



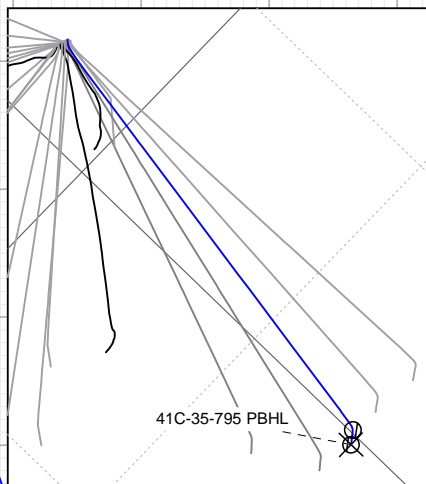
SECTION DETAILS

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	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
3	1140.5	19.22	93.95	1128.6	-7.3	106.2	3.00	93.95	106.4	
4	8041.9	19.22	93.95	7645.4	-163.8	2372.2	0.00	0.00	2377.8	
5	8682.4	0.00	0.00	8274.0	-171.1	2478.3	3.00	180.00	2484.2	
6	10700.4	0.00	0.00	10292.0	-171.1	2478.3	0.00	0.00	2484.2	41C-35-795 PBHL

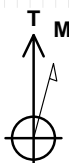
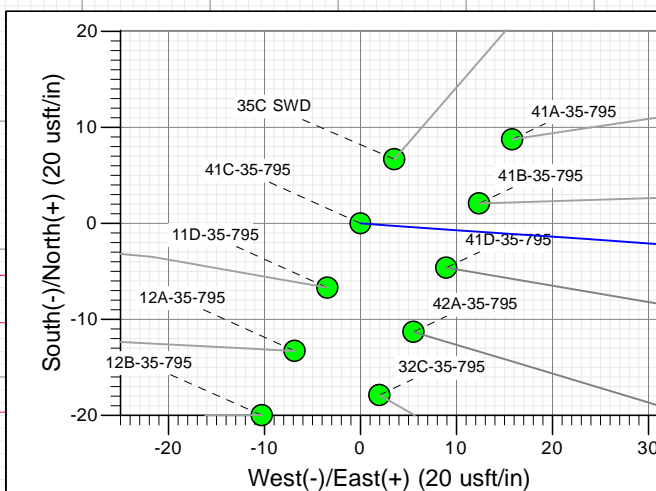
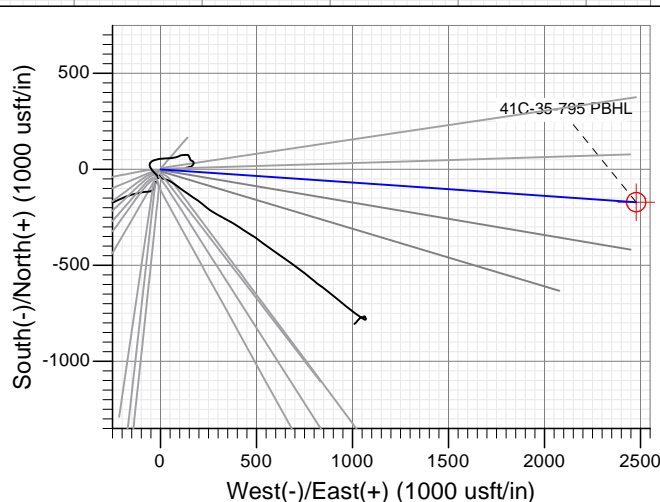
Project: Garfield County, CO (UTM 12
Site: S35-T7S-R95W (35C)
Well: 41C-35-795
Wellbore: OH
Design: PLAN #1

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
7206.0	7576.5	OHIO_CREEK
7575.0	7967.3	WILLIAMS_FORK
8274.0	8682.4	TOP_GAS
9602.0	10010.4	CAMEO
10142.0	10550.4	ROLLINS
10292.0	10700.4	TD



