



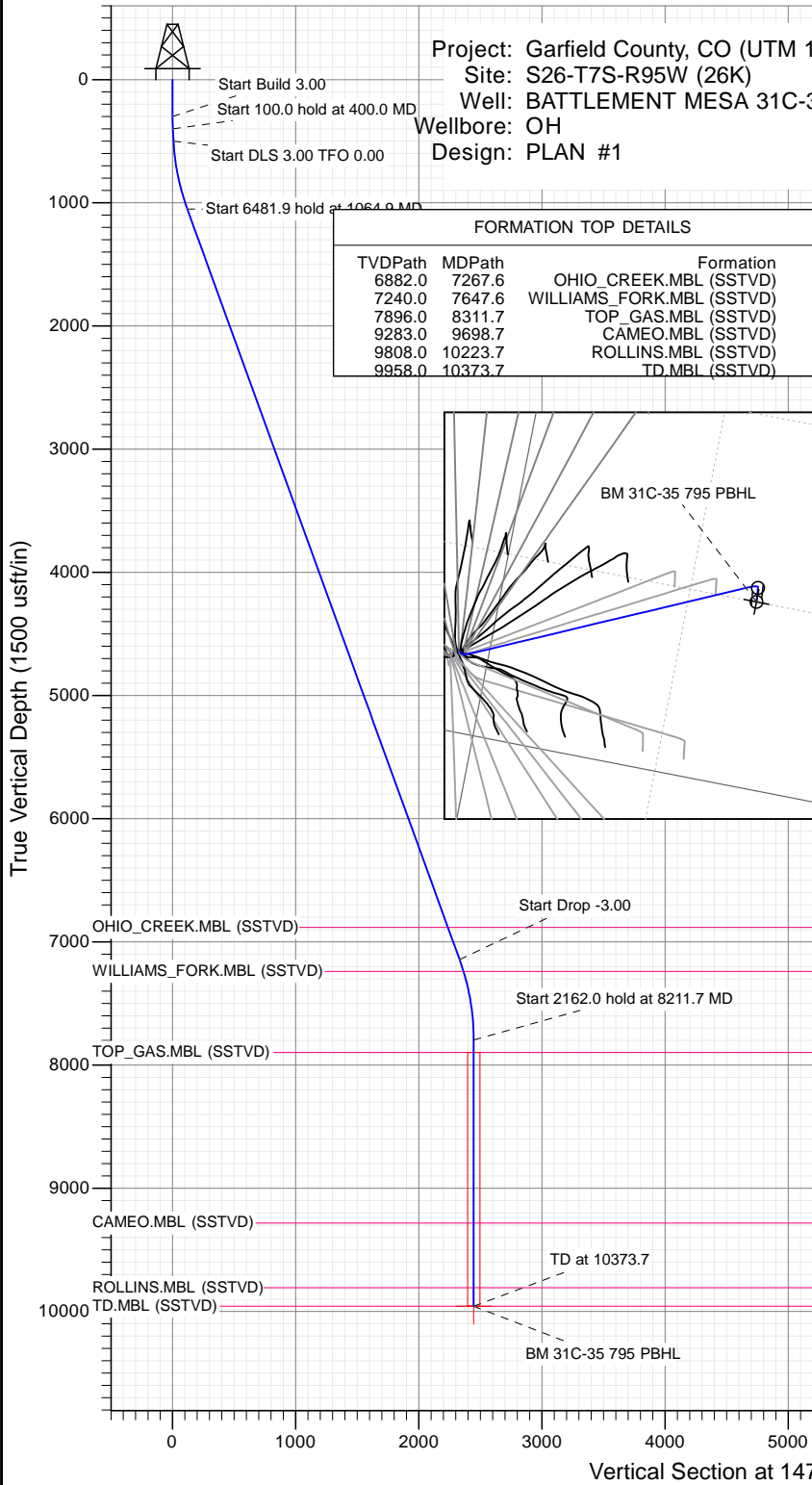
SECTION DETAILS

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	400.0	3.00	147.47	400.0	-2.2	1.4	3.00	147.47	2.6	
4	500.0	3.00	147.47	499.8	-6.6	4.2	0.00	0.00	7.9	
5	1064.9	19.95	147.47	1051.4	-101.0	64.4	3.00	0.00	119.8	
6	7546.8	19.95	147.47	7144.4	-1965.5	1253.6	0.00	0.00	2331.2	
7	8211.7	0.00	0.00	7796.0	-2062.1	1315.2	3.00	180.00	2445.8	
8	10373.7	0.00	0.00	9958.0	-2062.1	1315.2	0.00	0.00	2445.8	BM 31C-35 795 PBHL

