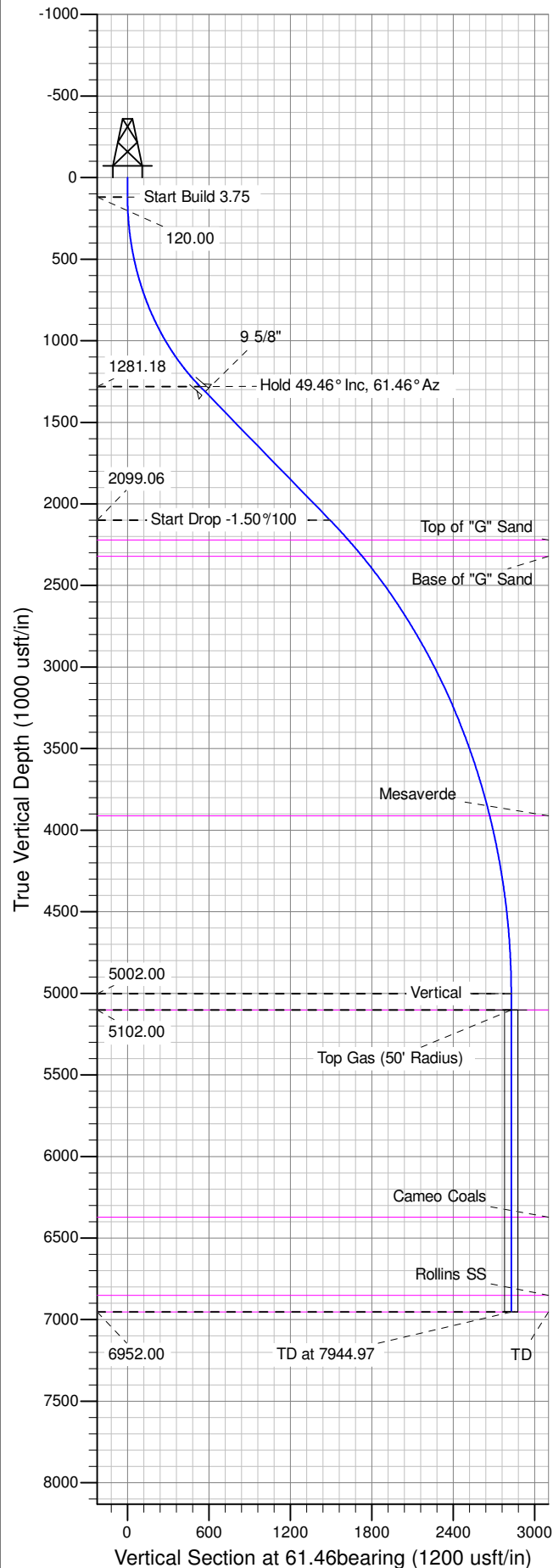
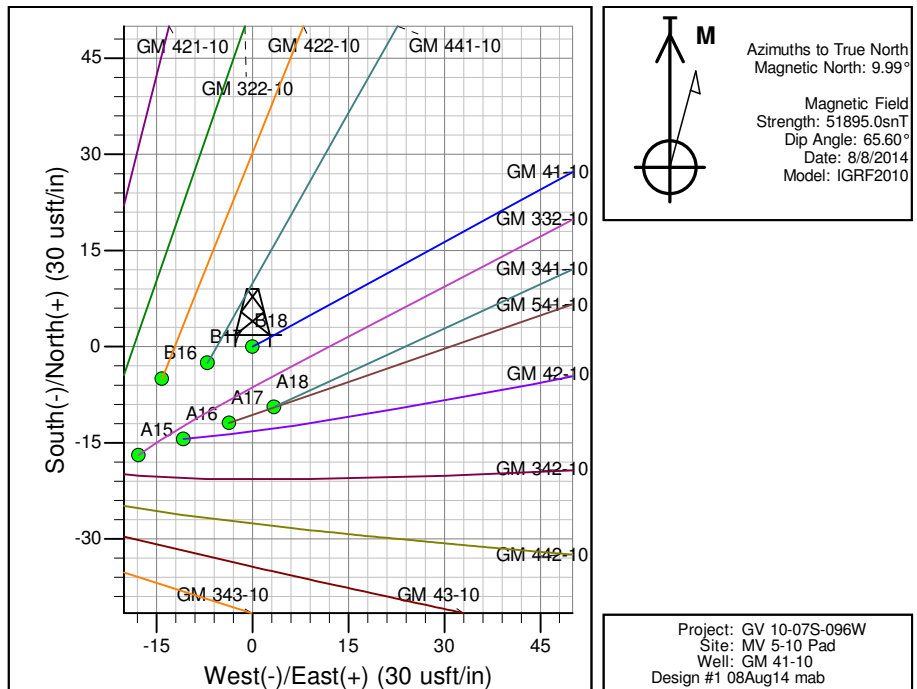
