

Project: Rio Blanco County, CO  
 Site: ELU J14 496 Pad  
 Well: ELU J14 FED 22C-14 496  
 Wellbore: Wellbore #1  
 Design: Design #2  
 Latitude: 39.700878  
 Longitude: -108.136154  
 Ground Level: 7902.0  
 RKB @ 7932.0usft (H&P #330)

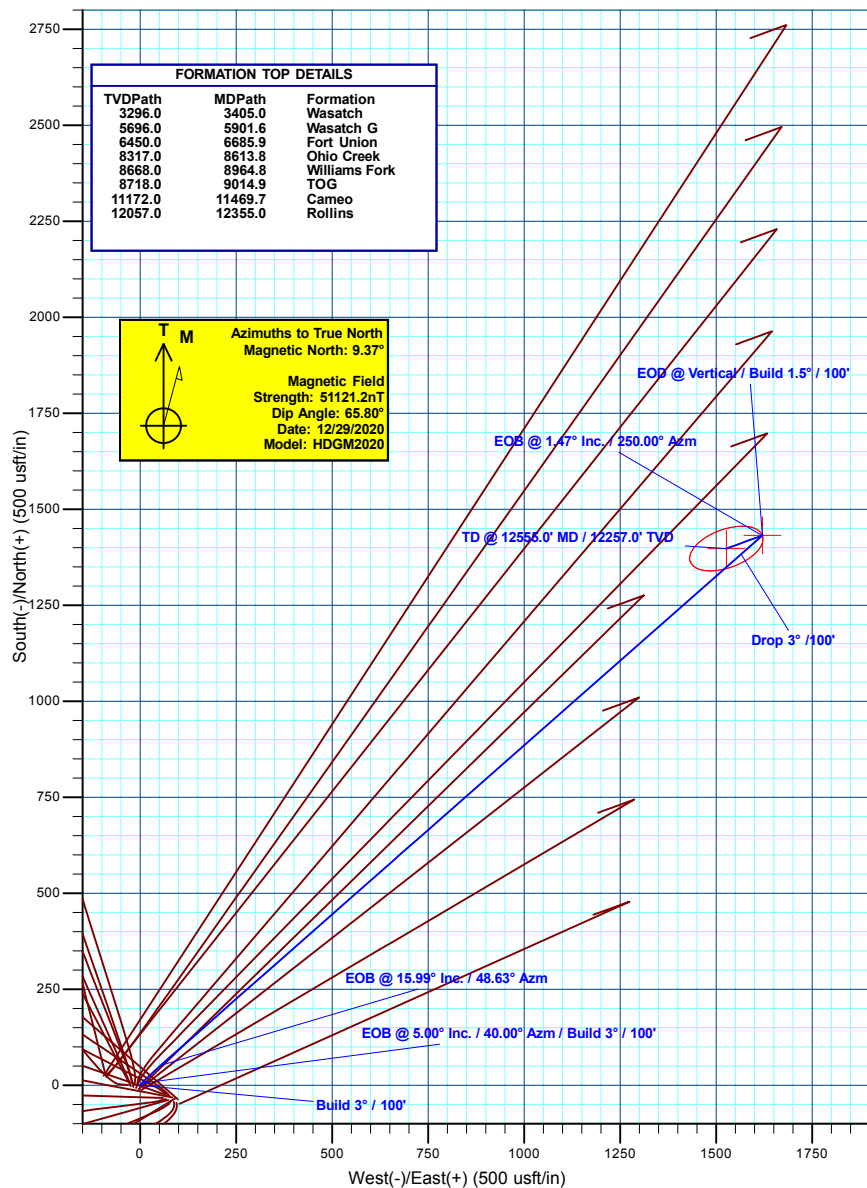
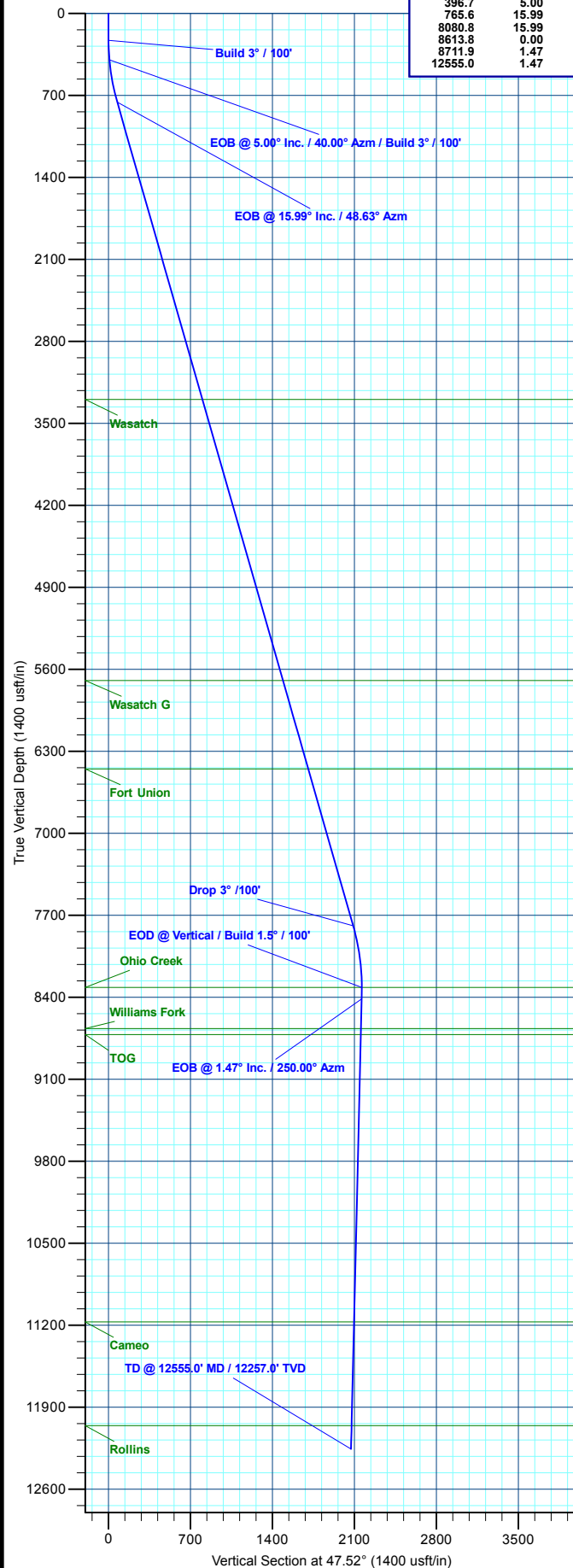
PROJECT DETAILS: Rio Blanco County, CO  
 Geodetic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1927 - Western US  
 Ellipsoid: Clarke 1866  
 Zone: Zone 12N (114 W to 108 W)  
 System Datum: Mean Sea Level

