

Project: Rio Blanco County, CO
 Site: ELU J14 496 Pad
 Well: ELU J14 FED 15B-14 496
 Wellbore: Wellbore #1
 Design: Design #1
 Latitude: 39.700759
 Longitude: -108.135841
 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 15B-14 496 - Slot 15B-14, True North
 Vertical (TVD) Reference: RKB @ 7932.0usft (H&P 330)
 Section (VS) Reference: Slot - 15B-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	
330.0	0.00	0.00	330.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
496.7	5.00	175.00	496.5	-7.2	0.6	3.00	175.00	3.1	EOB @ 5.00° Inc. / 175.00° Azm / Build 3° / 100'
978.1	15.82	240.24	970.4	-61.0	-54.8	3.00	83.11	78.0	EOB @ 15.82° Inc. / 240.24° Azm
7817.1	15.82	240.24	7550.2	-986.6	-1673.8	0.00	0.00	1942.9	Drop 3° / 100'
8344.6	0.00	0.00	8071.0	-1022.6	-1736.6	3.00	180.00	2015.2	EOD @ Vertical / Build 1.5° / 100'
8442.6	1.47	250.00	8169.0	-1023.0	-1737.8	1.50	250.00	2016.5	EOB @ 1.47° Inc. / 250.00° Azm
12289.9	1.47	250.00	12015.0	-1056.8	-1830.6	0.00	0.00	2113.7	TD @ 12289.9' MD / 12015.0' TVD

