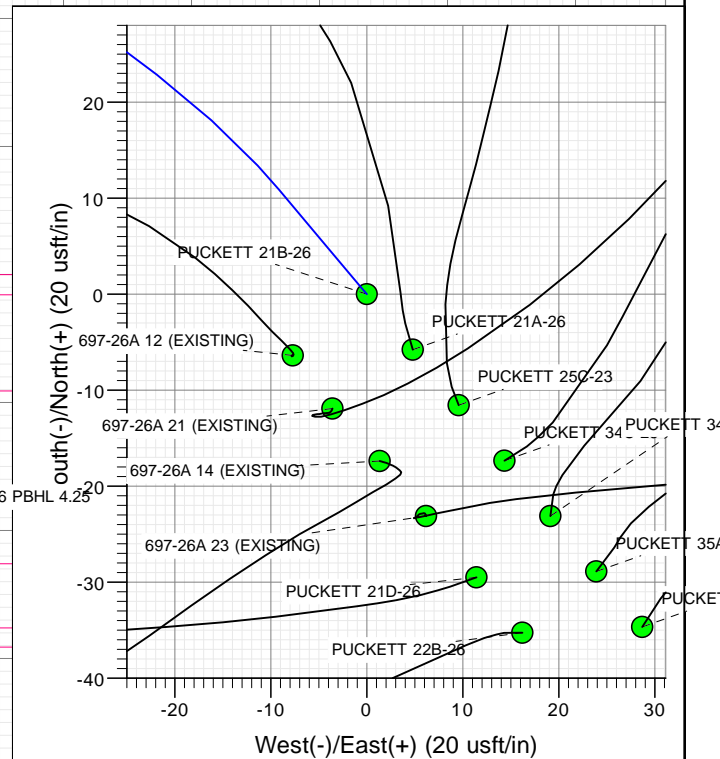
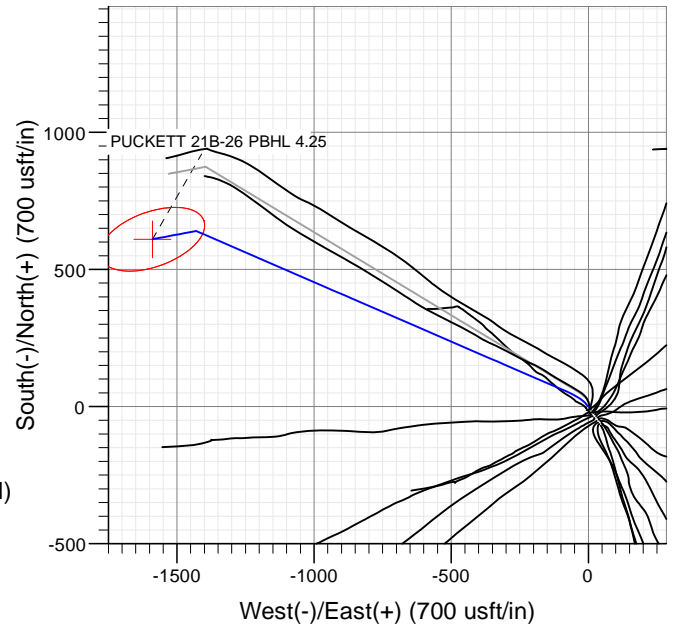
