

Project: Garfield County, CO
 Site: NPM M33 496 Pad
 Well: BJU M33 FED 25D-33 496
 Wellbore: Wellbore #1
 Design: Design #1
 Latitude: 39.653388
 Longitude: -108.177806
 Ground Level: 8401.0
 RKB @ 8431.0usft (H&P #329)

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2428.0	2557.6	Wasatch
5428.0	5779.2	Wasatch G
5684.0	6054.2	Fort Union
7530.0	8001.5	Ohio Creek
7762.0	8233.6	TOG
7762.0	8233.6	Williams Fork
10356.0	10628.6	Cameo
11024.0	11496.8	Rollins

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well BJU M33 FED 25D-33 496 - Slot BJU M33 FED 25D-33 496, True North
 Vertical (TVD) Reference: RKB @ 8431.0usft (H&P #329)
 Section (VS) Reference: Slot - BJU M33 FED 25D-33 496(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 8431.0usft (H&P #329)
 Calculation Method: Minimum Curvature

WELL DETAILS: BJU M33 FED 25D-33 496

+N/-S	+E/-W	North	East	Latitude	Longitude
0.0	0.0	14412325.90	2434837.30	39.653388	-108.177806

PROJECT DETAILS: Garfield County, CO

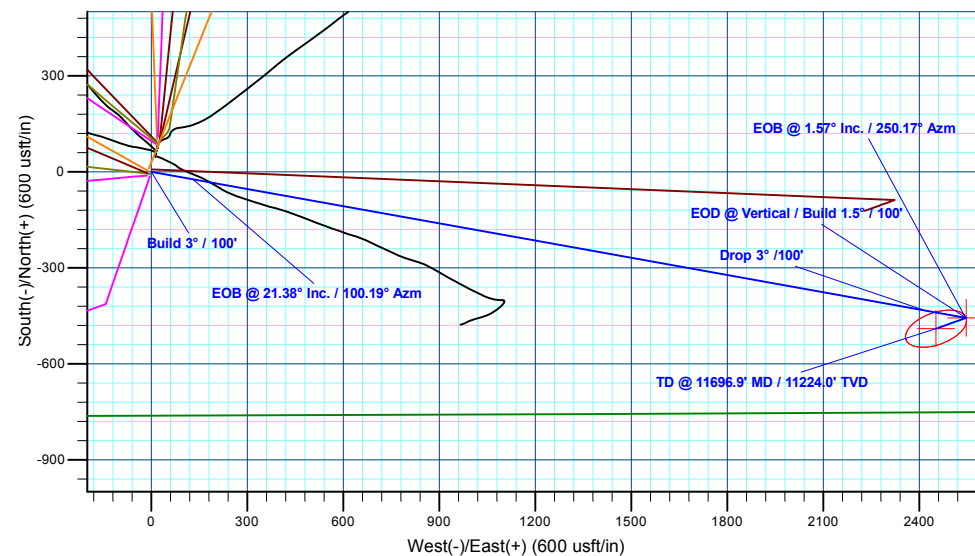
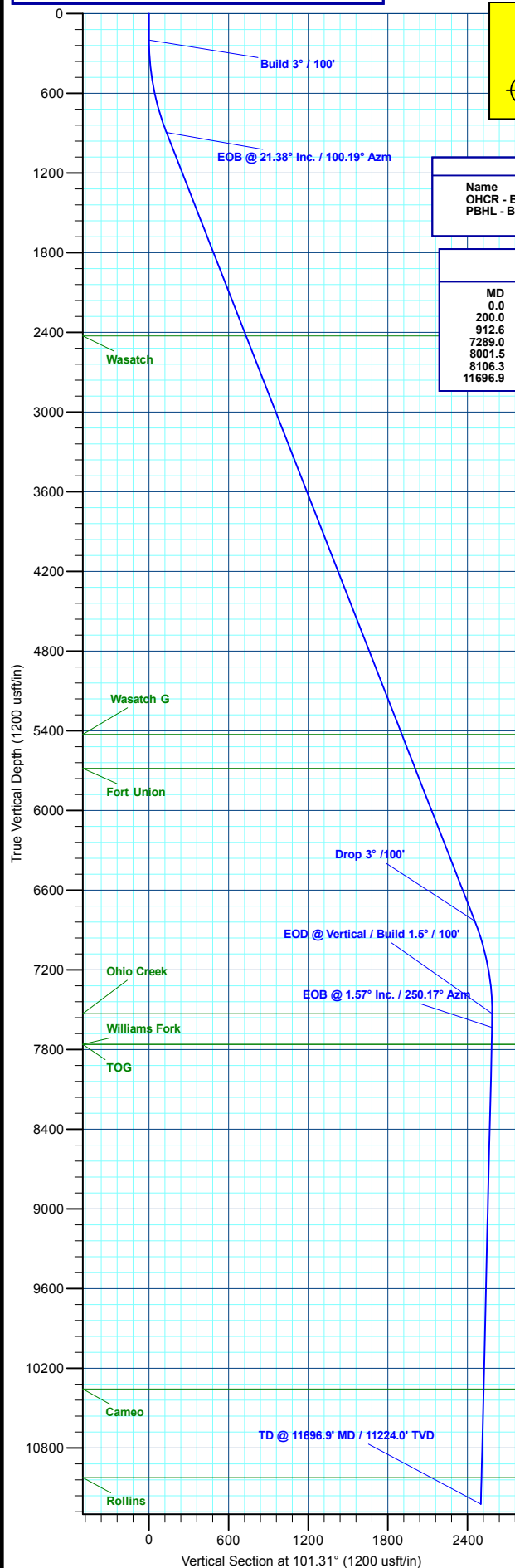
Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1927 - Western US
 Ellipsoid: Clarke 1866
 Zone: Zone 12N (114 W to 108 W)
 System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	OHCR - BJU M33 FED 25D-33 496	TVD	+N/-S	+E/-W	North	East	Latitude	Longitude
PBHL - BJU M33 FED 25D-33 496		11224.0	-456.5	2546.5	14411949.68	2437396.85	39.652135	-108.168766
			-490.5	2452.5	14411912.80	2437304.00	39.652042	-108.169100

