	0.00	0.00	2313.9	EOB @ 100°
8069.1	17.96	338.62	8667.9	2245.1	-873.4	3.00	180.00	2407.0	EOD @ Vertical / Build 1.5° / 100'
8667.9	0.00	0.00	8766.5	2244.7	-874.6	1.50	250.00	2407.0	EOB @ 1.48° Inc. / 250.00° Azm
8766.5	1.48	250.00	12591.2	2210.9	-967.4	0.00	0.00	2413.3	TD @ 12591.2' MD / 12219.0' TVD

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
12A-14 - OHCR	8297.0	2245.1	-873.4	14432204.69	2445049.43	39.707028	-108.139319
12A-14 - PBHL	12219.0	2210.9	-967.4	14432167.50	2444956.60	39.706934	-108.139653

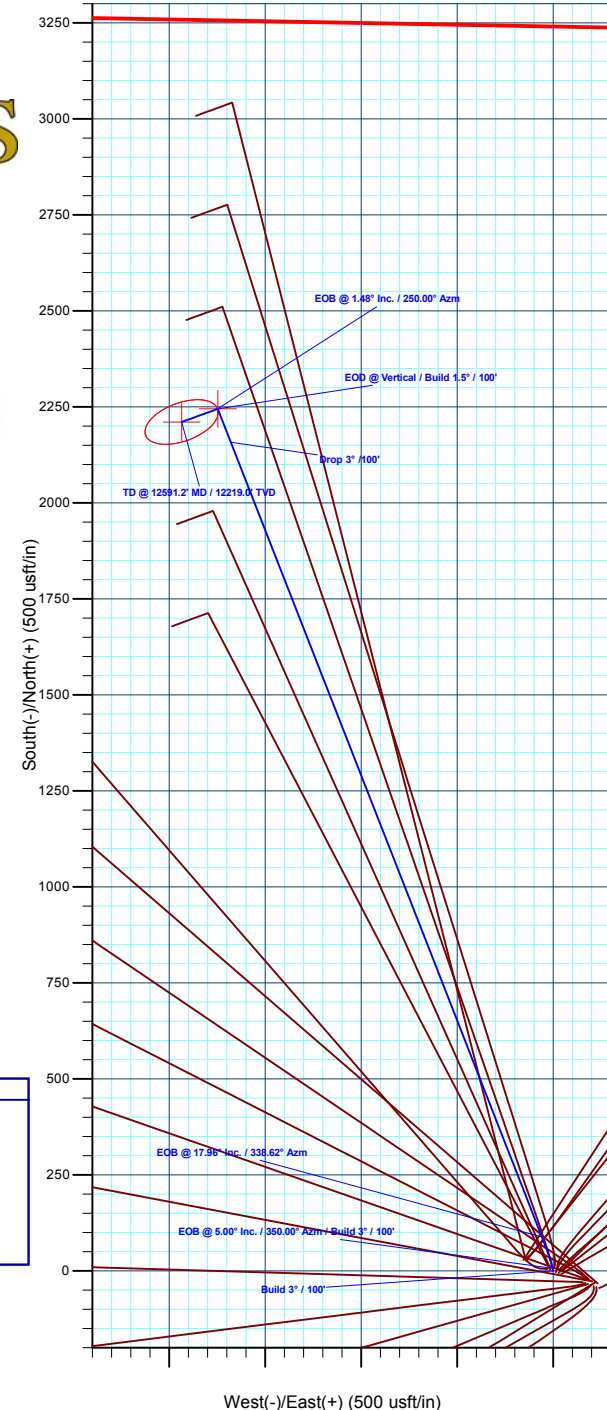
#### WELL DETAILS: ELU J14 FED 12A-14 496

+N/-S	+E/-W	Northing	7902.0 Easting	Latitude	Longitude	12A-14
0.0	0.0	14429988.60	2445994.10	39.700866	-108.136216	



#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3265.0	3398.4	Wasatch
5665.0	5921.4	Wasatch G
6384.0	6677.3	Fort Union
8297.0	8667.9	Ohio Creek
8654.0	9025.0	Williams Fork
8704.0	9075.0	TOG
11107.0	11478.8	Cameo
12019.0	12391.1	Rollins



