



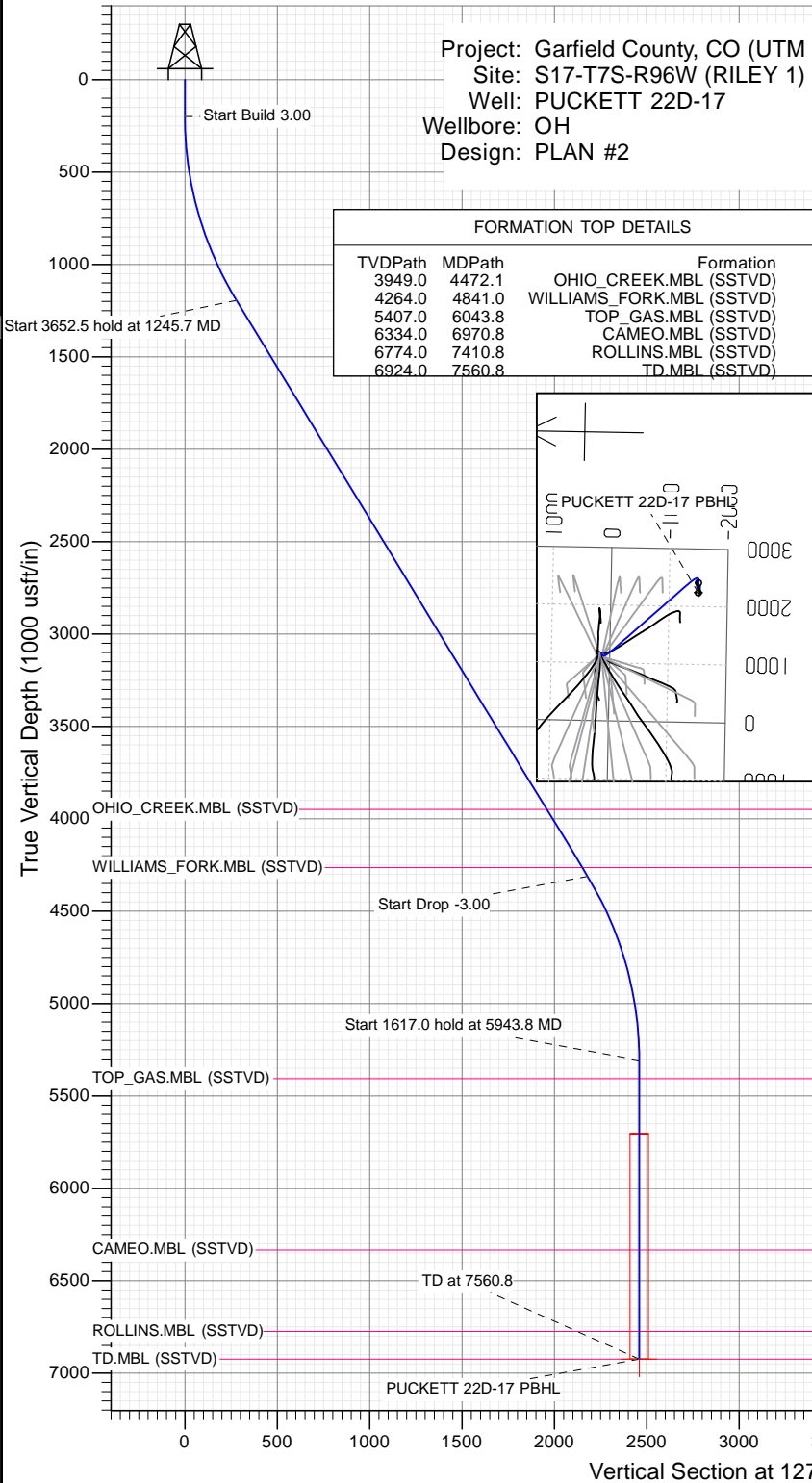
SECTION DETAILS

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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1245.7	31.37	127.62	1194.2	-170.4	221.1	3.00	127.62	279.2	
4	4898.2	31.37	127.62	4312.8	-1331.0	1727.2	0.00	0.00	2180.5	
5	5943.8	0.00	0.00	5307.0	-1501.4	1948.3	3.00	180.00	2459.7	
6	7560.8	0.00	0.00	6924.0	-1501.4	1948.3	0.00	0.00	2459.7	PUCKETT 22D-17 PBHL

