

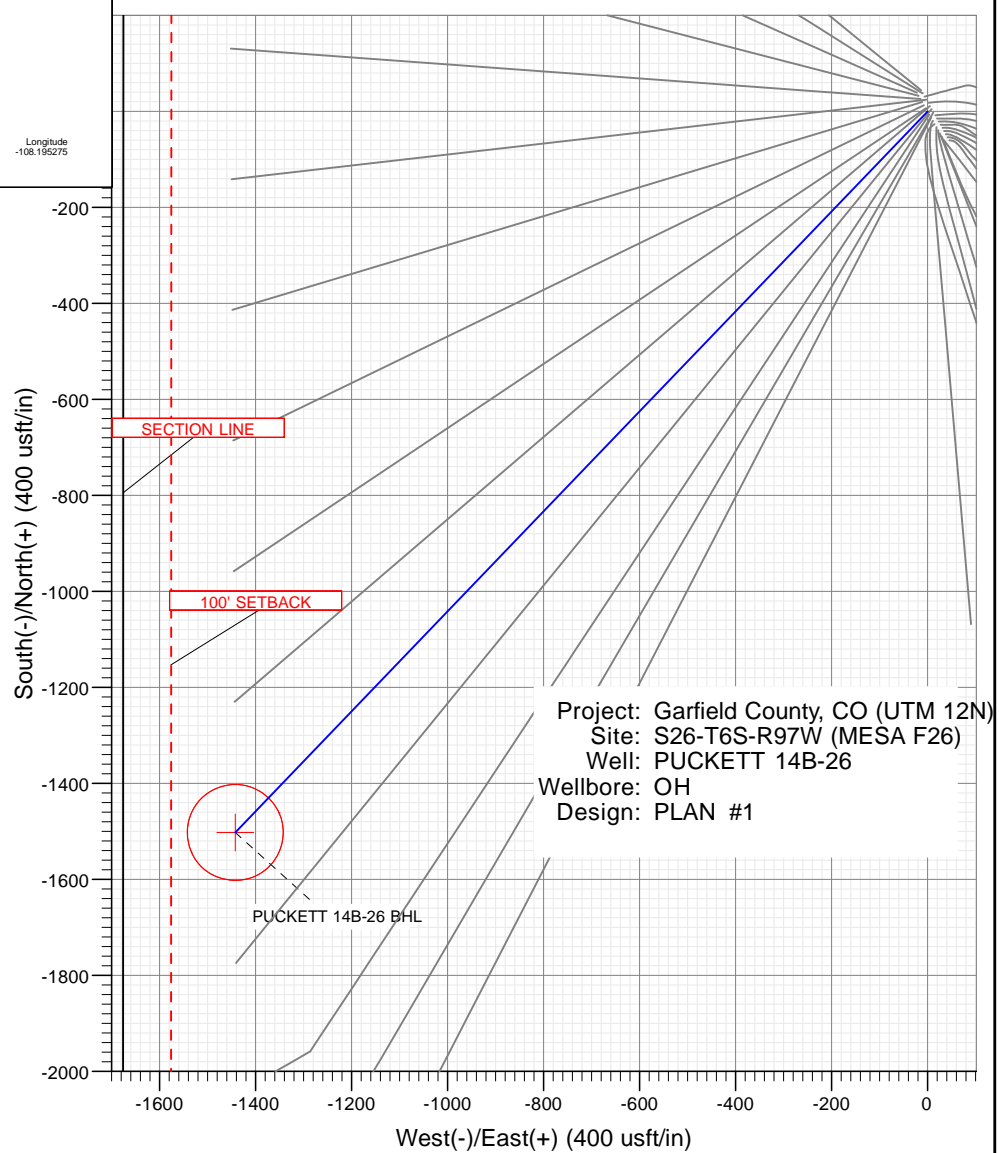
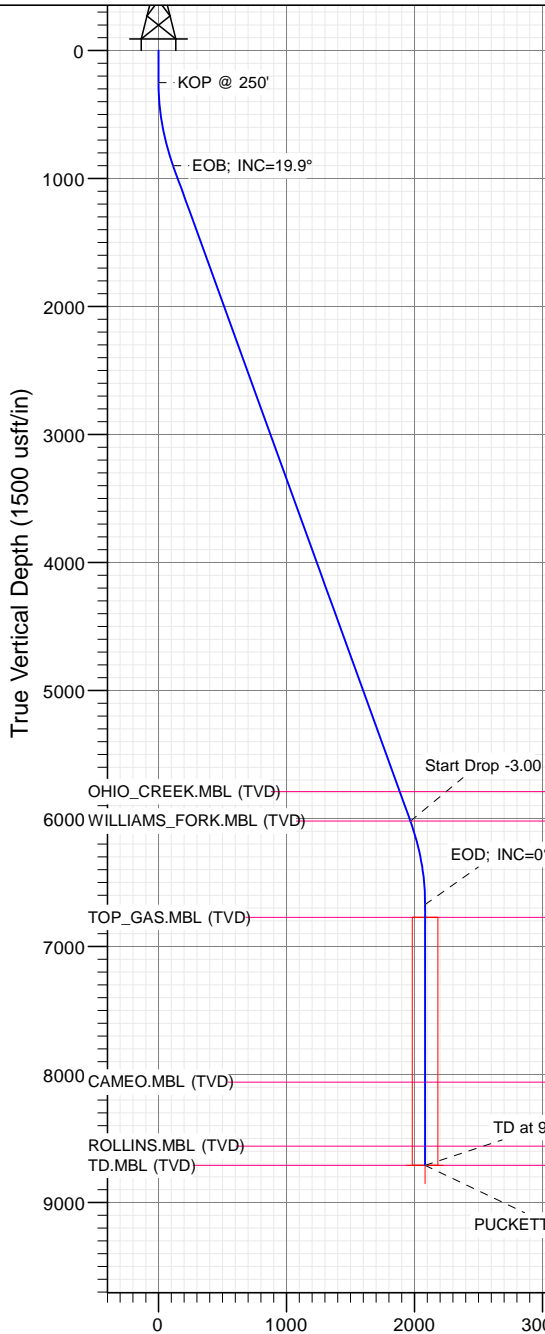


## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
3	913.42	19.90	223.84	900.16	-82.28	-79.00	3.00	223.84	114.07	
4	6360.44	19.90	223.84	6021.84	-1419.85	-1363.27	0.00	0.00	1968.36	
5	7023.86	0.00	0.00	6672.00	-1502.13	-1442.27	3.00	180.00	2082.44	
6	9060.86	0.00	0.00	8709.00	-1502.13	-1442.27	0.00	0.00	2082.44	PUCKETT 14B-26 BHL

PLAN #1  
PUCKETT 14B-26  
XXX16; LR  
30' KB @ 8322.00usft  
Ground Level @ 8322.00  
NAD 1927 - Western US  
Well PUCKETT 14B-26, True North

Type TD	Target No Target (Freehand)	Azimuth 223.84	Origin Type Slot	N/S 0.00	E/W 0.00	From TVD 0.00
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
PUCKETT 14B-26 BHL	8709.00	-1502.13	-1442.27	39.490855	-108.195275	



## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
5790.00	6113.87	OHIO_CREEK.MBL (TVD)
6019.00	6357.42	WILLIAMS_FORK.MBL (TVD)
6772.00	7123.86	TOP_GAS.MBL (TVD)
8059.00	8410.86	CAMEO.MBL (TVD)
8559.00	8910.86	ROLLINS.MBL (TVD)
8709.00	9060.86	TD.MBL (TVD)



Azimuths to True North  
Magnetic North: 9.78°

Magnetic Field  
Strength: 51819.5snT  
Dip Angle: 65.83°  
Date: 9/23/2016  
Model: HDGM

## Vertical Section at 223.84° (1500 usft/in)

## WELL DETAILS: PUCKETT 14B-26

+N/-S	+E/-W	Northing	Ground Level:	8322.00	Latitude	Longitude
0.00	0.00	14354525.40	Easting	2433161.40	39.494978	-108.190166

CATHEDRAL



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 14B-26
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8352.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8352.00usft
<b>Site:</b>	S26-T6S-R97W (MESA F26)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 14B-26	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

<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)		

Site		S26-T6S-R97W (MESA F26)			
Site Position:		Northing:	14,354,512.70 usft	Latitude:	39.494943
From:	Map	Easting:	2,433,169.20 usft	Longitude:	-108.190140
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.79 °