REFERENCE INFORMATION  
 Co-ordinate (N/E) Reference: Well ELU J14 FED 22C-14 496 - Slot 22C-14, True North  
 Vertical (TVD) Reference: RKB @ 7932.0usft (H&P #330)  
 Section (VS) Reference: Slot - 22C-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	0.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
230.0	0.00	0.00	230.0	0.0	0.0	0.00	0.00	0.0	EOB @ 5.00° Inc. / 40.00° Azm / Build 3° / 100'
396.7	5.00	40.00	396.5	5.6	4.7	3.00	40.00	7.2	EOB @ 15.99° Inc. / 48.63° Azm
765.6	15.99	48.63	758.7	51.6	53.3	3.00	12.43	74.2	Drop 3° / 100'
8080.8	15.99	48.63	7791.0	1383.3	1565.3	0.00	0.00	2088.6	EOD @ Vertical / Build 1.5° / 100'
8613.8	0.00	0.00	8317.0	1432.2	1620.7	3.00	180.00	2162.5	EOB @ 1.47° Inc. / 250.00° Azm
8711.9	1.47	250.00	8415.1	1431.7	1619.5	1.50	250.00	2161.3	TD @ 12555.0' MD / 12257.0' TVD
12555.0	1.47	250.00	12257.0	1397.9	1526.7	0.00	0.00	2070.1	

