

Project: Rio Blanco County, CO
 Site: ELU O13 496 Pad
 Well: ELU O13 FED 21A-24 496
 Wellbore: Wellbore #1
 Design: Design #3
 Latitude: 39.698693
 Longitude: -108.115145
 Ground Level: 8118.0
 RKB @ 8143.0usft (25')

PROJECT DETAILS: Rio Blanco County, CO
 Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1927 - Western US
 Ellipsoid: Clarke 1886
 Zone: Zone 12N (114 W to 108 W)
 System Datum: Mean Sea Level

REFERENCE INFORMATION
 Vertical (TVD) Reference: RKB @ 8143.0usft (25')
 Section (VS) Reference: Slot - 21A-24(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 8143.0usft (25')
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3955.0	4088.0	Wasatch
6355.0	6591.2	Wasatch G
6555.0	6904.1	Fort Union
8619.0	8936.8	Ohio Creek
9121.0	9439.0	Williams Fork
12067.0	12385.8	Cameo
12381.0	12699.9	Rollins

SECTION DETAILS

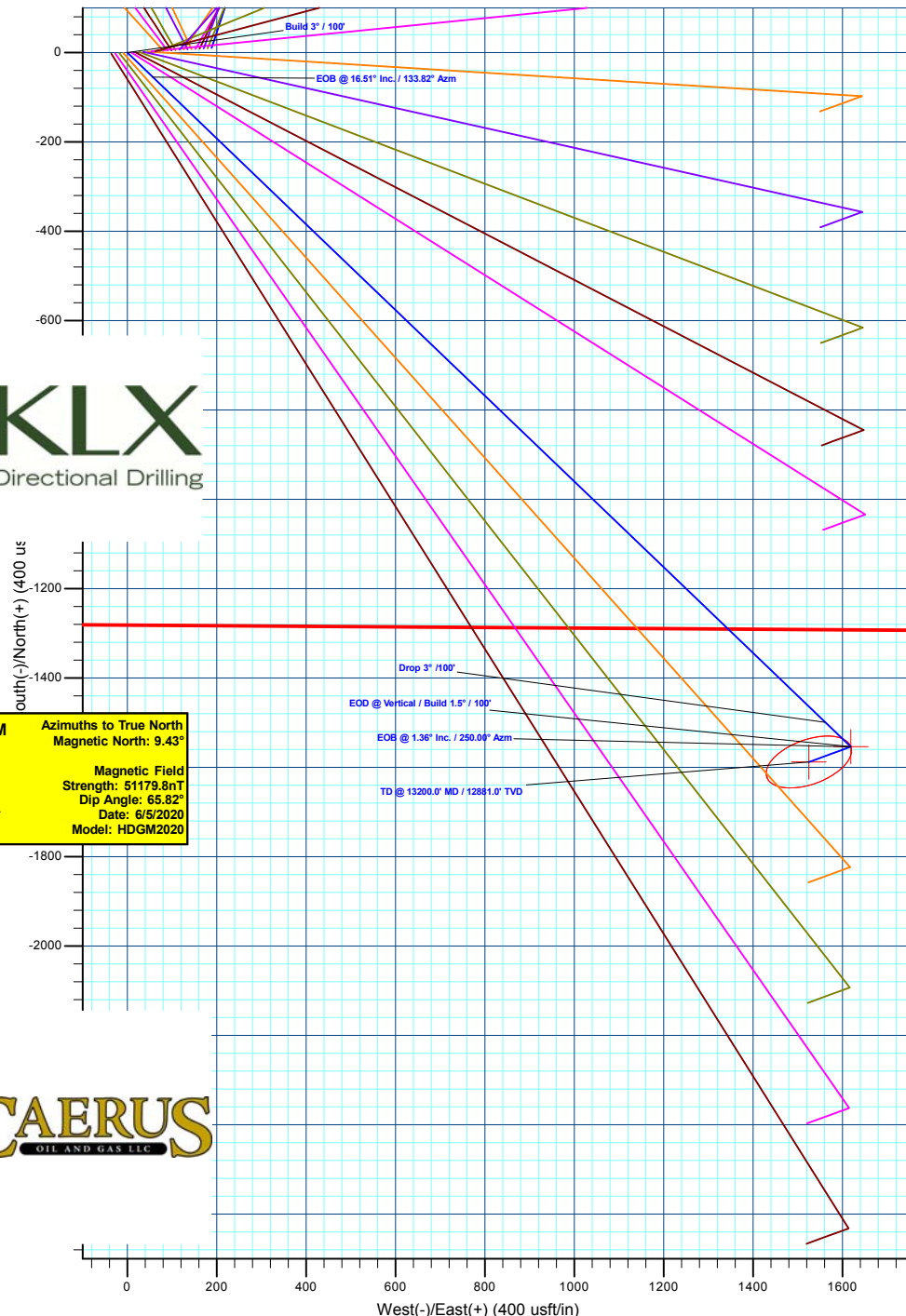
