

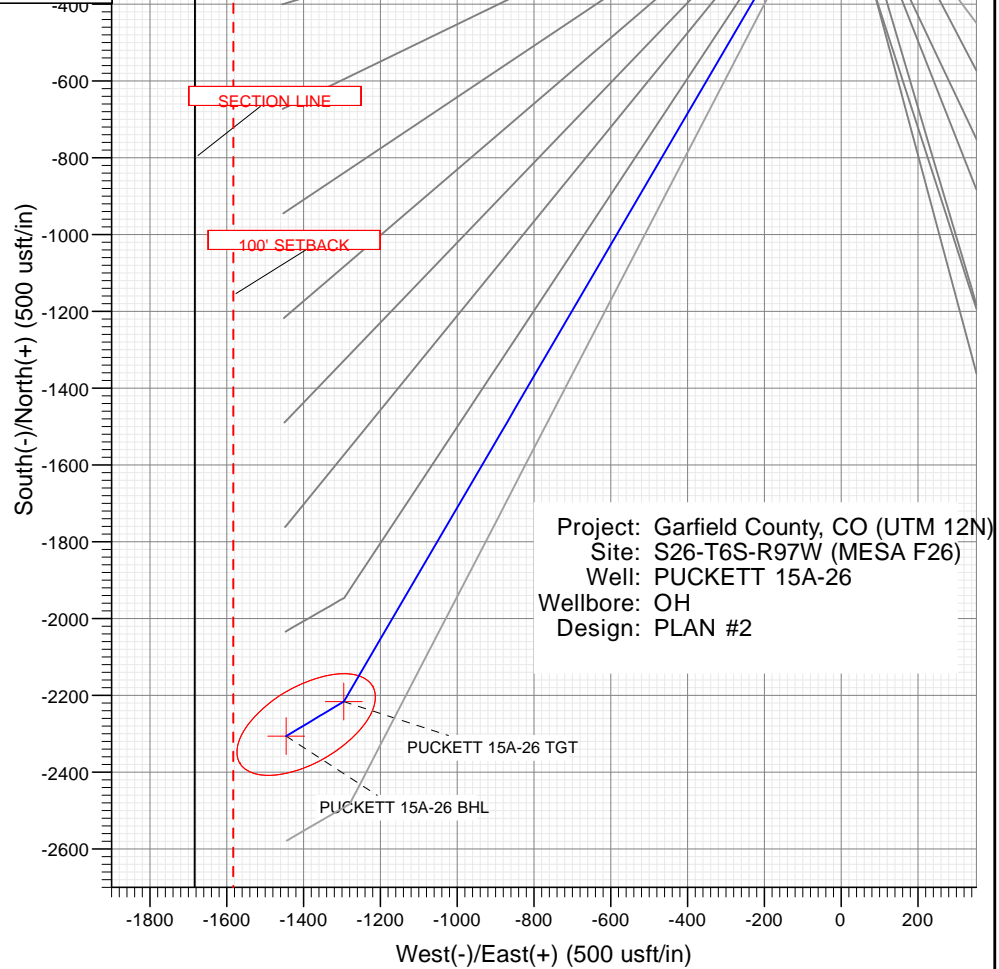
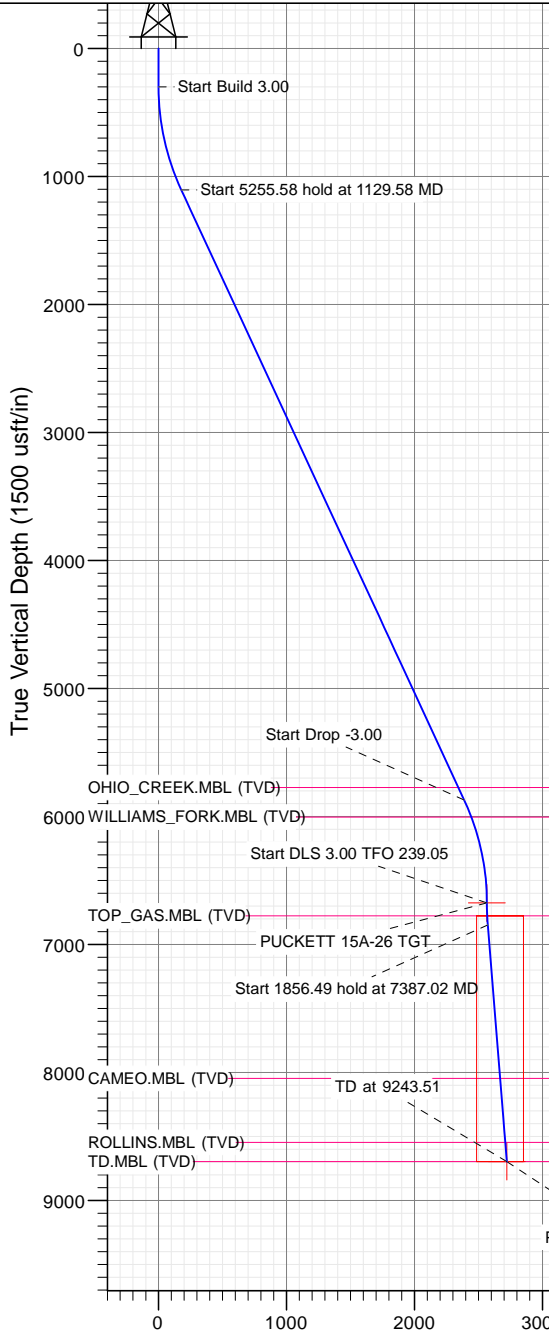


## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	1129.58	24.89	210.31	1103.73	-153.12	-89.49	0.00	210.31	177.27	
4	6385.15	24.89	210.31	5871.27	-2062.61	-1205.55	0.00	0.00	2387.94	
5	7214.73	0.00	0.00	6675.00	-2215.73	-1295.04	3.00	180.00	2565.21	PUCKETT 15A-26 TGT
6	7387.02	5.17	239.05	6847.06	-2219.72	-1301.70	3.00	239.05	2572.13	
7	9243.51	5.17	239.05	8696.00	-2305.73	-1445.15	0.00	0.00	2721.18	PUCKETT 15A-26 BHL

PLAN #2  
PUCKETT 15A-26  
XXX16 LR  
30' KB @ 8322.00usft  
Ground Level @ 8322.00  
NAD 1927 - Western US  
Well PUCKETT 15A-26, True North

Type	Target	Target (Freehand)	Azimuth	Origin Type	N/S	E/W	From TVD
TD	No Target		212.08	Slot	0.00	0.00	0.00
Name	PUCKETT 15A-26 TGT		TVD	+N/-S	+E/-W	Latitude	Longitude
	PUCKETT 15A-26 BHL		6675.00	-2215.73	-1295.04	39.488861	-108.194727
			8696.00	-2305.73	-1445.15	39.488614	-108.195259



Project: Garfield County, CO (UTM 12N)  
Site: S26-T6S-R97W (MESA F26)  
Well: PUCKETT 15A-26  
Wellbore: OH  
Design: PLAN #2

## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
5774.00	6277.93	OHIO_CREEK.MBL (TVD)
6005.00	6530.16	WILLIAMS_FORK.MBL (TVD)
6775.00	7314.77	TOP_GAS.MBL (TVD)
8046.00	8590.86	CAMEO.MBL (TVD)
8546.00	9092.90	ROLLINS.MBL (TVD)
8696.00	9243.51	TD.MBL (TVD)



Azimuths to True North  
Magnetic North: 9.80°

Magnetic Field  
Strength: 51817.0snT  
Dip Angle: 65.82°  
Date: 9/23/2016  
Model: HDGM

## Vertical Section at 212.08° (1500 usft/in)

## WELL DETAILS: PUCKETT 15A-26

+N/-S	+E/-W	Northing	Ground Level:	8322.00	Latitude	Longitude
0.00	0.00	14354512.70	Easting	2433169.20	39.494943	-108.190140

CATHEDRAL



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 15A-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 15A-26	<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)		

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 15A-26					
Well Position	+N/-S	0.00 usft	Northing:	14,354,512.70 usft	Latitude:	39.494943
	+E/-W	0.00 usft	Easting:	2,433,169.20 usft	Longitude:	-108.190140
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	9.80	65.82	51,817.00000000

<b>Design</b>	PLAN #2			
<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	212.08

<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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,129.58	24.89	210.31	1,103.73	-153.12	-89.49	3.00	3.00	0.00	210.31	
6,385.15	24.89	210.31	5,871.27	-2,062.61	-1,205.55	0.00	0.00	0.00	0.00	
7,214.73	0.00	0.00	6,675.00	-2,215.73	-1,295.04	3.00	-3.00	0.00	180.00	PUCKETT 15A-26 TC
7,387.02	5.17	239.05	6,847.06	-2,219.72	-1,301.70	3.00	3.00	-70.20	239.05	
9,243.51	5.17	239.05	8,696.00	-2,305.73	-1,445.15	0.00	0.00	0.00	0.00	PUCKETT 15A-26 BH