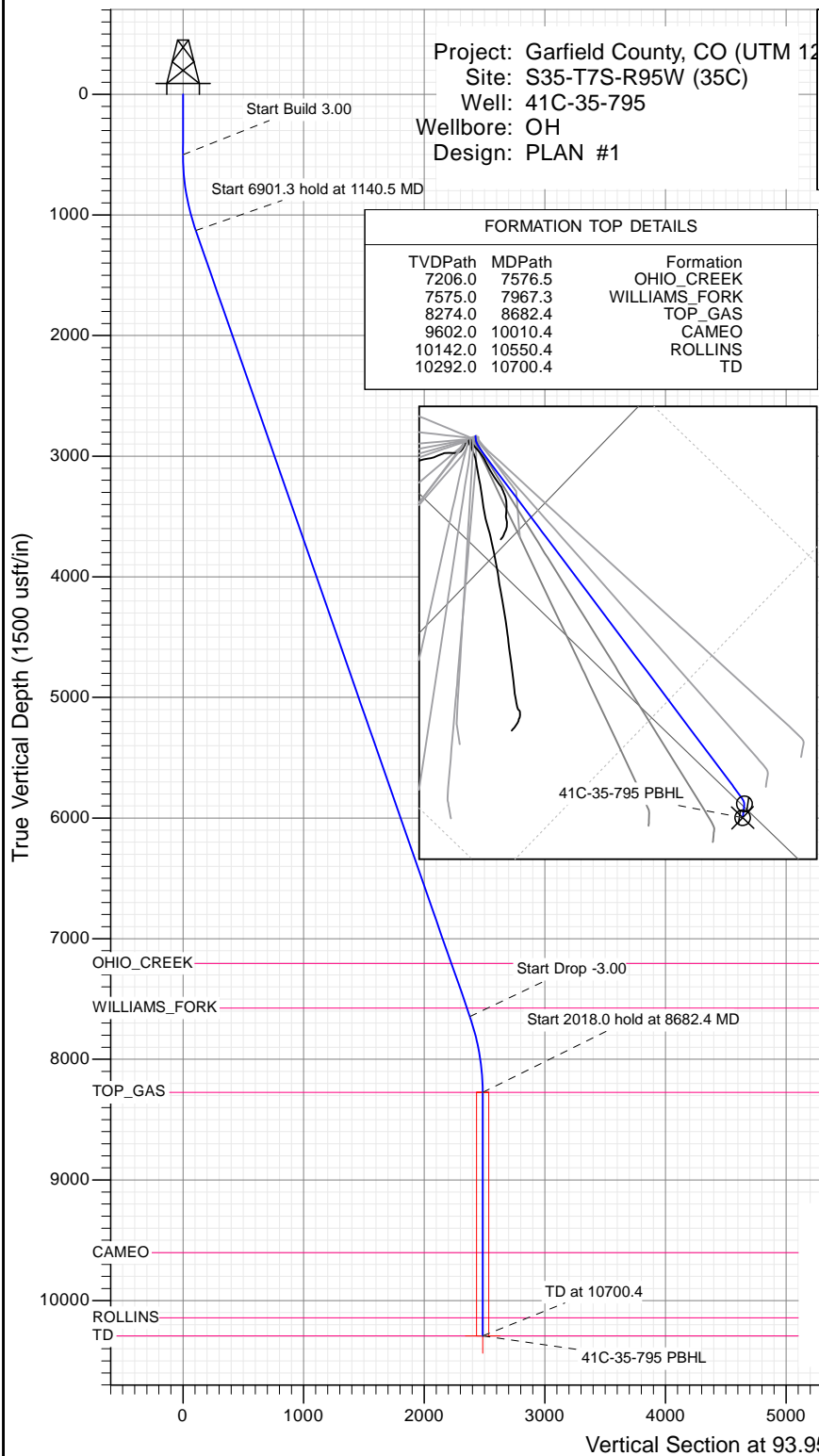
Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
TD	No Target (Freehand)	93.95	Slot	0.0	0.0	0.0
Name		TVD	+N/-S	+E/-W	Latitude	Longitude
41C-35-795 PBHL		10292.0	-171.1	2478.3	39.398548	-107.957133