Project: Garfield County, CO (UTM 12  
 Site: S17-T7S-R96W (RILEY 1)  
 Well: PUCKETT 22D-17  
 Wellbore: OH  
 Design: PLAN #2

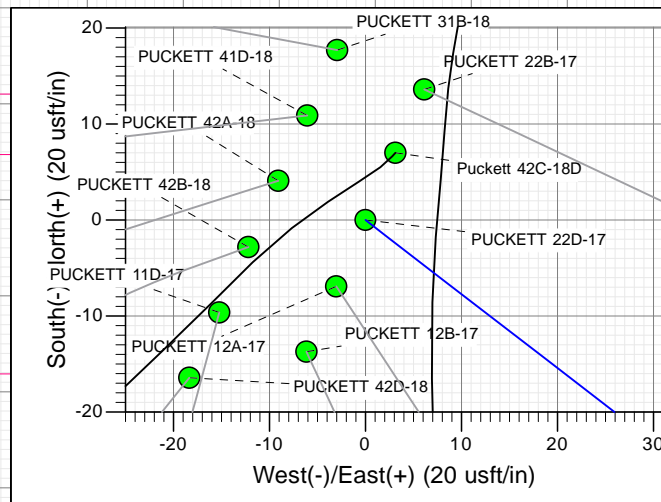
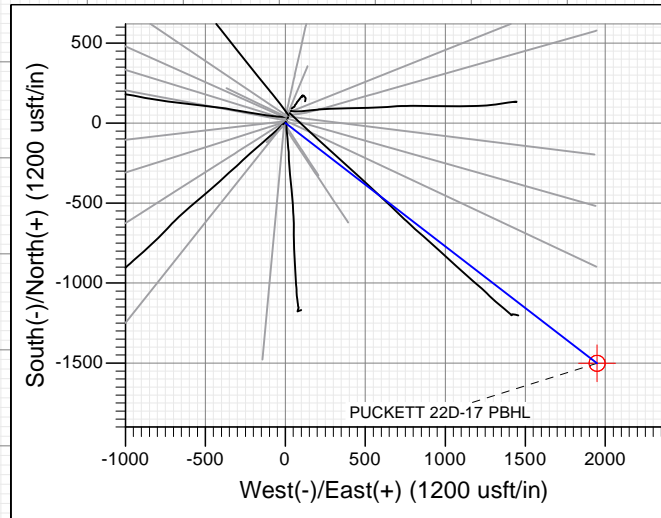
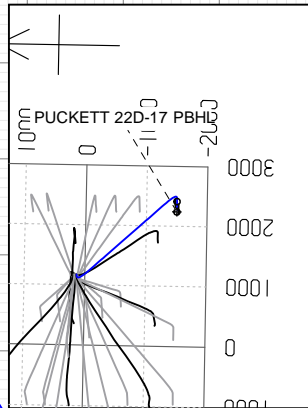
PLAN #2  
 PUCKETT 22D-17  
 15XXX; LR  
 KB @ 6764.0usft  
 Ground Level @ 6734.0  
 NAD 1927 - Western US  
 Well PUCKETT 22D-17, True North

Type	Target	Origin	N/S	E/W	From	
TD	No Target (Freehand)	Slot	0.0	0.0	TVD	
Name		TVD	+N/-S	+E/-W	Latitude	Longitude
PUCKETT 22D-17 PBHL		6924.0	-1501.4	1948.3	39.437743	-108.131106



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3949.0	4472.1	OHIO_CREEK.MBL (SSTVD)
4264.0	4841.0	WILLIAMS_FORK.MBL (SSTVD)
5407.0	6043.8	TOP_GAS.MBL (SSTVD)
6334.0	6970.8	CAMEO.MBL (SSTVD)
6774.0	7410.8	ROLLINS.MBL (SSTVD)
6924.0	7560.8	TD.MBL (SSTVD)



TM  
 Azimuths to True North  
 Magnetic North: 9.75°  
 Magnetic Field  
 Strength: 51971.4snT  
 Dip Angle: 65.73°  
 Date: 11/19/2015  
 Model: HDGM

CASING DETAILS

No casing data is available



WELL DETAILS: PUCKETT 22D-17

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14335645.50	2448495.80	39.441864	-108.138002

