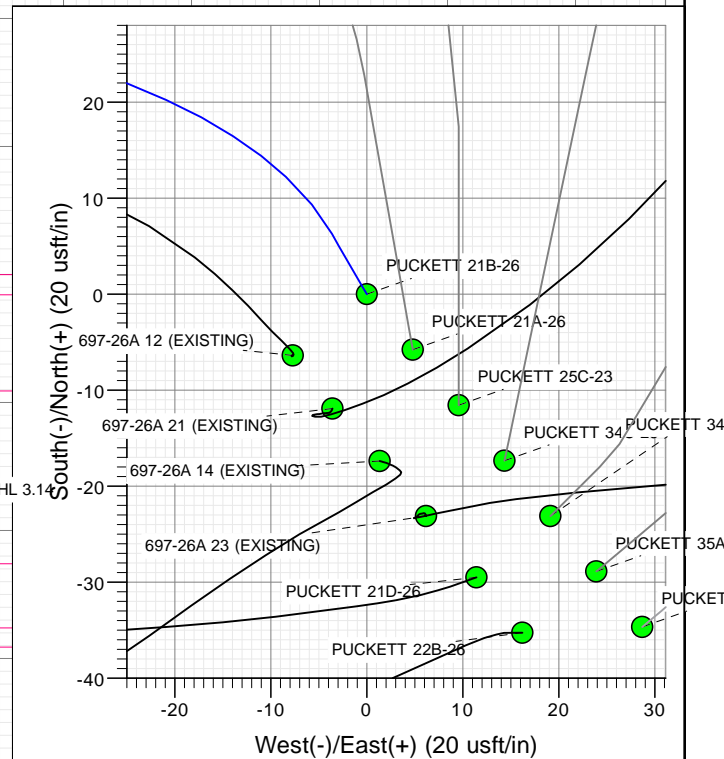
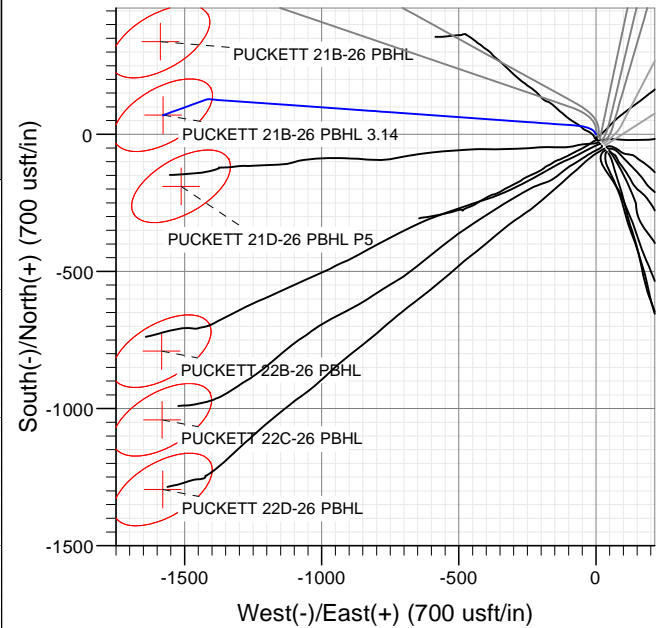
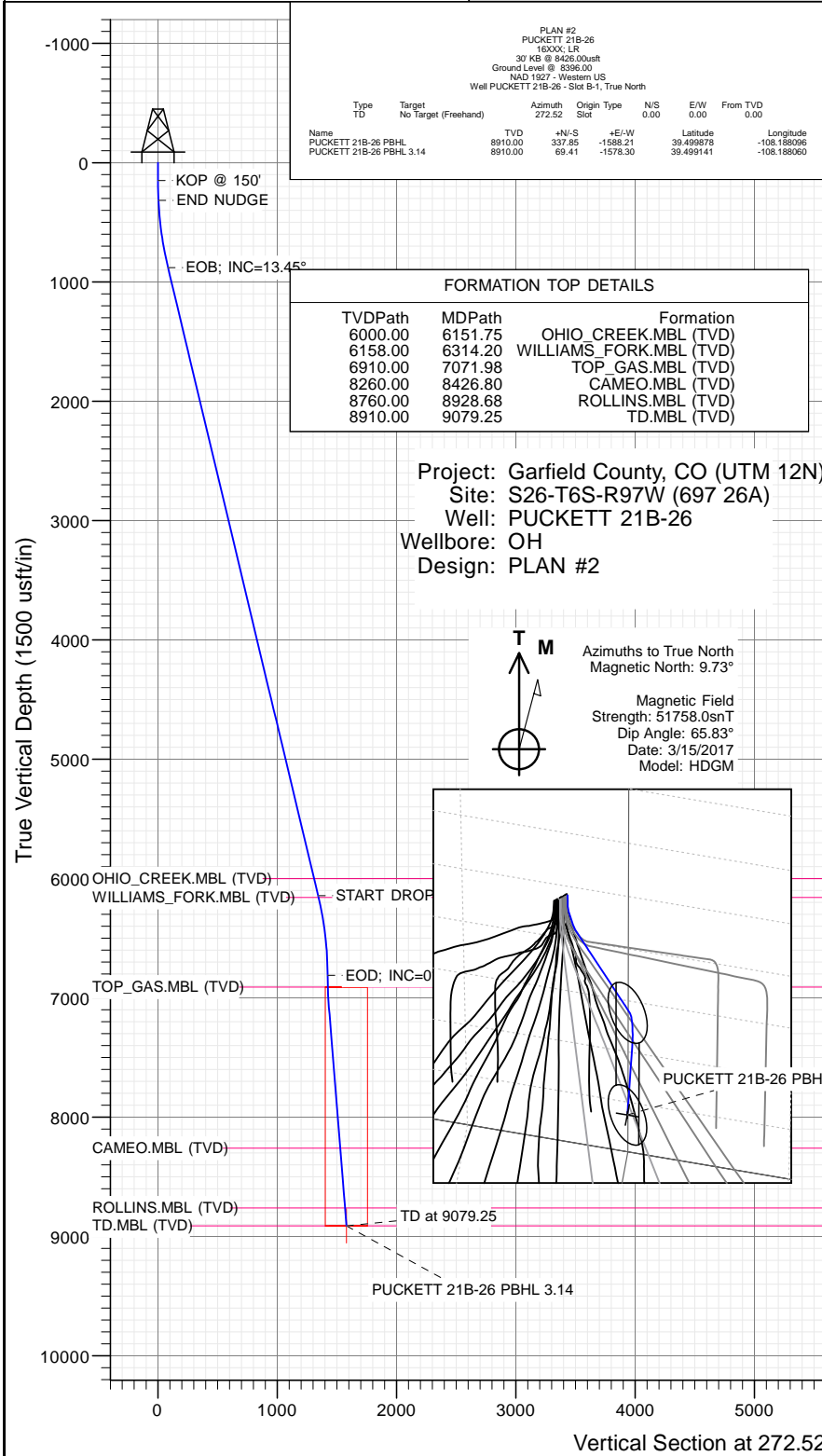




## SECTION DETAILS

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	150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	
3	316.67	5.00	330.00	316.46	6.29	-3.63	3.00	330.00	3.91	
4	887.43	13.45	274.09	880.17	32.65	-82.57	2.00	-76.81	83.92	
5	6299.22	13.45	274.09	6143.42	122.40	-1338.57	0.00	0.00	1342.66	
6	6971.96	0.00	0.00	6810.00	128.00	-1417.00	2.00	180.00	1421.25	
7	7220.17	4.96	250.04	7057.89	124.33	-1427.10	2.00	250.04	1431.18	
8	9079.25	4.96	250.04	8910.00	69.41	-1578.30	0.00	0.00	1579.83	PUCKETT 21B-26 PBHL 3.14



## 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

# 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 #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 (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 (nT)</b>
	HDGM	3/15/2017	9.73	65.83	51,758

<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) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	272.52

<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	
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
316.67	5.00	330.00	316.46	6.29	-3.63	3.00	3.00	0.00	330.00	
887.43	13.45	274.09	880.17	32.65	-82.57	2.00	1.48	-9.80	-76.81	
6,299.22	13.45	274.09	6,143.42	122.40	-1,338.57	0.00	0.00	0.00	0.00	
6,971.96	0.00	0.00	6,810.00	128.00	-1,417.00	2.00	-2.00	0.00	180.00	
7,220.17	4.96	250.04	7,057.89	124.33	-1,427.10	2.00	2.00	-44.30	250.04	
9,079.25	4.96	250.04	8,910.00	69.41	-1,578.30	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 #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	
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	KOP @ 150'
200.00	1.50	330.00	199.99	0.57	-0.33	0.35	3.00	3.00	
300.00	4.50	330.00	299.85	5.10	-2.94	3.16	3.00	3.00	
316.67	5.00	330.00	316.46	6.29	-3.63	3.91	3.00	3.00	END NUDGE