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'
912.6	21.38	100.16	896.2	-23.2	129.3	3.00	100.16	131.4	EOB @ 21.38° Inc. / 100.19° Azm
7289.0	21.38	100.16	6833.8	-433.3	2417.1	0.00	0.00	2455.2	Drop 3° / 100'
8001.5	0.00	0.00	7530.0	-456.5	2546.5	3.00	180.00	2586.5	EOB @ Vertical / Build 1.5° / 100'
8106.3	1.57	250.14	7634.8	-457.0	2545.1	1.50	250.14	2585.3	EOB @ 1.57° Inc. / 250.17° Azm
11696.9	1.57	250.14	11224.0	-490.5	2452.5	0.00	0.00	2501.1	TD @ 11696.9° MD / 11224.0° TVD



Plan: Design #1 (BJU M33 FED 25D-33 496/Wellbore #1)

Created By: Will Jircik

Date: 16:56, December 16 2019



Caerus Oil & Gas

Garfield County, CO

NPM M33 496 Pad

BJU M33 FED 25D-33 496 - Slot BJU M33 FED 25D-33 496

Wellbore #1

Plan: Design #1

QES Well Planning Report

16 December, 2019



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M33 FED 25D-33 496 - Slot BJU M33 FED 25D-33 496
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 25D-33 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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 25D-33 496 - Slot BJU M33 FED 25D-33 496		
Well Position	+N/-S	-2,637.8 usft	Northing: 14,412,325.90 usft
	+E/-W	-12,264.0 usft	Easting: 2,434,837.30 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 39.653388
			Longitude: -108.177806
			Ground Level: 8,401.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	12/11/2019	9.48	65.82	51,259.30000000

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	101.31

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	
912.6	21.38	100.16	896.2	-23.2	129.3	3.00	3.00	0.00	100.16	
7,289.0	21.38	100.16	6,833.8	-433.3	2,417.1	0.00	0.00	0.00	0.00	
8,001.5	0.00	0.00	7,530.0	-456.5	2,546.5	3.00	-3.00	0.00	180.00	OHCR - BJU M33 F
8,106.3	1.57	250.14	7,634.8	-457.0	2,545.1	1.50	1.50	-104.86	250.14	
11,696.9	1.57	250.14	11,224.0	-490.5	2,452.5	0.00	0.00	0.00	0.00	PBHL - BJU M33 FI