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
22C-14 - OHCR	8317.0	1432.2	1620.7	14431476.49	2447585.63	39.704808	-108.130396
22C-14 - PBHL	12257.0	1397.9	1526.7	14431439.30	2447492.80	39.704714	-108.130730

WELL DETAILS: ELU J14 FED 22C-14 496							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude		
0.0	0.0	14429993.30	7902.0 2446011.50	39.700878	-108.136154	22C-14	



Plan: Design #2 (ELU J14 FED 22C-14 496/Wellbore #1)

Created By: Will Jircik

Date: 14:28, January 14 2021



## **Caerus Oil & Gas**

**Rio Blanco County, CO**

**ELU J14 496 Pad**

**ELU J14 FED 22C-14 496 - Slot 22C-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 22C-14 496 - Slot 22C-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 22C-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 22C-14 496 - Slot 22C-14					
Well Position	+N/-S	-1.0 usft	Northing:	14,429,993.30 usft	Latitude:	39.700878
	+E/-W	31.6 usft	Easting:	2,446,011.50 usft	Longitude:	-108.136154
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	51,121.20000000

<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	47.52

<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	
230.0	0.00	0.00	230.0	0.0	0.0	0.00	0.00	0.00	0.00	
396.7	5.00	40.00	396.5	5.6	4.7	3.00	3.00	0.00	40.00	
765.6	15.99	48.63	758.7	51.6	53.3	3.00	2.98	2.34	12.43	
8,080.8	15.99	48.63	7,791.0	1,383.3	1,565.3	0.00	0.00	0.00	0.00	
8,613.8	0.00	0.00	8,317.0	1,432.2	1,620.7	3.00	-3.00	0.00	180.00	22C-14 - OHCR
8,711.9	1.47	250.00	8,415.1	1,431.7	1,619.5	1.50	1.50	-112.08	250.00	
12,555.0	1.47	250.00	12,257.0	1,397.9	1,526.7	0.00	0.00	0.00	0.00	22C-14 - PBHL