Project: Garfield County, CO (UTM 12
 Site: S26-T7S-R95W (26K)
 Well: BATTLEMENT MESA 31C-35
 Wellbore: OH
 Design: PLAN #1

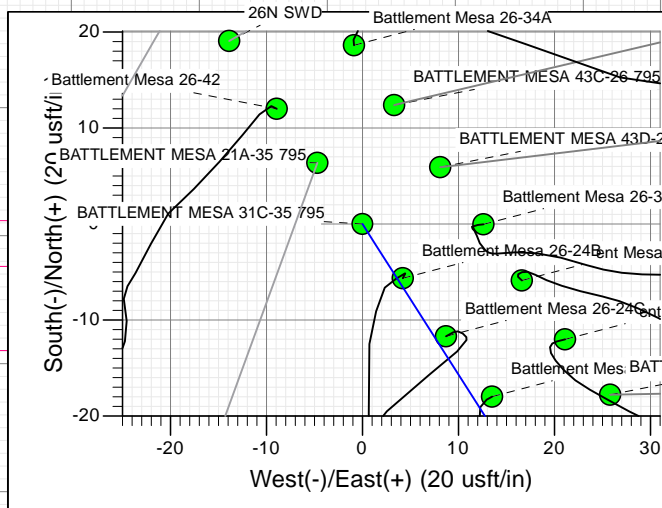
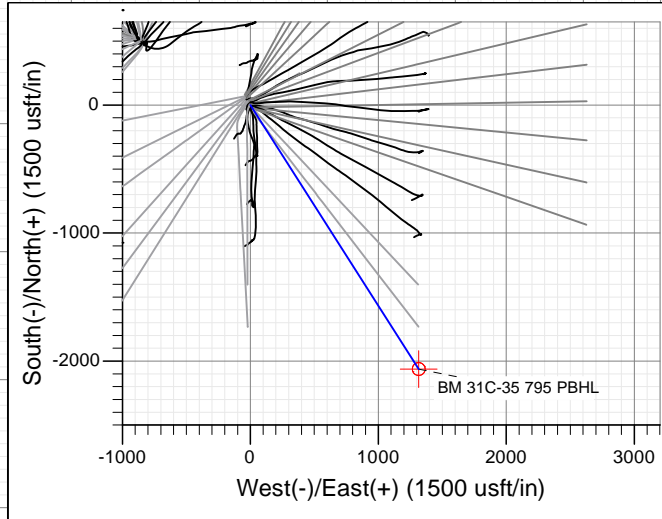
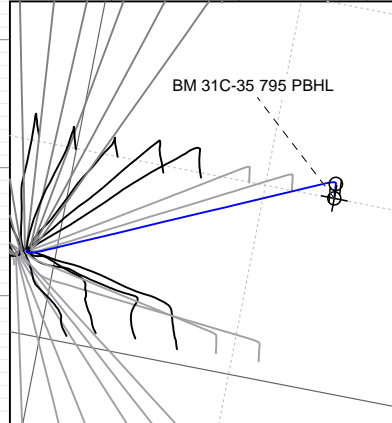
PLAN #1
 BATTLEMENT MESA 31C-35 795
 15XXX; LR
 30 KB @ 8964.0usft
 Ground Level @ 8964.0
 NAD 1927 - Western US
 Well BATTLEMENT MESA 31C-35 795, True North