Plan: Design #2 (ELU J14 FED 12A-14 496/Wellbore #1)

Created By: Will Jircik

Date: 13:29, January 14 2021



## **Caerus Oil & Gas**

**Rio Blanco County, CO**

**ELU J14 496 Pad**

**ELU J14 FED 12A-14 496 - Slot 12A-14**

**Wellbore #1**

**Plan: Design #2**

## **QES Well Planning Report**

**14 January, 2021**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU J14 FED 12A-14 496 - Slot 12A-14
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Site:</b>	ELU J14 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU J14 FED 12A-14 496	<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)		

Site		ELU J14 496 Pad			
Site Position:		Northing:	14,429,993.30 usft	Latitude:	39.700881
From:	Map	Easting:	2,445,979.90 usft	Longitude:	-108.136266
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.83 °

Well	ELU J14 FED 12A-14 496 - Slot 12A-14					
Well Position	+N/-S	-5.2 usft	Northing:	14,429,988.60 usft	Latitude:	39.700867
	+E/-W	14.0 usft	Easting:	2,445,994.10 usft	Longitude:	-108.136216
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	7,902.0 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	12/29/2020	9.37	65.80	51,121.10000000

<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	336.37

<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	
260.0	0.00	0.00	260.0	0.0	0.0	0.00	0.00	0.00	0.00	
426.7	5.00	350.00	426.5	7.2	-1.3	3.00	3.00	0.00	350.00	
863.3	17.96	338.62	853.5	88.9	-29.2	3.00	2.97	-2.61	-15.58	
8,069.1	17.96	338.62	7,708.0	2,158.4	-839.5	0.00	0.00	0.00	0.00	
8,667.9	0.00	0.00	8,297.0	2,245.1	-873.4	3.00	-3.00	0.00	180.00	12A-14 - OHCR
8,766.5	1.48	250.00	8,395.6	2,244.7	-874.6	1.50	1.50	-111.55	250.00	
12,591.2	1.48	250.00	12,219.0	2,210.9	-967.4	0.00	0.00	0.00	0.00	12A-14 - PBHL