Well	PUCKETT 14B-26					
Well Position	+N/-S	0.00 usft	Northing:	14,354,525.40 usft	Latitude:	39.494978
	+E/-W	0.00 usft	Easting:	2,433,161.40 usft	Longitude:	-108.190166
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	8,322.00 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	HDGM	9/23/2016	9.78	65.83	51,820

<b>Design</b>	PLAN #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	223.84

<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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
913.42	19.90	223.84	900.16	-82.28	-79.00	3.00	3.00	0.00	223.84	
6,360.44	19.90	223.84	6,021.84	-1,419.85	-1,363.27	0.00	0.00	0.00	0.00	
7,023.86	0.00	0.00	6,672.00	-1,502.13	-1,442.27	3.00	-3.00	0.00	180.00	
9,060.86	0.00	0.00	8,709.00	-1,502.13	-1,442.27	0.00	0.00	0.00	0.00	PUCKETT 14B-26 BH

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 14B-26
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8352.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8352.00usft
<b>Site:</b>	S26-T6S-R97W (MESA F26)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 14B-26	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	KOP @ 250'
300.00	1.50	223.84	299.99	-0.47	-0.45	0.65	3.00	3.00	
400.00	4.50	223.84	399.85	-4.25	-4.08	5.89	3.00	3.00	
500.00	7.50	223.84	499.29	-11.79	-11.32	16.34	3.00	3.00	
600.00	10.50	223.84	598.04	-23.07	-22.15	31.98	3.00	3.00	
700.00	13.50	223.84	695.85	-38.06	-36.55	52.77	3.00	3.00	
800.00	16.50	223.84	792.43	-56.73	-54.47	78.65	3.00	3.00	
900.00	19.50	223.84	887.52	-79.02	-75.87	109.55	3.00	3.00	
913.42	19.90	223.84	900.16	-82.28	-79.00	114.07	3.00	3.00	EOB; INC=19.9°
1,000.00	19.90	223.84	981.57	-103.54	-99.42	143.54	0.00	0.00	
1,100.00	19.90	223.84	1,075.59	-128.10	-122.99	177.59	0.00	0.00	
1,200.00	19.90	223.84	1,169.62	-152.66	-146.57	211.63	0.00	0.00	
1,300.00	19.90	223.84	1,263.65	-177.21	-170.15	245.67	0.00	0.00	
1,400.00	19.90	223.84	1,357.68	-201.77	-193.73	279.71	0.00	0.00	
1,500.00	19.90	223.84	1,451.70	-226.32	-217.30	313.76	0.00	0.00	
1,600.00	19.90	223.84	1,545.73	-250.88	-240.88	347.80	0.00	0.00	
1,700.00	19.90	223.84	1,639.76	-275.43	-264.46	381.84	0.00	0.00	
1,800.00	19.90	223.84	1,733.79	-299.99	-288.04	415.88	0.00	0.00	
1,900.00	19.90	223.84	1,827.81	-324.55	-311.61	449.93	0.00	0.00	
2,000.00	19.90	223.84	1,921.84	-349.10	-335.19	483.97	0.00	0.00	
2,100.00	19.90	223.84	2,015.87	-373.66	-358.77	518.01	0.00	0.00	
2,200.00	19.90	223.84	2,109.89	-398.21	-382.35	552.05	0.00	0.00	
2,300.00	19.90	223.84	2,203.92	-422.77	-405.92	586.10	0.00	0.00	
2,400.00	19.90	223.84	2,297.95	-447.33	-429.50	620.14	0.00	0.00	
2,500.00	19.90	223.84	2,391.98	-471.88	-453.08	654.18	0.00	0.00	
2,600.00	19.90	223.84	2,486.00	-496.44	-476.66	688.22	0.00	0.00	
2,700.00	19.90	223.84	2,580.03	-520.99	-500.23	722.26	0.00	0.00	
2,800.00	19.90	223.84	2,674.06	-545.55	-523.81	756.31	0.00	0.00	
2,900.00	19.90	223.84	2,768.08	-570.10	-547.39	790.35	0.00	0.00	
3,000.00	19.90	223.84	2,862.11	-594.66	-570.96	824.39	0.00	0.00	
3,100.00	19.90	223.84	2,956.14	-619.22	-594.54	858.43	0.00	0.00	
3,200.00	19.90	223.84	3,050.17	-643.77	-618.12	892.48	0.00	0.00	