Name	Type	Target	TD	No Target (Freehand)	Azimuth	Origin Type	Slot	N/S	E/W	From TVD
BM 31C-35 795 PBHL					147.47			0.0	0.0	0.0
					9958.0			+N-S	+E/W	Latitude
								-2062.1	1315.2	39.398772
										Longitude
										-107.961910



FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
6882.0	7267.6	OHIO_CREEK.MBL (SSTVD)
7240.0	7647.6	WILLIAMS_FORK.MBL (SSTVD)
7896.0	8311.7	TOP_GAS.MBL (SSTVD)
9283.0	9698.7	CAMEO.MBL (SSTVD)
9808.0	10223.7	ROLLINS.MBL (SSTVD)
9958.0	10373.7	TD.MBL (SSTVD)



↑ T
 ↓ M
 Azimuths to True North
 Magnetic North: 9.45°
 Magnetic Field
 Strength: 51901.0snT
 Dip Angle: 65.63°
 Date: 11/12/2015
 Model: HDGM

CASING DETAILS
 No casing data is available



WELL DETAILS: BATTLEMENT MESA 31C-35 795

+N-S	+E-W	Northing	Ground Level:	8964.0	Latitude	Longitude
0.0	0.0	14323596.30	Easting	2497368.70	39.404431	-107.966562

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well BATTLEMENT MESA 31C-35 795
Company: Caerus Oil & Gas	TVD Reference: 30' KB @ 8994.0usft
Project: Garfield County, CO (UTM 12N)	MD Reference: 30' KB @ 8994.0usft
Site: S26-T7S-R95W (26K)	North Reference: True
Well: BATTLEMENT MESA 31C-35 795	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-T7S-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 31C-35 795			
Well Position	+N/-S 0.0 usft	Northing: 14,323,596.30 usft	Latitude: 39.404431
	+E/-W 0.0 usft	Easting: 2,497,368.70 usft	Longitude: -107.966562
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
	HDGM	11/12/2015	(°) 9.45	(°) 65.63	(nT) 51,901

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	147.47

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	
400.0	3.00	147.47	400.0	-2.2	1.4	3.00	3.00	0.00	147.47	
500.0	3.00	147.47	499.8	-6.6	4.2	0.00	0.00	0.00	0.00	
1,064.9	19.95	147.47	1,051.4	-101.0	64.4	3.00	3.00	0.00	0.00	
7,546.8	19.95	147.47	7,144.4	-1,965.5	1,253.6	0.00	0.00	0.00	0.00	
8,211.7	0.00	0.00	7,796.0	-2,062.1	1,315.2	3.00	-3.00	0.00	180.00	
10,373.7	0.00	0.00	9,958.0	-2,062.1	1,315.2	0.00	0.00	0.00	0.00	BM 31C-35 795 PBHI

