

Project: Garfield County, CO
 Site: NPM M33 496 Pad
 Well: BJU M33 FED 24A-32 496
 Wellbore: Wellbore #1
 Design: Design #2
 Latitude: 39.653626
 Longitude: -108.177756
 Ground Level: 8401.0
 RKB @ 8431.0usft (H&P #329)

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2265.0	2352.5	Wasatch
5265.0	5510.4	Wasatch G
5545.0	5805.2	Fort Union
7394.0	7730.3	Ohio Creek
7662.0	7998.3	TOG
7662.0	7998.3	Williams Fork
10207.0	10544.3	Cameo
10853.0	11190.6	Rollins

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well BJU M33 FED 24A-32 496 - Slot BJU M33 FED 24A-32 496, True North
 Vertical (TVD) Reference: RKB @ 8431.0usft (H&P #329)
 Section (VS) Reference: Slot - BJU M33 FED 24A-32 496(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 8431.0usft (H&P #329)
 Calculation Method: Minimum Curvature

WELL DETAILS: BJU M33 FED 24A-32 496

8401.0
 +N/-S 0.0 +E/-W 0.0 Northing 14412413.00 Easting 2434848.60 Latitude 39.653626 Longitude -108.177756

PROJECT DETAILS: Garfield County, CO

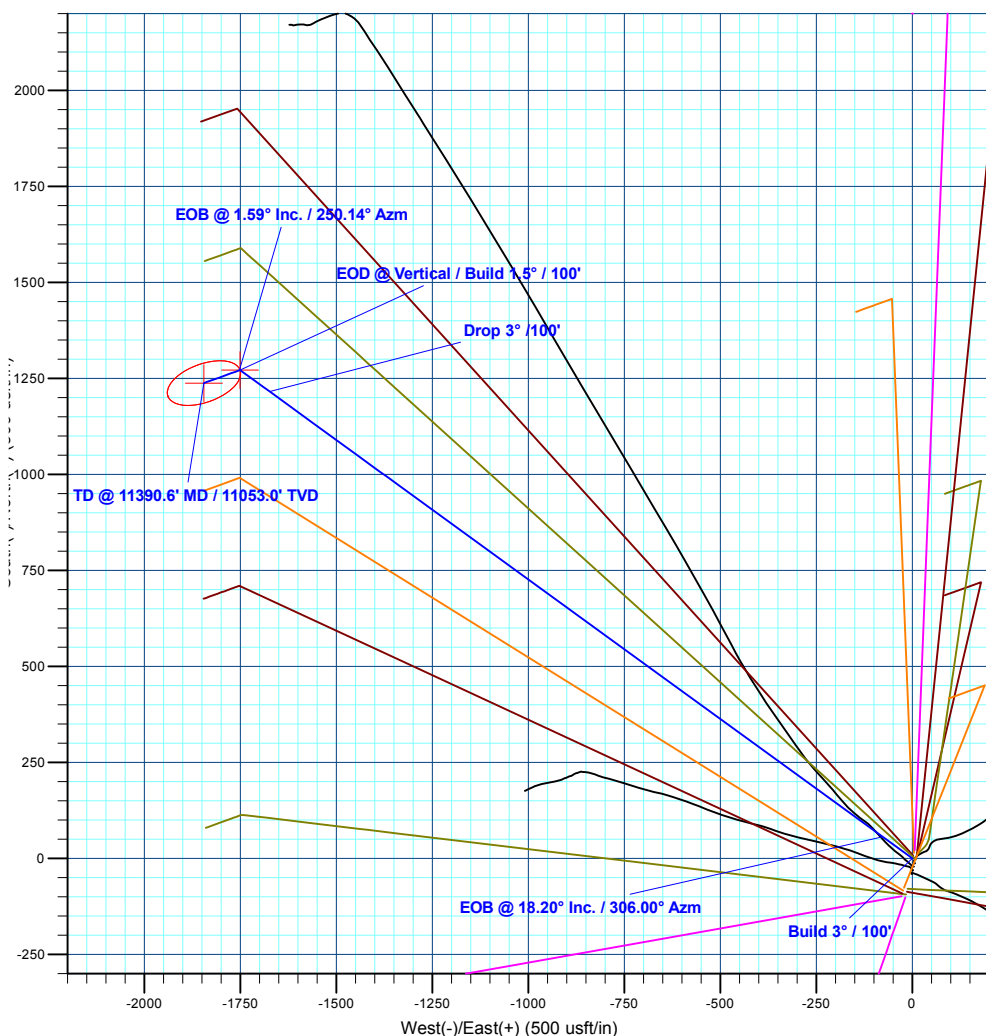
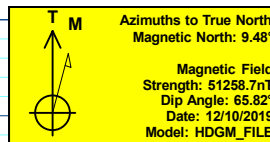
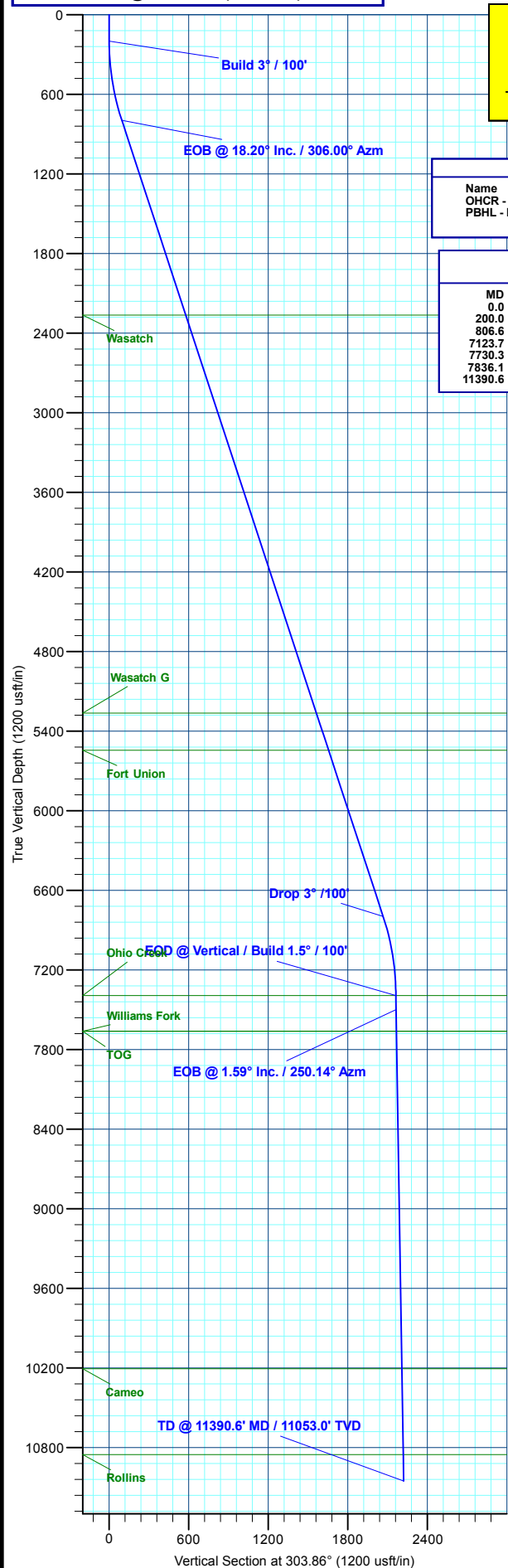
Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1927 - Western US
 Ellipsoid: Clarke 1866
 Zone: Zone 12N (114 W to 108 W)
 System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - D#2 - BJ M33 24A-32 496	7394.0	1271.8	-1750.7	14413629.08	2433058.75	39.657116	-108.183972
PBHL - D#2 - BJ M33 24A-32 496	11053.0	1237.8	-1844.7	14413592.20	2432965.90	39.657023	-108.184306

