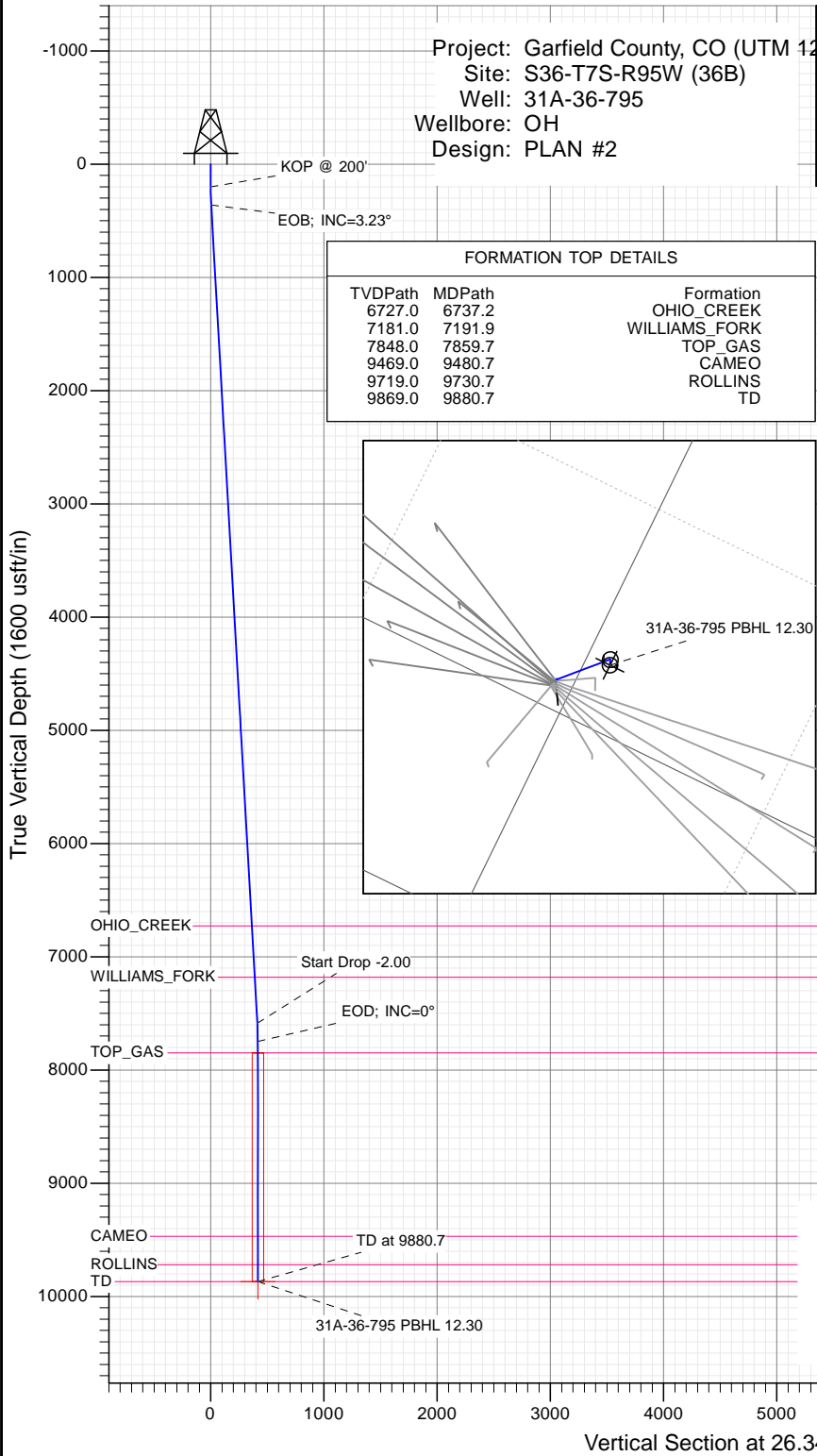




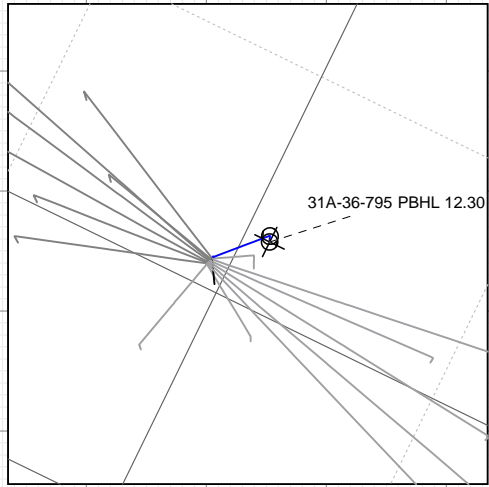
SECTION DETAILS

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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	361.5	3.23	26.34	361.4	4.1	2.0	2.00	26.34	4.6	
4	7598.2	3.23	26.34	7586.6	369.5	182.9	0.00	0.00	412.3	
5	7759.7	0.00	0.00	7748.0	373.5	185.0	2.00	180.00	416.8	
6	9880.7	0.00	0.00	9869.0	373.5	185.0	0.00	0.00	416.8	31A-36-795 PBHL 12.30