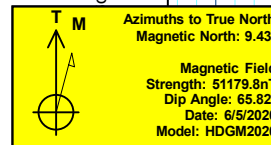
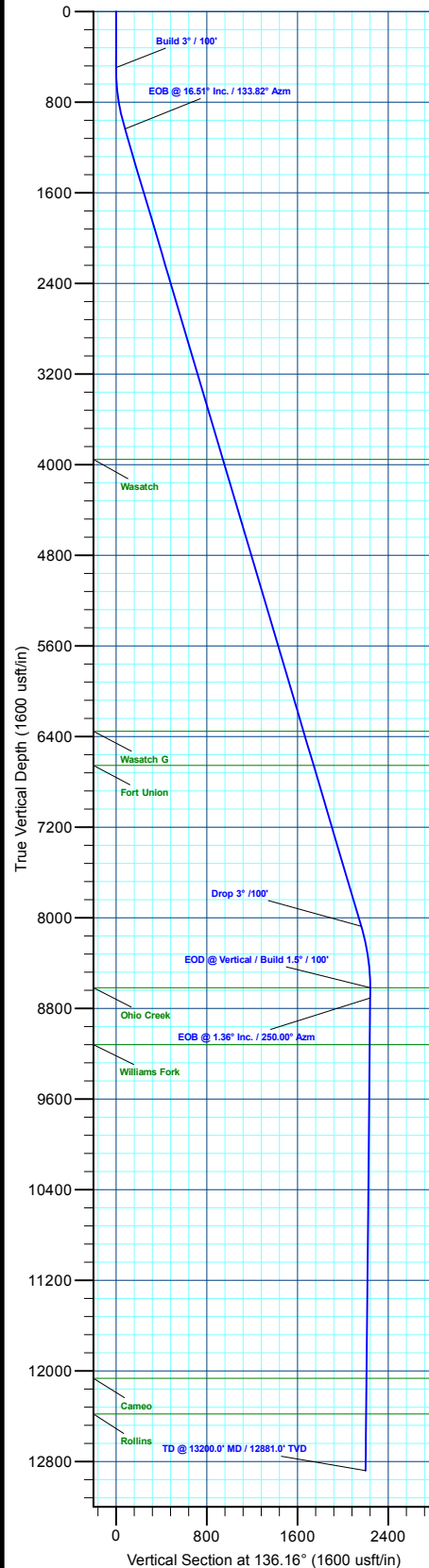
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
495.0	0.00	0.00	495.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
1045.3	16.51	133.82	1037.8	-54.5	56.8	3.00	133.82	78.7	EOB @ 16.51° Inc. / 133.82° Azm
8386.5	16.51	133.82	8076.2	-1499.1	1562.1	0.00	0.00	2163.2	Drop 3° / 100'
8936.8	0.00	0.00	8619.0	-1553.6	1618.9	3.00	180.00	2241.9	EOD @ Vertical / Build 1.5° / 100'
9027.4	1.36	250.00	8709.6	-1553.9	1617.9	1.50	250.00	2241.4	EOB @ 1.36° Inc. / 250.00° Azm
13200.0	1.36	250.00	12861.0	-1587.8	1524.9	0.00	0.00	2201.5	TD @ 13200.0' MD / 12861.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 21A-24	8619.0	-1553.6	1618.9	14427886.51	2453615.82	39.694430	-108.109394
PBHL - 21A-24	12861.0	-1587.8	1524.9	14427849.30	2453523.00	39.694336	-108.109728

