



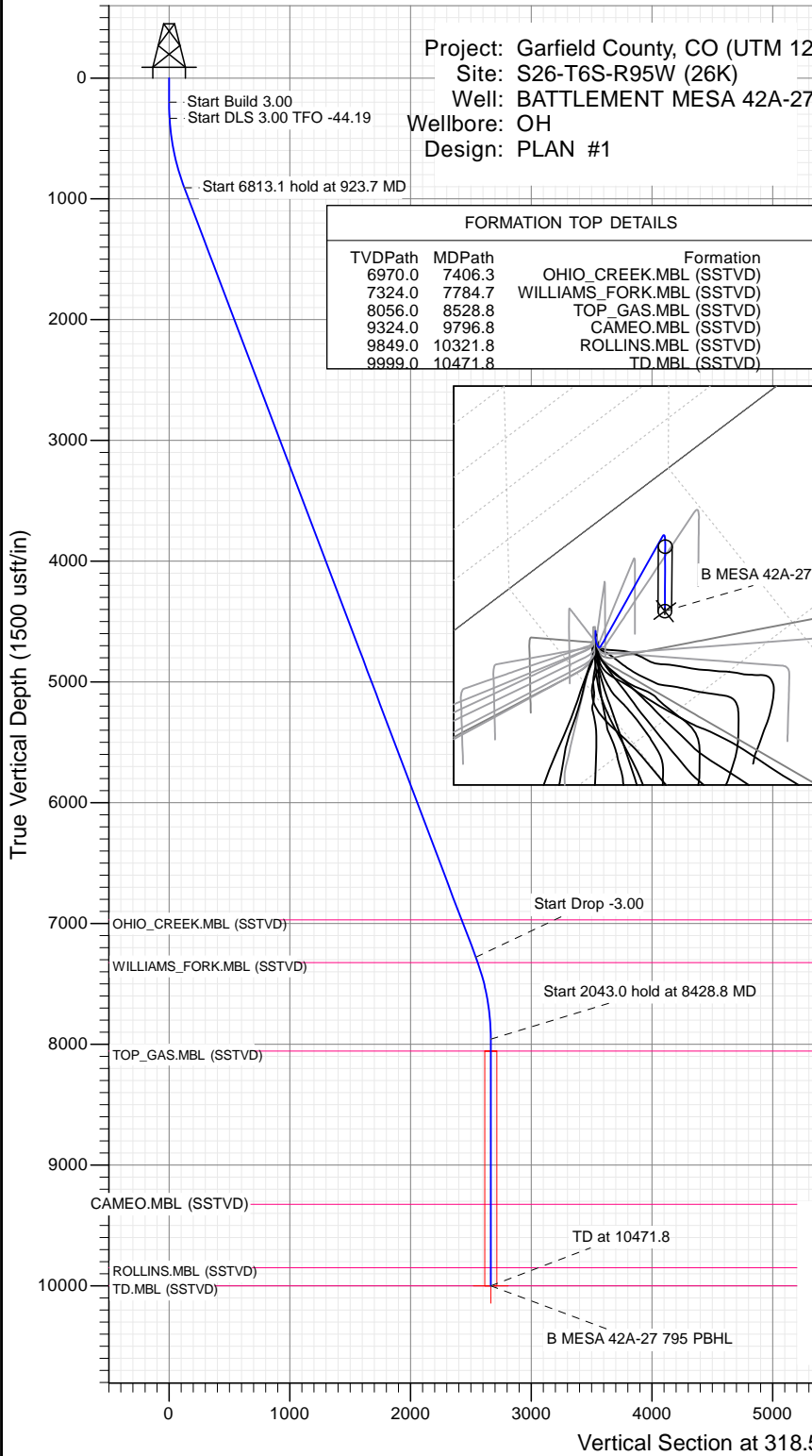
SECTION DETAILS

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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	333.3	4.00	355.00	333.2	4.6	-0.4	3.00	355.00	3.7	
4	923.7	20.76	318.26	908.3	104.0	-72.4	3.00	-44.19	125.9	
5	7736.8	20.76	318.26	7279.0	1905.9	-1680.2	0.00	0.00	2540.8	
6	8428.8	0.00	0.00	7956.0	1998.4	-1762.8	3.00	180.00	2664.8	
7	10471.8	0.00	0.00	9999.0	1998.4	-1762.8	0.00	0.00	2664.8	B MESA 42A-27 795 PBHL