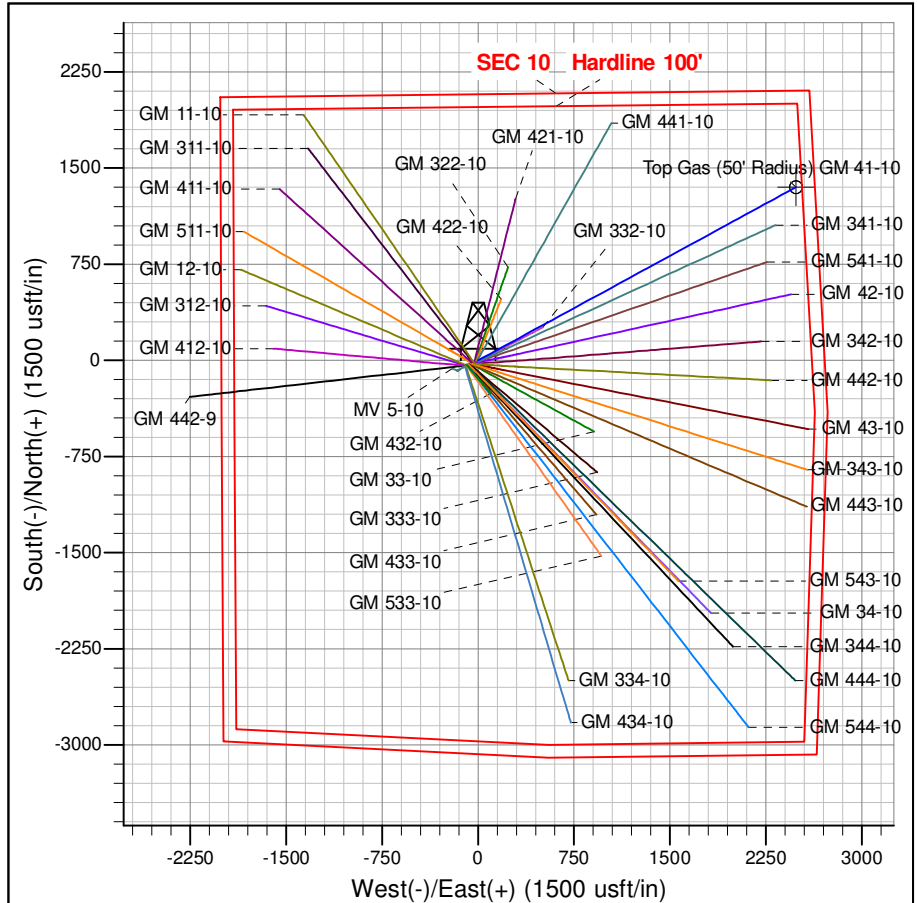