DESIGN TARGET DETAILS

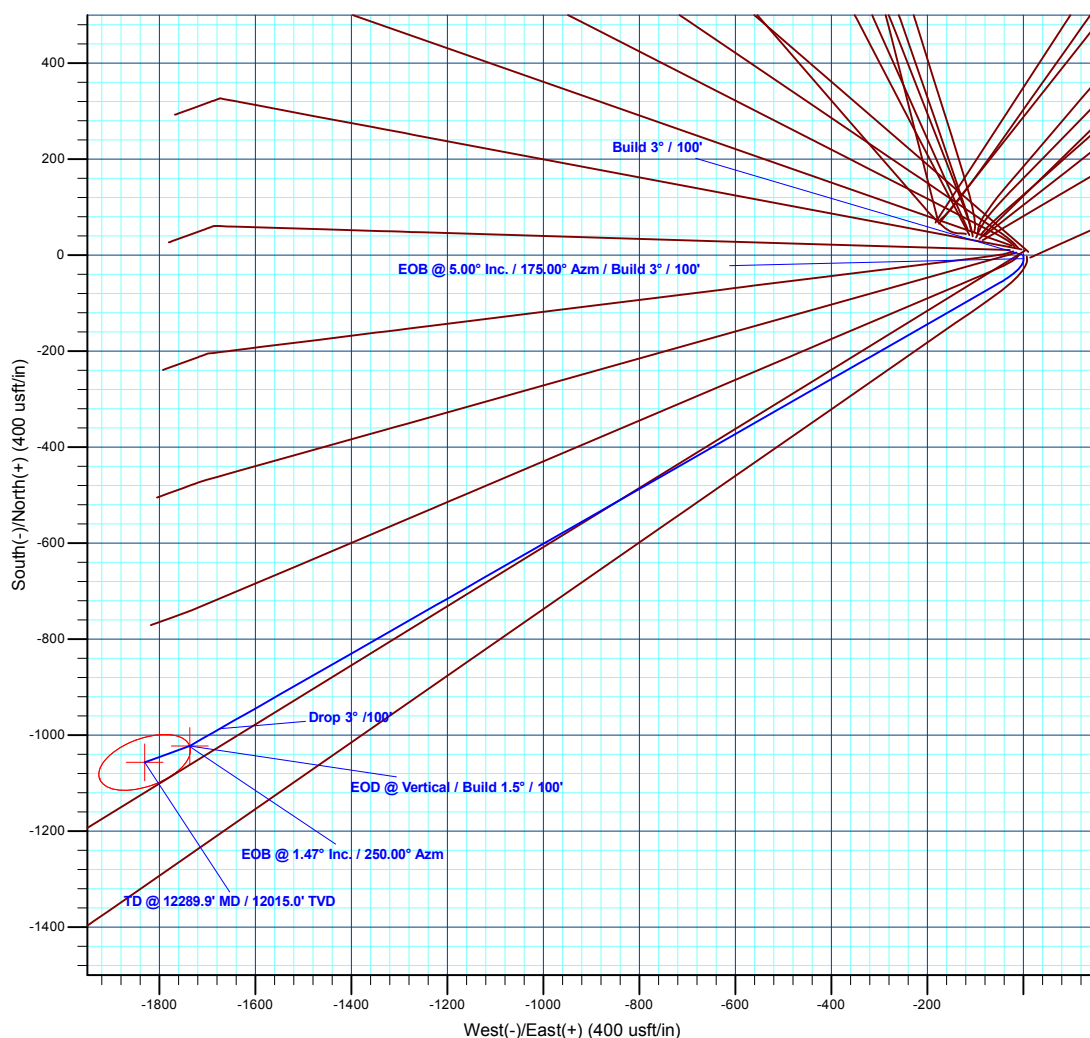
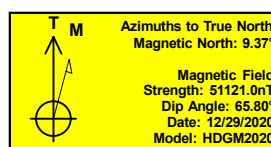
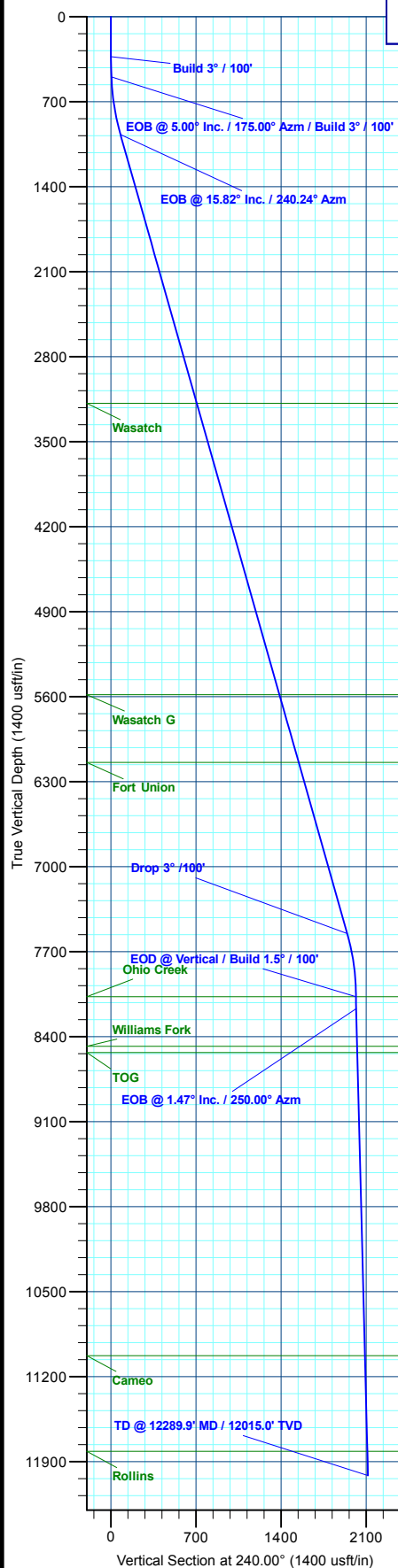
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
15B-14 - OHCR	8071.0	-1022.6	-1736.6	14428875.29	2444397.73	39.697953	-108.142010
15B-14 - PBHL	12015.0	-1056.8	-1830.6	14428838.10	2444304.90	39.697859	-108.142344

FORMATION TOP DETAILS

TVDPth	MDPth	Formation
3184.0	3278.9	Wasatch
5584.0	5773.5	Wasatch G
6143.0	6354.5	Fort Union
8071.0	8344.6	Ohio Creek
8461.0	8754.7	Williams Fork
8531.0	8804.7	TOG
11028.0	11302.5	Cameo
11815.0	12089.8	Rollins

