



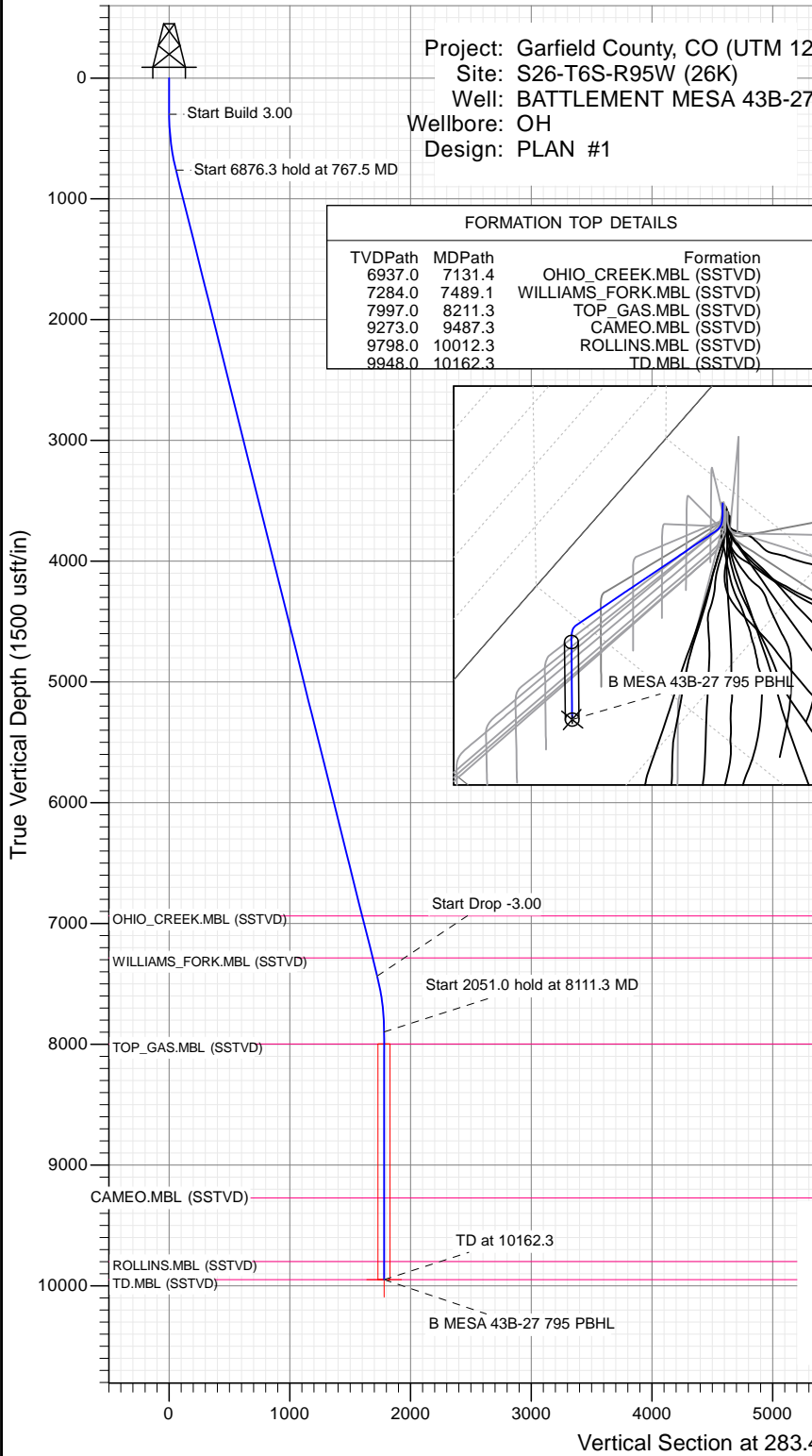
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	767.5	14.03	283.49	762.9	13.3	-55.4	3.00	283.49	56.9	
4	7643.8	14.03	283.49	7434.1	402.0	-1676.0	0.00	0.00	1723.5	
5	8111.3	0.00	0.00	7897.0	415.3	-1731.3	3.00	180.00	1780.4	
6	10162.3	0.00	0.00	9948.0	415.3	-1731.3	0.00	0.00	1780.4	B MESA 43B-27 795 PBHL