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Project:	Garfield County, CO	MD Reference:	RKB @ 8431.0usft (H&P #329)
Site:	NPM M33 496 Pad	North Reference:	True
Well:	BJU M33 FED 25D-33 496	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
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	100.16	300.0	-0.5	2.6	2.6	3.00	3.00	0.00
400.0	6.00	100.16	399.6	-1.8	10.3	10.5	3.00	3.00	0.00
500.0	9.00	100.16	498.8	-4.1	23.1	23.5	3.00	3.00	0.00
600.0	12.00	100.16	597.1	-7.4	41.1	41.7	3.00	3.00	0.00
700.0	15.00	100.16	694.3	-11.5	64.1	65.1	3.00	3.00	0.00
800.0	18.00	100.16	790.2	-16.5	92.0	93.5	3.00	3.00	0.00
900.0	21.00	100.16	884.4	-22.4	124.9	126.8	3.00	3.00	0.00
EOB @ 21.38° Inc. / 100.19° Azm									
912.6	21.38	100.16	896.2	-23.2	129.3	131.4	3.00	3.00	0.00
1,000.0	21.38	100.16	977.6	-28.8	160.7	163.2	0.00	0.00	0.00
1,100.0	21.38	100.16	1,070.7	-35.2	196.6	199.7	0.00	0.00	0.00
1,200.0	21.38	100.16	1,163.8	-41.7	232.5	236.1	0.00	0.00	0.00
1,300.0	21.38	100.16	1,256.9	-48.1	268.3	272.6	0.00	0.00	0.00
1,400.0	21.38	100.16	1,350.0	-54.5	304.2	309.0	0.00	0.00	0.00
1,500.0	21.38	100.16	1,443.2	-61.0	340.1	345.5	0.00	0.00	0.00
1,600.0	21.38	100.16	1,536.3	-67.4	376.0	381.9	0.00	0.00	0.00
1,700.0	21.38	100.16	1,629.4	-73.8	411.9	418.3	0.00	0.00	0.00
1,800.0	21.38	100.16	1,722.5	-80.3	447.7	454.8	0.00	0.00	0.00
1,900.0	21.38	100.16	1,815.6	-86.7	483.6	491.2	0.00	0.00	0.00
2,000.0	21.38	100.16	1,908.8	-93.1	519.5	527.7	0.00	0.00	0.00
2,100.0	21.38	100.16	2,001.9	-99.6	555.4	564.1	0.00	0.00	0.00
2,200.0	21.38	100.16	2,095.0	-106.0	591.3	600.6	0.00	0.00	0.00
2,300.0	21.38	100.16	2,188.1	-112.4	627.1	637.0	0.00	0.00	0.00
2,400.0	21.38	100.16	2,281.2	-118.9	663.0	673.4	0.00	0.00	0.00
2,500.0	21.38	100.16	2,374.4	-125.3	698.9	709.9	0.00	0.00	0.00
Wasatch									
2,557.6	21.38	100.16	2,428.0	-129.0	719.6	730.9	0.00	0.00	0.00
2,600.0	21.38	100.16	2,467.5	-131.7	734.8	746.3	0.00	0.00	0.00
2,700.0	21.38	100.16	2,560.6	-138.2	770.6	782.8	0.00	0.00	0.00
2,800.0	21.38	100.16	2,653.7	-144.6	806.5	819.2	0.00	0.00	0.00
2,900.0	21.38	100.16	2,746.8	-151.0	842.4	855.7	0.00	0.00	0.00
3,000.0	21.38	100.16	2,840.0	-157.5	878.3	892.1	0.00	0.00	0.00
3,100.0	21.38	100.16	2,933.1	-163.9	914.2	928.6	0.00	0.00	0.00
3,200.0	21.38	100.16	3,026.2	-170.3	950.0	965.0	0.00	0.00	0.00
3,300.0	21.38	100.16	3,119.3	-176.8	985.9	1,001.4	0.00	0.00	0.00
3,400.0	21.38	100.16	3,212.4	-183.2	1,021.8	1,037.9	0.00	0.00	0.00
3,500.0	21.38	100.16	3,305.6	-189.6	1,057.7	1,074.3	0.00	0.00	0.00
3,600.0	21.38	100.16	3,398.7	-196.0	1,093.6	1,110.8	0.00	0.00	0.00
3,700.0	21.38	100.16	3,491.8	-202.5	1,129.4	1,147.2	0.00	0.00	0.00
3,800.0	21.38	100.16	3,584.9	-208.9	1,165.3	1,183.7	0.00	0.00	0.00
3,900.0	21.38	100.16	3,678.0	-215.3	1,201.2	1,220.1	0.00	0.00	0.00
4,000.0	21.38	100.16	3,771.2	-221.8	1,237.1	1,256.5	0.00	0.00	0.00
4,100.0	21.38	100.16	3,864.3	-228.2	1,273.0	1,293.0	0.00	0.00	0.00
4,200.0	21.38	100.16	3,957.4	-234.6	1,308.8	1,329.4	0.00	0.00	0.00
4,300.0	21.38	100.16	4,050.5	-241.1	1,344.7	1,365.9	0.00	0.00	0.00
4,400.0	21.38	100.16	4,143.6	-247.5	1,380.6	1,402.3	0.00	0.00	0.00
4,500.0	21.38	100.16	4,236.8	-253.9	1,416.5	1,438.8	0.00	0.00	0.00
4,600.0	21.38	100.16	4,329.9	-260.4	1,452.3	1,475.2	0.00	0.00	0.00
4,700.0	21.38	100.16	4,423.0	-266.8	1,488.2	1,511.7	0.00	0.00	0.00

