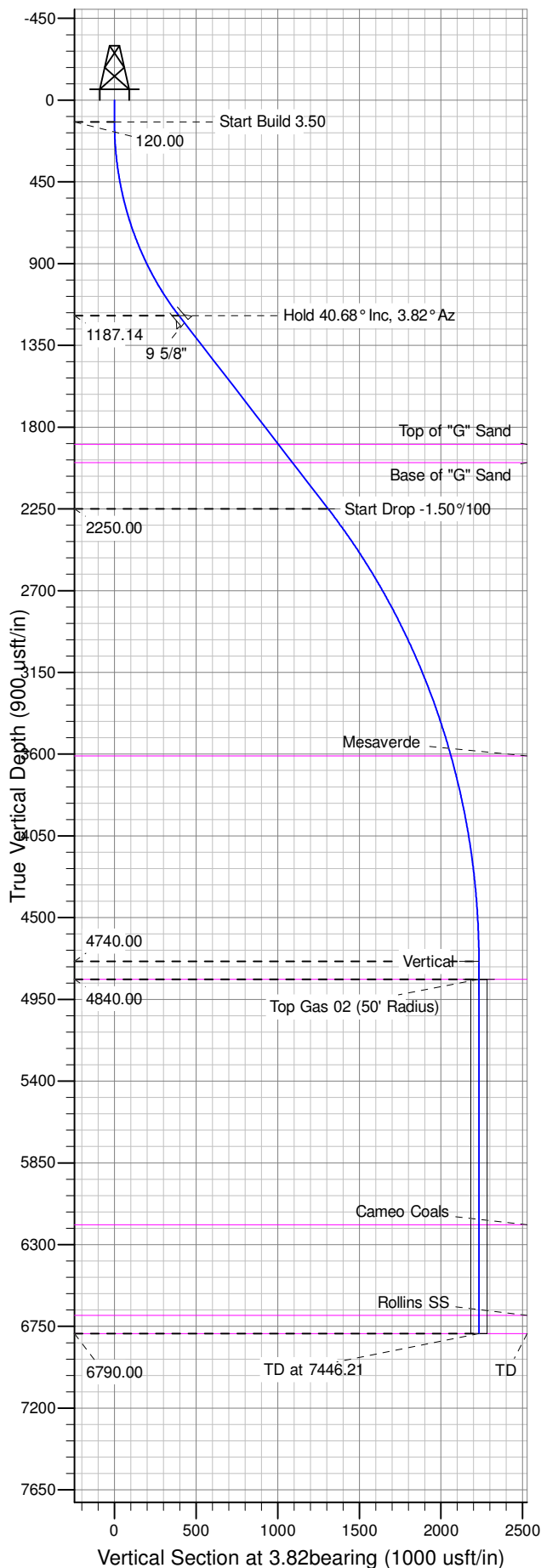
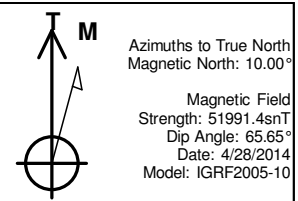
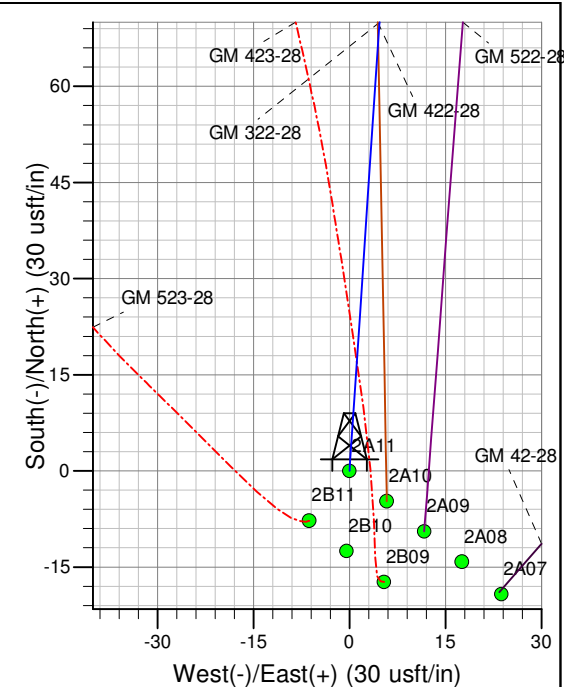
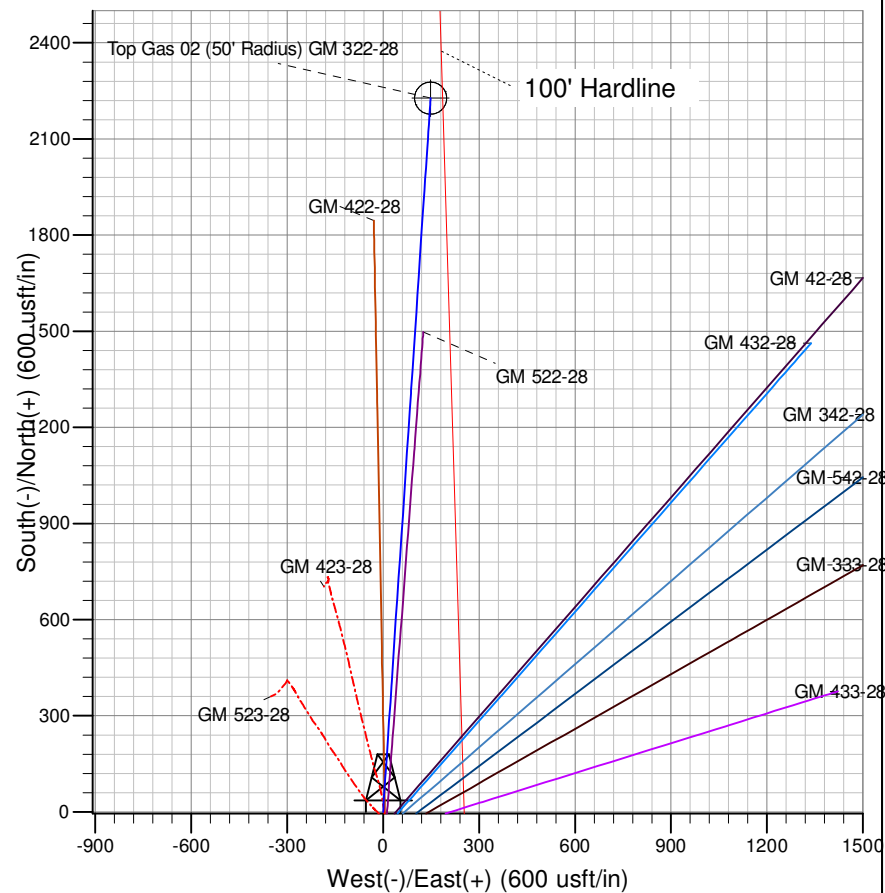