Project: Garfield County, CO (UTM 12)  
 Site: S26-T6S-R95W (26K)  
 Well: BATTLEMENT MESA 43B-27  
 Wellbore: OH  
 Design: PLAN #1

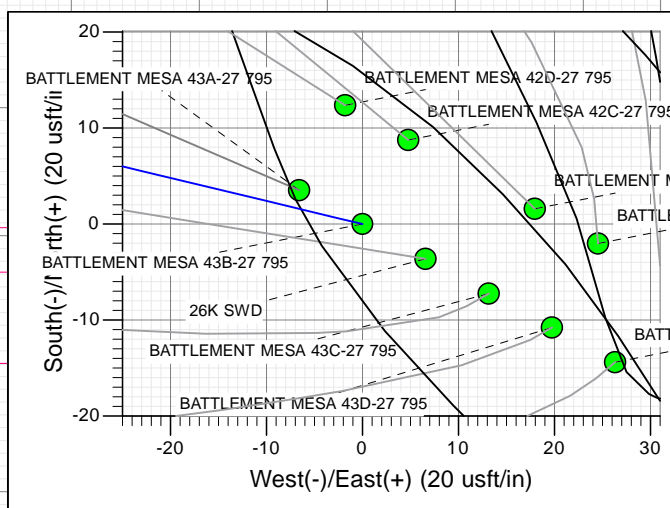
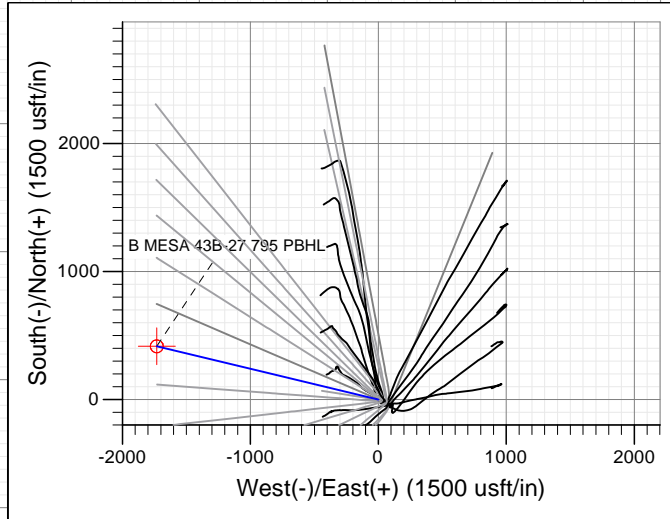
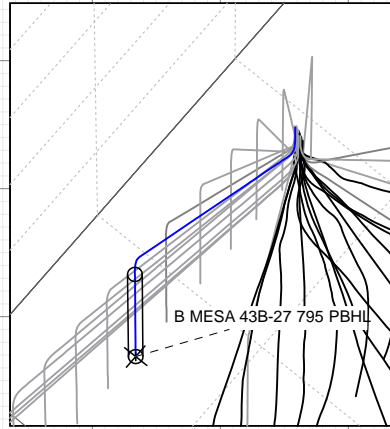
PLAN #1  
 BATTLEMENT MESA 43B-27 795  
 15XXX; LR  
 30 KB @ 8994.0usft  
 Ground Level @ 8964.0  
 NAD 1927 - Western US  
 Well BATTLEMENT MESA 43B-27 795, True North

Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
TD	No Target (Freehand)	283.49	Slot	0.0	0.0	0.0
Name		TVD	+N/-S	+E/-W	Latitude	Longitude
B MESA 43B-27 795 PBHL		9948.0	415.3	-1731.3	39.407019	-107.975942



FORMATION TOP DETAILS

TVDPATH	MDPATH	Formation
6937.0	7131.4	OHIO_CREEK.MBL (SSTVD)
7284.0	7489.1	WILLIAMS_FORK.MBL (SSTVD)
7997.0	8211.3	TOP_GAS.MBL (SSTVD)
9273.0	9487.3	CAMEO.MBL (SSTVD)
9798.0	10012.3	ROLLINS.MBL (SSTVD)
9948.0	10162.3	TD.MBL (SSTVD)



