

Project: Rio Blanco County, CO
 Site: ELU J14 496 Pad
 Well: ELU J14 FED 15C-14 496
 Wellbore: Wellbore #1
 Design: Design #1
 Latitude: 39.700785
 Longitude: -108.135829
 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 15C-14 496 - Slot 15C-14, True North
 Vertical (TVD) Reference: RKB @ 7932.0usft (H&P 330)
 Section (VS) Reference: Slot - 15C-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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
1046.8	19.41	238.38	1034.5	-56.9	-92.4	3.00	238.38	108.5	Start 6758.9 hold at 1046.8 MD
7805.7	19.41	238.38	7409.5	-1234.1	-2004.7	0.00	0.00	2354.0	Drop 3° / 100'
8452.5	0.00	0.00	8044.0	-1291.0	-2097.1	3.00	180.00	2462.5	EOD @ Vertical / Build 1.5° / 100'
8550.6	1.47	250.00	8142.1	-1291.4	-2098.3	1.50	250.00	2463.8	EOB @ 1.47° Inc. / 250.00° Azm
12396.8	1.47	250.00	11987.0	-1325.2	-2191.1	0.00	0.00	2560.6	TD @ 12396.8' MD / 11987.0' TVD

DESIGN TARGET DETAILS

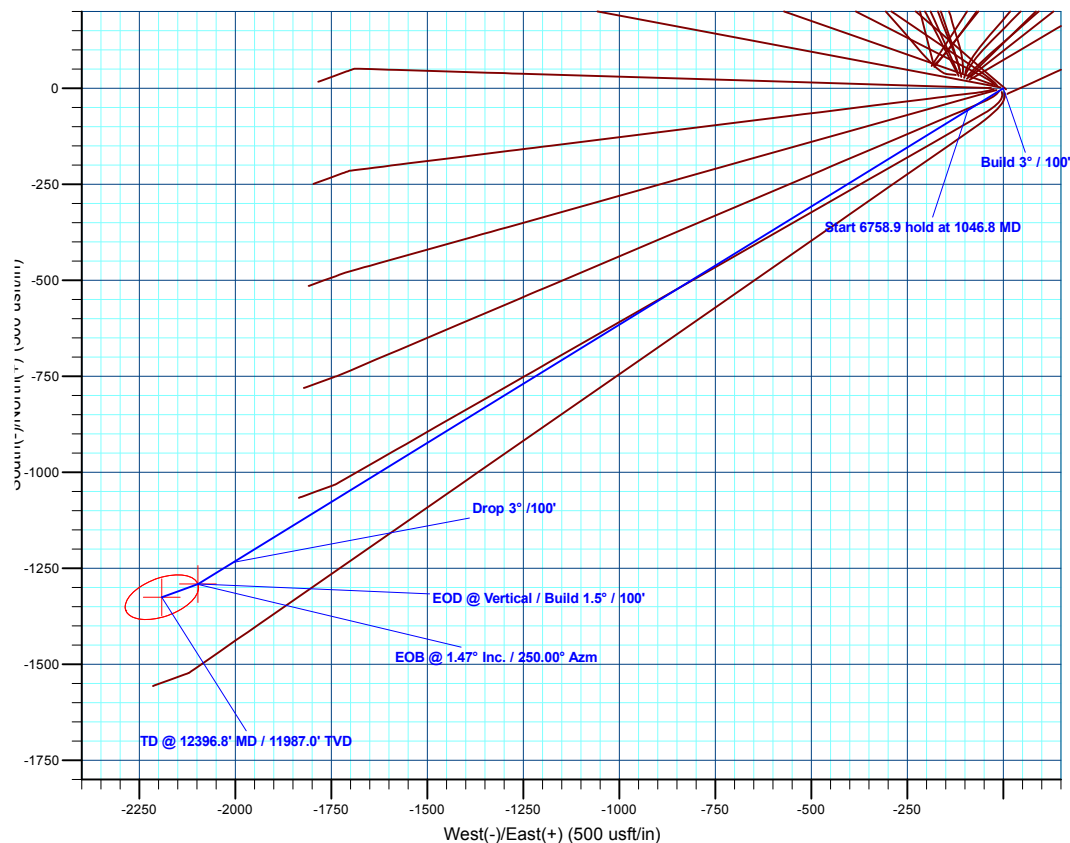
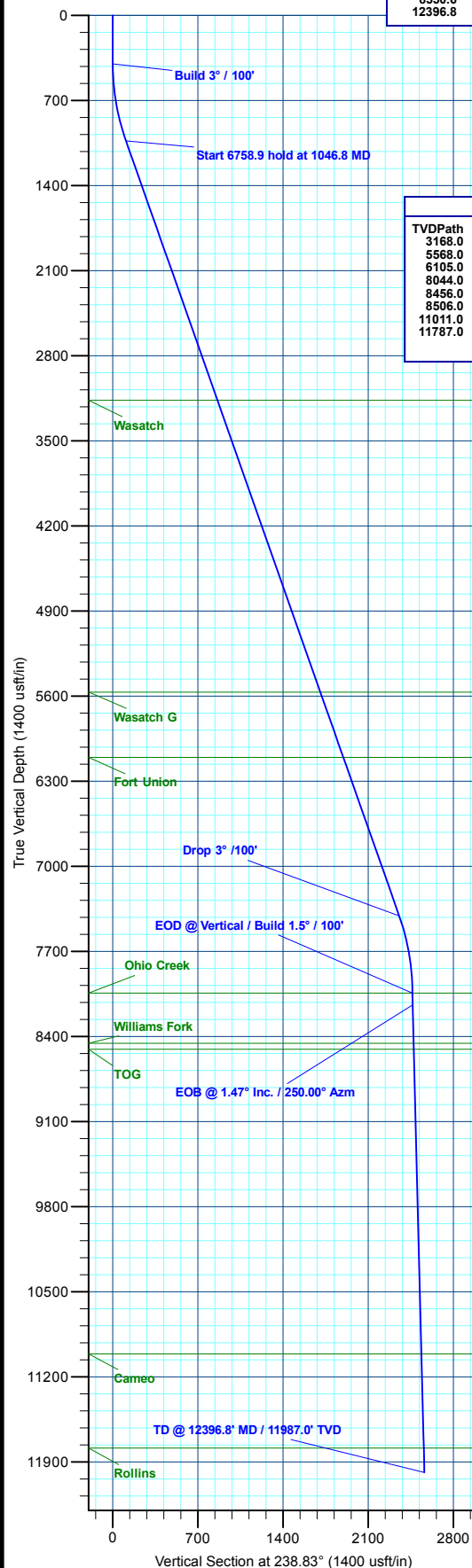
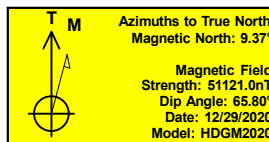
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
15C-14 - OHCR	8044.0	-1291.0	-2097.1	14428604.99	2444049.23	39.697242	-108.143278
15C-14 - PBHL	11987.0	-1325.2	-2191.1	14428567.80	2443956.40	39.697148	-108.143612

FORMATION TOP DETAILS

TVDPth	MDPth	Formation
3168.0	3308.8	Wasatch
5568.0	5853.3	Wasatch G
6105.0	6422.7	Fort Union
8044.0	8452.5	Ohio Creek
8456.0	8654.7	Williams Fork
8506.0	8914.7	TOG
11011.0	11420.5	Cameo
11787.0	12196.8	Rollins

WELL DETAILS: ELU J14 FED 15C-14 496

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	15C-14
0.0	0.0	14429962.30	2446104.00	39.700785	-108.135829	15C-14



Plan: Design #1 (ELU J14 FED 15C-14 496/Wellbore #1)