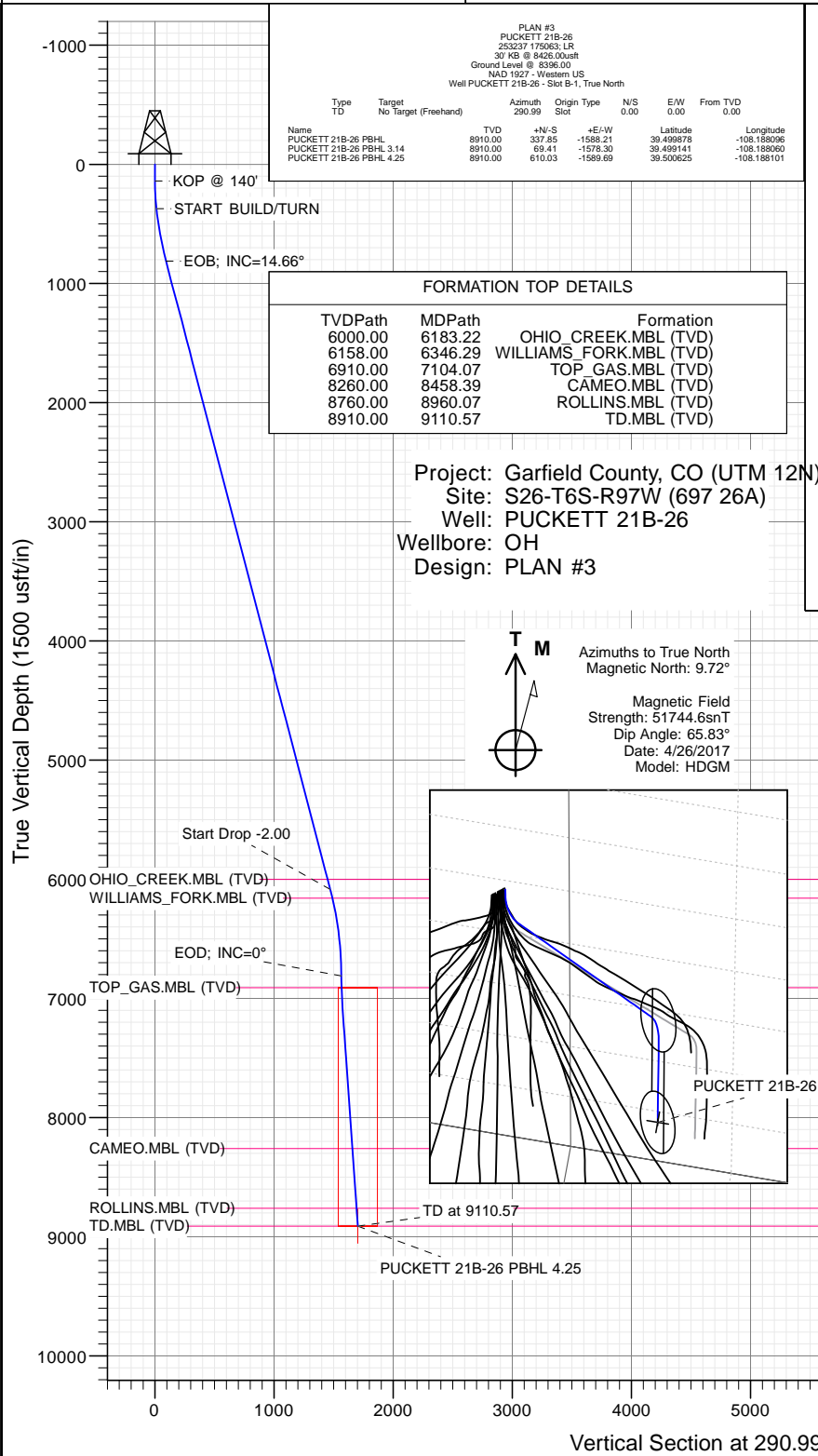




