



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 33B-36-795
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	KB @ 8902.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	KB @ 8902.0usft
<b>Site:</b>	S36-T7S-R95W (36G)	<b>North Reference:</b>	True
<b>Well:</b>	33B-36-795	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

<b>Project</b> Garfield County, CO (UTM 12N)			
<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> S36-T7S-R95W (36G)			
<b>Site Position:</b>		<b>Northing:</b>	14,320,581.60 usft
<b>From:</b>	Map	<b>Easting:</b>	2,504,539.60 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16"
		<b>Latitude:</b>	39.395498
		<b>Longitude:</b>	-107.941574
		<b>Grid Convergence:</b>	1.94 °

<b>Well</b> 33B-36-795			
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>
			14,320,583.90 usft
			<b>Latitude:</b>
			39.395505
			<b>Longitude:</b>
			-107.941608
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>
			0.0 usft
			<b>Ground Level:</b>
			8,872.0 usft

<b>Wellbore</b> OH					
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	HDGM	12/28/2015	9.40	65.60	51,873

<b>Design</b> PLAN #1				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	186.86

<b>Plan Sections</b>										
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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
516.7	8.00	200.00	515.8	-17.5	-6.4	3.00	3.00	0.00	200.00	
716.7	8.00	200.00	713.9	-43.6	-15.9	0.00	0.00	0.00	0.00	
881.4	12.34	186.31	876.0	-71.9	-21.7	3.00	2.64	-8.31	-35.95	
6,990.2	12.34	186.31	6,843.6	-1,370.0	-165.4	0.00	0.00	0.00	0.00	
7,401.7	0.00	0.00	7,251.9	-1,413.8	-170.2	3.00	-3.00	0.00	180.00	
10,108.8	0.00	0.00	9,959.0	-1,413.8	-170.2	0.00	0.00	0.00	0.00	33B-36-795 PBHL

Planning Report

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<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	KB @ 8902.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	KB @ 8902.0usft
<b>Site:</b>	S36-T7S-R95W (36G)	<b>North Reference:</b>	True
<b>Well:</b>	33B-36-795	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #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 (°/100u)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	Start Build 3.00
300.0	1.50	200.00	300.0	-0.6	-0.2	0.6	3.00	3.00	
400.0	4.50	200.00	399.8	-5.5	-2.0	5.7	3.00	3.00	
500.0	7.50	200.00	499.3	-15.4	-5.6	15.9	3.00	3.00	
516.7	8.00	200.00	515.8	-17.5	-6.4	18.1	3.00	3.00	Start 200.0 hold at 516.7 MD
600.0	8.00	200.00	598.3	-28.4	-10.3	29.4	0.00	0.00	
700.0	8.00	200.00	697.4	-41.4	-15.1	42.9	0.00	0.00	
716.7	8.00	200.00	713.9	-43.6	-15.9	45.2	0.00	0.00	Start DLS 3.00 TFO -35.95
800.0	10.13	191.63	796.1	-56.3	-19.3	58.2	3.00	2.56	
881.4	12.34	186.31	876.0	-71.9	-21.7	74.0	3.00	2.72	Start 6108.8 hold at 881.4 MD
900.0	12.34	186.31	894.2	-75.9	-22.2	78.0	0.00	0.00	
1,000.0	12.34	186.31	991.8	-97.1	-24.5	99.3	0.00	0.00	
1,100.0	12.34	186.31	1,089.5	-118.4	-26.9	120.7	0.00	0.00	
1,200.0	12.34	186.31	1,187.2	-139.6	-29.2	142.1	0.00	0.00	
1,300.0	12.34	186.31	1,284.9	-160.9	-31.6	163.5	0.00	0.00	
1,400.0	12.34	186.31	1,382.6	-182.1	-33.9	184.9	0.00	0.00	
1,500.0	12.34	186.31	1,480.3	-203.4	-36.3	206.2	0.00	0.00	
1,600.0	12.34	186.31	1,578.0	-224.6	-38.6	227.6	0.00	0.00	
1,700.0	12.34	186.31	1,675.7	-245.9	-41.0	249.0	0.00	0.00	
1,800.0	12.34	186.31	1,773.3	-267.1	-43.3	270.4	0.00	0.00	
1,900.0	12.34	186.31	1,871.0	-288.4	-45.7	291.7	0.00	0.00	
2,000.0	12.34	186.31	1,968.7	-309.6	-48.0	313.1	0.00	0.00	
2,100.0	12.34	186.31	2,066.4	-330.8	-50.4	334.5	0.00	0.00	
2,200.0	12.34	186.31	2,164.1	-352.1	-52.7	355.9	0.00	0.00	
2,300.0	12.34	186.31	2,261.8	-373.3	-55.1	377.3	0.00	0.00	
2,400.0	12.34	186.31	2,359.5	-394.6	-57.4	398.6	0.00	0.00	
2,500.0	12.34	186.31	2,457.2	-415.8	-59.8	420.0	0.00	0.00	
2,600.0	12.34	186.31	2,554.9	-437.1	-62.1	441.4	0.00	0.00	
2,700.0	12.34	186.31	2,652.5	-458.3	-64.5	462.8	0.00	0.00	
2,800.0	12.34	186.31	2,750.2	-479.6	-66.8	484.1	0.00	0.00	
2,900.0	12.34	186.31	2,847.9	-500.8	-69.2	505.5	0.00	0.00	
3,000.0	12.34	186.31	2,945.6	-522.1	-71.5	526.9	0.00	0.00	
3,100.0	12.34	186.31	3,043.3	-543.3	-73.9	548.3	0.00	0.00	
3,200.0	12.34	186.31	3,141.0	-564.6	-76.2	569.6	0.00	0.00	
3,300.0	12.34	186.31	3,238.7	-585.8	-78.6	591.0	0.00	0.00	
3,400.0	12.34	186.31	3,336.4	-607.1	-81.0	612.4	0.00	0.00	
3,500.0	12.34	186.31	3,434.0	-628.3	-83.3	633.8	0.00	0.00	
3,600.0	12.34	186.31	3,531.7	-649.6	-85.7	655.2	0.00	0.00	
3,700.0	12.34	186.31	3,629.4	-670.8	-88.0	676.5	0.00	0.00	
3,800.0	12.34	186.31	3,727.1	-692.1	-90.4	697.9	0.00	0.00	
3,900.0	12.34	186.31	3,824.8	-713.3	-92.7	719.3	0.00	0.00	
4,000.0	12.34	186.31	3,922.5	-734.6	-95.1	740.7	0.00	0.00	
4,100.0	12.34	186.31	4,020.2	-755.8	-97.4	762.0	0.00	0.00	
4,200.0	12.34	186.31	4,117.9	-777.1	-99.8	783.4	0.00	0.00	
4,300.0	12.34	186.31	4,215.5	-798.3	-102.1	804.8	0.00	0.00	
4,400.0	12.34	186.31	4,313.2	-819.6	-104.5	826.2	0.00	0.00	
4,500.0	12.34	186.31	4,410.9	-840.8	-106.8	847.6	0.00	0.00	
4,600.0	12.34	186.31	4,508.6	-862.1	-109.2	868.9	0.00	0.00	
4,700.0	12.34	186.31	4,606.3	-883.3	-111.5	890.3	0.00	0.00	

