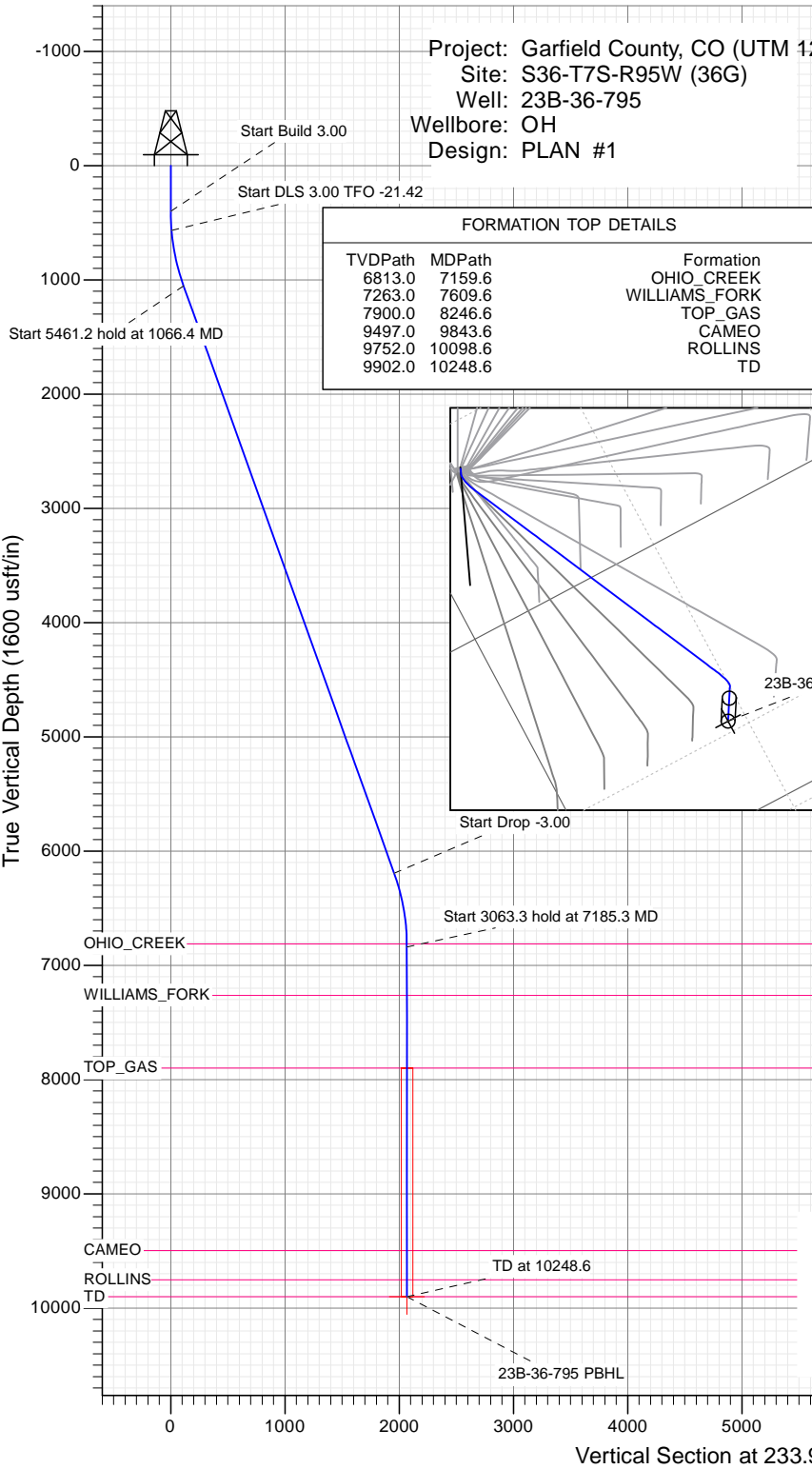




SECTION DETAILS

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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	566.7	5.00	250.00	566.5	-2.5	-6.8	3.00	250.00	7.0	
4	1066.4	19.73	233.75	1053.4	-60.1	-95.8	3.00	-21.42	112.9	
5	6527.6	19.73	233.75	6194.0	-1150.4	-1582.5	0.00	0.00	1956.4	
6	7185.3	0.00	0.00	6838.7	-1216.7	-1672.9	3.00	180.00	2068.6	
7	10248.6	0.00	0.00	9902.0	-1216.7	-1672.9	0.00	0.00	2068.6	23B-36-795 PBHL

