

#### WEEKLY PETROLEUM SUPPLY-DEMAND TRENDS

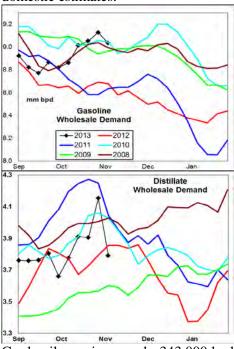
A Fundamental Petroleum Trends Weekly Report

Lehi German Tel: 816.505.0980 www.fundamentalpetroleumtrends.com Thursday, November 14, 2013



#### Major Fundamental Trends<sup>1</sup>

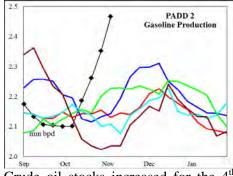
Wholesale demand for gasoline fell -0.3 million bpd last week, although the 4-wk average was +0.4 million bpd above a year ago. Distillate wholesale demand plunged -0.7 million bpd to a level below last year. Jet fuel demand surged +0.2 million bpd to a record high. These high levels of demand and volatile week to week swings point to a likely inclusion of exports into the domestic estimates.



Crude oil runs increased +343,000 bpd last week with the increase concentrated in the Gulf as plants in the region began to return from maintenance.

Crude oil runs in the Midwest are nearly +0.2 million bpd above last year for the most recent 4-wk period. Combined with the switch to sub octane gasoline by a major products pipeline and winter grade product, gasoline production has soared. This very high level of output is confirmed by the record low cash basis in the region.





Crude oil stocks increased for the 4<sup>th</sup> consecutive week in Cushing OK, with the build of +5.3 million barrels leading to a record rate of stock build in this market during the last 4-wks.

Demand for gasoline and distillate surged for the 2<sup>nd</sup> consecutive week. Jet fuel demand plunged. Wholesale demand, measured over the last four weeks compared to a year ago: gasoline increased +5.4%; distillate was +8.2% higher; jet fuel was -5.7% lower, and residual decreased -30%.

Stocks forward coverage: Gasoline demand coverage declined on a -0.8 million barrel stock draw, and robust demand. Coverage ended the week at a level which matched the 3-yr mid range.

Distillate coverage increased on a -0.5 million barrel stock draw which was more than offset by a -0.7 million bpd drop in wholesale demand. Coverage levels remain below the 5-yr range.

Jet fuel coverage fell on a -1.2 million barrel stock draw and +0.3 million bpd jump in wholesale demand. Coverage levels fell below the 5-yr range.

Residual fuel oil coverage remains exceptionally high on very low demand.

Refinery utilization rates increased on a +343,000 bpd rise in crude oil runs. During the latest 4-wk period crude oil input was +0.4 million bpd above a year ago.

Gasoline yield % on crude oil runs surged on a +1.1 million bpd rise in output compared to the +343,000 bpd rise in crude oil runs. Yield % on crude oil runs ended the week at a

level comparable to a year ago.

Distillate yield % on crude oil runs fell sharply last week, on a +5,000 bpd rise in output compared to the large increase in crude oil thru put. The yield % on crude oil runs matched 5-yr highs.

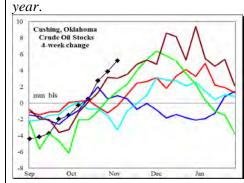
Jet fuel yield % on crude oil runs fell on a +12,000 bpd rise in output, compared the large increase in crude oil runs. The yield % level was above the 5-yr range.

Petroleum Imports/Exports: Imports of crude oil, climbed +0.6 million bpd last week. Imports of distillate fell -96,000 bpd, from the prior week record high level.

During the latest 4-wk period crude oil *imports* were -0.6 million bpd below last year; distillate imports were +66,000 bpd higher; finished gasoline imports decreased -12,000 bpd, gasoline blend stock imports were -18,000 bpd lower; jet fuel imports decreased -29,000 bpd, while residual fuel oil imports were -134,000 bpd lower.

The latest weekly *export* estimate saw a +56,000 bpd increase in gasoline, a +349,000 bpd jump in distillate and +73,000 bpd rise in jet fuel compared to a year ago.