Created By: Will Jircik

Date: 8:52, January 11 2021



Caerus Oil & Gas

Rio Blanco County, CO

ELU J14 496 Pad

ELU J14 FED 15C-14 496 - Slot 15C-14

Wellbore #1

Plan: Design #1

QES Well Planning Report

08 January, 2021



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU J14 FED 15C-14 496 - Slot 15C-14
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 7932.0usft (H&P 330)
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 7932.0usft (H&P 330)
Site:	ELU J14 496 Pad	North Reference:	True
Well:	ELU J14 FED 15C-14 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Rio Blanco County, CO		
Map System:	Universal Transverse Mercator (US Survey Fee	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	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 15C-14 496 - Slot 15C-14					
Well Position	+N/-S	-34.9 usft	Northing:	14,429,962.30 usft	Latitude:	39.700785
	+E/-W	123.0 usft	Easting:	2,446,104.00 usft	Longitude:	-108.135829
Position Uncertainty	0.0 usft		Wellhead Elevation:		Ground Level:	7,902.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2020	12/29/2020	9.37	65.80	51,121.00000000

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	238.83

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,046.8	19.41	238.38	1,034.5	-56.9	-92.4	3.00	3.00	0.00	238.38	
7,805.7	19.41	238.38	7,409.5	-1,234.1	-2,004.7	0.00	0.00	0.00	0.00	
8,452.5	0.00	0.00	8,044.0	-1,291.0	-2,097.1	3.00	-3.00	0.00	180.00	15C-14 - OHCR
8,550.6	1.47	250.00	8,142.1	-1,291.4	-2,098.3	1.50	1.50	-112.16	250.00	
12,396.8	1.47	250.00	11,987.0	-1,325.2	-2,191.1	0.00	0.00	0.00	0.00	15C-14 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU J14 FED 15C-14 496 - Slot 15C-14
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 7932.0usft (H&P 330)
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 7932.0usft (H&P 330)
Site:	ELU J14 496 Pad	North Reference:	True
Well:	ELU J14 FED 15C-14 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 3° / 100'									
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	3.00	238.38	500.0	-1.4	-2.2	2.6	3.00	3.00	0.00
600.0	6.00	238.38	599.6	-5.5	-8.9	10.5	3.00	3.00	0.00
700.0	9.00	238.38	698.8	-12.3	-20.0	23.5	3.00	3.00	0.00
800.0	12.00	238.38	797.1	-21.9	-35.5	41.7	3.00	3.00	0.00
900.0	15.00	238.38	894.3	-34.1	-55.4	65.1	3.00	3.00	0.00
1,000.0	18.00	238.38	990.2	-49.0	-79.6	93.5	3.00	3.00	0.00
Start 6758.9 hold at 1046.8 MD									
1,046.8	19.41	238.38	1,034.5	-56.9	-92.4	108.5	3.00	3.00	0.00
1,100.0	19.41	238.38	1,084.7	-66.1	-107.4	126.2	0.00	0.00	0.00
1,200.0	19.41	238.38	1,179.0	-83.6	-135.7	159.4	0.00	0.00	0.00
1,300.0	19.41	238.38	1,273.3	-101.0	-164.0	192.6	0.00	0.00	0.00
