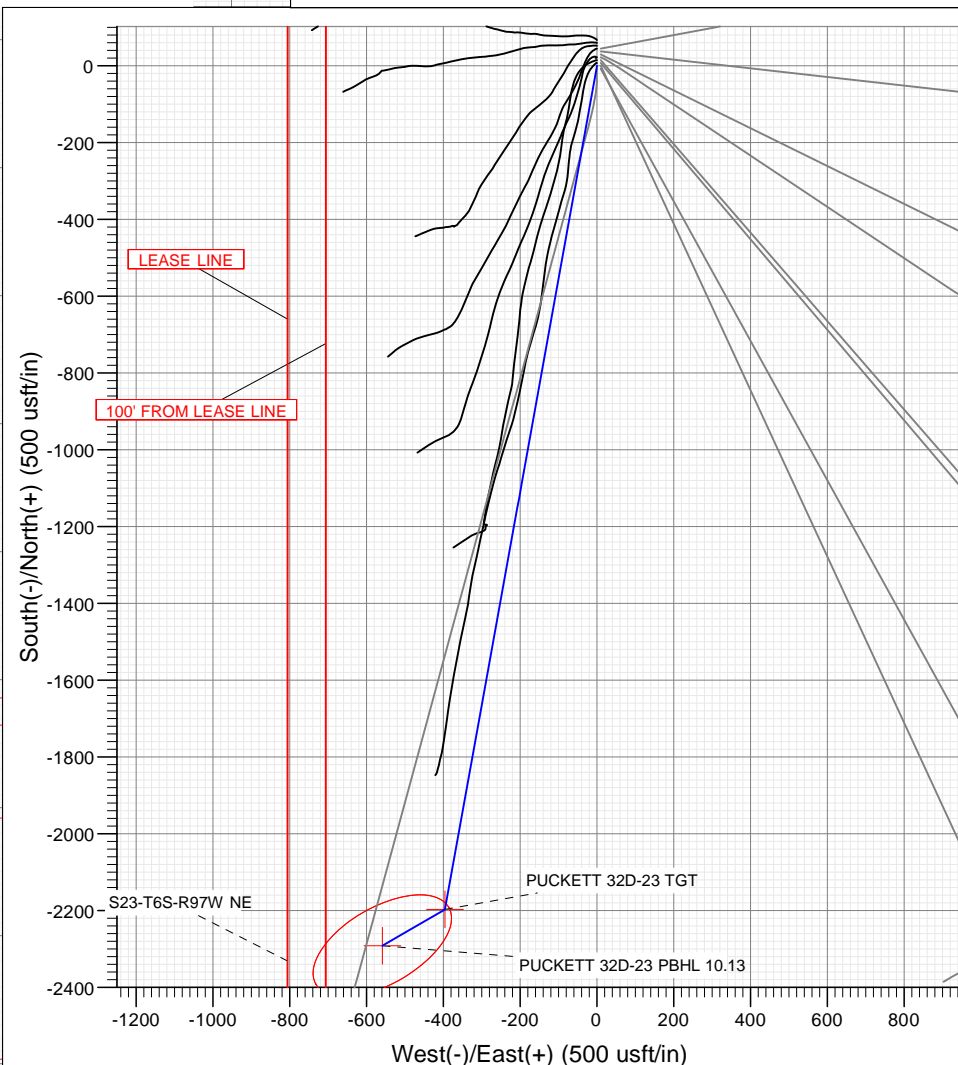
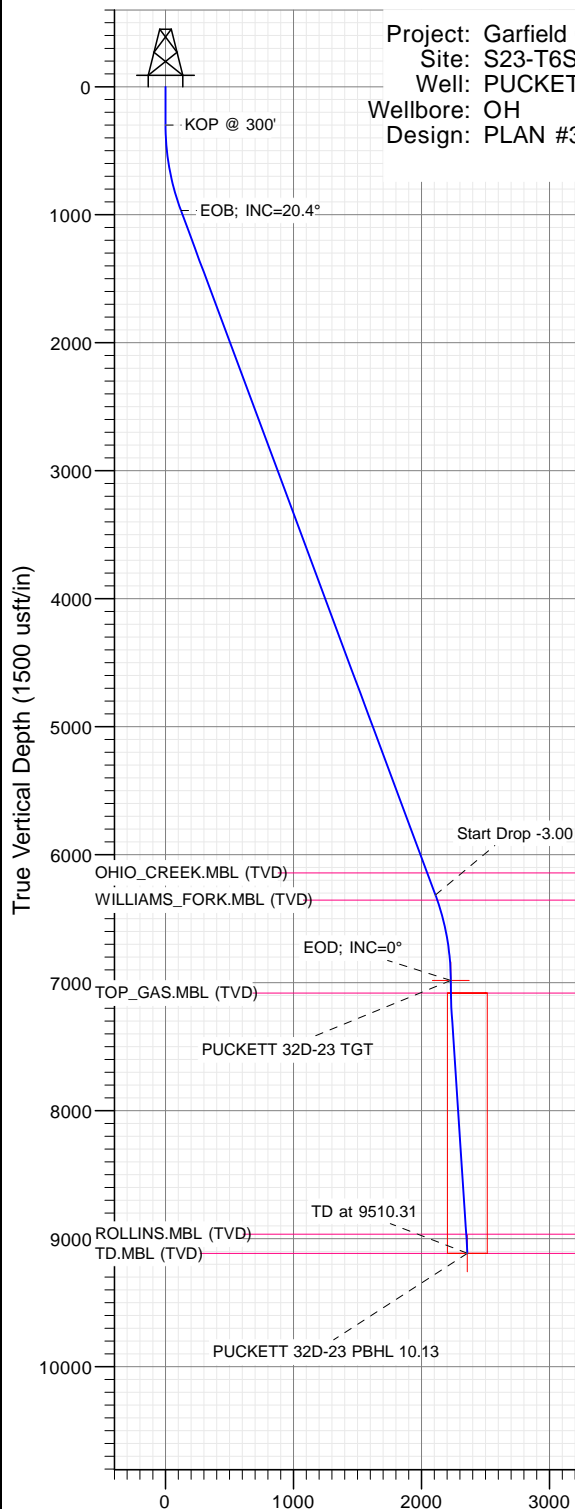




