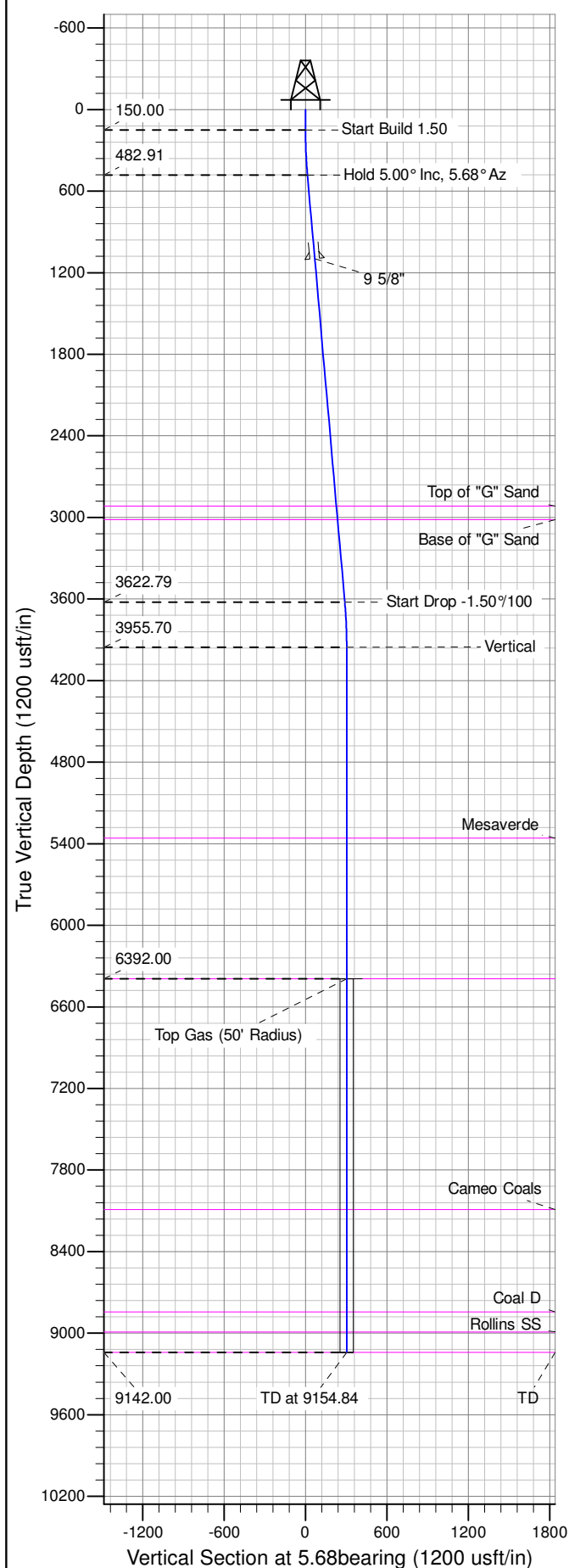
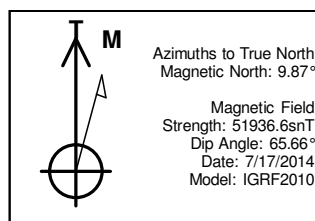
