

Project: Garfield County, CO  
 Site: BJU M33 496 Pad  
 Well: BJU M33 FED 14B-32 496  
 Wellbore: Wellbore #1  
 Design: Design #1  
 Latitude: 39.653434  
 Longitude: -108.177789  
 Ground Level: 8401.0  
 RKB @ 8431.0usft (H&P #330)

**FORMATION TOP DETAILS**

TVDPath	MDPath	Formation
2279.0	2428.5	Wasatch
5289.0	5732.9	Wasatch G
5563.0	6033.7	Fort Union
7411.0	8009.7	Ohio Creek
7684.0	8282.7	Williams Fork
10234.0	10833.6	Cameo
10880.0	11479.8	Rollins

**REFERENCE INFORMATION**

Co-ordinate (N/E) Reference: Well BJU M33 FED 14B-32 496, True North  
 Vertical (TVD) Reference: RKB @ 8431.0usft (H&P #330)  
 Section (VS) Reference: Slot - (0.0N, 0.0E)  
 Measured Depth Reference: RKB @ 8431.0usft (H&P #330)  
 Calculation Method: Minimum Curvature

**WELL DETAILS: BJU M33 FED 14B-32 496**

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14412342.90	2434841.50	39.653434	-108.177789

**PROJECT DETAILS: Garfield 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

**DESIGN TARGET DETAILS**

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 14B-32	7411.0	1795.5	-2264.4	14414066.28	2432521.73	39.658361	-108.185829
PBHL - 14B-32	11380.0	1761.2	-2358.4	14414029.10	2432428.90	39.658267	-108.186163