Well Name: GM 322-28  
Surface Location: GM 323-28 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 5476.00  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.00 0.00 1614784.80 2262141.80 39.49221 -108.11488 2A11  
KELLY BUSHING @ 5500.00usft (H&P 318 (24' RKB) mab)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
120.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.50	
1187.14	1282.39	40.68	3.82	394.76	26.35	395.63	395.63	Hold 40.68° Inc, 3.82° Az	
2250.00	2683.98	40.68	3.82	1306.40	87.19	1309.30	1309.30	Start Drop -1.50°/100	
4740.00	5396.21	0.00	0.00	2227.49	148.66	2232.45	2232.45	Vertical	
4840.00	5496.21	0.00	0.00	2227.49	148.66	2232.45	2232.45	Top Gas	
6790.00	7446.21	0.00	0.00	2227.49	148.66	2232.45	2232.45	TD at 7446.21	



Project: GV 28-06S-096W  
Site: GM 323-28 Pad  
Well: GM 322-28  
Design #1 28Apr14 mab

# **PICEANCE VLY NAD 83**

**GV 28-06S-096W**

**GM 323-28 Pad**

**GM 322-28 - Slot 2A11**

**Wellbore #1**

**Plan: Design #1 28Apr14 mab**

## **Standard Planning Report - Geographic**

**25 June, 2014**

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 322-28 - Slot 2A11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5500.00usft (H&P 318 (24' RKB) mab)
<b>Project:</b>	GV 28-06S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5500.00usft (H&P 318 (24' RKB) mab)
<b>Site:</b>	GM 323-28 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 322-28	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 28Apr14 mab		

<b>Project</b>	GV 28-06S-096W, 28-06S-096W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		Using geodetic scale factor

<b>Site</b>	GM 323-28 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,614,757.30000 usft	<b>Latitude:</b> 39.49213
<b>From:</b> Map		<b>Easting:</b>	2,262,158.50000 usft	<b>Longitude:</b> -108.11482
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> -1.65 °

<b>Well</b>	GM 322-28 - Slot 2A11			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,614,784.80000 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,262,141.80000 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	0.00 usft
			<b>Ground Level:</b>	5,476.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2005-10	4/28/2014	10.00	65.65	51,991