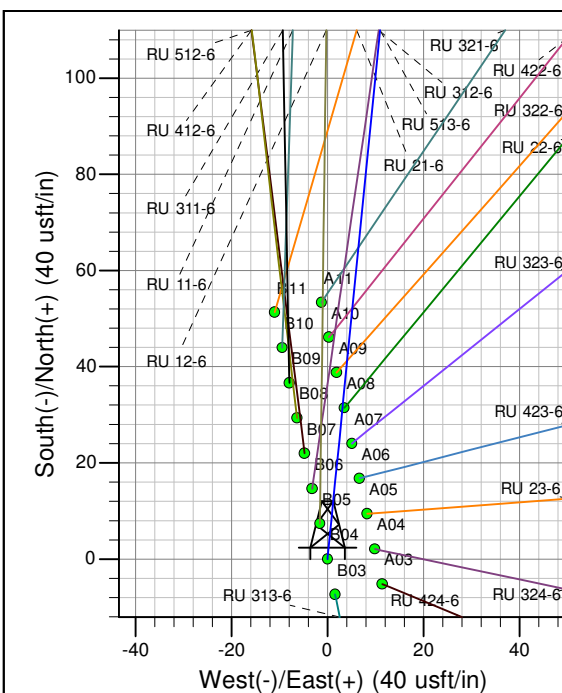
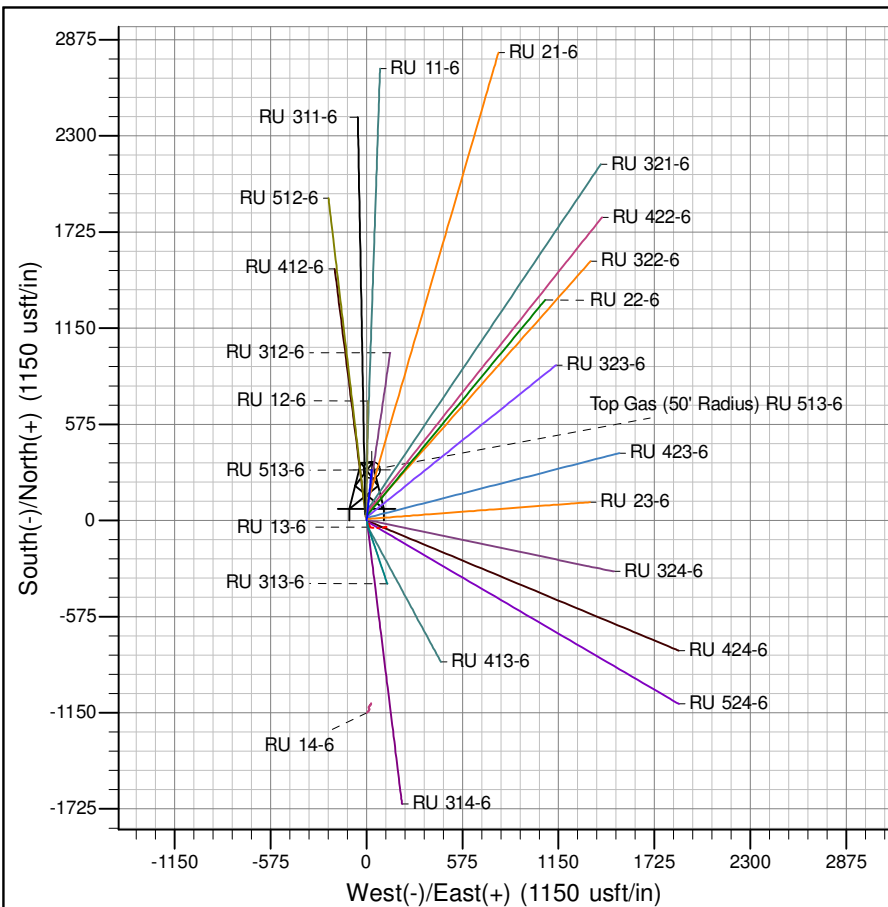