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 15A-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 15A-26	<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
0.00	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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00
400.00	3.00	210.31	399.95	-2.26	-1.32	2.62	3.00	3.00	
500.00	6.00	210.31	499.63	-9.03	-5.28	10.46	3.00	3.00	
600.00	9.00	210.31	598.77	-20.30	-11.87	23.50	3.00	3.00	
700.00	12.00	210.31	697.08	-36.03	-21.06	41.72	3.00	3.00	
800.00	15.00	210.31	794.31	-56.18	-32.84	65.05	3.00	3.00	
900.00	18.00	210.31	890.18	-80.70	-47.17	93.43	3.00	3.00	
1,000.00	21.00	210.31	984.43	-109.52	-64.01	126.79	3.00	3.00	
1,100.00	24.00	210.31	1,076.81	-142.55	-83.32	165.04	3.00	3.00	
1,129.58	24.89	210.31	1,103.73	-153.12	-89.49	177.27	3.00	3.00	Start 5255.58 hold at 1129.58 MD
1,200.00	24.89	210.31	1,167.62	-178.71	-104.45	206.89	0.00	0.00	
1,300.00	24.89	210.31	1,258.33	-215.04	-125.68	248.96	0.00	0.00	
1,400.00	24.89	210.31	1,349.05	-251.37	-146.92	291.02	0.00	0.00	
1,500.00	24.89	210.31	1,439.76	-287.70	-168.16	333.08	0.00	0.00	
1,600.00	24.89	210.31	1,530.47	-324.04	-189.39	375.15	0.00	0.00	
1,700.00	24.89	210.31	1,621.19	-360.37	-210.63	417.21	0.00	0.00	
1,800.00	24.89	210.31	1,711.90	-396.70	-231.86	459.27	0.00	0.00	
1,900.00	24.89	210.31	1,802.62	-433.03	-253.10	501.34	0.00	0.00	
2,000.00	24.89	210.31	1,893.33	-469.37	-274.33	543.40	0.00	0.00	
2,100.00	24.89	210.31	1,984.04	-505.70	-295.57	585.46	0.00	0.00	
2,200.00	24.89	210.31	2,074.76	-542.03	-316.81	627.53	0.00	0.00	
2,300.00	24.89	210.31	2,165.47	-578.37	-338.04	669.59	0.00	0.00	
2,400.00	24.89	210.31	2,256.18	-614.70	-359.28	711.65	0.00	0.00	
2,500.00	24.89	210.31	2,346.90	-651.03	-380.51	753.71	0.00	0.00	
2,600.00	24.89	210.31	2,437.61	-687.36	-401.75	795.78	0.00	0.00	
2,700.00	24.89	210.31	2,528.33	-723.70	-422.98	837.84	0.00	0.00	
2,800.00	24.89	210.31	2,619.04	-760.03	-444.22	879.90	0.00	0.00	
2,900.00	24.89	210.31	2,709.75	-796.36	-465.45	921.97	0.00	0.00	
3,000.00	24.89	210.31	2,800.47	-832.69	-486.69	964.03	0.00	0.00	
3,100.00	24.89	210.31	2,891.18	-869.03	-507.93	1,006.09	0.00	0.00	
3,200.00	24.89	210.31	2,981.89	-905.36	-529.16	1,048.16	0.00	0.00	
3,300.00	24.89	210.31	3,072.61	-941.69	-550.40	1,090.22	0.00	0.00	
3,400.00	24.89	210.31	3,163.32	-978.02	-571.63	1,132.28	0.00	0.00	
3,500.00	24.89	210.31	3,254.04	-1,014.36	-592.87	1,174.35	0.00	0.00	
3,600.00	24.89	210.31	3,344.75	-1,050.69	-614.10	1,216.41	0.00	0.00	
3,700.00	24.89	210.31	3,435.46	-1,087.02	-635.34	1,258.47	0.00	0.00	
3,800.00	24.89	210.31	3,526.18	-1,123.36	-656.58	1,300.54	0.00	0.00	
3,900.00	24.89	210.31	3,616.89	-1,159.69	-677.81	1,342.60	0.00	0.00	
4,000.00	24.89	210.31	3,707.60	-1,196.02	-699.05	1,384.66	0.00	0.00	
4,100.00	24.89	210.31	3,798.32	-1,232.35	-720.28	1,426.73	0.00	0.00	
4,200.00	24.89	210.31	3,889.03	-1,268.69	-741.52	1,468.79	0.00	0.00	
4,300.00	24.89	210.31	3,979.75	-1,305.02	-762.75	1,510.85	0.00	0.00	
4,400.00	24.89	210.31	4,070.46	-1,341.35	-783.99	1,552.92	0.00	0.00	
4,500.00	24.89	210.31	4,161.17	-1,377.68	-805.22	1,594.98	0.00	0.00	
4,600.00	24.89	210.31	4,251.89	-1,414.02	-826.46	1,637.04	0.00	0.00	
4,700.00	24.89	210.31	4,342.60	-1,450.35	-847.70	1,679.11	0.00	0.00	
4,800.00	24.89	210.31	4,433.31	-1,486.68	-868.93	1,721.17	0.00	0.00	
4,900.00	24.89	210.31	4,524.03	-1,523.01	-890.17	1,763.23	0.00	0.00	
5,000.00	24.89	210.31	4,614.74	-1,559.35	-911.40	1,805.30	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 15A-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 15A-26	<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
5,100.00	24.89	210.31	4,705.46	-1,595.68	-932.64	1,847.36	0.00	0.00	
5,200.00	24.89	210.31	4,796.17	-1,632.01	-953.87	1,889.42	0.00	0.00	
