

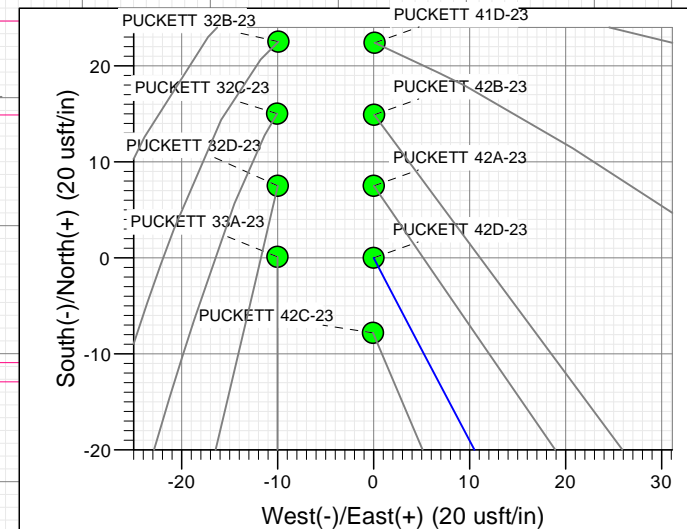
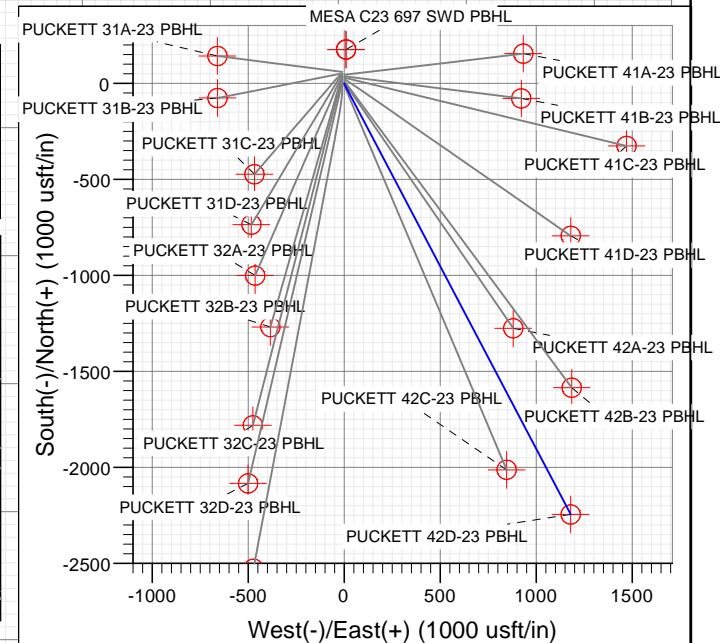
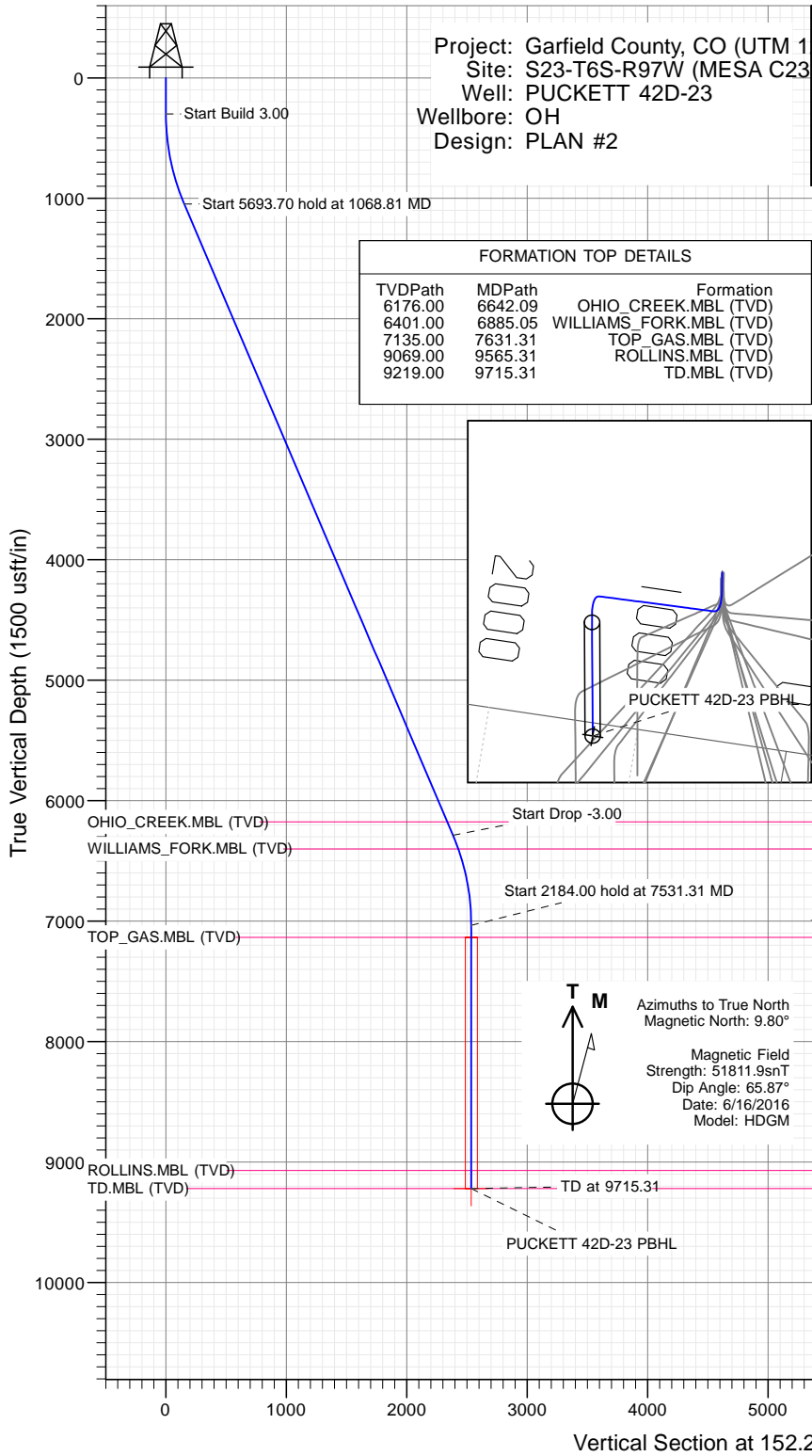