400.00	5.62	313.19	399.44	12.23	-8.42	8.95	2.00	0.74	
500.00	6.84	298.47	498.85	18.42	-17.23	18.02	2.00	1.22	
600.00	8.36	288.63	597.97	23.58	-29.36	30.36	2.00	1.52	
700.00	10.06	281.94	696.68	27.71	-44.79	45.97	2.00	1.69	
800.00	11.84	277.20	794.86	30.81	-63.52	64.81	2.00	1.79	
887.43	13.45	274.09	880.17	32.65	-82.57	83.92	2.00	1.84	EOB; INC=13.45°
900.00	13.45	274.09	892.39	32.86	-85.48	86.84	0.00	0.00	
1,000.00	13.45	274.09	989.65	34.52	-108.69	110.10	0.00	0.00	
1,100.00	13.45	274.09	1,086.90	36.18	-131.90	133.36	0.00	0.00	
1,200.00	13.45	274.09	1,184.16	37.84	-155.11	156.62	0.00	0.00	
1,300.00	13.45	274.09	1,281.41	39.50	-178.32	179.88	0.00	0.00	
1,400.00	13.45	274.09	1,378.67	41.15	-201.53	203.14	0.00	0.00	
1,500.00	13.45	274.09	1,475.92	42.81	-224.73	226.40	0.00	0.00	
1,600.00	13.45	274.09	1,573.18	44.47	-247.94	249.66	0.00	0.00	
1,700.00	13.45	274.09	1,670.43	46.13	-271.15	272.92	0.00	0.00	
1,800.00	13.45	274.09	1,767.69	47.79	-294.36	296.18	0.00	0.00	
1,900.00	13.45	274.09	1,864.94	49.45	-317.57	319.43	0.00	0.00	
2,000.00	13.45	274.09	1,962.20	51.10	-340.78	342.69	0.00	0.00	
2,100.00	13.45	274.09	2,059.46	52.76	-363.99	365.95	0.00	0.00	
2,200.00	13.45	274.09	2,156.71	54.42	-387.20	389.21	0.00	0.00	
2,300.00	13.45	274.09	2,253.97	56.08	-410.40	412.47	0.00	0.00	
2,400.00	13.45	274.09	2,351.22	57.74	-433.61	435.73	0.00	0.00	
2,500.00	13.45	274.09	2,448.48	59.39	-456.82	458.99	0.00	0.00	
2,600.00	13.45	274.09	2,545.73	61.05	-480.03	482.25	0.00	0.00	
2,700.00	13.45	274.09	2,642.99	62.71	-503.24	505.51	0.00	0.00	
2,800.00	13.45	274.09	2,740.24	64.37	-526.45	528.77	0.00	0.00	
2,900.00	13.45	274.09	2,837.50	66.03	-549.66	552.03	0.00	0.00	
3,000.00	13.45	274.09	2,934.75	67.69	-572.86	575.29	0.00	0.00	
3,100.00	13.45	274.09	3,032.01	69.34	-596.07	598.54	0.00	0.00	
3,200.00	13.45	274.09	3,129.26	71.00	-619.28	621.80	0.00	0.00	