## SECTION DETAILS

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	140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	
3	373.33	7.00	320.00	372.75	10.91	-9.15	3.00	320.00	12.45	
4	820.95	14.66	293.43	812.31	54.41	-78.80	2.00	-46.67	93.06	
5	6271.03	14.66	293.43	6084.95	602.91	-1344.42	0.00	0.00	1471.18	
6	7004.05	0.00	0.00	6810.00	640.00	-1430.00	2.00	180.00	1564.37	
7	7238.28	4.68	259.37	7043.96	638.23	-1439.41	2.00	259.37	1572.52	
8	9110.57	4.68	259.37	8910.00	610.03	-1589.69	0.00	0.00	1702.72	PUCKETT 21B-26 PBHL 4.25



## WELL DETAILS: PUCKETT 21B-26

+N/-S	+E/-W	Northing	Ground Level:	8396.00	Latitude	Longitude
0.00	0.00	14356040.01	Easting	2435288.00	39.498951	-108.182469

B-1

CATHEDRAL



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 21B-26 - Slot B-1
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8426.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8426.00usft
<b>Site:</b>	S26-T6S-R97W (697 26A)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 21B-26	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #3		

<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 (697 26A)			
Site Position:		Northing:	14,356,905.20 usft	Latitude:	39.501458
From:	Map	Easting:	2,433,730.50 usft	Longitude:	-108.187888
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	1.79 °

Well	PUCKETT 21B-26 - Slot B-1					
Well Position	+N/-S	0.00 usft	Northing:	14,356,040.01 usft	Latitude:	39.498951
	+E/-W	0.00 usft	Easting:	2,435,288.00 usft	Longitude:	-108.182469
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	8,396.00 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	4/26/2017	9.72	65.83	51,745

<b>Design</b>	PLAN #3			
<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	290.99

<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	
140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	
373.33	7.00	320.00	372.75	10.91	-9.15	3.00	3.00	0.00	320.00	
820.95	14.66	293.43	812.31	54.41	-78.80	2.00	1.71	-5.94	-46.67	
6,271.03	14.66	293.43	6,084.95	602.91	-1,344.42	0.00	0.00	0.00	0.00	
7,004.05	0.00	0.00	6,810.00	640.00	-1,430.00	2.00	-2.00	0.00	180.00	
7,238.28	4.68	259.37	7,043.96	638.23	-1,439.41	2.00	2.00	-42.96	259.37	
9,110.57	4.68	259.37	8,910.00	610.03	-1,589.69	0.00	0.00	0.00	0.00	PUCKETT 21B-26 PE

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well PUCKETT 21B-26 - Slot B-1
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8426.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8426.00usft
<b>Site:</b>	S26-T6S-R97W (697 26A)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 21B-26	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #3		

