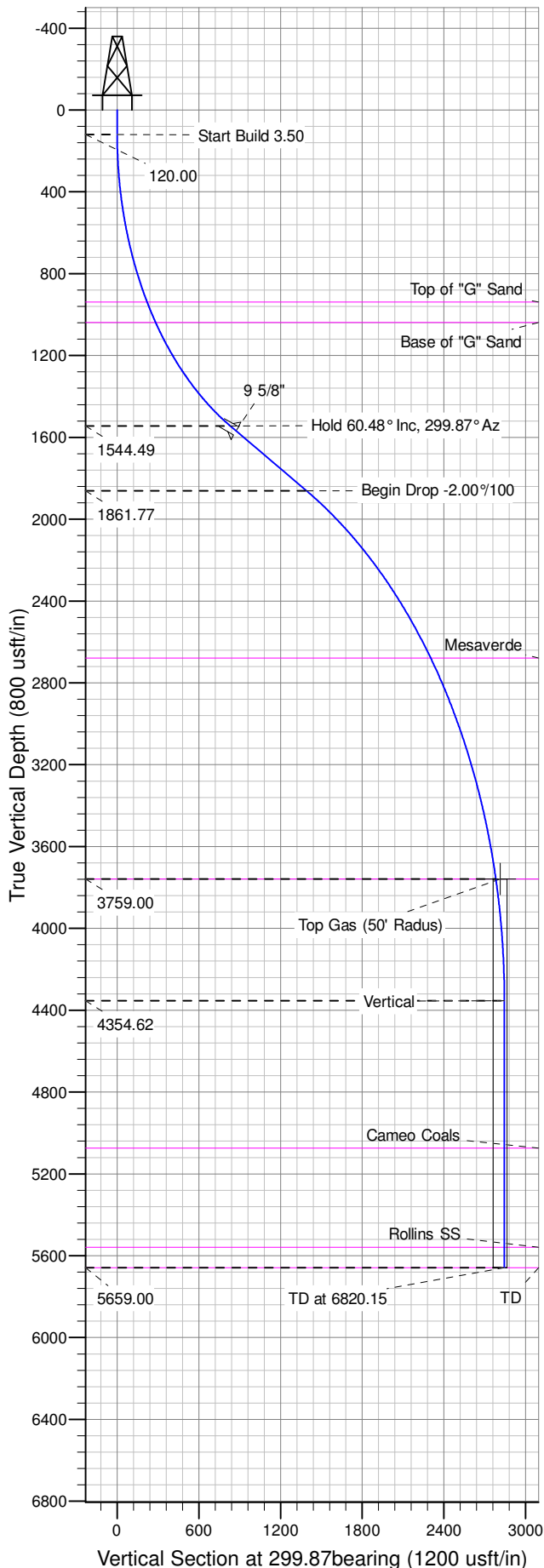
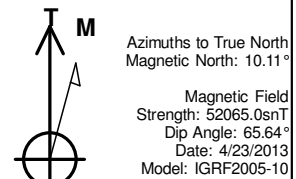
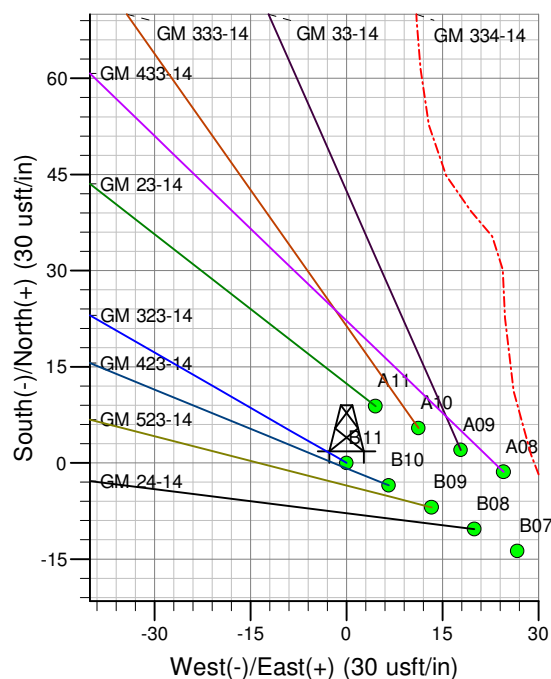
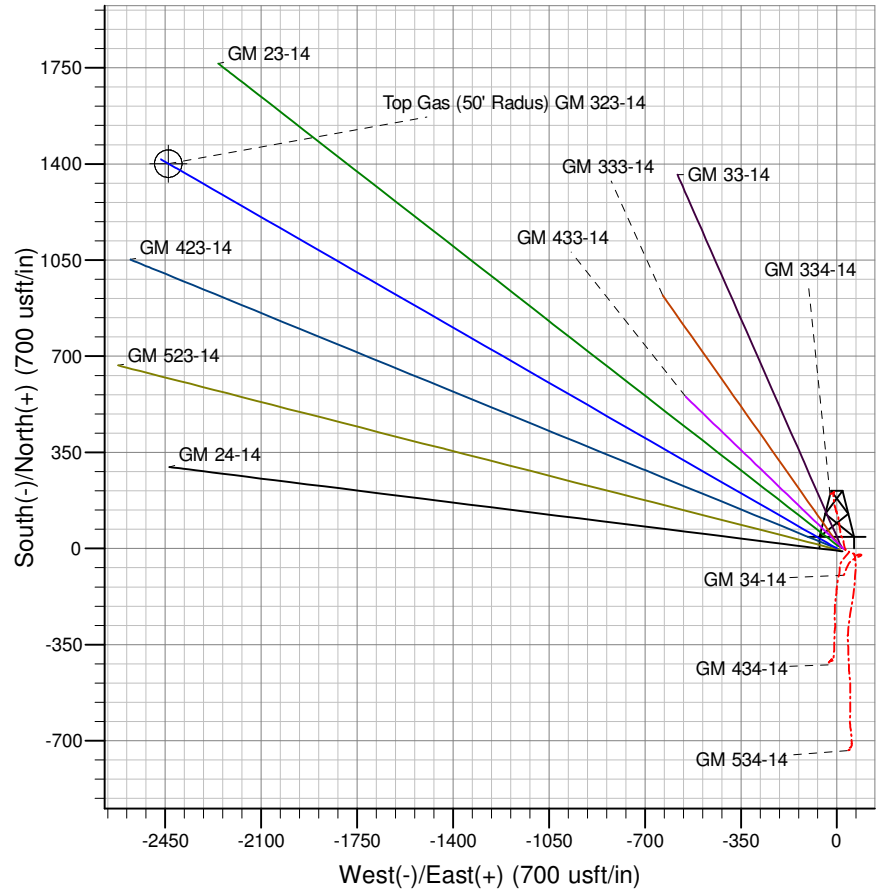




