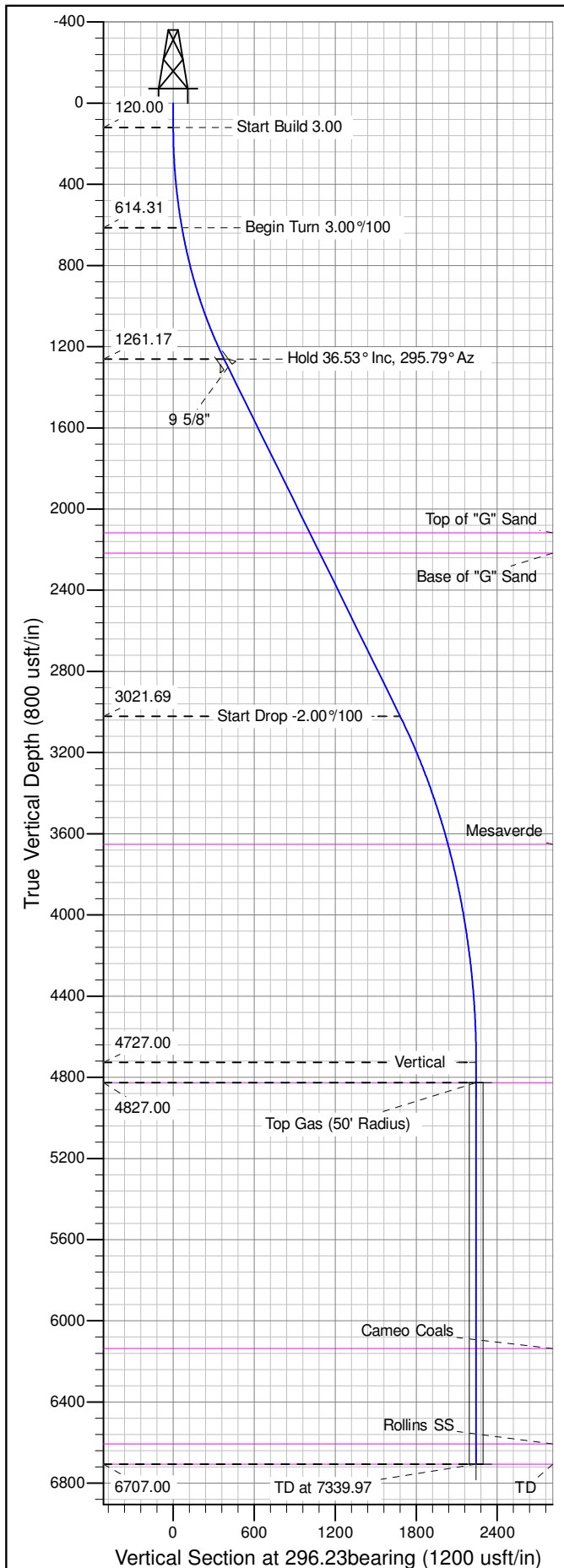
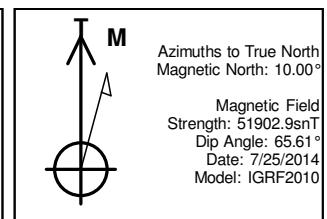
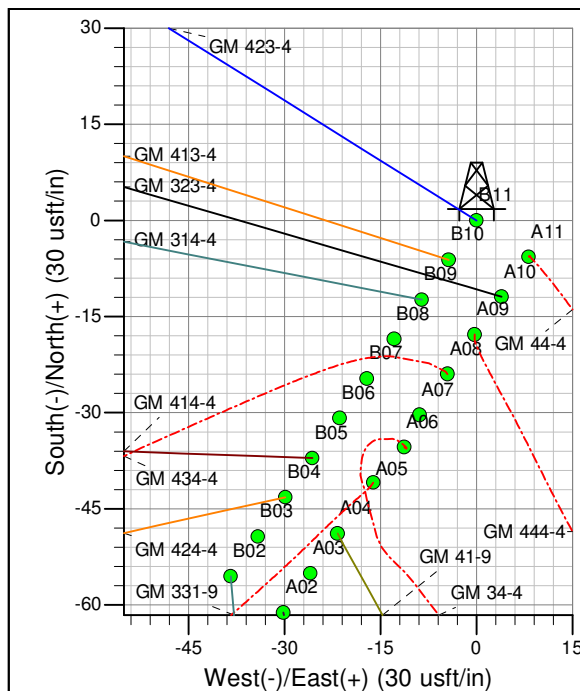
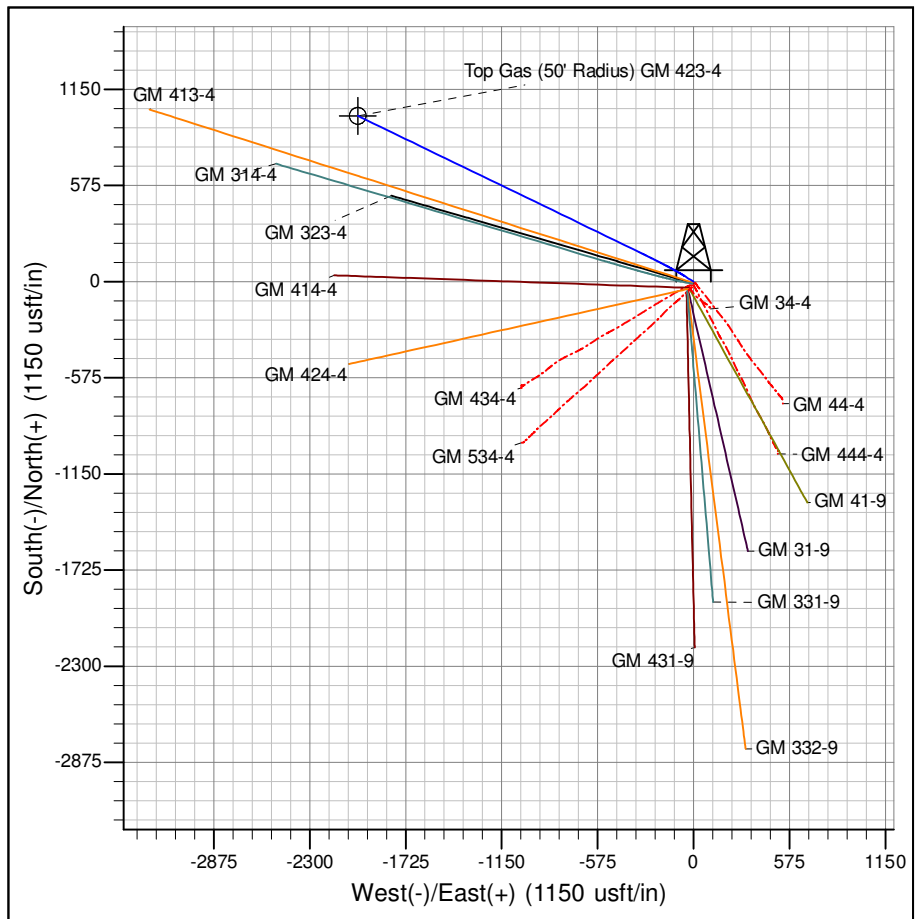