1,400.0	19.41	238.38	1,367.6	-118.4	-192.3	225.8	0.00	0.00	0.00
1,500.0	19.41	238.38	1,462.0	-135.8	-220.6	259.0	0.00	0.00	0.00
1,600.0	19.41	238.38	1,556.3	-153.2	-248.9	292.3	0.00	0.00	0.00
1,700.0	19.41	238.38	1,650.6	-170.6	-277.2	325.5	0.00	0.00	0.00
1,800.0	19.41	238.38	1,744.9	-188.1	-305.5	358.7	0.00	0.00	0.00
1,900.0	19.41	238.38	1,839.2	-205.5	-333.8	391.9	0.00	0.00	0.00
2,000.0	19.41	238.38	1,933.6	-222.9	-362.1	425.2	0.00	0.00	0.00
2,100.0	19.41	238.38	2,027.9	-240.3	-390.4	458.4	0.00	0.00	0.00
2,200.0	19.41	238.38	2,122.2	-257.7	-418.7	491.6	0.00	0.00	0.00
2,300.0	19.41	238.38	2,216.5	-275.1	-447.0	524.8	0.00	0.00	0.00
2,400.0	19.41	238.38	2,310.8	-292.6	-475.2	558.1	0.00	0.00	0.00
2,500.0	19.41	238.38	2,405.2	-310.0	-503.5	591.3	0.00	0.00	0.00
2,600.0	19.41	238.38	2,499.5	-327.4	-531.8	624.5	0.00	0.00	0.00
2,700.0	19.41	238.38	2,593.8	-344.8	-560.1	657.7	0.00	0.00	0.00
2,800.0	19.41	238.38	2,688.1	-362.2	-588.4	691.0	0.00	0.00	0.00
2,900.0	19.41	238.38	2,782.4	-379.7	-616.7	724.2	0.00	0.00	0.00
3,000.0	19.41	238.38	2,876.8	-397.1	-645.0	757.4	0.00	0.00	0.00
3,100.0	19.41	238.38	2,971.1	-414.5	-673.3	790.6	0.00	0.00	0.00
3,200.0	19.41	238.38	3,065.4	-431.9	-701.6	823.8	0.00	0.00	0.00
3,300.0	19.41	238.38	3,159.7	-449.3	-729.9	857.1	0.00	0.00	0.00
Wasatch									
3,308.8	19.41	238.38	3,168.0	-450.9	-732.4	860.0	0.00	0.00	0.00
3,400.0	19.41	238.38	3,254.0	-466.7	-758.2	890.3	0.00	0.00	0.00
3,500.0	19.41	238.38	3,348.3	-484.2	-786.5	923.5	0.00	0.00	0.00
3,600.0	19.41	238.38	3,442.7	-501.6	-814.8	956.7	0.00	0.00	0.00
3,700.0	19.41	238.38	3,537.0	-519.0	-843.1	990.0	0.00	0.00	0.00
3,800.0	19.41	238.38	3,631.3	-536.4	-871.3	1,023.2	0.00	0.00	0.00
3,900.0	19.41	238.38	3,725.6	-553.8	-899.6	1,056.4	0.00	0.00	0.00
4,000.0	19.41	238.38	3,819.9	-571.2	-927.9	1,089.6	0.00	0.00	0.00
4,100.0	19.41	238.38	3,914.3	-588.7	-956.2	1,122.9	0.00	0.00	0.00
4,200.0	19.41	238.38	4,008.6	-606.1	-984.5	1,156.1	0.00	0.00	0.00
4,300.0	19.41	238.38	4,102.9	-623.5	-1,012.8	1,189.3	0.00	0.00	0.00
4,400.0	19.41	238.38	4,197.2	-640.9	-1,041.1	1,222.5	0.00	0.00	0.00
4,500.0	19.41	238.38	4,291.5	-658.3	-1,069.4	1,255.8	0.00	0.00	0.00
4,600.0	19.41	238.38	4,385.9	-675.7	-1,097.7	1,289.0	0.00	0.00	0.00
4,700.0	19.41	238.38	4,480.2	-693.2	-1,126.0	1,322.2	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU J14 FED 15C-14 496 - Slot 15C-14
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 7932.0usft (H&P 330)
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 7932.0usft (H&P 330)
Site:	ELU J14 496 Pad	North Reference:	True
Well:	ELU J14 FED 15C-14 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