WELL DETAILS: ELU J14 FED 15B-14 496

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14429952.80	2446100.80	39.700759	-108.135841



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

Created By: Will Jircik

Date: 8:48, January 11 2021



Caerus Oil & Gas

Rio Blanco County, CO

ELU J14 496 Pad

ELU J14 FED 15B-14 496 - Slot 15B-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 15B-14 496 - Slot 15B-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 15B-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 15B-14 496 - Slot 15B-14					
Well Position	+N/-S	-44.3 usft	Northing:	14,429,952.80 usft	Latitude:	39.700759
	+E/-W	119.5 usft	Easting:	2,446,100.80 usft	Longitude:	-108.135841
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	240.00

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	
330.0	0.00	0.00	330.0	0.0	0.0	0.00	0.00	0.00	0.00	
496.7	5.00	175.00	496.5	-7.2	0.6	3.00	3.00	0.00	175.00	
978.1	15.82	240.24	970.4	-61.0	-54.8	3.00	2.25	13.55	83.11	
7,817.1	15.82	240.24	7,550.2	-986.6	-1,673.8	0.00	0.00	0.00	0.00	
8,344.6	0.00	0.00	8,071.0	-1,022.6	-1,736.6	3.00	-3.00	0.00	180.00	15B-14 - OHCR
8,442.6	1.47	250.00	8,169.0	-1,023.0	-1,737.8	1.50	1.50	-112.19	250.00	
12,289.9	1.47	250.00	12,015.0	-1,056.8	-1,830.6	0.00	0.00	0.00	0.00	15B-14 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU J14 FED 15B-14 496 - Slot 15B-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 15B-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'									
330.0	0.00	0.00	330.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.10	175.00	400.0	-1.3	0.1	0.5	3.00	3.00	0.00
EOB @ 5.00° Inc. / 175.00° Azm / Build 3° / 100'									
496.7	5.00	175.00	496.5	-7.2	0.6	3.1	3.00	3.00	0.00
500.0	5.01	176.14	499.8	-7.5	0.7	3.2	3.00	0.39	34.09
600.0	6.19	204.87	599.3	-16.8	-1.3	9.5	3.00	1.18	28.73
700.0	8.33	221.72	698.5	-27.1	-8.4	20.8	3.00	2.14	16.85
800.0	10.89	231.24	797.1	-38.4	-20.6	37.0	3.00	2.55	9.52
900.0	13.62	237.08	894.8	-50.7	-37.8	58.1	3.00	2.74	5.84
EOB @ 15.82° Inc. / 240.24° Azm									
978.1	15.82	240.24	970.4	-61.0	-54.8	78.0	3.00	2.82	4.04
1,000.0	15.82	240.24	991.4	-64.0	-60.0	83.9	0.00	0.00	0.00
1,100.0	15.82	240.24	1,087.6	-77.5	-83.7	111.2	0.00	0.00	0.00
1,200.0	15.82	240.24	1,183.9	-91.0	-107.3	138.5	0.00	0.00	0.00
1,300.0	15.82	240.24	1,280.1	-104.6	-131.0	165.7	0.00	0.00	0.00
1,400.0	15.82	240.24	1,376.3	-118.1	-154.7	193.0	0.00	0.00	0.00
1,500.0	15.82	240.24	1,472.5	-131.6	-178.4	220.3	0.00	0.00	0.00
