



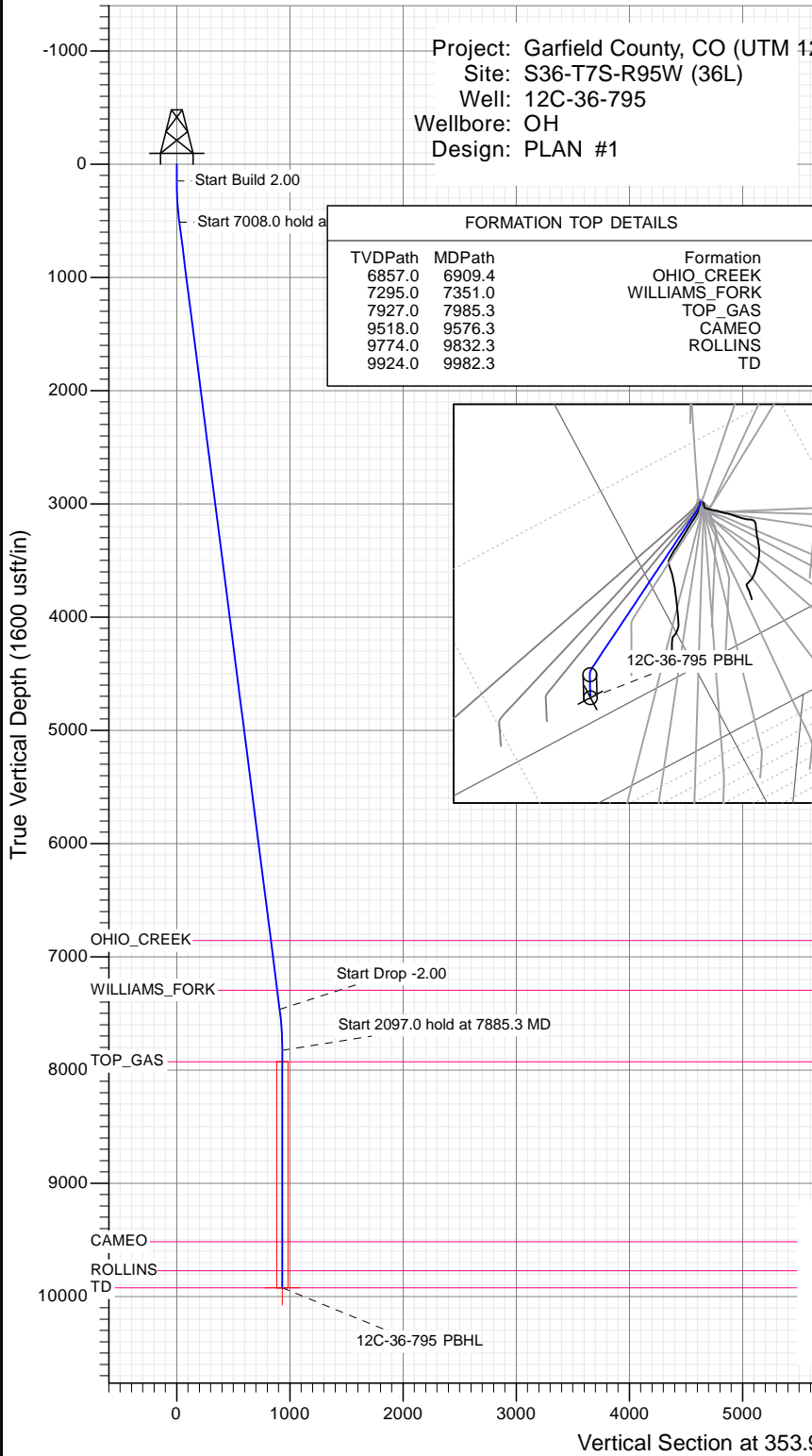
SECTION DETAILS

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	150.0	0.00	0.00	150.0	0.0	0.0	0.00	0.00	0.0	
3	513.7	7.27	353.90	512.7	22.9	-2.4	2.00	353.90	23.1	
4	7521.7	7.27	353.90	7464.3	905.2	-96.7	0.00	0.00	910.3	
5	7885.3	0.00	0.00	7827.0	928.1	-99.1	2.00	180.00	933.4	
6	9982.3	0.00	0.00	9924.0	928.1	-99.1	0.00	0.00	933.4	12C-36-795 PBHL

Project: Garfield County, CO (UTM 12
 Site: S36-T7S-R95W (36L)
 Well: 12C-36-795
 Wellbore: OH
 Design: PLAN #1