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU J14 FED 12A-14 496 - Slot 12A-14
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Site:</b>	ELU J14 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU J14 FED 12A-14 496	<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
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>									
260.0	0.00	0.00	260.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	1.20	350.00	300.0	0.4	-0.1	0.4	3.00	3.00	0.00
400.0	4.20	350.00	399.9	5.1	-0.9	5.0	3.00	3.00	0.00
<b>EOB @ 5.00° Inc. / 350.00° Azm / Build 3° / 100'</b>									
426.7	5.00	350.00	426.5	7.2	-1.3	7.1	3.00	3.00	0.00
500.0	7.14	345.24	499.4	14.7	-3.0	14.7	3.00	2.92	-6.48
600.0	10.11	342.03	598.2	29.1	-7.3	29.6	3.00	2.96	-3.22
700.0	13.08	340.26	696.2	48.1	-13.8	49.6	3.00	2.98	-1.77
800.0	16.07	339.14	793.0	71.7	-22.6	74.7	3.00	2.99	-1.12
<b>EOB @ 17.96° Inc. / 338.62° Azm</b>									
863.3	17.96	338.62	853.5	88.9	-29.2	93.2	3.00	2.99	-0.82
900.0	17.96	338.62	888.4	99.5	-33.4	104.5	0.00	0.00	0.00
1,000.0	17.96	338.62	983.5	128.2	-44.6	135.3	0.00	0.00	0.00
1,100.0	17.96	338.62	1,078.6	156.9	-55.9	166.2	0.00	0.00	0.00
1,200.0	17.96	338.62	1,173.8	185.7	-67.1	197.0	0.00	0.00	0.00
1,300.0	17.96	338.62	1,268.9	214.4	-78.3	227.8	0.00	0.00	0.00
1,400.0	17.96	338.62	1,364.0	243.1	-89.6	258.6	0.00	0.00	0.00
1,500.0	17.96	338.62	1,459.1	271.8	-100.8	289.4	0.00	0.00	0.00
1,600.0	17.96	338.62	1,554.3	300.5	-112.1	320.3	0.00	0.00	0.00
1,700.0	17.96	338.62	1,649.4	329.3	-123.3	351.1	0.00	0.00	0.00
1,800.0	17.96	338.62	1,744.5	358.0	-134.6	381.9	0.00	0.00	0.00
1,900.0	17.96	338.62	1,839.6	386.7	-145.8	412.7	0.00	0.00	0.00
2,000.0	17.96	338.62	1,934.8	415.4	-157.0	443.5	0.00	0.00	0.00
2,100.0	17.96	338.62	2,029.9	444.1	-168.3	474.3	0.00	0.00	0.00
2,200.0	17.96	338.62	2,125.0	472.9	-179.5	505.2	0.00	0.00	0.00
2,300.0	17.96	338.62	2,220.1	501.6	-190.8	536.0	0.00	0.00	0.00
2,400.0	17.96	338.62	2,315.3	530.3	-202.0	566.8	0.00	0.00	0.00
2,500.0	17.96	338.62	2,410.4	559.0	-213.3	597.6	0.00	0.00	0.00
2,600.0	17.96	338.62	2,505.5	587.7	-224.5	628.4	0.00	0.00	0.00
2,700.0	17.96	338.62	2,600.6	616.4	-235.8	659.3	0.00	0.00	0.00
2,800.0	17.96	338.62	2,695.8	645.2	-247.0	690.1	0.00	0.00	0.00
2,900.0	17.96	338.62	2,790.9	673.9	-258.2	720.9	0.00	0.00	0.00
3,000.0	17.96	338.62	2,886.0	702.6	-269.5	751.7	0.00	0.00	0.00
3,100.0	17.96	338.62	2,981.1	731.3	-280.7	782.5	0.00	0.00	0.00
3,200.0	17.96	338.62	3,076.3	760.0	-292.0	813.4	0.00	0.00	0.00
3,300.0	17.96	338.62	3,171.4	788.8	-303.2	844.2	0.00	0.00	0.00
<b>Wasatch</b>									
3,398.4	17.96	338.62	3,265.0	817.0	-314.3	874.5	0.00	0.00	0.00
3,400.0	17.96	338.62	3,266.5	817.5	-314.5	875.0	0.00	0.00	0.00
3,500.0	17.96	338.62	3,361.6	846.2	-325.7	905.8	0.00	0.00	0.00
3,600.0	17.96	338.62	3,456.8	874.9	-337.0	936.6	0.00	0.00	0.00
3,700.0	17.96	338.62	3,551.9	903.6	-348.2	967.4	0.00	0.00	0.00
3,800.0	17.96	338.62	3,647.0	932.4	-359.4	998.3	0.00	0.00	0.00