Well Name: GM 423-4
Surface Location: GM 34-4 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6023.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1603699.50000 2263186.40000 39.461867 -108.110052 B11
KELLY BUSHING @ 6047.00usft (H&P 318 (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	0.00	Start Build 3.00
614.31	620.00	15.00	302.00	34.49	-55.19	64.75	65.08	65.08	Begin Turn 3.00°/100
1261.17	1342.41	36.53	295.79	179.31	-331.36	376.49	377.04	377.04	Hold 36.53° Inc, 295.79° Az
3021.69	3533.39	36.53	295.79	746.82	-1505.64	1680.67	1681.26	1681.26	Start Drop -2.00°/100
4727.00	5359.97	0.00	358.35	991.73	-2012.41	2243.51	2244.11	2244.11	Vertical
4827.00	5459.97	0.00	0.00	991.73	-2012.41	2243.51	2244.11	2244.11	Top Gas
6707.00	7339.97	0.00	358.35	991.73	-2012.41	2243.51	2244.11	2244.11	TD at 7339.97



Project: GV 04-07S-096W
Site: GM 34-4 Pad
Well: GM 423-4
Design #1 25Jul14 mab

PICEANCE VLY NAD 83

GV 04-07S-096W

GM 34-4 Pad

GM 423-4 - Slot B11

Wellbore #1

Plan: Design #1 25Jul14 mab

Standard Planning Report - Geographic

25 September, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 423-4 - Slot B11
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6047.00usft (H&P 318 (24' RKB) mab)
Project:	GV 04-07S-096W	MD Reference:	KELLY BUSHING @ 6047.00usft (H&P 318 (24' RKB) mab)
Site:	GM 34-4 Pad	North Reference:	True
Well:	GM 423-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25Jul14 mab		

Project	GV 04-07S-096W, Garfield County, CO, 04-07S-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	GM 34-4 Pad			
Site Position:		Northing:	1,603,693.60000 usft	Latitude: 39.461851
From: Map		Easting:	2,263,194.40000 usft	Longitude: -108.110023
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.65 °

Well	GM 423-4 - Slot B11			
Well Position	+N/-S	0.00 usft	Northing:	1,603,699.50000 usft
	+E/-W	0.00 usft	Easting:	2,263,186.40000 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	6,023.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/25/2014	10.00	65.61	51,903