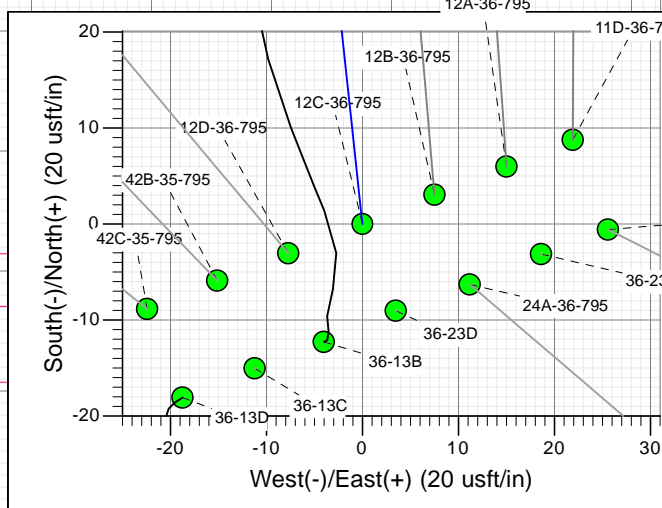
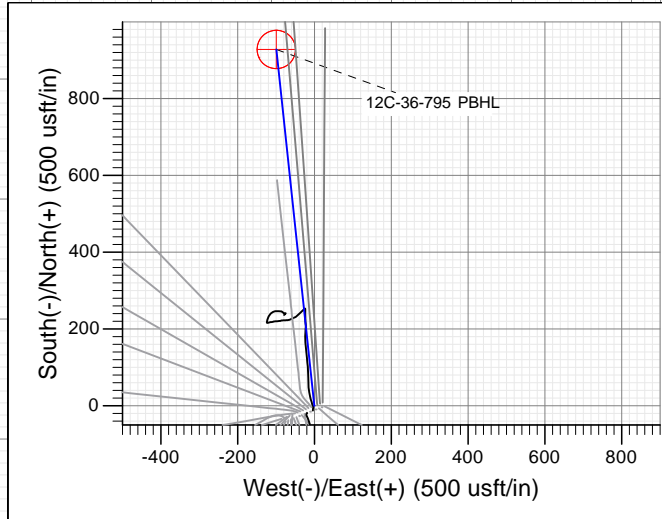
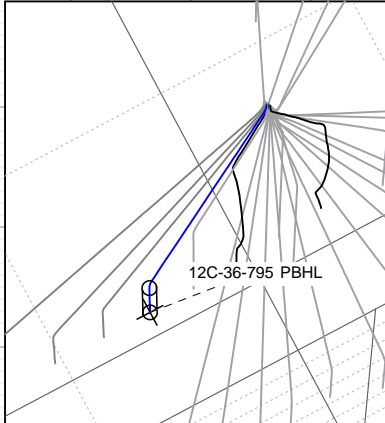
PLAN #1
 12C-36-795
 15XXX LR
 30 KB @ 8931.0usft
 Ground Level @ 8991.0
 NAD 1927 - Western US
 Well 12C-36-795, True North

Type	Target	Origin	N/S	E/W	From	
TD	No Target (Freehand)	TD	0.0	0.0	TVD	
Name		TVD	+N/-S	+E/-W	Latitude	Longitude
12C-36-795 PBHL		9924.0	928.1	-99.1	39.394739	-107.952554



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
6857.0	6909.4	OHIO_CREEK
7295.0	7351.0	WILLIAMS_FORK
7927.0	7985.3	TOP_GAS
9518.0	9576.3	CAMEO
9774.0	9832.3	ROLLINS
9924.0	9982.3	TD



Azimuths to True North
 Magnetic North: 9.42°
 Magnetic Field
 Strength: 51881.2snT
 Dip Angle: 65.60°
 Date: 12/14/2015
 Model: HDGM

CASING DETAILS

No casing data is available



WELL DETAILS: 12C-36-795

+N/-S	+E/-W	Northing	Ground Level:	8910.0	Latitude	Longitude
0.0	0.0	14319275.80	Easting	2501576.50	39.392192	-107.952203



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 12C-36-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8931.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8931.0usft
Site:	S36-T7S-R95W (36L)	North Reference:	True
Well:	12C-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 (36L)				
Site Position:		Northing:	14,319,276.10 usft	Latitude:	39.392190
From:	Map	Easting:	2,501,602.10 usft	Longitude:	-107.952113
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	1.94 °