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<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	KB @ 8902.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	KB @ 8902.0usft
<b>Site:</b>	S36-T7S-R95W (36G)	<b>North Reference:</b>	True
<b>Well:</b>	33B-36-795	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #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 (°/100u)	Comments / Formations
4,800.0	12.34	186.31	4,704.0	-904.6	-113.9	911.7	0.00	0.00	
4,900.0	12.34	186.31	4,801.7	-925.8	-116.2	933.1	0.00	0.00	
5,000.0	12.34	186.31	4,899.4	-947.1	-118.6	954.4	0.00	0.00	
5,100.0	12.34	186.31	4,997.1	-968.3	-120.9	975.8	0.00	0.00	
5,200.0	12.34	186.31	5,094.7	-989.6	-123.3	997.2	0.00	0.00	
5,300.0	12.34	186.31	5,192.4	-1,010.8	-125.6	1,018.6	0.00	0.00	
5,400.0	12.34	186.31	5,290.1	-1,032.1	-128.0	1,040.0	0.00	0.00	
5,500.0	12.34	186.31	5,387.8	-1,053.3	-130.3	1,061.3	0.00	0.00	
5,600.0	12.34	186.31	5,485.5	-1,074.6	-132.7	1,082.7	0.00	0.00	
5,700.0	12.34	186.31	5,583.2	-1,095.8	-135.0	1,104.1	0.00	0.00	
5,800.0	12.34	186.31	5,680.9	-1,117.0	-137.4	1,125.5	0.00	0.00	
5,900.0	12.34	186.31	5,778.6	-1,138.3	-139.7	1,146.8	0.00	0.00	
6,000.0	12.34	186.31	5,876.2	-1,159.5	-142.1	1,168.2	0.00	0.00	
6,100.0	12.34	186.31	5,973.9	-1,180.8	-144.4	1,189.6	0.00	0.00	
6,200.0	12.34	186.31	6,071.6	-1,202.0	-146.8	1,211.0	0.00	0.00	
6,300.0	12.34	186.31	6,169.3	-1,223.3	-149.1	1,232.3	0.00	0.00	
6,400.0	12.34	186.31	6,267.0	-1,244.5	-151.5	1,253.7	0.00	0.00	
6,500.0	12.34	186.31	6,364.7	-1,265.8	-153.8	1,275.1	0.00	0.00	
6,600.0	12.34	186.31	6,462.4	-1,287.0	-156.2	1,296.5	0.00	0.00	
6,700.0	12.34	186.31	6,560.1	-1,308.3	-158.5	1,317.9	0.00	0.00	
6,800.0	12.34	186.31	6,657.8	-1,329.5	-160.9	1,339.2	0.00	0.00	
6,900.0	12.34	186.31	6,755.4	-1,350.8	-163.2	1,360.6	0.00	0.00	
6,979.4	12.34	186.31	6,833.0	-1,367.7	-165.1	1,377.6	0.00	0.00	OHIO_CREEK
6,990.2	12.34	186.31	6,843.6	-1,370.0	-165.4	1,379.9	0.00	0.00	Start Drop -3.00
7,000.0	12.05	186.31	6,853.1	-1,372.0	-165.6	1,382.0	3.00	-3.00	
7,100.0	9.05	186.31	6,951.4	-1,390.2	-167.6	1,400.3	3.00	-3.00	
7,200.0	6.05	186.31	7,050.6	-1,403.3	-169.0	1,413.4	3.00	-3.00	
7,300.0	3.05	186.31	7,150.2	-1,411.2	-169.9	1,421.3	3.00	-3.00	
7,400.0	0.05	186.31	7,250.2	-1,413.8	-170.2	1,424.1	3.00	-3.00	
7,401.7	0.00	0.00	7,251.9	-1,413.8	-170.2	1,424.1	3.00	-3.00	Start 2707.1 hold at 7401.7 MD
7,422.8	0.00	0.00	7,273.0	-1,413.8	-170.2	1,424.1	0.00	0.00	WILLIAMS_FORK
7,500.0	0.00	0.00	7,350.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
7,600.0	0.00	0.00	7,450.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
7,700.0	0.00	0.00	7,550.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
7,800.0	0.00	0.00	7,650.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
7,900.0	0.00	0.00	7,750.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,000.0	0.00	0.00	7,850.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,085.8	0.00	0.00	7,936.0	-1,413.8	-170.2	1,424.1	0.00	0.00	TOP_GAS
8,100.0	0.00	0.00	7,950.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,200.0	0.00	0.00	8,050.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,300.0	0.00	0.00	8,150.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,400.0	0.00	0.00	8,250.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,500.0	0.00	0.00	8,350.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,600.0	0.00	0.00	8,450.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,700.0	0.00	0.00	8,550.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,800.0	0.00	0.00	8,650.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
8,900.0	0.00	0.00	8,750.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,000.0	0.00	0.00	8,850.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,100.0	0.00	0.00	8,950.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,200.0	0.00	0.00	9,050.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,300.0	0.00	0.00	9,150.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,400.0	0.00	0.00	9,250.2	-1,413.8	-170.2	1,424.1	0.00	0.00	