1,600.0	15.82	240.24	1,568.7	-145.2	-202.0	247.6	0.00	0.00	0.00
1,700.0	15.82	240.24	1,664.9	-158.7	-225.7	274.8	0.00	0.00	0.00
1,800.0	15.82	240.24	1,761.1	-172.2	-249.4	302.1	0.00	0.00	0.00
1,900.0	15.82	240.24	1,857.3	-185.8	-273.1	329.4	0.00	0.00	0.00
2,000.0	15.82	240.24	1,953.5	-199.3	-296.7	356.6	0.00	0.00	0.00
2,100.0	15.82	240.24	2,049.7	-212.8	-320.4	383.9	0.00	0.00	0.00
2,200.0	15.82	240.24	2,146.0	-226.4	-344.1	411.2	0.00	0.00	0.00
2,300.0	15.82	240.24	2,242.2	-239.9	-367.7	438.4	0.00	0.00	0.00
2,400.0	15.82	240.24	2,338.4	-253.5	-391.4	465.7	0.00	0.00	0.00
2,500.0	15.82	240.24	2,434.6	-267.0	-415.1	493.0	0.00	0.00	0.00
2,600.0	15.82	240.24	2,530.8	-280.5	-438.8	520.2	0.00	0.00	0.00
2,700.0	15.82	240.24	2,627.0	-294.1	-462.4	547.5	0.00	0.00	0.00
2,800.0	15.82	240.24	2,723.2	-307.6	-486.1	574.8	0.00	0.00	0.00
2,900.0	15.82	240.24	2,819.4	-321.1	-509.8	602.0	0.00	0.00	0.00
3,000.0	15.82	240.24	2,915.6	-334.7	-533.5	629.3	0.00	0.00	0.00
3,100.0	15.82	240.24	3,011.8	-348.2	-557.1	656.6	0.00	0.00	0.00
3,200.0	15.82	240.24	3,108.1	-361.7	-580.8	683.8	0.00	0.00	0.00
Wasatch									
3,278.9	15.82	240.24	3,184.0	-372.4	-599.5	705.4	0.00	0.00	0.00
3,300.0	15.82	240.24	3,204.3	-375.3	-604.5	711.1	0.00	0.00	0.00
3,400.0	15.82	240.24	3,300.5	-388.8	-628.1	738.4	0.00	0.00	0.00
3,500.0	15.82	240.24	3,396.7	-402.3	-651.8	765.7	0.00	0.00	0.00
3,600.0	15.82	240.24	3,492.9	-415.9	-675.5	792.9	0.00	0.00	0.00
3,700.0	15.82	240.24	3,589.1	-429.4	-699.2	820.2	0.00	0.00	0.00
3,800.0	15.82	240.24	3,685.3	-442.9	-722.8	847.5	0.00	0.00	0.00
3,900.0	15.82	240.24	3,781.5	-456.5	-746.5	874.7	0.00	0.00	0.00
4,000.0	15.82	240.24	3,877.7	-470.0	-770.2	902.0	0.00	0.00	0.00
4,100.0	15.82	240.24	3,974.0	-483.5	-793.8	929.3	0.00	0.00	0.00
4,200.0	15.82	240.24	4,070.2	-497.1	-817.5	956.5	0.00	0.00	0.00
4,300.0	15.82	240.24	4,166.4	-510.6	-841.2	983.8	0.00	0.00	0.00
4,400.0	15.82	240.24	4,262.6	-524.1	-864.9	1,011.1	0.00	0.00	0.00
4,500.0	15.82	240.24	4,358.8	-537.7	-888.5	1,038.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU J14 FED 15B-14 496 - Slot 15B-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 15B-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)
4,600.0	15.82	240.24	4,455.0	-551.2	-912.2	1,065.6	0.00	0.00	0.00
4,700.0	15.82	240.24	4,551.2	-564.7	-935.9	1,092.9	0.00	0.00	0.00
4,800.0	15.82	240.24	4,647.4	-578.3	-959.6	1,120.1	0.00	0.00	0.00
4,900.0	15.82	240.24	4,743.6	-591.8	-983.2	1,147.4	0.00	0.00	0.00