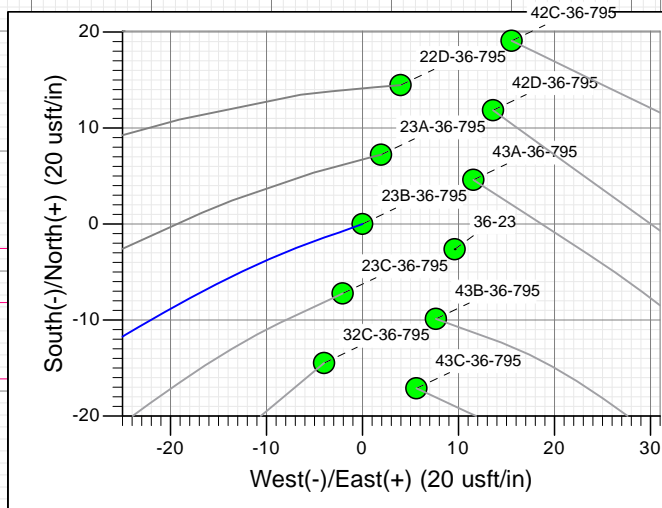
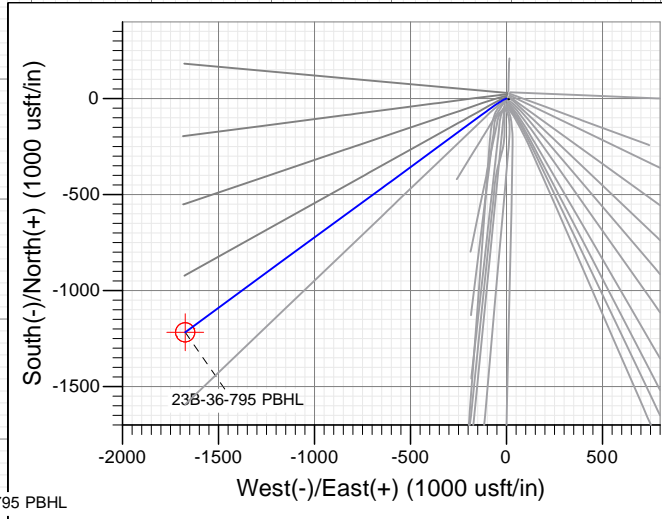


FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
6813.0	7159.6	OHIO_CREEK
7263.0	7609.6	WILLIAMS_FORK
7900.0	8246.6	TOP_GAS
9497.0	9843.6	CAMEO
9752.0	10098.6	ROLLINS
9902.0	10248.6	TD

PLAN #1
23B-36-795
15XXX LR
KB @ 8902.0usft
Ground Level @ 8872.0
NAD 1927 - Western US
Well 23B-36-795, True North

Name	Type	Target	No Target (Freehand)	Azimuth	Origin Type	N/S	E/W	From TVD
23B-36-795 PBHL	TD			233.97	Slot	0.0	0.0	0.0
				9902.0		+N/-S	+E/-W	Latitude
						-1216.7	-1672.9	39.392285
								Longitude
								-107.947482



T M
Azimuths to True North
Magnetic North: 9.40°
Magnetic Field
Strength: 51872.9snT
Dip Angle: 65.60°
Date: 12/28/2015
Model: HDGM

CASING DETAILS

No casing data is available



WELL DETAILS: 23B-36-795

Ground Level: 8872.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14320627.70	2504540.30	39.395624	-107.941566

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 23B-36-795
Company:	Caerus Oil & Gas	TVD Reference:	KB @ 8902.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	KB @ 8902.0usft
Site:	S36-T7S-R95W (36G)	North Reference:	True
Well:	23B-36-795	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 S36-T7S-R95W (36G)			
Site Position:		Northing:	14,320,581.60 usft
From:	Map	Easting:	2,504,539.60 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	39.395498
		Longitude:	-107.941574
		Grid Convergence:	1.94 °

Well 23B-36-795			
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
			14,320,627.70 usft
			Latitude:
			39.395624
			Longitude:
			-107.941566
Position Uncertainty		0.0 usft	Wellhead Elevation:
			0.0 usft
			Ground Level:
			8,872.0 usft

