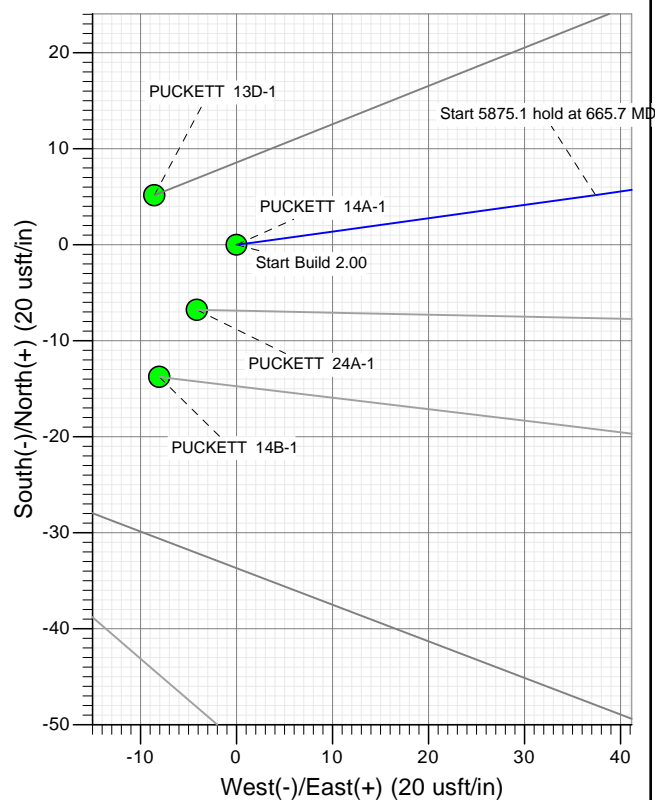
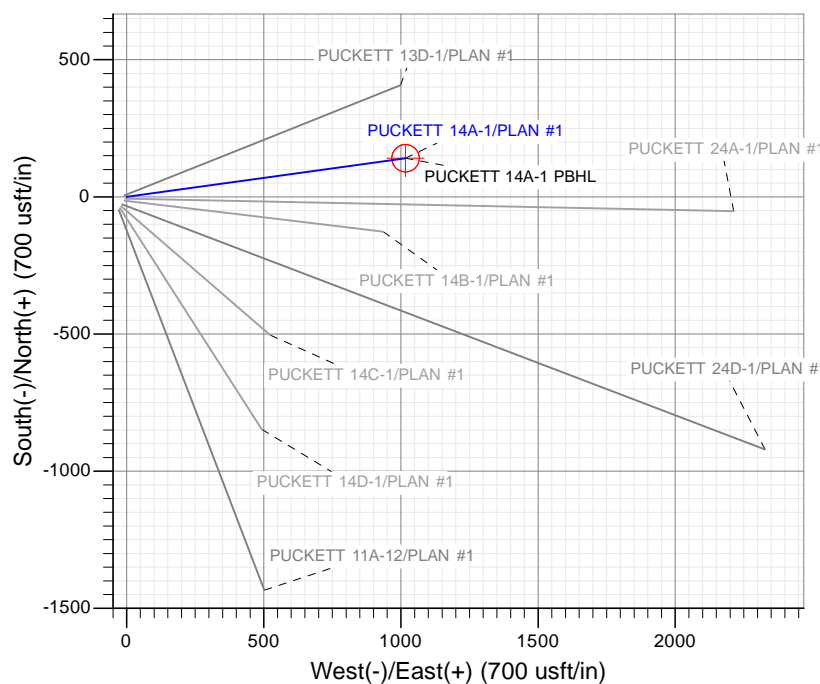