Crude Oil stocks increased +2.6 million barrels last week, including a +3 million barrel build in the Midwest. Imports jumped +0.8 million bpd in the Gulf, contributing to a build in that region for the week. Cushing stocks have increased +5.3 million barrels in the last 4-wks; driving the 4-wk rate of build to a record high for this time of





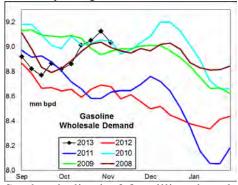
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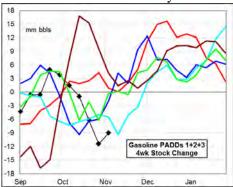
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#### **Product Supply-Demand Trends**

Gasoline wholesale demand fell 260,000 bpd last week to level which matched historic highs. The latest 4wk average demand was +406,000 bpd above a year ago. Supply reversed last week's plunge, rising +1.1 million bpd on higher production. Supply for the latest 4-wk period was +29,000 bpd above a year ago.



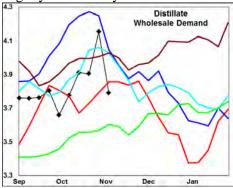
Stocks declined -0.8 million barrels last week, ending at a level above the historic mid range. The latest 4-wk stock change in markets East of the Rockies was a -9 million barrel draw, a record draw for this time of year.



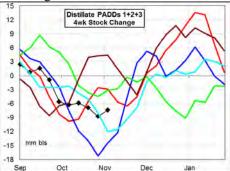
Refinery maintenance on the East Coast and Eastern Canada, combined with low imports has created a supply squeeze in the region. Look for a seasonal downtrend in demand and return of East Coast region plants to lead to stock building over the next 2months.

Distillate wholesale demand plunged -722,000 bpd last week, falling to a level below last year. The latest 4-wk average demand was +256,000 bpd above last year. Supply increased +91,000 bpd last week on sharply lower imports. The latest 4-wk

average supply was +473,000 bpd above last year. Stocks decreased -0.5 million barrels on the week, to a level slightly above last years' record low.



change 4-wk stock latest markets East of the Rockies was a -7.3 million barrel draw, less than the 3-yr mid range.



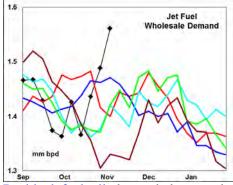
Look for production to reach a seasonal peak over the next 60days, with a pull back in wholesale As a result, look for meaningful stock builds by late December and early January. Significant fuel switching in the Northeast to natural gas will reduce the impact of winter heating on distillate supplies.

Jet Fuel wholesale demand jumped +328,000 bpd last week. The latest 4wk average demand was unchanged from a year ago.

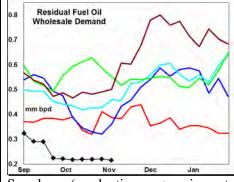
Supplies increased +14,000 bpd on the week, driven by production nearly +100,000 bpd above last year for the most recent week. Supply for the latest 4-wk period was +5,000 bpd above a year ago. Stocks fell -1.2 million barrels last week, with the level -10% below a year ago.

Record production should lead to

modest stock building as refiners return from maintenance. Stock levels remian below the historic range on the East Coast and in the Midwest.



Residual fuel oil demand decreased -18,000 bpd last week. Demand for the latest 4-wk period was -114,000 bpd below a year ago.



(production imports) increased +54,000 bpd on higher production. Production remains -18% below a year ago. Stock levels ended the week at a level well below the last 5-yrs.

Production in the Gulf region was -97,000 bpd (-35%) below a year ago for the most recent 4-wks. Imports to the region were -96,000 bpd below last year (-93%). Even with the collapse in residual fuel oil supplies, the industry has failed to liquidate stocks which are equal to nearly 200 days supply.



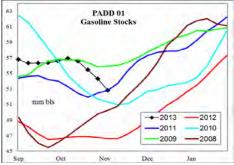
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#### **PADD Supply Trends**

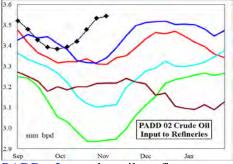
PADD 1 refinery crude oil runs increased +46,000 bpd last week; with the latest 4-wk average +2% above last year.