Azimuths to True North
Magnetic North: 9.43°
Magnetic Field
Strength: 51875.1snT
Dip Angle: 65.62°
Date: 1/18/2016
Model: HDGM

CASING DETAILS

No casing data is available



WELL DETAILS: 41C-35-795

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14321631.40	2497622.50	39.399018	-107.965899



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 41C-35-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 9266.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 9266.0usft
Site:	S35-T7S-R95W (35C)	North Reference:	True
Well:	41C-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		S35-T7S-R95W (35C)			
Site Position:		Northing:	14,321,562.10 usft	Latitude:	39.398831
From:	Map	Easting:	2,497,589.70 usft	Longitude:	-107.966023
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.93 °

Well	41C-35-795					
Well Position	+N/-S	0.0 usft	Northing:	14,321,631.40 usft	Latitude:	39.399018
	+E/-W	0.0 usft	Easting:	2,497,622.50 usft	Longitude:	-107.965899
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	9,236.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	1/18/2016	9.43	65.62	51,875

Design	PLAN #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	93.95	

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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,140.5	19.22	93.95	1,128.6	-7.3	106.2	3.00	3.00	0.00	93.95	
8,041.9	19.22	93.95	7,645.4	-163.8	2,372.2	0.00	0.00	0.00	0.00	
8,682.4	0.00	0.00	8,274.0	-171.1	2,478.3	3.00	-3.00	0.00	180.00	
10,700.4	0.00	0.00	10,292.0	-171.1	2,478.3	0.00	0.00	0.00	0.00	41C-35-795 PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 41C-35-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 9266.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 9266.0usft
Site:	S35-T7S-R95W (35C)	North Reference:	True
Well:	41C-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	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	Start Build 3.00
600.0	3.00	93.95	600.0	-0.2	2.6	2.6	3.00	3.00	
700.0	6.00	93.95	699.6	-0.7	10.4	10.5	3.00	3.00	
800.0	9.00	93.95	798.8	-1.6	23.5	23.5	3.00	3.00	
900.0	12.00	93.95	897.1	-2.9	41.6	41.7	3.00	3.00	
1,000.0	15.00	93.95	994.3	-4.5	64.9	65.1	3.00	3.00	
1,100.0	18.00	93.95	1,090.2	-6.4	93.3	93.5	3.00	3.00	
1,140.5	19.22	93.95	1,128.6	-7.3	106.2	106.4	3.00	3.00	Start 6901.3 hold at 1140.5 MD
1,200.0	19.22	93.95	1,184.7	-8.7	125.7	126.0	0.00	0.00	
1,300.0	19.22	93.95	1,279.2	-10.9	158.5	158.9	0.00	0.00	
1,400.0	19.22	93.95	1,373.6	-13.2	191.4	191.8	0.00	0.00	