3,300.00	13.45	274.09	3,226.52	72.66	-642.49	645.06	0.00	0.00	
3,400.00	13.45	274.09	3,323.77	74.32	-665.70	668.32	0.00	0.00	
3,500.00	13.45	274.09	3,421.03	75.98	-688.91	691.58	0.00	0.00	
3,600.00	13.45	274.09	3,518.29	77.64	-712.12	714.84	0.00	0.00	
3,700.00	13.45	274.09	3,615.54	79.29	-735.33	738.10	0.00	0.00	
3,800.00	13.45	274.09	3,712.80	80.95	-758.53	761.36	0.00	0.00	
3,900.00	13.45	274.09	3,810.05	82.61	-781.74	784.62	0.00	0.00	
4,000.00	13.45	274.09	3,907.31	84.27	-804.95	807.88	0.00	0.00	
4,100.00	13.45	274.09	4,004.56	85.93	-828.16	831.14	0.00	0.00	
4,200.00	13.45	274.09	4,101.82	87.59	-851.37	854.39	0.00	0.00	
4,300.00	13.45	274.09	4,199.07	89.24	-874.58	877.65	0.00	0.00	
4,400.00	13.45	274.09	4,296.33	90.90	-897.79	900.91	0.00	0.00	
4,500.00	13.45	274.09	4,393.58	92.56	-921.00	924.17	0.00	0.00	
4,600.00	13.45	274.09	4,490.84	94.22	-944.20	947.43	0.00	0.00	
4,700.00	13.45	274.09	4,588.09	95.88	-967.41	970.69	0.00	0.00	
4,800.00	13.45	274.09	4,685.35	97.54	-990.62	993.95	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 #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
4,900.00	13.45	274.09	4,782.61	99.19	-1,013.83	1,017.21	0.00	0.00	
5,000.00	13.45	274.09	4,879.86	100.85	-1,037.04	1,040.47	0.00	0.00	
5,100.00	13.45	274.09	4,977.12	102.51	-1,060.25	1,063.73	0.00	0.00	
5,200.00	13.45	274.09	5,074.37	104.17	-1,083.46	1,086.99	0.00	0.00	
5,300.00	13.45	274.09	5,171.63	105.83	-1,106.67	1,110.25	0.00	0.00	
5,400.00	13.45	274.09	5,268.88	107.48	-1,129.87	1,133.50	0.00	0.00	
5,500.00	13.45	274.09	5,366.14	109.14	-1,153.08	1,156.76	0.00	0.00	
5,600.00	13.45	274.09	5,463.39	110.80	-1,176.29	1,180.02	0.00	0.00	
5,700.00	13.45	274.09	5,560.65	112.46	-1,199.50	1,203.28	0.00	0.00	
5,800.00	13.45	274.09	5,657.90	114.12	-1,222.71	1,226.54	0.00	0.00	
5,900.00	13.45	274.09	5,755.16	115.78	-1,245.92	1,249.80	0.00	0.00	