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU J14 FED 22C-14 496 - Slot 22C-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 22C-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>									
230.0	0.00	0.00	230.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	2.10	40.00	300.0	1.0	0.8	1.3	3.00	3.00	0.00
<b>EOB @ 5.00° Inc. / 40.00° Azm / Build 3° / 100'</b>									
396.7	5.00	40.00	396.5	5.6	4.7	7.2	3.00	3.00	0.00
400.0	5.10	40.24	399.8	5.8	4.9	7.5	3.00	2.93	7.27
500.0	8.05	44.76	499.1	14.2	12.7	18.9	3.00	2.96	4.52
600.0	11.04	46.86	597.7	25.7	24.6	35.5	3.00	2.98	2.10
700.0	14.02	48.07	695.3	40.3	40.6	57.2	3.00	2.99	1.21
<b>EOB @ 15.99° Inc. / 48.63° Azm</b>									
765.6	15.99	48.63	758.7	51.6	53.3	74.2	3.00	2.99	0.84
800.0	15.99	48.63	791.7	57.9	60.4	83.6	0.00	0.00	0.00
900.0	15.99	48.63	887.9	76.1	81.1	111.2	0.00	0.00	0.00
1,000.0	15.99	48.63	984.0	94.3	101.7	138.7	0.00	0.00	0.00
1,100.0	15.99	48.63	1,080.1	112.5	122.4	166.2	0.00	0.00	0.00
1,200.0	15.99	48.63	1,176.3	130.7	143.1	193.8	0.00	0.00	0.00
1,300.0	15.99	48.63	1,272.4	148.9	163.7	221.3	0.00	0.00	0.00
1,400.0	15.99	48.63	1,368.5	167.1	184.4	248.8	0.00	0.00	0.00
1,500.0	15.99	48.63	1,464.7	185.3	205.1	276.4	0.00	0.00	0.00
1,600.0	15.99	48.63	1,560.8	203.5	225.7	303.9	0.00	0.00	0.00
1,700.0	15.99	48.63	1,656.9	221.7	246.4	331.5	0.00	0.00	0.00
1,800.0	15.99	48.63	1,753.1	239.9	267.1	359.0	0.00	0.00	0.00
1,900.0	15.99	48.63	1,849.2	258.1	287.8	386.5	0.00	0.00	0.00
2,000.0	15.99	48.63	1,945.3	276.3	308.4	414.1	0.00	0.00	0.00
2,100.0	15.99	48.63	2,041.5	294.5	329.1	441.6	0.00	0.00	0.00
2,200.0	15.99	48.63	2,137.6	312.7	349.8	469.2	0.00	0.00	0.00
2,300.0	15.99	48.63	2,233.7	330.9	370.4	496.7	0.00	0.00	0.00
2,400.0	15.99	48.63	2,329.9	349.1	391.1	524.2	0.00	0.00	0.00
2,500.0	15.99	48.63	2,426.0	367.3	411.8	551.8	0.00	0.00	0.00
2,600.0	15.99	48.63	2,522.1	385.6	432.4	579.3	0.00	0.00	0.00
2,700.0	15.99	48.63	2,618.3	403.8	453.1	606.8	0.00	0.00	0.00
2,800.0	15.99	48.63	2,714.4	422.0	473.8	634.4	0.00	0.00	0.00
2,900.0	15.99	48.63	2,810.5	440.2	494.4	661.9	0.00	0.00	0.00
3,000.0	15.99	48.63	2,906.7	458.4	515.1	689.5	0.00	0.00	0.00
3,100.0	15.99	48.63	3,002.8	476.6	535.8	717.0	0.00	0.00	0.00
3,200.0	15.99	48.63	3,098.9	494.8	556.4	744.5	0.00	0.00	0.00
3,300.0	15.99	48.63	3,195.1	513.0	577.1	772.1	0.00	0.00	0.00
3,400.0	15.99	48.63	3,291.2	531.2	597.8	799.6	0.00	0.00	0.00
<b>Wasatch</b>									
3,405.0	15.99	48.63	3,296.0	532.1	598.8	801.0	0.00	0.00	0.00
3,500.0	15.99	48.63	3,387.3	549.4	618.5	827.1	0.00	0.00	0.00
3,600.0	15.99	48.63	3,483.4	567.6	639.1	854.7	0.00	0.00	0.00
3,700.0	15.99	48.63	3,579.6	585.8	659.8	882.2	0.00	0.00	0.00
3,800.0	15.99	48.63	3,675.7	604.0	680.5	909.8	0.00	0.00	0.00
3,900.0	15.99	48.63	3,771.8	622.2	701.1	937.3	0.00	0.00	0.00
4,000.0	15.99	48.63	3,868.0	640.4	721.8	964.8	0.00	0.00	0.00
4,100.0	15.99	48.63	3,964.1	658.6	742.5	992.4	0.00	0.00	0.00
4,200.0	15.99	48.63	4,060.2	676.8	763.1	1,019.9	0.00	0.00	0.00
4,300.0	15.99	48.63	4,156.4	695.0	783.8	1,047.4	0.00	0.00	0.00
4,400.0	15.99	48.63	4,252.5	713.2	804.5	1,075.0	0.00	0.00	0.00
4,500.0	15.99	48.63	4,348.6	731.4	825.1	1,102.5	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 22C-14 496 - Slot 22C-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 22C-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	15.99	48.63	4,444.8	749.7	845.8	1,130.1	0.00	0.00	0.00
