

Project: Rio Blanco County, CO  
 Site: ELU J14 496 Pad  
 Well: ELU J14 FED 12D-14 496  
 Wellbore: Wellbore #1  
 Design: Design #1  
 Latitude: 39.700881  
 Longitude: -108.136266  
 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

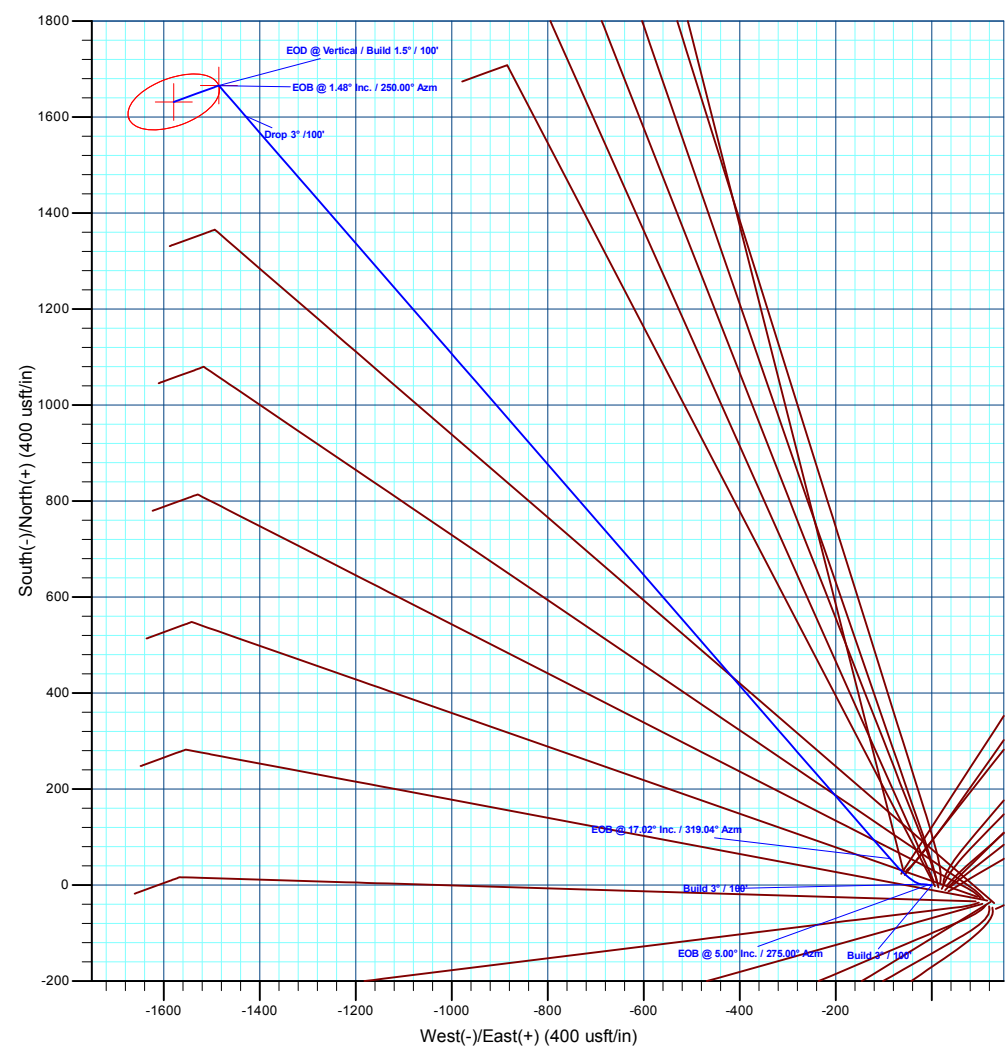
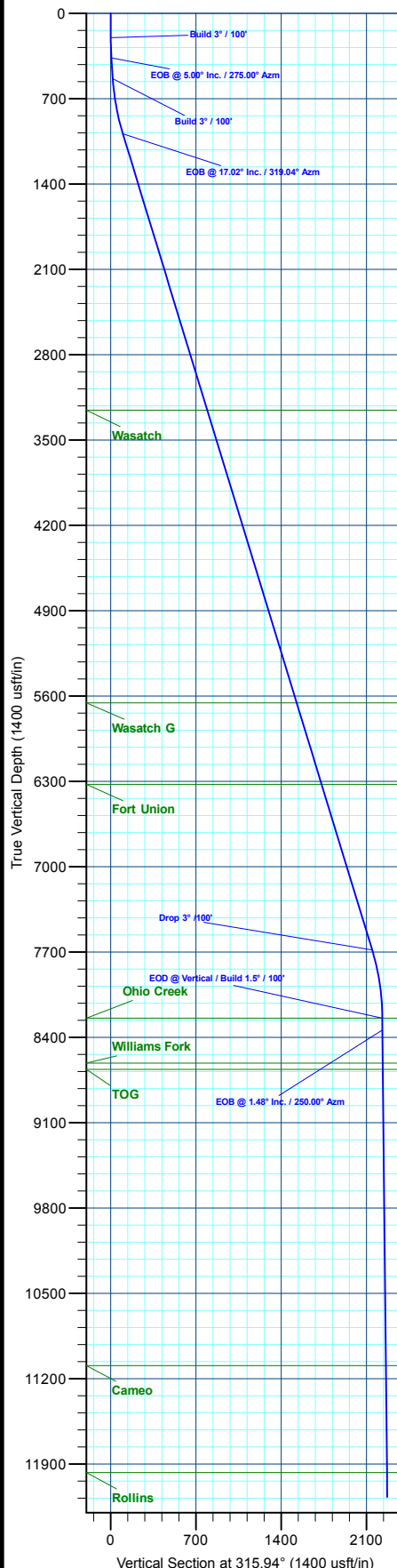
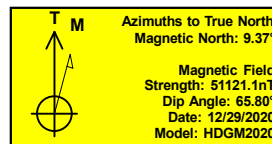
REFERENCE INFORMATION  
 Co-ordinate (N/E) Reference: Well ELU J14 FED 12D-14 496 - Slot 12D-14, True North  
 Vertical (TVD) Reference: RKB @ 7932.0usft (H&P #330)  
 Section (VS) Reference: Slot - 12D-14(0.0N, 0.0E)  
 Measured Depth Reference: RKB @ 7932.0usft (H&P #330)  
 Calculation Method: Minimum 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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
366.7	5.00	275.00	366.5	0.6	-7.2	3.00	275.00	5.5	EOB @ 5.00° Inc. / 275.00° Azm
536.7	5.00	275.00	535.8	1.9	-22.0	0.00	0.00	16.7	Build 3° / 100'
998.6	17.02	319.04	989.0	55.0	-86.7	3.00	58.17	99.8	EOB @ 17.02° Inc. / 319.04° Azm
7999.2	17.02	319.04	7682.9	1602.6	-1430.3	0.00	0.00	2146.3	Drop 3° / 100'
8566.7	0.00	0.00	8242.0	1665.8	-1485.1	3.00	180.00	2229.8	EOB @ Vertical / Build 1.5° / 100'
8665.1	1.48	250.00	8340.4	1665.3	-1486.3	1.50	250.00	2230.3	EOB @ 1.48° Inc. / 250.00° Azm
12496.9	1.48	250.00	12171.0	1631.6	-1579.1	0.00	0.00	2270.6	TD @ 12496.9' MD / 12171.0' TVD

DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northring	Easting	Latitude
12D-14 - OHCR	8242.0	1665.8	-1485.1	14431610.79	2444442.33	39.705452
12D-14 - PBHL	12171.0	1631.6	-1579.1	14431573.60	2444349.50	-108.141542

FORMATION TOP DETAILS		
TVDPth	MDPth	Formation
3256.0	3369.5	Wasatch
5656.0	5879.5	Wasatch G
6324.0	6578.1	Fort Union
8242.0	8566.7	Ohio Creek
8612.0	8936.8	Williams Fork
8662.0	8966.8	TOG
11093.0	11418.6	Cameo
11971.0	12296.9	Rollins

WELL DETAILS: ELU J14 FED 12D-14 496						
+N/-S	+E/-W	Northring	Easting	Latitude	Longitude	12D-14
0.0	0.0	14429993.30	2445979.90	39.700881	-108.136266	12D-14



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

Created By: Will Jircik Date: 15:36, January 08 2021



## **Caerus Oil & Gas**

**Rio Blanco County, CO**

**ELU J14 496 Pad**

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

**Wellbore #1**

**Plan: Design #1**

## **QES Well Planning Report**

**08 January, 2021**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU J14 FED 12D-14 496 - Slot 12D-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 12D-14 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<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 12D-14 496 - Slot 12D-14					
Well Position	+N/-S	0.0 usft	Northing:	14,429,993.30 usft	Latitude:	39.700881
	+E/-W	0.0 usft	Easting:	2,445,979.90 usft	Longitude:	-108.136266
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 #1			
<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	315.94

Plan Sections										
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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
366.7	5.00	275.00	366.5	0.6	-7.2	3.00	3.00	0.00	275.00	
536.7	5.00	275.00	535.8	1.9	-22.0	0.00	0.00	0.00	0.00	
998.6	17.02	319.04	989.0	55.0	-86.7	3.00	2.60	9.53	58.17	
7,999.2	17.02	319.04	7,682.9	1,602.6	-1,430.3	0.00	0.00	0.00	0.00	
8,566.7	0.00	0.00	8,242.0	1,665.8	-1,485.1	3.00	-3.00	0.00	180.00	12D-14 - OHCR
8,665.1	1.48	250.00	8,340.4	1,665.3	-1,486.3	1.50	1.50	-111.75	250.00	
12,496.9	1.48	250.00	12,171.0	1,631.6	-1,579.1	0.00	0.00	0.00	0.00	12D-14 - PBHL

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU J14 FED 12D-14 496 - Slot 12D-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 12D-14 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

