



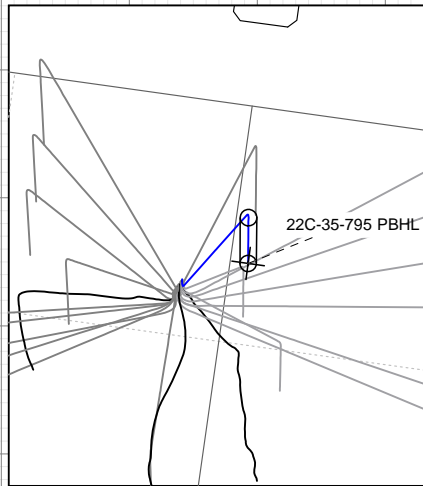
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	150.0	0.00	0.00	150.0	0.0	0.0	0.00	0.00	0.0	
3	535.4	11.56	186.41	532.8	-38.5	-4.3	3.00	186.41	38.7	
4	7903.3	11.56	186.41	7751.2	-1505.9	-169.2	0.00	0.00	1515.4	
5	8288.7	0.00	0.00	8134.0	-1544.4	-173.5	3.00	180.00	1554.2	
6	10284.7	0.00	0.00	10130.0	-1544.4	-173.5	0.00	0.00	1554.2	22C-35-795 PBHL

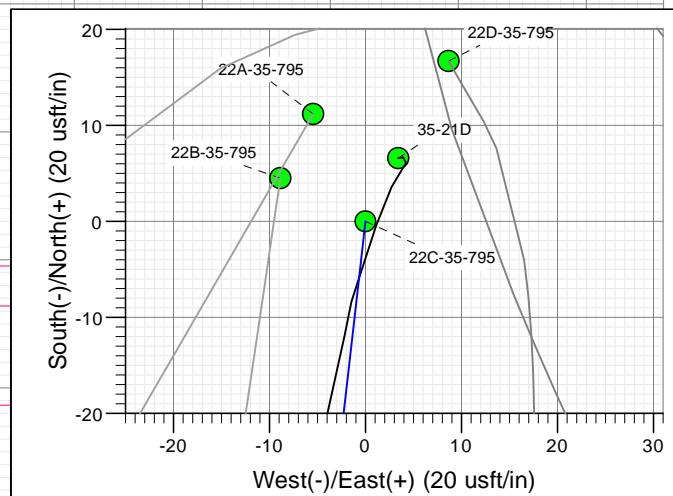
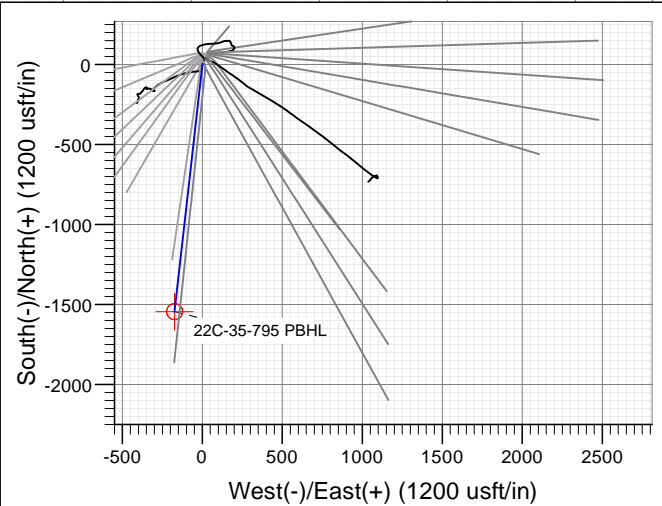
Project: Garfield County, CO (UTM 1
Site: S35-T7S-R95W (35C)
Well: 22C-35-795
Wellbore: OH
Design: PLAN #1

FORMATION TOP DETAILS

TVDPATH	MDPATH	Formation
7047.0	7184.5	OHIO_CREEK
7360.0	7504.0	WILLIAMS_FORK
8134.0	8288.7	TOP_GAS
9440.0	9594.7	CAMEO
9980.0	10134.7	ROLLINS
10130.0	10284.7	TD