3,900.0	17.96	338.62	3,742.1	961.1	-370.7	1,029.1	0.00	0.00	0.00
4,000.0	17.96	338.62	3,837.3	989.8	-381.9	1,059.9	0.00	0.00	0.00
4,100.0	17.96	338.62	3,932.4	1,018.5	-393.2	1,090.7	0.00	0.00	0.00
4,200.0	17.96	338.62	4,027.5	1,047.2	-404.4	1,121.5	0.00	0.00	0.00
4,300.0	17.96	338.62	4,122.6	1,076.0	-415.7	1,152.4	0.00	0.00	0.00
4,400.0	17.96	338.62	4,217.8	1,104.7	-426.9	1,183.2	0.00	0.00	0.00
4,500.0	17.96	338.62	4,312.9	1,133.4	-438.2	1,214.0	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU J14 FED 12A-14 496 - Slot 12A-14
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Site:</b>	ELU J14 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU J14 FED 12A-14 496	<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	17.96	338.62	4,408.0	1,162.1	-449.4	1,244.8	0.00	0.00	0.00
4,700.0	17.96	338.62	4,503.1	1,190.8	-460.6	1,275.6	0.00	0.00	0.00
4,800.0	17.96	338.62	4,598.3	1,219.6	-471.9	1,306.5	0.00	0.00	0.00
4,900.0	17.96	338.62	4,693.4	1,248.3	-483.1	1,337.3	0.00	0.00	0.00
5,000.0	17.96	338.62	4,788.5	1,277.0	-494.4	1,368.1	0.00	0.00	0.00
5,100.0	17.96	338.62	4,883.6	1,305.7	-505.6	1,398.9	0.00	0.00	0.00
5,200.0	17.96	338.62	4,978.8	1,334.4	-516.9	1,429.7	0.00	0.00	0.00
5,300.0	17.96	338.62	5,073.9	1,363.2	-528.1	1,460.5	0.00	0.00	0.00
5,400.0	17.96	338.62	5,169.0	1,391.9	-539.3	1,491.4	0.00	0.00	0.00
5,500.0	17.96	338.62	5,264.1	1,420.6	-550.6	1,522.2	0.00	0.00	0.00
5,600.0	17.96	338.62	5,359.3	1,449.3	-561.8	1,553.0	0.00	0.00	0.00
5,700.0	17.96	338.62	5,454.4	1,478.0	-573.1	1,583.8	0.00	0.00	0.00
5,800.0	17.96	338.62	5,549.5	1,506.8	-584.3	1,614.6	0.00	0.00	0.00
5,900.0	17.96	338.62	5,644.6	1,535.5	-595.6	1,645.5	0.00	0.00	0.00
<b>Wasatch G</b>									
5,921.4	17.96	338.62	5,665.0	1,541.6	-598.0	1,652.1	0.00	0.00	0.00
6,000.0	17.96	338.62	5,739.8	1,564.2	-606.8	1,676.3	0.00	0.00	0.00
6,100.0	17.96	338.62	5,834.9	1,592.9	-618.1	1,707.1	0.00	0.00	0.00
6,200.0	17.96	338.62	5,930.0	1,621.6	-629.3	1,737.9	0.00	0.00	0.00
6,300.0	17.96	338.62	6,025.1	1,650.4	-640.5	1,768.7	0.00	0.00	0.00
6,400.0	17.96	338.62	6,120.3	1,679.1	-651.8	1,799.5	0.00	0.00	0.00
6,500.0	17.96	338.62	6,215.4	1,707.8	-663.0	1,830.4	0.00	0.00	0.00
6,600.0	17.96	338.62	6,310.5	1,736.5	-674.3	1,861.2	0.00	0.00	0.00
<b>Fort Union</b>									
6,677.3	17.96	338.62	6,384.0	1,758.7	-683.0	1,885.0	0.00	0.00	0.00
6,700.0	17.96	338.62	6,405.6	1,765.2	-685.5	1,892.0	0.00	0.00	0.00
6,800.0	17.96	338.62	6,500.8	1,794.0	-696.8	1,922.8	0.00	0.00	0.00
6,900.0	17.96	338.62	6,595.9	1,822.7	-708.0	1,953.6	0.00	0.00	0.00
7,000.0	17.96	338.62	6,691.0	1,851.4	-719.3	1,984.5	0.00	0.00	0.00
7,100.0	17.96	338.62	6,786.1	1,880.1	-730.5	2,015.3	0.00	0.00	0.00
7,200.0	17.96	338.62	6,881.3	1,908.8	-741.7	2,046.1	0.00	0.00	0.00
7,300.0	17.96	338.62	6,976.4	1,937.6	-753.0	2,076.9	0.00	0.00	0.00
7,400.0	17.96	338.62	7,071.5	1,966.3	-764.2	2,107.7	0.00	0.00	0.00
7,500.0	17.96	338.62	7,166.6	1,995.0	-775.5	2,138.6	0.00	0.00	0.00