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>									
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	3.00	275.00	300.0	0.2	-2.6	2.0	3.00	3.00	0.00
<b>EOB @ 5.00° Inc. / 275.00° Azm</b>									
366.7	5.00	275.00	366.5	0.6	-7.2	5.5	3.00	3.00	0.00
400.0	5.00	275.00	399.7	0.9	-10.1	7.7	0.00	0.00	0.00
500.0	5.00	275.00	499.3	1.6	-18.8	14.3	0.00	0.00	0.00
<b>Build 3° / 100'</b>									
536.7	5.00	275.00	535.8	1.9	-22.0	16.7	0.00	0.00	0.00
600.0	6.21	290.08	598.8	3.3	-28.0	21.9	3.00	1.92	23.81
700.0	8.65	303.85	698.0	9.4	-39.3	34.1	3.00	2.43	13.77
800.0	11.36	311.37	796.5	20.1	-52.9	51.3	3.00	2.71	7.52
900.0	14.18	315.98	894.0	35.4	-68.8	73.3	3.00	2.82	4.61
<b>EOB @ 17.02° Inc. / 319.04° Azm</b>									
998.6	17.02	319.04	989.0	55.0	-86.7	99.8	3.00	2.88	3.10
1,000.0	17.02	319.04	990.3	55.3	-87.0	100.2	0.00	0.00	0.00
1,100.0	17.02	319.04	1,085.9	77.4	-106.2	129.5	0.00	0.00	0.00
1,200.0	17.02	319.04	1,181.5	99.5	-125.3	158.7	0.00	0.00	0.00
1,300.0	17.02	319.04	1,277.2	121.6	-144.5	187.9	0.00	0.00	0.00
1,400.0	17.02	319.04	1,372.8	143.7	-163.7	217.2	0.00	0.00	0.00
1,500.0	17.02	319.04	1,468.4	165.8	-182.9	246.4	0.00	0.00	0.00
1,600.0	17.02	319.04	1,564.0	187.9	-202.1	275.6	0.00	0.00	0.00
1,700.0	17.02	319.04	1,659.6	210.1	-221.3	304.8	0.00	0.00	0.00
1,800.0	17.02	319.04	1,755.2	232.2	-240.5	334.1	0.00	0.00	0.00
1,900.0	17.02	319.04	1,850.9	254.3	-259.7	363.3	0.00	0.00	0.00
2,000.0	17.02	319.04	1,946.5	276.4	-278.9	392.5	0.00	0.00	0.00
2,100.0	17.02	319.04	2,042.1	298.5	-298.1	421.8	0.00	0.00	0.00
2,200.0	17.02	319.04	2,137.7	320.6	-317.3	451.0	0.00	0.00	0.00
2,300.0	17.02	319.04	2,233.3	342.7	-336.5	480.2	0.00	0.00	0.00
2,400.0	17.02	319.04	2,329.0	364.8	-355.7	509.5	0.00	0.00	0.00
2,500.0	17.02	319.04	2,424.6	386.9	-374.8	538.7	0.00	0.00	0.00
2,600.0	17.02	319.04	2,520.2	409.0	-394.0	567.9	0.00	0.00	0.00
2,700.0	17.02	319.04	2,615.8	431.1	-413.2	597.2	0.00	0.00	0.00
2,800.0	17.02	319.04	2,711.4	453.2	-432.4	626.4	0.00	0.00	0.00
2,900.0	17.02	319.04	2,807.1	475.3	-451.6	655.6	0.00	0.00	0.00
3,000.0	17.02	319.04	2,902.7	497.4	-470.8	684.9	0.00	0.00	0.00
3,100.0	17.02	319.04	2,998.3	519.5	-490.0	714.1	0.00	0.00	0.00
3,200.0	17.02	319.04	3,093.9	541.6	-509.2	743.3	0.00	0.00	0.00
3,300.0	17.02	319.04	3,189.5	563.8	-528.4	772.6	0.00	0.00	0.00
<b>Wasatch</b>									
3,369.5	17.02	319.04	3,256.0	579.1	-541.7	792.9	0.00	0.00	0.00
3,400.0	17.02	319.04	3,285.1	585.9	-547.6	801.8	0.00	0.00	0.00
3,500.0	17.02	319.04	3,380.8	608.0	-566.8	831.0	0.00	0.00	0.00
3,600.0	17.02	319.04	3,476.4	630.1	-586.0	860.3	0.00	0.00	0.00
3,700.0	17.02	319.04	3,572.0	652.2	-605.2	889.5	0.00	0.00	0.00
3,800.0	17.02	319.04	3,667.6	674.3	-624.3	918.7	0.00	0.00	0.00
3,900.0	17.02	319.04	3,763.2	696.4	-643.5	948.0	0.00	0.00	0.00
4,000.0	17.02	319.04	3,858.9	718.5	-662.7	977.2	0.00	0.00	0.00
4,100.0	17.02	319.04	3,954.5	740.6	-681.9	1,006.4	0.00	0.00	0.00
4,200.0	17.02	319.04	4,050.1	762.7	-701.1	1,035.7	0.00	0.00	0.00
4,300.0	17.02	319.04	4,145.7	784.8	-720.3	1,064.9	0.00	0.00	0.00
4,400.0	17.02	319.04	4,241.3	806.9	-739.5	1,094.1	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 12D-14 496 - Slot 12D-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 12D-14 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

