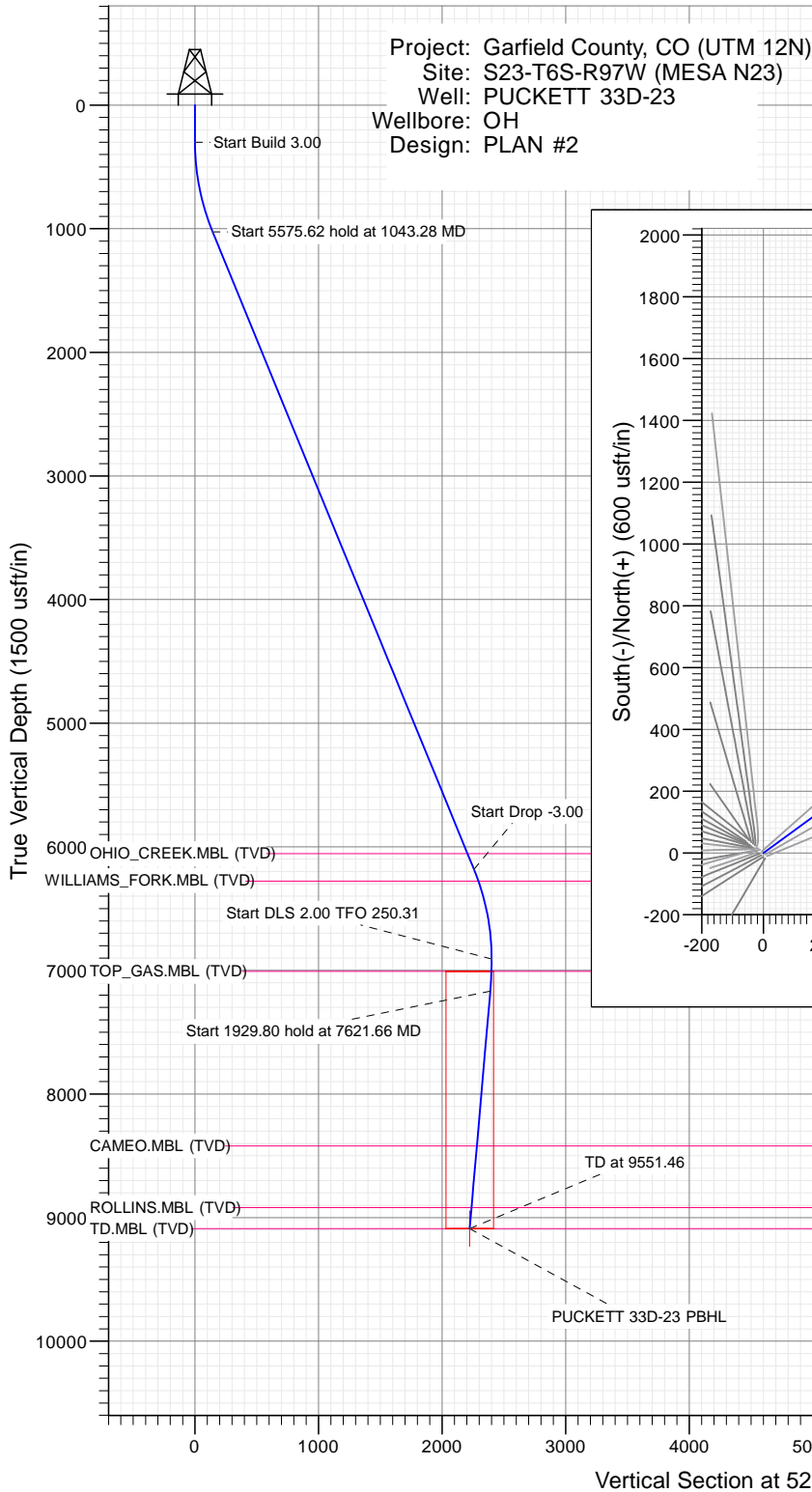




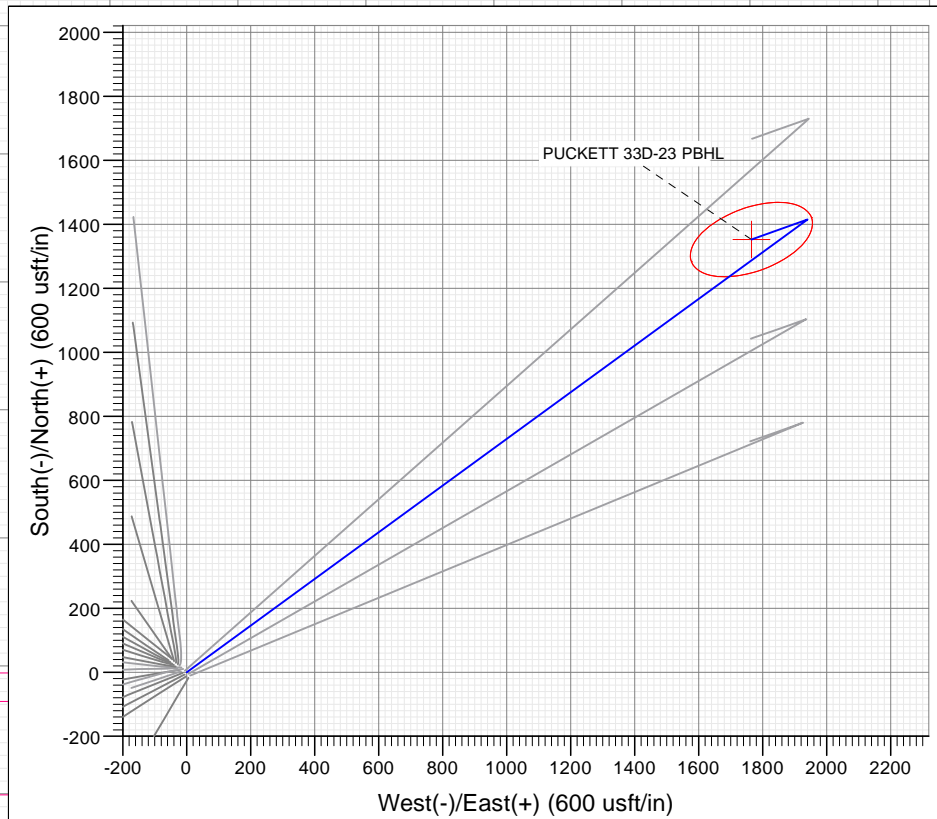
SECTION DETAILS

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	1043.28	22.30	53.89	1024.66	84.16	115.39	3.00	53.89	142.78	
4	6618.91	22.30	53.89	6183.34	1330.84	1824.61	0.00	0.00	2257.76	
5	7362.19	0.00	0.00	6908.00	1415.00	1940.00	3.00	180.00	2400.54	
6	7621.66	5.19	250.31	7167.11	1411.04	1928.94	2.00	250.31	2389.36	
7	9551.46	5.19	250.31	9089.00	1352.23	1764.60	0.00	0.00	2223.14	PUCKETT 33D-23 PBHL



PLAN #2
PUCKETT 33D-23
16300: LR
30' KB @ 8462.00usft
Ground Level @ 8432.00
NAD 1927 - Western US
Well PUCKETT 33D-23, True North

Type	Target	No Target (Freehand)	Azimuth	Origin Type	N/S	E/W	From TVD
Name	TD	No Target (Freehand)	52.54	Slot	0.00	0.00	0.00
PUCKETT 33D-23 PBHL	TVD		9089.00	+N/-S	1352.23	+E/-W	1764.60
						Latitude	39.506796
						Longitude	-108.181018