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'
806.6	18.20	306.00	796.5	56.1	-77.3	3.00	306.00	95.5	EOB @ 18.20° Inc. / 306.00° Azm
7123.7	18.20	306.00	6797.5	1215.6	-1673.4	0.00	0.00	2066.9	Drop 3° / 100'
7730.3	0.00	0.00	7394.0	1271.8	-1750.7	3.00	180.00	2162.4	EOD @ Vertical / Build 1.5° / 100'
7836.1	1.59	250.14	7499.8	1271.3	-1752.1	1.50	250.14	2163.3	EOB @ 1.59° Inc. / 250.14° Azm
11390.6	1.59	250.14	11053.0	1237.8	-1844.7	0.00	0.00	2221.5	TD @ 11390.6° MD / 11053.0° TVD



Plan: Design #2 (BJU M33 FED 24A-32 496/Wellbore #1)

Created By: Will Jircik

Date: 13:16, January 16 2020



Caerus Oil & Gas

Garfield County, CO

NPM M33 496 Pad

BJU M33 FED 24A-32 496 - Slot BJU M33 FED 24A-32 496

Wellbore #1

Plan: Design #2

QES Well Planning Report

16 January, 2020



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M33 FED 24A-32 496 - Slot BJU M33 FED 24A-32 496
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8431.0usft (H&P #329)
Project:	Garfield County, CO	MD Reference:	RKB @ 8431.0usft (H&P #329)
Site:	NPM M33 496 Pad	North Reference:	True
Well:	BJU M33 FED 24A-32 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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

Well	BJU M33 FED 24A-32 496 - Slot BJU M33 FED 24A-32 496		
Well Position	+N/-S	-2,551.1 usft	Northing: 14,412,413.00 usft
	+E/-W	-12,249.9 usft	Easting: 2,434,848.60 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 39.653626
			Longitude: -108.177757
			Ground Level: 8,401.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	12/10/2019	9.48	65.82	51,258.70000000

Design	Design #2			
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	303.86

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	
806.6	18.20	306.00	796.5	56.1	-77.3	3.00	3.00	0.00	306.00	
7,123.7	18.20	306.00	6,797.5	1,215.6	-1,673.4	0.00	0.00	0.00	0.00	
7,730.3	0.00	0.00	7,394.0	1,271.8	-1,750.7	3.00	-3.00	0.00	180.00	OHCR - D#2 - BJ M
7,836.1	1.59	250.14	7,499.8	1,271.3	-1,752.1	1.50	1.50	-103.84	250.14	
11,390.6	1.59	250.14	11,053.0	1,237.8	-1,844.7	0.00	0.00	0.00	0.00	PBHL - D#2 - BJ M:

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M33 FED 24A-32 496 - Slot BJU M33 FED 24A-32 496
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8431.0usft (H&P #329)
Project:	Garfield County, CO	MD Reference:	RKB @ 8431.0usft (H&P #329)
Site:	NPM M33 496 Pad	North Reference:	True
Well:	BJU M33 FED 24A-32 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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
Build 3° / 100'									
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	3.00	306.00	300.0	1.5	-2.1	2.6	3.00	3.00	0.00
400.0	6.00	306.00	399.6	6.1	-8.5	10.5	3.00	3.00	0.00
500.0	9.00	306.00	498.8	13.8	-19.0	23.5	3.00	3.00	0.00
600.0	12.00	306.00	597.1	24.5	-33.8	41.7	3.00	3.00	0.00
700.0	15.00	306.00	694.3	38.2	-52.7	65.0	3.00	3.00	0.00
EOB @ 18.20° Inc. / 306.00° Azm									
806.6	18.20	306.00	796.5	56.1	-77.3	95.5	3.00	3.00	0.00
900.0	18.20	306.00	885.2	73.3	-100.9	124.6	0.00	0.00	0.00
1,000.0	18.20	306.00	980.2	91.6	-126.2	155.8	0.00	0.00	0.00
1,100.0	18.20	306.00	1,075.2	110.0	-151.4	187.0	0.00	0.00	0.00
1,200.0	18.20	306.00	1,170.2	128.3	-176.7	218.2	0.00	0.00	0.00
1,300.0	18.20	306.00	1,265.2	146.7	-202.0	249.4	0.00	0.00	0.00
1,400.0	18.20	306.00	1,360.2	165.1	-227.2	280.7	0.00	0.00	0.00
1,500.0	18.20	306.00	1,455.2	183.4	-252.5	311.9	0.00	0.00	0.00
1,600.0	18.20	306.00	1,550.2	201.8	-277.8	343.1	0.00	0.00	0.00
1,700.0	18.20	306.00	1,645.2	220.1	-303.0	374.3	0.00	0.00	0.00
1,800.0	18.20	306.00	1,740.2	238.5	-328.3	405.5	0.00	0.00	0.00
1,900.0	18.20	306.00	1,835.2	256.8	-353.6	436.7	0.00	0.00	0.00
2,000.0	18.20	306.00	1,930.2	275.2	-378.8	467.9	0.00	0.00	0.00
2,100.0	18.20	306.00	2,025.2	293.5	-404.1	499.1	0.00	0.00	0.00
2,200.0	18.20	306.00	2,120.2	311.9	-429.4	530.3	0.00	0.00	0.00
2,300.0	18.20	306.00	2,215.2	330.3	-454.6	561.5	0.00	0.00	0.00
Wasatch									
2,352.5	18.20	306.00	2,265.0	339.9	-467.9	577.9	0.00	0.00	0.00
2,400.0	18.20	306.00	2,310.2	348.6	-479.9	592.7	0.00	0.00	0.00
2,500.0	18.20	306.00	2,405.2	367.0	-505.2	623.9	0.00	0.00	0.00
2,600.0	18.20	306.00	2,500.2	385.3	-530.4	655.2	0.00	0.00	0.00
2,700.0	18.20	306.00	2,595.1	403.7	-555.7	686.4	0.00	0.00	0.00
2,800.0	18.20	306.00	2,690.1	422.0	-581.0	717.6	0.00	0.00	0.00
2,900.0	18.20	306.00	2,785.1	440.4	-606.2	748.8	0.00	0.00	0.00
3,000.0	18.20	306.00	2,880.1	458.7	-631.5	780.0	0.00	0.00	0.00
3,100.0	18.20	306.00	2,975.1	477.1	-656.8	811.2	0.00	0.00	0.00
3,200.0	18.20	306.00	3,070.1	495.4	-682.0	842.4	0.00	0.00	0.00