Ground Level: 6734.0



## Planning Report

<b>Database:</b> USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b> Well PUCKETT 22D-17
<b>Company:</b> Caerus Oil & Gas	<b>TVD Reference:</b> KB @ 6764.0usft
<b>Project:</b> Garfield County, CO (UTM 12N)	<b>MD Reference:</b> KB @ 6764.0usft
<b>Site:</b> S17-T7S-R96W (RILEY 1)	<b>North Reference:</b> True
<b>Well:</b> PUCKETT 22D-17	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Wellbore:</b> OH	
<b>Design:</b> PLAN #2	

<b>Project</b> Garfield County, CO (UTM 12N)			
<b>Map System:</b> Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b> Mean Sea Level		
<b>Geo Datum:</b> NAD 1927 - Western US			
<b>Map Zone:</b> Zone 12N (114 W to 108 W)			

<b>Site</b> S17-T7S-R96W (RILEY 1)			
<b>Site Position:</b>	<b>Northing:</b> 14,335,697.50 usft	<b>Latitude:</b> 39.442005	
<b>From:</b> Map	<b>Easting:</b> 2,448,508.30 usft	<b>Longitude:</b> -108.137952	
<b>Position Uncertainty:</b> 0.0 usft	<b>Slot Radius:</b> 13-3/16"	<b>Grid Convergence:</b> 1.82 °	

<b>Well</b> PUCKETT 22D-17			
<b>Well Position</b>	<b>+N/-S</b> 0.0 usft	<b>Northing:</b> 14,335,645.50 usft	<b>Latitude:</b> 39.441864
	<b>+E/-W</b> 0.0 usft	<b>Easting:</b> 2,448,495.80 usft	<b>Longitude:</b> -108.138002
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b> 0.0 usft	<b>Ground Level:</b> 6,734.0 usft

<b>Wellbore</b> OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	11/19/2015	9.75	65.73	51,971

<b>Design</b> PLAN #2				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b> PLAN	<b>Tie On Depth:</b> 0.0		
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	127.62

<b>Plan Sections</b>										
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	
1,245.7	31.37	127.62	1,194.2	-170.4	221.1	3.00	3.00	0.00	127.62	
4,898.2	31.37	127.62	4,312.8	-1,331.0	1,727.2	0.00	0.00	0.00	0.00	
5,943.8	0.00	0.00	5,307.0	-1,501.4	1,948.3	3.00	-3.00	0.00	180.00	
7,560.8	0.00	0.00	6,924.0	-1,501.4	1,948.3	0.00	0.00	0.00	0.00	PUCKETT 22D-17 PE

Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 22D-17
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	KB @ 6764.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	KB @ 6764.0usft
<b>Site:</b>	S17-T7S-R96W (RILEY 1)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 22D-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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	Start Build 3.00
300.0	3.00	127.62	300.0	-1.6	2.1	2.6	3.00	3.00	
400.0	6.00	127.62	399.6	-6.4	8.3	10.5	3.00	3.00	
500.0	9.00	127.62	498.8	-14.4	18.6	23.5	3.00	3.00	
600.0	12.00	127.62	597.1	-25.5	33.1	41.7	3.00	3.00	
700.0	15.00	127.62	694.3	-39.7	51.5	65.1	3.00	3.00	
800.0	18.00	127.62	790.2	-57.1	74.0	93.5	3.00	3.00	
900.0	21.00	127.62	884.4	-77.4	100.5	126.9	3.00	3.00	
1,000.0	24.00	127.62	976.8	-100.8	130.8	165.1	3.00	3.00	
1,100.0	27.00	127.62	1,067.1	-127.1	164.9	208.2	3.00	3.00	
1,200.0	30.00	127.62	1,154.9	-156.2	202.7	255.9	3.00	3.00	
1,245.7	31.37	127.62	1,194.2	-170.4	221.1	279.2	3.00	3.00	Start 3652.5 hold at 1245.7 MD
1,300.0	31.37	127.62	1,240.6	-187.7	243.5	307.5	0.00	0.00	
1,400.0	31.37	127.62	1,326.0	-219.4	284.8	359.5	0.00	0.00	
1,500.0	31.37	127.62	1,411.4	-251.2	326.0	411.6	0.00	0.00	
1,600.0	31.37	127.62	1,496.7	-283.0	367.2	463.6	0.00	0.00	
1,700.0	31.37	127.62	1,582.1	-314.8	408.5	515.7	0.00	0.00	
1,800.0	31.37	127.62	1,667.5	-346.5	449.7	567.7	0.00	0.00	
1,900.0	31.37	127.62	1,752.9	-378.3	490.9	619.8	0.00	0.00	
2,000.0	31.37	127.62	1,838.3	-410.1	532.2	671.9	0.00	0.00	
2,100.0	31.37	127.62	1,923.7	-441.9	573.4	723.9	0.00	0.00	
2,200.0	31.37	127.62	2,009.0	-473.7	614.6	776.0	0.00	0.00	
2,300.0	31.37	127.62	2,094.4	-505.4	655.9	828.0	0.00	0.00	
2,400.0	31.37	127.62	2,179.8	-537.2	697.1	880.1	0.00	0.00	
2,500.0	31.37	127.62	2,265.2	-569.0	738.3	932.1	0.00	0.00	
2,600.0	31.37	127.62	2,350.6	-600.8	779.6	984.2	0.00	0.00	
2,700.0	31.37	127.62	2,435.9	-632.5	820.8	1,036.2	0.00	0.00	
2,800.0	31.37	127.62	2,521.3	-664.3	862.0	1,088.3	0.00	0.00	
2,900.0	31.37	127.62	2,606.7	-696.1	903.3	1,140.4	0.00	0.00	
3,000.0	31.37	127.62	2,692.1	-727.9	944.5	1,192.4	0.00	0.00	
3,100.0	31.37	127.62	2,777.5	-759.6	985.7	1,244.5	0.00	0.00	
3,200.0	31.37	127.62	2,862.9	-791.4	1,027.0	1,296.5	0.00	0.00	
3,300.0	31.37	127.62	2,948.2	-823.2	1,068.2	1,348.6	0.00	0.00	
3,400.0	31.37	127.62	3,033.6	-855.0	1,109.4	1,400.6	0.00	0.00	
3,500.0	31.37	127.62	3,119.0	-886.7	1,150.7	1,452.7	0.00	0.00	
3,600.0	31.37	127.62	3,204.4	-918.5	1,191.9	1,504.8	0.00	0.00	
3,700.0	31.37	127.62	3,289.8	-950.3	1,233.1	1,556.8	0.00	0.00	
3,800.0	31.37	127.62	3,375.2	-982.1	1,274.4	1,608.9	0.00	0.00	
3,900.0	31.37	127.62	3,460.5	-1,013.8	1,315.6	1,660.9	0.00	0.00	
4,000.0	31.37	127.62	3,545.9	-1,045.6	1,356.8	1,713.0	0.00	0.00	
4,100.0	31.37	127.62	3,631.3	-1,077.4	1,398.1	1,765.0	0.00	0.00	
4,200.0	31.37	127.62	3,716.7	-1,109.2	1,439.3	1,817.1	0.00	0.00	
4,300.0	31.37	127.62	3,802.1	-1,140.9	1,480.5	1,869.1	0.00	0.00	
4,400.0	31.37	127.62	3,887.4	-1,172.7	1,521.8	1,921.2	0.00	0.00	
4,472.1	31.37	127.62	3,949.0	-1,195.6	1,551.5	1,958.7	0.00	0.00	OHIO_CREEK.MBL (SSTVD)
4,500.0	31.37	127.62	3,972.8	-1,204.5	1,563.0	1,973.3	0.00	0.00	
4,600.0	31.37	127.62	4,058.2	-1,236.3	1,604.2	2,025.3	0.00	0.00	
4,700.0	31.37	127.62	4,143.6	-1,268.0	1,645.5	2,077.4	0.00	0.00	
4,800.0	31.37	127.62	4,229.0	-1,299.8	1,686.7	2,129.4	0.00	0.00	
4,841.0	31.37	127.62	4,264.0	-1,312.8	1,703.6	2,150.8	0.00	0.00	WILLIAMS_FORK.MBL (SSTVD)