3,300.00	19.90	223.84	3,144.19	-668.33	-641.70	926.52	0.00	0.00	
3,400.00	19.90	223.84	3,238.22	-692.88	-665.27	960.56	0.00	0.00	
3,500.00	19.90	223.84	3,332.25	-717.44	-688.85	994.60	0.00	0.00	
3,600.00	19.90	223.84	3,426.27	-742.00	-712.43	1,028.65	0.00	0.00	
3,700.00	19.90	223.84	3,520.30	-766.55	-736.01	1,062.69	0.00	0.00	
3,800.00	19.90	223.84	3,614.33	-791.11	-759.58	1,096.73	0.00	0.00	
3,900.00	19.90	223.84	3,708.36	-815.66	-783.16	1,130.77	0.00	0.00	
4,000.00	19.90	223.84	3,802.38	-840.22	-806.74	1,164.82	0.00	0.00	
4,100.00	19.90	223.84	3,896.41	-864.78	-830.32	1,198.86	0.00	0.00	
4,200.00	19.90	223.84	3,990.44	-889.33	-853.89	1,232.90	0.00	0.00	
4,300.00	19.90	223.84	4,084.47	-913.89	-877.47	1,266.94	0.00	0.00	
4,400.00	19.90	223.84	4,178.49	-938.44	-901.05	1,300.98	0.00	0.00	
4,500.00	19.90	223.84	4,272.52	-963.00	-924.63	1,335.03	0.00	0.00	
4,600.00	19.90	223.84	4,366.55	-987.55	-948.20	1,369.07	0.00	0.00	
4,700.00	19.90	223.84	4,460.57	-1,012.11	-971.78	1,403.11	0.00	0.00	
4,800.00	19.90	223.84	4,554.60	-1,036.67	-995.36	1,437.15	0.00	0.00	
4,900.00	19.90	223.84	4,648.63	-1,061.22	-1,018.93	1,471.20	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 14B-26
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8352.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8352.00usft
<b>Site:</b>	S26-T6S-R97W (MESA F26)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 14B-26	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
5,000.00	19.90	223.84	4,742.66	-1,085.78	-1,042.51	1,505.24	0.00	0.00	
5,100.00	19.90	223.84	4,836.68	-1,110.33	-1,066.09	1,539.28	0.00	0.00	
5,200.00	19.90	223.84	4,930.71	-1,134.89	-1,089.67	1,573.32	0.00	0.00	
5,300.00	19.90	223.84	5,024.74	-1,159.45	-1,113.24	1,607.37	0.00	0.00	
5,400.00	19.90	223.84	5,118.76	-1,184.00	-1,136.82	1,641.41	0.00	0.00	
5,500.00	19.90	223.84	5,212.79	-1,208.56	-1,160.40	1,675.45	0.00	0.00	
5,600.00	19.90	223.84	5,306.82	-1,233.11	-1,183.98	1,709.49	0.00	0.00	
5,700.00	19.90	223.84	5,400.85	-1,257.67	-1,207.55	1,743.54	0.00	0.00	
5,800.00	19.90	223.84	5,494.87	-1,282.22	-1,231.13	1,777.58	0.00	0.00	
5,900.00	19.90	223.84	5,588.90	-1,306.78	-1,254.71	1,811.62	0.00	0.00	
6,000.00	19.90	223.84	5,682.93	-1,331.34	-1,278.29	1,845.66	0.00	0.00	
6,100.00	19.90	223.84	5,776.96	-1,355.89	-1,301.86	1,879.71	0.00	0.00	
6,113.87	19.90	223.84	5,790.00	-1,359.30	-1,305.13	1,884.43	0.00	0.00	OHIO_CREEK.MBL (TVD)
6,200.00	19.90	223.84	5,870.98	-1,380.45	-1,325.44	1,913.75	0.00	0.00	
6,300.00	19.90	223.84	5,965.01	-1,405.00	-1,349.02	1,947.79	0.00	0.00	
6,357.42	19.90	223.84	6,019.00	-1,419.10	-1,362.56	1,967.34	0.00	0.00	WILLIAMS_FORK.MBL (TVD)
6,360.44	19.90	223.84	6,021.84	-1,419.85	-1,363.27	1,968.36	0.00	0.00	Start Drop -3.00
6,400.00	18.72	223.84	6,059.17	-1,429.28	-1,372.33	1,981.45	3.00	-3.00	
6,500.00	15.72	223.84	6,154.68	-1,450.63	-1,392.82	2,011.04	3.00	-3.00	
6,600.00	12.72	223.84	6,251.61	-1,468.34	-1,409.83	2,035.59	3.00	-3.00	
6,700.00	9.72	223.84	6,349.69	-1,482.37	-1,423.30	2,055.04	3.00	-3.00	
6,800.00	6.72	223.84	6,448.65	-1,492.68	-1,433.20	2,069.33	3.00	-3.00	
6,900.00	3.72	223.84	6,548.23	-1,499.23	-1,439.49	2,078.42	3.00	-3.00	