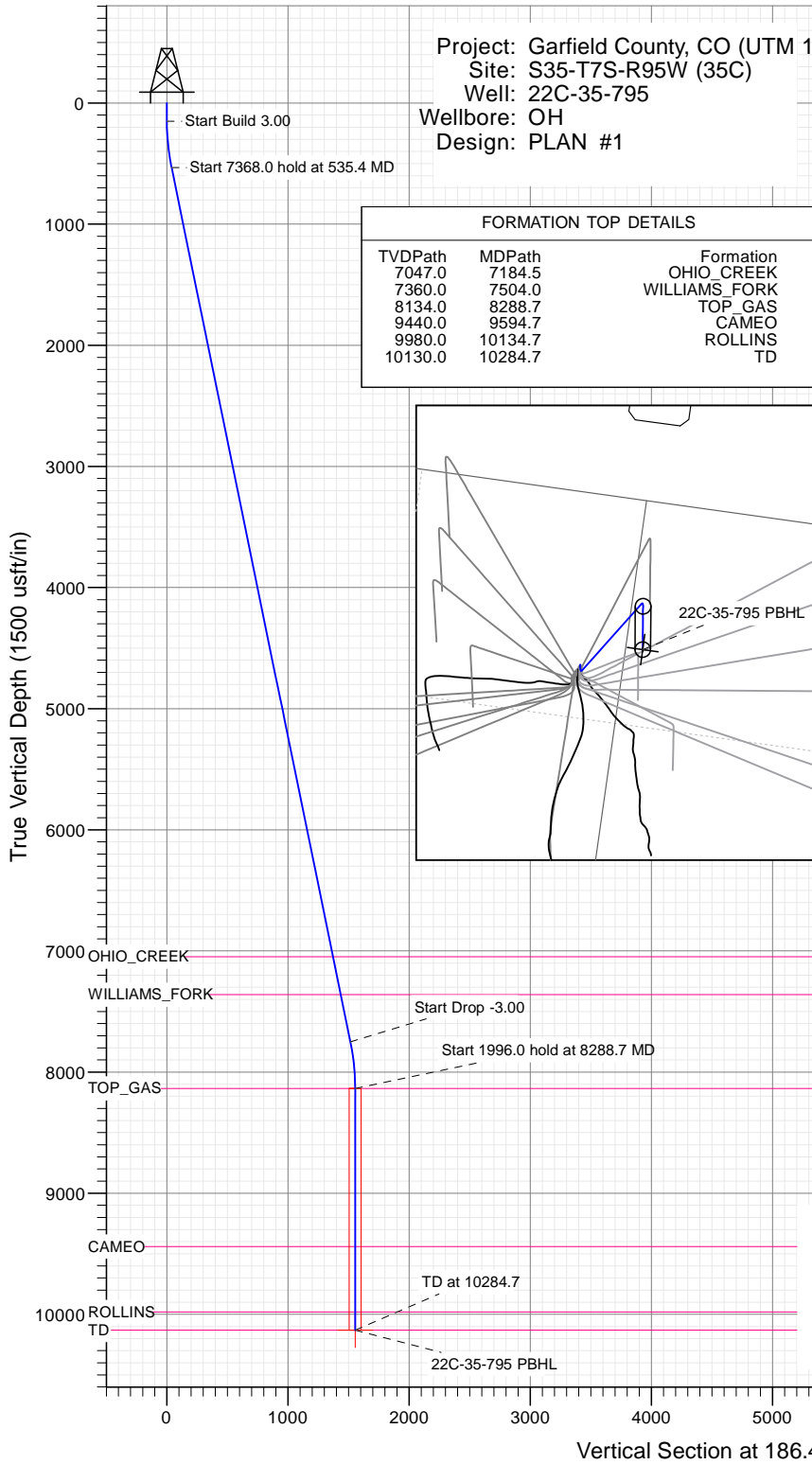
Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
TD	No Target (Freehand)	186.41	Slot	0.0	0.0	0.0
Name		TVD	+N/-S	+E/-W	Latitude	Longitude
22C-35-795 PBHL		10130.0	-1544.4	-173.5	39.394580	-107.966605



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



Vertical Section at 186.41° (1500 usft/in)

WELL DETAILS: 22C-35-795

+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude
0.0	0.0	14321557.90	9236.0	2497598.70	39.398819	-107.965992



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 22C-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:	22C-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	22C-35-795					
Well Position	+N/-S	0.0 usft	Northing:	14,321,557.90 usft	Latitude:	39.398819
	+E/-W	0.0 usft	Easting:	2,497,598.70 usft	Longitude:	-107.965992
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)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	186.41