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
6056.00	6481.28	OHIO_CREEK.MBL (TVD)
6277.00	6719.11	WILLIAMS_FORK.MBL (TVD)
7008.00	7462.21	TOP_GAS.MBL (TVD)
8419.00	8878.70	CAMEO.MBL (TVD)
8919.00	9380.76	ROLLINS.MBL (TVD)
9089.00	9551.46	TD.MBL (TVD)



Azimuths to True North
Magnetic North: 9.78°

Magnetic Field
Strength: 51811.3snT
Dip Angle: 65.85°
Date: 9/14/2016
Model: HDGM

Vertical Section at 52.54° (1500 usft/in)

WELL DETAILS: PUCKETT 33D-23

+N/-S	+E/-W	Northing	Ground Level:	8432.00	Latitude	Longitude
0.00	0.00	14357503.30	Easting	2433886.50	39.503085	-108.187270



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 33D-23
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8462.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8462.00usft
Site:	S23-T6S-R97W (MESA N23)	North Reference:	True
Well:	PUCKETT 33D-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

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

Site		S23-T6S-R97W (MESA N23)			
Site Position:		Northing:	14,357,518.00 usft	Latitude:	39.503127
From:	Map	Easting:	2,433,869.00 usft	Longitude:	-108.187330
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.79 °

Well	PUCKETT 33D-23					
Well Position	+N/-S	0.00 usft	Northing:	14,357,503.30 usft	Latitude:	39.503085
	+E/-W	0.00 usft	Easting:	2,433,886.50 usft	Longitude:	-108.187270
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	8,432.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	9/14/2016	9.78	65.85	51,811.30000000

Design	PLAN #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	52.54

Plan Sections										
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	
1,043.28	22.30	53.89	1,024.66	84.16	115.39	3.00	3.00	0.00	53.89	
6,618.91	22.30	53.89	6,183.34	1,330.84	1,824.61	0.00	0.00	0.00	0.00	
7,362.19	0.00	0.00	6,908.00	1,415.00	1,940.00	3.00	-3.00	0.00	180.00	
7,621.66	5.19	250.31	7,167.11	1,411.04	1,928.94	2.00	2.00	-42.28	250.31	
9,551.46	5.19	250.31	9,089.00	1,352.23	1,764.60	0.00	0.00	0.00	0.00	PUCKETT 33D-23 PE