SECTION DETAILS

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	981.02	20.43	190.21	966.68	-118.24	-21.30	3.00	190.21	119.92	
4	6687.63	20.43	190.21	6314.32	-2078.70	-374.53	0.00	0.00	2108.24	
5	7368.66	0.00	0.00	6981.00	-2196.93	-395.83	3.00	180.00	2228.15	PUCKETT 32D-23 TGT
6	7637.87	5.38	240.00	7249.82	-2203.25	-406.78	2.00	240.00	2236.89	
7	9510.31	5.38	240.00	9114.00	-2291.10	-558.94	0.00	0.00	2358.30	PUCKETT 32D-23 PBHL 10.13



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
6141.00	6502.68	OHIO_CREEK.MBL (TVD)
6354.00	6729.81	WILLIAMS_FORK.MBL (TVD)
7081.00	7468.68	TOP_GAS.MBL (TVD)
8964.00	9359.65	ROLLINS.MBL (TVD)
9114.00	9510.31	TD.MBL (TVD)



Azimuths to True North
Magnetic North: 9.77°

Magnetic Field
Strength: 51784.3nT
Dip Angle: 65.87°
Date: 10/17/2016
Model: HDGM

Vertical Section at 193.71° (1500 usft/in)

WELL DETAILS: PUCKETT 32D-23

+N/-S	+E/-W	Northing	Ground Level: Easting	8532.00	Latitude	Longitude
0.00	0.00	14361836.87	2434698.99		39.514903	-108.183913

CATHEDRAL



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 32D-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 32D-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

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 32D-23					
Well Position	+N/-S	0.00 usft	Northing:	14,361,836.87 usft	Latitude:	39.514903
	+E/-W	0.00 usft	Easting:	2,434,698.99 usft	Longitude:	-108.183913
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	10/17/2016	9.77	65.87	51,784

Design	PLAN #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	193.71

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	
981.02	20.43	190.21	966.68	-118.24	-21.30	3.00	3.00	0.00	190.21	
6,687.63	20.43	190.21	6,314.32	-2,078.70	-374.53	0.00	0.00	0.00	0.00	
7,368.66	0.00	0.00	6,981.00	-2,196.93	-395.83	3.00	-3.00	0.00	180.00	PUCKETT 32D-23 TC
7,637.87	5.38	240.00	7,249.82	-2,203.25	-406.78	2.00	2.00	-44.57	240.00	
9,510.31	5.38	240.00	9,114.00	-2,291.10	-558.94	0.00	0.00	0.00	0.00	PUCKETT 32D-23 PE