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	
150.0	0.00	0.00	150.0	0.0	0.0	0.00	0.00	0.00	0.00	
535.4	11.56	186.41	532.8	-38.5	-4.3	3.00	3.00	0.00	186.41	
7,903.3	11.56	186.41	7,751.2	-1,505.9	-169.2	0.00	0.00	0.00	0.00	
8,288.7	0.00	0.00	8,134.0	-1,544.4	-173.5	3.00	-3.00	0.00	180.00	
10,284.7	0.00	0.00	10,130.0	-1,544.4	-173.5	0.00	0.00	0.00	0.00	22C-35-795 PBHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 22C-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:	22C-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	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	Start Build 3.00
200.0	1.50	186.41	200.0	-0.7	-0.1	0.7	3.00	3.00	
300.0	4.50	186.41	299.8	-5.9	-0.7	5.9	3.00	3.00	
400.0	7.50	186.41	399.3	-16.2	-1.8	16.3	3.00	3.00	
500.0	10.50	186.41	498.0	-31.8	-3.6	32.0	3.00	3.00	
535.4	11.56	186.41	532.8	-38.5	-4.3	38.7	3.00	3.00	Start 7368.0 hold at 535.4 MD
600.0	11.56	186.41	596.1	-51.4	-5.8	51.7	0.00	0.00	
700.0	11.56	186.41	694.1	-71.3	-8.0	71.7	0.00	0.00	
800.0	11.56	186.41	792.0	-91.2	-10.2	91.8	0.00	0.00	
900.0	11.56	186.41	890.0	-111.1	-12.5	111.8	0.00	0.00	
1,000.0	11.56	186.41	988.0	-131.0	-14.7	131.9	0.00	0.00	
1,100.0	11.56	186.41	1,085.9	-151.0	-17.0	151.9	0.00	0.00	
1,200.0	11.56	186.41	1,183.9	-170.9	-19.2	172.0	0.00	0.00	
1,300.0	11.56	186.41	1,281.9	-190.8	-21.4	192.0	0.00	0.00	
1,400.0	11.56	186.41	1,379.8	-210.7	-23.7	212.0	0.00	0.00	
1,500.0	11.56	186.41	1,477.8	-230.6	-25.9	232.1	0.00	0.00	
1,600.0	11.56	186.41	1,575.8	-250.5	-28.2	252.1	0.00	0.00	
1,700.0	11.56	186.41	1,673.8	-270.5	-30.4	272.2	0.00	0.00	
1,800.0	11.56	186.41	1,771.7	-290.4	-32.6	292.2	0.00	0.00	
1,900.0	11.56	186.41	1,869.7	-310.3	-34.9	312.2	0.00	0.00	
2,000.0	11.56	186.41	1,967.7	-330.2	-37.1	332.3	0.00	0.00	
2,100.0	11.56	186.41	2,065.6	-350.1	-39.3	352.3	0.00	0.00	
2,200.0	11.56	186.41	2,163.6	-370.0	-41.6	372.4	0.00	0.00	
2,300.0	11.56	186.41	2,261.6	-390.0	-43.8	392.4	0.00	0.00	
2,400.0	11.56	186.41	2,359.6	-409.9	-46.1	412.5	0.00	0.00	
2,500.0	11.56	186.41	2,457.5	-429.8	-48.3	432.5	0.00	0.00	
2,600.0	11.56	186.41	2,555.5	-449.7	-50.5	452.5	0.00	0.00	
2,700.0	11.56	186.41	2,653.5	-469.6	-52.8	472.6	0.00	0.00	
2,800.0	11.56	186.41	2,751.4	-489.5	-55.0	492.6	0.00	0.00	
2,900.0	11.56	186.41	2,849.4	-509.5	-57.2	512.7	0.00	0.00	
3,000.0	11.56	186.41	2,947.4	-529.4	-59.5	532.7	0.00	0.00	
3,100.0	11.56	186.41	3,045.4	-549.3	-61.7	552.7	0.00	0.00	
3,200.0	11.56	186.41	3,143.3	-569.2	-64.0	572.8	0.00	0.00	
3,300.0	11.56	186.41	3,241.3	-589.1	-66.2	592.8	0.00	0.00	
3,400.0	11.56	186.41	3,339.3	-609.0	-68.4	612.9	0.00	0.00	
3,500.0	11.56	186.41	3,437.2	-629.0	-70.7	632.9	0.00	0.00	
3,600.0	11.56	186.41	3,535.2	-648.9	-72.9	652.9	0.00	0.00	
3,700.0	11.56	186.41	3,633.2	-668.8	-75.1	673.0	0.00	0.00	
3,800.0	11.56	186.41	3,731.2	-688.7	-77.4	693.0	0.00	0.00	
3,900.0	11.56	186.41	3,829.1	-708.6	-79.6	713.1	0.00	0.00	