↑ T  
 ↓ M  
 Azimuths to True North  
 Magnetic North: 9.47°  
 Magnetic Field  
 Strength: 51904.6snT  
 Dip Angle: 65.63°  
 Date: 11/6/2015  
 Model: HDGM

CASING DETAILS  
 No casing data is available



WELL DETAILS: BATTLEMENT MESA 43B-27 795

+N/-S	+E/-W	Northing	Ground Level:	8964.0	Latitude	Longitude
0.0	0.0	14324093.10	Easting	2496431.00	39.405880	-107.969818

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well BATTLEMENT MESA 43B-27 795
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8994.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8994.0usft
<b>Site:</b>	S26-T6S-R95W (26K)	<b>North Reference:</b>	True
<b>Well:</b>	BATTLEMENT MESA 43B-27 795	<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>	S26-T6S-R95W (26K)				
<b>Site Position:</b>		<b>Northing:</b>	14,324,088.50 usft	<b>Latitude:</b>	39.405864
<b>From:</b>	Map	<b>Easting:</b>	2,496,462.30 usft	<b>Longitude:</b>	-107.969708
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16"	<b>Grid Convergence:</b>	1.92 °

<b>Well</b>	BATTLEMENT MESA 43B-27 795					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,324,093.10 usft	<b>Latitude:</b>	39.405880
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	2,496,431.00 usft	<b>Longitude:</b>	-107.969818
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>	0.0 usft	<b>Ground Level:</b>	8,964.0 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	11/6/2015	9.47	65.63	51,905

<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	283.49

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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
767.5	14.03	283.49	762.9	13.3	-55.4	3.00	3.00	0.00	283.49	
7,643.8	14.03	283.49	7,434.1	402.0	-1,676.0	0.00	0.00	0.00	0.00	
8,111.3	0.00	0.00	7,897.0	415.3	-1,731.3	3.00	-3.00	0.00	180.00	
10,162.3	0.00	0.00	9,948.0	415.3	-1,731.3	0.00	0.00	0.00	0.00	B MESA 43B-27 795 I