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 32D-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 32D-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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	
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	KOP @ 300'
400.00	3.00	190.21	399.95	-2.58	-0.46	2.61	3.00	3.00	
500.00	6.00	190.21	499.63	-10.30	-1.86	10.44	3.00	3.00	
600.00	9.00	190.21	598.77	-23.14	-4.17	23.47	3.00	3.00	
700.00	12.00	190.21	697.08	-41.07	-7.40	41.66	3.00	3.00	
800.00	15.00	190.21	794.31	-64.05	-11.54	64.96	3.00	3.00	
900.00	18.00	190.21	890.18	-91.99	-16.57	93.30	3.00	3.00	
981.02	20.43	190.21	966.68	-118.24	-21.30	119.92	3.00	3.00	EOB; INC=20.4°
1,000.00	20.43	190.21	984.47	-124.76	-22.48	126.53	0.00	0.00	
1,100.00	20.43	190.21	1,078.18	-159.11	-28.67	161.37	0.00	0.00	
1,200.00	20.43	190.21	1,171.88	-193.46	-34.86	196.21	0.00	0.00	
1,300.00	20.43	190.21	1,265.59	-227.82	-41.05	231.05	0.00	0.00	
1,400.00	20.43	190.21	1,359.30	-262.17	-47.24	265.90	0.00	0.00	
1,500.00	20.43	190.21	1,453.01	-296.53	-53.43	300.74	0.00	0.00	
1,600.00	20.43	190.21	1,546.72	-330.88	-59.62	335.58	0.00	0.00	
1,700.00	20.43	190.21	1,640.43	-365.23	-65.81	370.42	0.00	0.00	
1,800.00	20.43	190.21	1,734.14	-399.59	-72.00	405.27	0.00	0.00	
1,900.00	20.43	190.21	1,827.85	-433.94	-78.19	440.11	0.00	0.00	
2,000.00	20.43	190.21	1,921.56	-468.30	-84.38	474.95	0.00	0.00	
2,100.00	20.43	190.21	2,015.27	-502.65	-90.57	509.79	0.00	0.00	
2,200.00	20.43	190.21	2,108.98	-537.01	-96.75	544.64	0.00	0.00	
2,300.00	20.43	190.21	2,202.69	-571.36	-102.94	579.48	0.00	0.00	
2,400.00	20.43	190.21	2,296.40	-605.71	-109.13	614.32	0.00	0.00	
2,500.00	20.43	190.21	2,390.11	-640.07	-115.32	649.16	0.00	0.00	
2,600.00	20.43	190.21	2,483.82	-674.42	-121.51	684.01	0.00	0.00	
2,700.00	20.43	190.21	2,577.53	-708.78	-127.70	718.85	0.00	0.00	
2,800.00	20.43	190.21	2,671.24	-743.13	-133.89	753.69	0.00	0.00	
2,900.00	20.43	190.21	2,764.95	-777.49	-140.08	788.53	0.00	0.00	
3,000.00	20.43	190.21	2,858.66	-811.84	-146.27	823.38	0.00	0.00	
3,100.00	20.43	190.21	2,952.37	-846.19	-152.46	858.22	0.00	0.00	
3,200.00	20.43	190.21	3,046.07	-880.55	-158.65	893.06	0.00	0.00	
3,300.00	20.43	190.21	3,139.78	-914.90	-164.84	927.90	0.00	0.00	
3,400.00	20.43	190.21	3,233.49	-949.26	-171.03	962.75	0.00	0.00	
3,500.00	20.43	190.21	3,327.20	-983.61	-177.22	997.59	0.00	0.00	
3,600.00	20.43	190.21	3,420.91	-1,017.97	-183.41	1,032.43	0.00	0.00	
3,700.00	20.43	190.21	3,514.62	-1,052.32	-189.60	1,067.27	0.00	0.00	
3,800.00	20.43	190.21	3,608.33	-1,086.67	-195.79	1,102.12	0.00	0.00	
3,900.00	20.43	190.21	3,702.04	-1,121.03	-201.98	1,136.96	0.00	0.00	
4,000.00	20.43	190.21	3,795.75	-1,155.38	-208.17	1,171.80	0.00	0.00	
4,100.00	20.43	190.21	3,889.46	-1,189.74	-214.36	1,206.64	0.00	0.00	
4,200.00	20.43	190.21	3,983.17	-1,224.09	-220.55	1,241.48	0.00	0.00	
4,300.00	20.43	190.21	4,076.88	-1,258.45	-226.74	1,276.33	0.00	0.00	
4,400.00	20.43	190.21	4,170.59	-1,292.80	-232.93	1,311.17	0.00	0.00	
4,500.00	20.43	190.21	4,264.30	-1,327.15	-239.12	1,346.01	0.00	0.00	
4,600.00	20.43	190.21	4,358.01	-1,361.51	-245.31	1,380.85	0.00	0.00	
4,700.00	20.43	190.21	4,451.72	-1,395.86	-251.50	1,415.70	0.00	0.00	
4,800.00	20.43	190.21	4,545.43	-1,430.22	-257.69	1,450.54	0.00	0.00	
4,900.00	20.43	190.21	4,639.14	-1,464.57	-263.88	1,485.38	0.00	0.00	
5,000.00	20.43	190.21	4,732.85	-1,498.92	-270.07	1,520.22	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 32D-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 32D-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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
5,100.00	20.43	190.21	4,826.56	-1,533.28	-276.26	1,555.07	0.00	0.00	
5,200.00	20.43	190.21	4,920.27	-1,567.63	-282.45	1,589.91	0.00	0.00	