Well	12C-36-795					
Well Position	+N/-S	0.0 usft	Northing:	14,319,275.80 usft	Latitude:	39.392192
	+E/-W	0.0 usft	Easting:	2,501,576.50 usft	Longitude:	-107.952203
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,901.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	12/14/2015	9.42	65.60	51,881

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	353.90

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	
513.7	7.27	353.90	512.7	22.9	-2.4	2.00	2.00	0.00	353.90	
7,521.7	7.27	353.90	7,464.3	905.2	-96.7	0.00	0.00	0.00	0.00	
7,885.3	0.00	0.00	7,827.0	928.1	-99.1	2.00	-2.00	0.00	180.00	
9,982.3	0.00	0.00	9,924.0	928.1	-99.1	0.00	0.00	0.00	0.00	12C-36-795 PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 12C-36-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8931.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8931.0usft
Site:	S36-T7S-R95W (36L)	North Reference:	True
Well:	12C-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	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	Start Build 2.00
200.0	1.00	353.90	200.0	0.4	0.0	0.4	2.00	2.00	
300.0	3.00	353.90	299.9	3.9	-0.4	3.9	2.00	2.00	
400.0	5.00	353.90	399.7	10.8	-1.2	10.9	2.00	2.00	
500.0	7.00	353.90	499.1	21.2	-2.3	21.4	2.00	2.00	
513.7	7.27	353.90	512.7	22.9	-2.4	23.1	2.00	2.00	Start 7008.0 hold at 513.7 MD
600.0	7.27	353.90	598.3	33.8	-3.6	34.0	0.00	0.00	
700.0	7.27	353.90	697.5	46.4	-5.0	46.6	0.00	0.00	
800.0	7.27	353.90	796.7	59.0	-6.3	59.3	0.00	0.00	
900.0	7.27	353.90	895.9	71.6	-7.6	72.0	0.00	0.00	
1,000.0	7.27	353.90	995.1	84.1	-9.0	84.6	0.00	0.00	
1,100.0	7.27	353.90	1,094.3	96.7	-10.3	97.3	0.00	0.00	
1,200.0	7.27	353.90	1,193.5	109.3	-11.7	109.9	0.00	0.00	
1,300.0	7.27	353.90	1,292.7	121.9	-13.0	122.6	0.00	0.00	
1,400.0	7.27	353.90	1,391.9	134.5	-14.4	135.3	0.00	0.00	
1,500.0	7.27	353.90	1,491.1	147.1	-15.7	147.9	0.00	0.00	
1,600.0	7.27	353.90	1,590.3	159.7	-17.1	160.6	0.00	0.00	
1,700.0	7.27	353.90	1,689.5	172.3	-18.4	173.2	0.00	0.00	
1,800.0	7.27	353.90	1,788.7	184.9	-19.7	185.9	0.00	0.00	
1,900.0	7.27	353.90	1,887.9	197.4	-21.1	198.6	0.00	0.00	
2,000.0	7.27	353.90	1,987.1	210.0	-22.4	211.2	0.00	0.00	
2,100.0	7.27	353.90	2,086.3	222.6	-23.8	223.9	0.00	0.00	
2,200.0	7.27	353.90	2,185.5	235.2	-25.1	236.5	0.00	0.00	
2,300.0	7.27	353.90	2,284.6	247.8	-26.5	249.2	0.00	0.00	
2,400.0	7.27	353.90	2,383.8	260.4	-27.8	261.9	0.00	0.00	
2,500.0	7.27	353.90	2,483.0	273.0	-29.2	274.5	0.00	0.00	
2,600.0	7.27	353.90	2,582.2	285.6	-30.5	287.2	0.00	0.00	
2,700.0	7.27	353.90	2,681.4	298.2	-31.8	299.9	0.00	0.00	
2,800.0	7.27	353.90	2,780.6	310.7	-33.2	312.5	0.00	0.00	
2,900.0	7.27	353.90	2,879.8	323.3	-34.5	325.2	0.00	0.00	
3,000.0	7.27	353.90	2,979.0	335.9	-35.9	337.8	0.00	0.00	
3,100.0	7.27	353.90	3,078.2	348.5	-37.2	350.5	0.00	0.00	
3,200.0	7.27	353.90	3,177.4	361.1	-38.6	363.2	0.00	0.00	
3,300.0	7.27	353.90	3,276.6	373.7	-39.9	375.8	0.00	0.00	
3,400.0	7.27	353.90	3,375.8	386.3	-41.3	388.5	0.00	0.00	
3,500.0	7.27	353.90	3,475.0	398.9	-42.6	401.1	0.00	0.00	
3,600.0	7.27	353.90	3,574.2	411.5	-43.9	413.8	0.00	0.00	
3,700.0	7.27	353.90	3,673.4	424.0	-45.3	426.5	0.00	0.00	
3,800.0	7.27	353.90	3,772.6	436.6	-46.6	439.1	0.00	0.00	
3,900.0	7.27	353.90	3,871.8	449.2	-48.0	451.8	0.00	0.00	
4,000.0	7.27	353.90	3,971.0	461.8	-49.3	464.4	0.00	0.00	
4,100.0	7.27	353.90	4,070.2	474.4	-50.7	477.1	0.00	0.00	
4,200.0	7.27	353.90	4,169.4	487.0	-52.0	489.8	0.00	0.00	
4,300.0	7.27	353.90	4,268.5	499.6	-53.4	502.4	0.00	0.00	
4,400.0	7.27	353.90	4,367.7	512.2	-54.7	515.1	0.00	0.00	
4,500.0	7.27	353.90	4,466.9	524.8	-56.0	527.7	0.00	0.00	