3,300.0	18.20	306.00	3,165.1	513.8	-707.3	873.6	0.00	0.00	0.00
3,400.0	18.20	306.00	3,260.1	532.2	-732.6	904.8	0.00	0.00	0.00
3,500.0	18.20	306.00	3,355.1	550.5	-757.8	936.0	0.00	0.00	0.00
3,600.0	18.20	306.00	3,450.1	568.9	-783.1	967.2	0.00	0.00	0.00
3,700.0	18.20	306.00	3,545.1	587.2	-808.4	998.5	0.00	0.00	0.00
3,800.0	18.20	306.00	3,640.1	605.6	-833.6	1,029.7	0.00	0.00	0.00
3,900.0	18.20	306.00	3,735.1	623.9	-858.9	1,060.9	0.00	0.00	0.00
4,000.0	18.20	306.00	3,830.1	642.3	-884.2	1,092.1	0.00	0.00	0.00
4,100.0	18.20	306.00	3,925.1	660.6	-909.4	1,123.3	0.00	0.00	0.00
4,200.0	18.20	306.00	4,020.1	679.0	-934.7	1,154.5	0.00	0.00	0.00
4,300.0	18.20	306.00	4,115.1	697.3	-960.0	1,185.7	0.00	0.00	0.00
4,400.0	18.20	306.00	4,210.1	715.7	-985.2	1,216.9	0.00	0.00	0.00
4,500.0	18.20	306.00	4,305.1	734.1	-1,010.5	1,248.1	0.00	0.00	0.00
4,600.0	18.20	306.00	4,400.1	752.4	-1,035.8	1,279.3	0.00	0.00	0.00
4,700.0	18.20	306.00	4,495.1	770.8	-1,061.0	1,310.5	0.00	0.00	0.00
4,800.0	18.20	306.00	4,590.1	789.1	-1,086.3	1,341.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M33 FED 24A-32 496 - Slot BJU M33 FED 24A-32 496
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8431.0usft (H&P #329)
Project:	Garfield County, CO	MD Reference:	RKB @ 8431.0usft (H&P #329)
Site:	NPM M33 496 Pad	North Reference:	True
Well:	BJU M33 FED 24A-32 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
4,900.0	18.20	306.00	4,685.1	807.5	-1,111.6	1,373.0	0.00	0.00	0.00
5,000.0	18.20	306.00	4,780.1	825.8	-1,136.8	1,404.2	0.00	0.00	0.00
5,100.0	18.20	306.00	4,875.1	844.2	-1,162.1	1,435.4	0.00	0.00	0.00
5,200.0	18.20	306.00	4,970.1	862.5	-1,187.4	1,466.6	0.00	0.00	0.00
5,300.0	18.20	306.00	5,065.1	880.9	-1,212.6	1,497.8	0.00	0.00	0.00
5,400.0	18.20	306.00	5,160.1	899.2	-1,237.9	1,529.0	0.00	0.00	0.00
5,500.0	18.20	306.00	5,255.1	917.6	-1,263.2	1,560.2	0.00	0.00	0.00
Wasatch G									
5,510.4	18.20	306.00	5,265.0	919.5	-1,265.8	1,563.5	0.00	0.00	0.00
5,600.0	18.20	306.00	5,350.1	936.0	-1,288.5	1,591.4	0.00	0.00	0.00
5,700.0	18.20	306.00	5,445.1	954.3	-1,313.7	1,622.6	0.00	0.00	0.00
5,800.0	18.20	306.00	5,540.1	972.7	-1,339.0	1,653.8	0.00	0.00	0.00
Fort Union									
5,805.2	18.20	306.00	5,545.0	973.6	-1,340.3	1,655.4	0.00	0.00	0.00
5,900.0	18.20	306.00	5,635.1	991.0	-1,364.3	1,685.0	0.00	0.00	0.00
6,000.0	18.20	306.00	5,730.1	1,009.4	-1,389.5	1,716.3	0.00	0.00	0.00
6,100.0	18.20	306.00	5,825.1	1,027.7	-1,414.8	1,747.5	0.00	0.00	0.00
6,200.0	18.20	306.00	5,920.1	1,046.1	-1,440.1	1,778.7	0.00	0.00	0.00