SECTION DETAILS

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	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	1068.81	23.06	152.27	1048.21	-135.13	71.03	3.00	152.27	152.66	
4	6762.50	23.06	152.27	6286.79	-2109.58	1108.82	0.00	0.00	2383.24	
5	7531.31	0.00	0.00	7035.00	-2244.71	1179.85	3.00	180.00	2535.90	
6	9715.31	0.00	0.00	9219.00	-2244.71	1179.85	0.00	0.00	2535.90	PUCKETT 42D-23 PBHL

Project: Garfield County, CO (UTM 1
Site: S23-T6S-R97W (MESA C23
Well: PUCKETT 42D-23
Wellbore: OH
Design: PLAN #2

Type	Target	Azimuth	Origin	Type	N/S	E/W	From
TD	No Target (Freehand)	152.27	Slot		0.00	0.00	TVD
Name							
PUCKETT 42D-23 PBHL		9219.00	+N/-S	+E/-W	Latitude	Longitude	
		-2244.71	1179.85	39.508742	-108.179697		



WELL DETAILS: PUCKETT 42D-23

+N/-S	+E/-W	Northing	Ground Level:	8532.00	Latitude	Longitude
0.00	0.00	14361837.10	Easting	2434709.00	39.514903	-108.183877

CATHEDRAL



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 42D-23
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8562.00usft (H&P 330)
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8562.00usft (H&P 330)
Site:	S23-T6S-R97W (MESA C23)	North Reference:	True
Well:	PUCKETT 42D-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 C23)			
Site Position:		Northing:	14,361,896.90 usft	Latitude:	39.515068
From:	Map	Easting:	2,434,697.40 usft	Longitude:	-108.183912
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.79 °

