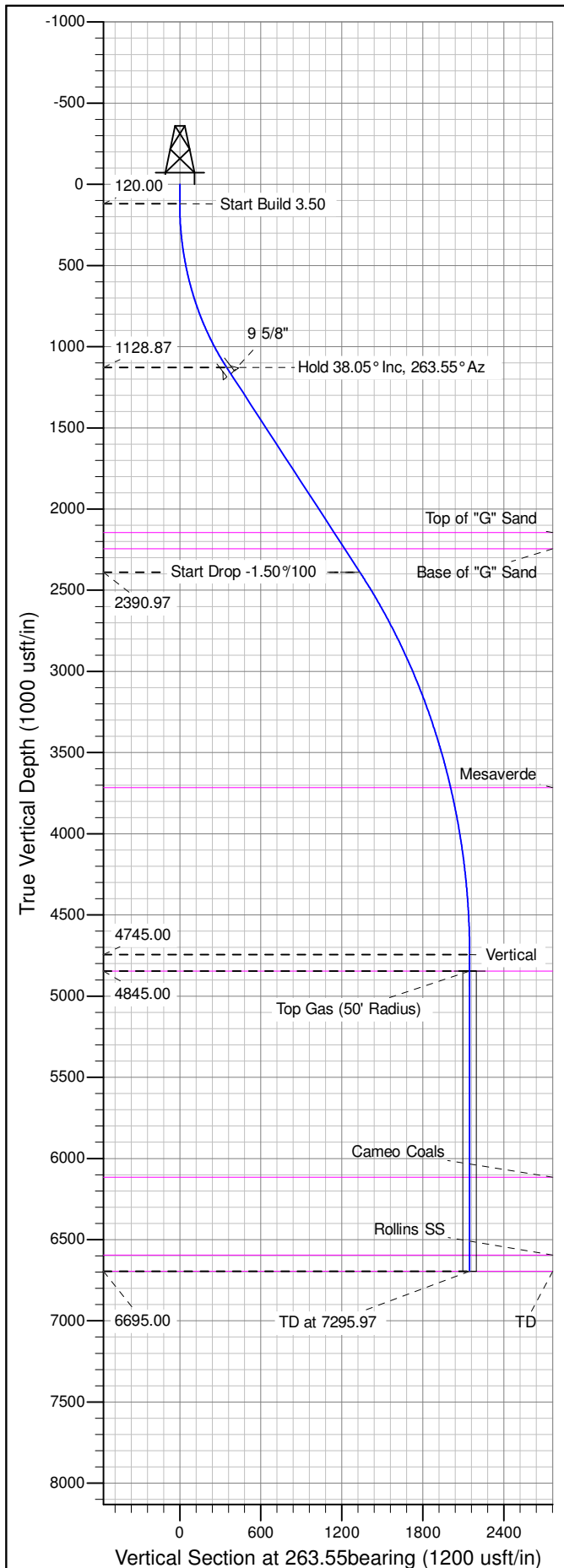
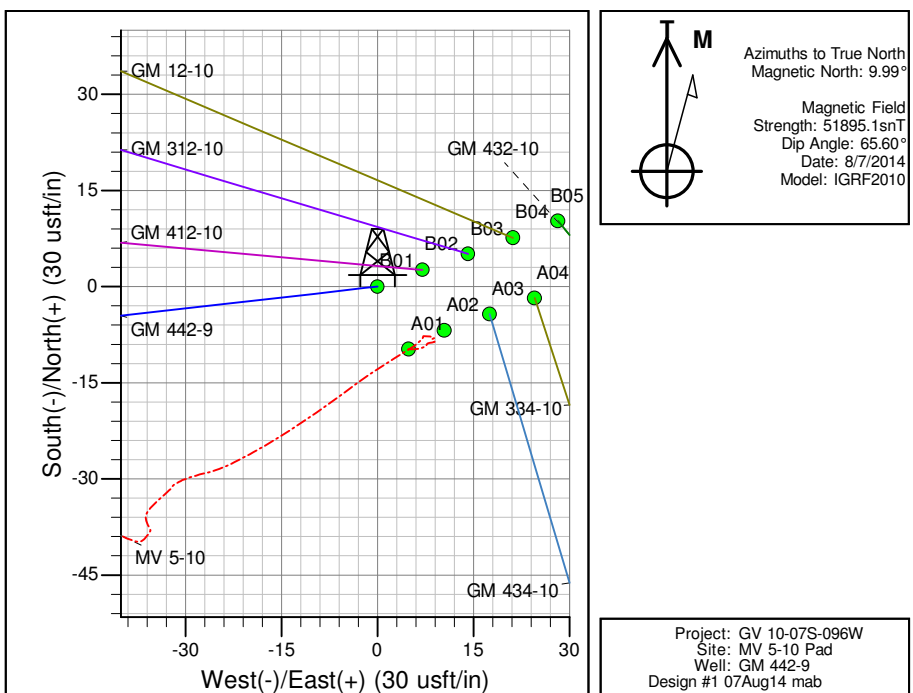