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well BATTLEMENT MESA 43B-27 795
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8994.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8994.0usft
<b>Site:</b>	S26-T6S-R95W (26K)	<b>North Reference:</b>	True
<b>Well:</b>	BATTLEMENT MESA 43B-27 795	<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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	Start Build 3.00
400.0	3.00	283.49	400.0	0.6	-2.5	2.6	3.00	3.00	
500.0	6.00	283.49	499.6	2.4	-10.2	10.5	3.00	3.00	
600.0	9.00	283.49	598.8	5.5	-22.9	23.5	3.00	3.00	
700.0	12.00	283.49	697.1	9.7	-40.6	41.7	3.00	3.00	
767.5	14.03	283.49	762.9	13.3	-55.4	56.9	3.00	3.00	Start 6876.3 hold at 767.5 MD
800.0	14.03	283.49	794.4	15.1	-63.0	64.8	0.00	0.00	
900.0	14.03	283.49	891.4	20.8	-86.6	89.0	0.00	0.00	
1,000.0	14.03	283.49	988.4	26.4	-110.2	113.3	0.00	0.00	
1,100.0	14.03	283.49	1,085.4	32.1	-133.7	137.5	0.00	0.00	
1,200.0	14.03	283.49	1,182.5	37.7	-157.3	161.8	0.00	0.00	
1,300.0	14.03	283.49	1,279.5	43.4	-180.9	186.0	0.00	0.00	
1,400.0	14.03	283.49	1,376.5	49.0	-204.4	210.2	0.00	0.00	
1,500.0	14.03	283.49	1,473.5	54.7	-228.0	234.5	0.00	0.00	
1,600.0	14.03	283.49	1,570.5	60.3	-251.6	258.7	0.00	0.00	
1,700.0	14.03	283.49	1,667.5	66.0	-275.1	282.9	0.00	0.00	
1,800.0	14.03	283.49	1,764.6	71.6	-298.7	307.2	0.00	0.00	
1,900.0	14.03	283.49	1,861.6	77.3	-322.3	331.4	0.00	0.00	
2,000.0	14.03	283.49	1,958.6	83.0	-345.8	355.6	0.00	0.00	
2,100.0	14.03	283.49	2,055.6	88.6	-369.4	379.9	0.00	0.00	
2,200.0	14.03	283.49	2,152.6	94.3	-393.0	404.1	0.00	0.00	
2,300.0	14.03	283.49	2,249.7	99.9	-416.5	428.4	0.00	0.00	
2,400.0	14.03	283.49	2,346.7	105.6	-440.1	452.6	0.00	0.00	
2,500.0	14.03	283.49	2,443.7	111.2	-463.7	476.8	0.00	0.00	
2,600.0	14.03	283.49	2,540.7	116.9	-487.2	501.1	0.00	0.00	
2,700.0	14.03	283.49	2,637.7	122.5	-510.8	525.3	0.00	0.00	
2,800.0	14.03	283.49	2,734.7	128.2	-534.4	549.5	0.00	0.00	
2,900.0	14.03	283.49	2,831.8	133.8	-557.9	573.8	0.00	0.00	
3,000.0	14.03	283.49	2,928.8	139.5	-581.5	598.0	0.00	0.00	
3,100.0	14.03	283.49	3,025.8	145.1	-605.1	622.2	0.00	0.00	
3,200.0	14.03	283.49	3,122.8	150.8	-628.7	646.5	0.00	0.00	
3,300.0	14.03	283.49	3,219.8	156.4	-652.2	670.7	0.00	0.00	
3,400.0	14.03	283.49	3,316.9	162.1	-675.8	695.0	0.00	0.00	
3,500.0	14.03	283.49	3,413.9	167.8	-699.4	719.2	0.00	0.00	
3,600.0	14.03	283.49	3,510.9	173.4	-722.9	743.4	0.00	0.00	
3,700.0	14.03	283.49	3,607.9	179.1	-746.5	767.7	0.00	0.00	
3,800.0	14.03	283.49	3,704.9	184.7	-770.1	791.9	0.00	0.00	
3,900.0	14.03	283.49	3,802.0	190.4	-793.6	816.1	0.00	0.00	
4,000.0	14.03	283.49	3,899.0	196.0	-817.2	840.4	0.00	0.00	
4,100.0	14.03	283.49	3,996.0	201.7	-840.8	864.6	0.00	0.00	
4,200.0	14.03	283.49	4,093.0	207.3	-864.3	888.8	0.00	0.00	
4,300.0	14.03	283.49	4,190.0	213.0	-887.9	913.1	0.00	0.00	
4,400.0	14.03	283.49	4,287.0	218.6	-911.5	937.3	0.00	0.00	
4,500.0	14.03	283.49	4,384.1	224.3	-935.0	961.6	0.00	0.00	
4,600.0	14.03	283.49	4,481.1	229.9	-958.6	985.8	0.00	0.00	
4,700.0	14.03	283.49	4,578.1	235.6	-982.2	1,010.0	0.00	0.00	
4,800.0	14.03	283.49	4,675.1	241.2	-1,005.7	1,034.3	0.00	0.00	
4,900.0	14.03	283.49	4,772.1	246.9	-1,029.3	1,058.5	0.00	0.00	
5,000.0	14.03	283.49	4,869.2	252.5	-1,052.9	1,082.7	0.00	0.00	

Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well BATTLEMENT MESA 43B-27 795
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8994.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8994.0usft
<b>Site:</b>	S26-T6S-R95W (26K)	<b>North Reference:</b>	True
<b>Well:</b>	BATTLEMENT MESA 43B-27 795	<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
5,100.0	14.03	283.49	4,966.2	258.2	-1,076.4	1,107.0	0.00	0.00	
5,200.0	14.03	283.49	5,063.2	263.9	-1,100.0	1,131.2	0.00	0.00	
5,300.0	14.03	283.49	5,160.2	269.5	-1,123.6	1,155.4	0.00	0.00	
5,400.0	14.03	283.49	5,257.2	275.2	-1,147.1	1,179.7	0.00	0.00	
5,500.0	14.03	283.49	5,354.2	280.8	-1,170.7	1,203.9	0.00	0.00	
5,600.0	14.03	283.49	5,451.3	286.5	-1,194.3	1,228.2	0.00	0.00	
5,700.0	14.03	283.49	5,548.3	292.1	-1,217.8	1,252.4	0.00	0.00	
5,800.0	14.03	283.49	5,645.3	297.8	-1,241.4	1,276.6	0.00	0.00	
5,900.0	14.03	283.49	5,742.3	303.4	-1,265.0	1,300.9	0.00	0.00	
6,000.0	14.03	283.49	5,839.3	309.1	-1,288.6	1,325.1	0.00	0.00	
6,100.0	14.03	283.49	5,936.4	314.7	-1,312.1	1,349.3	0.00	0.00	
6,200.0	14.03	283.49	6,033.4	320.4	-1,335.7	1,373.6	0.00	0.00	
6,300.0	14.03	283.49	6,130.4	326.0	-1,359.3	1,397.8	0.00	0.00	
6,400.0	14.03	283.49	6,227.4	331.7	-1,382.8	1,422.0	0.00	0.00	
6,500.0	14.03	283.49	6,324.4	337.3	-1,406.4	1,446.3	0.00	0.00	
6,600.0	14.03	283.49	6,421.5	343.0	-1,430.0	1,470.5	0.00	0.00	
6,700.0	14.03	283.49	6,518.5	348.7	-1,453.5	1,494.8	0.00	0.00	
6,800.0	14.03	283.49	6,615.5	354.3	-1,477.1	1,519.0	0.00	0.00	
6,900.0	14.03	283.49	6,712.5	360.0	-1,500.7	1,543.2	0.00	0.00	
7,000.0	14.03	283.49	6,809.5	365.6	-1,524.2	1,567.5	0.00	0.00	
7,100.0	14.03	283.49	6,906.5	371.3	-1,547.8	1,591.7	0.00	0.00	
7,131.4	14.03	283.49	6,937.0	373.0	-1,555.2	1,599.3	0.00	0.00	OHIO_CREEK.MBL (SSTVD)
7,200.0	14.03	283.49	7,003.6	376.9	-1,571.4	1,615.9	0.00	0.00	
7,300.0	14.03	283.49	7,100.6	382.6	-1,594.9	1,640.2	0.00	0.00	
7,400.0	14.03	283.49	7,197.6	388.2	-1,618.5	1,664.4	0.00	0.00	
7,489.1	14.03	283.49	7,284.0	393.3	-1,639.5	1,686.0	0.00	0.00	WILLIAMS_FORK.MBL (SSTVD)
7,500.0	14.03	283.49	7,294.6	393.9	-1,642.1	1,688.6	0.00	0.00	
7,600.0	14.03	283.49	7,391.6	399.5	-1,665.6	1,712.9	0.00	0.00	
7,643.8	14.03	283.49	7,434.1	402.0	-1,676.0	1,723.5	0.00	0.00	Start Drop -3.00
7,700.0	12.34	283.49	7,488.8	405.0	-1,688.4	1,736.3	3.00	-3.00	
7,800.0	9.34	283.49	7,587.1	409.4	-1,706.7	1,755.1	3.00	-3.00	
7,900.0	6.34	283.49	7,686.1	412.6	-1,720.0	1,768.8	3.00	-3.00	
8,000.0	3.34	283.49	7,785.7	414.5	-1,728.2	1,777.2	3.00	-3.00	
8,100.0	0.34	283.49	7,885.7	415.3	-1,731.3	1,780.4	3.00	-3.00	
8,111.3	0.00	0.00	7,897.0	415.3	-1,731.3	1,780.4	3.00	-3.00	Start 2051.0 hold at 8111.3 MD