**SECTION DETAILS**

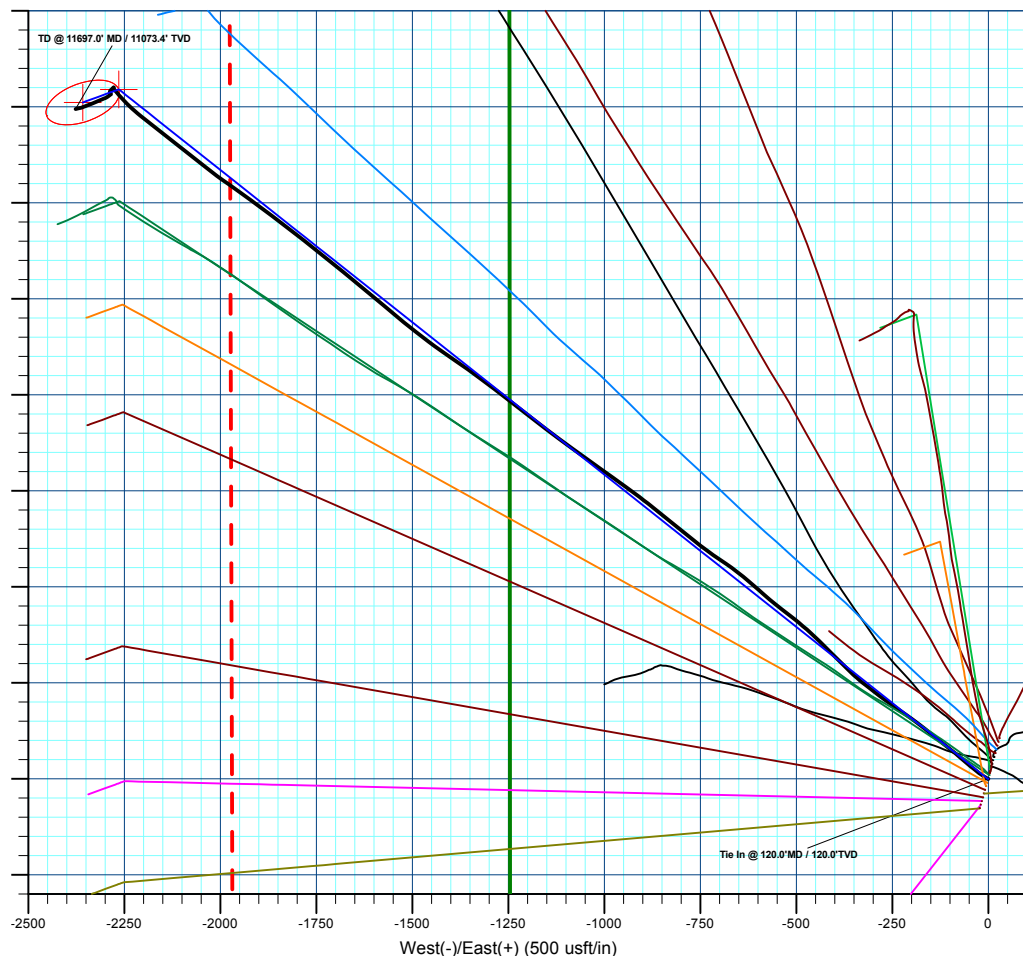
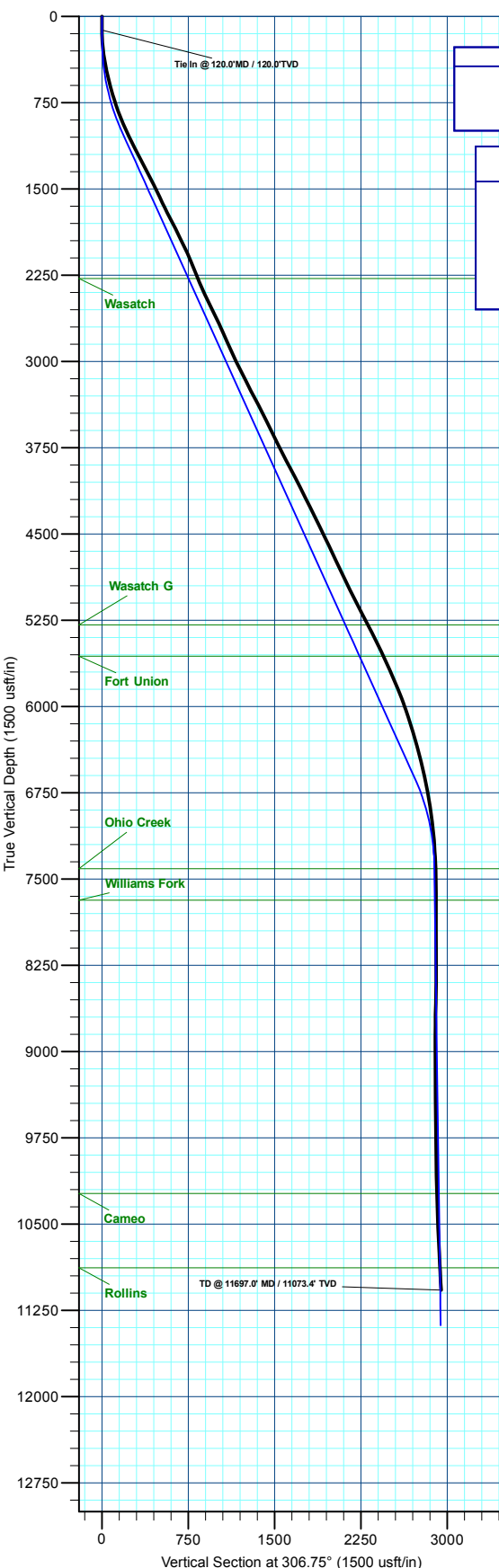
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
120.0	0.73	292.58	120.0	-0.5	-0.5	0.00	0.00	0.1	Conductor Tie in
131.9	1.00	308.43	131.9	-0.4	-0.7	3.00	49.65	0.3	EOB @ 1.00° Inc. / 308.39° Azm
244.0	1.00	308.43	244.0	0.8	-2.2	0.00	0.00	2.3	Build 3° / 100'
1023.0	24.37	308.43	998.7	106.4	-135.3	3.00	0.00	0.00	EOB @ 24.37° Inc. / 308.43° Azm
7197.4	24.37	308.43	6623.0	1689.7	-2131.1	0.00	0.00	172.0	Drop 3° / 100'
8009.7	0.00	0.00	7411.0	1795.5	-2264.4	3.00	180.00	2888.7	EOD @ Vertical / Build 1.5° / 100'
8107.1	1.46	249.98	7508.4	1795.0	-2265.6	1.50	249.98	2889.3	EOB @ 1.46° Inc. / 249.98° Azm
11979.9	1.46	249.98	11380.0	1761.2	-2358.4	0.00	0.00	2943.5	TD @ 11979.9° MD / 11380.0° TVD