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

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	233.97

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
566.7	5.00	250.00	566.5	-2.5	-6.8	3.00	3.00	0.00	250.00	
1,066.4	19.73	233.75	1,053.4	-60.1	-95.8	3.00	2.95	-3.25	-21.42	
6,527.6	19.73	233.75	6,194.0	-1,150.4	-1,582.5	0.00	0.00	0.00	0.00	
7,185.3	0.00	0.00	6,838.7	-1,216.7	-1,672.9	3.00	-3.00	0.00	180.00	
10,248.6	0.00	0.00	9,902.0	-1,216.7	-1,672.9	0.00	0.00	0.00	0.00	23B-36-795 PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 23B-36-795
Company:	Caerus Oil & Gas	TVD Reference:	KB @ 8902.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	KB @ 8902.0usft
Site:	S36-T7S-R95W (36G)	North Reference:	True
Well:	23B-36-795	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	Start Build 3.00
500.0	3.00	250.00	500.0	-0.9	-2.5	2.5	3.00	3.00	
566.7	5.00	250.00	566.5	-2.5	-6.8	7.0	3.00	3.00	Start DLS 3.00 TFO -21.42
600.0	5.94	246.47	599.6	-3.7	-9.8	10.1	3.00	2.83	
700.0	8.84	240.46	698.8	-9.5	-21.2	22.8	3.00	2.90	
800.0	11.80	237.42	797.2	-18.8	-36.5	40.6	3.00	2.95	
900.0	14.77	235.59	894.5	-31.5	-55.7	63.6	3.00	2.97	
1,000.0	17.75	234.36	990.5	-47.6	-78.6	91.5	3.00	2.98	
1,066.4	19.73	233.75	1,053.4	-60.1	-95.8	112.9	3.00	2.99	Start 5461.2 hold at 1066.4 MD
1,100.0	19.73	233.75	1,085.0	-66.9	-105.0	124.2	0.00	0.00	
1,200.0	19.73	233.75	1,179.1	-86.8	-132.2	158.0	0.00	0.00	
1,300.0	19.73	233.75	1,273.2	-106.8	-159.4	191.7	0.00	0.00	
1,400.0	19.73	233.75	1,367.4	-126.7	-186.6	225.5	0.00	0.00	
1,500.0	19.73	233.75	1,461.5	-146.7	-213.9	259.2	0.00	0.00	
1,600.0	19.73	233.75	1,555.6	-166.7	-241.1	293.0	0.00	0.00	
1,700.0	19.73	233.75	1,649.8	-186.6	-268.3	326.8	0.00	0.00	
1,800.0	19.73	233.75	1,743.9	-206.6	-295.5	360.5	0.00	0.00	
1,900.0	19.73	233.75	1,838.0	-226.6	-322.7	394.3	0.00	0.00	
2,000.0	19.73	233.75	1,932.1	-246.5	-350.0	428.0	0.00	0.00	
2,100.0	19.73	233.75	2,026.3	-266.5	-377.2	461.8	0.00	0.00	
2,200.0	19.73	233.75	2,120.4	-286.5	-404.4	495.5	0.00	0.00	
2,300.0	19.73	233.75	2,214.5	-306.4	-431.6	529.3	0.00	0.00	
2,400.0	19.73	233.75	2,308.7	-326.4	-458.9	563.1	0.00	0.00	
2,500.0	19.73	233.75	2,402.8	-346.3	-486.1	596.8	0.00	0.00	
2,600.0	19.73	233.75	2,496.9	-366.3	-513.3	630.6	0.00	0.00	
2,700.0	19.73	233.75	2,591.1	-386.3	-540.5	664.3	0.00	0.00	
2,800.0	19.73	233.75	2,685.2	-406.2	-567.7	698.1	0.00	0.00	
2,900.0	19.73	233.75	2,779.3	-426.2	-595.0	731.9	0.00	0.00	
3,000.0	19.73	233.75	2,873.4	-446.2	-622.2	765.6	0.00	0.00	
3,100.0	19.73	233.75	2,967.6	-466.1	-649.4	799.4	0.00	0.00	
3,200.0	19.73	233.75	3,061.7	-486.1	-676.6	833.1	0.00	0.00	
3,300.0	19.73	233.75	3,155.8	-506.1	-703.9	866.9	0.00	0.00	
3,400.0	19.73	233.75	3,250.0	-526.0	-731.1	900.6	0.00	0.00	
3,500.0	19.73	233.75	3,344.1	-546.0	-758.3	934.4	0.00	0.00	
3,600.0	19.73	233.75	3,438.2	-565.9	-785.5	968.2	0.00	0.00	
3,700.0	19.73	233.75	3,532.4	-585.9	-812.7	1,001.9	0.00	0.00	
3,800.0	19.73	233.75	3,626.5	-605.9	-840.0	1,035.7	0.00	0.00	
3,900.0	19.73	233.75	3,720.6	-625.8	-867.2	1,069.4	0.00	0.00	
4,000.0	19.73	233.75	3,814.7	-645.8	-894.4	1,103.2	0.00	0.00	
4,100.0	19.73	233.75	3,908.9	-665.8	-921.6	1,136.9	0.00	0.00	