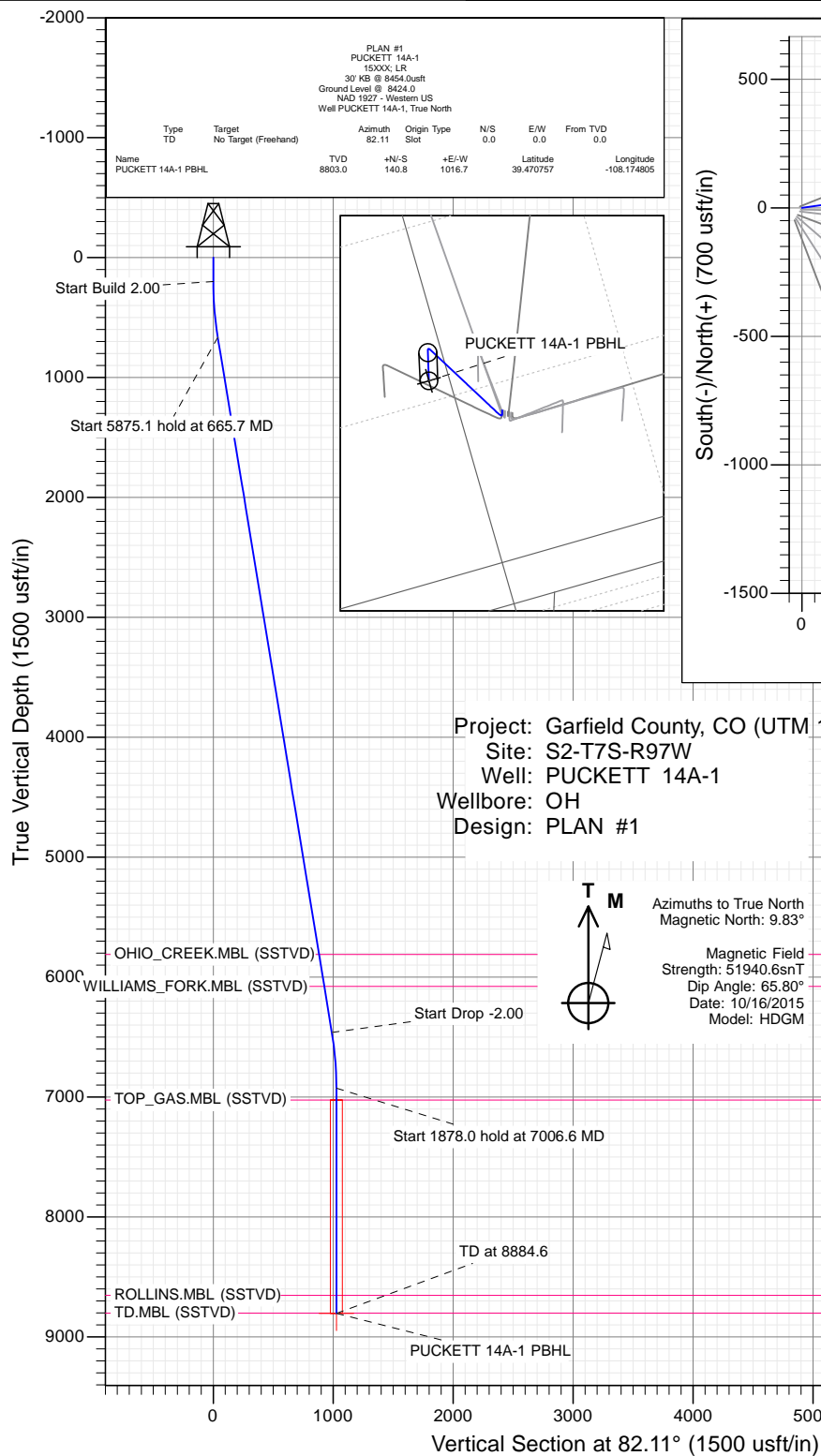




SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
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	
3	665.7	9.31	82.11	663.7	5.2	37.4	2.00	82.11	37.8	
4	6540.8	9.31	82.11	6461.3	135.6	979.3	0.00	0.00	988.6	
5	7006.6	0.00	0.00	6925.0	140.8	1016.7	2.00	180.00	1026.4	
6	8884.6	0.00	0.00	8803.0	140.8	1016.7	0.00	0.00	1026.4	PUCKETT 14A-1 PBHL



WELL DETAILS: PUCKETT 14A-1

+N/-S	+E/-W	Northing	Ground Level:	8424.0	Latitude	Longitude
0.0	0.0	14345667.40	Easting	2436760.90	39.470370	-108.178405

CATHEDRAL



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 14A-1
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8454.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8454.0usft
Site:	S2-T7S-R97W	North Reference:	True
Well:	PUCKETT 14A-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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		S2-T7S-R97W			
Site Position:		Northing:	14,345,665.30 usft	Latitude:	39.470366
From:	Map	Easting:	2,436,748.30 usft	Longitude:	-108.178450
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.79 °

Well	PUCKETT 14A-1					
Well Position	+N/-S	0.0 usft	Northing:	14,345,667.40 usft	Latitude:	39.470370
	+E/-W	0.0 usft	Easting:	2,436,760.90 usft	Longitude:	-108.178405
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,424.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	10/16/2015	9.83	65.80	51,941

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	82.11

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)	(°)	
0.0	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	
665.7	9.31	82.11	663.7	5.2	37.4	2.00	2.00	0.00	82.11	
6,540.8	9.31	82.11	6,461.3	135.6	979.3	0.00	0.00	0.00	0.00	
7,006.6	0.00	0.00	6,925.0	140.8	1,016.7	2.00	-2.00	0.00	180.00	
8,884.6	0.00	0.00	8,803.0	140.8	1,016.7	0.00	0.00	0.00	0.00	PUCKETT 14A-1 PBH