### 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	
140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	KOP @ 140'
200.00	1.80	320.00	199.99	0.72	-0.61	0.82	3.00	3.00	
300.00	4.80	320.00	299.81	5.13	-4.31	5.86	3.00	3.00	
373.33	7.00	320.00	372.75	10.91	-9.15	12.45	3.00	3.00	START BUILD/TURN
400.00	7.38	316.98	399.21	13.40	-11.36	15.41	2.00	1.41	
500.00	8.93	308.04	498.20	22.88	-21.86	28.60	2.00	1.55	
600.00	10.63	301.84	596.75	32.53	-35.81	45.08	2.00	1.70	
700.00	12.42	297.37	694.73	42.34	-53.20	64.84	2.00	1.79	
800.00	14.27	294.03	792.02	52.31	-74.01	87.83	2.00	1.85	
820.95	14.66	293.43	812.31	54.41	-78.80	93.06	2.00	1.87	EOB; INC=14.66°
900.00	14.66	293.43	888.79	62.37	-97.15	113.05	0.00	0.00	
1,000.00	14.66	293.43	985.53	72.43	-120.38	138.34	0.00	0.00	
1,100.00	14.66	293.43	1,082.27	82.50	-143.60	163.62	0.00	0.00	
1,200.00	14.66	293.43	1,179.02	92.56	-166.82	188.91	0.00	0.00	
1,300.00	14.66	293.43	1,275.76	102.62	-190.04	214.19	0.00	0.00	
1,400.00	14.66	293.43	1,372.51	112.69	-213.27	239.48	0.00	0.00	
1,500.00	14.66	293.43	1,469.25	122.75	-236.49	264.77	0.00	0.00	
1,600.00	14.66	293.43	1,566.00	132.82	-259.71	290.05	0.00	0.00	
1,700.00	14.66	293.43	1,662.74	142.88	-282.93	315.34	0.00	0.00	
1,800.00	14.66	293.43	1,759.48	152.94	-306.15	340.63	0.00	0.00	
1,900.00	14.66	293.43	1,856.23	163.01	-329.38	365.91	0.00	0.00	
2,000.00	14.66	293.43	1,952.97	173.07	-352.60	391.20	0.00	0.00	
2,100.00	14.66	293.43	2,049.72	183.14	-375.82	416.48	0.00	0.00	
2,200.00	14.66	293.43	2,146.46	193.20	-399.04	441.77	0.00	0.00	
2,300.00	14.66	293.43	2,243.21	203.26	-422.26	467.06	0.00	0.00	
2,400.00	14.66	293.43	2,339.95	213.33	-445.49	492.34	0.00	0.00	
2,500.00	14.66	293.43	2,436.69	223.39	-468.71	517.63	0.00	0.00	
2,600.00	14.66	293.43	2,533.44	233.46	-491.93	542.92	0.00	0.00	
2,700.00	14.66	293.43	2,630.18	243.52	-515.15	568.20	0.00	0.00	
2,800.00	14.66	293.43	2,726.93	253.58	-538.37	593.49	0.00	0.00	
2,900.00	14.66	293.43	2,823.67	263.65	-561.60	618.77	0.00	0.00	
3,000.00	14.66	293.43	2,920.42	273.71	-584.82	644.06	0.00	0.00	
3,100.00	14.66	293.43	3,017.16	283.78	-608.04	669.35	0.00	0.00	
3,200.00	14.66	293.43	3,113.90	293.84	-631.26	694.63	0.00	0.00	
3,300.00	14.66	293.43	3,210.65	303.91	-654.49	719.92	0.00	0.00	
3,400.00	14.66	293.43	3,307.39	313.97	-677.71	745.21	0.00	0.00	
3,500.00	14.66	293.43	3,404.14	324.03	-700.93	770.49	0.00	0.00	
3,600.00	14.66	293.43	3,500.88	334.10	-724.15	795.78	0.00	0.00	
3,700.00	14.66	293.43	3,597.62	344.16	-747.37	821.06	0.00	0.00	
3,800.00	14.66	293.43	3,694.37	354.23	-770.60	846.35	0.00	0.00	
3,900.00	14.66	293.43	3,791.11	364.29	-793.82	871.64	0.00	0.00	
4,000.00	14.66	293.43	3,887.86	374.35	-817.04	896.92	0.00	0.00	
4,100.00	14.66	293.43	3,984.60	384.42	-840.26	922.21	0.00	0.00	
4,200.00	14.66	293.43	4,081.35	394.48	-863.48	947.50	0.00	0.00	
4,300.00	14.66	293.43	4,178.09	404.55	-886.71	972.78	0.00	0.00	
4,400.00	14.66	293.43	4,274.83	414.61	-909.93	998.07	0.00	0.00	
4,500.00	14.66	293.43	4,371.58	424.67	-933.15	1,023.35	0.00	0.00	
4,600.00	14.66	293.43	4,468.32	434.74	-956.37	1,048.64	0.00	0.00	
4,700.00	14.66	293.43	4,565.07	444.80	-979.59	1,073.93	0.00	0.00	
4,800.00	14.66	293.43	4,661.81	454.87	-1,002.82	1,099.21	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 21B-26 - Slot B-1
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8426.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8426.00usft
<b>Site:</b>	S26-T6S-R97W (697 26A)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 21B-26	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #3		