Well Name: GM 323-14  
Surface Location: GM 34-14 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 5173.00  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.00 0.00 1592881.80000 2272781.59629 39.43293 -108.07499 B 11  
KELLY BUSHING @ 5199.00usft (Nabors 574 rig (26' RKB) kjs)



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	
1544.49	1847.95	60.48	299.87	413.57	-720.06	830.37	830.37	Hold 60.48° Inc, 299.87° Az	
1861.77	2491.86	60.48	299.87	692.63	-1205.93	1390.68	1390.68	Begin Drop -2.00°/100	
3759.00	4915.77	12.00	299.87	1385.19	-2411.74	2781.23	2781.23	Top Gas	
4354.62	5515.77	0.00	0.00	1416.37	-2466.03	2843.84	2843.84	Vertical	
5659.00	6820.15	0.00	0.00	1416.37	-2466.03	2843.84	2843.84	TD at 6820.15	



Project: GV 14-07S-096W  
Site: GM 34-14 Pad  
Well: GM 323-14  
Design #2 02May14 mab

# **PICEANCE VLY NAD 83**

**GV 14-07S-096W**

**GM 34-14 Pad**

**GM 323-14 - Slot B11**

**Wellbore #1**

**Plan: Design #2 02May14 mab**

## **Standard Planning Report - Geographic**

**30 May, 2014**

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 323-14 - Slot B11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5199.00usft (Nabors 574 rig (26' RKB) kjs)
<b>Project:</b>	GV 14-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5199.00usft (Nabors 574 rig (26' RKB) kjs)
<b>Site:</b>	GM 34-14 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 323-14	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2 02May14 mab		

<b>Project</b>	GV 14-07S-096W, Garfield County, CO, 14-07S-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 34-14 Pad		
<b>Site Position:</b>		<b>Northing:</b>	1,592,854.30000 usft
<b>From:</b>	Map	<b>Easting:</b>	2,272,852.10000 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in
		<b>Latitude:</b>	39.43286
		<b>Longitude:</b>	-108.07474
		<b>Grid Convergence:</b>	-1.62 °

<b>Well</b>	GM 323-14 - Slot B11		
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b> 1,592,881.80000 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 2,272,781.59629 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 39.43293
			<b>Longitude:</b> -108.07500
			<b>Ground Level:</b> 5,173.00 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	4/23/2013	10.11	65.64	52,065