Design	Design #1 25Jul14 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	296.23

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	
620.00	15.00	302.00	614.31	34.49	-55.19	3.00	3.00	0.00	302.00	
1,342.41	36.53	295.79	1,261.17	179.31	-331.36	3.00	2.98	-0.86	-10.04	
3,533.39	36.53	295.79	3,021.69	746.82	-1,505.64	0.00	0.00	0.00	0.00	
5,359.97	0.00	358.35	4,727.00	991.73	-2,012.41	2.00	-2.00	0.00	180.00	
7,339.97	0.00	358.35	6,707.00	991.73	-2,012.41	0.00	0.00	0.00	0.00	TD / PBHL GM 423-4

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 423-4 - Slot B11
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6047.00usft (H&P 318 (24' RKB) mab)
Project:	GV 04-07S-096W	MD Reference:	KELLY BUSHING @ 6047.00usft (H&P 318 (24' RKB) mab)
Site:	GM 34-4 Pad	North Reference:	True
Well:	GM 423-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25Jul14 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	1,603,699.50000	2,263,186.40000	39.461867	-108.110052	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,699.50000	2,263,186.40000	39.461867	-108.110052	
Start Build 3.00										
200.00	2.40	302.00	199.98	0.89	-1.42	1,603,700.42817	2,263,185.00544	39.461869	-108.110057	
400.00	8.40	302.00	399.00	10.86	-17.38	1,603,710.85131	2,263,169.34472	39.461897	-108.110113	
600.00	14.40	302.00	594.96	31.80	-50.88	1,603,732.74322	2,263,136.45224	39.461954	-108.110232	
620.00	15.00	302.00	614.31	34.49	-55.19	1,603,735.55503	2,263,132.22750	39.461962	-108.110247	
Begin Turn 3.00°/100										
800.00	20.34	299.30	785.76	62.16	-102.26	1,603,764.56503	2,263,085.97428	39.462038	-108.110414	
1,000.00	26.30	297.54	969.34	99.68	-171.92	1,603,804.07629	2,263,017.42393	39.462141	-108.110661	
1,200.00	32.27	296.40	1,143.70	143.95	-259.11	1,603,850.82807	2,262,931.54343	39.462262	-108.110970	
1,342.41	36.53	295.79	1,261.17	179.31	-331.36	1,603,888.25081	2,262,860.34195	39.462359	-108.111225	
Hold 36.53° Inc, 295.79° Az										
1,392.41	36.53	295.79	1,301.35	192.27	-358.16	1,603,901.96645	2,262,833.92643	39.462395	-108.111320	
9 5/8"										
1,400.00	36.53	295.79	1,307.45	194.23	-362.23	1,603,904.04834	2,262,829.91682	39.462400	-108.111335	
1,600.00	36.53	295.79	1,468.15	246.04	-469.42	1,603,958.90717	2,262,724.26189	39.462542	-108.111714	
1,800.00	36.53	295.79	1,628.86	297.84	-576.61	1,604,013.76600	2,262,618.60695	39.462685	-108.112094	
2,000.00	36.53	295.79	1,789.57	349.64	-683.80	1,604,068.62483	2,262,512.95202	39.462827	-108.112474	
2,200.00	36.53	295.79	1,950.27	401.45	-791.00	1,604,123.48366	2,262,407.29709	39.462969	-108.112853	
2,400.00	36.53	295.79	2,110.98	453.25	-898.19	1,604,178.34249	2,262,301.64216	39.463111	-108.113233	
2,407.50	36.53	295.79	2,117.00	455.19	-902.21	1,604,180.39840	2,262,297.68257	39.463117	-108.113247	
Top of "G" Sand										
2,531.95	36.53	295.79	2,217.00	487.43	-968.91	1,604,214.53463	2,262,231.93817	39.463205	-108.113483	
Base of "G" Sand										
2,600.00	36.53	295.79	2,271.68	505.05	-1,005.38	1,604,233.20131	2,262,195.98722	39.463254	-108.113613	
2,800.00	36.53	295.79	2,432.39	556.86	-1,112.57	1,604,288.06014	2,262,090.33229	39.463396	-108.113992	
3,000.00	36.53	295.79	2,593.09	608.66	-1,219.76	1,604,342.91897	2,261,984.67736	39.463538	-108.114372	
3,200.00	36.53	295.79	2,753.80	660.46	-1,326.96	1,604,397.77780	2,261,879.02243	39.463680	-108.114752	
3,400.00	36.53	295.79	2,914.51	712.27	-1,434.15	1,604,452.63663	2,261,773.36749	39.463822	-108.115131	
3,533.39	36.53	295.79	3,021.69	746.82	-1,505.64	1,604,489.22397	2,261,702.90239	39.463917	-108.115385	
Start Drop -2.00°/100										
3,600.00	35.20	295.79	3,075.67	763.80	-1,540.78	1,604,507.20706	2,261,668.26801	39.463964	-108.115509	
3,800.00	31.20	295.79	3,242.99	811.44	-1,639.36	1,604,557.65855	2,261,571.10135	39.464095	-108.115858	
4,000.00	27.20	295.79	3,417.54	853.89	-1,727.19	1,604,602.60894	2,261,484.52949	39.464211	-108.116169	
4,200.00	23.20	295.79	3,598.47	890.93	-1,803.84	1,604,641.83924	2,261,408.97419	39.464313	-108.116441	
4,258.00	22.04	295.79	3,652.00	900.64	-1,823.93	1,604,652.11729	2,261,389.17927	39.464339	-108.116512	
Mesaverde										
4,400.00	19.20	295.79	3,784.89	922.39	-1,868.95	1,604,675.15832	2,261,344.80357	39.464399	-108.116671	
4,600.00	15.20	295.79	3,975.91	948.12	-1,922.18	1,604,702.40385	2,261,292.33024	39.464470	-108.116860	
4,800.00	11.20	295.79	4,170.59	967.99	-1,963.29	1,604,723.44311	2,261,251.80987	39.464524	-108.117006	
5,000.00	7.20	295.79	4,367.98	981.90	-1,992.08	1,604,738.17357	2,261,223.43984	39.464562	-108.117107	
5,200.00	3.20	295.79	4,567.11	989.78	-2,008.39	1,604,746.52349	2,261,207.35838	39.464584	-108.117165	
5,359.97	0.00	358.35	4,727.00	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
Vertical										
5,400.00	0.00	0.00	4,767.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
5,459.97	0.00	0.00	4,827.00	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
Top Gas - Approx. Top Gas										
5,600.00	0.00	0.00	4,967.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
5,800.00	0.00	0.00	5,167.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
6,000.00	0.00	0.00	5,367.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 423-4 - Slot B11
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6047.00usft (H&P 318 (24' RKB) mab)
Project:	GV 04-07S-096W	MD Reference:	KELLY BUSHING @ 6047.00usft (H&P 318 (24' RKB) mab)
Site:	GM 34-4 Pad	North Reference:	True
Well:	GM 423-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25Jul14 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	
6,200.00	0.00	0.00	5,567.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
6,400.00	0.00	0.00	5,767.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
6,600.00	0.00	0.00	5,967.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
6,769.97	0.00	0.00	6,137.00	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
Cameo Coals										
6,800.00	0.00	0.00	6,167.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
7,000.00	0.00	0.00	6,367.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
7,200.00	0.00	0.00	6,567.03	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
7,239.97	0.00	0.00	6,607.00	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
Rollins SS										
7,339.97	0.00	358.35	6,707.00	991.73	-2,012.41	1,604,748.58103	2,261,203.39567	39.464589	-108.117179	
TD at 7339.97										