<b>Design</b>	Design #1 28Apr14 mab			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (bearing)</b>
	0.00	0.00	0.00	3.82

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	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	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,282.39	40.68	3.82	1,187.14	394.76	26.35	3.50	3.50	0.00	3.82	
2,683.98	40.68	3.82	2,250.00	1,306.40	87.19	0.00	0.00	0.00	0.00	
5,396.21	0.00	0.00	4,740.00	2,227.49	148.66	1.50	-1.50	0.00	180.00	
5,496.21	0.00	0.00	4,840.00	2,227.49	148.66	0.00	0.00	0.00	0.00	Top Gas 02 (50' Radii
7,446.21	0.00	0.00	6,790.00	2,227.49	148.66	0.00	0.00	0.00	0.00	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 322-28 - Slot 2A11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5500.00usft (H&P 318 (24' RKB) mab)
<b>Project:</b>	GV 28-06S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5500.00usft (H&P 318 (24' RKB) mab)
<b>Site:</b>	GM 323-28 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 322-28	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 28Apr14 mab		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	1,614,784.80000	2,262,141.80000	39.49221	-108.11488	
120.00	0.00	0.00	120.00	0.00	0.00	1,614,784.80000	2,262,141.80000	39.49221	-108.11488	
Start Build 3.50										
200.00	2.80	3.82	199.97	1.95	0.13	1,614,786.74541	2,262,141.98620	39.49221	-108.11488	
400.00	9.80	3.82	398.64	23.83	1.59	1,614,808.57795	2,262,144.07593	39.49227	-108.11488	
600.00	16.80	3.82	593.15	69.71	4.65	1,614,854.34823	2,262,148.45687	39.49240	-108.11487	
800.00	23.80	3.82	780.61	138.90	9.27	1,614,923.37390	2,262,155.06373	39.49259	-108.11485	
1,000.00	30.80	3.82	958.23	230.37	15.38	1,615,014.62599	2,262,163.79801	39.49284	-108.11483	
1,200.00	37.80	3.82	1,123.34	342.76	22.88	1,615,126.74410	2,262,174.52950	39.49315	-108.11480	
1,282.39	40.68	3.82	1,187.14	394.76	26.35	1,615,178.61760	2,262,179.49463	39.49329	-108.11479	
Hold 40.68° Inc, 3.82° Az										
1,332.39	40.68	3.82	1,225.06	427.28	28.52	1,615,211.06333	2,262,182.60020	39.49338	-108.11478	
9 5/8"										
1,400.00	40.68	3.82	1,276.33	471.25	31.45	1,615,254.93470	2,262,186.79939	39.49350	-108.11477	
1,600.00	40.68	3.82	1,428.00	601.34	40.13	1,615,384.71247	2,262,199.22119	39.49386	-108.11474	
1,800.00	40.68	3.82	1,579.66	731.43	48.82	1,615,514.49025	2,262,211.64300	39.49422	-108.11471	
2,000.00	40.68	3.82	1,731.32	861.51	57.50	1,615,644.26803	2,262,224.06480	39.49457	-108.11468	
2,200.00	40.68	3.82	1,882.99	991.60	66.18	1,615,774.04580	2,262,236.48661	39.49493	-108.11465	
2,215.84	40.68	3.82	1,895.00	1,001.90	66.87	1,615,784.32395	2,262,237.47039	39.49496	-108.11465	
Top of "G" Sand										
2,347.71	40.68	3.82	1,995.00	1,087.68	72.59	1,615,869.89309	2,262,245.66072	39.49519	-108.11463	
Base of "G" Sand										
2,400.00	40.68	3.82	2,034.65	1,121.69	74.86	1,615,903.82358	2,262,248.90841	39.49529	-108.11462	
2,600.00	40.68	3.82	2,186.32	1,251.78	83.54	1,616,033.60136	2,262,261.33022	39.49564	-108.11459	
2,683.98	40.68	3.82	2,250.00	1,306.40	87.19	1,616,088.09226	2,262,266.54587	39.49579	-108.11457	
Start Drop -1.50°/100										
2,800.00	38.94	3.82	2,339.12	1,380.52	92.14	1,616,162.03753	2,262,273.62361	39.49600	-108.11456	
3,000.00	35.94	3.82	2,497.89	1,501.83	100.23	1,616,283.06054	2,262,285.20744	39.49633	-108.11453	
3,200.00	32.94	3.82	2,662.81	1,614.68	107.76	1,616,395.64630	2,262,295.98370	39.49664	-108.11450	
3,400.00	29.94	3.82	2,833.42	1,718.77	114.71	1,616,499.48619	2,262,305.92283	39.49693	-108.11448	
3,600.00	26.94	3.82	3,009.26	1,813.80	121.05	1,616,594.29563	2,262,314.99761	39.49719	-108.11445	
3,800.00	23.94	3.82	3,189.84	1,899.53	126.78	1,616,679.81473	2,262,323.18315	39.49742	-108.11443	
4,000.00	20.94	3.82	3,374.67	1,975.70	131.86	1,616,755.80911	2,262,330.45702	39.49763	-108.11442	
4,200.00	17.94	3.82	3,563.24	2,042.12	136.29	1,616,822.07045	2,262,336.79929	39.49781	-108.11440	
4,249.05	17.21	3.82	3,610.00	2,056.90	137.28	1,616,836.81258	2,262,338.21035	39.49785	-108.11440	
Mesaverde										
4,400.00	14.94	3.82	3,755.04	2,098.60	140.06	1,616,878.41713	2,262,342.19257	39.49797	-108.11439	
4,600.00	11.94	3.82	3,949.54	2,144.99	143.16	1,616,924.69474	2,262,346.62207	39.49810	-108.11438	
4,800.00	8.94	3.82	4,146.20	2,181.16	145.57	1,616,960.77641	2,262,350.07567	39.49820	-108.11437	
5,000.00	5.94	3.82	4,344.50	2,207.01	147.30	1,616,986.56325	2,262,352.54388	39.49827	-108.11436	
5,200.00	2.94	3.82	4,543.87	2,222.46	148.33	1,617,001.98458	2,262,354.01995	39.49831	-108.11436	
5,396.21	0.00	0.00	4,740.00	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
Vertical										
5,400.00	0.00	0.00	4,743.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
5,496.21	0.00	0.00	4,840.00	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
Top Gas - Approx. Top Gas										
5,600.00	0.00	0.00	4,943.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
5,800.00	0.00	0.00	5,143.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
6,000.00	0.00	0.00	5,343.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
6,200.00	0.00	0.00	5,543.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
6,400.00	0.00	0.00	5,743.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
6,600.00	0.00	0.00	5,943.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 322-28 - Slot 2A11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5500.00usft (H&P 318 (24' RKB) mab)
<b>Project:</b>	GV 28-06S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5500.00usft (H&P 318 (24' RKB) mab)
<b>Site:</b>	GM 323-28 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 322-28	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 28Apr14 mab		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
6,800.00	0.00	0.00	6,143.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
6,846.21	0.00	0.00	6,190.00	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
Cameo Coals										
7,000.00	0.00	0.00	6,343.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
7,200.00	0.00	0.00	6,543.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
7,346.21	0.00	0.00	6,690.00	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
Rollins SS										
7,400.00	0.00	0.00	6,743.79	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
7,446.21	0.00	0.00	6,790.00	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	
TD at 7446.21										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Top Gas 02 (50' Radius) - plan hits target center - Circle (radius 50.00)	0.00	0.00	4,840.00	2,227.49	148.66	1,617,007.00000	2,262,354.50000	39.49832	-108.11436	