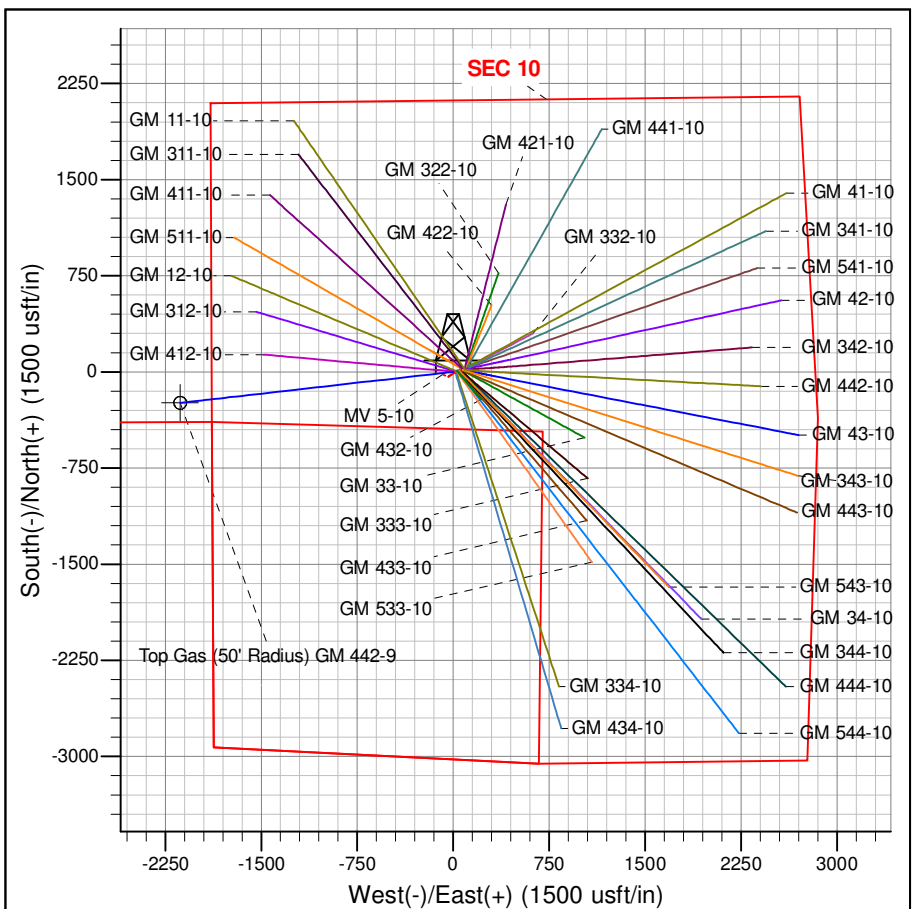