6,000.00	13.45	274.09	5,852.41	117.43	-1,269.13	1,273.06	0.00	0.00	
6,100.00	13.45	274.09	5,949.67	119.09	-1,292.33	1,296.32	0.00	0.00	
6,151.75	13.45	274.09	6,000.00	119.95	-1,304.35	1,308.36	0.00	0.00	OHIO_CREEK.MBL (TVD)
6,200.00	13.45	274.09	6,046.93	120.75	-1,315.54	1,319.58	0.00	0.00	
6,299.22	13.45	274.09	6,143.42	122.40	-1,338.57	1,342.66	0.00	0.00	START DROP
6,300.00	13.44	274.09	6,144.18	122.41	-1,338.75	1,342.84	2.00	-2.00	
6,314.20	13.16	274.09	6,158.00	122.64	-1,342.01	1,346.10	2.00	-2.00	WILLIAMS_FORK.MBL (TVD)
6,400.00	11.44	274.09	6,241.83	123.94	-1,360.24	1,364.37	2.00	-2.00	
6,500.00	9.44	274.09	6,340.17	125.24	-1,378.31	1,382.48	2.00	-2.00	
6,600.00	7.44	274.09	6,439.08	126.28	-1,392.95	1,397.15	2.00	-2.00	
6,700.00	5.44	274.09	6,538.44	127.08	-1,404.13	1,408.36	2.00	-2.00	
6,800.00	3.44	274.09	6,638.14	127.63	-1,411.85	1,416.10	2.00	-2.00	
6,900.00	1.44	274.09	6,738.04	127.94	-1,416.10	1,420.35	2.00	-2.00	
6,971.96	0.00	0.00	6,810.00	128.00	-1,417.00	1,421.25	2.00	-2.00	EOD; INC=0°
7,000.00	0.56	250.04	6,838.04	127.95	-1,417.13	1,421.38	2.00	2.00	
7,071.98	2.00	250.04	6,910.00	127.40	-1,418.64	1,422.87	2.00	2.00	TOP_GAS.MBL (TVD)
7,100.00	2.56	250.04	6,937.99	127.02	-1,419.69	1,423.90	2.00	2.00	
7,200.00	4.56	250.04	7,037.79	124.90	-1,425.53	1,429.64	2.00	2.00	
7,220.17	4.96	250.04	7,057.89	124.33	-1,427.10	1,431.18	2.00	2.00	
7,300.00	4.96	250.04	7,137.43	121.97	-1,433.59	1,437.57	0.00	0.00	
7,400.00	4.96	250.04	7,237.05	119.02	-1,441.73	1,445.56	0.00	0.00	
7,500.00	4.96	250.04	7,336.68	116.06	-1,449.86	1,453.56	0.00	0.00	
7,600.00	4.96	250.04	7,436.30	113.11	-1,457.99	1,461.55	0.00	0.00	
7,700.00	4.96	250.04	7,535.93	110.16	-1,466.13	1,469.55	0.00	0.00	
7,800.00	4.96	250.04	7,635.55	107.20	-1,474.26	1,477.54	0.00	0.00	
7,900.00	4.96	250.04	7,735.18	104.25	-1,482.39	1,485.54	0.00	0.00	
8,000.00	4.96	250.04	7,834.80	101.29	-1,490.52	1,493.54	0.00	0.00	