Well	PUCKETT 42D-23					
Well Position	+N/-S	0.00 usft	Northing:	14,361,837.10 usft	Latitude:	39.514903
	+E/-W	0.00 usft	Easting:	2,434,709.00 usft	Longitude:	-108.183877
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	8,532.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	6/16/2016	9.80	65.87	51,812

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	152.27

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
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	
1,068.81	23.06	152.27	1,048.21	-135.13	71.03	3.00	3.00	0.00	152.27	
6,762.50	23.06	152.27	6,286.79	-2,109.58	1,108.82	0.00	0.00	0.00	0.00	
7,531.31	0.00	0.00	7,035.00	-2,244.71	1,179.85	3.00	-3.00	0.00	180.00	
9,715.31	0.00	0.00	9,219.00	-2,244.71	1,179.85	0.00	0.00	0.00	0.00	PUCKETT 42D-23 PE

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 42D-23
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8562.00usft (H&P 330)
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8562.00usft (H&P 330)
Site:	S23-T6S-R97W (MESA C23)	North Reference:	True
Well:	PUCKETT 42D-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	
400.00	3.00	152.27	399.95	-2.32	1.22	2.62	3.00	3.00	
500.00	6.00	152.27	499.63	-9.26	4.87	10.46	3.00	3.00	
600.00	9.00	152.27	598.77	-20.81	10.94	23.51	3.00	3.00	
700.00	12.00	152.27	697.08	-36.94	19.42	41.74	3.00	3.00	
800.00	15.00	152.27	794.31	-57.60	30.28	65.08	3.00	3.00	
900.00	18.00	152.27	890.18	-82.74	43.49	93.48	3.00	3.00	
1,000.00	21.00	152.27	984.43	-112.29	59.02	126.85	3.00	3.00	
1,068.81	23.06	152.27	1,048.21	-135.13	71.03	152.66	3.00	3.00	
1,100.00	23.06	152.27	1,076.91	-145.95	76.71	164.88	0.00	0.00	
1,200.00	23.06	152.27	1,168.92	-180.63	94.94	204.06	0.00	0.00	
1,300.00	23.06	152.27	1,260.92	-215.31	113.17	243.23	0.00	0.00	
1,400.00	23.06	152.27	1,352.93	-249.98	131.39	282.41	0.00	0.00	
1,500.00	23.06	152.27	1,444.94	-284.66	149.62	321.59	0.00	0.00	
1,600.00	23.06	152.27	1,536.94	-319.34	167.85	360.76	0.00	0.00	
1,700.00	23.06	152.27	1,628.95	-354.02	186.08	399.94	0.00	0.00	
1,800.00	23.06	152.27	1,720.96	-388.69	204.30	439.12	0.00	0.00	
1,900.00	23.06	152.27	1,812.96	-423.37	222.53	478.29	0.00	0.00	
2,000.00	23.06	152.27	1,904.97	-458.05	240.76	517.47	0.00	0.00	
2,100.00	23.06	152.27	1,996.98	-492.73	258.98	556.64	0.00	0.00	
2,200.00	23.06	152.27	2,088.98	-527.40	277.21	595.82	0.00	0.00	
2,300.00	23.06	152.27	2,180.99	-562.08	295.44	635.00	0.00	0.00	
2,400.00	23.06	152.27	2,273.00	-596.76	313.67	674.17	0.00	0.00	
2,500.00	23.06	152.27	2,365.00	-631.44	331.89	713.35	0.00	0.00	
2,600.00	23.06	152.27	2,457.01	-666.12	350.12	752.53	0.00	0.00	
2,700.00	23.06	152.27	2,549.02	-700.79	368.35	791.70	0.00	0.00	
2,800.00	23.06	152.27	2,641.02	-735.47	386.57	830.88	0.00	0.00	
2,900.00	23.06	152.27	2,733.03	-770.15	404.80	870.05	0.00	0.00	
3,000.00	23.06	152.27	2,825.04	-804.83	423.03	909.23	0.00	0.00	
3,100.00	23.06	152.27	2,917.04	-839.50	441.26	948.41	0.00	0.00	
3,200.00	23.06	152.27	3,009.05	-874.18	459.48	987.58	0.00	0.00	
3,300.00	23.06	152.27	3,101.06	-908.86	477.71	1,026.76	0.00	0.00	
3,400.00	23.06	152.27	3,193.06	-943.54	495.94	1,065.93	0.00	0.00	