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BATTLEMENT MESA 31C-35 795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8994.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8994.0usft
Site:	S26-T7S-R95W (26K)	North Reference:	True
Well:	BATTLEMENT MESA 31C-35 795	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	
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	147.47	400.0	-2.2	1.4	2.6	3.00	3.00	Start 100.0 hold at 400.0 MD
500.0	3.00	147.47	499.8	-6.6	4.2	7.9	0.00	0.00	Start DLS 3.00 TFO 0.00
600.0	6.00	147.47	599.5	-13.2	8.4	15.7	3.00	3.00	
700.0	9.00	147.47	698.6	-24.2	15.5	28.7	3.00	3.00	
800.0	12.00	147.47	796.9	-39.6	25.3	47.0	3.00	3.00	
900.0	15.00	147.47	894.2	-59.3	37.8	70.3	3.00	3.00	
1,000.0	18.00	147.47	990.0	-83.2	53.1	98.7	3.00	3.00	
1,064.9	19.95	147.47	1,051.4	-101.0	64.4	119.8	3.00	3.00	Start 6481.9 hold at 1064.9 MD
1,100.0	19.95	147.47	1,084.4	-111.1	70.9	131.8	0.00	0.00	
1,200.0	19.95	147.47	1,178.4	-139.9	89.2	165.9	0.00	0.00	
1,300.0	19.95	147.47	1,272.4	-168.6	107.6	200.0	0.00	0.00	
1,400.0	19.95	147.47	1,366.4	-197.4	125.9	234.1	0.00	0.00	
1,500.0	19.95	147.47	1,460.4	-226.2	144.2	268.3	0.00	0.00	
1,600.0	19.95	147.47	1,554.4	-254.9	162.6	302.4	0.00	0.00	
1,700.0	19.95	147.47	1,648.4	-283.7	180.9	336.5	0.00	0.00	
1,800.0	19.95	147.47	1,742.4	-312.5	199.3	370.6	0.00	0.00	
1,900.0	19.95	147.47	1,836.4	-341.2	217.6	404.7	0.00	0.00	
2,000.0	19.95	147.47	1,930.4	-370.0	236.0	438.8	0.00	0.00	
2,100.0	19.95	147.47	2,024.4	-398.7	254.3	473.0	0.00	0.00	
2,200.0	19.95	147.47	2,118.4	-427.5	272.7	507.1	0.00	0.00	
2,300.0	19.95	147.47	2,212.4	-456.3	291.0	541.2	0.00	0.00	
2,400.0	19.95	147.47	2,306.4	-485.0	309.4	575.3	0.00	0.00	
2,500.0	19.95	147.47	2,400.4	-513.8	327.7	609.4	0.00	0.00	
2,600.0	19.95	147.47	2,494.4	-542.6	346.1	643.5	0.00	0.00	
2,700.0	19.95	147.47	2,588.4	-571.3	364.4	677.7	0.00	0.00	
2,800.0	19.95	147.47	2,682.4	-600.1	382.7	711.8	0.00	0.00	
2,900.0	19.95	147.47	2,776.4	-628.9	401.1	745.9	0.00	0.00	
3,000.0	19.95	147.47	2,870.4	-657.6	419.4	780.0	0.00	0.00	
3,100.0	19.95	147.47	2,964.4	-686.4	437.8	814.1	0.00	0.00	
3,200.0	19.95	147.47	3,058.4	-715.2	456.1	848.2	0.00	0.00	
3,300.0	19.95	147.47	3,152.4	-743.9	474.5	882.4	0.00	0.00	
3,400.0	19.95	147.47	3,246.4	-772.7	492.8	916.5	0.00	0.00	
3,500.0	19.95	147.47	3,340.4	-801.4	511.2	950.6	0.00	0.00	
3,600.0	19.95	147.47	3,434.4	-830.2	529.5	984.7	0.00	0.00	
3,700.0	19.95	147.47	3,528.4	-859.0	547.9	1,018.8	0.00	0.00	
3,800.0	19.95	147.47	3,622.4	-887.7	566.2	1,052.9	0.00	0.00	
3,900.0	19.95	147.47	3,716.4	-916.5	584.6	1,087.1	0.00	0.00	
4,000.0	19.95	147.47	3,810.4	-945.3	602.9	1,121.2	0.00	0.00	
4,100.0	19.95	147.47	3,904.4	-974.0	621.2	1,155.3	0.00	0.00	
4,200.0	19.95	147.47	3,998.4	-1,002.8	639.6	1,189.4	0.00	0.00	
4,300.0	19.95	147.47	4,092.4	-1,031.6	657.9	1,223.5	0.00	0.00	
4,400.0	19.95	147.47	4,186.4	-1,060.3	676.3	1,257.6	0.00	0.00	
4,500.0	19.95	147.47	4,280.4	-1,089.1	694.6	1,291.8	0.00	0.00	
4,600.0	19.95	147.47	4,374.4	-1,117.9	713.0	1,325.9	0.00	0.00	
4,700.0	19.95	147.47	4,468.4	-1,146.6	731.3	1,360.0	0.00	0.00	
4,800.0	19.95	147.47	4,562.4	-1,175.4	749.7	1,394.1	0.00	0.00	
4,900.0	19.95	147.47	4,656.4	-1,204.1	768.0	1,428.2	0.00	0.00	
5,000.0	19.95	147.47	4,750.4	-1,232.9	786.4	1,462.3	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BATTLEMENT MESA 31C-35 795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8994.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8994.0usft
Site:	S26-T7S-R95W (26K)	North Reference:	True
Well:	BATTLEMENT MESA 31C-35 795	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