Project: Garfield County, CO (UTM 12)
 Site: S26-T6S-R95W (26K)
 Well: BATTLEMENT MESA 42A-27
 Wellbore: OH
 Design: PLAN #1

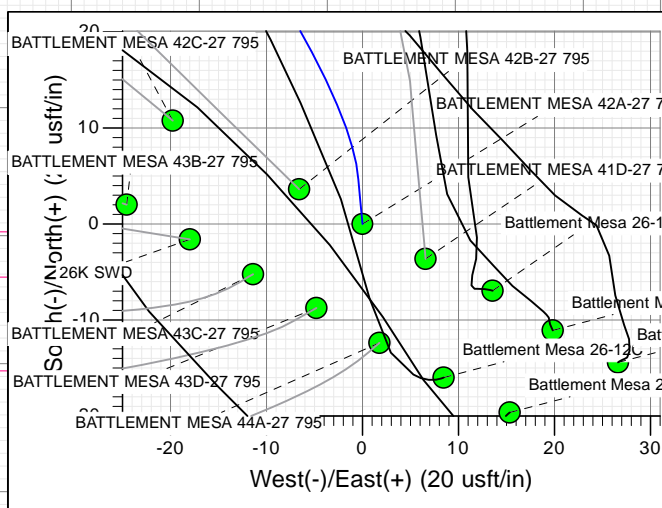
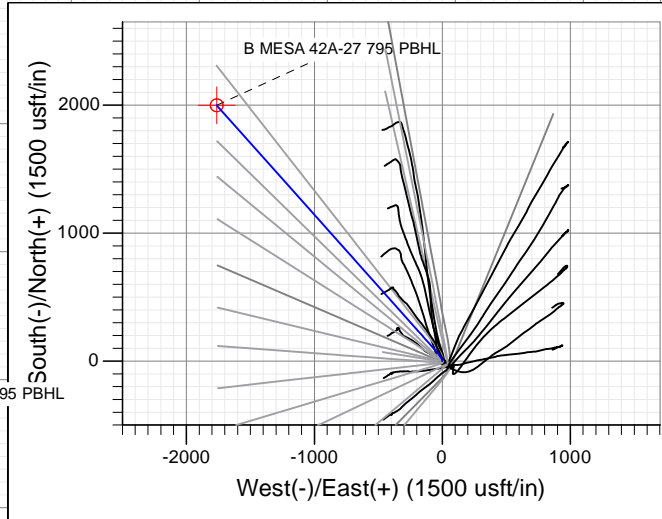
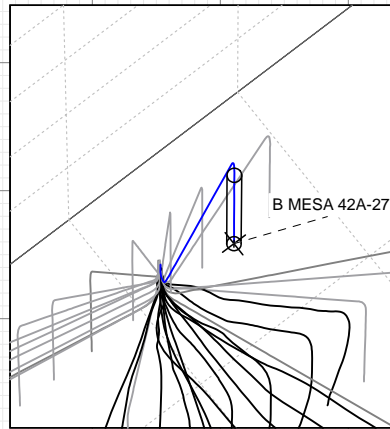
PLAN #1
 BATTLEMENT MESA 42A-27 795
 15XXX; LR
 30 KB @ 8994.0ust
 Ground Level @ 8964.0
 NAD 1927 - Western US
 Well BATTLEMENT MESA 42A-27 795, True North

Type	Target	TD	No Target (Freehand)	Azimuth	Origin Type	N/S	E/W	From TVD
Name	B MESA 42A-27 795 PBHL	TVD	+N/-S	+E/-W	Latitude	Longitude		
		9999.0	1998.4	-1762.8	39.411358	-107.975967		



