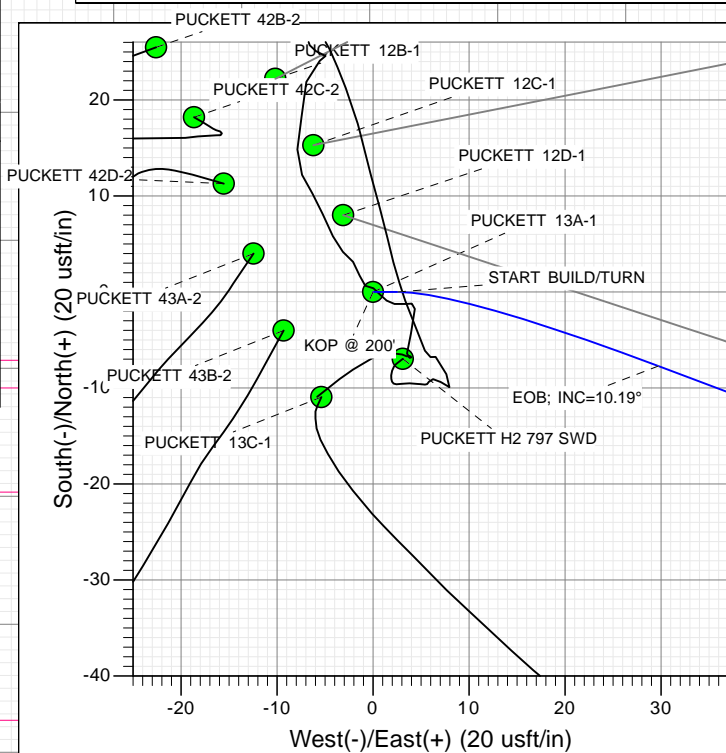
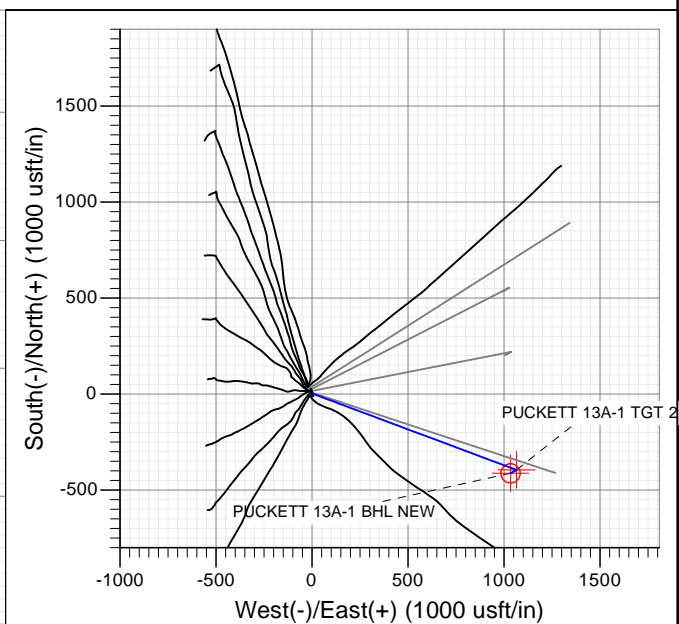
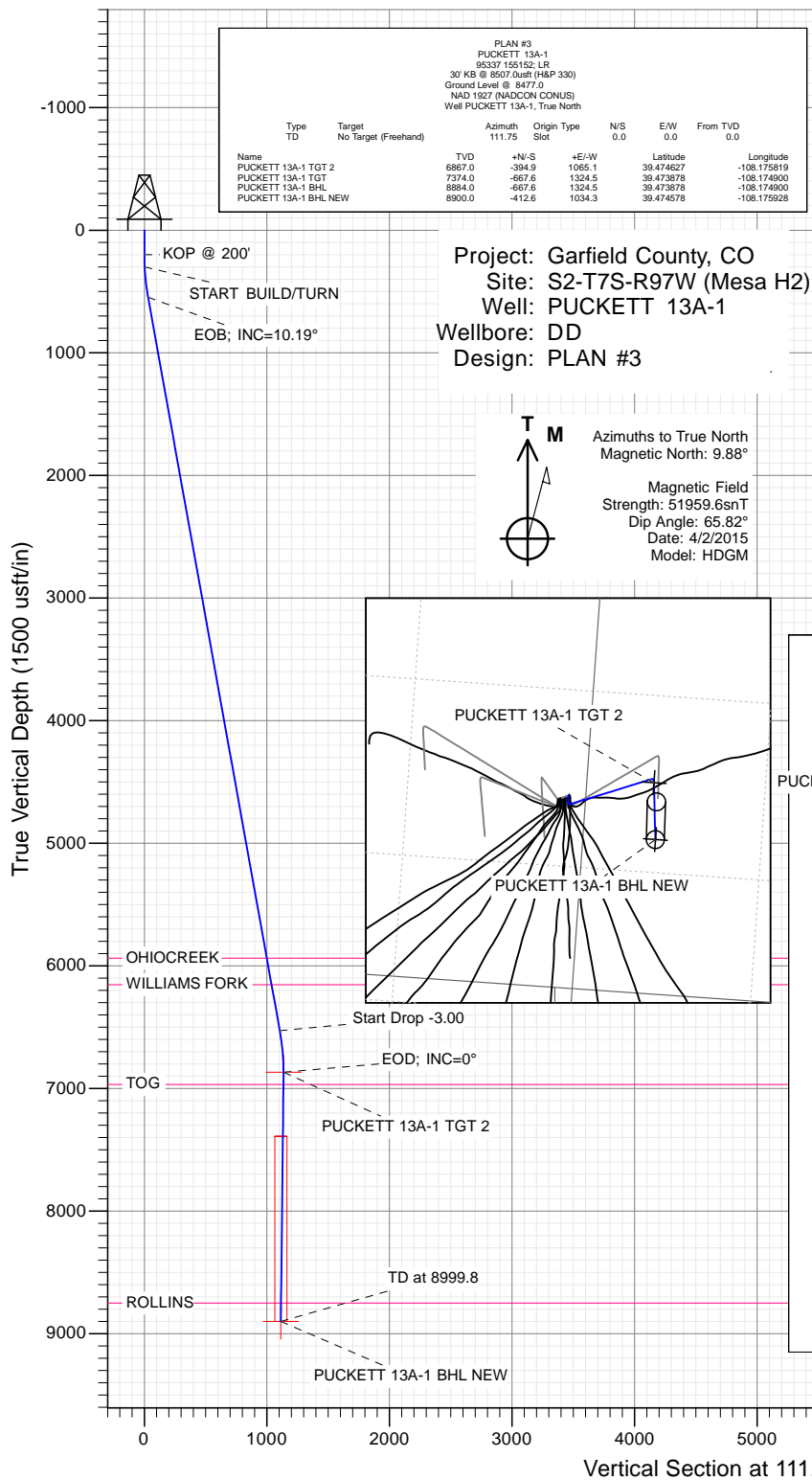




SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0		KOP @ 200'
3	300.0	3.00	90.00	300.0	0.0	2.6	3.00	90.00	2.4		START BUILD/TURN
4	548.4	10.19	110.50	546.6	-7.7	29.7	3.00	28.54	30.5		EOB; INC=10.19°
5	6626.8	10.19	110.50	6529.2	-384.3	1036.8	0.00	0.00	1105.5		Start Drop -3.00
6	6966.5	0.00	0.00	6867.0	-394.9	1065.1	3.00	180.00	1135.6	PUCKETT 13A-1 TGT 2	EOD; INC=0°
7	7069.1	1.03	240.00	6969.6	-395.4	1064.3	1.00	240.00	1135.0		
8	8999.8	1.03	240.00	8900.0	-412.6	1034.3	0.00	0.00	1113.6	PUCKETT 13A-1 BHL NEW	TD at 8999.8



WELL DETAILS: PUCKETT 13A-1

+N/-S	+E/-W	Ground Level:	8477.0
0.0	0.0	Northing	609299.47
		Easting	1243689.96
		Latitude	39.475711
		Longitude	-108.179592

CATHEDRAL



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 13A-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	30' KB @ 8507.0usft (H&P 330)
Project:	Garfield County, CO	MD Reference:	30' KB @ 8507.0usft (H&P 330)
Site:	S2-T7S-R97W (Mesa H2)	North Reference:	True
Well:	PUCKETT 13A-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	PLAN #3		

Project	Garfield County, CO		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado Central 502		

Site		S2-T7S-R97W (Mesa H2)			
Site Position:		Northing:	609,295.74 usft	Latitude:	39.475700
From:	Lat/Long	Easting:	1,243,680.53 usft	Longitude:	-108.179625
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.69 °

Well	PUCKETT 13A-1					
Well Position	+N/-S	0.0 usft	Northing:	609,299.47 usft	Latitude:	39.475711
	+E/-W	0.0 usft	Easting:	1,243,689.96 usft	Longitude:	-108.179592
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,477.0 usft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/2/2015	9.88	65.82	51,960