WELL DETAILS: ELU O13 FED 21A-24 496

+N/-S	+E/-W	Ground Level : 8118.0	Latitude	Longitude
0.0	0.0	Northing 14429387.20 Easting 2451947.80	39.698693	-108.115145



Plan: Design #3 (ELU O13 FED 21A-24 496/Wellbore #1)

Created By: Will Jircik Date: 13:42, November 15 2022



Caerus Oil & Gas

Rio Blanco County, CO

ELU O13 496 Pad

ELU O13 FED 21A-24 496 - Slot 21A-24

Wellbore #1

Plan: Design #3

KLX Well Planning Report

15 November, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21A-24 496 - Slot 21A-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21A-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

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 O13 496 Pad		
Site Position:		Northing:	14,429,398.00 usft
From:	Map	Easting:	2,452,071.40 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	39.698712
		Longitude:	-108.114705
		Grid Convergence:	1.84 °

Well	ELU O13 FED 21A-24 496 - Slot 21A-24		
Well Position	+N/-S	-6.8 usft	Northing: 14,429,387.20 usft
	+E/-W	-123.9 usft	Easting: 2,451,947.80 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 39.698693
			Longitude: -108.115145
			Ground Level: 8,118.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2020	6/5/2020	9.43	65.82	51,179.80000000

Design	Design #3			
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	136.16

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	
495.0	0.00	0.00	495.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,045.3	16.51	133.82	1,037.8	-54.5	56.8	3.00	3.00	0.00	133.82	
8,386.5	16.51	133.82	8,076.2	-1,499.1	1,562.1	0.00	0.00	0.00	0.00	
8,936.8	0.00	0.00	8,619.0	-1,553.6	1,618.9	3.00	-3.00	0.00	180.00	OHCR - 21A-24
9,027.4	1.36	250.00	8,709.6	-1,553.9	1,617.9	1.50	1.50	-121.46	250.00	
13,200.0	1.36	250.00	12,881.0	-1,587.8	1,524.9	0.00	0.00	0.00	0.00	PBHL - 21A-24

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21A-24 496 - Slot 21A-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21A-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