5,300.00	20.43	190.21	5,013.97	-1,601.99	-288.64	1,624.75	0.00	0.00	
5,400.00	20.43	190.21	5,107.68	-1,636.34	-294.83	1,659.59	0.00	0.00	
5,500.00	20.43	190.21	5,201.39	-1,670.70	-301.02	1,694.44	0.00	0.00	
5,600.00	20.43	190.21	5,295.10	-1,705.05	-307.21	1,729.28	0.00	0.00	
5,700.00	20.43	190.21	5,388.81	-1,739.40	-313.40	1,764.12	0.00	0.00	
5,800.00	20.43	190.21	5,482.52	-1,773.76	-319.59	1,798.96	0.00	0.00	
5,900.00	20.43	190.21	5,576.23	-1,808.11	-325.78	1,833.81	0.00	0.00	
6,000.00	20.43	190.21	5,669.94	-1,842.47	-331.97	1,868.65	0.00	0.00	
6,100.00	20.43	190.21	5,763.65	-1,876.82	-338.16	1,903.49	0.00	0.00	
6,200.00	20.43	190.21	5,857.36	-1,911.18	-344.35	1,938.33	0.00	0.00	
6,300.00	20.43	190.21	5,951.07	-1,945.53	-350.54	1,973.18	0.00	0.00	
6,400.00	20.43	190.21	6,044.78	-1,979.88	-356.72	2,008.02	0.00	0.00	
6,500.00	20.43	190.21	6,138.49	-2,014.24	-362.91	2,042.86	0.00	0.00	
6,502.68	20.43	190.21	6,141.00	-2,015.16	-363.08	2,043.79	0.00	0.00	OHIO_CREEK.MBL (TVD)
6,600.00	20.43	190.21	6,232.20	-2,048.59	-369.10	2,077.70	0.00	0.00	
6,687.63	20.43	190.21	6,314.32	-2,078.70	-374.53	2,108.24	0.00	0.00	Start Drop -3.00
6,700.00	20.06	190.21	6,325.92	-2,082.91	-375.29	2,112.51	3.00	-3.00	
6,729.81	19.17	190.21	6,354.00	-2,092.76	-377.06	2,122.49	3.00	-3.00	WILLIAMS_FORK.MBL (TVD)
6,800.00	17.06	190.21	6,420.71	-2,114.23	-380.93	2,144.27	3.00	-3.00	
6,900.00	14.06	190.21	6,517.03	-2,140.63	-385.69	2,171.04	3.00	-3.00	
7,000.00	11.06	190.21	6,614.63	-2,162.03	-389.54	2,192.75	3.00	-3.00	
7,100.00	8.06	190.21	6,713.23	-2,178.37	-392.49	2,209.32	3.00	-3.00	
7,200.00	5.06	190.21	6,812.56	-2,189.61	-394.51	2,220.72	3.00	-3.00	
7,300.00	2.06	190.21	6,912.36	-2,195.72	-395.61	2,226.92	3.00	-3.00	
7,368.66	0.00	0.00	6,981.00	-2,196.93	-395.83	2,228.15	3.00	-3.00	EOD; INC=0°
7,400.00	0.63	240.00	7,012.34	-2,197.02	-395.98	2,228.27	2.00	2.00	
7,468.68	2.00	240.00	7,081.00	-2,197.81	-397.34	2,229.36	2.00	2.00	TOP_GAS.MBL (TVD)
7,500.00	2.63	240.00	7,112.30	-2,198.44	-398.44	2,230.23	2.00	2.00	
7,600.00	4.63	240.00	7,212.09	-2,201.60	-403.92	2,234.60	2.00	2.00	
7,637.87	5.38	240.00	7,249.82	-2,203.25	-406.78	2,236.89	2.00	2.00	
7,700.00	5.38	240.00	7,311.67	-2,206.17	-411.83	2,240.91	0.00	0.00	
7,800.00	5.38	240.00	7,411.23	-2,210.86	-419.95	2,247.40	0.00	0.00	
7,900.00	5.38	240.00	7,510.79	-2,215.55	-428.08	2,253.88	0.00	0.00	
8,000.00	5.38	240.00	7,610.35	-2,220.24	-436.21	2,260.37	0.00	0.00	
8,100.00	5.38	240.00	7,709.91	-2,224.94	-444.33	2,266.85	0.00	0.00	
8,200.00	5.38	240.00	7,809.47	-2,229.63	-452.46	2,273.34	0.00	0.00	
8,300.00	5.38	240.00	7,909.03	-2,234.32	-460.59	2,279.82	0.00	0.00	
8,400.00	5.38	240.00	8,008.59	-2,239.01	-468.71	2,286.30	0.00	0.00	
8,500.00	5.38	240.00	8,108.14	-2,243.70	-476.84	2,292.79	0.00	0.00	
8,600.00	5.38	240.00	8,207.70	-2,248.40	-484.97	2,299.27	0.00	0.00	
8,700.00	5.38	240.00	8,307.26	-2,253.09	-493.09	2,305.76	0.00	0.00	
8,800.00	5.38	240.00	8,406.82	-2,257.78	-501.22	2,312.24	0.00	0.00	
8,900.00	5.38	240.00	8,506.38	-2,262.47	-509.34	2,318.73	0.00	0.00	
9,000.00	5.38	240.00	8,605.94	-2,267.16	-517.47	2,325.21	0.00	0.00	
9,100.00	5.38	240.00	8,705.50	-2,271.85	-525.60	2,331.69	0.00	0.00	
9,200.00	5.38	240.00	8,805.06	-2,276.55	-533.72	2,338.18	0.00	0.00	
9,300.00	5.38	240.00	8,904.62	-2,281.24	-541.85	2,344.66	0.00	0.00	
9,359.65	5.38	240.00	8,964.00	-2,284.04	-546.70	2,348.53	0.00	0.00	ROLLINS.MBL (TVD)
9,400.00	5.38	240.00	9,004.17	-2,285.93	-549.98	2,351.15	0.00	0.00	
9,500.00	5.38	240.00	9,103.73	-2,290.62	-558.10	2,357.63	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 32D-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 32D-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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
9,510.31	5.38	240.00	9,114.00	-2,291.10	-558.94	2,358.30	0.00	0.00	TD at 9510.31