Design	PLAN #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	111.75

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	3.00	90.00	300.0	0.0	2.6	3.00	3.00	0.00	90.00	
548.4	10.19	110.50	546.6	-7.7	29.7	3.00	2.89	8.25	28.54	
6,626.8	10.19	110.50	6,529.2	-384.3	1,036.8	0.00	0.00	0.00	0.00	
6,966.5	0.00	0.00	6,867.0	-394.9	1,065.1	3.00	-3.00	0.00	180.00	PUCKETT 13A-1 TG1
7,069.1	1.03	240.00	6,969.6	-395.4	1,064.3	1.00	1.00	-116.97	240.00	
8,999.8	1.03	240.00	8,900.0	-412.6	1,034.3	0.00	0.00	0.00	0.00	PUCKETT 13A-1 BHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 13A-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	30' KB @ 8507.0usft (H&P 330)
Project:	Garfield County, CO	MD Reference:	30' KB @ 8507.0usft (H&P 330)
Site:	S2-T7S-R97W (Mesa H2)	North Reference:	True
Well:	PUCKETT 13A-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	3.00	90.00	300.0	0.0	2.6	2.4	3.00	3.00	KOP @ 200'
400.0	5.81	104.29	399.7	-1.3	10.1	9.9	3.00	2.81	START BUILD/TURN
500.0	8.75	109.16	498.8	-5.0	22.2	22.5	3.00	2.94	
548.4	10.19	110.50	546.6	-7.7	29.7	30.5	3.00	2.96	EOB; INC=10.19°
600.0	10.19	110.50	597.4	-10.9	38.3	39.6	0.00	0.00	
700.0	10.19	110.50	695.8	-17.1	54.9	57.3	0.00	0.00	
800.0	10.19	110.50	794.2	-23.3	71.4	75.0	0.00	0.00	
900.0	10.19	110.50	892.6	-29.5	88.0	92.7	0.00	0.00	
1,000.0	10.19	110.50	991.1	-35.7	104.6	110.3	0.00	0.00	
1,100.0	10.19	110.50	1,089.5	-41.9	121.1	128.0	0.00	0.00	
1,200.0	10.19	110.50	1,187.9	-48.1	137.7	145.7	0.00	0.00	
1,300.0	10.19	110.50	1,286.3	-54.3	154.3	163.4	0.00	0.00	
1,400.0	10.19	110.50	1,384.7	-60.5	170.8	181.1	0.00	0.00	
1,500.0	10.19	110.50	1,483.2	-66.7	187.4	198.8	0.00	0.00	
1,600.0	10.19	110.50	1,581.6	-72.9	204.0	216.4	0.00	0.00	
1,700.0	10.19	110.50	1,680.0	-79.1	220.5	234.1	0.00	0.00	
1,800.0	10.19	110.50	1,778.4	-85.3	237.1	251.8	0.00	0.00	
1,900.0	10.19	110.50	1,876.9	-91.5	253.7	269.5	0.00	0.00	
2,000.0	10.19	110.50	1,975.3	-97.7	270.2	287.2	0.00	0.00	
2,100.0	10.19	110.50	2,073.7	-103.8	286.8	304.9	0.00	0.00	
2,200.0	10.19	110.50	2,172.1	-110.0	303.4	322.6	0.00	0.00	
2,300.0	10.19	110.50	2,270.6	-116.2	319.9	340.2	0.00	0.00	
2,400.0	10.19	110.50	2,369.0	-122.4	336.5	357.9	0.00	0.00	
2,500.0	10.19	110.50	2,467.4	-128.6	353.1	375.6	0.00	0.00	
2,600.0	10.19	110.50	2,565.8	-134.8	369.7	393.3	0.00	0.00	
2,700.0	10.19	110.50	2,664.2	-141.0	386.2	411.0	0.00	0.00	