4,600.0	7.27	353.90	4,566.1	537.3	-57.4	540.4	0.00	0.00	
4,700.0	7.27	353.90	4,665.3	549.9	-58.7	553.1	0.00	0.00	
4,800.0	7.27	353.90	4,764.5	562.5	-60.1	565.7	0.00	0.00	
4,900.0	7.27	353.90	4,863.7	575.1	-61.4	578.4	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 12C-36-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8931.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8931.0usft
Site:	S36-T7S-R95W (36L)	North Reference:	True
Well:	12C-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	7.27	353.90	4,962.9	587.7	-62.8	591.0	0.00	0.00	
5,100.0	7.27	353.90	5,062.1	600.3	-64.1	603.7	0.00	0.00	
5,200.0	7.27	353.90	5,161.3	612.9	-65.5	616.4	0.00	0.00	
5,300.0	7.27	353.90	5,260.5	625.5	-66.8	629.0	0.00	0.00	
5,400.0	7.27	353.90	5,359.7	638.1	-68.1	641.7	0.00	0.00	
5,500.0	7.27	353.90	5,458.9	650.6	-69.5	654.3	0.00	0.00	
5,600.0	7.27	353.90	5,558.1	663.2	-70.8	667.0	0.00	0.00	
5,700.0	7.27	353.90	5,657.3	675.8	-72.2	679.7	0.00	0.00	
5,800.0	7.27	353.90	5,756.5	688.4	-73.5	692.3	0.00	0.00	
5,900.0	7.27	353.90	5,855.7	701.0	-74.9	705.0	0.00	0.00	
6,000.0	7.27	353.90	5,954.9	713.6	-76.2	717.6	0.00	0.00	
6,100.0	7.27	353.90	6,054.1	726.2	-77.6	730.3	0.00	0.00	
6,200.0	7.27	353.90	6,153.3	738.8	-78.9	743.0	0.00	0.00	
6,300.0	7.27	353.90	6,252.4	751.4	-80.2	755.6	0.00	0.00	
6,400.0	7.27	353.90	6,351.6	763.9	-81.6	768.3	0.00	0.00	
6,500.0	7.27	353.90	6,450.8	776.5	-82.9	781.0	0.00	0.00	
6,600.0	7.27	353.90	6,550.0	789.1	-84.3	793.6	0.00	0.00	
6,700.0	7.27	353.90	6,649.2	801.7	-85.6	806.3	0.00	0.00	
6,800.0	7.27	353.90	6,748.4	814.3	-87.0	818.9	0.00	0.00	
6,900.0	7.27	353.90	6,847.6	826.9	-88.3	831.6	0.00	0.00	
6,909.4	7.27	353.90	6,857.0	828.1	-88.4	832.8	0.00	0.00	OHIO_CREEK
7,000.0	7.27	353.90	6,946.8	839.5	-89.7	844.3	0.00	0.00	
7,100.0	7.27	353.90	7,046.0	852.1	-91.0	856.9	0.00	0.00	
7,200.0	7.27	353.90	7,145.2	864.7	-92.3	869.6	0.00	0.00	
7,300.0	7.27	353.90	7,244.4	877.2	-93.7	882.2	0.00	0.00	
7,351.0	7.27	353.90	7,295.0	883.7	-94.4	888.7	0.00	0.00	WILLIAMS_FORK
7,400.0	7.27	353.90	7,343.6	889.8	-95.0	894.9	0.00	0.00	
7,500.0	7.27	353.90	7,442.8	902.4	-96.4	907.6	0.00	0.00	
7,521.7	7.27	353.90	7,464.3	905.2	-96.7	910.3	0.00	0.00	Start Drop -2.00
7,600.0	5.71	353.90	7,542.1	914.0	-97.6	919.2	2.00	-2.00	
7,700.0	3.71	353.90	7,641.8	922.1	-98.5	927.4	2.00	-2.00	
7,800.0	1.71	353.90	7,741.7	926.8	-99.0	932.1	2.00	-2.00	
7,885.3	0.00	0.00	7,827.0	928.1	-99.1	933.4	2.00	-2.00	Start 2097.0 hold at 7885.3 MD
7,900.0	0.00	0.00	7,841.6	928.1	-99.1	933.4	0.00	0.00	
7,985.3	0.00	0.00	7,927.0	928.1	-99.1	933.4	0.00	0.00	TOP_GAS
8,000.0	0.00	0.00	7,941.6	928.1	-99.1	933.4	0.00	0.00	
8,100.0	0.00	0.00	8,041.6	928.1	-99.1	933.4	0.00	0.00	
8,200.0	0.00	0.00	8,141.6	928.1	-99.1	933.4	0.00	0.00	
8,300.0	0.00	0.00	8,241.6	928.1	-99.1	933.4	0.00	0.00	
8,400.0	0.00	0.00	8,341.6	928.1	-99.1	933.4	0.00	0.00	
8,500.0	0.00	0.00	8,441.6	928.1	-99.1	933.4	0.00	0.00	
8,600.0	0.00	0.00	8,541.6	928.1	-99.1	933.4	0.00	0.00	
8,700.0	0.00	0.00	8,641.6	928.1	-99.1	933.4	0.00	0.00	
8,800.0	0.00	0.00	8,741.6	928.1	-99.1	933.4	0.00	0.00	
8,900.0	0.00	0.00	8,841.6	928.1	-99.1	933.4	0.00	0.00	
9,000.0	0.00	0.00	8,941.6	928.1	-99.1	933.4	0.00	0.00	
9,100.0	0.00	0.00	9,041.6	928.1	-99.1	933.4	0.00	0.00	
9,200.0	0.00	0.00	9,141.6	928.1	-99.1	933.4	0.00	0.00	
9,300.0	0.00	0.00	9,241.6	928.1	-99.1	933.4	0.00	0.00	
9,400.0	0.00	0.00	9,341.6	928.1	-99.1	933.4	0.00	0.00	
9,500.0	0.00	0.00	9,441.6	928.1	-99.1	933.4	0.00	0.00	
9,576.3	0.00	0.00	9,518.0	928.1	-99.1	933.4	0.00	0.00	CAMEO