4,000.0	11.56	186.41	3,927.1	-728.5	-81.9	733.1	0.00	0.00	
4,100.0	11.56	186.41	4,025.1	-748.4	-84.1	753.2	0.00	0.00	
4,200.0	11.56	186.41	4,123.0	-768.4	-86.3	773.2	0.00	0.00	
4,300.0	11.56	186.41	4,221.0	-788.3	-88.6	793.2	0.00	0.00	
4,400.0	11.56	186.41	4,319.0	-808.2	-90.8	813.3	0.00	0.00	
4,500.0	11.56	186.41	4,417.0	-828.1	-93.0	833.3	0.00	0.00	
4,600.0	11.56	186.41	4,514.9	-848.0	-95.3	853.4	0.00	0.00	
4,700.0	11.56	186.41	4,612.9	-867.9	-97.5	873.4	0.00	0.00	
4,800.0	11.56	186.41	4,710.9	-887.9	-99.8	893.4	0.00	0.00	
4,900.0	11.56	186.41	4,808.8	-907.8	-102.0	913.5	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 22C-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:	22C-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
5,000.0	11.56	186.41	4,906.8	-927.7	-104.2	933.5	0.00	0.00	
5,100.0	11.56	186.41	5,004.8	-947.6	-106.5	953.6	0.00	0.00	
5,200.0	11.56	186.41	5,102.7	-967.5	-108.7	973.6	0.00	0.00	
5,300.0	11.56	186.41	5,200.7	-987.4	-110.9	993.7	0.00	0.00	
5,400.0	11.56	186.41	5,298.7	-1,007.4	-113.2	1,013.7	0.00	0.00	
5,500.0	11.56	186.41	5,396.7	-1,027.3	-115.4	1,033.7	0.00	0.00	
5,600.0	11.56	186.41	5,494.6	-1,047.2	-117.7	1,053.8	0.00	0.00	
5,700.0	11.56	186.41	5,592.6	-1,067.1	-119.9	1,073.8	0.00	0.00	
5,800.0	11.56	186.41	5,690.6	-1,087.0	-122.1	1,093.9	0.00	0.00	
5,900.0	11.56	186.41	5,788.5	-1,106.9	-124.4	1,113.9	0.00	0.00	
6,000.0	11.56	186.41	5,886.5	-1,126.9	-126.6	1,133.9	0.00	0.00	
6,100.0	11.56	186.41	5,984.5	-1,146.8	-128.8	1,154.0	0.00	0.00	
6,200.0	11.56	186.41	6,082.5	-1,166.7	-131.1	1,174.0	0.00	0.00	
6,300.0	11.56	186.41	6,180.4	-1,186.6	-133.3	1,194.1	0.00	0.00	
6,400.0	11.56	186.41	6,278.4	-1,206.5	-135.6	1,214.1	0.00	0.00	
6,500.0	11.56	186.41	6,376.4	-1,226.4	-137.8	1,234.2	0.00	0.00	
6,600.0	11.56	186.41	6,474.3	-1,246.4	-140.0	1,254.2	0.00	0.00	
6,700.0	11.56	186.41	6,572.3	-1,266.3	-142.3	1,274.2	0.00	0.00	
6,800.0	11.56	186.41	6,670.3	-1,286.2	-144.5	1,294.3	0.00	0.00	
6,900.0	11.56	186.41	6,768.3	-1,306.1	-146.8	1,314.3	0.00	0.00	
7,000.0	11.56	186.41	6,866.2	-1,326.0	-149.0	1,334.4	0.00	0.00	
7,100.0	11.56	186.41	6,964.2	-1,345.9	-151.2	1,354.4	0.00	0.00	
7,184.5	11.56	186.41	7,047.0	-1,362.8	-153.1	1,371.3	0.00	0.00	OHIO_CREEK
7,200.0	11.56	186.41	7,062.2	-1,365.9	-153.5	1,374.4	0.00	0.00	
7,300.0	11.56	186.41	7,160.1	-1,385.8	-155.7	1,394.5	0.00	0.00	
7,400.0	11.56	186.41	7,258.1	-1,405.7	-157.9	1,414.5	0.00	0.00	
7,500.0	11.56	186.41	7,356.1	-1,425.6	-160.2	1,434.6	0.00	0.00	
7,504.0	11.56	186.41	7,360.0	-1,426.4	-160.3	1,435.4	0.00	0.00	WILLIAMS_FORK
7,600.0	11.56	186.41	7,454.1	-1,445.5	-162.4	1,454.6	0.00	0.00	
7,700.0	11.56	186.41	7,552.0	-1,465.4	-164.7	1,474.7	0.00	0.00	
7,800.0	11.56	186.41	7,650.0	-1,485.4	-166.9	1,494.7	0.00	0.00	
7,900.0	11.56	186.41	7,748.0	-1,505.3	-169.1	1,514.7	0.00	0.00	
7,903.3	11.56	186.41	7,751.2	-1,505.9	-169.2	1,515.4	0.00	0.00	Start Drop -3.00
8,000.0	8.66	186.41	7,846.4	-1,522.8	-171.1	1,532.4	3.00	-3.00	