Gasoline supply increased +56,000 bpd on the week. The -1.2 million barrel stock draw last week was driven by refinery FCCU maintenance and low imports.

Distillate declined -66,000 bpd last week, with the 4-wk average +60,000 bpd above a year ago. Stocks declined -0.6 million barrels on the week, to a level that matched last year.

Jet fuel stocks fell -1.1 million barrels on the week, to a record low level for this time of year.



PADD 2 crude oil refinery runs increased +27,000 bpd last week, with the latest 4-wk average +187,000 bpd above last year. Crude oil stocks increased +3 including a +1.7 million barrel build in Cushing. Stocks in Cushing have seen four consecutive weekly builds totaling 5.3 million barrels.

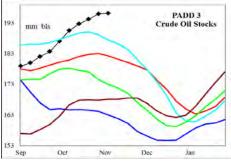
Gasoline production increased +25,000 bpd last week to a new record high level as refiners restarted FCCU's, converting in-process to finished gasoline. Stocks increased +0.1 million barrels on the week, to a

level above the 3-yr mid range.

Distillate supply increased +3,000 bpd last week, a level sharply above the 5-yr range. Stocks decreased -1.2 million barrels to a level near 5-yr lows.

Jet fuel production decreased - 10,000 bpd although the level remains at a record high for the winter quarter. Stock levels ended the week -20% below a year ago and well below the 5-yr range.

PADD 3 refinery runs increased +303,000 bpd last week with the level slightly above a year ago. During the latest 4-wk period, average runs were -28,000 bpd below last year. Crude oil stocks increased +1.4 million barrels last week, on a +0.8 million bpd jump in imports.



Gasoline supply climbed +209,000 bpd on the week, with the latest 4-wk average -85,000 bpd below a year ago. Stocks increased +0.3 million barrels last week, to a level near the 3-yr mid range.

Distillate supply increased +50,000 bpd on the week, with the latest 4-wk average supply +250,000 bpd above last year. Stocks increased +1.4 million barrels last week, to a level +3% above a year ago.

Jet fuel production increased +44,000 bpd on the week, to a level above 5-yr highs. Stocks increased +0.3 million barrels on the week to a level -5% below a year ago.

Residual fuel supply was -193,000 bpd below last year and a record low for this time of year. Stock levels remain at the upper end of the historic range.

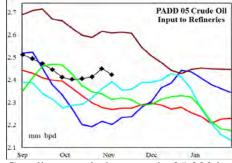
PADD 4 refinery crude runs increased

+6,000 bpd last week, to a level above the historic range. Crude oil stock levels were +11% above the previous record high, even with imports -9% below a year ago.

Gasoline production increased +24,000 bpd on the week, to a level +35,000 bpd above the last 2-yrs. Stocks levels matched 5-yr highs for the week.

Distillate production fell -32,000 bpd on the week, to a record low level for the period. Stocks increased +0.3 million barrels on the week, to a level above the historic range.

Jet fuel production matched historic highs for this time of year, with stock levels below the last 3-yrs. PADD 5 crude oil refinery runs decreased -40,000 bpd last week with the level still above four of the last 5-yrs. The latest 4-wk run rate was +143,000 bpd above a year ago.