**Azimuths to True North**  
 Magnetic North: 9.12°  
 Magnetic Field Strength: 50938.0nT  
 Dip Angle: 65.63°  
 Date: 10/2/2023  
 Model: HDGM2023



**ANNOTATIONS**

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
120.0	0.73	292.58	120.0	-0.5	-0.5	0.1	0.9	Tie In @ 120.0° MD / 120.0° TVD
11697.0	5.40	256.20	11073.4	1744.1	-2376.8	2948.1	3033.7	TD @ 11697.0° MD / 11073.4° TVD



**Plan: Design #1 (BJU M33 FED 14B-32 496/Wellbore #1)**

**Created By: Will Jircik Date: 19:53, October 23 2023**



## **Caerus Oil & Gas**

**Garfield County, CO**

**BJU M33 496 Pad**

**BJU M33 FED 14B-32 496**

**Wellbore #1**

**Design: Wellbore #1**

## **KLX Survey Report**

**23 October, 2023**



<b>Company:</b>	Caerus Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 14B-32 496
<b>Project:</b>	Garfield County, CO	<b>TVD Reference:</b>	RKB @ 8431.0usft (H&P #330)
<b>Site:</b>	BJU M33 496 Pad	<b>MD Reference:</b>	RKB @ 8431.0usft (H&P #330)
<b>Well:</b>	BJU M33 FED 14B-32 496	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db

<b>Project</b>	Garfield County, CO		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<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)		

<b>Site</b>	BJU M33 496 Pad				
<b>Site Position:</b>		<b>Northing:</b>	14,415,354.00 usft	<b>Latitude:</b>	39.660635
<b>From:</b>	Map	<b>Easting:</b>	2,447,010.80 usft	<b>Longitude:</b>	-108.134267
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	1.83 °

<b>Well</b>	BJU M33 FED 14B-32 496					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,412,342.90 usft	<b>Latitude:</b>	39.653434
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	2,434,841.50 usft	<b>Longitude:</b>	-108.177790
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>	usft	<b>Ground Level:</b>	8,401.0 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>
	HDGM2023	10/2/2023	9.12	65.63	50,938.00000000

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<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	306.27	

<b>Survey Program</b>	<b>Date</b>	10/23/2023			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
30.0	120.0	Conductor Gyro (Wellbore #1)	GYRO-NS	OWSG Gyrocompass Gyro	
324.0	11,697.0	KLX MWD (Wellbore #1)	MWD	OWSG MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
30.0	0.00	0.00	30.0	0.0	0.0	0.0	0.00	0.00	0.00	
60.0	0.63	179.81	60.0	-0.2	0.0	-0.1	2.10	2.10	0.00	
90.0	0.79	236.04	90.0	-0.4	-0.2	-0.1	2.28	0.53	187.43	
<b>Tie In @ 120.0'MD / 120.0'TVD</b>										
120.0	0.73	292.58	120.0	-0.5	-0.5	0.1	2.41	-0.20	188.47	
324.0	7.40	302.10	323.4	7.0	-12.9	14.5	3.28	3.27	4.67	
413.0	10.30	308.00	411.3	14.9	-24.0	28.2	3.41	3.26	6.63	
500.0	12.90	308.20	496.5	25.7	-37.8	45.7	2.99	2.99	0.23	
595.0	14.70	309.80	588.8	40.0	-55.3	68.3	1.94	1.89	1.68	

<b>Company:</b>	Caerus Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 14B-32 496
<b>Project:</b>	Garfield County, CO	<b>TVD Reference:</b>	RKB @ 8431.0usft (H&P #330)
<b>Site:</b>	BJU M33 496 Pad	<b>MD Reference:</b>	RKB @ 8431.0usft (H&P #330)
<b>Well:</b>	BJU M33 FED 14B-32 496	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db