6,300.0	18.20	306.00	6,015.1	1,064.4	-1,465.3	1,809.9	0.00	0.00	0.00
6,400.0	18.20	306.00	6,110.1	1,082.8	-1,490.6	1,841.1	0.00	0.00	0.00
6,500.0	18.20	306.00	6,205.1	1,101.1	-1,515.9	1,872.3	0.00	0.00	0.00
6,600.0	18.20	306.00	6,300.1	1,119.5	-1,541.1	1,903.5	0.00	0.00	0.00
6,700.0	18.20	306.00	6,395.1	1,137.9	-1,566.4	1,934.7	0.00	0.00	0.00
6,800.0	18.20	306.00	6,490.1	1,156.2	-1,591.7	1,965.9	0.00	0.00	0.00
6,900.0	18.20	306.00	6,585.1	1,174.6	-1,616.9	1,997.1	0.00	0.00	0.00
7,000.0	18.20	306.00	6,680.1	1,192.9	-1,642.2	2,028.3	0.00	0.00	0.00
7,100.0	18.20	306.00	6,775.1	1,211.3	-1,667.5	2,059.5	0.00	0.00	0.00
Drop 3° /100'									
7,123.7	18.20	306.00	6,797.5	1,215.6	-1,673.4	2,066.9	0.00	0.00	0.00
7,200.0	15.91	306.00	6,870.5	1,228.8	-1,691.6	2,089.3	3.00	-3.00	0.00
7,300.0	12.91	306.00	6,967.4	1,243.4	-1,711.7	2,114.2	3.00	-3.00	0.00
7,400.0	9.91	306.00	7,065.4	1,255.0	-1,727.7	2,133.9	3.00	-3.00	0.00
7,500.0	6.91	306.00	7,164.3	1,263.6	-1,739.5	2,148.5	3.00	-3.00	0.00
7,600.0	3.91	306.00	7,263.8	1,269.2	-1,747.1	2,158.0	3.00	-3.00	0.00
7,700.0	0.91	306.00	7,363.7	1,271.6	-1,750.5	2,162.1	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
7,730.3	0.00	0.00	7,394.0	1,271.8	-1,750.7	2,162.4	3.00	-3.00	0.00
7,800.0	1.05	250.14	7,463.7	1,271.5	-1,751.3	2,162.8	1.50	1.50	0.00
EOB @ 1.59° Inc. / 250.14° Azm									
7,836.1	1.59	250.14	7,499.8	1,271.3	-1,752.1	2,163.3	1.50	1.50	0.00
7,900.0	1.59	250.14	7,563.7	1,270.7	-1,753.8	2,164.3	0.00	0.00	0.00
Williams Fork - TOG									
7,998.3	1.59	250.14	7,662.0	1,269.7	-1,756.3	2,165.9	0.00	0.00	0.00
8,000.0	1.59	250.14	7,663.7	1,269.7	-1,756.4	2,165.9	0.00	0.00	0.00
8,100.0	1.59	250.14	7,763.6	1,268.8	-1,759.0	2,167.6	0.00	0.00	0.00
8,200.0	1.59	250.14	7,863.6	1,267.8	-1,761.6	2,169.2	0.00	0.00	0.00
8,300.0	1.59	250.14	7,963.5	1,266.9	-1,764.2	2,170.9	0.00	0.00	0.00
8,400.0	1.59	250.14	8,063.5	1,266.0	-1,766.8	2,172.5	0.00	0.00	0.00
8,500.0	1.59	250.14	8,163.5	1,265.0	-1,769.4	2,174.1	0.00	0.00	0.00
8,600.0	1.59	250.14	8,263.4	1,264.1	-1,772.0	2,175.8	0.00	0.00	0.00
8,700.0	1.59	250.14	8,363.4	1,263.1	-1,774.6	2,177.4	0.00	0.00	0.00
8,800.0	1.59	250.14	8,463.4	1,262.2	-1,777.2	2,179.1	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M33 FED 24A-32 496 - Slot BJU M33 FED 24A-32 496
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8431.0usft (H&P #329)
Project:	Garfield County, CO	MD Reference:	RKB @ 8431.0usft (H&P #329)
Site:	NPM M33 496 Pad	North Reference:	True