8,100.0	5.66	186.41	7,945.6	-1,535.2	-172.5	1,544.8	3.00	-3.00	
8,200.0	2.66	186.41	8,045.3	-1,542.4	-173.3	1,552.1	3.00	-3.00	
8,288.7	0.00	0.00	8,134.0	-1,544.4	-173.5	1,554.2	3.00	-3.00	Start 1996.0 hold at 8288.7 MD - TOP_GAS
8,300.0	0.00	0.00	8,145.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
8,400.0	0.00	0.00	8,245.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
8,500.0	0.00	0.00	8,345.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
8,600.0	0.00	0.00	8,445.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
8,700.0	0.00	0.00	8,545.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
8,800.0	0.00	0.00	8,645.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
8,900.0	0.00	0.00	8,745.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
9,000.0	0.00	0.00	8,845.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
9,100.0	0.00	0.00	8,945.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
9,200.0	0.00	0.00	9,045.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
9,300.0	0.00	0.00	9,145.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
9,400.0	0.00	0.00	9,245.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
9,500.0	0.00	0.00	9,345.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
9,594.7	0.00	0.00	9,440.0	-1,544.4	-173.5	1,554.2	0.00	0.00	CAMEO
9,600.0	0.00	0.00	9,445.3	-1,544.4	-173.5	1,554.2	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 22C-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:	22C-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	9,545.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
9,800.0	0.00	0.00	9,645.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
9,900.0	0.00	0.00	9,745.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
10,000.0	0.00	0.00	9,845.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
10,100.0	0.00	0.00	9,945.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
10,134.7	0.00	0.00	9,980.0	-1,544.4	-173.5	1,554.2	0.00	0.00	ROLLINS
10,200.0	0.00	0.00	10,045.3	-1,544.4	-173.5	1,554.2	0.00	0.00	
10,284.7	0.00	0.00	10,130.0	-1,544.4	-173.5	1,554.2	0.00	0.00	TD at 10284.7 - 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
- Shape									
22C-35-795 PBHL	0.00	0.00	10,130.0	-1,544.4	-173.5	14,320,008.50	2,497,477.20	39.394580	-107.966605
- plan hits target center									
- Circle (radius 50.0)									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,184.5	7,047.0	OHIO_CREEK				
7,504.0	7,360.0	WILLIAMS_FORK				
8,288.7	8,134.0	TOP_GAS				
9,594.7	9,440.0	CAMEO		0.00		
10,134.7	9,980.0	ROLLINS				
10,284.7	10,130.0	TD				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
150.0	150.0	0.0	0.0	Start Build 3.00
535.4	532.8	-38.5	-4.3	Start 7368.0 hold at 535.4 MD
7,903.3	7,751.2	-1,505.9	-169.2	Start Drop -3.00
8,288.7	8,134.0	-1,544.4	-173.5	Start 1996.0 hold at 8288.7 MD
10,284.7	10,130.0	-1,544.4	-173.5	TD at 10284.7