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
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 3° / 100'									
495.0	0.00	0.00	495.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.15	133.82	500.0	0.0	0.0	0.0	3.00	3.00	0.00
600.0	3.15	133.82	599.9	-2.0	2.1	2.9	3.00	3.00	0.00
700.0	6.15	133.82	699.6	-7.6	7.9	11.0	3.00	3.00	0.00
800.0	9.15	133.82	798.7	-16.8	17.5	24.3	3.00	3.00	0.00
900.0	12.15	133.82	897.0	-29.6	30.9	42.7	3.00	3.00	0.00
1,000.0	15.15	133.82	994.1	-46.0	47.9	66.3	3.00	3.00	0.00
EOB @ 16.51° Inc. / 133.82° Azm									
1,045.3	16.51	133.82	1,037.8	-54.5	56.8	78.7	3.00	3.00	0.00
1,100.0	16.51	133.82	1,090.2	-65.3	68.0	94.2	0.00	0.00	0.00
1,200.0	16.51	133.82	1,186.0	-85.0	88.5	122.6	0.00	0.00	0.00
1,300.0	16.51	133.82	1,281.9	-104.6	109.0	151.0	0.00	0.00	0.00
1,400.0	16.51	133.82	1,377.8	-124.3	129.5	179.4	0.00	0.00	0.00
1,500.0	16.51	133.82	1,473.7	-144.0	150.0	207.8	0.00	0.00	0.00
1,600.0	16.51	133.82	1,569.5	-163.7	170.5	236.2	0.00	0.00	0.00
1,700.0	16.51	133.82	1,665.4	-183.3	191.0	264.6	0.00	0.00	0.00
1,800.0	16.51	133.82	1,761.3	-203.0	211.6	293.0	0.00	0.00	0.00
1,900.0	16.51	133.82	1,857.2	-222.7	232.1	321.4	0.00	0.00	0.00
2,000.0	16.51	133.82	1,953.1	-242.4	252.6	349.8	0.00	0.00	0.00
2,100.0	16.51	133.82	2,048.9	-262.1	273.1	378.1	0.00	0.00	0.00
2,200.0	16.51	133.82	2,144.8	-281.7	293.6	406.5	0.00	0.00	0.00
2,300.0	16.51	133.82	2,240.7	-301.4	314.1	434.9	0.00	0.00	0.00
2,400.0	16.51	133.82	2,336.6	-321.1	334.6	463.3	0.00	0.00	0.00
2,500.0	16.51	133.82	2,432.4	-340.8	355.1	491.7	0.00	0.00	0.00
2,600.0	16.51	133.82	2,528.3	-360.4	375.6	520.1	0.00	0.00	0.00
2,700.0	16.51	133.82	2,624.2	-380.1	396.1	548.5	0.00	0.00	0.00
2,800.0	16.51	133.82	2,720.1	-399.8	416.6	576.9	0.00	0.00	0.00
2,900.0	16.51	133.82	2,815.9	-419.5	437.1	605.3	0.00	0.00	0.00
3,000.0	16.51	133.82	2,911.8	-439.1	457.6	633.7	0.00	0.00	0.00
3,100.0	16.51	133.82	3,007.7	-458.8	478.1	662.1	0.00	0.00	0.00
3,200.0	16.51	133.82	3,103.6	-478.5	498.6	690.5	0.00	0.00	0.00
3,300.0	16.51	133.82	3,199.5	-498.2	519.1	718.9	0.00	0.00	0.00
3,400.0	16.51	133.82	3,295.3	-517.9	539.6	747.3	0.00	0.00	0.00
3,500.0	16.51	133.82	3,391.2	-537.5	560.1	775.7	0.00	0.00	0.00
3,600.0	16.51	133.82	3,487.1	-557.2	580.6	804.1	0.00	0.00	0.00
3,700.0	16.51	133.82	3,583.0	-576.9	601.1	832.5	0.00	0.00	0.00
3,800.0	16.51	133.82	3,678.8	-596.6	621.6	860.9	0.00	0.00	0.00
3,900.0	16.51	133.82	3,774.7	-616.2	642.1	889.3	0.00	0.00	0.00
4,000.0	16.51	133.82	3,870.6	-635.9	662.6	917.7	0.00	0.00	0.00
Wasatch									
4,088.0	16.51	133.82	3,955.0	-653.2	680.7	942.6	0.00	0.00	0.00
4,100.0	16.51	133.82	3,966.5	-655.6	683.1	946.0	0.00	0.00	0.00
4,200.0	16.51	133.82	4,062.3	-675.3	703.7	974.4	0.00	0.00	0.00
4,300.0	16.51	133.82	4,158.2	-694.9	724.2	1,002.8	0.00	0.00	0.00
4,400.0	16.51	133.82	4,254.1	-714.6	744.7	1,031.2	0.00	0.00	0.00
4,500.0	16.51	133.82	4,350.0	-734.3	765.2	1,059.6	0.00	0.00	0.00
4,600.0	16.51	133.82	4,445.9	-754.0	785.7	1,088.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21A-24 496 - Slot 21A-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21A-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