Well Name: RU 513-6
Surface Location: RU 13-6 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6985.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1603425.70000 2343747.30000 39.467122 -107.824784 B04
KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
150.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50	
482.91	483.33	5.00	5.68	14.46	1.44	14.54	14.54	Hold 5.00° Inc, 5.68° Az	
3622.79	3635.21	5.00	5.68	287.82	28.64	289.24	289.24	Start Drop -1.50°/100	
3955.70	3968.54	0.00	0.00	302.28	30.08	303.77	303.77	Vertical	
6392.00	6404.84	0.00	0.00	302.28	30.08	303.77	303.77	Top Gas	
9142.00	9154.84	0.00	0.00	302.28	30.08	303.77	303.77	TD at 9154.84	



Project: RU 06-07S-093W
Site: RU 13-6 Pad
Well: RU 513-6
Design #1 17Jul14 mab

PICEANCE VLY NAD 83

RU 06-07S-093W

RU 13-6 Pad

RU 513-6 - Slot B04

Wellbore #1

Plan: Design #1 17Jul14 mab

Standard Planning Report - Geographic

17 September, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 513-6 - Slot B04
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 513-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 mab		

Project	RU 06-07S-093W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site	RU 13-6 Pad		
Site Position:		Northing:	1,603,405.40000 usft
From:	Map	Easting:	2,343,761.30000 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	39.467067
		Longitude:	-107.824733
		Grid Convergence:	-1.47 °

Well	RU 513-6 - Slot B04		
Well Position	+N/-S	0.00 usft	Northing: 1,603,425.70000 usft
	+E/-W	0.00 usft	Easting: 2,343,747.30000 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	39.467122
		Longitude:	-107.824784
		Ground Level:	6,985.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/17/2014	9.87	65.66	51,937

Design	Design #1 17Jul14 mab			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (bearing)
	0.00	0.00	0.00	5.68

Plan Sections										
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	
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
483.33	5.00	5.68	482.91	14.46	1.44	1.50	1.50	0.00	5.68	
3,635.21	5.00	5.68	3,622.79	287.82	28.64	0.00	0.00	0.00	0.00	
3,968.54	0.00	0.00	3,955.70	302.28	30.08	1.50	-1.50	0.00	180.00	
6,404.84	0.00	0.00	6,392.00	302.28	30.08	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
9,154.84	0.00	0.00	9,142.00	302.28	30.08	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 513-6 - Slot B04
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 513-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 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	1,603,425.70000	2,343,747.30000	39.467122	-107.824784	
150.00	0.00	0.00	150.00	0.00	0.00	1,603,425.70000	2,343,747.30000	39.467122	-107.824784	
Start Build 1.50										
200.00	0.75	5.68	200.00	0.33	0.03	1,603,426.02468	2,343,747.34072	39.467123	-107.824784	
400.00	3.75	5.68	399.82	8.14	0.81	1,603,433.81438	2,343,748.31766	39.467144	-107.824781	
483.33	5.00	5.68	482.91	14.46	1.44	1,603,440.12157	2,343,749.10868	39.467162	-107.824779	
Hold 5.00° Inc, 5.68° Az										
600.00	5.00	5.68	599.13	24.58	2.45	1,603,450.21026	2,343,750.37395	39.467190	-107.824776	
800.00	5.00	5.68	798.37	41.93	4.17	1,603,467.50517	2,343,752.54298	39.467237	-107.824770	
1,000.00	5.00	5.68	997.61	59.27	5.90	1,603,484.80007	2,343,754.71202	39.467285	-107.824763	
1,100.00	5.00	5.68	1,097.23	67.95	6.76	1,603,493.44752	2,343,755.79654	39.467309	-107.824760	
9 5/8"										
1,200.00	5.00	5.68	1,196.85	76.62	7.62	1,603,502.09497	2,343,756.88105	39.467332	-107.824757	
1,400.00	5.00	5.68	1,396.09	93.96	9.35	1,603,519.38987	2,343,759.05009	39.467380	-107.824751	
1,600.00	5.00	5.68	1,595.33	111.31	11.08	1,603,536.68478	2,343,761.21912	39.467428	-107.824745	
1,800.00	5.00	5.68	1,794.57	128.65	12.80	1,603,553.97968	2,343,763.38816	39.467475	-107.824739	
2,000.00	5.00	5.68	1,993.81	146.00	14.53	1,603,571.27458	2,343,765.55720	39.467523	-107.824733	
2,200.00	5.00	5.68	2,193.04	163.35	16.25	1,603,588.56949	2,343,767.72623	39.467571	-107.824727	
2,400.00	5.00	5.68	2,392.28	180.69	17.98	1,603,605.86439	2,343,769.89527	39.467618	-107.824721	
2,600.00	5.00	5.68	2,591.52	198.04	19.70	1,603,623.15929	2,343,772.06430	39.467666	-107.824715	
2,800.00	5.00	5.68	2,790.76	215.38	21.43	1,603,640.45420	2,343,774.23334	39.467713	-107.824708	
2,925.72	5.00	5.68	2,916.00	226.29	22.52	1,603,651.32551	2,343,775.59676	39.467743	-107.824705	
Top of "G" Sand										
3,000.00	5.00	5.68	2,990.00	232.73	23.16	1,603,657.74910	2,343,776.40237	39.467761	-107.824702	
3,026.10	5.00	5.68	3,016.00	234.99	23.38	1,603,660.00599	2,343,776.68542	39.467767	-107.824702	
Base of "G" Sand										
3,200.00	5.00	5.68	3,189.24	250.07	24.88	1,603,675.04400	2,343,778.57141	39.467809	-107.824696	