<b>Design</b>	Design #2 02May14 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	299.87

<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	
1,847.95	60.48	299.87	1,544.49	413.57	-720.06	3.50	3.50	0.00	299.87	
2,491.86	60.48	299.87	1,861.77	692.63	-1,205.93	0.00	0.00	0.00	0.00	
4,915.77	12.00	299.87	3,759.00	1,385.19	-2,411.74	2.00	-2.00	0.00	180.00	Top Gas (50' Radius) (
5,515.77	0.00	0.00	4,354.62	1,416.37	-2,466.03	2.00	-2.00	0.00	180.00	
6,820.15	0.00	0.00	5,659.00	1,416.37	-2,466.03	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 323-14 - Slot B11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5199.00usft (Nabors 574 rig (26' RKB) kjs)
<b>Project:</b>	GV 14-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5199.00usft (Nabors 574 rig (26' RKB) kjs)
<b>Site:</b>	GM 34-14 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 323-14	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2 02May14 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	1,592,881.80000	2,272,781.59629	39.43293	-108.07500
120.00	0.00	0.00	120.00	0.00	0.00	1,592,881.80000	2,272,781.59629	39.43293	-108.07500
<b>Start Build 3.50</b>									
200.00	2.80	299.87	199.97	0.97	-1.69	1,592,882.82097	2,272,779.92989	39.43293	-108.07500
400.00	9.80	299.87	398.64	11.90	-20.71	1,592,894.27889	2,272,761.22866	39.43296	-108.07507
600.00	16.80	299.87	593.15	34.80	-60.59	1,592,918.29956	2,272,722.02291	39.43303	-108.07521
800.00	23.80	299.87	780.61	69.33	-120.72	1,592,954.52490	2,272,662.89713	39.43312	-108.07542
977.71	30.02	299.87	939.00	109.37	-190.43	1,592,996.52006	2,272,594.35400	39.43323	-108.07567
<b>Top of "G" Sand</b>									
1,000.00	30.80	299.87	958.23	114.99	-200.21	1,593,002.41485	2,272,584.73273	39.43325	-108.07571
1,095.76	34.15	299.87	1,039.00	140.60	-244.79	1,593,029.27202	2,272,540.89734	39.43332	-108.07586
<b>Base of "G" Sand</b>									
1,200.00	37.80	299.87	1,123.34	171.09	-297.88	1,593,061.25549	2,272,488.69498	39.43340	-108.07605
1,400.00	44.80	299.87	1,273.50	236.79	-412.28	1,593,130.16964	2,272,376.21557	39.43358	-108.07646
1,600.00	51.80	299.87	1,406.47	311.12	-541.69	1,593,208.12997	2,272,248.97132	39.43379	-108.07691
1,800.00	58.80	299.87	1,520.25	392.96	-684.18	1,593,293.97424	2,272,108.85913	39.43401	-108.07742
1,847.95	60.48	299.87	1,544.49	413.57	-720.06	1,593,315.58824	2,272,073.58147	39.43407	-108.07755
<b>Hold 60.48° Inc, 299.87° Az</b>									
1,897.95	60.48	299.87	1,569.12	435.24	-757.79	1,593,338.31616	2,272,036.48572	39.43413	-108.07768
<b>9 5/8"</b>									
2,000.00	60.48	299.87	1,619.41	479.46	-834.79	1,593,384.70573	2,271,960.77021	39.43425	-108.07795
2,200.00	60.48	299.87	1,717.96	566.14	-985.70	1,593,475.62110	2,271,812.38115	39.43449	-108.07849
2,400.00	60.48	299.87	1,816.51	652.82	-1,136.62	1,593,566.53647	2,271,663.99208	39.43472	-108.07902
2,491.86	60.48	299.87	1,861.77	692.63	-1,205.93	1,593,608.29165	2,271,595.84066	39.43483	-108.07927
<b>Begin Drop -2.00°/100</b>									
2,600.00	58.32	299.87	1,916.82	738.98	-1,286.64	1,593,656.91479	2,271,516.47959	39.43496	-108.07955
2,800.00	54.32	299.87	2,027.73	821.85	-1,430.92	1,593,743.83538	2,271,374.61067	39.43519	-108.08006
3,000.00	50.32	299.87	2,149.96	900.67	-1,568.14	1,593,826.50290	2,271,239.68349	39.43540	-108.08055
3,200.00	46.32	299.87	2,282.94	975.04	-1,697.64	1,593,904.51458	2,271,112.35540	39.43561	-108.08101
3,400.00	42.32	299.87	2,426.01	1,044.62	-1,818.77	1,593,977.49038	2,270,993.24671	39.43580	-108.08144
3,600.00	38.32	299.87	2,578.48	1,109.05	-1,930.96	1,594,045.07476	2,270,882.93772	39.43598	-108.08183
3,725.97	35.80	299.87	2,679.00	1,146.85	-1,996.77	1,594,084.72466	2,270,818.22246	39.43608	-108.08207
<b>Mesaverde</b>									
3,800.00	34.32	299.87	2,739.60	1,168.03	-2,033.64	1,594,106.93845	2,270,781.96586	39.43614	-108.08220
4,000.00	30.32	299.87	2,908.59	1,221.27	-2,126.34	1,594,162.78007	2,270,690.82302	39.43628	-108.08253
4,200.00	26.32	299.87	3,084.63	1,268.51	-2,208.58	1,594,212.32755	2,270,609.95326	39.43641	-108.08282
4,400.00	22.32	299.87	3,266.85	1,309.51	-2,279.98	1,594,255.33951	2,270,539.75057	39.43653	-108.08307
4,600.00	18.32	299.87	3,454.37	1,344.09	-2,340.18	1,594,291.60638	2,270,480.55696	39.43662	-108.08328
4,800.00	14.32	299.87	3,646.28	1,372.07	-2,388.89	1,594,320.95150	2,270,432.66083	39.43670	-108.08345
4,915.77	12.00	299.87	3,759.00	1,385.19	-2,411.74	1,594,334.71753	2,270,410.19237	39.43673	-108.08354
<b>Top Gas - Approx. Top Gas</b>									
5,000.00	10.32	299.87	3,841.63	1,393.31	-2,425.88	1,594,343.23189	2,270,396.29551	39.43676	-108.08359
5,200.00	6.32	299.87	4,039.49	1,407.71	-2,450.95	1,594,358.33901	2,270,371.63819	39.43680	-108.08367
5,400.00	2.32	299.87	4,238.88	1,415.21	-2,464.00	1,594,366.19925	2,270,358.80897	39.43682	-108.08372
5,515.77	0.00	0.00	4,354.62	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
<b>Vertical</b>									
5,600.00	0.00	0.00	4,438.85	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
5,800.00	0.00	0.00	4,638.85	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
6,000.00	0.00	0.00	4,838.85	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
6,200.00	0.00	0.00	5,038.85	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 323-14 - Slot B11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5199.00usft (Nabors 574 rig (26' RKB) kjs)
<b>Project:</b>	GV 14-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5199.00usft (Nabors 574 rig (26' RKB) kjs)
<b>Site:</b>	GM 34-14 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 323-14	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2 02May14 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
6,235.15	0.00	0.00	5,074.00	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
Cameo Coals									
6,400.00	0.00	0.00	5,238.85	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
6,600.00	0.00	0.00	5,438.85	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
6,720.15	0.00	0.00	5,559.00	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
Rollins SS									
6,800.00	0.00	0.00	5,638.85	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
6,820.15	0.00	0.00	5,659.00	1,416.37	-2,466.03	1,594,367.42111	2,270,356.81468	39.43682	-108.08373
TD at 6820.15 - TD									