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)
4,500.0	17.02	319.04	4,337.0	829.0	-758.7	1,123.4	0.00	0.00	0.00
4,600.0	17.02	319.04	4,432.6	851.1	-777.9	1,152.6	0.00	0.00	0.00
4,700.0	17.02	319.04	4,528.2	873.2	-797.1	1,181.8	0.00	0.00	0.00
4,800.0	17.02	319.04	4,623.8	895.4	-816.3	1,211.0	0.00	0.00	0.00
4,900.0	17.02	319.04	4,719.4	917.5	-835.5	1,240.3	0.00	0.00	0.00
5,000.0	17.02	319.04	4,815.0	939.6	-854.7	1,269.5	0.00	0.00	0.00
5,100.0	17.02	319.04	4,910.7	961.7	-873.8	1,298.7	0.00	0.00	0.00
5,200.0	17.02	319.04	5,006.3	983.8	-893.0	1,328.0	0.00	0.00	0.00
5,300.0	17.02	319.04	5,101.9	1,005.9	-912.2	1,357.2	0.00	0.00	0.00
5,400.0	17.02	319.04	5,197.5	1,028.0	-931.4	1,386.4	0.00	0.00	0.00
5,500.0	17.02	319.04	5,293.1	1,050.1	-950.6	1,415.7	0.00	0.00	0.00
5,600.0	17.02	319.04	5,388.8	1,072.2	-969.8	1,444.9	0.00	0.00	0.00
5,700.0	17.02	319.04	5,484.4	1,094.3	-989.0	1,474.1	0.00	0.00	0.00
5,800.0	17.02	319.04	5,580.0	1,116.4	-1,008.2	1,503.4	0.00	0.00	0.00
<b>Wasatch G</b>									
5,879.5	17.02	319.04	5,656.0	1,134.0	-1,023.4	1,526.6	0.00	0.00	0.00
5,900.0	17.02	319.04	5,675.6	1,138.5	-1,027.4	1,532.6	0.00	0.00	0.00
6,000.0	17.02	319.04	5,771.2	1,160.6	-1,046.6	1,561.8	0.00	0.00	0.00
6,100.0	17.02	319.04	5,866.9	1,182.7	-1,065.8	1,591.1	0.00	0.00	0.00
6,200.0	17.02	319.04	5,962.5	1,204.8	-1,085.0	1,620.3	0.00	0.00	0.00
6,300.0	17.02	319.04	6,058.1	1,226.9	-1,104.1	1,649.5	0.00	0.00	0.00
6,400.0	17.02	319.04	6,153.7	1,249.1	-1,123.3	1,678.8	0.00	0.00	0.00
6,500.0	17.02	319.04	6,249.3	1,271.2	-1,142.5	1,708.0	0.00	0.00	0.00
<b>Fort Union</b>									
6,578.1	17.02	319.04	6,324.0	1,288.4	-1,157.5	1,730.8	0.00	0.00	0.00
6,600.0	17.02	319.04	6,344.9	1,293.3	-1,161.7	1,737.2	0.00	0.00	0.00
6,700.0	17.02	319.04	6,440.6	1,315.4	-1,180.9	1,766.5	0.00	0.00	0.00
6,800.0	17.02	319.04	6,536.2	1,337.5	-1,200.1	1,795.7	0.00	0.00	0.00
6,900.0	17.02	319.04	6,631.8	1,359.6	-1,219.3	1,824.9	0.00	0.00	0.00
7,000.0	17.02	319.04	6,727.4	1,381.7	-1,238.5	1,854.2	0.00	0.00	0.00
7,100.0	17.02	319.04	6,823.0	1,403.8	-1,257.7	1,883.4	0.00	0.00	0.00
7,200.0	17.02	319.04	6,918.7	1,425.9	-1,276.9	1,912.6	0.00	0.00	0.00
7,300.0	17.02	319.04	7,014.3	1,448.0	-1,296.1	1,941.9	0.00	0.00	0.00
7,400.0	17.02	319.04	7,109.9	1,470.1	-1,315.3	1,971.1	0.00	0.00	0.00
7,500.0	17.02	319.04	7,205.5	1,492.2	-1,334.5	2,000.3	0.00	0.00	0.00
7,600.0	17.02	319.04	7,301.1	1,514.3	-1,353.6	2,029.6	0.00	0.00	0.00
7,700.0	17.02	319.04	7,396.8	1,536.4	-1,372.8	2,058.8	0.00	0.00	0.00
7,800.0	17.02	319.04	7,492.4	1,558.5	-1,392.0	2,088.0	0.00	0.00	0.00
7,900.0	17.02	319.04	7,588.0	1,580.7	-1,411.2	2,117.3	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
7,999.2	17.02	319.04	7,682.9	1,602.6	-1,430.3	2,146.3	0.00	0.00	0.00
8,100.0	14.00	319.04	7,780.0	1,622.9	-1,447.9	2,173.2	3.00	-3.00	0.00
8,200.0	11.00	319.04	7,877.6	1,639.3	-1,462.1	2,194.8	3.00	-3.00	0.00
8,300.0	8.00	319.04	7,976.2	1,651.7	-1,472.9	2,211.3	3.00	-3.00	0.00
8,400.0	5.00	319.04	8,075.5	1,660.3	-1,480.4	2,222.6	3.00	-3.00	0.00
8,500.0	2.00	319.04	8,175.3	1,664.9	-1,484.4	2,228.7	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek</b>									
8,566.7	0.00	0.00	8,242.0	1,665.8	-1,485.1	2,229.8	3.00	-3.00	0.00
8,600.0	0.50	250.00	8,275.3	1,665.7	-1,485.3	2,229.9	1.50	1.50	0.00
<b>EOB @ 1.48° Inc. / 250.00° Azm</b>									
8,665.1	1.48	250.00	8,340.4	1,665.3	-1,486.3	2,230.3	1.50	1.50	0.00
8,700.0	1.48	250.00	8,375.3	1,665.0	-1,487.2	2,230.7	0.00	0.00	0.00
8,800.0	1.48	250.00	8,475.3	1,664.2	-1,489.6	2,231.7	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 12D-14 496 - Slot 12D-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 12D-14 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