4,700.0	15.99	48.63	4,540.9	767.9	866.5	1,157.6	0.00	0.00	0.00
4,800.0	15.99	48.63	4,637.0	786.1	887.2	1,185.1	0.00	0.00	0.00
4,900.0	15.99	48.63	4,733.2	804.3	907.8	1,212.7	0.00	0.00	0.00
5,000.0	15.99	48.63	4,829.3	822.5	928.5	1,240.2	0.00	0.00	0.00
5,100.0	15.99	48.63	4,925.4	840.7	949.2	1,267.8	0.00	0.00	0.00
5,200.0	15.99	48.63	5,021.6	858.9	969.8	1,295.3	0.00	0.00	0.00
5,300.0	15.99	48.63	5,117.7	877.1	990.5	1,322.8	0.00	0.00	0.00
5,400.0	15.99	48.63	5,213.8	895.3	1,011.2	1,350.4	0.00	0.00	0.00
5,500.0	15.99	48.63	5,310.0	913.5	1,031.8	1,377.9	0.00	0.00	0.00
5,600.0	15.99	48.63	5,406.1	931.7	1,052.5	1,405.4	0.00	0.00	0.00
5,700.0	15.99	48.63	5,502.2	949.9	1,073.2	1,433.0	0.00	0.00	0.00
5,800.0	15.99	48.63	5,598.4	968.1	1,093.8	1,460.5	0.00	0.00	0.00
5,900.0	15.99	48.63	5,694.5	986.3	1,114.5	1,488.1	0.00	0.00	0.00
<b>Wasatch G</b>									
5,901.6	15.99	48.63	5,696.0	986.6	1,114.8	1,488.5	0.00	0.00	0.00
6,000.0	15.99	48.63	5,790.6	1,004.5	1,135.2	1,515.6	0.00	0.00	0.00
6,100.0	15.99	48.63	5,886.7	1,022.7	1,155.8	1,543.1	0.00	0.00	0.00
6,200.0	15.99	48.63	5,982.9	1,040.9	1,176.5	1,570.7	0.00	0.00	0.00
6,300.0	15.99	48.63	6,079.0	1,059.1	1,197.2	1,598.2	0.00	0.00	0.00
6,400.0	15.99	48.63	6,175.1	1,077.3	1,217.9	1,625.7	0.00	0.00	0.00
6,500.0	15.99	48.63	6,271.3	1,095.5	1,238.5	1,653.3	0.00	0.00	0.00
6,600.0	15.99	48.63	6,367.4	1,113.7	1,259.2	1,680.8	0.00	0.00	0.00
<b>Fort Union</b>									
6,685.9	15.99	48.63	6,450.0	1,129.4	1,276.9	1,704.5	0.00	0.00	0.00
6,700.0	15.99	48.63	6,463.5	1,132.0	1,279.9	1,708.4	0.00	0.00	0.00
6,800.0	15.99	48.63	6,559.7	1,150.2	1,300.5	1,735.9	0.00	0.00	0.00
6,900.0	15.99	48.63	6,655.8	1,168.4	1,321.2	1,763.4	0.00	0.00	0.00
7,000.0	15.99	48.63	6,751.9	1,186.6	1,341.9	1,791.0	0.00	0.00	0.00
7,100.0	15.99	48.63	6,848.1	1,204.8	1,362.5	1,818.5	0.00	0.00	0.00
7,200.0	15.99	48.63	6,944.2	1,223.0	1,383.2	1,846.0	0.00	0.00	0.00
7,300.0	15.99	48.63	7,040.3	1,241.2	1,403.9	1,873.6	0.00	0.00	0.00
7,400.0	15.99	48.63	7,136.5	1,259.4	1,424.5	1,901.1	0.00	0.00	0.00
7,500.0	15.99	48.63	7,232.6	1,277.6	1,445.2	1,928.7	0.00	0.00	0.00
7,600.0	15.99	48.63	7,328.7	1,295.8	1,465.9	1,956.2	0.00	0.00	0.00
7,700.0	15.99	48.63	7,424.9	1,314.0	1,486.6	1,983.7	0.00	0.00	0.00
7,800.0	15.99	48.63	7,521.0	1,332.2	1,507.2	2,011.3	0.00	0.00	0.00
7,900.0	15.99	48.63	7,617.1	1,350.4	1,527.9	2,038.8	0.00	0.00	0.00
8,000.0	15.99	48.63	7,713.3	1,368.6	1,548.6	2,066.4	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
8,080.8	15.99	48.63	7,791.0	1,383.3	1,565.3	2,088.6	0.00	0.00	0.00
8,100.0	15.41	48.63	7,809.4	1,386.8	1,569.2	2,093.8	3.00	-3.00	0.00
8,200.0	12.41	48.63	7,906.5	1,402.6	1,587.2	2,117.8	3.00	-3.00	0.00
8,300.0	9.41	48.63	8,004.7	1,415.2	1,601.4	2,136.8	3.00	-3.00	0.00
8,400.0	6.41	48.63	8,103.7	1,424.3	1,611.7	2,150.5	3.00	-3.00	0.00
8,500.0	3.41	48.63	8,203.3	1,429.9	1,618.2	2,159.1	3.00	-3.00	0.00
8,600.0	0.41	48.63	8,303.2	1,432.1	1,620.7	2,162.4	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek</b>									
8,613.8	0.00	0.00	8,317.0	1,432.2	1,620.7	2,162.5	3.00	-3.00	0.00
8,700.0	1.29	250.00	8,403.2	1,431.8	1,619.8	2,161.6	1.50	1.50	0.00
<b>EOB @ 1.47° Inc. / 250.00° Azm</b>									
8,711.9	1.47	250.00	8,415.1	1,431.7	1,619.5	2,161.3	1.50	1.50	0.00