3,500.00	23.06	152.27	3,285.07	-978.22	514.16	1,105.11	0.00	0.00	
3,600.00	23.06	152.27	3,377.08	-1,012.89	532.39	1,144.29	0.00	0.00	
3,700.00	23.06	152.27	3,469.08	-1,047.57	550.62	1,183.46	0.00	0.00	
3,800.00	23.06	152.27	3,561.09	-1,082.25	568.84	1,222.64	0.00	0.00	
3,900.00	23.06	152.27	3,653.10	-1,116.93	587.07	1,261.82	0.00	0.00	
4,000.00	23.06	152.27	3,745.10	-1,151.60	605.30	1,300.99	0.00	0.00	
4,100.00	23.06	152.27	3,837.11	-1,186.28	623.53	1,340.17	0.00	0.00	
4,200.00	23.06	152.27	3,929.12	-1,220.96	641.75	1,379.34	0.00	0.00	
4,300.00	23.06	152.27	4,021.12	-1,255.64	659.98	1,418.52	0.00	0.00	
4,400.00	23.06	152.27	4,113.13	-1,290.32	678.21	1,457.70	0.00	0.00	
4,500.00	23.06	152.27	4,205.14	-1,324.99	696.43	1,496.87	0.00	0.00	
4,600.00	23.06	152.27	4,297.14	-1,359.67	714.66	1,536.05	0.00	0.00	
4,700.00	23.06	152.27	4,389.15	-1,394.35	732.89	1,575.23	0.00	0.00	
4,800.00	23.06	152.27	4,481.16	-1,429.03	751.12	1,614.40	0.00	0.00	
4,900.00	23.06	152.27	4,573.16	-1,463.70	769.34	1,653.58	0.00	0.00	
5,000.00	23.06	152.27	4,665.17	-1,498.38	787.57	1,692.75	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 42D-23
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8562.00usft (H&P 330)
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8562.00usft (H&P 330)
Site:	S23-T6S-R97W (MESA C23)	North Reference:	True
Well:	PUCKETT 42D-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	23.06	152.27	4,757.18	-1,533.06	805.80	1,731.93	0.00	0.00	
5,200.00	23.06	152.27	4,849.18	-1,567.74	824.02	1,771.11	0.00	0.00	
5,300.00	23.06	152.27	4,941.19	-1,602.42	842.25	1,810.28	0.00	0.00	
5,400.00	23.06	152.27	5,033.20	-1,637.09	860.48	1,849.46	0.00	0.00	
5,500.00	23.06	152.27	5,125.20	-1,671.77	878.71	1,888.64	0.00	0.00	
5,600.00	23.06	152.27	5,217.21	-1,706.45	896.93	1,927.81	0.00	0.00	
5,700.00	23.06	152.27	5,309.22	-1,741.13	915.16	1,966.99	0.00	0.00	
5,800.00	23.06	152.27	5,401.22	-1,775.80	933.39	2,006.16	0.00	0.00	
5,900.00	23.06	152.27	5,493.23	-1,810.48	951.61	2,045.34	0.00	0.00	
6,000.00	23.06	152.27	5,585.24	-1,845.16	969.84	2,084.52	0.00	0.00	
6,100.00	23.06	152.27	5,677.24	-1,879.84	988.07	2,123.69	0.00	0.00	
6,200.00	23.06	152.27	5,769.25	-1,914.52	1,006.30	2,162.87	0.00	0.00	
6,300.00	23.06	152.27	5,861.26	-1,949.19	1,024.52	2,202.04	0.00	0.00	
6,400.00	23.06	152.27	5,953.26	-1,983.87	1,042.75	2,241.22	0.00	0.00	
6,500.00	23.06	152.27	6,045.27	-2,018.55	1,060.98	2,280.40	0.00	0.00	
6,600.00	23.06	152.27	6,137.28	-2,053.23	1,079.20	2,319.57	0.00	0.00	
6,642.09	23.06	152.27	6,176.00	-2,067.82	1,086.88	2,336.06	0.00	0.00	OHIO_CREEK.MBL (TVD)
6,700.00	23.06	152.27	6,229.28	-2,087.90	1,097.43	2,358.75	0.00	0.00	
6,762.50	23.06	152.27	6,286.79	-2,109.58	1,108.82	2,383.24	0.00	0.00	
6,800.00	21.94	152.27	6,321.43	-2,122.28	1,115.50	2,397.59	3.00	-3.00	
6,885.05	19.39	152.27	6,401.00	-2,148.84	1,129.46	2,427.59	3.00	-3.00	WILLIAMS_FORK.MBL (TVD)
6,900.00	18.94	152.27	6,415.13	-2,153.19	1,131.75	2,432.50	3.00	-3.00	
7,000.00	15.94	152.27	6,510.52	-2,179.71	1,145.69	2,462.47	3.00	-3.00	
7,100.00	12.94	152.27	6,607.35	-2,201.78	1,157.29	2,487.40	3.00	-3.00	