Project: Garfield County, CO (UTM 12
 Site: S36-T7S-R95W (36B)
 Well: 31A-36-795
 Wellbore: OH
 Design: PLAN #2



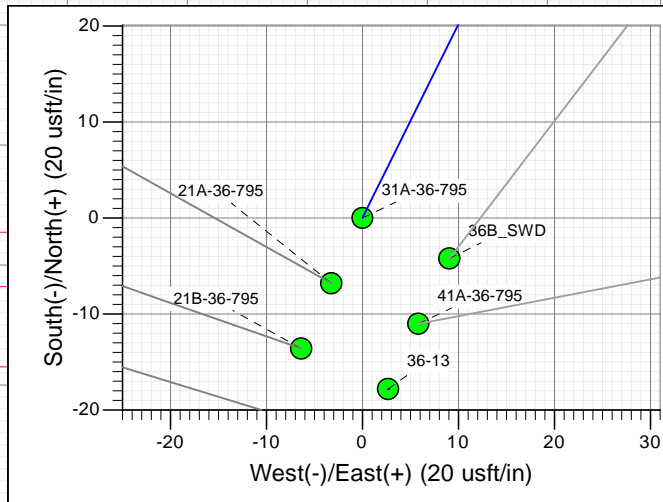
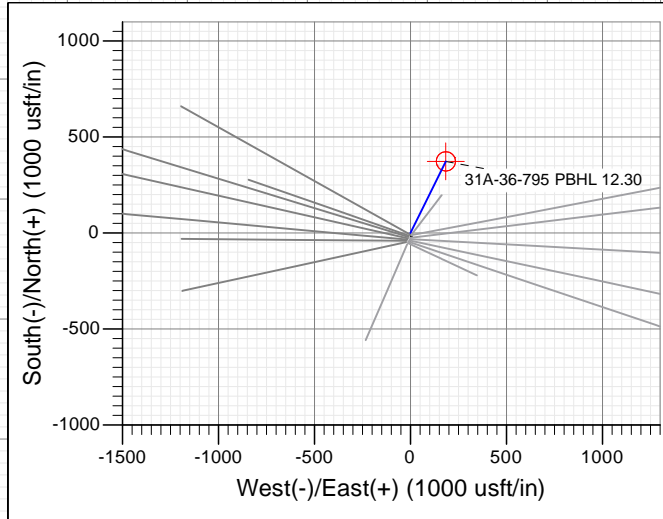
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
6727.0	6737.2	OHIO_CREEK
7181.0	7191.9	WILLIAMS_FORK
7848.0	7859.7	TOP_GAS
9469.0	9480.7	CAMEO
9719.0	9730.7	ROLLINS
9869.0	9880.7	TD



Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
TD	No Target (Freehand)	26.34	Spot	0.0	0.0	0.0

PLAN #2
 31A-36-795
 15XXX LR
 30' KB @ 8714.0usft
 Ground Level @ 8684.0
 NAD 1927 - Western US
 Well 31A-36-795, True North

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
31A-36-795 PBHL	9869.0	405.2	162.7	39.399544	-107.942765
31A-36-795 PBHL 12.30	9869.0	373.5	185.0	39.399258	-107.942686



T M
 Azimuths to True North
 Magnetic North: 9.42°
 Magnetic Field
 Strength: 51880.5snT
 Dip Angle: 65.62°
 Date: 12/17/2015
 Model: HDGM

CASING DETAILS
 No casing data is available



WELL DETAILS: 31A-36-795

Ground Level: 8684.0
 +N/-S 0.0 +E/-W 0.0 Northing 14321560.50 Easting 2504006.70 Latitude 39.398232 Longitude -107.943340



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 31A-36-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8714.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8714.0usft
Site:	S36-T7S-R95W (36B)	North Reference:	True
Well:	31A-36-795	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