7,600.0	17.96	338.62	7,261.8	2,023.7	-786.7	2,169.4	0.00	0.00	0.00
7,700.0	17.96	338.62	7,356.9	2,052.4	-798.0	2,200.2	0.00	0.00	0.00
7,800.0	17.96	338.62	7,452.0	2,081.2	-809.2	2,231.0	0.00	0.00	0.00
7,900.0	17.96	338.62	7,547.1	2,109.9	-820.5	2,261.8	0.00	0.00	0.00
8,000.0	17.96	338.62	7,642.3	2,138.6	-831.7	2,292.6	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
8,069.1	17.96	338.62	7,708.0	2,158.4	-839.5	2,313.9	0.00	0.00	0.00
8,100.0	17.04	338.62	7,737.5	2,167.1	-842.9	2,323.2	3.00	-3.00	0.00
8,200.0	14.04	338.62	7,833.8	2,192.0	-852.6	2,350.0	3.00	-3.00	0.00
8,300.0	11.04	338.62	7,931.4	2,212.2	-860.5	2,371.7	3.00	-3.00	0.00
8,400.0	8.04	338.62	8,030.0	2,227.7	-866.6	2,388.2	3.00	-3.00	0.00
8,500.0	5.04	338.62	8,129.3	2,238.3	-870.7	2,399.6	3.00	-3.00	0.00
8,600.0	2.04	338.62	8,229.1	2,244.0	-873.0	2,405.8	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek</b>									
8,667.9	0.00	0.00	8,297.0	2,245.1	-873.4	2,407.0	3.00	-3.00	0.00
8,700.0	0.48	250.00	8,329.1	2,245.1	-873.5	2,407.0	1.50	1.50	0.00
<b>EOB @ 1.48° Inc. / 250.00° Azm</b>									
8,766.5	1.48	250.00	8,395.6	2,244.7	-874.6	2,407.0	1.50	1.50	0.00
8,800.0	1.48	250.00	8,429.1	2,244.4	-875.4	2,407.1	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU J14 FED 12A-14 496 - Slot 12A-14
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Site:</b>	ELU J14 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU J14 FED 12A-14 496	<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)
8,900.0	1.48	250.00	8,529.1	2,243.5	-877.8	2,407.3	0.00	0.00	0.00
9,000.0	1.48	250.00	8,629.0	2,242.6	-880.3	2,407.4	0.00	0.00	0.00
<b>Williams Fork</b>									
9,025.0	1.48	250.00	8,654.0	2,242.4	-880.9	2,407.5	0.00	0.00	0.00
<b>TOG</b>									
9,075.0	1.48	250.00	8,704.0	2,242.0	-882.1	2,407.6	0.00	0.00	0.00
9,100.0	1.48	250.00	8,729.0	2,241.8	-882.7	2,407.6	0.00	0.00	0.00
9,200.0	1.48	250.00	8,829.0	2,240.9	-885.1	2,407.8	0.00	0.00	0.00
9,300.0	1.48	250.00	8,928.9	2,240.0	-887.5	2,407.9	0.00	0.00	0.00
9,400.0	1.48	250.00	9,028.9	2,239.1	-890.0	2,408.1	0.00	0.00	0.00
9,500.0	1.48	250.00	9,128.9	2,238.2	-892.4	2,408.2	0.00	0.00	0.00
9,600.0	1.48	250.00	9,228.8	2,237.3	-894.8	2,408.4	0.00	0.00	0.00
9,700.0	1.48	250.00	9,328.8	2,236.5	-897.2	2,408.6	0.00	0.00	0.00
9,800.0	1.48	250.00	9,428.8	2,235.6	-899.7	2,408.7	0.00	0.00	0.00
9,900.0	1.48	250.00	9,528.7	2,234.7	-902.1	2,408.9	0.00	0.00	0.00
10,000.0	1.48	250.00	9,628.7	2,233.8	-904.5	2,409.1	0.00	0.00	0.00
10,100.0	1.48	250.00	9,728.7	2,232.9	-906.9	2,409.2	0.00	0.00	0.00
10,200.0	1.48	250.00	9,828.6	2,232.0	-909.4	2,409.4	0.00	0.00	0.00
10,300.0	1.48	250.00	9,928.6	2,231.2	-911.8	2,409.6	0.00	0.00	0.00
10,400.0	1.48	250.00	10,028.6	2,230.3	-914.2	2,409.7	0.00	0.00	0.00
10,500.0	1.48	250.00	10,128.5	2,229.4	-916.7	2,409.9	0.00	0.00	0.00
10,600.0	1.48	250.00	10,228.5	2,228.5	-919.1	2,410.0	0.00	0.00	0.00
10,700.0	1.48	250.00	10,328.5	2,227.6	-921.5	2,410.2	0.00	0.00	0.00