7,200.00	9.94	152.27	6,705.35	-2,219.34	1,166.51	2,507.23	3.00	-3.00	
7,300.00	6.94	152.27	6,804.26	-2,232.33	1,173.34	2,521.91	3.00	-3.00	
7,400.00	3.94	152.27	6,903.80	-2,240.72	1,177.75	2,531.39	3.00	-3.00	
7,500.00	0.94	152.27	7,003.69	-2,244.48	1,179.73	2,535.64	3.00	-3.00	
7,531.31	0.00	0.00	7,035.00	-2,244.71	1,179.85	2,535.90	3.00	-3.00	
7,600.00	0.00	0.00	7,103.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
7,631.31	0.00	0.00	7,135.00	-2,244.71	1,179.85	2,535.90	0.00	0.00	TOP_GAS.MBL (TVD)
7,700.00	0.00	0.00	7,203.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
7,800.00	0.00	0.00	7,303.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
7,900.00	0.00	0.00	7,403.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,000.00	0.00	0.00	7,503.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,100.00	0.00	0.00	7,603.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,200.00	0.00	0.00	7,703.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,300.00	0.00	0.00	7,803.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,400.00	0.00	0.00	7,903.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,500.00	0.00	0.00	8,003.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,600.00	0.00	0.00	8,103.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,700.00	0.00	0.00	8,203.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,800.00	0.00	0.00	8,303.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
8,900.00	0.00	0.00	8,403.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
9,000.00	0.00	0.00	8,503.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
9,100.00	0.00	0.00	8,603.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
9,200.00	0.00	0.00	8,703.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
9,300.00	0.00	0.00	8,803.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
9,400.00	0.00	0.00	8,903.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
9,500.00	0.00	0.00	9,003.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
9,565.31	0.00	0.00	9,069.00	-2,244.71	1,179.85	2,535.90	0.00	0.00	ROLLINS.MBL (TVD)
9,600.00	0.00	0.00	9,103.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 42D-23
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8562.00usft (H&P 330)
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8562.00usft (H&P 330)
Site:	S23-T6S-R97W (MESA C23)	North Reference:	True
Well:	PUCKETT 42D-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
9,700.00	0.00	0.00	9,203.69	-2,244.71	1,179.85	2,535.90	0.00	0.00	
9,715.31	0.00	0.00	9,219.00	-2,244.71	1,179.85	2,535.90	0.00	0.00	TD.MBL (TVD)

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PUCKETT 42D-23 PBHI	0.00	0.00	9,219.00	-2,244.71	1,179.85	14,359,630.40	2,435,958.50	39.508742	-108.179697
- plan hits target center									
- Circle (radius 50.00)									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,642.09	6,176.00	OHIO_CREEK.MBL (TVD)				
6,885.05	6,401.00	WILLIAMS_FORK.MBL (TVD)				
7,631.31	7,135.00	TOP_GAS.MBL (TVD)				
9,565.31	9,069.00	ROLLINS.MBL (TVD)				
9,715.31	9,219.00	TD.MBL (TVD)				