5,000.0	15.82	240.24	4,839.8	-605.3	-1,006.9	1,174.7	0.00	0.00	0.00
5,100.0	15.82	240.24	4,936.1	-618.9	-1,030.6	1,201.9	0.00	0.00	0.00
5,200.0	15.82	240.24	5,032.3	-632.4	-1,054.2	1,229.2	0.00	0.00	0.00
5,300.0	15.82	240.24	5,128.5	-646.0	-1,077.9	1,256.5	0.00	0.00	0.00
5,400.0	15.82	240.24	5,224.7	-659.5	-1,101.6	1,283.8	0.00	0.00	0.00
5,500.0	15.82	240.24	5,320.9	-673.0	-1,125.3	1,311.0	0.00	0.00	0.00
5,600.0	15.82	240.24	5,417.1	-686.6	-1,148.9	1,338.3	0.00	0.00	0.00
5,700.0	15.82	240.24	5,513.3	-700.1	-1,172.6	1,365.6	0.00	0.00	0.00
Wasatch G									
5,773.5	15.82	240.24	5,584.0	-710.0	-1,190.0	1,385.6	0.00	0.00	0.00
5,800.0	15.82	240.24	5,609.5	-713.6	-1,196.3	1,392.8	0.00	0.00	0.00
5,900.0	15.82	240.24	5,705.7	-727.2	-1,220.0	1,420.1	0.00	0.00	0.00
6,000.0	15.82	240.24	5,801.9	-740.7	-1,243.6	1,447.4	0.00	0.00	0.00
6,100.0	15.82	240.24	5,898.2	-754.2	-1,267.3	1,474.6	0.00	0.00	0.00
6,200.0	15.82	240.24	5,994.4	-767.8	-1,291.0	1,501.9	0.00	0.00	0.00
6,300.0	15.82	240.24	6,090.6	-781.3	-1,314.6	1,529.2	0.00	0.00	0.00
Fort Union									
6,354.5	15.82	240.24	6,143.0	-788.7	-1,327.5	1,544.0	0.00	0.00	0.00
6,400.0	15.82	240.24	6,186.8	-794.8	-1,338.3	1,556.4	0.00	0.00	0.00
6,500.0	15.82	240.24	6,283.0	-808.4	-1,362.0	1,583.7	0.00	0.00	0.00
6,600.0	15.82	240.24	6,379.2	-821.9	-1,385.7	1,611.0	0.00	0.00	0.00
6,700.0	15.82	240.24	6,475.4	-835.4	-1,409.3	1,638.2	0.00	0.00	0.00
6,800.0	15.82	240.24	6,571.6	-849.0	-1,433.0	1,665.5	0.00	0.00	0.00
6,900.0	15.82	240.24	6,667.8	-862.5	-1,456.7	1,692.8	0.00	0.00	0.00
7,000.0	15.82	240.24	6,764.1	-876.0	-1,480.4	1,720.0	0.00	0.00	0.00
7,100.0	15.82	240.24	6,860.3	-889.6	-1,504.0	1,747.3	0.00	0.00	0.00
7,200.0	15.82	240.24	6,956.5	-903.1	-1,527.7	1,774.6	0.00	0.00	0.00
7,300.0	15.82	240.24	7,052.7	-916.6	-1,551.4	1,801.8	0.00	0.00	0.00
7,400.0	15.82	240.24	7,148.9	-930.2	-1,575.0	1,829.1	0.00	0.00	0.00
7,500.0	15.82	240.24	7,245.1	-943.7	-1,598.7	1,856.4	0.00	0.00	0.00
7,600.0	15.82	240.24	7,341.3	-957.2	-1,622.4	1,883.7	0.00	0.00	0.00
7,700.0	15.82	240.24	7,437.5	-970.8	-1,646.1	1,910.9	0.00	0.00	0.00
7,800.0	15.82	240.24	7,533.7	-984.3	-1,669.7	1,938.2	0.00	0.00	0.00
Drop 3° /100'									
7,817.1	15.82	240.24	7,550.2	-986.6	-1,673.8	1,942.9	0.00	0.00	0.00
7,900.0	13.34	240.24	7,630.4	-997.0	-1,691.9	1,963.7	3.00	-3.00	0.00
8,000.0	10.34	240.24	7,728.3	-1,007.2	-1,709.7	1,984.2	3.00	-3.00	0.00
8,100.0	7.34	240.24	7,827.1	-1,014.8	-1,723.0	1,999.6	3.00	-3.00	0.00