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)
4,700.0	16.51	133.82	4,541.7	-773.7	806.2	1,116.4	0.00	0.00	0.00
4,800.0	16.51	133.82	4,637.6	-793.3	826.7	1,144.8	0.00	0.00	0.00
4,900.0	16.51	133.82	4,733.5	-813.0	847.2	1,173.2	0.00	0.00	0.00
5,000.0	16.51	133.82	4,829.4	-832.7	867.7	1,201.6	0.00	0.00	0.00
5,100.0	16.51	133.82	4,925.2	-852.4	888.2	1,230.0	0.00	0.00	0.00
5,200.0	16.51	133.82	5,021.1	-872.0	908.7	1,258.4	0.00	0.00	0.00
5,300.0	16.51	133.82	5,117.0	-891.7	929.2	1,286.8	0.00	0.00	0.00
5,400.0	16.51	133.82	5,212.9	-911.4	949.7	1,315.2	0.00	0.00	0.00
5,500.0	16.51	133.82	5,308.7	-931.1	970.2	1,343.6	0.00	0.00	0.00
5,600.0	16.51	133.82	5,404.6	-950.8	990.7	1,372.0	0.00	0.00	0.00
5,700.0	16.51	133.82	5,500.5	-970.4	1,011.2	1,400.4	0.00	0.00	0.00
5,800.0	16.51	133.82	5,596.4	-990.1	1,031.7	1,428.8	0.00	0.00	0.00
5,900.0	16.51	133.82	5,692.3	-1,009.8	1,052.2	1,457.2	0.00	0.00	0.00
6,000.0	16.51	133.82	5,788.1	-1,029.5	1,072.7	1,485.5	0.00	0.00	0.00
6,100.0	16.51	133.82	5,884.0	-1,049.1	1,093.2	1,513.9	0.00	0.00	0.00
6,200.0	16.51	133.82	5,979.9	-1,068.8	1,113.7	1,542.3	0.00	0.00	0.00
6,300.0	16.51	133.82	6,075.8	-1,088.5	1,134.2	1,570.7	0.00	0.00	0.00
6,400.0	16.51	133.82	6,171.6	-1,108.2	1,154.7	1,599.1	0.00	0.00	0.00
6,500.0	16.51	133.82	6,267.5	-1,127.8	1,175.2	1,627.5	0.00	0.00	0.00
Wasatch G									
6,591.2	16.51	133.82	6,355.0	-1,145.8	1,194.0	1,653.4	0.00	0.00	0.00
6,600.0	16.51	133.82	6,363.4	-1,147.5	1,195.8	1,655.9	0.00	0.00	0.00
6,700.0	16.51	133.82	6,459.3	-1,167.2	1,216.3	1,684.3	0.00	0.00	0.00
6,800.0	16.51	133.82	6,555.1	-1,186.9	1,236.8	1,712.7	0.00	0.00	0.00
6,900.0	16.51	133.82	6,651.0	-1,206.6	1,257.3	1,741.1	0.00	0.00	0.00
Fort Union									
6,904.1	16.51	133.82	6,655.0	-1,207.4	1,258.1	1,742.3	0.00	0.00	0.00
7,000.0	16.51	133.82	6,746.9	-1,226.2	1,277.8	1,769.5	0.00	0.00	0.00
7,100.0	16.51	133.82	6,842.8	-1,245.9	1,298.3	1,797.9	0.00	0.00	0.00
7,200.0	16.51	133.82	6,938.7	-1,265.6	1,318.8	1,826.3	0.00	0.00	0.00
7,300.0	16.51	133.82	7,034.5	-1,285.3	1,339.3	1,854.7	0.00	0.00	0.00
7,400.0	16.51	133.82	7,130.4	-1,304.9	1,359.8	1,883.1	0.00	0.00	0.00
7,500.0	16.51	133.82	7,226.3	-1,324.6	1,380.3	1,911.5	0.00	0.00	0.00
7,600.0	16.51	133.82	7,322.2	-1,344.3	1,400.8	1,939.9	0.00	0.00	0.00
7,700.0	16.51	133.82	7,418.0	-1,364.0	1,421.3	1,968.3	0.00	0.00	0.00
7,800.0	16.51	133.82	7,513.9	-1,383.6	1,441.8	1,996.7	0.00	0.00	0.00
7,900.0	16.51	133.82	7,609.8	-1,403.3	1,462.3	2,025.0	0.00	0.00	0.00
8,000.0	16.51	133.82	7,705.7	-1,423.0	1,482.8	2,053.4	0.00	0.00	0.00
8,100.0	16.51	133.82	7,801.5	-1,442.7	1,503.3	2,081.8	0.00	0.00	0.00
8,200.0	16.51	133.82	7,897.4	-1,462.4	1,523.8	2,110.2	0.00	0.00	0.00
8,300.0	16.51	133.82	7,993.3	-1,482.0	1,544.3	2,138.6	0.00	0.00	0.00
Drop 3° /100'									
8,386.5	16.51	133.82	8,076.2	-1,499.1	1,562.1	2,163.2	0.00	0.00	0.00
8,400.0	16.11	133.82	8,089.2	-1,501.7	1,564.8	2,167.0	3.00	-3.00	0.00
8,500.0	13.11	133.82	8,186.0	-1,519.1	1,583.0	2,192.2	3.00	-3.00	0.00
8,600.0	10.11	133.82	8,283.9	-1,533.1	1,597.5	2,212.3	3.00	-3.00	0.00
8,700.0	7.11	133.82	8,382.8	-1,543.4	1,608.3	2,227.2	3.00	-3.00	0.00
8,800.0	4.11	133.82	8,482.3	-1,550.2	1,615.3	2,237.0	3.00	-3.00	0.00
8,900.0	1.11	133.82	8,582.2	-1,553.3	1,618.6	2,241.5	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,936.8	0.00	0.00	8,619.0	-1,553.6	1,618.9	2,241.9	3.00	-3.00	0.00
9,000.0	0.95	250.00	8,682.1	-1,553.8	1,618.4	2,241.7	1.50	1.50	0.00
EOB @ 1.36° Inc. / 250.00° Azm									
9,027.4	1.36	250.00	8,709.6	-1,553.9	1,617.9	2,241.4	1.50	1.50	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21A-24 496 - Slot 21A-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21A-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