Well Name: GM 442-9
Surface Location: MV 5-10 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6148.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1600349.50 2266864.30 39.45296 -108.09669 B01
KELLY BUSHING @ 6174.00usft (Nabors (26' RKB) 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 3.50	
1128.87	1207.00	38.05	263.55	-39.06	-345.63	347.83	347.83	Hold 38.05° Inc, 263.55° Az	
2390.97	2809.63	38.05	263.55	-149.97	-1327.05	1335.49	1335.49	Start Drop -1.50°/100	
4745.00	5345.97	0.00	0.00	-241.11	-2133.51	2147.09	2147.09	Vertical	
4845.00	5445.97	0.00	0.00	-241.11	-2133.51	2147.09	2147.09	Top Gas	
6695.00	7295.97	0.00	0.00	-241.11	-2133.51	2147.09	2147.09	TD at 7295.97	



PICEANCE VLY NAD 83

GV 10-07S-096W

MV 5-10 Pad

GM 442-9 - Slot B01

Wellbore #1

Plan: Design #1 07Aug14 mab

Standard Planning Report - Geographic

14 October, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 442-9 - Slot B01
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 442-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Aug14 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 442-9 - Slot B01			
Well Position	+N/-S	0.00 usft	Northing:	1,600,349.50000 usft
	+E/-W	0.00 usft	Easting:	2,266,864.30000 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	8/7/2014	9.99	65.60	51,895

Design	Design #1 07Aug14 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	263.55

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	
1,207.00	38.05	263.55	1,128.87	-39.06	-345.63	3.50	3.50	0.00	263.55	
2,809.63	38.05	263.55	2,390.97	-149.97	-1,327.05	0.00	0.00	0.00	0.00	
5,345.97	0.00	0.00	4,745.00	-241.11	-2,133.51	1.50	-1.50	0.00	180.00	
5,445.97	0.00	0.00	4,845.00	-241.11	-2,133.51	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
7,295.97	0.00	0.00	6,695.00	-241.11	-2,133.51	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 442-9 - Slot B01
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 442-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Aug14 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	1,600,349.50000	2,266,864.30000	39.45296	-108.09669	
120.00	0.00	0.00	120.00	0.00	0.00	1,600,349.50000	2,266,864.30000	39.45296	-108.09669	
Start Build 3.50										
200.00	2.80	263.55	199.97	-0.22	-1.94	1,600,349.33612	2,266,862.35259	39.45296	-108.09670	
400.00	9.80	263.55	398.64	-2.68	-23.74	1,600,347.49704	2,266,840.49761	39.45296	-108.09678	
600.00	16.80	263.55	593.15	-7.85	-69.43	1,600,343.64154	2,266,794.68029	39.45294	-108.09694	
800.00	23.80	263.55	780.61	-15.63	-138.33	1,600,337.82709	2,266,725.58365	39.45292	-108.09718	
1,000.00	30.80	263.55	958.23	-25.93	-229.43	1,600,330.14038	2,266,634.23777	39.45289	-108.09751	
1,200.00	37.80	263.55	1,123.34	-38.58	-341.35	1,600,320.69601	2,266,522.00440	39.45286	-108.09790	
1,207.00	38.05	263.55	1,128.87	-39.06	-345.63	1,600,320.33504	2,266,517.71487	39.45286	-108.09792	
Hold 38.05° Inc, 263.55° Az										
1,257.00	38.05	263.55	1,168.24	-42.52	-376.24	1,600,317.75153	2,266,487.01338	39.45285	-108.09803	
9 5/8"										
1,400.00	38.05	263.55	1,280.86	-52.42	-463.81	1,600,310.36203	2,266,399.19937	39.45282	-108.09834	
1,600.00	38.05	263.55	1,438.36	-66.26	-586.29	1,600,300.02706	2,266,276.38256	39.45278	-108.09877	
1,800.00	38.05	263.55	1,595.87	-80.10	-708.77	1,600,289.69209	2,266,153.56574	39.45274	-108.09920	
2,000.00	38.05	263.55	1,753.37	-93.94	-831.24	1,600,279.35712	2,266,030.74894	39.45271	-108.09964	
2,200.00	38.05	263.55	1,910.88	-107.78	-953.72	1,600,269.02215	2,265,907.93212	39.45267	-108.10007	
2,400.00	38.05	263.55	2,068.38	-121.62	-1,076.20	1,600,258.68718	2,265,785.11531	39.45263	-108.10050	
2,497.29	38.05	263.55	2,145.00	-128.36	-1,135.78	1,600,253.65976	2,265,725.37138	39.45261	-108.10072	
Top of "G" Sand										
2,600.00	38.05	263.55	2,225.89	-135.47	-1,198.67	1,600,248.35221	2,265,662.29849	39.45259	-108.10094	
2,624.27	38.05	263.55	2,245.00	-137.14	-1,213.54	1,600,247.09809	2,265,647.39496	39.45259	-108.10099	
Base of "G" Sand										
2,800.00	38.05	263.55	2,383.39	-149.31	-1,321.15	1,600,238.01724	2,265,539.48169	39.45255	-108.10137	