Well Name: GM 41-10
Surface Location: MV 5-10 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6148.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1600389.10 2266985.50 39.45308 -108.09627 B18
KELLY BUSHING @ 6174.00usft (Nabors (26' RKB) 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 3.75	
1281.18	1439.02	49.46	61.46	255.55	469.86	534.86	534.86	Hold 49.46° Inc, 61.46° Az	
2099.06	2697.42	49.46	61.46	712.50	1310.00	1491.23	1491.23	Start Drop -1.50°/100	
5002.00	5994.97	0.00	0.00	1351.38	2484.65	2828.37	2828.37	Vertical	
5102.00	6094.97	0.00	0.00	1351.38	2484.65	2828.37	2828.37	Top Gas	
6952.00	7944.97	0.00	0.00	1351.38	2484.65	2828.37	2828.37	TD at 7944.97	



PICEANCE VLY NAD 83

GV 10-07S-096W

MV 5-10 Pad

GM 41-10 - Slot B18

Wellbore #1

Plan: Design #1 08Aug14 mab

Standard Planning Report - Geographic

13 October, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 41-10 - Slot B18
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 41-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 08Aug14 mab		

Project	GV 10-07S-096W		
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	MV 5-10 Pad			
Site Position:		Northing:	1,600,354.00000 usft	Latitude: 39.45298
From: Map		Easting:	2,266,910.20000 usft	Longitude: -108.09653
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.64 °

Well	GM 41-10 - Slot B18			
Well Position	+N/-S	0.00 usft	Northing:	1,600,389.10000 usft
	+E/-W	0.00 usft	Easting:	2,266,985.50000 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	6,148.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/8/2014	9.99	65.60	51,895

Design	Design #1 08Aug14 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	61.46

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	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,439.02	49.46	61.46	1,281.18	255.55	469.86	3.75	3.75	0.00	61.46	
2,697.42	49.46	61.46	2,099.06	712.50	1,310.00	0.00	0.00	0.00	0.00	
5,994.97	0.00	0.00	5,002.00	1,351.38	2,484.65	1.50	-1.50	0.00	180.00	
6,094.97	0.00	0.00	5,102.00	1,351.38	2,484.65	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
7,944.97	0.00	0.00	6,952.00	1,351.38	2,484.65	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 41-10 - Slot B18
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 41-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 08Aug14 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	1,600,389.10000	2,266,985.50000	39.45308	-108.09627	
120.00	0.00	0.00	120.00	0.00	0.00	1,600,389.10000	2,266,985.50000	39.45308	-108.09627	
Start Build 3.75										
200.00	3.00	61.46	199.96	1.00	1.84	1,600,390.04745	2,266,987.36720	39.45308	-108.09626	
400.00	10.50	61.46	398.44	12.22	22.48	1,600,400.67642	2,267,008.31447	39.45312	-108.09619	
600.00	18.00	61.46	592.14	35.73	65.69	1,600,422.93621	2,267,052.18339	39.45318	-108.09604	
800.00	25.50	61.46	777.77	71.11	130.75	1,600,456.44593	2,267,118.22335	39.45328	-108.09581	
1,000.00	33.00	61.46	952.15	117.77	216.54	1,600,500.63224	2,267,205.30439	39.45341	-108.09550	
1,200.00	40.50	61.46	1,112.28	174.91	321.58	1,600,554.73908	2,267,311.93653	39.45356	-108.09513	
1,400.00	48.00	61.46	1,255.44	241.54	444.10	1,600,617.84067	2,267,436.29527	39.45374	-108.09470	
1,439.02	49.46	61.46	1,281.18	255.55	469.86	1,600,631.11040	2,267,462.44685	39.45378	-108.09460	
Hold 49.46° Inc, 61.46° Az										
1,489.02	49.46	61.46	1,313.67	273.71	503.24	1,600,648.30460	2,267,496.33266	39.45383	-108.09449	
9 5/8"										
1,600.00	49.46	61.46	1,385.80	314.01	577.33	1,600,686.46802	2,267,571.54400	39.45394	-108.09422	
1,800.00	49.46	61.46	1,515.79	386.63	710.86	1,600,755.24334	2,267,707.08433	39.45414	-108.09375	
2,000.00	49.46	61.46	1,645.78	459.25	844.39	1,600,824.01866	2,267,842.62467	39.45434	-108.09328	
2,200.00	49.46	61.46	1,775.77	531.88	977.91	1,600,892.79399	2,267,978.16502	39.45454	-108.09281	
2,400.00	49.46	61.46	1,905.75	604.50	1,111.44	1,600,961.56931	2,268,113.70535	39.45474	-108.09233	
2,600.00	49.46	61.46	2,035.74	677.12	1,244.96	1,601,030.34462	2,268,249.24569	39.45494	-108.09186	
2,697.42	49.46	61.46	2,099.06	712.50	1,310.00	1,601,063.84452	2,268,315.26629	39.45504	-108.09163	
Start Drop -1.50°/100										
2,800.00	47.92	61.46	2,166.77	749.32	1,377.69	1,601,098.71064	2,268,383.97940	39.45514	-108.09139	
2,881.47	46.70	61.46	2,222.00	777.93	1,430.30	1,601,125.80661	2,268,437.37931	39.45522	-108.09120	
Top of "G" Sand										