2,800.0	10.19	110.50	2,762.7	-147.2	402.8	428.7	0.00	0.00	
2,900.0	10.19	110.50	2,861.1	-153.4	419.4	446.4	0.00	0.00	
3,000.0	10.19	110.50	2,959.5	-159.6	435.9	464.0	0.00	0.00	
3,100.0	10.19	110.50	3,057.9	-165.8	452.5	481.7	0.00	0.00	
3,200.0	10.19	110.50	3,156.4	-172.0	469.1	499.4	0.00	0.00	
3,300.0	10.19	110.50	3,254.8	-178.2	485.6	517.1	0.00	0.00	
3,400.0	10.19	110.50	3,353.2	-184.4	502.2	534.8	0.00	0.00	
3,500.0	10.19	110.50	3,451.6	-190.6	518.8	552.5	0.00	0.00	
3,600.0	10.19	110.50	3,550.0	-196.8	535.3	570.2	0.00	0.00	
3,700.0	10.19	110.50	3,648.5	-203.0	551.9	587.8	0.00	0.00	
3,800.0	10.19	110.50	3,746.9	-209.2	568.5	605.5	0.00	0.00	
3,900.0	10.19	110.50	3,845.3	-215.4	585.0	623.2	0.00	0.00	
4,000.0	10.19	110.50	3,943.7	-221.6	601.6	640.9	0.00	0.00	
4,100.0	10.19	110.50	4,042.2	-227.8	618.2	658.6	0.00	0.00	
4,200.0	10.19	110.50	4,140.6	-234.0	634.8	676.3	0.00	0.00	
4,300.0	10.19	110.50	4,239.0	-240.2	651.3	693.9	0.00	0.00	
4,400.0	10.19	110.50	4,337.4	-246.4	667.9	711.6	0.00	0.00	
4,500.0	10.19	110.50	4,435.9	-252.6	684.5	729.3	0.00	0.00	
4,600.0	10.19	110.50	4,534.3	-258.8	701.0	747.0	0.00	0.00	
4,700.0	10.19	110.50	4,632.7	-265.0	717.6	764.7	0.00	0.00	
4,800.0	10.19	110.50	4,731.1	-271.1	734.2	782.4	0.00	0.00	
4,900.0	10.19	110.50	4,829.5	-277.3	750.7	800.1	0.00	0.00	
5,000.0	10.19	110.50	4,928.0	-283.5	767.3	817.7	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 13A-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	30' KB @ 8507.0usft (H&P 330)
Project:	Garfield County, CO	MD Reference:	30' KB @ 8507.0usft (H&P 330)
Site:	S2-T7S-R97W (Mesa H2)	North Reference:	True
Well:	PUCKETT 13A-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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
5,100.0	10.19	110.50	5,026.4	-289.7	783.9	835.4	0.00	0.00	
5,200.0	10.19	110.50	5,124.8	-295.9	800.4	853.1	0.00	0.00	
5,300.0	10.19	110.50	5,223.2	-302.1	817.0	870.8	0.00	0.00	
5,400.0	10.19	110.50	5,321.7	-308.3	833.6	888.5	0.00	0.00	
5,500.0	10.19	110.50	5,420.1	-314.5	850.1	906.2	0.00	0.00	
5,600.0	10.19	110.50	5,518.5	-320.7	866.7	923.9	0.00	0.00	
5,700.0	10.19	110.50	5,616.9	-326.9	883.3	941.5	0.00	0.00	
5,800.0	10.19	110.50	5,715.4	-333.1	899.8	959.2	0.00	0.00	
5,900.0	10.19	110.50	5,813.8	-339.3	916.4	976.9	0.00	0.00	
6,000.0	10.19	110.50	5,912.2	-345.5	933.0	994.6	0.00	0.00	