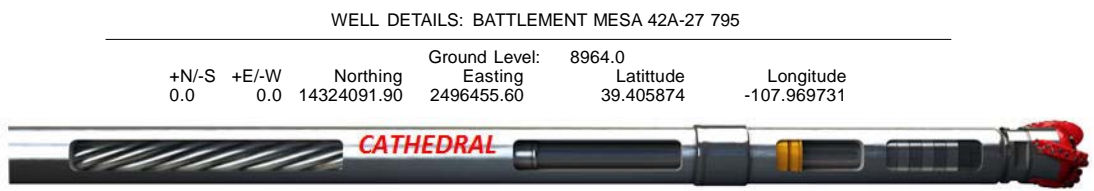
FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
6970.0	7406.3	OHIO_CREEK.MBL (SSTVD)
7324.0	7784.7	WILLIAMS_FORK.MBL (SSTVD)
8056.0	8528.8	TOP_GAS.MBL (SSTVD)
9324.0	9796.8	CAMEO.MBL (SSTVD)
9849.0	10321.8	ROLLINS.MBL (SSTVD)
9999.0	10471.8	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 42A-27 795

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14324091.90	2496455.60	39.405874	-107.969731

Ground Level: 8964.0

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BATTLEMENT MESA 42A-27 795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8994.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8994.0usft
Site:	S26-T6S-R95W (26K)	North Reference:	True
Well:	BATTLEMENT MESA 42A-27 795	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Project	Garfield County, CO (UTM 12N)		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	S26-T6S-R95W (26K)				
Site Position:		Northing:	14,324,088.50 usft	Latitude:	39.405864
From:	Map	Easting:	2,496,462.30 usft	Longitude:	-107.969708
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	1.92 °

Well	BATTLEMENT MESA 42A-27 795					
Well Position	+N/-S	0.0 usft	Northing:	14,324,091.90 usft	Latitude:	39.405874
	+E/-W	0.0 usft	Easting:	2,496,455.60 usft	Longitude:	-107.969731
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,964.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	11/6/2015	9.47	65.63	51,905

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	318.59

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	
333.3	4.00	355.00	333.2	4.6	-0.4	3.00	3.00	0.00	355.00	
923.7	20.76	318.26	908.3	104.0	-72.4	3.00	2.84	-6.22	-44.19	
7,736.8	20.76	318.26	7,279.0	1,905.9	-1,680.2	0.00	0.00	0.00	0.00	
8,428.8	0.00	0.00	7,956.0	1,998.4	-1,762.8	3.00	-3.00	0.00	180.00	
10,471.8	0.00	0.00	9,999.0	1,998.4	-1,762.8	0.00	0.00	0.00	0.00	B MESA 42A-27 795 I