4,200.0	19.73	233.75	4,003.0	-685.7	-948.9	1,170.7	0.00	0.00	
4,300.0	19.73	233.75	4,097.1	-705.7	-976.1	1,204.5	0.00	0.00	
4,400.0	19.73	233.75	4,191.3	-725.7	-1,003.3	1,238.2	0.00	0.00	
4,500.0	19.73	233.75	4,285.4	-745.6	-1,030.5	1,272.0	0.00	0.00	
4,600.0	19.73	233.75	4,379.5	-765.6	-1,057.7	1,305.7	0.00	0.00	
4,700.0	19.73	233.75	4,473.6	-785.5	-1,085.0	1,339.5	0.00	0.00	
4,800.0	19.73	233.75	4,567.8	-805.5	-1,112.2	1,373.2	0.00	0.00	
4,900.0	19.73	233.75	4,661.9	-825.5	-1,139.4	1,407.0	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 23B-36-795
Company:	Caerus Oil & Gas	TVD Reference:	KB @ 8902.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	KB @ 8902.0usft
Site:	S36-T7S-R95W (36G)	North Reference:	True
Well:	23B-36-795	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	19.73	233.75	4,756.0	-845.4	-1,166.6	1,440.8	0.00	0.00	
5,100.0	19.73	233.75	4,850.2	-865.4	-1,193.9	1,474.5	0.00	0.00	
5,200.0	19.73	233.75	4,944.3	-885.4	-1,221.1	1,508.3	0.00	0.00	
5,300.0	19.73	233.75	5,038.4	-905.3	-1,248.3	1,542.0	0.00	0.00	
5,400.0	19.73	233.75	5,132.6	-925.3	-1,275.5	1,575.8	0.00	0.00	
5,500.0	19.73	233.75	5,226.7	-945.2	-1,302.8	1,609.6	0.00	0.00	
5,600.0	19.73	233.75	5,320.8	-965.2	-1,330.0	1,643.3	0.00	0.00	
5,700.0	19.73	233.75	5,414.9	-985.2	-1,357.2	1,677.1	0.00	0.00	
5,800.0	19.73	233.75	5,509.1	-1,005.1	-1,384.4	1,710.8	0.00	0.00	
5,900.0	19.73	233.75	5,603.2	-1,025.1	-1,411.6	1,744.6	0.00	0.00	
6,000.0	19.73	233.75	5,697.3	-1,045.1	-1,438.9	1,778.3	0.00	0.00	
6,100.0	19.73	233.75	5,791.5	-1,065.0	-1,466.1	1,812.1	0.00	0.00	
6,200.0	19.73	233.75	5,885.6	-1,085.0	-1,493.3	1,845.9	0.00	0.00	
6,300.0	19.73	233.75	5,979.7	-1,105.0	-1,520.5	1,879.6	0.00	0.00	
6,400.0	19.73	233.75	6,073.9	-1,124.9	-1,547.8	1,913.4	0.00	0.00	
6,500.0	19.73	233.75	6,168.0	-1,144.9	-1,575.0	1,947.1	0.00	0.00	
6,527.6	19.73	233.75	6,194.0	-1,150.4	-1,582.5	1,956.4	0.00	0.00	Start Drop -3.00
6,600.0	17.56	233.75	6,262.6	-1,164.1	-1,601.2	1,979.6	3.00	-3.00	
6,700.0	14.56	233.75	6,358.6	-1,180.4	-1,623.5	2,007.2	3.00	-3.00	
6,800.0	11.56	233.75	6,456.0	-1,193.8	-1,641.7	2,029.8	3.00	-3.00	
6,900.0	8.56	233.75	6,554.5	-1,204.1	-1,655.8	2,047.3	3.00	-3.00	
7,000.0	5.56	233.75	6,653.7	-1,211.4	-1,665.7	2,059.6	3.00	-3.00	
7,100.0	2.56	233.75	6,753.5	-1,215.6	-1,671.4	2,066.7	3.00	-3.00	
7,159.6	0.77	233.75	6,813.0	-1,216.6	-1,672.8	2,068.4	3.00	-3.00	OHIO_CREEK
7,185.3	0.00	0.00	6,838.7	-1,216.7	-1,672.9	2,068.6	3.00	-3.00	Start 3063.3 hold at 7185.3 MD
7,200.0	0.00	0.00	6,853.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
7,300.0	0.00	0.00	6,953.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
7,400.0	0.00	0.00	7,053.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
7,500.0	0.00	0.00	7,153.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
7,600.0	0.00	0.00	7,253.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
7,609.6	0.00	0.00	7,263.0	-1,216.7	-1,672.9	2,068.6	0.00	0.00	WILLIAMS_FORK
7,700.0	0.00	0.00	7,353.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
7,800.0	0.00	0.00	7,453.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