6,025.2	10.19	110.50	5,937.0	-347.1	937.2	999.1	0.00	0.00	OHIOCREEK
6,100.0	10.19	110.50	6,010.6	-351.7	949.6	1,012.3	0.00	0.00	
6,200.0	10.19	110.50	6,109.0	-357.9	966.1	1,030.0	0.00	0.00	
6,244.7	10.19	110.50	6,153.0	-360.7	973.5	1,037.9	0.00	0.00	WILLIAMS FORK
6,300.0	10.19	110.50	6,207.5	-364.1	982.7	1,047.7	0.00	0.00	
6,400.0	10.19	110.50	6,305.9	-370.3	999.3	1,065.3	0.00	0.00	
6,500.0	10.19	110.50	6,404.3	-376.5	1,015.8	1,083.0	0.00	0.00	
6,600.0	10.19	110.50	6,502.7	-382.7	1,032.4	1,100.7	0.00	0.00	
6,626.8	10.19	110.50	6,529.2	-384.3	1,036.8	1,105.5	0.00	0.00	Start Drop -3.00
6,700.0	7.99	110.50	6,601.4	-388.4	1,047.7	1,117.0	3.00	-3.00	
6,800.0	4.99	110.50	6,700.7	-392.4	1,058.3	1,128.3	3.00	-3.00	
6,900.0	1.99	110.50	6,800.5	-394.5	1,064.0	1,134.4	3.00	-3.00	
6,966.5	0.00	0.00	6,867.0	-394.9	1,065.1	1,135.6	3.00	-3.00	EOD; INC=0°
7,000.0	0.34	240.00	6,900.5	-394.9	1,065.0	1,135.5	1.00	1.00	
7,066.5	1.00	240.00	6,967.0	-395.3	1,064.3	1,135.0	1.00	1.00	TOG
7,069.1	1.03	240.00	6,969.6	-395.4	1,064.3	1,135.0	1.00	1.00	
7,100.0	1.03	240.00	7,000.5	-395.6	1,063.8	1,134.7	0.00	0.00	
7,200.0	1.03	240.00	7,100.5	-396.5	1,062.2	1,133.5	0.00	0.00	
7,300.0	1.03	240.00	7,200.5	-397.4	1,060.7	1,132.4	0.00	0.00	
7,400.0	1.03	240.00	7,300.5	-398.3	1,059.1	1,131.3	0.00	0.00	
7,500.0	1.03	240.00	7,400.5	-399.2	1,057.6	1,130.2	0.00	0.00	
7,600.0	1.03	240.00	7,500.4	-400.1	1,056.0	1,129.1	0.00	0.00	
7,700.0	1.03	240.00	7,600.4	-401.0	1,054.5	1,128.0	0.00	0.00	
7,800.0	1.03	240.00	7,700.4	-401.9	1,052.9	1,126.9	0.00	0.00	
7,900.0	1.03	240.00	7,800.4	-402.8	1,051.4	1,125.8	0.00	0.00	
8,000.0	1.03	240.00	7,900.4	-403.7	1,049.8	1,124.7	0.00	0.00	
8,100.0	1.03	240.00	8,000.4	-404.6	1,048.3	1,123.6	0.00	0.00	
8,200.0	1.03	240.00	8,100.3	-405.5	1,046.7	1,122.5	0.00	0.00	
8,300.0	1.03	240.00	8,200.3	-406.4	1,045.2	1,121.4	0.00	0.00	
8,400.0	1.03	240.00	8,300.3	-407.3	1,043.6	1,120.2	0.00	0.00	
8,500.0	1.03	240.00	8,400.3	-408.2	1,042.1	1,119.1	0.00	0.00	
8,600.0	1.03	240.00	8,500.3	-409.1	1,040.5	1,118.0	0.00	0.00	
8,700.0	1.03	240.00	8,600.3	-410.0	1,039.0	1,116.9	0.00	0.00	
8,800.0	1.03	240.00	8,700.2	-410.9	1,037.4	1,115.8	0.00	0.00	
8,849.8	1.03	240.00	8,750.0	-411.3	1,036.7	1,115.3	0.00	0.00	ROLLINS
8,900.0	1.03	240.00	8,800.2	-411.7	1,035.9	1,114.7	0.00	0.00	
8,999.8	1.03	240.00	8,900.0	-412.6	1,034.3	1,113.6	0.00	0.00	TD at 8999.8