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Project:	Garfield County, CO	MD Reference:	RKB @ 8431.0usft (H&P #329)
Site:	NPM M33 496 Pad	North Reference:	True
Well:	BJU M33 FED 25D-33 496	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	21.38	100.16	4,516.1	-273.2	1,524.1	1,548.1	0.00	0.00	0.00
4,900.0	21.38	100.16	4,609.2	-279.7	1,560.0	1,584.5	0.00	0.00	0.00
5,000.0	21.38	100.16	4,702.4	-286.1	1,595.9	1,621.0	0.00	0.00	0.00
5,100.0	21.38	100.16	4,795.5	-292.5	1,631.7	1,657.4	0.00	0.00	0.00
5,200.0	21.38	100.16	4,888.6	-299.0	1,667.6	1,693.9	0.00	0.00	0.00
5,300.0	21.38	100.16	4,981.7	-305.4	1,703.5	1,730.3	0.00	0.00	0.00
5,400.0	21.38	100.16	5,074.8	-311.8	1,739.4	1,766.8	0.00	0.00	0.00
5,500.0	21.38	100.16	5,168.0	-318.3	1,775.3	1,803.2	0.00	0.00	0.00
5,600.0	21.38	100.16	5,261.1	-324.7	1,811.1	1,839.6	0.00	0.00	0.00
5,700.0	21.38	100.16	5,354.2	-331.1	1,847.0	1,876.1	0.00	0.00	0.00
Wasatch G									
5,779.2	21.38	100.16	5,428.0	-336.2	1,875.4	1,905.0	0.00	0.00	0.00
5,800.0	21.38	100.16	5,447.3	-337.6	1,882.9	1,912.5	0.00	0.00	0.00
5,900.0	21.38	100.16	5,540.4	-344.0	1,918.8	1,949.0	0.00	0.00	0.00
6,000.0	21.38	100.16	5,633.6	-350.4	1,954.7	1,985.4	0.00	0.00	0.00
Fort Union									
6,054.2	21.38	100.16	5,684.0	-353.9	1,974.1	2,005.2	0.00	0.00	0.00
6,100.0	21.38	100.16	5,726.7	-356.9	1,990.5	2,021.9	0.00	0.00	0.00
6,200.0	21.38	100.16	5,819.8	-363.3	2,026.4	2,058.3	0.00	0.00	0.00
6,300.0	21.38	100.16	5,912.9	-369.7	2,062.3	2,094.8	0.00	0.00	0.00
6,400.0	21.38	100.16	6,006.0	-376.2	2,098.2	2,131.2	0.00	0.00	0.00
6,500.0	21.38	100.16	6,099.2	-382.6	2,134.0	2,167.6	0.00	0.00	0.00
6,600.0	21.38	100.16	6,192.3	-389.0	2,169.9	2,204.1	0.00	0.00	0.00
6,700.0	21.38	100.16	6,285.4	-395.4	2,205.8	2,240.5	0.00	0.00	0.00
6,800.0	21.38	100.16	6,378.5	-401.9	2,241.7	2,277.0	0.00	0.00	0.00
6,900.0	21.38	100.16	6,471.6	-408.3	2,277.6	2,313.4	0.00	0.00	0.00
7,000.0	21.38	100.16	6,564.8	-414.7	2,313.4	2,349.9	0.00	0.00	0.00
7,100.0	21.38	100.16	6,657.9	-421.2	2,349.3	2,386.3	0.00	0.00	0.00
7,200.0	21.38	100.16	6,751.0	-427.6	2,385.2	2,422.7	0.00	0.00	0.00
Drop 3° /100'									
7,289.0	21.38	100.16	6,833.8	-433.3	2,417.1	2,455.2	0.00	0.00	0.00
7,300.0	21.05	100.16	6,844.1	-434.0	2,421.1	2,459.2	3.00	-3.00	0.00
7,400.0	18.05	100.16	6,938.4	-439.9	2,454.0	2,492.6	3.00	-3.00	0.00
7,500.0	15.05	100.16	7,034.2	-445.0	2,482.0	2,521.1	3.00	-3.00	0.00
7,600.0	12.05	100.16	7,131.4	-449.1	2,505.1	2,544.5	3.00	-3.00	0.00
7,700.0	9.05	100.16	7,229.7	-452.3	2,523.1	2,562.8	3.00	-3.00	0.00
7,800.0	6.05	100.16	7,328.8	-454.6	2,536.0	2,575.9	3.00	-3.00	0.00
7,900.0	3.05	100.16	7,428.5	-456.0	2,543.8	2,583.8	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,001.5	0.00	0.00	7,530.0	-456.5	2,546.5	2,586.5	3.00	-3.00	0.00
EOB @ 1.57° Inc. / 250.17° Azm									
8,106.3	1.57	250.14	7,634.8	-457.0	2,545.1	2,585.3	1.50	1.50	0.00
8,200.0	1.57	250.14	7,728.4	-457.9	2,542.7	2,583.1	0.00	0.00	0.00
Williams Fork - TOG									
8,233.6	1.57	250.14	7,762.0	-458.2	2,541.8	2,582.3	0.00	0.00	0.00
8,300.0	1.57	250.14	7,828.4	-458.8	2,540.1	2,580.8	0.00	0.00	0.00
8,400.0	1.57	250.14	7,928.3	-459.7	2,537.5	2,578.4	0.00	0.00	0.00
8,500.0	1.57	250.14	8,028.3	-460.7	2,534.9	2,576.1	0.00	0.00	0.00
8,600.0	1.57	250.14	8,128.3	-461.6	2,532.4	2,573.7	0.00	0.00	0.00
8,700.0	1.57	250.14	8,228.2	-462.5	2,529.8	2,571.4	0.00	0.00	0.00
8,800.0	1.57	250.14	8,328.2	-463.5	2,527.2	2,569.0	0.00	0.00	0.00
8,900.0	1.57	250.14	8,428.2	-464.4	2,524.6	2,566.7	0.00	0.00	0.00