4,800.0	19.41	238.38	4,574.5	-710.6	-1,154.3	1,355.4	0.00	0.00	0.00
4,900.0	19.41	238.38	4,668.8	-728.0	-1,182.6	1,388.6	0.00	0.00	0.00
5,000.0	19.41	238.38	4,763.1	-745.4	-1,210.9	1,421.9	0.00	0.00	0.00
5,100.0	19.41	238.38	4,857.5	-762.8	-1,239.2	1,455.1	0.00	0.00	0.00
5,200.0	19.41	238.38	4,951.8	-780.3	-1,267.5	1,488.3	0.00	0.00	0.00
5,300.0	19.41	238.38	5,046.1	-797.7	-1,295.7	1,521.5	0.00	0.00	0.00
5,400.0	19.41	238.38	5,140.4	-815.1	-1,324.0	1,554.8	0.00	0.00	0.00
5,500.0	19.41	238.38	5,234.7	-832.5	-1,352.3	1,588.0	0.00	0.00	0.00
5,600.0	19.41	238.38	5,329.1	-849.9	-1,380.6	1,621.2	0.00	0.00	0.00
5,700.0	19.41	238.38	5,423.4	-867.3	-1,408.9	1,654.4	0.00	0.00	0.00
5,800.0	19.41	238.38	5,517.7	-884.8	-1,437.2	1,687.7	0.00	0.00	0.00
Wasatch G									
5,853.3	19.41	238.38	5,568.0	-894.0	-1,452.3	1,705.4	0.00	0.00	0.00
5,900.0	19.41	238.38	5,612.0	-902.2	-1,465.5	1,720.9	0.00	0.00	0.00
6,000.0	19.41	238.38	5,706.3	-919.6	-1,493.8	1,754.1	0.00	0.00	0.00
6,100.0	19.41	238.38	5,800.6	-937.0	-1,522.1	1,787.3	0.00	0.00	0.00
6,200.0	19.41	238.38	5,895.0	-954.4	-1,550.4	1,820.6	0.00	0.00	0.00
6,300.0	19.41	238.38	5,989.3	-971.8	-1,578.7	1,853.8	0.00	0.00	0.00
6,400.0	19.41	238.38	6,083.6	-989.3	-1,607.0	1,887.0	0.00	0.00	0.00
Fort Union									
6,422.7	19.41	238.38	6,105.0	-993.2	-1,613.4	1,894.5	0.00	0.00	0.00
6,500.0	19.41	238.38	6,177.9	-1,006.7	-1,635.3	1,920.2	0.00	0.00	0.00
6,600.0	19.41	238.38	6,272.2	-1,024.1	-1,663.6	1,953.4	0.00	0.00	0.00
6,700.0	19.41	238.38	6,366.6	-1,041.5	-1,691.9	1,986.7	0.00	0.00	0.00
6,800.0	19.41	238.38	6,460.9	-1,058.9	-1,720.1	2,019.9	0.00	0.00	0.00
6,900.0	19.41	238.38	6,555.2	-1,076.4	-1,748.4	2,053.1	0.00	0.00	0.00
7,000.0	19.41	238.38	6,649.5	-1,093.8	-1,776.7	2,086.3	0.00	0.00	0.00
7,100.0	19.41	238.38	6,743.8	-1,111.2	-1,805.0	2,119.6	0.00	0.00	0.00
7,200.0	19.41	238.38	6,838.2	-1,128.6	-1,833.3	2,152.8	0.00	0.00	0.00
7,300.0	19.41	238.38	6,932.5	-1,146.0	-1,861.6	2,186.0	0.00	0.00	0.00
7,400.0	19.41	238.38	7,026.8	-1,163.4	-1,889.9	2,219.2	0.00	0.00	0.00
7,500.0	19.41	238.38	7,121.1	-1,180.9	-1,918.2	2,252.5	0.00	0.00	0.00
7,600.0	19.41	238.38	7,215.4	-1,198.3	-1,946.5	2,285.7	0.00	0.00	0.00
7,700.0	19.41	238.38	7,309.8	-1,215.7	-1,974.8	2,318.9	0.00	0.00	0.00
Drop 3° /100'									
7,805.7	19.41	238.38	7,409.5	-1,234.1	-2,004.7	2,354.0	0.00	0.00	0.00
7,900.0	16.58	238.38	7,499.1	-1,249.4	-2,029.5	2,383.1	3.00	-3.00	0.00
8,000.0	13.58	238.38	7,595.7	-1,263.0	-2,051.6	2,409.2	3.00	-3.00	0.00
8,100.0	10.58	238.38	7,693.5	-1,274.0	-2,069.5	2,430.1	3.00	-3.00	0.00
8,200.0	7.58	238.38	7,792.2	-1,282.2	-2,082.9	2,445.8	3.00	-3.00	0.00