8,200.0	4.34	240.24	7,926.5	-1,019.8	-1,731.9	2,009.8	3.00	-3.00	0.00
8,300.0	1.34	240.24	8,026.4	-1,022.3	-1,736.2	2,014.7	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,344.6	0.00	0.00	8,071.0	-1,022.6	-1,736.6	2,015.2	3.00	-3.00	0.00
8,400.0	0.83	250.00	8,126.4	-1,022.7	-1,737.0	2,015.6	1.50	1.50	0.00
EOB @ 1.47° Inc. / 250.00° Azm									
8,442.6	1.47	250.00	8,169.0	-1,023.0	-1,737.8	2,016.5	1.50	1.50	0.00
8,500.0	1.47	250.00	8,226.4	-1,023.5	-1,739.2	2,017.9	0.00	0.00	0.00
8,600.0	1.47	250.00	8,326.3	-1,024.4	-1,741.6	2,020.5	0.00	0.00	0.00
8,700.0	1.47	250.00	8,426.3	-1,025.2	-1,744.0	2,023.0	0.00	0.00	0.00
Williams Fork									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU J14 FED 15B-14 496 - Slot 15B-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 15B-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)
8,754.7	1.47	250.00	8,481.0	-1,025.7	-1,745.3	2,024.4	0.00	0.00	0.00
8,800.0	1.47	250.00	8,526.3	-1,026.1	-1,746.4	2,025.5	0.00	0.00	0.00
TOG									
8,804.7	1.47	250.00	8,531.0	-1,026.2	-1,746.5	2,025.6	0.00	0.00	0.00
8,900.0	1.47	250.00	8,626.2	-1,027.0	-1,748.8	2,028.0	0.00	0.00	0.00
9,000.0	1.47	250.00	8,726.2	-1,027.9	-1,751.2	2,030.6	0.00	0.00	0.00
9,100.0	1.47	250.00	8,826.2	-1,028.8	-1,753.7	2,033.1	0.00	0.00	0.00
9,200.0	1.47	250.00	8,926.1	-1,029.6	-1,756.1	2,035.6	0.00	0.00	0.00
9,300.0	1.47	250.00	9,026.1	-1,030.5	-1,758.5	2,038.1	0.00	0.00	0.00
9,400.0	1.47	250.00	9,126.1	-1,031.4	-1,760.9	2,040.7	0.00	0.00	0.00
9,500.0	1.47	250.00	9,226.0	-1,032.3	-1,763.3	2,043.2	0.00	0.00	0.00
9,600.0	1.47	250.00	9,326.0	-1,033.1	-1,765.7	2,045.7	0.00	0.00	0.00
9,700.0	1.47	250.00	9,426.0	-1,034.0	-1,768.1	2,048.3	0.00	0.00	0.00
9,800.0	1.47	250.00	9,525.9	-1,034.9	-1,770.5	2,050.8	0.00	0.00	0.00
9,900.0	1.47	250.00	9,625.9	-1,035.8	-1,773.0	2,053.3	0.00	0.00	0.00
10,000.0	1.47	250.00	9,725.9	-1,036.7	-1,775.4	2,055.8	0.00	0.00	0.00
10,100.0	1.47	250.00	9,825.8	-1,037.5	-1,777.8	2,058.4	0.00	0.00	0.00
10,200.0	1.47	250.00	9,925.8	-1,038.4	-1,780.2	2,060.9	0.00	0.00	0.00
10,300.0	1.47	250.00	10,025.8	-1,039.3	-1,782.6	2,063.4	0.00	0.00	0.00
10,400.0	1.47	250.00	10,125.7	-1,040.2	-1,785.0	2,066.0	0.00	0.00	0.00
10,500.0	1.47	250.00	10,225.7	-1,041.0	-1,787.4	2,068.5	0.00	0.00	0.00
10,600.0	1.47	250.00	10,325.7	-1,041.9	-1,789.8	2,071.0	0.00	0.00	0.00
10,700.0	1.47	250.00	10,425.7	-1,042.8	-1,792.2	2,073.5	0.00	0.00	0.00
10,800.0	1.47	250.00	10,525.6	-1,043.7	-1,794.7	2,076.1	0.00	0.00	0.00