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 13A-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	30' KB @ 8507.0usft (H&P 330)
Project:	Garfield County, CO	MD Reference:	30' KB @ 8507.0usft (H&P 330)
Site:	S2-T7S-R97W (Mesa H2)	North Reference:	True
Well:	PUCKETT 13A-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	PLAN #3		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
PUCKETT 13A-1 BHL N - plan hits target center - Circle (radius 50.0)	0.00	0.00	8,900.0	-412.6	1,034.3	608,856.50	1,244,711.66	39.474578	-108.175928
PUCKETT 13A-1 TGT - plan misses target center by 378.4usft at 7471.8usft MD (7372.3 TVD, -399.0 N, 1058.0 E) - Point	0.00	0.00	7,374.0	-667.6	1,324.5	608,593.11	1,244,994.23	39.473878	-108.174900
PUCKETT 13A-1 TGT 2 - plan hits target center - Point	0.00	0.00	6,867.0	-394.9	1,065.1	608,873.33	1,244,742.91	39.474627	-108.175819
PUCKETT 13A-1 BHL - plan misses target center by 386.2usft at 8981.6usft MD (8881.8 TVD, -412.5 N, 1034.6 E) - Circle (radius 50.0)	0.00	0.00	8,884.0	-667.6	1,324.5	608,593.11	1,244,994.23	39.473878	-108.174900

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
6,025.2	5,937.0	OHIOCREEK		0.00	
6,244.7	6,153.0	WILLIAMS FORK		0.00	
7,066.5	6,967.0	TOG		0.00	
8,849.8	8,750.0	ROLLINS		0.00	

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
200.0	200.0	0.0	0.0	KOP @ 200'
300.0	300.0	0.0	2.6	START BUILD/TURN
548.4	546.6	-7.7	29.7	EOB; INC=10.19°
6,626.8	6,529.2	-384.3	1,036.8	Start Drop -3.00
6,966.5	6,867.0	-394.9	1,065.1	EOD; INC=0°
8,999.8	8,900.0	-395.4	1,064.3	TD at 8999.8