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Project:	Garfield County, CO	MD Reference:	RKB @ 8431.0usft (H&P #329)
Site:	NPM M33 496 Pad	North Reference:	True
Well:	BJU M33 FED 25D-33 496	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)
9,000.0	1.57	250.14	8,528.1	-465.3	2,522.1	2,564.3	0.00	0.00	0.00
9,100.0	1.57	250.14	8,628.1	-466.3	2,519.5	2,562.0	0.00	0.00	0.00
9,200.0	1.57	250.14	8,728.0	-467.2	2,516.9	2,559.6	0.00	0.00	0.00
9,300.0	1.57	250.14	8,828.0	-468.1	2,514.3	2,557.3	0.00	0.00	0.00
9,400.0	1.57	250.14	8,928.0	-469.1	2,511.7	2,554.9	0.00	0.00	0.00
9,500.0	1.57	250.14	9,027.9	-470.0	2,509.2	2,552.6	0.00	0.00	0.00
9,600.0	1.57	250.14	9,127.9	-470.9	2,506.6	2,550.3	0.00	0.00	0.00
9,700.0	1.57	250.14	9,227.9	-471.9	2,504.0	2,547.9	0.00	0.00	0.00
9,800.0	1.57	250.14	9,327.8	-472.8	2,501.4	2,545.6	0.00	0.00	0.00
9,900.0	1.57	250.14	9,427.8	-473.7	2,498.8	2,543.2	0.00	0.00	0.00
10,000.0	1.57	250.14	9,527.7	-474.6	2,496.3	2,540.9	0.00	0.00	0.00
10,100.0	1.57	250.14	9,627.7	-475.6	2,493.7	2,538.5	0.00	0.00	0.00
10,200.0	1.57	250.14	9,727.7	-476.5	2,491.1	2,536.2	0.00	0.00	0.00
10,300.0	1.57	250.14	9,827.6	-477.4	2,488.5	2,533.8	0.00	0.00	0.00
10,400.0	1.57	250.14	9,927.6	-478.4	2,485.9	2,531.5	0.00	0.00	0.00
10,500.0	1.57	250.14	10,027.6	-479.3	2,483.4	2,529.1	0.00	0.00	0.00
10,600.0	1.57	250.14	10,127.5	-480.2	2,480.8	2,526.8	0.00	0.00	0.00
10,700.0	1.57	250.14	10,227.5	-481.2	2,478.2	2,524.4	0.00	0.00	0.00
10,800.0	1.57	250.14	10,327.4	-482.1	2,475.6	2,522.1	0.00	0.00	0.00
Cameo									
10,828.6	1.57	250.14	10,356.0	-482.4	2,474.9	2,521.4	0.00	0.00	0.00
10,900.0	1.57	250.14	10,427.4	-483.0	2,473.0	2,519.8	0.00	0.00	0.00
11,000.0	1.57	250.14	10,527.4	-484.0	2,470.5	2,517.4	0.00	0.00	0.00
11,100.0	1.57	250.14	10,627.3	-484.9	2,467.9	2,515.1	0.00	0.00	0.00
11,200.0	1.57	250.14	10,727.3	-485.8	2,465.3	2,512.7	0.00	0.00	0.00
11,300.0	1.57	250.14	10,827.3	-486.8	2,462.7	2,510.4	0.00	0.00	0.00
11,400.0	1.57	250.14	10,927.2	-487.7	2,460.1	2,508.0	0.00	0.00	0.00
Rollins									
11,496.8	1.57	250.14	11,024.0	-488.6	2,457.7	2,505.7	0.00	0.00	0.00
11,500.0	1.57	250.14	11,027.2	-488.6	2,457.6	2,505.7	0.00	0.00	0.00
11,600.0	1.57	250.14	11,127.1	-489.6	2,455.0	2,503.3	0.00	0.00	0.00
TD @ 11696.9' MD / 11224.0' TVD									
11,696.9	1.57	250.14	11,224.0	-490.5	2,452.5	2,501.1	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
- hit/miss target									
- Shape									
OHCR - BJU M33 FEI	0.00	0.00	7,530.0	-456.5	2,546.5	14,411,949.68	2,437,396.85	39.652135	-108.168766
- plan hits target center									
- Point									
PBHL - BJU M33 FED	0.00	0.00	11,224.0	-490.5	2,452.5	14,411,912.80	2,437,304.00	39.652042	-108.169100
- plan hits target center									
- Ellipse (radii L100.0 W50.0 on 250.00 azi)									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BJU M33 FED 25D-33 496 - Slot BJU M33 FED 25D-33 496
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 25D-33 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,557.6	2,428.0	Wasatch			
5,779.2	5,428.0	Wasatch G			
6,054.2	5,684.0	Fort Union			
8,001.5	7,530.0	Ohio Creek			
8,233.6	7,762.0	Williams Fork			
8,233.6	7,762.0	TOG			
10,828.6	10,356.0	Cameo			
11,496.8	11,024.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.0	200.0	0.0	0.0	Build 3° / 100'
912.6	896.2	-23.2	129.3	EOB @ 21.38° Inc. / 100.19° Azm
7,289.0	6,833.8	-433.3	2,417.1	Drop 3° / 100'
8,001.5	7,530.0	-456.5	2,546.5	EOD @ Vertical / Build 1.5° / 100'
8,106.3	7,634.8	-457.0	2,545.1	EOB @ 1.57° Inc. / 250.17° Azm
11,696.9	11,224.0	-490.5	2,452.5	TD @ 11696.9' MD / 11224.0' TVD