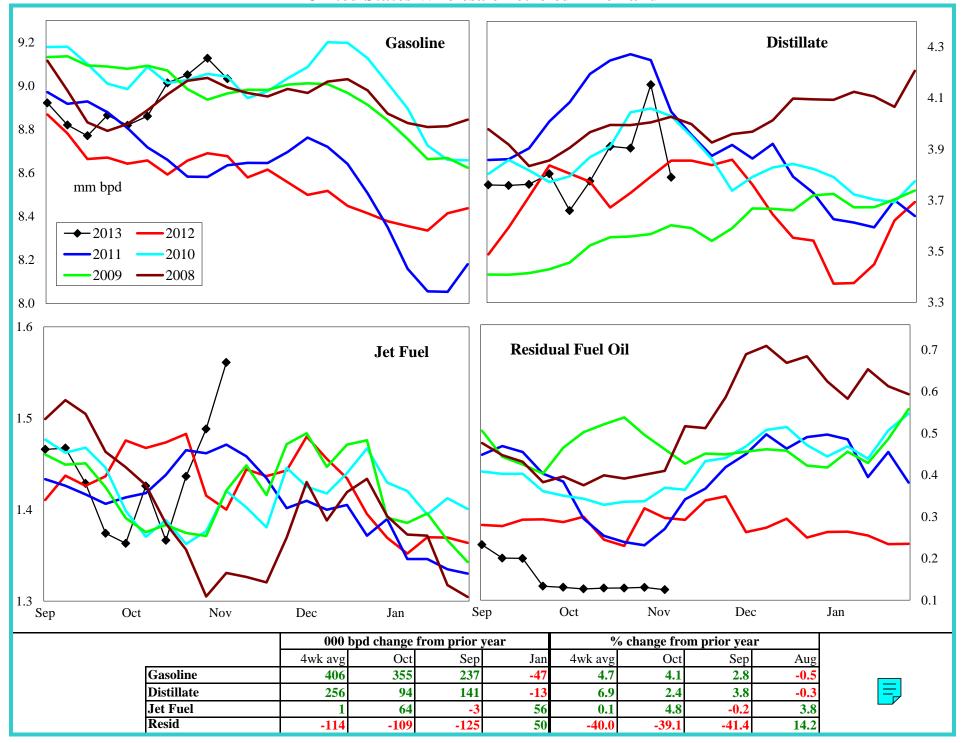
Gasoline supply increased +25,000 bpd on the week with production at winter quarter record highs. The latest 4-wk average supply was +32,000 bpd above a year ago. Stocks decreased -0.1 million barrels last week, at a level below the 3-yr mid range.

Distillate supply decrease -46,000 bpd, to a level that matched 5-yr highs. The latest 4-wk average supply was +113,000 bpd above last year. Stocks decreased -0.4 million barrels last week, with level just above the 5-yr range.

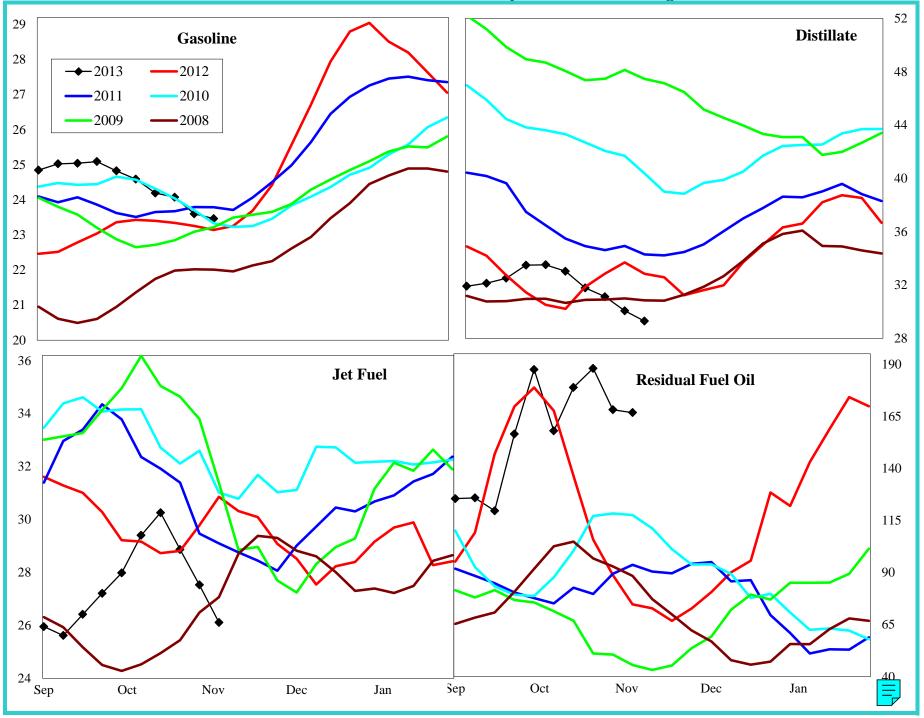
Jet fuel supply decreased -24,000 bpd last week, to a level -21,000 bpd below last year. Stocks decreased -0.2 million barrels on the week to a level above four of the last 5-yrs.