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
4,900.00	14.66	293.43	4,758.56	464.93	-1,026.04	1,124.50	0.00	0.00	
5,000.00	14.66	293.43	4,855.30	474.99	-1,049.26	1,149.79	0.00	0.00	
5,100.00	14.66	293.43	4,952.04	485.06	-1,072.48	1,175.07	0.00	0.00	
5,200.00	14.66	293.43	5,048.79	495.12	-1,095.71	1,200.36	0.00	0.00	
5,300.00	14.66	293.43	5,145.53	505.19	-1,118.93	1,225.64	0.00	0.00	
5,400.00	14.66	293.43	5,242.28	515.25	-1,142.15	1,250.93	0.00	0.00	
5,500.00	14.66	293.43	5,339.02	525.31	-1,165.37	1,276.22	0.00	0.00	
5,600.00	14.66	293.43	5,435.77	535.38	-1,188.59	1,301.50	0.00	0.00	
5,700.00	14.66	293.43	5,532.51	545.44	-1,211.82	1,326.79	0.00	0.00	
5,800.00	14.66	293.43	5,629.25	555.51	-1,235.04	1,352.07	0.00	0.00	
5,900.00	14.66	293.43	5,726.00	565.57	-1,258.26	1,377.36	0.00	0.00	
6,000.00	14.66	293.43	5,822.74	575.63	-1,281.48	1,402.65	0.00	0.00	
6,100.00	14.66	293.43	5,919.49	585.70	-1,304.70	1,427.93	0.00	0.00	
6,183.22	14.66	293.43	6,000.00	594.07	-1,324.03	1,448.98	0.00	0.00	OHIO_CREEK.MBL (TVD)
6,200.00	14.66	293.43	6,016.23	595.76	-1,327.93	1,453.22	0.00	0.00	
6,271.03	14.66	293.43	6,084.95	602.91	-1,344.42	1,471.18	0.00	0.00	Start Drop -2.00
6,300.00	14.08	293.43	6,113.01	605.77	-1,351.02	1,478.36	2.00	-2.00	
6,346.29	13.16	293.43	6,158.00	610.10	-1,361.02	1,489.25	2.00	-2.00	WILLIAMS_FORK.MBL (TVD)
6,400.00	12.08	293.43	6,210.41	614.77	-1,371.78	1,500.98	2.00	-2.00	
6,500.00	10.08	293.43	6,308.54	622.41	-1,389.42	1,520.18	2.00	-2.00	
6,600.00	8.08	293.43	6,407.28	628.69	-1,403.90	1,535.95	2.00	-2.00	
6,700.00	6.08	293.43	6,506.52	633.59	-1,415.21	1,548.26	2.00	-2.00	
6,800.00	4.08	293.43	6,606.12	637.11	-1,423.33	1,557.11	2.00	-2.00	
6,900.00	2.08	293.43	6,705.97	639.25	-1,428.27	1,562.48	2.00	-2.00	
7,000.00	0.08	293.43	6,805.95	640.00	-1,430.00	1,564.36	2.00	-2.00	
7,004.05	0.00	0.00	6,810.00	640.00	-1,430.00	1,564.37	2.00	-2.00	EOD; INC=0°
7,100.00	1.92	259.37	6,905.93	639.70	-1,431.58	1,565.73	2.00	2.00	
7,104.07	2.00	259.37	6,910.00	639.68	-1,431.72	1,565.85	2.00	2.00	TOP_GAS.MBL (TVD)
7,200.00	3.92	259.37	7,005.79	638.76	-1,436.58	1,570.07	2.00	2.00	
7,238.28	4.68	259.37	7,043.96	638.23	-1,439.41	1,572.52	2.00	2.00	
7,300.00	4.68	259.37	7,105.48	637.31	-1,444.36	1,576.81	0.00	0.00	
7,400.00	4.68	259.37	7,205.14	635.80	-1,452.39	1,583.76	0.00	0.00	
7,500.00	4.68	259.37	7,304.81	634.29	-1,460.41	1,590.72	0.00	0.00	
7,600.00	4.68	259.37	7,404.48	632.79	-1,468.44	1,597.67	0.00	0.00	
7,700.00	4.68	259.37	7,504.14	631.28	-1,476.47	1,604.62	0.00	0.00	
7,800.00	4.68	259.37	7,603.81	629.77	-1,484.49	1,611.58	0.00	0.00	
7,900.00	4.68	259.37	7,703.47	628.27	-1,492.52	1,618.53	0.00	0.00	
8,000.00	4.68	259.37	7,803.14	626.76	-1,500.55	1,625.49	0.00	0.00	
8,100.00	4.68	259.37	7,902.81	625.25	-1,508.57	1,632.44	0.00	0.00	
8,200.00	4.68	259.37	8,002.47	623.75	-1,516.60	1,639.40	0.00	0.00	
8,300.00	4.68	259.37	8,102.14	622.24	-1,524.63	1,646.35	0.00	0.00	
8,400.00	4.68	259.37	8,201.80	620.73	-1,532.65	1,653.30	0.00	0.00	
8,458.39	4.68	259.37	8,260.00	619.86	-1,537.34	1,657.37	0.00	0.00	CAMEO.MBL (TVD)
8,500.00	4.68	259.37	8,301.47	619.23	-1,540.68	1,660.26	0.00	0.00	
8,600.00	4.68	259.37	8,401.14	617.72	-1,548.71	1,667.21	0.00	0.00	
8,700.00	4.68	259.37	8,500.80	616.22	-1,556.73	1,674.17	0.00	0.00	
8,800.00	4.68	259.37	8,600.47	614.71	-1,564.76	1,681.12	0.00	0.00	
8,900.00	4.68	259.37	8,700.13	613.20	-1,572.79	1,688.08	0.00	0.00	
8,960.07	4.68	259.37	8,760.00	612.30	-1,577.61	1,692.25	0.00	0.00	ROLLINS.MBL (TVD)
9,000.00	4.68	259.37	8,799.80	611.70	-1,580.82	1,695.03	0.00	0.00	
9,100.00	4.68	259.37	8,899.47	610.19	-1,588.84	1,701.98	0.00	0.00	
9,110.57	4.68	259.37	8,910.00	610.03	-1,589.69	1,702.72	0.00	0.00	TD at 9110.57 - 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 21B-26 - Slot B-1
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	30' KB @ 8426.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	30' KB @ 8426.00usft
<b>Site:</b>	S26-T6S-R97W (697 26A)	<b>North Reference:</b>	True
<b>Well:</b>	PUCKETT 21B-26	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #3		