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 12C-36-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8931.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8931.0usft
Site:	S36-T7S-R95W (36L)	North Reference:	True
Well:	12C-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
9,600.0	0.00	0.00	9,541.6	928.1	-99.1	933.4	0.00	0.00	
9,700.0	0.00	0.00	9,641.6	928.1	-99.1	933.4	0.00	0.00	
9,800.0	0.00	0.00	9,741.6	928.1	-99.1	933.4	0.00	0.00	
9,832.3	0.00	0.00	9,774.0	928.1	-99.1	933.4	0.00	0.00	ROLLINS
9,900.0	0.00	0.00	9,841.6	928.1	-99.1	933.4	0.00	0.00	
9,982.3	0.00	0.00	9,924.0	928.1	-99.1	933.4	0.00	0.00	TD at 9982.3 - TD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
12C-36-795 PBHL - hit/miss target - Shape - Circle (radius 50.0)	0.00	0.00	9,924.0	928.1	-99.1	14,320,200.00	2,501,446.10	39.394739	-107.952554

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,909.4	6,857.0	OHIO_CREEK				
7,351.0	7,295.0	WILLIAMS_FORK				
7,985.3	7,927.0	TOP_GAS				
9,576.3	9,518.0	CAMEO				
9,832.3	9,774.0	ROLLINS				
9,982.3	9,924.0	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 2.00
513.7	512.7	22.9	-2.4	Start 7008.0 hold at 513.7 MD
7,521.7	7,464.3	905.2	-96.7	Start Drop -2.00
7,885.3	7,827.0	928.1	-99.1	Start 2097.0 hold at 7885.3 MD
9,982.3	9,924.0	928.1	-99.1	TD at 9982.3