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BATTLEMENT MESA 42A-27 795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8994.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8994.0usft
Site:	S26-T6S-R95W (26K)	North Reference:	True
Well:	BATTLEMENT MESA 42A-27 795	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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	Start Build 3.00
300.0	3.00	355.00	300.0	2.6	-0.2	2.1	3.00	3.00	
333.3	4.00	355.00	333.2	4.6	-0.4	3.7	3.00	3.00	Start DLS 3.00 TFO -44.19
400.0	5.61	340.59	399.7	10.0	-1.7	8.6	3.00	2.41	
500.0	8.35	330.26	498.9	20.9	-6.9	20.3	3.00	2.74	
600.0	11.22	325.09	597.4	35.2	-16.1	37.1	3.00	2.87	
700.0	14.14	322.02	695.0	52.8	-29.2	58.9	3.00	2.92	
800.0	17.09	319.99	791.3	73.7	-46.1	85.8	3.00	2.95	
900.0	20.06	318.54	886.1	97.8	-67.0	117.7	3.00	2.96	
923.7	20.76	318.26	908.3	104.0	-72.4	125.9	3.00	2.97	Start 6813.1 hold at 923.7 MD
1,000.0	20.76	318.26	979.6	124.2	-90.4	153.0	0.00	0.00	
1,100.0	20.76	318.26	1,073.1	150.6	-114.0	188.4	0.00	0.00	
1,200.0	20.76	318.26	1,166.7	177.1	-137.6	223.9	0.00	0.00	
1,300.0	20.76	318.26	1,260.2	203.5	-161.2	259.3	0.00	0.00	
1,400.0	20.76	318.26	1,353.7	230.0	-184.8	294.7	0.00	0.00	
1,500.0	20.76	318.26	1,447.2	256.4	-208.4	330.2	0.00	0.00	
1,600.0	20.76	318.26	1,540.7	282.9	-232.0	365.6	0.00	0.00	
1,700.0	20.76	318.26	1,634.2	309.3	-255.6	401.1	0.00	0.00	
1,800.0	20.76	318.26	1,727.7	335.8	-279.2	436.5	0.00	0.00	
1,900.0	20.76	318.26	1,821.2	362.2	-302.8	472.0	0.00	0.00	
2,000.0	20.76	318.26	1,914.7	388.7	-326.4	507.4	0.00	0.00	
2,100.0	20.76	318.26	2,008.2	415.1	-350.0	542.9	0.00	0.00	
2,200.0	20.76	318.26	2,101.7	441.6	-373.6	578.3	0.00	0.00	
2,300.0	20.76	318.26	2,195.2	468.0	-397.2	613.7	0.00	0.00	
2,400.0	20.76	318.26	2,288.7	494.5	-420.8	649.2	0.00	0.00	
2,500.0	20.76	318.26	2,382.2	520.9	-444.4	684.6	0.00	0.00	
2,600.0	20.76	318.26	2,475.8	547.4	-468.0	720.1	0.00	0.00	
2,700.0	20.76	318.26	2,569.3	573.8	-491.6	755.5	0.00	0.00	
2,800.0	20.76	318.26	2,662.8	600.2	-515.2	791.0	0.00	0.00	
2,900.0	20.76	318.26	2,756.3	626.7	-538.8	826.4	0.00	0.00	
3,000.0	20.76	318.26	2,849.8	653.1	-562.4	861.9	0.00	0.00	
3,100.0	20.76	318.26	2,943.3	679.6	-586.0	897.3	0.00	0.00	
3,200.0	20.76	318.26	3,036.8	706.0	-609.6	932.7	0.00	0.00	
3,300.0	20.76	318.26	3,130.3	732.5	-633.2	968.2	0.00	0.00	
3,400.0	20.76	318.26	3,223.8	758.9	-656.8	1,003.6	0.00	0.00	
3,500.0	20.76	318.26	3,317.3	785.4	-680.4	1,039.1	0.00	0.00	
3,600.0	20.76	318.26	3,410.8	811.8	-704.0	1,074.5	0.00	0.00	
3,700.0	20.76	318.26	3,504.3	838.3	-727.6	1,110.0	0.00	0.00	
3,800.0	20.76	318.26	3,597.8	864.7	-751.2	1,145.4	0.00	0.00	
3,900.0	20.76	318.26	3,691.4	891.2	-774.8	1,180.9	0.00	0.00	
4,000.0	20.76	318.26	3,784.9	917.6	-798.4	1,216.3	0.00	0.00	
4,100.0	20.76	318.26	3,878.4	944.1	-822.0	1,251.7	0.00	0.00	
4,200.0	20.76	318.26	3,971.9	970.5	-845.6	1,287.2	0.00	0.00	
4,300.0	20.76	318.26	4,065.4	997.0	-869.2	1,322.6	0.00	0.00	
4,400.0	20.76	318.26	4,158.9	1,023.4	-892.8	1,358.1	0.00	0.00	
4,500.0	20.76	318.26	4,252.4	1,049.9	-916.4	1,393.5	0.00	0.00	
4,600.0	20.76	318.26	4,345.9	1,076.3	-940.0	1,429.0	0.00	0.00	