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 21B-26 PBHL	0.00	0.00	8,910.00	610.03	-1,589.69	14,356,600.00	2,433,680.00	39.500625	-108.188101
- plan hits target center									
- Ellipse (radii L200.00 W100.00 on 250.00 azi)									
PUCKETT 21B-26 PBHL	0.00	0.00	8,910.00	337.85	-1,588.21	14,356,328.00	2,433,690.00	39.499878	-108.188096
- plan misses target center by 272.18usft at 9110.57usft MD (8910.00 TVD, 610.03 N, -1589.69 E)									
- Ellipse (radii L200.00 W100.00 on 240.00 azi)									
PUCKETT 21B-26 PBHL	0.00	0.00	8,910.00	69.41	-1,578.30	14,356,060.00	2,433,708.30	39.499141	-108.188060
- plan misses target center by 540.74usft at 9110.57usft MD (8910.00 TVD, 610.03 N, -1589.69 E)									
- Ellipse (radii L200.00 W100.00 on 240.00 azi)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
6,183.22	6,000.00	OHIO_CREEK.MBL (TVD)				
6,346.29	6,158.00	WILLIAMS_FORK.MBL (TVD)				
7,104.07	6,910.00	TOP_GAS.MBL (TVD)				
8,458.39	8,260.00	CAMEO.MBL (TVD)				
8,960.07	8,760.00	ROLLINS.MBL (TVD)				
9,110.57	8,910.00	TD.MBL (TVD)				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
140.00	140.00	0.00	0.00	KOP @ 140'	
373.33	372.75	10.91	-9.15	START BUILD/TURN	
820.95	812.31	54.41	-78.80	EOB; INC=14.66°	
6,271.03	6,084.95	602.91	-1,344.42	Start Drop -2.00	
7,004.05	6,810.00	640.00	-1,430.00	EOD; INC=0°	
9,110.57	8,910.00	638.23	-1,439.41	TD at 9110.57	