1,500.0	19.22	93.95	1,468.0	-15.5	224.2	224.7	0.00	0.00	
1,600.0	19.22	93.95	1,562.5	-17.7	257.0	257.6	0.00	0.00	
1,700.0	19.22	93.95	1,656.9	-20.0	289.9	290.5	0.00	0.00	
1,800.0	19.22	93.95	1,751.3	-22.3	322.7	323.5	0.00	0.00	
1,900.0	19.22	93.95	1,845.7	-24.5	355.5	356.4	0.00	0.00	
2,000.0	19.22	93.95	1,940.2	-26.8	388.4	389.3	0.00	0.00	
2,100.0	19.22	93.95	2,034.6	-29.1	421.2	422.2	0.00	0.00	
2,200.0	19.22	93.95	2,129.0	-31.4	454.0	455.1	0.00	0.00	
2,300.0	19.22	93.95	2,223.5	-33.6	486.9	488.0	0.00	0.00	
2,400.0	19.22	93.95	2,317.9	-35.9	519.7	520.9	0.00	0.00	
2,500.0	19.22	93.95	2,412.3	-38.2	552.5	553.8	0.00	0.00	
2,600.0	19.22	93.95	2,506.7	-40.4	585.4	586.8	0.00	0.00	
2,700.0	19.22	93.95	2,601.2	-42.7	618.2	619.7	0.00	0.00	
2,800.0	19.22	93.95	2,695.6	-45.0	651.0	652.6	0.00	0.00	
2,900.0	19.22	93.95	2,790.0	-47.2	683.9	685.5	0.00	0.00	
3,000.0	19.22	93.95	2,884.5	-49.5	716.7	718.4	0.00	0.00	
3,100.0	19.22	93.95	2,978.9	-51.8	749.5	751.3	0.00	0.00	
3,200.0	19.22	93.95	3,073.3	-54.0	782.4	784.2	0.00	0.00	
3,300.0	19.22	93.95	3,167.7	-56.3	815.2	817.2	0.00	0.00	
3,400.0	19.22	93.95	3,262.2	-58.6	848.0	850.1	0.00	0.00	
3,500.0	19.22	93.95	3,356.6	-60.8	880.9	883.0	0.00	0.00	
3,600.0	19.22	93.95	3,451.0	-63.1	913.7	915.9	0.00	0.00	
3,700.0	19.22	93.95	3,545.5	-65.4	946.6	948.8	0.00	0.00	
3,800.0	19.22	93.95	3,639.9	-67.6	979.4	981.7	0.00	0.00	
3,900.0	19.22	93.95	3,734.3	-69.9	1,012.2	1,014.6	0.00	0.00	
4,000.0	19.22	93.95	3,828.7	-72.2	1,045.1	1,047.5	0.00	0.00	
4,100.0	19.22	93.95	3,923.2	-74.4	1,077.9	1,080.5	0.00	0.00	
4,200.0	19.22	93.95	4,017.6	-76.7	1,110.7	1,113.4	0.00	0.00	
4,300.0	19.22	93.95	4,112.0	-79.0	1,143.6	1,146.3	0.00	0.00	
4,400.0	19.22	93.95	4,206.5	-81.2	1,176.4	1,179.2	0.00	0.00	
4,500.0	19.22	93.95	4,300.9	-83.5	1,209.2	1,212.1	0.00	0.00	
4,600.0	19.22	93.95	4,395.3	-85.8	1,242.1	1,245.0	0.00	0.00	
4,700.0	19.22	93.95	4,489.7	-88.0	1,274.9	1,277.9	0.00	0.00	
4,800.0	19.22	93.95	4,584.2	-90.3	1,307.7	1,310.8	0.00	0.00	
4,900.0	19.22	93.95	4,678.6	-92.6	1,340.6	1,343.8	0.00	0.00	
5,000.0	19.22	93.95	4,773.0	-94.8	1,373.4	1,376.7	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 41C-35-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 9266.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 9266.0usft
Site:	S35-T7S-R95W (35C)	North Reference:	True
Well:	41C-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	19.22	93.95	4,867.5	-97.1	1,406.2	1,409.6	0.00	0.00	
5,200.0	19.22	93.95	4,961.9	-99.4	1,439.1	1,442.5	0.00	0.00	