10,900.0	1.47	250.00	10,625.6	-1,044.6	-1,797.1	2,078.6	0.00	0.00	0.00
11,000.0	1.47	250.00	10,725.6	-1,045.4	-1,799.5	2,081.1	0.00	0.00	0.00
11,100.0	1.47	250.00	10,825.5	-1,046.3	-1,801.9	2,083.6	0.00	0.00	0.00
11,200.0	1.47	250.00	10,925.5	-1,047.2	-1,804.3	2,086.2	0.00	0.00	0.00
11,300.0	1.47	250.00	11,025.5	-1,048.1	-1,806.7	2,088.7	0.00	0.00	0.00
Cameo									
11,302.5	1.47	250.00	11,028.0	-1,048.1	-1,806.8	2,088.8	0.00	0.00	0.00
11,400.0	1.47	250.00	11,125.4	-1,049.0	-1,809.1	2,091.2	0.00	0.00	0.00
11,500.0	1.47	250.00	11,225.4	-1,049.8	-1,811.5	2,093.8	0.00	0.00	0.00
11,600.0	1.47	250.00	11,325.4	-1,050.7	-1,814.0	2,096.3	0.00	0.00	0.00
11,700.0	1.47	250.00	11,425.3	-1,051.6	-1,816.4	2,098.8	0.00	0.00	0.00
11,800.0	1.47	250.00	11,525.3	-1,052.5	-1,818.8	2,101.3	0.00	0.00	0.00
11,900.0	1.47	250.00	11,625.3	-1,053.3	-1,821.2	2,103.9	0.00	0.00	0.00
12,000.0	1.47	250.00	11,725.2	-1,054.2	-1,823.6	2,106.4	0.00	0.00	0.00
Rollins									
12,089.8	1.47	250.00	11,815.0	-1,055.0	-1,825.8	2,108.7	0.00	0.00	0.00
12,100.0	1.47	250.00	11,825.2	-1,055.1	-1,826.0	2,108.9	0.00	0.00	0.00
12,200.0	1.47	250.00	11,925.2	-1,056.0	-1,828.4	2,111.4	0.00	0.00	0.00
TD @ 12289.9' MD / 12015.0' TVD									
12,289.9	1.47	250.00	12,015.0	-1,056.8	-1,830.6	2,113.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU J14 FED 15B-14 496 - Slot 15B-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 15B-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)		
15B-14 - OHCR	0.00	0.00	8,071.0	-1,022.6	-1,736.6	14,428,875.29	2,444,397.73	39.697953	-108.142011
- plan hits target center									
- Point									
15B-14 - PBHL	0.00	0.00	12,015.0	-1,056.8	-1,830.6	14,428,838.10	2,444,304.90	39.697859	-108.142344
- 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 (°)	
3,278.9	3,184.0	Wasatch				
5,773.5	5,584.0	Wasatch G				
6,354.5	6,143.0	Fort Union				
8,344.6	8,071.0	Ohio Creek				
8,754.7	8,481.0	Williams Fork				
8,804.7	8,531.0	TOG				
11,302.5	11,028.0	Cameo				
12,089.8	11,815.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
330.0	330.0	0.0	0.0	Build 3° / 100'
496.7	496.5	-7.2	0.6	EOB @ 5.00° Inc. / 175.00° Azm / Build 3° / 100'
978.1	970.4	-61.0	-54.8	EOB @ 15.82° Inc. / 240.24° Azm
7,817.1	7,550.2	-986.6	-1,673.8	Drop 3° / 100'
8,344.6	8,071.0	-1,022.6	-1,736.6	EOD @ Vertical / Build 1.5° / 100'
8,442.6	8,169.0	-1,023.0	-1,737.8	EOB @ 1.47° Inc. / 250.00° Azm
12,289.9	12,015.0	-1,056.8	-1,830.6	TD @ 12289.9' MD / 12015.0' TVD