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 hits target center - Circle (radius 50.00)	0.00	358.35	4,827.00	991.73	-2,012.41	1,604,748.58104	2,261,203.39567	39.464589	-108.117179	
TD / PBHL GM 423-4 - plan hits target center - Point	0.00	0.00	6,707.00	991.73	-2,012.41	1,604,748.58104	2,261,203.39567	39.464589	-108.117179	

Casing Points									
	Measured Depth (usft)	Vertical Depth (usft)	Name				Casing Diameter (in)	Hole Diameter (in)	
	1,392.41	1,301.35	9 5/8"				9.625	13.500	

Formations									
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)			
	2,407.50	2,117.00	Top of "G" Sand						
	2,531.95	2,217.00	Base of "G" Sand						
	4,258.00	3,652.00	Mesaverde						
	5,459.97	4,827.00	Approx. Top Gas						
	6,769.97	6,137.00	Cameo Coals						
	7,239.97	6,607.00	Rollins SS						
	7,339.97	6,707.00	TD						

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 423-4 - Slot B11
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6047.00usft (H&P 318 (24' RKB) mab)
Project:	GV 04-07S-096W	MD Reference:	KELLY BUSHING @ 6047.00usft (H&P 318 (24' RKB) mab)
Site:	GM 34-4 Pad	North Reference:	True
Well:	GM 423-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25Jul14 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 3.00
620.00	614.31	34.49	-55.19	Begin Turn 3.00°/100
1,342.41	1,261.17	179.31	-331.36	Hold 36.53° Inc, 295.79° Az
3,533.39	3,021.69	746.82	-1,505.64	Start Drop -2.00°/100
5,359.97	4,727.00	991.73	-2,012.41	Vertical
5,459.97	4,827.00	991.73	-2,012.41	Top Gas
7,339.97	6,707.00	991.73	-2,012.41	TD at 7339.97