5,300.00	24.89	210.31	4,886.88	-1,668.35	-975.11	1,931.49	0.00	0.00	
5,400.00	24.89	210.31	4,977.60	-1,704.68	-996.35	1,973.55	0.00	0.00	
5,500.00	24.89	210.31	5,068.31	-1,741.01	-1,017.58	2,015.61	0.00	0.00	
5,600.00	24.89	210.31	5,159.02	-1,777.34	-1,038.82	2,057.68	0.00	0.00	
5,700.00	24.89	210.31	5,249.74	-1,813.68	-1,060.05	2,099.74	0.00	0.00	
5,800.00	24.89	210.31	5,340.45	-1,850.01	-1,081.29	2,141.80	0.00	0.00	
5,900.00	24.89	210.31	5,431.17	-1,886.34	-1,102.52	2,183.87	0.00	0.00	
6,000.00	24.89	210.31	5,521.88	-1,922.67	-1,123.76	2,225.93	0.00	0.00	
6,100.00	24.89	210.31	5,612.59	-1,959.01	-1,144.99	2,267.99	0.00	0.00	
6,200.00	24.89	210.31	5,703.31	-1,995.34	-1,166.23	2,310.06	0.00	0.00	
6,277.93	24.89	210.31	5,774.00	-2,023.65	-1,182.78	2,342.84	0.00	0.00	OHIO_CREEK.MBL (TVD)
6,300.00	24.89	210.31	5,794.02	-2,031.67	-1,187.47	2,352.12	0.00	0.00	
6,385.15	24.89	210.31	5,871.27	-2,062.61	-1,205.55	2,387.94	0.00	0.00	Start Drop -3.00
6,400.00	24.44	210.31	5,884.76	-2,067.96	-1,208.68	2,394.13	3.00	-3.00	
6,500.00	21.44	210.31	5,976.84	-2,101.61	-1,228.34	2,433.09	3.00	-3.00	
6,530.16	20.54	210.31	6,005.00	-2,110.94	-1,233.79	2,443.89	3.00	-3.00	WILLIAMS_FORK.MBL (TVD)
6,600.00	18.44	210.31	6,070.83	-2,131.05	-1,245.55	2,467.17	3.00	-3.00	
6,700.00	15.44	210.31	6,166.48	-2,156.21	-1,260.25	2,496.30	3.00	-3.00	
6,800.00	12.44	210.31	6,263.52	-2,177.01	-1,272.41	2,520.38	3.00	-3.00	
6,900.00	9.44	210.31	6,361.69	-2,193.39	-1,281.99	2,539.35	3.00	-3.00	
7,000.00	6.44	210.31	6,460.72	-2,205.32	-1,288.96	2,553.15	3.00	-3.00	
7,100.00	3.44	210.31	6,560.34	-2,212.76	-1,293.30	2,561.76	3.00	-3.00	
7,200.00	0.44	210.31	6,660.27	-2,215.68	-1,295.01	2,565.15	3.00	-3.00	
7,214.73	0.00	0.00	6,675.00	-2,215.73	-1,295.04	2,565.21	3.00	-3.00	Start DLS 3.00 TFO 239.05
7,300.00	2.56	239.05	6,760.24	-2,216.71	-1,296.68	2,566.90	3.00	3.00	
7,314.77	3.00	239.05	6,775.00	-2,217.08	-1,297.29	2,567.54	3.00	3.00	TOP_GAS.MBL (TVD)
7,387.02	5.17	239.05	6,847.06	-2,219.72	-1,301.70	2,572.13	3.00	3.00	Start 1856.49 hold at 7387.02 MD
7,400.00	5.17	239.05	6,859.98	-2,220.32	-1,302.71	2,573.17	0.00	0.00	
7,500.00	5.17	239.05	6,959.58	-2,224.96	-1,310.43	2,581.20	0.00	0.00	
7,600.00	5.17	239.05	7,059.17	-2,229.59	-1,318.16	2,589.23	0.00	0.00	
7,700.00	5.17	239.05	7,158.76	-2,234.22	-1,325.89	2,597.26	0.00	0.00	
7,800.00	5.17	239.05	7,258.36	-2,238.86	-1,333.61	2,605.29	0.00	0.00	
7,900.00	5.17	239.05	7,357.95	-2,243.49	-1,341.34	2,613.32	0.00	0.00	
8,000.00	5.17	239.05	7,457.54	-2,248.12	-1,349.07	2,621.34	0.00	0.00	
8,100.00	5.17	239.05	7,557.14	-2,252.75	-1,356.79	2,629.37	0.00	0.00	
8,200.00	5.17	239.05	7,656.73	-2,257.39	-1,364.52	2,637.40	0.00	0.00	
8,300.00	5.17	239.05	7,756.32	-2,262.02	-1,372.25	2,645.43	0.00	0.00	
8,400.00	5.17	239.05	7,855.92	-2,266.65	-1,379.97	2,653.46	0.00	0.00	
8,500.00	5.17	239.05	7,955.51	-2,271.28	-1,387.70	2,661.49	0.00	0.00	
8,590.86	5.17	239.05	8,046.00	-2,275.49	-1,394.72	2,668.78	0.00	0.00	CAMEO.MBL (TVD)
8,600.00	5.17	239.05	8,055.10	-2,275.92	-1,395.43	2,669.52	0.00	0.00	
8,700.00	5.17	239.05	8,154.70	-2,280.55	-1,403.15	2,677.55	0.00	0.00	
8,800.00	5.17	239.05	8,254.29	-2,285.18	-1,410.88	2,685.58	0.00	0.00	
8,900.00	5.17	239.05	8,353.89	-2,289.82	-1,418.61	2,693.60	0.00	0.00	
9,000.00	5.17	239.05	8,453.48	-2,294.45	-1,426.33	2,701.63	0.00	0.00	
9,092.90	5.17	239.05	8,546.00	-2,298.75	-1,433.51	2,709.09	0.00	0.00	ROLLINS.MBL (TVD)
9,100.00	5.17	239.05	8,553.07	-2,299.08	-1,434.06	2,709.66	0.00	0.00	
9,200.00	5.17	239.05	8,652.67	-2,303.71	-1,441.79	2,717.69	0.00	0.00	
9,243.51	5.17	239.05	8,696.00	-2,305.73	-1,445.15	2,721.18	0.00	0.00	TD at 9243.51 - 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 15A-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 15A-26	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