8,300.0	4.58	238.38	7,891.6	-1,287.8	-2,091.9	2,456.4	3.00	-3.00	0.00
8,400.0	1.58	238.38	7,991.5	-1,290.6	-2,096.5	2,461.8	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,452.5	0.00	0.00	8,044.0	-1,291.0	-2,097.1	2,462.5	3.00	-3.00	0.00
8,500.0	0.71	250.00	8,091.5	-1,291.1	-2,097.4	2,462.8	1.50	1.50	0.00
EOB @ 1.47° Inc. / 250.00° Azm									
8,550.6	1.47	250.00	8,142.1	-1,291.4	-2,098.3	2,463.8	1.50	1.50	0.00
8,600.0	1.47	250.00	8,191.4	-1,291.8	-2,099.5	2,465.0	0.00	0.00	0.00
8,700.0	1.47	250.00	8,291.4	-1,292.7	-2,101.9	2,467.5	0.00	0.00	0.00
8,800.0	1.47	250.00	8,391.4	-1,293.6	-2,104.3	2,470.0	0.00	0.00	0.00
Williams Fork									
8,864.7	1.47	250.00	8,456.0	-1,294.2	-2,105.8	2,471.7	0.00	0.00	0.00
8,900.0	1.47	250.00	8,491.3	-1,294.5	-2,106.7	2,472.6	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU J14 FED 15C-14 496 - Slot 15C-14
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 7932.0usft (H&P 330)
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 7932.0usft (H&P 330)
Site:	ELU J14 496 Pad	North Reference:	True
Well:	ELU J14 FED 15C-14 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)	
TOG										
8,914.7	1.47	250.00	8,506.0	-1,294.6	-2,107.0	2,472.9	0.00	0.00	0.00	
9,000.0	1.47	250.00	8,591.3	-1,295.4	-2,109.1	2,475.1	0.00	0.00	0.00	
9,100.0	1.47	250.00	8,691.3	-1,296.2	-2,111.5	2,477.6	0.00	0.00	0.00	
9,200.0	1.47	250.00	8,791.2	-1,297.1	-2,113.9	2,480.1	0.00	0.00	0.00	
9,300.0	1.47	250.00	8,891.2	-1,298.0	-2,116.3	2,482.6	0.00	0.00	0.00	
9,400.0	1.47	250.00	8,991.2	-1,298.9	-2,118.8	2,485.1	0.00	0.00	0.00	
9,500.0	1.47	250.00	9,091.1	-1,299.7	-2,121.2	2,487.7	0.00	0.00	0.00	
9,600.0	1.47	250.00	9,191.1	-1,300.6	-2,123.6	2,490.2	0.00	0.00	0.00	
9,700.0	1.47	250.00	9,291.1	-1,301.5	-2,126.0	2,492.7	0.00	0.00	0.00	
9,800.0	1.47	250.00	9,391.0	-1,302.4	-2,128.4	2,495.2	0.00	0.00	0.00	
9,900.0	1.47	250.00	9,491.0	-1,303.3	-2,130.8	2,497.7	0.00	0.00	0.00	
10,000.0	1.47	250.00	9,591.0	-1,304.1	-2,133.2	2,500.3	0.00	0.00	0.00	
10,100.0	1.47	250.00	9,690.9	-1,305.0	-2,135.6	2,502.8	0.00	0.00	0.00	
10,200.0	1.47	250.00	9,790.9	-1,305.9	-2,138.1	2,505.3	0.00	0.00	0.00	
10,300.0	1.47	250.00	9,890.9	-1,306.8	-2,140.5	2,507.8	0.00	0.00	0.00	
10,400.0	1.47	250.00	9,990.8	-1,307.6	-2,142.9	2,510.3	0.00	0.00	0.00	
10,500.0	1.47	250.00	10,090.8	-1,308.5	-2,145.3	2,512.9	0.00	0.00	0.00	
10,600.0	1.47	250.00	10,190.8	-1,309.4	-2,147.7	2,515.4	0.00	0.00	0.00	
10,700.0	1.47	250.00	10,290.7	-1,310.3	-2,150.1	2,517.9	0.00	0.00	0.00	
10,800.0	1.47	250.00	10,390.7	-1,311.2	-2,152.5	2,520.4	0.00	0.00	0.00	
10,900.0	1.47	250.00	10,490.7	-1,312.0	-2,154.9	2,522.9	0.00	0.00	0.00	