7,000.00	0.72	223.84	6,648.14	-1,502.02	-1,442.17	2,082.29	3.00	-3.00	
7,023.86	0.00	0.00	6,672.00	-1,502.13	-1,442.27	2,082.44	3.00	-3.00	EOD; INC=0°
7,100.00	0.00	0.00	6,748.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
7,123.86	0.00	0.00	6,772.00	-1,502.13	-1,442.27	2,082.44	0.00	0.00	TOP_GAS.MBL (TVD)
7,200.00	0.00	0.00	6,848.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
7,300.00	0.00	0.00	6,948.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
7,400.00	0.00	0.00	7,048.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
7,500.00	0.00	0.00	7,148.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
7,600.00	0.00	0.00	7,248.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
7,700.00	0.00	0.00	7,348.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
7,800.00	0.00	0.00	7,448.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
7,900.00	0.00	0.00	7,548.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,000.00	0.00	0.00	7,648.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,100.00	0.00	0.00	7,748.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,200.00	0.00	0.00	7,848.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,300.00	0.00	0.00	7,948.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,400.00	0.00	0.00	8,048.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,410.86	0.00	0.00	8,059.00	-1,502.13	-1,442.27	2,082.44	0.00	0.00	CAMEO.MBL (TVD)
8,500.00	0.00	0.00	8,148.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,600.00	0.00	0.00	8,248.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,700.00	0.00	0.00	8,348.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,800.00	0.00	0.00	8,448.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,900.00	0.00	0.00	8,548.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
8,910.86	0.00	0.00	8,559.00	-1,502.13	-1,442.27	2,082.44	0.00	0.00	ROLLINS.MBL (TVD)
9,000.00	0.00	0.00	8,648.14	-1,502.13	-1,442.27	2,082.44	0.00	0.00	
9,060.86	0.00	0.00	8,709.00	-1,502.13	-1,442.27	2,082.44	0.00	0.00	TD at 9060.86 - TD.MBL (TVD)

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 14B-26
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8352.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8352.00usft
<b>Site:</b>	S26-T6S-R97W (MESA F26)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 14B-26	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
PUCKETT 14B-26 BHL	0.00	0.00	8,709.00	-1,502.13	-1,442.27	14,352,979.00	2,431,766.70	39.490855	-108.195275
- plan hits target center									
- Circle (radius 100.00)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
6,113.87	5,790.00	OHIO_CREEK.MBL (TVD)				
6,357.42	6,019.00	WILLIAMS_FORK.MBL (TVD)				
7,123.86	6,772.00	TOP_GAS.MBL (TVD)				
8,410.86	8,059.00	CAMEO.MBL (TVD)				
8,910.86	8,559.00	ROLLINS.MBL (TVD)				
9,060.86	8,709.00	TD.MBL (TVD)				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
250.00	250.00	0.00	0.00	KOP @ 250'	
913.42	900.16	-82.28	-79.00	EOB; INC=19.9°	
6,360.44	6,021.84	-1,419.85	-1,363.27	Start Drop -3.00	
7,023.86	6,672.00	-1,502.13	-1,442.27	EOD; INC=0°	
9,060.86	8,709.00	-1,502.13	-1,442.27	TD at 9060.86	