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)	
690.0	16.60	310.80	680.2	56.6	-74.9	93.9	2.02	2.00	1.05	
784.0	18.40	309.50	769.9	74.8	-96.5	122.1	1.96	1.91	-1.38	
879.0	20.70	308.70	859.4	94.9	-121.2	153.8	2.44	2.42	-0.84	
973.0	24.20	308.90	946.3	117.3	-149.1	189.7	3.72	3.72	0.21	
1,067.0	26.10	307.50	1,031.4	142.0	-180.5	229.6	2.12	2.02	-1.49	
1,162.0	26.80	305.40	1,116.4	167.2	-214.6	271.9	1.23	0.74	-2.21	
1,256.0	27.10	304.40	1,200.2	191.5	-249.5	314.5	0.58	0.32	-1.06	
1,350.0	27.10	307.90	1,283.9	216.8	-284.1	357.3	1.70	0.00	3.72	
1,445.0	27.80	307.40	1,368.2	243.5	-318.8	401.1	0.78	0.74	-0.53	
1,539.0	25.90	313.40	1,452.1	271.0	-351.1	443.4	3.52	-2.02	6.38	
1,634.0	25.80	314.30	1,537.6	299.7	-381.0	484.4	0.43	-0.11	0.95	
1,728.0	26.30	315.50	1,622.0	328.8	-410.2	525.2	0.77	0.53	1.28	
1,822.0	27.60	313.90	1,705.8	358.7	-440.5	567.4	1.58	1.38	-1.70	
1,917.0	27.20	312.10	1,790.2	388.6	-472.5	610.8	0.97	-0.42	-1.89	
2,011.0	26.20	307.90	1,874.1	415.7	-504.8	652.9	2.27	-1.06	-4.47	
2,106.0	26.10	308.00	1,959.4	441.5	-537.8	694.8	0.12	-0.11	0.11	
2,200.0	24.70	310.30	2,044.3	466.9	-569.1	735.0	1.82	-1.49	2.45	
2,295.0	22.30	311.70	2,131.4	491.7	-597.7	772.8	2.59	-2.53	1.47	
2,389.0	22.00	310.10	2,218.5	514.9	-624.4	808.1	0.72	-0.32	-1.70	
2,483.0	23.20	308.00	2,305.3	537.7	-652.5	844.2	1.54	1.28	-2.23	
2,578.0	24.30	304.50	2,392.2	560.3	-683.4	882.4	1.88	1.16	-3.68	
2,672.0	25.70	304.60	2,477.4	582.8	-716.1	922.1	1.49	1.49	0.11	
2,767.0	26.20	307.90	2,562.9	607.4	-749.6	963.7	1.61	0.53	3.47	
2,861.0	26.10	308.70	2,647.2	633.1	-782.1	1,005.1	0.39	-0.11	0.85	
2,956.0	24.10	308.70	2,733.3	658.3	-813.6	1,045.3	2.11	-2.11	0.00	
3,061.0	23.80	310.20	2,829.2	685.3	-846.5	1,087.9	0.65	-0.29	1.43	
3,155.0	24.00	307.90	2,915.2	709.3	-876.0	1,125.9	1.01	0.21	-2.45	
3,250.0	26.40	306.50	3,001.1	733.8	-908.3	1,166.4	2.60	2.53	-1.47	
3,344.0	26.90	306.00	3,085.1	758.7	-942.3	1,208.5	0.58	0.53	-0.53	
3,439.0	26.10	305.90	3,170.2	783.6	-976.6	1,250.9	0.84	-0.84	-0.11	
3,533.0	27.60	305.70	3,254.0	808.4	-1,011.0	1,293.4	1.60	1.60	-0.21	
3,628.0	28.30	305.50	3,337.9	834.3	-1,047.2	1,337.9	0.74	0.74	-0.21	
3,723.0	26.80	305.60	3,422.2	859.9	-1,083.0	1,381.8	1.58	-1.58	0.11	
3,817.0	26.40	306.90	3,506.2	884.7	-1,116.9	1,423.9	0.75	-0.43	1.38	
3,912.0	25.80	307.40	3,591.5	910.0	-1,150.2	1,465.7	0.67	-0.63	0.53	
4,007.0	26.10	307.40	3,676.9	935.2	-1,183.2	1,507.3	0.32	0.32	0.00	
4,101.0	26.40	308.30	3,761.2	960.7	-1,216.1	1,548.8	0.53	0.32	0.96	
4,196.0	28.00	307.70	3,845.7	987.5	-1,250.3	1,592.2	1.71	1.68	-0.63	
4,290.0	27.90	307.00	3,928.8	1,014.2	-1,285.3	1,636.3	0.36	-0.11	-0.74	
4,384.0	27.10	307.20	4,012.2	1,040.4	-1,319.9	1,679.7	0.86	-0.85	0.21	
4,479.0	26.90	305.40	4,096.8	1,065.9	-1,354.7	1,722.8	0.89	-0.21	-1.89	
4,573.0	26.90	304.70	4,180.6	1,090.3	-1,389.5	1,765.3	0.34	0.00	-0.74	
4,667.0	26.20	304.50	4,264.7	1,114.2	-1,424.1	1,807.3	0.75	-0.74	-0.21	