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 14A-1
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8454.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8454.0usft
Site:	S2-T7S-R97W	North Reference:	True
Well:	PUCKETT 14A-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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	Start Build 2.00
300.0	2.00	82.11	300.0	0.2	1.7	1.7	2.00	2.00	
400.0	4.00	82.11	399.8	1.0	6.9	7.0	2.00	2.00	
500.0	6.00	82.11	499.5	2.2	15.5	15.7	2.00	2.00	
600.0	8.00	82.11	598.7	3.8	27.6	27.9	2.00	2.00	
665.7	9.31	82.11	663.7	5.2	37.4	37.8	2.00	2.00	Start 5875.1 hold at 665.7 MD
700.0	9.31	82.11	697.5	5.9	42.9	43.3	0.00	0.00	
800.0	9.31	82.11	796.2	8.2	58.9	59.5	0.00	0.00	
900.0	9.31	82.11	894.9	10.4	75.0	75.7	0.00	0.00	
1,000.0	9.31	82.11	993.5	12.6	91.0	91.9	0.00	0.00	
1,100.0	9.31	82.11	1,092.2	14.8	107.0	108.1	0.00	0.00	
1,200.0	9.31	82.11	1,190.9	17.0	123.1	124.2	0.00	0.00	
1,300.0	9.31	82.11	1,289.6	19.3	139.1	140.4	0.00	0.00	
1,400.0	9.31	82.11	1,388.3	21.5	155.1	156.6	0.00	0.00	
1,500.0	9.31	82.11	1,487.0	23.7	171.2	172.8	0.00	0.00	
1,600.0	9.31	82.11	1,585.6	25.9	187.2	189.0	0.00	0.00	
1,700.0	9.31	82.11	1,684.3	28.1	203.2	205.2	0.00	0.00	
1,800.0	9.31	82.11	1,783.0	30.4	219.3	221.4	0.00	0.00	
1,900.0	9.31	82.11	1,881.7	32.6	235.3	237.5	0.00	0.00	
2,000.0	9.31	82.11	1,980.4	34.8	251.3	253.7	0.00	0.00	
2,100.0	9.31	82.11	2,079.0	37.0	267.4	269.9	0.00	0.00	
2,200.0	9.31	82.11	2,177.7	39.3	283.4	286.1	0.00	0.00	
2,300.0	9.31	82.11	2,276.4	41.5	299.4	302.3	0.00	0.00	
2,400.0	9.31	82.11	2,375.1	43.7	315.4	318.5	0.00	0.00	
2,500.0	9.31	82.11	2,473.8	45.9	331.5	334.6	0.00	0.00	
2,600.0	9.31	82.11	2,572.4	48.1	347.5	350.8	0.00	0.00	
2,700.0	9.31	82.11	2,671.1	50.4	363.5	367.0	0.00	0.00	
2,800.0	9.31	82.11	2,769.8	52.6	379.6	383.2	0.00	0.00	
2,900.0	9.31	82.11	2,868.5	54.8	395.6	399.4	0.00	0.00	
3,000.0	9.31	82.11	2,967.2	57.0	411.6	415.6	0.00	0.00	
3,100.0	9.31	82.11	3,065.9	59.2	427.7	431.8	0.00	0.00	
3,200.0	9.31	82.11	3,164.5	61.5	443.7	447.9	0.00	0.00	
3,300.0	9.31	82.11	3,263.2	63.7	459.7	464.1	0.00	0.00	
3,400.0	9.31	82.11	3,361.9	65.9	475.8	480.3	0.00	0.00	
3,500.0	9.31	82.11	3,460.6	68.1	491.8	496.5	0.00	0.00	
3,600.0	9.31	82.11	3,559.3	70.3	507.8	512.7	0.00	0.00	
3,700.0	9.31	82.11	3,657.9	72.6	523.9	528.9	0.00	0.00	
3,800.0	9.31	82.11	3,756.6	74.8	539.9	545.0	0.00	0.00	
3,900.0	9.31	82.11	3,855.3	77.0	555.9	561.2	0.00	0.00	
4,000.0	9.31	82.11	3,954.0	79.2	572.0	577.4	0.00	0.00	
4,100.0	9.31	82.11	4,052.7	81.4	588.0	593.6	0.00	0.00	
4,200.0	9.31	82.11	4,151.4	83.7	604.0	609.8	0.00	0.00	
4,300.0	9.31	82.11	4,250.0	85.9	620.1	626.0	0.00	0.00	
4,400.0	9.31	82.11	4,348.7	88.1	636.1	642.2	0.00	0.00	
4,500.0	9.31	82.11	4,447.4	90.3	652.1	658.3	0.00	0.00	
4,600.0	9.31	82.11	4,546.1	92.5	668.1	674.5	0.00	0.00	
4,700.0	9.31	82.11	4,644.8	94.8	684.2	690.7	0.00	0.00	
4,800.0	9.31	82.11	4,743.4	97.0	700.2	706.9	0.00	0.00	
4,900.0	9.31	82.11	4,842.1	99.2	716.2	723.1	0.00	0.00	
5,000.0	9.31	82.11	4,940.8	101.4	732.3	739.3	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 14A-1
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8454.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8454.0usft
Site:	S2-T7S-R97W	North Reference:	True
Well:	PUCKETT 14A-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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	9.31	82.11	5,039.5	103.7	748.3	755.4	0.00	0.00	
5,200.0	9.31	82.11	5,138.2	105.9	764.3	771.6	0.00	0.00	
5,300.0	9.31	82.11	5,236.9	108.1	780.4	787.8	0.00	0.00	
5,400.0	9.31	82.11	5,335.5	110.3	796.4	804.0	0.00	0.00	
5,500.0	9.31	82.11	5,434.2	112.5	812.4	820.2	0.00	0.00	
5,600.0	9.31	82.11	5,532.9	114.8	828.5	836.4	0.00	0.00	