11,000.0	1.47	250.00	10,590.6	-1,312.9	-2,157.4	2,525.4	0.00	0.00	0.00	
11,100.0	1.47	250.00	10,690.6	-1,313.8	-2,159.8	2,528.0	0.00	0.00	0.00	
11,200.0	1.47	250.00	10,790.6	-1,314.7	-2,162.2	2,530.5	0.00	0.00	0.00	
11,300.0	1.47	250.00	10,890.5	-1,315.6	-2,164.6	2,533.0	0.00	0.00	0.00	
11,400.0	1.47	250.00	10,990.5	-1,316.4	-2,167.0	2,535.5	0.00	0.00	0.00	
Cameo										
11,420.5	1.47	250.00	11,011.0	-1,316.6	-2,167.5	2,536.0	0.00	0.00	0.00	
11,500.0	1.47	250.00	11,090.5	-1,317.3	-2,169.4	2,538.0	0.00	0.00	0.00	
11,600.0	1.47	250.00	11,190.4	-1,318.2	-2,171.8	2,540.6	0.00	0.00	0.00	
11,700.0	1.47	250.00	11,290.4	-1,319.1	-2,174.2	2,543.1	0.00	0.00	0.00	
11,800.0	1.47	250.00	11,390.4	-1,319.9	-2,176.7	2,545.6	0.00	0.00	0.00	
11,900.0	1.47	250.00	11,490.3	-1,320.8	-2,179.1	2,548.1	0.00	0.00	0.00	
12,000.0	1.47	250.00	11,590.3	-1,321.7	-2,181.5	2,550.6	0.00	0.00	0.00	
12,100.0	1.47	250.00	11,690.3	-1,322.6	-2,183.9	2,553.2	0.00	0.00	0.00	
Rollins										
12,196.8	1.47	250.00	11,787.0	-1,323.4	-2,186.2	2,555.6	0.00	0.00	0.00	
12,200.0	1.47	250.00	11,790.2	-1,323.5	-2,186.3	2,555.7	0.00	0.00	0.00	
12,300.0	1.47	250.00	11,890.2	-1,324.3	-2,188.7	2,558.2	0.00	0.00	0.00	
TD @ 12396.8' MD / 11987.0' TVD										
12,396.8	1.47	250.00	11,987.0	-1,325.2	-2,191.1	2,560.6	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU J14 FED 15C-14 496 - Slot 15C-14
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 7932.0usft (H&P 330)
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 7932.0usft (H&P 330)
Site:	ELU J14 496 Pad	North Reference:	True
Well:	ELU J14 FED 15C-14 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)		
15C-14 - OHCR	0.00	0.00	8,044.0	-1,291.0	-2,097.1	14,428,604.99	2,444,049.23	39.697242	-108.143279
- plan hits target center									
- Point									
15C-14 - PBHL	0.00	0.00	11,987.0	-1,325.2	-2,191.1	14,428,567.80	2,443,956.40	39.697148	-108.143612
- 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)			(°)	(°)
3,308.8	3,168.0	Wasatch			
5,853.3	5,568.0	Wasatch G			
6,422.7	6,105.0	Fort Union			
8,452.5	8,044.0	Ohio Creek			
8,864.7	8,456.0	Williams Fork			
8,914.7	8,506.0	TOG			
11,420.5	11,011.0	Cameo			
12,196.8	11,787.0	Rollins			

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
400.0	400.0	0.0	0.0	Build 3° / 100'
1,046.8	1,034.5	-56.9	-92.4	Start 6758.9 hold at 1046.8 MD
7,805.7	7,409.5	-1,234.1	-2,004.7	Drop 3° / 100'
8,452.5	8,044.0	-1,291.0	-2,097.1	EOD @ Vertical / Build 1.5° / 100'
8,550.6	8,142.1	-1,291.4	-2,098.3	EOB @ 1.47° Inc. / 250.00° Azm
12,396.8	11,987.0	-1,325.2	-2,191.1	TD @ 12396.8' MD / 11987.0' TVD