3,000.00	44.92	61.46	2,304.61	818.54	1,504.96	1,601,164.26388	2,268,513.16975	39.45533	-108.09094	
3,024.48	44.56	61.46	2,322.00	826.77	1,520.10	1,601,172.06017	2,268,528.53444	39.45535	-108.09089	
Base of "G" Sand										
3,200.00	41.92	61.46	2,449.85	884.22	1,625.72	1,601,226.46297	2,268,635.74986	39.45551	-108.09051	
3,400.00	38.92	61.46	2,602.09	946.17	1,739.64	1,601,285.13744	2,268,751.38375	39.45568	-108.09011	
3,600.00	35.92	61.46	2,760.90	1,004.24	1,846.40	1,601,340.12646	2,268,859.75445	39.45584	-108.08973	
3,800.00	32.92	61.46	2,925.86	1,058.26	1,945.71	1,601,391.27932	2,268,960.56496	39.45599	-108.08938	
4,000.00	29.92	61.46	3,096.50	1,108.07	2,037.30	1,601,438.45578	2,269,053.53895	39.45612	-108.08905	
4,200.00	26.92	61.46	3,272.37	1,153.55	2,120.92	1,601,481.52657	2,269,138.42157	39.45625	-108.08876	
4,400.00	23.92	61.46	3,452.98	1,194.57	2,196.34	1,601,520.37363	2,269,214.98018	39.45636	-108.08849	
4,600.00	20.92	61.46	3,637.84	1,231.02	2,263.36	1,601,554.89047	2,269,283.00493	39.45646	-108.08825	
4,800.00	17.92	61.46	3,826.43	1,262.80	2,321.78	1,601,584.98249	2,269,342.30938	39.45655	-108.08805	
4,889.60	16.58	61.46	3,912.00	1,275.49	2,345.12	1,601,597.00656	2,269,366.00606	39.45658	-108.08796	
Mesaverde										
5,000.00	14.92	61.46	4,018.25	1,289.81	2,371.45	1,601,610.56720	2,269,392.73097	39.45662	-108.08787	
5,200.00	11.92	61.46	4,212.76	1,312.00	2,412.24	1,601,631.57449	2,269,434.13151	39.45668	-108.08773	
5,400.00	8.92	61.46	4,409.44	1,329.28	2,444.02	1,601,647.94677	2,269,466.39750	39.45673	-108.08761	
5,600.00	5.92	61.46	4,607.74	1,341.63	2,466.72	1,601,659.63917	2,269,489.44053	39.45676	-108.08753	
5,800.00	2.92	61.46	4,807.12	1,349.00	2,480.28	1,601,666.61963	2,269,503.19741	39.45679	-108.08749	
5,994.97	0.00	0.00	5,002.00	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
Vertical										
6,000.00	0.00	0.00	5,007.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
6,094.97	0.00	0.00	5,102.00	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
Top Gas - Approx. Top Gas										
6,200.00	0.00	0.00	5,207.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
6,400.00	0.00	0.00	5,407.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
6,600.00	0.00	0.00	5,607.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 41-10 - Slot B18
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 41-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 08Aug14 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	5,807.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
7,000.00	0.00	0.00	6,007.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
7,200.00	0.00	0.00	6,207.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
7,364.97	0.00	0.00	6,372.00	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
Cameo Coals										
7,400.00	0.00	0.00	6,407.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
7,600.00	0.00	0.00	6,607.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
7,800.00	0.00	0.00	6,807.03	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
7,844.97	0.00	0.00	6,852.00	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
Rollins SS										
7,944.97	0.00	0.00	6,952.00	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679	-108.08747	
TD at 7944.97 - TD										

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) GM	0.00	0.00	5,102.00	1,351.38	2,484.65	1,601,668.87053	2,269,507.63342	39.45679		-108.08747
- plan hits target center										
- Circle (radius 50.00)										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (in)	Hole Diameter (in)
1,489.02	1,313.67	9 5/8"		9.625	13.500

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,881.47	2,222.00	Top of "G" Sand				
3,024.48	2,322.00	Base of "G" Sand				
4,889.60	3,912.00	Mesaverde				
6,094.97	5,102.00	Approx. Top Gas				
7,364.97	6,372.00	Cameo Coals				
7,844.97	6,852.00	Rollins SS				
7,944.97	6,952.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 41-10 - Slot B18
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 41-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 08Aug14 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 3.75
1,439.02	1,281.18	255.55	469.86	Hold 49.46° Inc, 61.46° Az
2,697.42	2,099.06	712.50	1,310.00	Start Drop -1.50°/100
5,994.97	5,002.00	1,351.38	2,484.65	Vertical
6,094.97	5,102.00	1,351.38	2,484.65	Top Gas
7,944.97	6,952.00	1,351.38	2,484.65	TD at 7944.97