2,809.63	38.05	263.55	2,390.97	-149.97	-1,327.05	1,600,237.51968	2,265,533.56893	39.45255	-108.10139	
Start Drop -1.50°/100										
3,000.00	35.19	263.55	2,543.76	-162.72	-1,439.87	1,600,227.99954	2,265,420.43516	39.45252	-108.10179	
3,200.00	32.19	263.55	2,710.15	-175.18	-1,550.09	1,600,218.69848	2,265,309.90487	39.45248	-108.10218	
3,400.00	29.19	263.55	2,882.12	-186.64	-1,651.51	1,600,210.14035	2,265,208.20328	39.45245	-108.10254	
3,600.00	26.19	263.55	3,059.20	-197.08	-1,743.85	1,600,202.34860	2,265,115.60914	39.45242	-108.10287	
3,800.00	23.19	263.55	3,240.89	-206.46	-1,826.85	1,600,195.34460	2,265,032.37625	39.45240	-108.10316	
4,000.00	20.19	263.55	3,426.71	-214.76	-1,900.29	1,600,189.14754	2,264,958.73275	39.45237	-108.10342	
4,200.00	17.19	263.55	3,616.14	-221.95	-1,963.97	1,600,183.77440	2,264,894.88049	39.45235	-108.10365	
4,303.06	15.64	263.55	3,715.00	-225.22	-1,992.91	1,600,181.33215	2,264,865.85769	39.45235	-108.10375	
Mesaverde										
4,400.00	14.19	263.55	3,808.67	-228.03	-2,017.70	1,600,179.23992	2,264,840.99449	39.45234	-108.10384	
4,600.00	11.19	263.55	4,003.76	-232.96	-2,061.36	1,600,175.55653	2,264,797.22243	39.45232	-108.10399	
4,800.00	8.19	263.55	4,200.89	-236.74	-2,094.80	1,600,172.73431	2,264,763.68429	39.45231	-108.10411	
5,000.00	5.19	263.55	4,399.50	-239.35	-2,117.95	1,600,170.78101	2,264,740.47201	39.45231	-108.10419	
5,200.00	2.19	263.55	4,599.06	-240.80	-2,130.74	1,600,169.70198	2,264,727.64920	39.45230	-108.10424	
5,345.97	0.00	0.00	4,745.00	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425	
Vertical										
5,400.00	0.00	0.00	4,799.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425	
5,445.97	0.00	0.00	4,845.00	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425	
Top Gas - Approx. Top Gas										
5,600.00	0.00	0.00	4,999.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425	
5,800.00	0.00	0.00	5,199.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425	
6,000.00	0.00	0.00	5,399.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425	
6,200.00	0.00	0.00	5,599.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425	
6,400.00	0.00	0.00	5,799.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425	
6,600.00	0.00	0.00	5,999.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 442-9 - Slot B01
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 442-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Aug14 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
6,715.97	0.00	0.00	6,115.00	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425
Cameo Coals									
6,800.00	0.00	0.00	6,199.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425
7,000.00	0.00	0.00	6,399.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425
7,195.97	0.00	0.00	6,595.00	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425
Rollins SS									
7,200.00	0.00	0.00	6,599.03	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425
7,295.97	0.00	0.00	6,695.00	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425
TD at 7295.97 - 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) G1 - plan hits target center - Circle (radius 50.00)	0.00	0.00	4,845.00	-241.11	-2,133.51	1,600,169.46813	2,264,724.87029	39.45230	-108.10425

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,257.00	1,168.24	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,497.29	2,145.00	Top of "G" Sand				
2,624.27	2,245.00	Base of "G" Sand				
4,303.06	3,715.00	Mesaverde				
5,445.97	4,845.00	Approx. Top Gas				
6,715.97	6,115.00	Cameo Coals				
7,195.97	6,595.00	Rollins SS				
7,295.97	6,695.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 442-9 - Slot B01
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 442-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Aug14 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
1,207.00	1,128.87	-39.06	-345.63	Hold 38.05° Inc, 263.55° Az
2,809.63	2,390.97	-149.97	-1,327.05	Start Drop -1.50°/100
5,345.97	4,745.00	-241.11	-2,133.51	Vertical
5,445.97	4,845.00	-241.11	-2,133.51	Top Gas
7,295.97	6,695.00	-241.11	-2,133.51	TD at 7295.97