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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)	
4,761.0	26.30	306.80	4,349.0	1,138.4	-1,457.9	1,848.9	1.09	0.11	2.45	
4,855.0	26.10	308.90	4,433.4	1,163.9	-1,490.6	1,890.4	1.01	-0.21	2.23	
4,949.0	25.40	308.50	4,518.0	1,189.4	-1,522.5	1,931.2	0.77	-0.74	-0.43	
5,043.0	25.70	309.60	4,602.8	1,215.0	-1,554.0	1,971.6	0.60	0.32	1.17	
5,137.0	25.30	310.20	4,687.7	1,240.9	-1,585.0	2,012.0	0.51	-0.43	0.64	
5,231.0	25.80	310.30	4,772.5	1,267.1	-1,616.0	2,052.5	0.53	0.53	0.11	
5,326.0	25.40	309.40	4,858.2	1,293.4	-1,647.5	2,093.4	0.59	-0.42	-0.95	
5,420.0	25.70	309.10	4,943.0	1,319.1	-1,678.9	2,133.9	0.35	0.32	-0.32	
5,515.0	26.00	309.30	5,028.5	1,345.2	-1,711.0	2,175.3	0.33	0.32	0.21	
5,609.0	27.50	308.70	5,112.4	1,371.9	-1,743.9	2,217.6	1.62	1.60	-0.64	
5,704.0	28.00	308.20	5,196.5	1,399.4	-1,778.5	2,261.8	0.58	0.53	-0.53	
5,799.0	27.30	307.50	5,280.6	1,426.4	-1,813.3	2,305.8	0.81	-0.74	-0.74	
5,893.0	26.90	307.20	5,364.3	1,452.4	-1,847.4	2,348.6	0.45	-0.43	-0.32	
5,988.0	26.20	306.10	5,449.3	1,477.8	-1,881.4	2,391.1	0.90	-0.74	-1.16	
6,083.0	25.40	306.40	5,534.8	1,502.2	-1,914.8	2,432.4	0.85	-0.84	0.32	
6,177.0	24.40	306.00	5,620.1	1,525.6	-1,946.7	2,472.0	1.08	-1.06	-0.43	
6,272.0	23.80	305.30	5,706.8	1,548.2	-1,978.2	2,510.8	0.70	-0.63	-0.74	
6,367.0	23.00	307.20	5,794.0	1,570.5	-2,008.6	2,548.5	1.16	-0.84	2.00	
6,461.0	22.00	307.60	5,880.8	1,592.3	-2,037.2	2,584.5	1.08	-1.06	0.43	
6,556.0	20.30	308.10	5,969.4	1,613.4	-2,064.3	2,618.8	1.80	-1.79	0.53	
6,651.0	18.00	309.10	6,059.2	1,632.8	-2,088.7	2,649.9	2.45	-2.42	1.05	
6,745.0	17.10	307.60	6,148.8	1,650.4	-2,110.9	2,678.2	1.07	-0.96	-1.60	
6,840.0	16.40	308.70	6,239.8	1,667.3	-2,132.4	2,705.6	0.81	-0.74	1.16	
6,934.0	16.40	306.20	6,329.9	1,683.4	-2,153.5	2,732.1	0.75	0.00	-2.66	
7,029.0	15.00	308.70	6,421.4	1,699.0	-2,173.9	2,757.8	1.64	-1.47	2.63	
7,123.0	13.50	309.10	6,512.5	1,713.6	-2,191.9	2,780.9	1.60	-1.60	0.43	
7,218.0	11.80	309.40	6,605.2	1,726.7	-2,208.0	2,801.7	1.79	-1.79	0.32	
7,313.0	10.80	311.20	6,698.3	1,738.7	-2,222.2	2,820.3	1.12	-1.05	1.89	
7,407.0	9.80	313.70	6,790.8	1,750.1	-2,234.6	2,837.0	1.17	-1.06	2.66	
7,502.0	9.40	314.60	6,884.5	1,761.1	-2,246.0	2,852.7	0.45	-0.42	0.95	
7,596.0	7.30	315.90	6,977.5	1,770.8	-2,255.6	2,866.2	2.24	-2.23	1.38	
7,691.0	5.90	322.90	7,071.9	1,779.0	-2,262.8	2,876.8	1.70	-1.47	7.37	
7,785.0	4.80	317.30	7,165.5	1,785.8	-2,268.3	2,885.3	1.29	-1.17	-5.96	
7,880.0	3.80	318.50	7,260.2	1,791.0	-2,273.1	2,892.3	1.06	-1.05	1.26	
7,975.0	2.80	330.20	7,355.0	1,795.4	-2,276.4	2,897.4	1.26	-1.05	12.32	
8,031.0	2.17	347.16	7,411.0	1,797.6	-2,277.3	2,899.5	1.72	-1.12	30.27	
8,069.0	1.90	4.10	7,449.0	1,799.0	-2,277.4	2,900.4	1.73	-0.71	44.60	
8,164.0	0.40	341.10	7,543.9	1,800.8	-2,277.4	2,901.5	1.62	-1.58	-24.21	
8,258.0	0.90	221.80	7,637.9	1,800.6	-2,278.0	2,901.8	1.22	0.53	-126.91	
8,353.0	1.00	222.80	7,732.9	1,799.4	-2,279.1	2,902.0	0.11	0.11	1.05	
8,447.0	1.10	215.50	7,826.9	1,798.1	-2,280.1	2,902.1	0.18	0.11	-7.77	
8,542.0	1.00	226.80	7,921.9	1,796.8	-2,281.3	2,902.2	0.24	-0.11	11.89	
8,637.0	0.90	226.90	8,016.9	1,795.7	-2,282.4	2,902.5	0.11	-0.11	0.11	