4,700.0	20.76	318.26	4,439.4	1,102.8	-963.6	1,464.4	0.00	0.00	
4,800.0	20.76	318.26	4,532.9	1,129.2	-987.2	1,499.9	0.00	0.00	
4,900.0	20.76	318.26	4,626.4	1,155.6	-1,010.8	1,535.3	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BATTLEMENT MESA 42A-27 795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8994.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8994.0usft
Site:	S26-T6S-R95W (26K)	North Reference:	True
Well:	BATTLEMENT MESA 42A-27 795	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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
5,000.0	20.76	318.26	4,719.9	1,182.1	-1,034.4	1,570.7	0.00	0.00	
5,100.0	20.76	318.26	4,813.4	1,208.5	-1,058.0	1,606.2	0.00	0.00	
5,200.0	20.76	318.26	4,907.0	1,235.0	-1,081.6	1,641.6	0.00	0.00	
5,300.0	20.76	318.26	5,000.5	1,261.4	-1,105.2	1,677.1	0.00	0.00	
5,400.0	20.76	318.26	5,094.0	1,287.9	-1,128.8	1,712.5	0.00	0.00	
5,500.0	20.76	318.26	5,187.5	1,314.3	-1,152.4	1,748.0	0.00	0.00	
5,600.0	20.76	318.26	5,281.0	1,340.8	-1,176.0	1,783.4	0.00	0.00	
5,700.0	20.76	318.26	5,374.5	1,367.2	-1,199.6	1,818.9	0.00	0.00	
5,800.0	20.76	318.26	5,468.0	1,393.7	-1,223.2	1,854.3	0.00	0.00	
5,900.0	20.76	318.26	5,561.5	1,420.1	-1,246.8	1,889.7	0.00	0.00	
6,000.0	20.76	318.26	5,655.0	1,446.6	-1,270.4	1,925.2	0.00	0.00	
6,100.0	20.76	318.26	5,748.5	1,473.0	-1,294.0	1,960.6	0.00	0.00	
6,200.0	20.76	318.26	5,842.0	1,499.5	-1,317.6	1,996.1	0.00	0.00	
6,300.0	20.76	318.26	5,935.5	1,525.9	-1,341.2	2,031.5	0.00	0.00	
6,400.0	20.76	318.26	6,029.0	1,552.4	-1,364.8	2,067.0	0.00	0.00	
6,500.0	20.76	318.26	6,122.5	1,578.8	-1,388.4	2,102.4	0.00	0.00	
6,600.0	20.76	318.26	6,216.1	1,605.3	-1,411.9	2,137.9	0.00	0.00	
6,700.0	20.76	318.26	6,309.6	1,631.7	-1,435.5	2,173.3	0.00	0.00	
6,800.0	20.76	318.26	6,403.1	1,658.2	-1,459.1	2,208.7	0.00	0.00	
6,900.0	20.76	318.26	6,496.6	1,684.6	-1,482.7	2,244.2	0.00	0.00	
7,000.0	20.76	318.26	6,590.1	1,711.0	-1,506.3	2,279.6	0.00	0.00	
7,100.0	20.76	318.26	6,683.6	1,737.5	-1,529.9	2,315.1	0.00	0.00	
7,200.0	20.76	318.26	6,777.1	1,763.9	-1,553.5	2,350.5	0.00	0.00	
7,300.0	20.76	318.26	6,870.6	1,790.4	-1,577.1	2,386.0	0.00	0.00	
7,400.0	20.76	318.26	6,964.1	1,816.8	-1,600.7	2,421.4	0.00	0.00	
7,406.3	20.76	318.26	6,970.0	1,818.5	-1,602.2	2,423.6	0.00	0.00	OHIO_CREEK.MBL (SSTVD)
7,500.0	20.76	318.26	7,057.6	1,843.3	-1,624.3	2,456.9	0.00	0.00	
7,600.0	20.76	318.26	7,151.1	1,869.7	-1,647.9	2,492.3	0.00	0.00	
7,700.0	20.76	318.26	7,244.6	1,896.2	-1,671.5	2,527.8	0.00	0.00	
7,736.8	20.76	318.26	7,279.0	1,905.9	-1,680.2	2,540.8	0.00	0.00	Start Drop -3.00
7,784.7	19.32	318.26	7,324.0	1,918.2	-1,691.1	2,557.2	3.00	-3.00	WILLIAMS_FORK.MBL (SSTVD)
7,800.0	18.86	318.26	7,338.5	1,921.9	-1,694.5	2,562.2	3.00	-3.00	
7,900.0	15.86	318.26	7,433.9	1,944.2	-1,714.3	2,592.1	3.00	-3.00	
8,000.0	12.86	318.26	7,530.8	1,962.7	-1,730.9	2,616.9	3.00	-3.00	
8,100.0	9.86	318.26	7,628.8	1,977.4	-1,744.0	2,636.6	3.00	-3.00	
8,200.0	6.86	318.26	7,727.8	1,988.2	-1,753.7	2,651.1	3.00	-3.00	
8,300.0	3.86	318.26	7,827.3	1,995.2	-1,759.9	2,660.4	3.00	-3.00	
8,400.0	0.86	318.26	7,927.2	1,998.3	-1,762.6	2,664.6	3.00	-3.00	