8,800.0	1.47	250.00	8,503.2	1,430.9	1,617.4	2,159.2	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 22C-14 496 - Slot 22C-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 22C-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	1.47	250.00	8,603.2	1,430.1	1,615.0	2,156.8	0.00	0.00	0.00	
<b>Williams Fork</b>										
8,964.8	1.47	250.00	8,668.0	1,429.5	1,613.4	2,155.3	0.00	0.00	0.00	
9,000.0	1.47	250.00	8,703.1	1,429.2	1,612.6	2,154.5	0.00	0.00	0.00	
<b>TOG</b>										
9,014.9	1.47	250.00	8,718.0	1,429.1	1,612.2	2,154.1	0.00	0.00	0.00	
9,100.0	1.47	250.00	8,803.1	1,428.3	1,610.1	2,152.1	0.00	0.00	0.00	
9,200.0	1.47	250.00	8,903.1	1,427.4	1,607.7	2,149.7	0.00	0.00	0.00	
9,300.0	1.47	250.00	9,003.0	1,426.6	1,605.3	2,147.3	0.00	0.00	0.00	
9,400.0	1.47	250.00	9,103.0	1,425.7	1,602.9	2,145.0	0.00	0.00	0.00	
9,500.0	1.47	250.00	9,203.0	1,424.8	1,600.5	2,142.6	0.00	0.00	0.00	
9,600.0	1.47	250.00	9,302.9	1,423.9	1,598.1	2,140.2	0.00	0.00	0.00	
9,700.0	1.47	250.00	9,402.9	1,423.0	1,595.7	2,137.8	0.00	0.00	0.00	
9,800.0	1.47	250.00	9,502.9	1,422.2	1,593.2	2,135.5	0.00	0.00	0.00	
9,900.0	1.47	250.00	9,602.8	1,421.3	1,590.8	2,133.1	0.00	0.00	0.00	
10,000.0	1.47	250.00	9,702.8	1,420.4	1,588.4	2,130.7	0.00	0.00	0.00	
10,100.0	1.47	250.00	9,802.8	1,419.5	1,586.0	2,128.3	0.00	0.00	0.00	
10,200.0	1.47	250.00	9,902.7	1,418.6	1,583.6	2,126.0	0.00	0.00	0.00	
10,300.0	1.47	250.00	10,002.7	1,417.8	1,581.2	2,123.6	0.00	0.00	0.00	
10,400.0	1.47	250.00	10,102.7	1,416.9	1,578.8	2,121.2	0.00	0.00	0.00	
10,500.0	1.47	250.00	10,202.6	1,416.0	1,576.3	2,118.9	0.00	0.00	0.00	
10,600.0	1.47	250.00	10,302.6	1,415.1	1,573.9	2,116.5	0.00	0.00	0.00	
10,700.0	1.47	250.00	10,402.6	1,414.3	1,571.5	2,114.1	0.00	0.00	0.00	
10,800.0	1.47	250.00	10,502.5	1,413.4	1,569.1	2,111.7	0.00	0.00	0.00	
10,900.0	1.47	250.00	10,602.5	1,412.5	1,566.7	2,109.4	0.00	0.00	0.00	
11,000.0	1.47	250.00	10,702.5	1,411.6	1,564.3	2,107.0	0.00	0.00	0.00	
11,100.0	1.47	250.00	10,802.4	1,410.7	1,561.9	2,104.6	0.00	0.00	0.00	
11,200.0	1.47	250.00	10,902.4	1,409.9	1,559.4	2,102.2	0.00	0.00	0.00	
11,300.0	1.47	250.00	11,002.4	1,409.0	1,557.0	2,099.9	0.00	0.00	0.00	
11,400.0	1.47	250.00	11,102.3	1,408.1	1,554.6	2,097.5	0.00	0.00	0.00	
<b>Cameo</b>										
11,469.7	1.47	250.00	11,172.0	1,407.5	1,552.9	2,095.8	0.00	0.00	0.00	
11,500.0	1.47	250.00	11,202.3	1,407.2	1,552.2	2,095.1	0.00	0.00	0.00	
11,600.0	1.47	250.00	11,302.3	1,406.3	1,549.8	2,092.7	0.00	0.00	0.00	
11,700.0	1.47	250.00	11,402.2	1,405.5	1,547.4	2,090.4	0.00	0.00	0.00	
11,800.0	1.47	250.00	11,502.2	1,404.6	1,545.0	2,088.0	0.00	0.00	0.00	
11,900.0	1.47	250.00	11,602.2	1,403.7	1,542.5	2,085.6	0.00	0.00	0.00	
12,000.0	1.47	250.00	11,702.1	1,402.8	1,540.1	2,083.2	0.00	0.00	0.00	
12,100.0	1.47	250.00	11,802.1	1,401.9	1,537.7	2,080.9	0.00	0.00	0.00	
12,200.0	1.47	250.00	11,902.1	1,401.1	1,535.3	2,078.5	0.00	0.00	0.00	
12,300.0	1.47	250.00	12,002.0	1,400.2	1,532.9	2,076.1	0.00	0.00	0.00	
<b>Rollins</b>										
12,355.0	1.47	250.00	12,057.0	1,399.7	1,531.6	2,074.8	0.00	0.00	0.00	
12,400.0	1.47	250.00	12,102.0	1,399.3	1,530.5	2,073.7	0.00	0.00	0.00	
12,500.0	1.47	250.00	12,202.0	1,398.4	1,528.1	2,071.4	0.00	0.00	0.00	
<b>TD @ 12555.0' MD / 12257.0' TVD</b>										
12,555.0	1.47	250.00	12,257.0	1,397.9	1,526.7	2,070.1	0.00	0.00	0.00	