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 33D-23
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8462.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8462.00usft
Site:	S23-T6S-R97W (MESA N23)	North Reference:	True
Well:	PUCKETT 33D-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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	53.89	399.95	1.54	2.11	2.62	3.00	3.00	
500.00	6.00	53.89	499.63	6.17	8.45	10.46	3.00	3.00	
600.00	9.00	53.89	598.77	13.86	19.00	23.51	3.00	3.00	
700.00	12.00	53.89	697.08	24.59	33.72	41.72	3.00	3.00	
800.00	15.00	53.89	794.31	38.35	52.58	65.06	3.00	3.00	
900.00	18.00	53.89	890.18	55.08	75.52	93.45	3.00	3.00	
1,000.00	21.00	53.89	984.43	74.75	102.49	126.82	3.00	3.00	
1,043.28	22.30	53.89	1,024.66	84.16	115.39	142.78	3.00	3.00	Start 5575.62 hold at 1043.28 MD
1,100.00	22.30	53.89	1,077.14	96.84	132.77	164.29	0.00	0.00	
1,200.00	22.30	53.89	1,169.66	119.20	163.43	202.23	0.00	0.00	
1,300.00	22.30	53.89	1,262.18	141.56	194.09	240.16	0.00	0.00	
1,400.00	22.30	53.89	1,354.70	163.92	224.74	278.09	0.00	0.00	
1,500.00	22.30	53.89	1,447.22	186.28	255.40	316.02	0.00	0.00	
1,600.00	22.30	53.89	1,539.75	208.64	286.05	353.96	0.00	0.00	
1,700.00	22.30	53.89	1,632.27	231.00	316.71	391.89	0.00	0.00	
1,800.00	22.30	53.89	1,724.79	253.36	347.36	429.82	0.00	0.00	
1,900.00	22.30	53.89	1,817.31	275.72	378.02	467.75	0.00	0.00	
2,000.00	22.30	53.89	1,909.83	298.08	408.67	505.69	0.00	0.00	
2,100.00	22.30	53.89	2,002.36	320.44	439.33	543.62	0.00	0.00	
2,200.00	22.30	53.89	2,094.88	342.80	469.98	581.55	0.00	0.00	
2,300.00	22.30	53.89	2,187.40	365.16	500.64	619.49	0.00	0.00	
2,400.00	22.30	53.89	2,279.92	387.52	531.29	657.42	0.00	0.00	
2,500.00	22.30	53.89	2,372.44	409.87	561.95	695.35	0.00	0.00	
2,600.00	22.30	53.89	2,464.97	432.23	592.60	733.28	0.00	0.00	
2,700.00	22.30	53.89	2,557.49	454.59	623.26	771.22	0.00	0.00	
2,800.00	22.30	53.89	2,650.01	476.95	653.91	809.15	0.00	0.00	
2,900.00	22.30	53.89	2,742.53	499.31	684.57	847.08	0.00	0.00	
3,000.00	22.30	53.89	2,835.05	521.67	715.23	885.01	0.00	0.00	
3,100.00	22.30	53.89	2,927.58	544.03	745.88	922.95	0.00	0.00	
3,200.00	22.30	53.89	3,020.10	566.39	776.54	960.88	0.00	0.00	
3,300.00	22.30	53.89	3,112.62	588.75	807.19	998.81	0.00	0.00	
3,400.00	22.30	53.89	3,205.14	611.11	837.85	1,036.74	0.00	0.00	
3,500.00	22.30	53.89	3,297.66	633.47	868.50	1,074.68	0.00	0.00	
3,600.00	22.30	53.89	3,390.19	655.83	899.16	1,112.61	0.00	0.00	
3,700.00	22.30	53.89	3,482.71	678.19	929.81	1,150.54	0.00	0.00	
3,800.00	22.30	53.89	3,575.23	700.55	960.47	1,188.47	0.00	0.00	
3,900.00	22.30	53.89	3,667.75	722.91	991.12	1,226.41	0.00	0.00	
4,000.00	22.30	53.89	3,760.27	745.27	1,021.78	1,264.34	0.00	0.00	
4,100.00	22.30	53.89	3,852.80	767.63	1,052.43	1,302.27	0.00	0.00	
4,200.00	22.30	53.89	3,945.32	789.98	1,083.09	1,340.20	0.00	0.00	
4,300.00	22.30	53.89	4,037.84	812.34	1,113.74	1,378.14	0.00	0.00	
4,400.00	22.30	53.89	4,130.36	834.70	1,144.40	1,416.07	0.00	0.00	