5,100.0	19.95	147.47	4,844.4	-1,261.7	804.7	1,496.5	0.00	0.00	
5,200.0	19.95	147.47	4,938.4	-1,290.4	823.0	1,530.6	0.00	0.00	
5,300.0	19.95	147.47	5,032.4	-1,319.2	841.4	1,564.7	0.00	0.00	
5,400.0	19.95	147.47	5,126.4	-1,348.0	859.7	1,598.8	0.00	0.00	
5,500.0	19.95	147.47	5,220.4	-1,376.7	878.1	1,632.9	0.00	0.00	
5,600.0	19.95	147.47	5,314.4	-1,405.5	896.4	1,667.0	0.00	0.00	
5,700.0	19.95	147.47	5,408.4	-1,434.3	914.8	1,701.2	0.00	0.00	
5,800.0	19.95	147.47	5,502.4	-1,463.0	933.1	1,735.3	0.00	0.00	
5,900.0	19.95	147.47	5,596.4	-1,491.8	951.5	1,769.4	0.00	0.00	
6,000.0	19.95	147.47	5,690.4	-1,520.6	969.8	1,803.5	0.00	0.00	
6,100.0	19.95	147.47	5,784.4	-1,549.3	988.2	1,837.6	0.00	0.00	
6,200.0	19.95	147.47	5,878.4	-1,578.1	1,006.5	1,871.7	0.00	0.00	
6,300.0	19.95	147.47	5,972.4	-1,606.8	1,024.9	1,905.9	0.00	0.00	
6,400.0	19.95	147.47	6,066.4	-1,635.6	1,043.2	1,940.0	0.00	0.00	
6,500.0	19.95	147.47	6,160.4	-1,664.4	1,061.5	1,974.1	0.00	0.00	
6,600.0	19.95	147.47	6,254.4	-1,693.1	1,079.9	2,008.2	0.00	0.00	
6,700.0	19.95	147.47	6,348.4	-1,721.9	1,098.2	2,042.3	0.00	0.00	
6,800.0	19.95	147.47	6,442.4	-1,750.7	1,116.6	2,076.4	0.00	0.00	
6,900.0	19.95	147.47	6,536.4	-1,779.4	1,134.9	2,110.6	0.00	0.00	
7,000.0	19.95	147.47	6,630.4	-1,808.2	1,153.3	2,144.7	0.00	0.00	
7,100.0	19.95	147.47	6,724.4	-1,837.0	1,171.6	2,178.8	0.00	0.00	
7,200.0	19.95	147.47	6,818.4	-1,865.7	1,190.0	2,212.9	0.00	0.00	
7,267.6	19.95	147.47	6,882.0	-1,885.2	1,202.4	2,236.0	0.00	0.00	OHIO_CREEK.MBL (SSTVD)
7,300.0	19.95	147.47	6,912.4	-1,894.5	1,208.3	2,247.0	0.00	0.00	
7,400.0	19.95	147.47	7,006.4	-1,923.3	1,226.7	2,281.1	0.00	0.00	
7,500.0	19.95	147.47	7,100.4	-1,952.0	1,245.0	2,315.3	0.00	0.00	
7,546.8	19.95	147.47	7,144.4	-1,965.5	1,253.6	2,331.2	0.00	0.00	Start Drop -3.00
7,600.0	18.35	147.47	7,194.7	-1,980.2	1,263.0	2,348.7	3.00	-3.00	
7,647.6	16.93	147.47	7,240.0	-1,992.3	1,270.7	2,363.1	3.00	-3.00	WILLIAMS_FORK.MBL (SSTVD)
7,700.0	15.35	147.47	7,290.4	-2,004.6	1,278.6	2,377.7	3.00	-3.00	
7,800.0	12.35	147.47	7,387.4	-2,024.8	1,291.4	2,401.6	3.00	-3.00	
7,900.0	9.35	147.47	7,485.6	-2,040.7	1,301.6	2,420.4	3.00	-3.00	
8,000.0	6.35	147.47	7,584.7	-2,052.2	1,308.9	2,434.1	3.00	-3.00	
8,100.0	3.35	147.47	7,684.3	-2,059.3	1,313.5	2,442.5	3.00	-3.00	
8,200.0	0.35	147.47	7,784.3	-2,062.1	1,315.2	2,445.8	3.00	-3.00	
8,211.7	0.00	0.00	7,796.0	-2,062.1	1,315.2	2,445.8	3.00	-3.00	Start 2162.0 hold at 8211.7 MD
8,300.0	0.00	0.00	7,884.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
8,311.7	0.00	0.00	7,896.0	-2,062.1	1,315.2	2,445.8	0.00	0.00	TOP_GAS.MBL (SSTVD)
8,400.0	0.00	0.00	7,984.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
8,500.0	0.00	0.00	8,084.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
8,600.0	0.00	0.00	8,184.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
8,700.0	0.00	0.00	8,284.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
8,800.0	0.00	0.00	8,384.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
8,900.0	0.00	0.00	8,484.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,000.0	0.00	0.00	8,584.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,100.0	0.00	0.00	8,684.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,200.0	0.00	0.00	8,784.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,300.0	0.00	0.00	8,884.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,400.0	0.00	0.00	8,984.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,500.0	0.00	0.00	9,084.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,600.0	0.00	0.00	9,184.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,698.7	0.00	0.00	9,283.0	-2,062.1	1,315.2	2,445.8	0.00	0.00	CAMEO.MBL (SSTVD)