8,100.00	4.96	250.04	7,934.43	98.34	-1,498.66	1,501.53	0.00	0.00	
8,200.00	4.96	250.04	8,034.05	95.38	-1,506.79	1,509.53	0.00	0.00	
8,300.00	4.96	250.04	8,133.68	92.43	-1,514.92	1,517.52	0.00	0.00	
8,400.00	4.96	250.04	8,233.30	89.48	-1,523.06	1,525.52	0.00	0.00	
8,426.80	4.96	250.04	8,260.00	88.68	-1,525.24	1,527.66	0.00	0.00	CAMEO.MBL (TVD)
8,500.00	4.96	250.04	8,332.92	86.52	-1,531.19	1,533.51	0.00	0.00	
8,600.00	4.96	250.04	8,432.55	83.57	-1,539.32	1,541.51	0.00	0.00	
8,700.00	4.96	250.04	8,532.17	80.61	-1,547.46	1,549.50	0.00	0.00	
8,800.00	4.96	250.04	8,631.80	77.66	-1,555.59	1,557.50	0.00	0.00	
8,900.00	4.96	250.04	8,731.42	74.71	-1,563.72	1,565.49	0.00	0.00	
8,928.68	4.96	250.04	8,760.00	73.86	-1,566.06	1,567.79	0.00	0.00	ROLLINS.MBL (TVD)
9,000.00	4.96	250.04	8,831.05	71.75	-1,571.86	1,573.49	0.00	0.00	
9,079.25	4.96	250.04	8,910.00	69.41	-1,578.30	1,579.83	0.00	0.00	TD at 9079.25 - 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 #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 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 268.53usft at 9072.12usft MD (8902.90 TVD, 69.62 N, -1577.72 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 hits target center									
- Ellipse (radii L200.00 W100.00 on 240.00 azi)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
6,151.75	6,000.00	OHIO_CREEK.MBL (TVD)				
6,314.20	6,158.00	WILLIAMS_FORK.MBL (TVD)				
7,071.98	6,910.00	TOP_GAS.MBL (TVD)				
8,426.80	8,260.00	CAMEO.MBL (TVD)				
8,928.68	8,760.00	ROLLINS.MBL (TVD)				
9,079.25	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)		
150.00	150.00	0.00	0.00	KOP @ 150'	
316.67	316.46	6.29	-3.63	END NUDGE	
887.43	880.17	32.65	-82.57	EOB; INC=13.45°	
6,299.22	6,143.42	122.40	-1,338.57	START DROP	
6,971.96	6,810.00	128.00	-1,417.00	EOD; INC=0°	
9,079.25	8,910.00	124.33	-1,427.10	TD at 9079.25	