3,400.00	5.00	5.68	3,388.48	267.42	26.61	1,603,692.33890	2,343,780.74045	39.467856	-107.824690	
3,600.00	5.00	5.68	3,587.72	284.76	28.33	1,603,709.63381	2,343,782.90948	39.467904	-107.824684	
3,635.21	5.00	5.68	3,622.79	287.82	28.64	1,603,712.67843	2,343,783.29132	39.467912	-107.824683	
Start Drop -1.50°/100										
3,800.00	2.53	5.68	3,787.22	298.58	29.71	1,603,723.41129	2,343,784.63738	39.467942	-107.824679	
3,968.54	0.00	0.00	3,955.70	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
Vertical										
4,000.00	0.00	0.00	3,987.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
4,200.00	0.00	0.00	4,187.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
4,400.00	0.00	0.00	4,387.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
4,600.00	0.00	0.00	4,587.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
4,800.00	0.00	0.00	4,787.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
5,000.00	0.00	0.00	4,987.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
5,200.00	0.00	0.00	5,187.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
5,371.84	0.00	0.00	5,359.00	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
Mesaverde										
5,400.00	0.00	0.00	5,387.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
5,600.00	0.00	0.00	5,587.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
5,800.00	0.00	0.00	5,787.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
6,000.00	0.00	0.00	5,987.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
6,200.00	0.00	0.00	6,187.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
6,400.00	0.00	0.00	6,387.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
6,404.84	0.00	0.00	6,392.00	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
Top Gas - Approx. Top Gas										
6,600.00	0.00	0.00	6,587.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 513-6 - Slot B04
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 513-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 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	6,787.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
7,000.00	0.00	0.00	6,987.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
7,200.00	0.00	0.00	7,187.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
7,400.00	0.00	0.00	7,387.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
7,600.00	0.00	0.00	7,587.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
7,800.00	0.00	0.00	7,787.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
8,000.00	0.00	0.00	7,987.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
8,104.84	0.00	0.00	8,092.00	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
Cameo Coals										
8,200.00	0.00	0.00	8,187.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
8,400.00	0.00	0.00	8,387.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
8,600.00	0.00	0.00	8,587.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
8,800.00	0.00	0.00	8,787.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
8,855.84	0.00	0.00	8,843.00	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
Coal D										
9,000.00	0.00	0.00	8,987.16	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
9,004.84	0.00	0.00	8,992.00	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
Rollins SS										
9,154.84	0.00	0.00	9,142.00	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
TD at 9154.84										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Top Gas (50' Radius) RL	0.00	0.00	6,392.00	302.28	30.08	1,603,727.10000	2,343,785.10000	39.467952	-107.824678	
- plan hits target center										
- Circle (radius 50.00)										

Casing Points									
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (in)	Hole Diameter (in)				
1,100.00	1,097.23	9 5/8"		9.625	13.500				

Formations									
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)				
2,925.72	2,916.00	Top of "G" Sand							
3,026.10	3,016.00	Base of "G" Sand							
5,371.84	5,359.00	Mesaverde							
6,404.84	6,392.00	Approx. Top Gas							
8,104.84	8,092.00	Cameo Coals							
8,855.84	8,843.00	Coal D							
9,004.84	8,992.00	Rollins SS							

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well RU 513-6 - Slot B04
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Project:	RU 06-07S-093W	MD Reference:	KELLY BUSHING @ 7011.00usft (Nabors 574 (26' RKB) mab)
Site:	RU 13-6 Pad	North Reference:	True
Well:	RU 513-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 17Jul14 mab		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
150.00	150.00	0.00	0.00	Start Build 1.50
483.33	482.91	14.46	1.44	Hold 5.00° Inc, 5.68° Az
3,635.21	3,622.79	287.82	28.64	Start Drop -1.50°/100
3,968.54	3,955.70	302.28	30.08	Vertical
6,404.84	6,392.00	302.28	30.08	Top Gas
9,154.84	9,142.00	302.28	30.08	TD at 9154.84