5,700.0	9.31	82.11	5,631.6	117.0	844.5	852.6	0.00	0.00	
5,800.0	9.31	82.11	5,730.3	119.2	860.5	868.7	0.00	0.00	
5,882.8	9.31	82.11	5,812.0	121.0	873.8	882.1	0.00	0.00	OHIO_CREEK.MBL (SSTVD)
5,900.0	9.31	82.11	5,828.9	121.4	876.6	884.9	0.00	0.00	
6,000.0	9.31	82.11	5,927.6	123.6	892.6	901.1	0.00	0.00	
6,100.0	9.31	82.11	6,026.3	125.9	908.6	917.3	0.00	0.00	
6,151.4	9.31	82.11	6,077.0	127.0	916.9	925.6	0.00	0.00	WILLIAMS_FORK.MBL (SSTVD)
6,200.0	9.31	82.11	6,125.0	128.1	924.7	933.5	0.00	0.00	
6,300.0	9.31	82.11	6,223.7	130.3	940.7	949.7	0.00	0.00	
6,400.0	9.31	82.11	6,322.3	132.5	956.7	965.9	0.00	0.00	
6,500.0	9.31	82.11	6,421.0	134.7	972.7	982.0	0.00	0.00	
6,540.8	9.31	82.11	6,461.3	135.6	979.3	988.6	0.00	0.00	Start Drop -2.00
6,600.0	8.13	82.11	6,519.8	136.9	988.2	997.6	2.00	-2.00	
6,700.0	6.13	82.11	6,619.0	138.6	1,000.5	1,010.0	2.00	-2.00	
6,800.0	4.13	82.11	6,718.6	139.8	1,009.3	1,019.0	2.00	-2.00	
6,900.0	2.13	82.11	6,818.5	140.6	1,014.7	1,024.4	2.00	-2.00	
7,000.0	0.13	82.11	6,918.4	140.8	1,016.7	1,026.4	2.00	-2.00	
7,006.6	0.00	0.00	6,925.0	140.8	1,016.7	1,026.4	2.00	-2.00	Start 1878.0 hold at 7006.6 MD
7,100.0	0.00	0.00	7,018.4	140.8	1,016.7	1,026.4	0.00	0.00	
7,106.6	0.00	0.00	7,025.0	140.8	1,016.7	1,026.4	0.00	0.00	TOP_GAS.MBL (SSTVD)
7,200.0	0.00	0.00	7,118.4	140.8	1,016.7	1,026.4	0.00	0.00	
7,300.0	0.00	0.00	7,218.4	140.8	1,016.7	1,026.4	0.00	0.00	
7,400.0	0.00	0.00	7,318.4	140.8	1,016.7	1,026.4	0.00	0.00	
7,500.0	0.00	0.00	7,418.4	140.8	1,016.7	1,026.4	0.00	0.00	
7,600.0	0.00	0.00	7,518.4	140.8	1,016.7	1,026.4	0.00	0.00	
7,700.0	0.00	0.00	7,618.4	140.8	1,016.7	1,026.4	0.00	0.00	
7,800.0	0.00	0.00	7,718.4	140.8	1,016.7	1,026.4	0.00	0.00	
7,900.0	0.00	0.00	7,818.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,000.0	0.00	0.00	7,918.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,100.0	0.00	0.00	8,018.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,200.0	0.00	0.00	8,118.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,300.0	0.00	0.00	8,218.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,400.0	0.00	0.00	8,318.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,500.0	0.00	0.00	8,418.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,600.0	0.00	0.00	8,518.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,700.0	0.00	0.00	8,618.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,734.6	0.00	0.00	8,653.0	140.8	1,016.7	1,026.4	0.00	0.00	ROLLINS.MBL (SSTVD)
8,800.0	0.00	0.00	8,718.4	140.8	1,016.7	1,026.4	0.00	0.00	
8,884.6	0.00	0.00	8,803.0	140.8	1,016.7	1,026.4	0.00	0.00	TD at 8884.6 - TD.MBL (SSTVD)

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 14A-1
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8454.0usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8454.0usft
Site:	S2-T7S-R97W	North Reference:	True
Well:	PUCKETT 14A-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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 14A-1 PBHL	0.00	0.00	8,803.0	140.8	1,016.7	14,345,840.00	2,437,772.70	39.470757	-108.174805
- plan hits target center									
- Circle (radius 50.0)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
5,882.8	5,812.0	OHIO_CREEK.MBL (SSTVD)		0.00		
6,151.4	6,077.0	WILLIAMS_FORK.MBL (SSTVD)		0.00		
7,106.6	7,025.0	TOP_GAS.MBL (SSTVD)		0.00		
8,734.6	8,653.0	ROLLINS.MBL (SSTVD)		0.00		
8,884.6	8,803.0	TD.MBL (SSTVD)		0.00		

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
200.0	200.0	0.0	0.0	Start Build 2.00	
665.7	663.7	5.2	37.4	Start 5875.1 hold at 665.7 MD	
6,540.8	6,461.3	135.6	979.3	Start Drop -2.00	
7,006.6	6,925.0	140.8	1,016.7	Start 1878.0 hold at 7006.6 MD	
8,884.6	8,803.0	140.8	1,016.7	TD at 8884.6	