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)
9,100.0	1.36	250.00	8,782.1	-1,554.5	1,616.2	2,240.7	0.00	0.00	0.00
9,200.0	1.36	250.00	8,882.1	-1,555.3	1,614.0	2,239.8	0.00	0.00	0.00
9,300.0	1.36	250.00	8,982.1	-1,556.2	1,611.8	2,238.8	0.00	0.00	0.00
9,400.0	1.36	250.00	9,082.0	-1,557.0	1,609.6	2,237.9	0.00	0.00	0.00
Williams Fork									
9,439.0	1.36	250.00	9,121.0	-1,557.3	1,608.7	2,237.5	0.00	0.00	0.00
9,500.0	1.36	250.00	9,182.0	-1,557.8	1,607.3	2,236.9	0.00	0.00	0.00
9,600.0	1.36	250.00	9,282.0	-1,558.6	1,605.1	2,236.0	0.00	0.00	0.00
9,700.0	1.36	250.00	9,382.0	-1,559.4	1,602.9	2,235.0	0.00	0.00	0.00
9,800.0	1.36	250.00	9,481.9	-1,560.2	1,600.7	2,234.0	0.00	0.00	0.00
9,900.0	1.36	250.00	9,581.9	-1,561.0	1,598.4	2,233.1	0.00	0.00	0.00
10,000.0	1.36	250.00	9,681.9	-1,561.8	1,596.2	2,232.1	0.00	0.00	0.00
10,100.0	1.36	250.00	9,781.8	-1,562.6	1,594.0	2,231.2	0.00	0.00	0.00
10,200.0	1.36	250.00	9,881.8	-1,563.5	1,591.7	2,230.2	0.00	0.00	0.00
10,300.0	1.36	250.00	9,981.8	-1,564.3	1,589.5	2,229.2	0.00	0.00	0.00
10,400.0	1.36	250.00	10,081.8	-1,565.1	1,587.3	2,228.3	0.00	0.00	0.00
10,500.0	1.36	250.00	10,181.7	-1,565.9	1,585.1	2,227.3	0.00	0.00	0.00
10,600.0	1.36	250.00	10,281.7	-1,566.7	1,582.8	2,226.4	0.00	0.00	0.00
10,700.0	1.36	250.00	10,381.7	-1,567.5	1,580.6	2,225.4	0.00	0.00	0.00
10,800.0	1.36	250.00	10,481.6	-1,568.3	1,578.4	2,224.5	0.00	0.00	0.00
10,900.0	1.36	250.00	10,581.6	-1,569.1	1,576.1	2,223.5	0.00	0.00	0.00
11,000.0	1.36	250.00	10,681.6	-1,569.9	1,573.9	2,222.5	0.00	0.00	0.00
11,100.0	1.36	250.00	10,781.6	-1,570.8	1,571.7	2,221.6	0.00	0.00	0.00
11,200.0	1.36	250.00	10,881.5	-1,571.6	1,569.5	2,220.6	0.00	0.00	0.00
11,300.0	1.36	250.00	10,981.5	-1,572.4	1,567.2	2,219.7	0.00	0.00	0.00
11,400.0	1.36	250.00	11,081.5	-1,573.2	1,565.0	2,218.7	0.00	0.00	0.00
11,500.0	1.36	250.00	11,181.4	-1,574.0	1,562.8	2,217.7	0.00	0.00	0.00
11,600.0	1.36	250.00	11,281.4	-1,574.8	1,560.6	2,216.8	0.00	0.00	0.00
11,700.0	1.36	250.00	11,381.4	-1,575.6	1,558.3	2,215.8	0.00	0.00	0.00
11,800.0	1.36	250.00	11,481.4	-1,576.4	1,556.1	2,214.9	0.00	0.00	0.00
11,900.0	1.36	250.00	11,581.3	-1,577.2	1,553.9	2,213.9	0.00	0.00	0.00