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	8,575.2	1,663.3	-1,492.0	2,232.8	0.00	0.00	0.00	
<b>Williams Fork</b>										
8,936.8	1.48	250.00	8,612.0	1,662.9	-1,492.9	2,233.2	0.00	0.00	0.00	
<b>TOG</b>										
8,986.8	1.48	250.00	8,662.0	1,662.5	-1,494.1	2,233.7	0.00	0.00	0.00	
9,000.0	1.48	250.00	8,675.2	1,662.4	-1,494.4	2,233.8	0.00	0.00	0.00	
9,100.0	1.48	250.00	8,775.2	1,661.5	-1,496.8	2,234.9	0.00	0.00	0.00	
9,200.0	1.48	250.00	8,875.1	1,660.6	-1,499.3	2,235.9	0.00	0.00	0.00	
9,300.0	1.48	250.00	8,975.1	1,659.7	-1,501.7	2,237.0	0.00	0.00	0.00	
9,400.0	1.48	250.00	9,075.1	1,658.9	-1,504.1	2,238.0	0.00	0.00	0.00	
9,500.0	1.48	250.00	9,175.0	1,658.0	-1,506.5	2,239.1	0.00	0.00	0.00	
9,600.0	1.48	250.00	9,275.0	1,657.1	-1,509.0	2,240.2	0.00	0.00	0.00	
9,700.0	1.48	250.00	9,375.0	1,656.2	-1,511.4	2,241.2	0.00	0.00	0.00	
9,800.0	1.48	250.00	9,474.9	1,655.3	-1,513.8	2,242.3	0.00	0.00	0.00	
9,900.0	1.48	250.00	9,574.9	1,654.5	-1,516.2	2,243.3	0.00	0.00	0.00	
10,000.0	1.48	250.00	9,674.9	1,653.6	-1,518.6	2,244.4	0.00	0.00	0.00	
10,100.0	1.48	250.00	9,774.8	1,652.7	-1,521.1	2,245.4	0.00	0.00	0.00	
10,200.0	1.48	250.00	9,874.8	1,651.8	-1,523.5	2,246.5	0.00	0.00	0.00	
10,300.0	1.48	250.00	9,974.8	1,650.9	-1,525.9	2,247.5	0.00	0.00	0.00	
10,400.0	1.48	250.00	10,074.7	1,650.0	-1,528.3	2,248.6	0.00	0.00	0.00	
10,500.0	1.48	250.00	10,174.7	1,649.2	-1,530.7	2,249.6	0.00	0.00	0.00	
10,600.0	1.48	250.00	10,274.7	1,648.3	-1,533.2	2,250.7	0.00	0.00	0.00	
10,700.0	1.48	250.00	10,374.6	1,647.4	-1,535.6	2,251.7	0.00	0.00	0.00	
10,800.0	1.48	250.00	10,474.6	1,646.5	-1,538.0	2,252.8	0.00	0.00	0.00	
10,900.0	1.48	250.00	10,574.6	1,645.6	-1,540.4	2,253.8	0.00	0.00	0.00	
11,000.0	1.48	250.00	10,674.5	1,644.8	-1,542.8	2,254.9	0.00	0.00	0.00	
11,100.0	1.48	250.00	10,774.5	1,643.9	-1,545.3	2,255.9	0.00	0.00	0.00	
11,200.0	1.48	250.00	10,874.5	1,643.0	-1,547.7	2,257.0	0.00	0.00	0.00	
11,300.0	1.48	250.00	10,974.5	1,642.1	-1,550.1	2,258.0	0.00	0.00	0.00	
11,400.0	1.48	250.00	11,074.4	1,641.2	-1,552.5	2,259.1	0.00	0.00	0.00	
<b>Cameo</b>										
11,418.6	1.48	250.00	11,093.0	1,641.1	-1,553.0	2,259.3	0.00	0.00	0.00	
11,500.0	1.48	250.00	11,174.4	1,640.4	-1,555.0	2,260.1	0.00	0.00	0.00	
11,600.0	1.48	250.00	11,274.4	1,639.5	-1,557.4	2,261.2	0.00	0.00	0.00	
11,700.0	1.48	250.00	11,374.3	1,638.6	-1,559.8	2,262.2	0.00	0.00	0.00	
11,800.0	1.48	250.00	11,474.3	1,637.7	-1,562.2	2,263.3	0.00	0.00	0.00	
11,900.0	1.48	250.00	11,574.3	1,636.8	-1,564.6	2,264.3	0.00	0.00	0.00	
12,000.0	1.48	250.00	11,674.2	1,635.9	-1,567.1	2,265.4	0.00	0.00	0.00	
12,100.0	1.48	250.00	11,774.2	1,635.1	-1,569.5	2,266.4	0.00	0.00	0.00	
12,200.0	1.48	250.00	11,874.2	1,634.2	-1,571.9	2,267.5	0.00	0.00	0.00	
<b>Rollins</b>										
12,296.9	1.48	250.00	11,971.0	1,633.3	-1,574.2	2,268.5	0.00	0.00	0.00	
12,300.0	1.48	250.00	11,974.1	1,633.3	-1,574.3	2,268.5	0.00	0.00	0.00	
12,400.0	1.48	250.00	12,074.1	1,632.4	-1,576.7	2,269.6	0.00	0.00	0.00	
<b>TD @ 12496.9' MD / 12171.0' TVD</b>										
12,496.9	1.48	250.00	12,171.0	1,631.6	-1,579.1	2,270.6	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 12D-14 496 - Slot 12D-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 12D-14 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