Well:	BJU M33 FED 24A-32 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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	1.59	250.14	8,563.3	1,261.3	-1,779.8	2,180.7	0.00	0.00	0.00
9,000.0	1.59	250.14	8,663.3	1,260.3	-1,782.4	2,182.3	0.00	0.00	0.00
9,100.0	1.59	250.14	8,763.2	1,259.4	-1,785.0	2,184.0	0.00	0.00	0.00
9,200.0	1.59	250.14	8,863.2	1,258.4	-1,787.6	2,185.6	0.00	0.00	0.00
9,300.0	1.59	250.14	8,963.2	1,257.5	-1,790.2	2,187.2	0.00	0.00	0.00
9,400.0	1.59	250.14	9,063.1	1,256.5	-1,792.8	2,188.9	0.00	0.00	0.00
9,500.0	1.59	250.14	9,163.1	1,255.6	-1,795.4	2,190.5	0.00	0.00	0.00
9,600.0	1.59	250.14	9,263.1	1,254.7	-1,798.0	2,192.2	0.00	0.00	0.00
9,700.0	1.59	250.14	9,363.0	1,253.7	-1,800.7	2,193.8	0.00	0.00	0.00
9,800.0	1.59	250.14	9,463.0	1,252.8	-1,803.3	2,195.4	0.00	0.00	0.00
9,900.0	1.59	250.14	9,562.9	1,251.8	-1,805.9	2,197.1	0.00	0.00	0.00
10,000.0	1.59	250.14	9,662.9	1,250.9	-1,808.5	2,198.7	0.00	0.00	0.00
10,100.0	1.59	250.14	9,762.9	1,250.0	-1,811.1	2,200.4	0.00	0.00	0.00
10,200.0	1.59	250.14	9,862.8	1,249.0	-1,813.7	2,202.0	0.00	0.00	0.00
10,300.0	1.59	250.14	9,962.8	1,248.1	-1,816.3	2,203.6	0.00	0.00	0.00
10,400.0	1.59	250.14	10,062.7	1,247.1	-1,818.9	2,205.3	0.00	0.00	0.00
10,500.0	1.59	250.14	10,162.7	1,246.2	-1,821.5	2,206.9	0.00	0.00	0.00
Cameo									
10,544.3	1.59	250.14	10,207.0	1,245.8	-1,822.6	2,207.6	0.00	0.00	0.00
10,600.0	1.59	250.14	10,262.7	1,245.3	-1,824.1	2,208.5	0.00	0.00	0.00
10,700.0	1.59	250.14	10,362.6	1,244.3	-1,826.7	2,210.2	0.00	0.00	0.00
10,800.0	1.59	250.14	10,462.6	1,243.4	-1,829.3	2,211.8	0.00	0.00	0.00
10,900.0	1.59	250.14	10,562.6	1,242.4	-1,831.9	2,213.5	0.00	0.00	0.00
11,000.0	1.59	250.14	10,662.5	1,241.5	-1,834.5	2,215.1	0.00	0.00	0.00
11,100.0	1.59	250.14	10,762.5	1,240.6	-1,837.1	2,216.7	0.00	0.00	0.00
Rollins									
11,190.6	1.59	250.14	10,853.0	1,239.7	-1,839.5	2,218.2	0.00	0.00	0.00
11,200.0	1.59	250.14	10,862.4	1,239.6	-1,839.7	2,218.4	0.00	0.00	0.00
11,300.0	1.59	250.14	10,962.4	1,238.7	-1,842.3	2,220.0	0.00	0.00	0.00
TD @ 11390.6' MD / 11053.0' TVD									
11,390.6	1.59	250.14	11,053.0	1,237.8	-1,844.7	2,221.5	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
OHCR - D#2 - BJ M33 - hit/miss target - Shape - Point	0.00	0.00	7,394.0	1,271.8	-1,750.7	14,413,629.08	2,433,058.75	39.657116	-108.183972
PBHL - D#2 - BJ M33 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	11,053.0	1,237.8	-1,844.7	14,413,592.20	2,432,965.90	39.657023	-108.184306