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<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 22C-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)		
22C-14 - OHCR	0.00	0.00	8,317.0	1,432.2	1,620.7	14,431,476.49	2,447,585.63	39.704808	-108.130396
- plan hits target center									
- Point									
22C-14 - PBHL	0.00	0.00	12,257.0	1,397.9	1,526.7	14,431,439.30	2,447,492.80	39.704714	-108.130730
- 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)			(°)	(°)
3,405.0	3,296.0	Wasatch			
5,901.6	5,696.0	Wasatch G			
6,685.9	6,450.0	Fort Union			
8,613.8	8,317.0	Ohio Creek			
8,964.8	8,668.0	Williams Fork			
9,014.9	8,718.0	TOG			
11,469.7	11,172.0	Cameo			
12,355.0	12,057.0	Rollins			

## Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
230.0	230.0	0.0	0.0	Build 3° / 100'
396.7	396.5	5.6	4.7	EOB @ 5.00° Inc. / 40.00° Azm / Build 3° / 100'
765.6	758.7	51.6	53.3	EOB @ 15.99° Inc. / 48.63° Azm
8,080.8	7,791.0	1,383.3	1,565.3	Drop 3° / 100'
8,613.8	8,317.0	1,432.2	1,620.7	EOD @ Vertical / Build 1.5° / 100'
8,711.9	8,415.1	1,431.7	1,619.5	EOB @ 1.47° Inc. / 250.00° Azm
12,555.0	12,257.0	1,397.9	1,526.7	TD @ 12555.0' MD / 12257.0' TVD