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 (36B)		
Site Position:		Northing:	14,321,539.90 usft
From:	Map	Easting:	2,503,997.80 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	39.398177
		Longitude:	-107.943374
		Grid Convergence:	1.94 °

Well	31A-36-795		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
			14,321,560.50 usft
			Latitude:
			39.398232
			Longitude:
			-107.943340
Position Uncertainty		0.0 usft	Wellhead Elevation:
			0.0 usft
			Ground Level:
			8,684.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
			Dip Angle
			(°)
			Field Strength
			(nT)
	HDGM	12/17/2015	9.42
			65.62
			51,881

Design	PLAN #2		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
			Direction
			(°)
	0.0	0.0	26.34

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
361.5	3.23	26.34	361.4	4.1	2.0	2.00	2.00	0.00	26.34	
7,598.2	3.23	26.34	7,586.6	369.5	182.9	0.00	0.00	0.00	0.00	
7,759.7	0.00	0.00	7,748.0	373.5	185.0	2.00	-2.00	0.00	180.00	
9,880.7	0.00	0.00	9,869.0	373.5	185.0	0.00	0.00	0.00	0.00	31A-36-795 PBHL 12.

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 31A-36-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8714.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8714.0usft
Site:	S36-T7S-R95W (36B)	North Reference:	True
Well:	31A-36-795	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

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	KOP @ 200'
300.0	2.00	26.34	300.0	1.6	0.8	1.7	2.00	2.00	
361.5	3.23	26.34	361.4	4.1	2.0	4.6	2.00	2.00	EOB; INC=3.23°
400.0	3.23	26.34	399.9	6.0	3.0	6.7	0.00	0.00	
500.0	3.23	26.34	499.7	11.1	5.5	12.4	0.00	0.00	
600.0	3.23	26.34	599.5	16.1	8.0	18.0	0.00	0.00	
700.0	3.23	26.34	699.4	21.2	10.5	23.6	0.00	0.00	
800.0	3.23	26.34	799.2	26.2	13.0	29.3	0.00	0.00	
900.0	3.23	26.34	899.1	31.3	15.5	34.9	0.00	0.00	
1,000.0	3.23	26.34	998.9	36.3	18.0	40.5	0.00	0.00	
1,100.0	3.23	26.34	1,098.7	41.4	20.5	46.2	0.00	0.00	
1,200.0	3.23	26.34	1,198.6	46.4	23.0	51.8	0.00	0.00	
1,300.0	3.23	26.34	1,298.4	51.5	25.5	57.4	0.00	0.00	
1,400.0	3.23	26.34	1,398.3	56.5	28.0	63.1	0.00	0.00	
1,500.0	3.23	26.34	1,498.1	61.6	30.5	68.7	0.00	0.00	
1,600.0	3.23	26.34	1,597.9	66.6	33.0	74.3	0.00	0.00	
1,700.0	3.23	26.34	1,697.8	71.7	35.5	80.0	0.00	0.00	
1,800.0	3.23	26.34	1,797.6	76.7	38.0	85.6	0.00	0.00	
1,900.0	3.23	26.34	1,897.5	81.8	40.5	91.2	0.00	0.00	
2,000.0	3.23	26.34	1,997.3	86.8	43.0	96.9	0.00	0.00	
2,100.0	3.23	26.34	2,097.2	91.9	45.5	102.5	0.00	0.00	
2,200.0	3.23	26.34	2,197.0	96.9	48.0	108.1	0.00	0.00	
2,300.0	3.23	26.34	2,296.8	102.0	50.5	113.8	0.00	0.00	
2,400.0	3.23	26.34	2,396.7	107.0	53.0	119.4	0.00	0.00	
2,500.0	3.23	26.34	2,496.5	112.1	55.5	125.0	0.00	0.00	
2,600.0	3.23	26.34	2,596.4	117.1	58.0	130.7	0.00	0.00	
2,700.0	3.23	26.34	2,696.2	122.2	60.5	136.3	0.00	0.00	
2,800.0	3.23	26.34	2,796.0	127.2	63.0	141.9	0.00	0.00	
2,900.0	3.23	26.34	2,895.9	132.3	65.5	147.6	0.00	0.00	
3,000.0	3.23	26.34	2,995.7	137.3	68.0	153.2	0.00	0.00	
3,100.0	3.23	26.34	3,095.6	142.4	70.5	158.8	0.00	0.00	
3,200.0	3.23	26.34	3,195.4	147.4	73.0	164.5	0.00	0.00	
3,300.0	3.23	26.34	3,295.2	152.4	75.5	170.1	0.00	0.00	
3,400.0	3.23	26.34	3,395.1	157.5	78.0	175.7	0.00	0.00	
3,500.0	3.23	26.34	3,494.9	162.5	80.5	181.4	0.00	0.00	
3,600.0	3.23	26.34	3,594.8	167.6	83.0	187.0	0.00	0.00	
3,700.0	3.23	26.34	3,694.6	172.6	85.5	192.6	0.00	0.00	
3,800.0	3.23	26.34	3,794.5	177.7	88.0	198.3	0.00	0.00	
3,900.0	3.23	26.34	3,894.3	182.7	90.5	203.9	0.00	0.00	
4,000.0	3.23	26.34	3,994.1	187.8	93.0	209.6	0.00	0.00	
4,100.0	3.23	26.34	4,094.0	192.8	95.5	215.2	0.00	0.00	
4,200.0	3.23	26.34	4,193.8	197.9	98.0	220.8	0.00	0.00	
4,300.0	3.23	26.34	4,293.7	202.9	100.5	226.5	0.00	0.00	
4,400.0	3.23	26.34	4,393.5	208.0	103.0	232.1	0.00	0.00	
4,500.0	3.23	26.34	4,493.3	213.0	105.5	237.7	0.00	0.00	
4,600.0	3.23	26.34	4,593.2	218.1	108.0	243.4	0.00	0.00	
4,700.0	3.23	26.34	4,693.0	223.1	110.5	249.0	0.00	0.00	
4,800.0	3.23	26.34	4,792.9	228.2	113.0	254.6	0.00	0.00	
4,900.0	3.23	26.34	4,892.7	233.2	115.5	260.3	0.00	0.00	
5,000.0	3.23	26.34	4,992.5	238.3	118.0	265.9	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 31A-36-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8714.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8714.0usft
Site:	S36-T7S-R95W (36B)	North Reference:	True
Well:	31A-36-795	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