<b>Company:</b>	Caerus Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 14B-32 496
<b>Project:</b>	Garfield County, CO	<b>TVD Reference:</b>	RKB @ 8431.0usft (H&P #330)
<b>Site:</b>	BJU M33 496 Pad	<b>MD Reference:</b>	RKB @ 8431.0usft (H&P #330)
<b>Well:</b>	BJU M33 FED 14B-32 496	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db

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)	
8,731.0	1.20	227.80	8,110.9	1,794.6	-2,283.7	2,902.8	0.32	0.32	0.96	
8,826.0	1.20	219.70	8,205.8	1,793.1	-2,285.1	2,903.1	0.18	0.00	-8.53	
8,920.0	1.80	219.40	8,299.8	1,791.2	-2,286.6	2,903.2	0.64	0.64	-0.32	
9,015.0	1.10	190.00	8,394.8	1,789.2	-2,287.7	2,902.9	1.05	-0.74	-30.95	
9,109.0	1.10	143.20	8,488.8	1,787.6	-2,287.3	2,901.7	0.93	0.00	-49.79	
9,204.0	1.10	146.60	8,583.7	1,786.1	-2,286.3	2,899.9	0.07	0.00	3.58	
9,298.0	1.10	145.10	8,677.7	1,784.6	-2,285.3	2,898.2	0.03	0.00	-1.60	
9,393.0	0.70	164.50	8,772.7	1,783.3	-2,284.6	2,896.9	0.52	-0.42	20.42	
9,487.0	0.50	226.30	8,866.7	1,782.4	-2,284.7	2,896.5	0.68	-0.21	65.74	
9,581.0	0.10	267.80	8,960.7	1,782.1	-2,285.1	2,896.7	0.46	-0.43	44.15	
9,676.0	0.30	247.10	9,055.7	1,782.0	-2,285.4	2,896.9	0.22	0.21	-21.79	
9,770.0	0.70	245.30	9,149.7	1,781.7	-2,286.2	2,897.3	0.43	0.43	-1.91	
9,865.0	1.20	239.70	9,244.7	1,781.0	-2,287.6	2,897.9	0.53	0.53	-5.89	
9,959.0	1.00	223.00	9,338.7	1,779.9	-2,289.0	2,898.4	0.40	-0.21	-17.77	
10,054.0	1.10	229.00	9,433.7	1,778.7	-2,290.2	2,898.7	0.16	0.11	6.32	
10,148.0	1.30	227.20	9,527.6	1,777.3	-2,291.7	2,899.1	0.22	0.21	-1.91	
10,243.0	1.30	242.40	9,622.6	1,776.1	-2,293.4	2,899.8	0.36	0.00	16.00	
10,337.0	1.20	240.70	9,716.6	1,775.1	-2,295.2	2,900.7	0.11	-0.11	-1.81	
10,432.0	1.70	243.20	9,811.6	1,774.0	-2,297.4	2,901.7	0.53	0.53	2.63	
10,526.0	1.70	246.00	9,905.5	1,772.8	-2,299.9	2,903.1	0.09	0.00	2.98	
10,621.0	2.10	250.60	10,000.5	1,771.7	-2,302.8	2,904.7	0.45	0.42	4.84	
10,716.0	2.40	250.50	10,095.4	1,770.4	-2,306.3	2,906.8	0.32	0.32	-0.11	
10,810.0	3.10	245.80	10,189.3	1,768.7	-2,310.5	2,909.2	0.78	0.74	-5.00	
10,904.0	3.60	244.40	10,283.1	1,766.4	-2,315.5	2,911.8	0.54	0.53	-1.49	
10,999.0	3.70	242.00	10,377.9	1,763.7	-2,320.9	2,914.6	0.19	0.11	-2.53	
11,093.0	4.00	249.80	10,471.7	1,761.1	-2,326.6	2,917.7	0.64	0.32	8.30	
11,188.0	4.70	250.10	10,566.4	1,758.7	-2,333.4	2,921.7	0.74	0.74	0.32	
11,282.0	5.10	247.30	10,660.1	1,755.7	-2,340.9	2,926.0	0.50	0.43	-2.98	
11,376.0	5.20	249.30	10,753.7	1,752.6	-2,348.7	2,930.5	0.22	0.11	2.13	
11,471.0	5.00	250.50	10,848.3	1,749.7	-2,356.7	2,935.1	0.24	-0.21	1.26	
11,534.0	5.30	253.40	10,911.1	1,748.0	-2,362.0	2,938.4	0.63	0.48	4.60	
11,628.0	5.40	256.20	11,004.7	1,745.7	-2,370.5	2,943.9	0.30	0.11	2.98	
<b>TD @ 11697.0' MD / 11073.4' TVD</b>										
11,697.0	5.40	256.20	11,073.4	1,744.1	-2,376.8	2,948.1	0.00	0.00	0.00	

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
120.0	120.0	-0.5	-0.5	Tie In @ 120.0'MD / 120.0'TVD	
11,697.0	11,073.4	1,744.1	-2,376.8	TD @ 11697.0' MD / 11073.4' TVD	



**KLX Directional Drilling**  
Survey Report



<b>Company:</b>	Caerus Oil & Gas	<b>Local Co-ordinate Reference:</b>	Well BJU M33 FED 14B-32 496
<b>Project:</b>	Garfield County, CO	<b>TVD Reference:</b>	RKB @ 8431.0usft (H&P #330)
<b>Site:</b>	BJU M33 496 Pad	<b>MD Reference:</b>	RKB @ 8431.0usft (H&P #330)
<b>Well:</b>	BJU M33 FED 14B-32 496	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db

Checked By: _____	Approved By: _____	Date: _____
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