Casing Points										
Measured Depth (usft)	Vertical Depth (usft)	Name				Casing Diameter (in)	Hole Diameter (in)			
1,332.39	1,225.06	9 5/8"				9.625	13.500			

Formations										
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)					
2,215.84	1,895.00	Top of "G" Sand								
2,347.71	1,995.00	Base of "G" Sand								
4,249.05	3,610.00	Mesaverde								
5,496.21	4,840.00	Approx. Top Gas								
6,846.21	6,190.00	Cameo Coals								
7,346.21	6,690.00	Rollins SS								

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 322-28 - Slot 2A11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5500.00usft (H&P 318 (24' RKB) mab)
<b>Project:</b>	GV 28-06S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5500.00usft (H&P 318 (24' RKB) mab)
<b>Site:</b>	GM 323-28 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 322-28	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 28Apr14 mab		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
120.00	120.00	0.00	0.00	Start Build 3.50
1,282.39	1,187.14	394.76	26.35	Hold 40.68° Inc, 3.82° Az
2,683.98	2,250.00	1,306.40	87.19	Start Drop -1.50°/100
5,396.21	4,740.00	2,227.49	148.66	Vertical
5,496.21	4,840.00	2,227.49	148.66	Top Gas
7,446.21	6,790.00	2,227.49	148.66	TD at 7446.21