7,900.0	0.00	0.00	7,553.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,000.0	0.00	0.00	7,653.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,100.0	0.00	0.00	7,753.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,200.0	0.00	0.00	7,853.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,246.6	0.00	0.00	7,900.0	-1,216.7	-1,672.9	2,068.6	0.00	0.00	TOP_GAS
8,300.0	0.00	0.00	7,953.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,400.0	0.00	0.00	8,053.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,500.0	0.00	0.00	8,153.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,600.0	0.00	0.00	8,253.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,700.0	0.00	0.00	8,353.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,800.0	0.00	0.00	8,453.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
8,900.0	0.00	0.00	8,553.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
9,000.0	0.00	0.00	8,653.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
9,100.0	0.00	0.00	8,753.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
9,200.0	0.00	0.00	8,853.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
9,300.0	0.00	0.00	8,953.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
9,400.0	0.00	0.00	9,053.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
9,500.0	0.00	0.00	9,153.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
9,600.0	0.00	0.00	9,253.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 23B-36-795
Company:	Caerus Oil & Gas	TVD Reference:	KB @ 8902.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	KB @ 8902.0usft
Site:	S36-T7S-R95W (36G)	North Reference:	True
Well:	23B-36-795	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	9,353.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
9,800.0	0.00	0.00	9,453.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
9,843.6	0.00	0.00	9,497.0	-1,216.7	-1,672.9	2,068.6	0.00	0.00	CAMEO
9,900.0	0.00	0.00	9,553.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
10,000.0	0.00	0.00	9,653.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
10,098.6	0.00	0.00	9,752.0	-1,216.7	-1,672.9	2,068.6	0.00	0.00	ROLLINS
10,100.0	0.00	0.00	9,753.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
10,200.0	0.00	0.00	9,853.4	-1,216.7	-1,672.9	2,068.6	0.00	0.00	
10,248.6	0.00	0.00	9,902.0	-1,216.7	-1,672.9	2,068.6	0.00	0.00	TD at 10248.6 - TD

Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
23B-36-795 PBHL		0.00	0.00	9,902.0	-1,216.7	-1,672.9	14,319,355.00	2,502,909.60	39.392285	-107.947482
- plan hits target center										
- Circle (radius 50.0)										

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,159.6	6,813.0	OHIO_CREEK				
7,609.6	7,263.0	WILLIAMS_FORK				
8,246.6	7,900.0	TOP_GAS				
9,843.6	9,497.0	CAMEO				
10,098.6	9,752.0	ROLLINS				
10,248.6	9,902.0	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
400.0	400.0	0.0	0.0	Start Build 3.00	
566.7	566.5	-2.5	-6.8	Start DLS 3.00 TFO -21.42	
1,066.4	1,053.4	-60.1	-95.8	Start 5461.2 hold at 1066.4 MD	
6,527.6	6,194.0	-1,150.4	-1,582.5	Start Drop -3.00	
7,185.3	6,838.7	-1,216.7	-1,672.9	Start 3063.3 hold at 7185.3 MD	
10,248.6	9,902.0	-1,216.7	-1,672.9	TD at 10248.6	