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 32D-23 PBHI	0.00	0.00	9,114.00	-2,291.10	-558.94	14,359,529.40	2,434,212.00	39.508615	-108.185893
- plan hits target center									
- Ellipse (radii L200.00 W100.00 on 240.00 azi)									
PUCKETT 32D-23 PBHI	0.00	0.00	9,114.00	-2,083.05	-490.40	14,359,739.50	2,434,274.00	39.509186	-108.185650
- plan misses target center by 218.52usft at 9494.98usft MD (9098.74 TVD, -2290.39 N, -557.70 E)									
- Circle (radius 100.00)									
PUCKETT 32D-23 TGT	0.00	0.00	6,981.00	-2,196.93	-395.83	14,359,628.63	2,434,372.08	39.508873	-108.185315
- plan hits target center									
- Point									

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,502.68	6,141.00	OHIO_CREEK.MBL (TVD)			
6,729.81	6,354.00	WILLIAMS_FORK.MBL (TVD)			
7,468.68	7,081.00	TOP_GAS.MBL (TVD)			
9,359.65	8,964.00	ROLLINS.MBL (TVD)			
9,510.31	9,114.00	TD.MBL (TVD)			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
300.00	300.00	0.00	0.00	KOP @ 300'
981.02	966.68	-118.24	-21.30	EOB; INC=20.4°
6,687.63	6,314.32	-2,078.70	-374.53	Start Drop -3.00
7,368.66	6,981.00	-2,196.93	-395.83	EOD; INC=0°
9,510.31	9,114.00	-2,203.25	-406.78	TD at 9510.31