4,500.00	22.30	53.89	4,222.88	857.06	1,175.05	1,454.00	0.00	0.00	
4,600.00	22.30	53.89	4,315.40	879.42	1,205.71	1,491.94	0.00	0.00	
4,700.00	22.30	53.89	4,407.93	901.78	1,236.37	1,529.87	0.00	0.00	
4,800.00	22.30	53.89	4,500.45	924.14	1,267.02	1,567.80	0.00	0.00	
4,900.00	22.30	53.89	4,592.97	946.50	1,297.68	1,605.73	0.00	0.00	
5,000.00	22.30	53.89	4,685.49	968.86	1,328.33	1,643.67	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 33D-23
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8462.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8462.00usft
Site:	S23-T6S-R97W (MESA N23)	North Reference:	True
Well:	PUCKETT 33D-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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	22.30	53.89	4,778.01	991.22	1,358.99	1,681.60	0.00	0.00	
5,200.00	22.30	53.89	4,870.54	1,013.58	1,389.64	1,719.53	0.00	0.00	
5,300.00	22.30	53.89	4,963.06	1,035.94	1,420.30	1,757.46	0.00	0.00	
5,400.00	22.30	53.89	5,055.58	1,058.30	1,450.95	1,795.40	0.00	0.00	
5,500.00	22.30	53.89	5,148.10	1,080.66	1,481.61	1,833.33	0.00	0.00	
5,600.00	22.30	53.89	5,240.62	1,103.02	1,512.26	1,871.26	0.00	0.00	
5,700.00	22.30	53.89	5,333.15	1,125.38	1,542.92	1,909.19	0.00	0.00	
5,800.00	22.30	53.89	5,425.67	1,147.74	1,573.57	1,947.13	0.00	0.00	
5,900.00	22.30	53.89	5,518.19	1,170.09	1,604.23	1,985.06	0.00	0.00	
6,000.00	22.30	53.89	5,610.71	1,192.45	1,634.88	2,022.99	0.00	0.00	
6,100.00	22.30	53.89	5,703.23	1,214.81	1,665.54	2,060.92	0.00	0.00	
6,200.00	22.30	53.89	5,795.76	1,237.17	1,696.19	2,098.86	0.00	0.00	
6,300.00	22.30	53.89	5,888.28	1,259.53	1,726.85	2,136.79	0.00	0.00	
6,400.00	22.30	53.89	5,980.80	1,281.89	1,757.51	2,174.72	0.00	0.00	
6,481.28	22.30	53.89	6,056.00	1,300.06	1,782.42	2,205.55	0.00	0.00	OHIO_CREEK.MBL (TVD)
6,500.00	22.30	53.89	6,073.32	1,304.25	1,788.16	2,212.65	0.00	0.00	
6,600.00	22.30	53.89	6,165.84	1,326.61	1,818.82	2,250.59	0.00	0.00	
6,618.91	22.30	53.89	6,183.34	1,330.84	1,824.61	2,257.76	0.00	0.00	Start Drop -3.00
6,700.00	19.87	53.89	6,259.00	1,348.03	1,848.18	2,286.92	3.00	-3.00	
6,719.11	19.29	53.89	6,277.00	1,351.80	1,853.35	2,293.32	3.00	-3.00	WILLIAMS_FORK.MBL (TVD)
6,800.00	16.87	53.89	6,353.89	1,366.59	1,873.63	2,318.41	3.00	-3.00	
6,900.00	13.87	53.89	6,450.31	1,382.20	1,895.04	2,344.90	3.00	-3.00	
7,000.00	10.87	53.89	6,547.98	1,394.82	1,912.34	2,366.31	3.00	-3.00	
7,100.00	7.87	53.89	6,646.63	1,404.41	1,925.48	2,382.58	3.00	-3.00	
7,200.00	4.87	53.89	6,746.00	1,410.94	1,934.44	2,393.66	3.00	-3.00	
7,300.00	1.87	53.89	6,845.82	1,414.40	1,939.18	2,399.53	3.00	-3.00	
7,362.19	0.00	0.00	6,908.00	1,415.00	1,940.00	2,400.54	3.00	-3.00	Start DLS 2.00 TFO 250.31
7,400.00	0.76	250.31	6,945.81	1,414.92	1,939.77	2,400.30	2.00	2.00	
7,462.21	2.00	250.31	7,008.00	1,414.41	1,938.36	2,398.88	2.00	2.00	TOP_GAS.MBL (TVD)
7,500.00	2.76	250.31	7,045.75	1,413.88	1,936.88	2,397.38	2.00	2.00	
7,600.00	4.76	250.31	7,145.54	1,411.68	1,930.71	2,391.15	2.00	2.00	