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)		
12D-14 - OHCR	0.00	0.00	8,242.0	1,665.8	-1,485.1	14,431,610.79	2,444,442.33	39.705452	-108.141543
- plan hits target center									
- Point									
12D-14 - PBHL	0.00	0.00	12,171.0	1,631.6	-1,579.1	14,431,573.60	2,444,349.50	39.705358	-108.141876
- plan hits target center									
- Ellipse (radii L100.0 W50.0 on 250.00 azi)									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,369.5	3,256.0	Wasatch				
5,879.5	5,656.0	Wasatch G				
6,578.1	6,324.0	Fort Union				
8,566.7	8,242.0	Ohio Creek				
8,936.8	8,612.0	Williams Fork				
8,986.8	8,662.0	TOG				
11,418.6	11,093.0	Cameo				
12,296.9	11,971.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.0	200.0	0.0	0.0	Build 3° / 100'
366.7	366.5	0.6	-7.2	EOB @ 5.00° Inc. / 275.00° Azm
536.7	535.8	1.9	-22.0	Build 3° / 100'
998.6	989.0	55.0	-86.7	EOB @ 17.02° Inc. / 319.04° Azm
7,999.2	7,682.9	1,602.6	-1,430.3	Drop 3° / 100'
8,566.7	8,242.0	1,665.8	-1,485.1	EOD @ Vertical / Build 1.5° / 100'
8,665.1	8,340.4	1,665.3	-1,486.3	EOB @ 1.48° Inc. / 250.00° Azm
12,496.9	12,171.0	1,631.6	-1,579.1	TD @ 12496.9' MD / 12171.0' TVD