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 (50' Radius) GM - plan misses target center by 30.76usft at 4921.86usft MD (3764.95 TVD, 1385.82 N, -2412.83 E) - Circle (radius 50.00)	0.00	0.00	3,759.00	1,400.71	-2,439.09	1,594,351.00000	2,270,383.30000	39.43678	-108.08363

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,897.95	1,569.12	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
977.71	939.00	Top of "G" Sand				
1,095.76	1,039.00	Base of "G" Sand				
3,725.97	2,679.00	Mesaverde				
4,915.77	3,759.00	Approx. Top Gas				
6,235.15	5,074.00	Cameo Coals				
6,720.15	5,559.00	Rollins SS				
6,820.15	5,659.00	TD				

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 323-14 - Slot B11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5199.00usft (Nabors 574 rig (26' RKB) kjs)
<b>Project:</b>	GV 14-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5199.00usft (Nabors 574 rig (26' RKB) kjs)
<b>Site:</b>	GM 34-14 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 323-14	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2 02May14 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
1,847.95	1,544.49	413.57	-720.06	Hold 60.48° Inc, 299.87° Az
2,491.86	1,861.77	692.63	-1,205.93	Begin Drop -2.00°/100
4,915.77	3,759.00	1,385.19	-2,411.74	Top Gas
5,515.77	4,354.62	1,416.37	-2,466.03	Vertical
6,820.15	5,659.00	1,416.37	-2,466.03	TD at 6820.15