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<b>Database:</b> USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b> Well 33B-36-795
<b>Company:</b> Caerus Oil & Gas	<b>TVD Reference:</b> KB @ 8902.0usft
<b>Project:</b> Garfield County, CO (UTM 12N)	<b>MD Reference:</b> KB @ 8902.0usft
<b>Site:</b> S36-T7S-R95W (36G)	<b>North Reference:</b> True
<b>Well:</b> 33B-36-795	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Wellbore:</b> OH	
<b>Design:</b> PLAN #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 (°/100u)	Comments / Formations
9,500.0	0.00	0.00	9,350.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,600.0	0.00	0.00	9,450.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,700.0	0.00	0.00	9,550.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,703.8	0.00	0.00	9,554.0	-1,413.8	-170.2	1,424.1	0.00	0.00	CAMEO
9,800.0	0.00	0.00	9,650.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,900.0	0.00	0.00	9,750.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
9,958.8	0.00	0.00	9,809.0	-1,413.8	-170.2	1,424.1	0.00	0.00	ROLLINS
10,000.0	0.00	0.00	9,850.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
10,100.0	0.00	0.00	9,950.2	-1,413.8	-170.2	1,424.1	0.00	0.00	
10,108.8	0.00	0.00	9,959.0	-1,413.8	-170.2	1,424.1	0.00	0.00	TD at 10108.8 - TD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
33B-36-795 PBHL - hit/miss target - Shape - plan hits target center - Circle (radius 50.0)	0.00	0.00	9,959.0	-1,413.8	-170.2	14,319,165.10	2,504,407.60	39.391625	-107.942210

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,979.4	6,833.0	OHIO_CREEK				
7,422.8	7,273.0	WILLIAMS_FORK				
8,085.8	7,936.0	TOP_GAS				
9,703.8	9,554.0	CAMEO				
9,958.8	9,809.0	ROLLINS				
10,108.8	9,959.0	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
250.0	250.0	0.0	0.0	Start Build 3.00	
516.7	515.8	-17.5	-6.4	Start 200.0 hold at 516.7 MD	
716.7	713.9	-43.6	-15.9	Start DLS 3.00 TFO -35.95	
881.4	876.0	-71.9	-21.7	Start 6108.8 hold at 881.4 MD	
6,990.2	6,843.6	-1,370.0	-165.4	Start Drop -3.00	
7,401.7	7,251.9	-1,413.8	-170.2	Start 2707.1 hold at 7401.7 MD	
10,108.8	9,959.0	-1,413.8	-170.2	TD at 10108.8	