5,300.0	19.22	93.95	5,056.3	-101.6	1,471.9	1,475.4	0.00	0.00	
5,400.0	19.22	93.95	5,150.7	-103.9	1,504.7	1,508.3	0.00	0.00	
5,500.0	19.22	93.95	5,245.2	-106.2	1,537.6	1,541.2	0.00	0.00	
5,600.0	19.22	93.95	5,339.6	-108.4	1,570.4	1,574.2	0.00	0.00	
5,700.0	19.22	93.95	5,434.0	-110.7	1,603.2	1,607.1	0.00	0.00	
5,800.0	19.22	93.95	5,528.5	-113.0	1,636.1	1,640.0	0.00	0.00	
5,900.0	19.22	93.95	5,622.9	-115.2	1,668.9	1,672.9	0.00	0.00	
6,000.0	19.22	93.95	5,717.3	-117.5	1,701.8	1,705.8	0.00	0.00	
6,100.0	19.22	93.95	5,811.7	-119.8	1,734.6	1,738.7	0.00	0.00	
6,200.0	19.22	93.95	5,906.2	-122.0	1,767.4	1,771.6	0.00	0.00	
6,300.0	19.22	93.95	6,000.6	-124.3	1,800.3	1,804.5	0.00	0.00	
6,400.0	19.22	93.95	6,095.0	-126.6	1,833.1	1,837.5	0.00	0.00	
6,500.0	19.22	93.95	6,189.5	-128.8	1,865.9	1,870.4	0.00	0.00	
6,600.0	19.22	93.95	6,283.9	-131.1	1,898.8	1,903.3	0.00	0.00	
6,700.0	19.22	93.95	6,378.3	-133.4	1,931.6	1,936.2	0.00	0.00	
6,800.0	19.22	93.95	6,472.7	-135.6	1,964.4	1,969.1	0.00	0.00	
6,900.0	19.22	93.95	6,567.2	-137.9	1,997.3	2,002.0	0.00	0.00	
7,000.0	19.22	93.95	6,661.6	-140.2	2,030.1	2,034.9	0.00	0.00	
7,100.0	19.22	93.95	6,756.0	-142.4	2,062.9	2,067.8	0.00	0.00	
7,200.0	19.22	93.95	6,850.5	-144.7	2,095.8	2,100.8	0.00	0.00	
7,300.0	19.22	93.95	6,944.9	-147.0	2,128.6	2,133.7	0.00	0.00	
7,400.0	19.22	93.95	7,039.3	-149.3	2,161.4	2,166.6	0.00	0.00	
7,500.0	19.22	93.95	7,133.7	-151.5	2,194.3	2,199.5	0.00	0.00	
7,576.5	19.22	93.95	7,206.0	-153.3	2,219.4	2,224.7	0.00	0.00	OHIO_CREEK
7,600.0	19.22	93.95	7,228.2	-153.8	2,227.1	2,232.4	0.00	0.00	
7,700.0	19.22	93.95	7,322.6	-156.1	2,259.9	2,265.3	0.00	0.00	
7,800.0	19.22	93.95	7,417.0	-158.3	2,292.8	2,298.2	0.00	0.00	
7,900.0	19.22	93.95	7,511.5	-160.6	2,325.6	2,331.2	0.00	0.00	
7,967.3	19.22	93.95	7,575.0	-162.1	2,347.7	2,353.3	0.00	0.00	WILLIAMS_FORK
8,000.0	19.22	93.95	7,605.9	-162.9	2,358.4	2,364.1	0.00	0.00	
8,041.9	19.22	93.95	7,645.4	-163.8	2,372.2	2,377.8	0.00	0.00	Start Drop -3.00
8,100.0	17.47	93.95	7,700.6	-165.1	2,390.4	2,396.1	3.00	-3.00	
8,200.0	14.47	93.95	7,796.7	-167.0	2,417.9	2,423.7	3.00	-3.00	
8,300.0	11.47	93.95	7,894.2	-168.5	2,440.3	2,446.1	3.00	-3.00	
8,400.0	8.47	93.95	7,992.6	-169.7	2,457.6	2,463.4	3.00	-3.00	
8,500.0	5.47	93.95	8,091.9	-170.5	2,469.7	2,475.5	3.00	-3.00	
8,600.0	2.47	93.95	8,191.6	-171.0	2,476.6	2,482.5	3.00	-3.00	
8,682.4	0.00	0.00	8,274.0	-171.1	2,478.3	2,484.2	3.00	-3.00	Start 2018.0 hold at 8682.4 MD - TOP_GAS
8,700.0	0.00	0.00	8,291.6	-171.1	2,478.3	2,484.2	0.00	0.00	