8,200.0	0.00	0.00	7,985.7	415.3	-1,731.3	1,780.4	0.00	0.00	
8,211.3	0.00	0.00	7,997.0	415.3	-1,731.3	1,780.4	0.00	0.00	TOP_GAS.MBL (SSTVD)
8,300.0	0.00	0.00	8,085.7	415.3	-1,731.3	1,780.4	0.00	0.00	
8,400.0	0.00	0.00	8,185.7	415.3	-1,731.3	1,780.4	0.00	0.00	
8,500.0	0.00	0.00	8,285.7	415.3	-1,731.3	1,780.4	0.00	0.00	
8,600.0	0.00	0.00	8,385.7	415.3	-1,731.3	1,780.4	0.00	0.00	
8,700.0	0.00	0.00	8,485.7	415.3	-1,731.3	1,780.4	0.00	0.00	
8,800.0	0.00	0.00	8,585.7	415.3	-1,731.3	1,780.4	0.00	0.00	
8,900.0	0.00	0.00	8,685.7	415.3	-1,731.3	1,780.4	0.00	0.00	
9,000.0	0.00	0.00	8,785.7	415.3	-1,731.3	1,780.4	0.00	0.00	
9,100.0	0.00	0.00	8,885.7	415.3	-1,731.3	1,780.4	0.00	0.00	
9,200.0	0.00	0.00	8,985.7	415.3	-1,731.3	1,780.4	0.00	0.00	
9,300.0	0.00	0.00	9,085.7	415.3	-1,731.3	1,780.4	0.00	0.00	
9,400.0	0.00	0.00	9,185.7	415.3	-1,731.3	1,780.4	0.00	0.00	
9,487.3	0.00	0.00	9,273.0	415.3	-1,731.3	1,780.4	0.00	0.00	CAMEO.MBL (SSTVD)
9,500.0	0.00	0.00	9,285.7	415.3	-1,731.3	1,780.4	0.00	0.00	
9,600.0	0.00	0.00	9,385.7	415.3	-1,731.3	1,780.4	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well BATTLEMENT MESA 43B-27 795
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8994.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8994.0usft
<b>Site:</b>	S26-T6S-R95W (26K)	<b>North Reference:</b>	True
<b>Well:</b>	BATTLEMENT MESA 43B-27 795	<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
9,700.0	0.00	0.00	9,485.7	415.3	-1,731.3	1,780.4	0.00	0.00	
9,800.0	0.00	0.00	9,585.7	415.3	-1,731.3	1,780.4	0.00	0.00	
9,900.0	0.00	0.00	9,685.7	415.3	-1,731.3	1,780.4	0.00	0.00	
10,000.0	0.00	0.00	9,785.7	415.3	-1,731.3	1,780.4	0.00	0.00	
10,012.3	0.00	0.00	9,798.0	415.3	-1,731.3	1,780.4	0.00	0.00	ROLLINS.MBL (SSTVD)
10,100.0	0.00	0.00	9,885.7	415.3	-1,731.3	1,780.4	0.00	0.00	
10,162.3	0.00	0.00	9,948.0	415.3	-1,731.3	1,780.4	0.00	0.00	TD at 10162.3 - TD.MBL (SSTVD)

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
B MESA 43B-27 795 PB - hit/miss target - Shape - Circle (radius 50.0)	0.00	0.00	9,948.0	415.3	-1,731.3	14,324,450.00	2,494,686.70	39.407019	-107.975942

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,131.4	6,937.0	OHIO_CREEK.MBL (SSTVD)		0.00		
7,489.1	7,284.0	WILLIAMS_FORK.MBL (SSTVD)		0.00		
8,211.3	7,997.0	TOP_GAS.MBL (SSTVD)		0.00		
9,487.3	9,273.0	CAMEO.MBL (SSTVD)		0.00		
10,012.3	9,798.0	ROLLINS.MBL (SSTVD)		0.00		
10,162.3	9,948.0	TD.MBL (SSTVD)		0.00		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
300.0	300.0	0.0	0.0	Start Build 3.00
767.5	762.9	13.3	-55.4	Start 6876.3 hold at 767.5 MD
7,643.8	7,434.1	402.0	-1,676.0	Start Drop -3.00
8,111.3	7,897.0	415.3	-1,731.3	Start 2051.0 hold at 8111.3 MD
10,162.3	9,948.0	415.3	-1,731.3	TD at 10162.3