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 15A-26 TGT	0.00	0.00	6,675.00	-2,215.73	-1,295.04	14,352,257.64	2,431,943.92	39.488861	-108.194727
- plan hits target center									
- Point									
PUCKETT 15A-26 BHL	0.00	0.00	8,696.00	-2,305.73	-1,445.15	14,352,163.00	2,431,796.70	39.488614	-108.195259
- plan hits target center									
- Ellipse (radii L200.00 W100.00 on 240.00 azi)									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,277.93	5,774.00	OHIO_CREEK.MBL (TVD)				
6,530.16	6,005.00	WILLIAMS_FORK.MBL (TVD)				
7,314.77	6,775.00	TOP_GAS.MBL (TVD)				
8,590.86	8,046.00	CAMEO.MBL (TVD)				
9,092.90	8,546.00	ROLLINS.MBL (TVD)				
9,243.51	8,696.00	TD.MBL (TVD)				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
300.00	300.00	0.00	0.00	Start Build 3.00	
1,129.58	1,103.73	-153.12	-89.49	Start 5255.58 hold at 1129.58 MD	
6,385.15	5,871.27	-2,062.61	-1,205.55	Start Drop -3.00	
7,214.73	6,675.00	-2,215.73	-1,295.04	Start DLS 3.00 TFO 239.05	
7,387.02	6,847.06	-2,219.72	-1,301.70	Start 1856.49 hold at 7387.02 MD	
9,243.51	8,696.00	-2,305.73	-1,445.15	TD at 9243.51	