8,800.0	0.00	0.00	8,391.6	-171.1	2,478.3	2,484.2	0.00	0.00	
8,900.0	0.00	0.00	8,491.6	-171.1	2,478.3	2,484.2	0.00	0.00	
9,000.0	0.00	0.00	8,591.6	-171.1	2,478.3	2,484.2	0.00	0.00	
9,100.0	0.00	0.00	8,691.6	-171.1	2,478.3	2,484.2	0.00	0.00	
9,200.0	0.00	0.00	8,791.6	-171.1	2,478.3	2,484.2	0.00	0.00	
9,300.0	0.00	0.00	8,891.6	-171.1	2,478.3	2,484.2	0.00	0.00	
9,400.0	0.00	0.00	8,991.6	-171.1	2,478.3	2,484.2	0.00	0.00	
9,500.0	0.00	0.00	9,091.6	-171.1	2,478.3	2,484.2	0.00	0.00	
9,600.0	0.00	0.00	9,191.6	-171.1	2,478.3	2,484.2	0.00	0.00	
9,700.0	0.00	0.00	9,291.6	-171.1	2,478.3	2,484.2	0.00	0.00	
9,800.0	0.00	0.00	9,391.6	-171.1	2,478.3	2,484.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 41C-35-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 9266.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 9266.0usft
Site:	S35-T7S-R95W (35C)	North Reference:	True
Well:	41C-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
9,900.0	0.00	0.00	9,491.6	-171.1	2,478.3	2,484.2	0.00	0.00	
10,000.0	0.00	0.00	9,591.6	-171.1	2,478.3	2,484.2	0.00	0.00	
10,010.4	0.00	0.00	9,602.0	-171.1	2,478.3	2,484.2	0.00	0.00	CAMEO
10,100.0	0.00	0.00	9,691.6	-171.1	2,478.3	2,484.2	0.00	0.00	
10,200.0	0.00	0.00	9,791.6	-171.1	2,478.3	2,484.2	0.00	0.00	
10,300.0	0.00	0.00	9,891.6	-171.1	2,478.3	2,484.2	0.00	0.00	
10,400.0	0.00	0.00	9,991.6	-171.1	2,478.3	2,484.2	0.00	0.00	
10,500.0	0.00	0.00	10,091.6	-171.1	2,478.3	2,484.2	0.00	0.00	
10,550.4	0.00	0.00	10,142.0	-171.1	2,478.3	2,484.2	0.00	0.00	ROLLINS
10,600.0	0.00	0.00	10,191.6	-171.1	2,478.3	2,484.2	0.00	0.00	
10,700.0	0.00	0.00	10,291.6	-171.1	2,478.3	2,484.2	0.00	0.00	
10,700.4	0.00	0.00	10,292.0	-171.1	2,478.3	2,484.2	0.00	0.00	TD at 10700.4 - TD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
41C-35-795 PBHL	0.00	0.00	10,292.0	-171.1	2,478.3	14,321,543.70	2,500,105.20	39.398548	-107.957133
- hit/miss target									
- Shape									
- plan hits target center									
- Circle (radius 50.0)									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,576.5	7,206.0	OHIO_CREEK				
7,967.3	7,575.0	WILLIAMS_FORK				
8,682.4	8,274.0	TOP_GAS				
10,010.4	9,602.0	CAMEO		0.00		
10,550.4	10,142.0	ROLLINS				
10,700.4	10,292.0	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
500.0	500.0	0.0	0.0	Start Build 3.00	
1,140.5	1,128.6	-7.3	106.2	Start 6901.3 hold at 1140.5 MD	
8,041.9	7,645.4	-163.8	2,372.2	Start Drop -3.00	
8,682.4	8,274.0	-171.1	2,478.3	Start 2018.0 hold at 8682.4 MD	
10,700.4	10,292.0	-171.1	2,478.3	TD at 10700.4	