10,800.0	1.48	250.00	10,428.4	2,226.7	-923.9	2,410.4	0.00	0.00	0.00
10,900.0	1.48	250.00	10,528.4	2,225.9	-926.4	2,410.5	0.00	0.00	0.00
11,000.0	1.48	250.00	10,628.4	2,225.0	-928.8	2,410.7	0.00	0.00	0.00
11,100.0	1.48	250.00	10,728.3	2,224.1	-931.2	2,410.9	0.00	0.00	0.00
11,200.0	1.48	250.00	10,828.3	2,223.2	-933.6	2,411.0	0.00	0.00	0.00
11,300.0	1.48	250.00	10,928.3	2,222.3	-936.1	2,411.2	0.00	0.00	0.00
11,400.0	1.48	250.00	11,028.2	2,221.4	-938.5	2,411.4	0.00	0.00	0.00
<b>Cameo</b>									
11,478.8	1.48	250.00	11,107.0	2,220.7	-940.4	2,411.5	0.00	0.00	0.00
11,500.0	1.48	250.00	11,128.2	2,220.6	-940.9	2,411.5	0.00	0.00	0.00
11,600.0	1.48	250.00	11,228.2	2,219.7	-943.3	2,411.7	0.00	0.00	0.00
11,700.0	1.48	250.00	11,328.1	2,218.8	-945.8	2,411.8	0.00	0.00	0.00
11,800.0	1.48	250.00	11,428.1	2,217.9	-948.2	2,412.0	0.00	0.00	0.00
11,900.0	1.48	250.00	11,528.1	2,217.0	-950.6	2,412.2	0.00	0.00	0.00
12,000.0	1.48	250.00	11,628.0	2,216.1	-953.0	2,412.3	0.00	0.00	0.00
12,100.0	1.48	250.00	11,728.0	2,215.3	-955.5	2,412.5	0.00	0.00	0.00
12,200.0	1.48	250.00	11,828.0	2,214.4	-957.9	2,412.7	0.00	0.00	0.00
12,300.0	1.48	250.00	11,927.9	2,213.5	-960.3	2,412.8	0.00	0.00	0.00
<b>Rollins</b>									
12,391.1	1.48	250.00	12,019.0	2,212.7	-962.5	2,413.0	0.00	0.00	0.00
12,400.0	1.48	250.00	12,027.9	2,212.6	-962.7	2,413.0	0.00	0.00	0.00
12,500.0	1.48	250.00	12,127.9	2,211.7	-965.2	2,413.1	0.00	0.00	0.00
<b>TD @ 12591.2' MD / 12219.0' TVD</b>									
12,591.2	1.48	250.00	12,219.0	2,210.9	-967.4	2,413.3	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU J14 FED 12A-14 496 - Slot 12A-14
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 7932.0usft (H&P #330)
<b>Site:</b>	ELU J14 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU J14 FED 12A-14 496	<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	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
12A-14 - OHCR	0.00	0.00	8,297.0	2,245.1	-873.4	14,432,204.69	2,445,049.43	39.707028	-108.139319
- plan hits target center									
- Point									
12A-14 - PBHL	0.00	0.00	12,219.0	2,210.9	-967.4	14,432,167.50	2,444,956.60	39.706934	-108.139653
- plan hits target center									
- Ellipse (radii L100.0 W50.0 on 250.00 azi)									

## Formations

Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
3,398.4	3,265.0	Wasatch			
5,921.4	5,665.0	Wasatch G			
6,677.3	6,384.0	Fort Union			
8,667.9	8,297.0	Ohio Creek			
9,025.0	8,654.0	Williams Fork			
9,075.0	8,704.0	TOG			
11,478.8	11,107.0	Cameo			
12,391.1	12,019.0	Rollins			

## Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
260.0	260.0	0.0	0.0	Build 3° / 100'
426.7	426.5	7.2	-1.3	EOB @ 5.00° Inc. / 350.00° Azm / Build 3° / 100'
863.3	853.5	88.9	-29.2	EOB @ 17.96° Inc. / 338.62° Azm
8,069.1	7,708.0	2,158.4	-839.5	Drop 3° / 100'
8,667.9	8,297.0	2,245.1	-873.4	EOD @ Vertical / Build 1.5° / 100'
8,766.5	8,395.6	2,244.7	-874.6	EOB @ 1.48° Inc. / 250.00° Azm
12,591.2	12,219.0	2,210.9	-967.4	TD @ 12591.2' MD / 12219.0' TVD