7,621.66	5.19	250.31	7,167.11	1,411.04	1,928.94	2,389.36	2.00	2.00	Start 1929.80 hold at 7621.66 MD
7,700.00	5.19	250.31	7,245.13	1,408.66	1,922.27	2,382.61	0.00	0.00	
7,800.00	5.19	250.31	7,344.72	1,405.61	1,913.76	2,374.00	0.00	0.00	
7,900.00	5.19	250.31	7,444.31	1,402.56	1,905.24	2,365.38	0.00	0.00	
8,000.00	5.19	250.31	7,543.90	1,399.51	1,896.73	2,356.77	0.00	0.00	
8,100.00	5.19	250.31	7,643.49	1,396.47	1,888.21	2,348.16	0.00	0.00	
8,200.00	5.19	250.31	7,743.08	1,393.42	1,879.69	2,339.55	0.00	0.00	
8,300.00	5.19	250.31	7,842.67	1,390.37	1,871.18	2,330.93	0.00	0.00	
8,400.00	5.19	250.31	7,942.26	1,387.32	1,862.66	2,322.32	0.00	0.00	
8,500.00	5.19	250.31	8,041.85	1,384.28	1,854.15	2,313.71	0.00	0.00	
8,600.00	5.19	250.31	8,141.44	1,381.23	1,845.63	2,305.09	0.00	0.00	
8,700.00	5.19	250.31	8,241.03	1,378.18	1,837.11	2,296.48	0.00	0.00	
8,800.00	5.19	250.31	8,340.62	1,375.13	1,828.60	2,287.87	0.00	0.00	
8,878.70	5.19	250.31	8,419.00	1,372.74	1,821.90	2,281.09	0.00	0.00	CAMEO.MBL (TVD)
8,900.00	5.19	250.31	8,440.21	1,372.09	1,820.08	2,279.25	0.00	0.00	
9,000.00	5.19	250.31	8,539.80	1,369.04	1,811.57	2,270.64	0.00	0.00	
9,100.00	5.19	250.31	8,639.39	1,365.99	1,803.05	2,262.03	0.00	0.00	
9,200.00	5.19	250.31	8,738.98	1,362.94	1,794.53	2,253.41	0.00	0.00	
9,300.00	5.19	250.31	8,838.57	1,359.90	1,786.02	2,244.80	0.00	0.00	
9,380.76	5.19	250.31	8,919.00	1,357.44	1,779.14	2,237.85	0.00	0.00	ROLLINS.MBL (TVD)
9,400.00	5.19	250.31	8,938.16	1,356.85	1,777.50	2,236.19	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 33D-23
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8462.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8462.00usft
Site:	S23-T6S-R97W (MESA N23)	North Reference:	True
Well:	PUCKETT 33D-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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
9,500.00	5.19	250.31	9,037.75	1,353.80	1,768.99	2,227.58	0.00	0.00	
9,551.46	5.19	250.31	9,089.00	1,352.23	1,764.60	2,223.14	0.00	0.00	TD at 9551.46 - TD.MBL (TVD)

Targets									
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	
- Shape									Latitude Longitude
PUCKETT 33D-23 PBHI		0.00	0.00	9,089.00	1,352.23	1,764.60	14,358,910.00	2,435,608.00	39.506796 -108.181018
- plan hits target center									
- Ellipse (radii L200.00 W100.00 on 250.00 azi)									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,481.28	6,056.00	OHIO_CREEK.MBL (TVD)				
6,719.11	6,277.00	WILLIAMS_FORK.MBL (TVD)				
7,462.21	7,008.00	TOP_GAS.MBL (TVD)				
8,878.70	8,419.00	CAMEO.MBL (TVD)				
9,380.76	8,919.00	ROLLINS.MBL (TVD)				
9,551.46	9,089.00	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	
1,043.28	1,024.66	84.16	115.39	Start 5575.62 hold at 1043.28 MD	
6,618.91	6,183.34	1,330.84	1,824.61	Start Drop -3.00	
7,362.19	6,908.00	1,415.00	1,940.00	Start DLS 2.00 TFO 250.31	
7,621.66	7,167.11	1,411.04	1,928.94	Start 1929.80 hold at 7621.66 MD	
9,551.46	9,089.00	1,352.23	1,764.60	TD at 9551.46	