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	3.23	26.34	5,092.4	243.3	120.5	271.5	0.00	0.00	
5,200.0	3.23	26.34	5,192.2	248.4	123.0	277.2	0.00	0.00	
5,300.0	3.23	26.34	5,292.1	253.4	125.5	282.8	0.00	0.00	
5,400.0	3.23	26.34	5,391.9	258.5	128.0	288.4	0.00	0.00	
5,500.0	3.23	26.34	5,491.8	263.5	130.5	294.1	0.00	0.00	
5,600.0	3.23	26.34	5,591.6	268.6	133.0	299.7	0.00	0.00	
5,700.0	3.23	26.34	5,691.4	273.6	135.5	305.3	0.00	0.00	
5,800.0	3.23	26.34	5,791.3	278.7	138.0	311.0	0.00	0.00	
5,900.0	3.23	26.34	5,891.1	283.7	140.5	316.6	0.00	0.00	
6,000.0	3.23	26.34	5,991.0	288.8	143.0	322.2	0.00	0.00	
6,100.0	3.23	26.34	6,090.8	293.8	145.5	327.9	0.00	0.00	
6,200.0	3.23	26.34	6,190.6	298.9	148.0	333.5	0.00	0.00	
6,300.0	3.23	26.34	6,290.5	303.9	150.5	339.1	0.00	0.00	
6,400.0	3.23	26.34	6,390.3	309.0	153.0	344.8	0.00	0.00	
6,500.0	3.23	26.34	6,490.2	314.0	155.5	350.4	0.00	0.00	
6,600.0	3.23	26.34	6,590.0	319.1	158.0	356.0	0.00	0.00	
6,700.0	3.23	26.34	6,689.8	324.1	160.5	361.7	0.00	0.00	
6,737.2	3.23	26.34	6,727.0	326.0	161.4	363.8	0.00	0.00	OHIO_CREEK
6,800.0	3.23	26.34	6,789.7	329.2	163.0	367.3	0.00	0.00	
6,900.0	3.23	26.34	6,889.5	334.2	165.5	372.9	0.00	0.00	
7,000.0	3.23	26.34	6,989.4	339.3	168.0	378.6	0.00	0.00	
7,100.0	3.23	26.34	7,089.2	344.3	170.5	384.2	0.00	0.00	
7,191.9	3.23	26.34	7,181.0	349.0	172.8	389.4	0.00	0.00	WILLIAMS_FORK
7,200.0	3.23	26.34	7,189.1	349.4	173.0	389.8	0.00	0.00	
7,300.0	3.23	26.34	7,288.9	354.4	175.5	395.5	0.00	0.00	
7,400.0	3.23	26.34	7,388.7	359.5	178.0	401.1	0.00	0.00	
7,500.0	3.23	26.34	7,488.6	364.5	180.5	406.8	0.00	0.00	
7,598.2	3.23	26.34	7,586.6	369.5	182.9	412.3	0.00	0.00	Start Drop -2.00
7,600.0	3.19	26.34	7,588.4	369.6	183.0	412.4	2.00	-2.00	
7,700.0	1.19	26.34	7,688.3	373.0	184.7	416.2	2.00	-2.00	
7,759.7	0.00	0.00	7,748.0	373.5	185.0	416.8	2.00	-2.00	EOD; INC=0°
7,800.0	0.00	0.00	7,788.3	373.5	185.0	416.8	0.00	0.00	
7,859.7	0.00	0.00	7,848.0	373.5	185.0	416.8	0.00	0.00	TOP_GAS
7,900.0	0.00	0.00	7,888.3	373.5	185.0	416.8	0.00	0.00	
8,000.0	0.00	0.00	7,988.3	373.5	185.0	416.8	0.00	0.00	
8,100.0	0.00	0.00	8,088.3	373.5	185.0	416.8	0.00	0.00	
8,200.0	0.00	0.00	8,188.3	373.5	185.0	416.8	0.00	0.00	
8,300.0	0.00	0.00	8,288.3	373.5	185.0	416.8	0.00	0.00	
8,400.0	0.00	0.00	8,388.3	373.5	185.0	416.8	0.00	0.00	
8,500.0	0.00	0.00	8,488.3	373.5	185.0	416.8	0.00	0.00	
8,600.0	0.00	0.00	8,588.3	373.5	185.0	416.8	0.00	0.00	
8,700.0	0.00	0.00	8,688.3	373.5	185.0	416.8	0.00	0.00	
8,800.0	0.00	0.00	8,788.3	373.5	185.0	416.8	0.00	0.00	
8,900.0	0.00	0.00	8,888.3	373.5	185.0	416.8	0.00	0.00	
9,000.0	0.00	0.00	8,988.3	373.5	185.0	416.8	0.00	0.00	
9,100.0	0.00	0.00	9,088.3	373.5	185.0	416.8	0.00	0.00	
9,200.0	0.00	0.00	9,188.3	373.5	185.0	416.8	0.00	0.00	
9,300.0	0.00	0.00	9,288.3	373.5	185.0	416.8	0.00	0.00	
9,400.0	0.00	0.00	9,388.3	373.5	185.0	416.8	0.00	0.00	
9,480.7	0.00	0.00	9,469.0	373.5	185.0	416.8	0.00	0.00	CAMEO
9,500.0	0.00	0.00	9,488.3	373.5	185.0	416.8	0.00	0.00	
9,600.0	0.00	0.00	9,588.3	373.5	185.0	416.8	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 31A-36-795
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8714.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8714.0usft
Site:	S36-T7S-R95W (36B)	North Reference:	True
Well:	31A-36-795	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