## Planning Report

<b>Database:</b> USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b> Well PUCKETT 22D-17
<b>Company:</b> Caerus Oil & Gas	<b>TVD Reference:</b> KB @ 6764.0usft
<b>Project:</b> Garfield County, CO (UTM 12N)	<b>MD Reference:</b> KB @ 6764.0usft
<b>Site:</b> S17-T7S-R96W (RILEY 1)	<b>North Reference:</b> True
<b>Well:</b> PUCKETT 22D-17	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Wellbore:</b> OH	
<b>Design:</b> 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
4,898.2	31.37	127.62	4,312.8	-1,331.0	1,727.2	2,180.5	0.00	0.00	Start Drop -3.00
4,900.0	31.32	127.62	4,314.4	-1,331.6	1,727.9	2,181.5	3.00	-3.00	
5,000.0	28.32	127.62	4,401.1	-1,361.9	1,767.3	2,231.2	3.00	-3.00	
5,100.0	25.32	127.62	4,490.3	-1,389.5	1,803.0	2,276.3	3.00	-3.00	
5,200.0	22.32	127.62	4,581.8	-1,414.1	1,835.0	2,316.7	3.00	-3.00	
5,300.0	19.32	127.62	4,675.3	-1,435.8	1,863.2	2,352.2	3.00	-3.00	
5,400.0	16.32	127.62	4,770.5	-1,454.5	1,887.4	2,382.8	3.00	-3.00	
5,500.0	13.32	127.62	4,867.1	-1,470.1	1,907.7	2,408.4	3.00	-3.00	
5,600.0	10.32	127.62	4,965.0	-1,482.6	1,923.9	2,428.8	3.00	-3.00	
5,700.0	7.32	127.62	5,063.8	-1,491.9	1,936.0	2,444.2	3.00	-3.00	
5,800.0	4.32	127.62	5,163.3	-1,498.1	1,944.0	2,454.3	3.00	-3.00	
5,900.0	1.32	127.62	5,263.2	-1,501.1	1,947.9	2,459.2	3.00	-3.00	
5,943.8	0.00	0.00	5,307.0	-1,501.4	1,948.3	2,459.7	3.00	-3.00	Start 1617.0 hold at 5943.8 MD
6,000.0	0.00	0.00	5,363.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,043.8	0.00	0.00	5,407.0	-1,501.4	1,948.3	2,459.7	0.00	0.00	TOP_GAS.MBL (SSTVD)
6,100.0	0.00	0.00	5,463.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,200.0	0.00	0.00	5,563.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,300.0	0.00	0.00	5,663.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,400.0	0.00	0.00	5,763.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,500.0	0.00	0.00	5,863.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,600.0	0.00	0.00	5,963.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,700.0	0.00	0.00	6,063.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,800.0	0.00	0.00	6,163.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,900.0	0.00	0.00	6,263.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
6,970.8	0.00	0.00	6,334.0	-1,501.4	1,948.3	2,459.7	0.00	0.00	CAMEO.MBL (SSTVD)
7,000.0	0.00	0.00	6,363.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
7,100.0	0.00	0.00	6,463.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
7,200.0	0.00	0.00	6,563.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
7,300.0	0.00	0.00	6,663.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
7,400.0	0.00	0.00	6,763.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
7,410.8	0.00	0.00	6,774.0	-1,501.4	1,948.3	2,459.7	0.00	0.00	ROLLINS.MBL (SSTVD)
7,500.0	0.00	0.00	6,863.2	-1,501.4	1,948.3	2,459.7	0.00	0.00	
7,560.8	0.00	0.00	6,924.0	-1,501.4	1,948.3	2,459.7	0.00	0.00	TD at 7560.8 - TD.MBL (SSTVD)

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PUCKETT 22D-17 PBHI - hit/miss target - Shape - Circle (radius 50.0)	0.00	0.00	6,924.0	-1,501.4	1,948.3	14,334,206.70	2,450,490.80	39.437743	-108.131106

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 22D-17
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	KB @ 6764.0usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	KB @ 6764.0usft
<b>Site:</b>	S17-T7S-R96W (RILEY 1)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 22D-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,472.1	3,949.0	OHIO_CREEK.MBL (SSTVD)		0.00	
4,841.0	4,264.0	WILLIAMS_FORK.MBL (SSTVD)		0.00	
6,043.8	5,407.0	TOP_GAS.MBL (SSTVD)		0.00	
6,970.8	6,334.0	CAMEO.MBL (SSTVD)		0.00	
7,410.8	6,774.0	ROLLINS.MBL (SSTVD)		0.00	
7,560.8	6,924.0	TD.MBL (SSTVD)		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
200.0	200.0	0.0	0.0	Start Build 3.00	
1,245.7	1,194.2	-170.4	221.1	Start 3652.5 hold at 1245.7 MD	
4,898.2	4,312.8	-1,331.0	1,727.2	Start Drop -3.00	
5,943.8	5,307.0	-1,501.4	1,948.3	Start 1617.0 hold at 5943.8 MD	
7,560.8	6,924.0	-1,501.4	1,948.3	TD at 7560.8	