12,000.0	1.36	250.00	11,681.3	-1,578.1	1,551.6	2,213.0	0.00	0.00	0.00
12,100.0	1.36	250.00	11,781.3	-1,578.9	1,549.4	2,212.0	0.00	0.00	0.00
12,200.0	1.36	250.00	11,881.3	-1,579.7	1,547.2	2,211.0	0.00	0.00	0.00
12,300.0	1.36	250.00	11,981.2	-1,580.5	1,545.0	2,210.1	0.00	0.00	0.00
Cameo									
12,385.8	1.36	250.00	12,067.0	-1,581.2	1,543.0	2,209.3	0.00	0.00	0.00
12,400.0	1.36	250.00	12,081.2	-1,581.3	1,542.7	2,209.1	0.00	0.00	0.00
12,500.0	1.36	250.00	12,181.2	-1,582.1	1,540.5	2,208.2	0.00	0.00	0.00
12,600.0	1.36	250.00	12,281.1	-1,582.9	1,538.3	2,207.2	0.00	0.00	0.00
Rollins									
12,699.9	1.36	250.00	12,381.0	-1,583.7	1,536.0	2,206.2	0.00	0.00	0.00
12,700.0	1.36	250.00	12,381.1	-1,583.7	1,536.0	2,206.2	0.00	0.00	0.00
12,800.0	1.36	250.00	12,481.1	-1,584.5	1,533.8	2,205.3	0.00	0.00	0.00
12,900.0	1.36	250.00	12,581.1	-1,585.4	1,531.6	2,204.3	0.00	0.00	0.00
13,000.0	1.36	250.00	12,681.0	-1,586.2	1,529.4	2,203.4	0.00	0.00	0.00
13,100.0	1.36	250.00	12,781.0	-1,587.0	1,527.1	2,202.4	0.00	0.00	0.00
TD @ 13200.0' MD / 12881.0' TVD									
13,200.0	1.36	250.00	12,881.0	-1,587.8	1,524.9	2,201.5	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21A-24 496 - Slot 21A-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21A-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
OHCR - 21A-24	0.00	0.00	8,619.0	-1,553.6	1,618.9	14,427,886.51	2,453,615.82	39.694430	-108.109394
- plan hits target center									
- Point									
PBHL - 21A-24	0.00	0.00	12,881.0	-1,587.8	1,524.9	14,427,849.30	2,453,523.00	39.694336	-108.109728
- 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 (°)
4,088.0	3,955.0	Wasatch			
6,591.2	6,355.0	Wasatch G			
6,904.1	6,655.0	Fort Union			
8,936.8	8,619.0	Ohio Creek			
9,439.0	9,121.0	Williams Fork			
12,385.8	12,067.0	Cameo			
12,699.9	12,381.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
495.0	495.0	0.0	0.0	Build 3° / 100'
1,045.3	1,037.8	-54.5	56.8	EOB @ 16.51° Inc. / 133.82° Azm
8,386.5	8,076.2	-1,499.1	1,562.1	Drop 3° / 100'
8,936.8	8,619.0	-1,553.6	1,618.9	EOD @ Vertical / Build 1.5° / 100'
9,027.4	8,709.6	-1,553.9	1,617.9	EOB @ 1.36° Inc. / 250.00° Azm
13,200.0	12,881.0	-1,587.8	1,524.9	TD @ 13200.0' MD / 12881.0' TVD