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	9,688.3	373.5	185.0	416.8	0.00	0.00	
9,730.7	0.00	0.00	9,719.0	373.5	185.0	416.8	0.00	0.00	ROLLINS
9,800.0	0.00	0.00	9,788.3	373.5	185.0	416.8	0.00	0.00	
9,880.7	0.00	0.00	9,869.0	373.5	185.0	416.8	0.00	0.00	TD at 9880.7 - TD

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
31A-36-795 PBHL 12.30 - hit/miss target - Shape - plan hits target center - Circle (radius 50.0)	0.00	0.00	9,869.0	373.5	185.0	14,321,940.10	2,504,178.90	39.399258	-107.942686	
31A-36-795 PBHL - plan misses target center by 38.7usft at 9880.7usft MD (9869.0 TVD, 373.5 N, 185.0 E) - Circle (radius 50.0)	0.00	0.00	9,869.0	405.2	162.7	14,321,971.00	2,504,155.60	39.399344	-107.942765	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,737.2	6,727.0	OHIO_CREEK				
7,191.9	7,181.0	WILLIAMS_FORK				
7,859.7	7,848.0	TOP_GAS				
9,480.7	9,469.0	CAMEO				
9,730.7	9,719.0	ROLLINS				
9,880.7	9,869.0	TD				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
200.0	200.0	0.0	0.0	KOP @ 200'
361.5	361.4	4.1	2.0	EOB; INC=3.23°
7,598.2	7,586.6	369.5	182.9	Start Drop -2.00
7,759.7	7,748.0	373.5	185.0	EOD; INC=0°
9,880.7	9,869.0	373.5	185.0	TD at 9880.7