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M33 FED 24A-32 496 - Slot BJU M33 FED 24A-32 496
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8431.0usft (H&P #329)
Project:	Garfield County, CO	MD Reference:	RKB @ 8431.0usft (H&P #329)
Site:	NPM M33 496 Pad	North Reference:	True
Well:	BJU M33 FED 24A-32 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,352.5	2,265.0	Wasatch				
5,510.4	5,265.0	Wasatch G				
5,805.2	5,545.0	Fort Union				
7,730.3	7,394.0	Ohio Creek				
7,998.3	7,662.0	Williams Fork				
7,998.3	7,662.0	TOG				
10,544.3	10,207.0	Cameo				
11,190.6	10,853.0	Rollins				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
200.0	200.0	0.0	0.0	Build 3° / 100'	
806.6	796.5	56.1	-77.3	EOB @ 18.20° Inc. / 306.00° Azm	
7,123.7	6,797.5	1,215.6	-1,673.4	Drop 3° / 100'	
7,730.3	7,394.0	1,271.8	-1,750.7	EOD @ Vertical / Build 1.5° / 100'	
7,836.1	7,499.8	1,271.3	-1,752.1	EOB @ 1.59° Inc. / 250.14° Azm	
11,390.6	11,053.0	1,237.8	-1,844.7	TD @ 11390.6' MD / 11053.0' TVD	