8,428.8	0.00	0.00	7,956.0	1,998.4	-1,762.8	2,664.8	3.00	-3.00	Start 2043.0 hold at 8428.8 MD
8,500.0	0.00	0.00	8,027.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
8,528.8	0.00	0.00	8,056.0	1,998.4	-1,762.8	2,664.8	0.00	0.00	TOP_GAS.MBL (SSTVD)
8,600.0	0.00	0.00	8,127.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
8,700.0	0.00	0.00	8,227.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
8,800.0	0.00	0.00	8,327.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
8,900.0	0.00	0.00	8,427.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
9,000.0	0.00	0.00	8,527.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
9,100.0	0.00	0.00	8,627.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
9,200.0	0.00	0.00	8,727.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
9,300.0	0.00	0.00	8,827.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
9,400.0	0.00	0.00	8,927.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
9,500.0	0.00	0.00	9,027.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
9,600.0	0.00	0.00	9,127.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well BATTLEMENT MESA 42A-27 795
Company: Caerus Oil & Gas	TVD Reference: 30' KB @ 8994.0usft
Project: Garfield County, CO (UTM 12N)	MD Reference: 30' KB @ 8994.0usft
Site: S26-T6S-R95W (26K)	North Reference: True
Well: BATTLEMENT MESA 42A-27 795	Survey Calculation Method: Minimum Curvature
Wellbore: OH	
Design: 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	9,227.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
9,796.8	0.00	0.00	9,324.0	1,998.4	-1,762.8	2,664.8	0.00	0.00	CAMEO.MBL (SSTVD)
9,800.0	0.00	0.00	9,327.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
9,900.0	0.00	0.00	9,427.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
10,000.0	0.00	0.00	9,527.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
10,100.0	0.00	0.00	9,627.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
10,200.0	0.00	0.00	9,727.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
10,300.0	0.00	0.00	9,827.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
10,321.8	0.00	0.00	9,849.0	1,998.4	-1,762.8	2,664.8	0.00	0.00	ROLLINS.MBL (SSTVD)
10,400.0	0.00	0.00	9,927.2	1,998.4	-1,762.8	2,664.8	0.00	0.00	
10,471.8	0.00	0.00	9,999.0	1,998.4	-1,762.8	2,664.8	0.00	0.00	TD at 10471.8 - 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 42A-27 795 PB - hit/miss target - Shape - plan hits target center - Circle (radius 50.0)	0.00	0.00	9,999.0	1,998.4	-1,762.8	14,326,030.00	2,494,626.70	39.411358	-107.975967

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,406.3	6,970.0	OHIO_CREEK.MBL (SSTVD)		0.00	
7,784.7	7,324.0	WILLIAMS_FORK.MBL (SSTVD)		0.00	
8,528.8	8,056.0	TOP_GAS.MBL (SSTVD)		0.00	
9,796.8	9,324.0	CAMEO.MBL (SSTVD)		0.00	
10,321.8	9,849.0	ROLLINS.MBL (SSTVD)		0.00	
10,471.8	9,999.0	TD.MBL (SSTVD)		0.00	

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	Start Build 3.00
333.3	333.2	4.6	-0.4	Start DLS 3.00 TFO -44.19
923.7	908.3	104.0	-72.4	Start 6813.1 hold at 923.7 MD
7,736.8	7,279.0	1,905.9	-1,680.2	Start Drop -3.00
8,428.8	7,956.0	1,998.4	-1,762.8	Start 2043.0 hold at 8428.8 MD
10,471.8	9,999.0	1,998.4	-1,762.8	TD at 10471.8