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BATTLEMENT MESA 31C-35 795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8994.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8994.0usft
Site:	S26-T7S-R95W (26K)	North Reference:	True
Well:	BATTLEMENT MESA 31C-35 795	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	9,284.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,800.0	0.00	0.00	9,384.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
9,900.0	0.00	0.00	9,484.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
10,000.0	0.00	0.00	9,584.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
10,100.0	0.00	0.00	9,684.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
10,200.0	0.00	0.00	9,784.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
10,223.7	0.00	0.00	9,808.0	-2,062.1	1,315.2	2,445.8	0.00	0.00	ROLLINS.MBL (SSTVD)
10,300.0	0.00	0.00	9,884.3	-2,062.1	1,315.2	2,445.8	0.00	0.00	
10,373.7	0.00	0.00	9,958.0	-2,062.1	1,315.2	2,445.8	0.00	0.00	TD at 10373.7 - TD.MBL (SSTVD) - BM 31C-35

Targets											
Target Name	- hit/miss target	- Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BM 31C-35 795 PBHL			0.00	0.00	9,958.0	-2,062.1	1,315.2	14,321,579.60	2,498,752.50	39.398772	-107.961910
- plan hits target center											
- Circle (radius 50.0)											

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,267.6	6,882.0	OHIO_CREEK.MBL (SSTVD)		0.00	
7,647.6	7,240.0	WILLIAMS_FORK.MBL (SSTVD)		0.00	
8,311.7	7,896.0	TOP_GAS.MBL (SSTVD)		0.00	
9,698.7	9,283.0	CAMEO.MBL (SSTVD)		0.00	
10,223.7	9,808.0	ROLLINS.MBL (SSTVD)		0.00	
10,373.7	9,958.0	TD.MBL (SSTVD)		0.00	

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
300.0	300.0	0.0	0.0	Start Build 3.00
400.0	400.0	-2.2	1.4	Start 100.0 hold at 400.0 MD
500.0	499.8	-6.6	4.2	Start DLS 3.00 TFO 0.00
1,064.9	1,051.4	-101.0	64.4	Start 6481.9 hold at 1064.9 MD
7,546.8	7,144.4	-1,965.5	1,253.6	Start Drop -3.00
8,211.7	7,796.0	-2,062.1	1,315.2	Start 2162.0 hold at 8211.7 MD
10,373.7	9,958.0	-2,062.1	1,315.2	TD at 10373.7