FUNDAMENTAL PETROLEUM: Graph Link and Weekly Summary A Fundamental Petroleum Trends Weekly Report November 14, 2013 ehi German Tel: 816.505.0980 www.fundamentalpetroleumtrends.com  Fundamental Wholesale Stocks Days Refinery Utilization							
Fundamental	Wholesale	Stocks Days		Refinery Utilization			
Trends	<b>Demand</b>	Fwd Coverage		<b>Product Yield %</b>			<u>Imports</u>
Supply/Demand Trends	8-Nov-13	EIA-DOE CHANGE FROM PRIOR WEEK					
	000 bpd	U. S. PADD					
	stocks 000 bls	Total	1	2	3	4	5
Crude Oil	Stocks	2,640	-727	3,023	1,442	445	-1,543
	Imports	620	-130	8	765	1	-23
	Input	343	46	27	303	6	-40
	% Utilization	1.90					
Gasoline	Stocks	-838	-1,208	108	344	54	-136
	Production	1,082	88	25	185	24	39
	Imports	-26	-32	3	18	-1	-14
	Supplied	-260					
<u>Distillate</u>	Stocks	-481	-620	-1,165	1,438	260	-395
	Production	5	-19	9	94	-32	-45
	Imports	-96	-47	-6	-44	0	-1
	Supplied	-722					
<u>Jet Fuel</u>	Stocks	-1,226	-1,139	-229	349	-1	-207
	Production	12	2	-10	44	-2	-21
	Imports	2	6	0	0	0	-3
	Supplied	328					
<u>Residual</u> <u>Fuel Oil</u>	Stocks	361	30	135	109	-10	98
	Production	73	-3	8	43	-1	24
	Imports	-19	-31	2	6	0	5
	Supplied	-18					

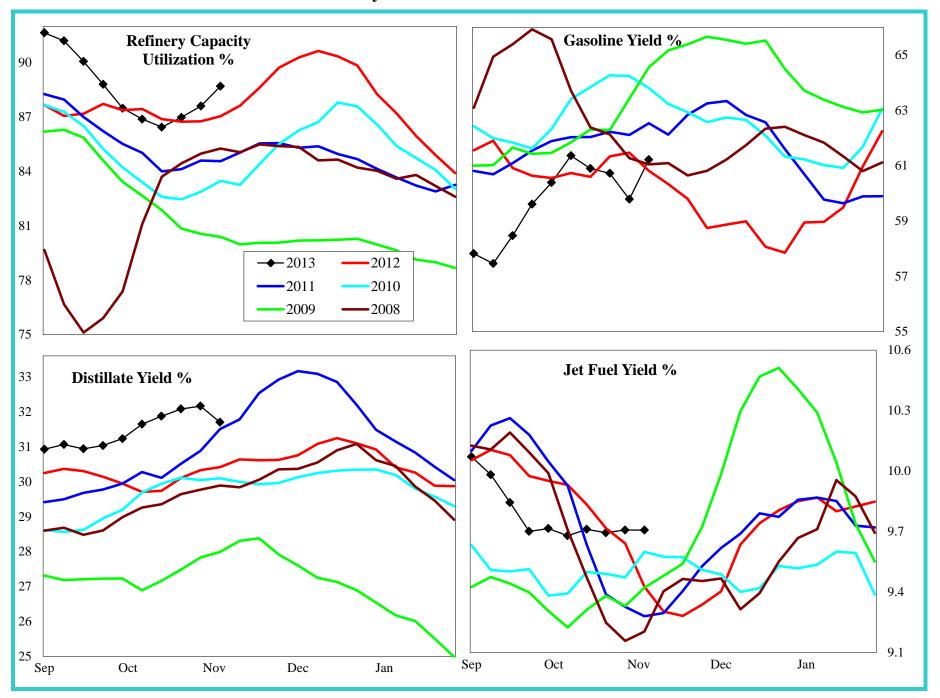
#### **United States Wholesale Petroleum Demand**



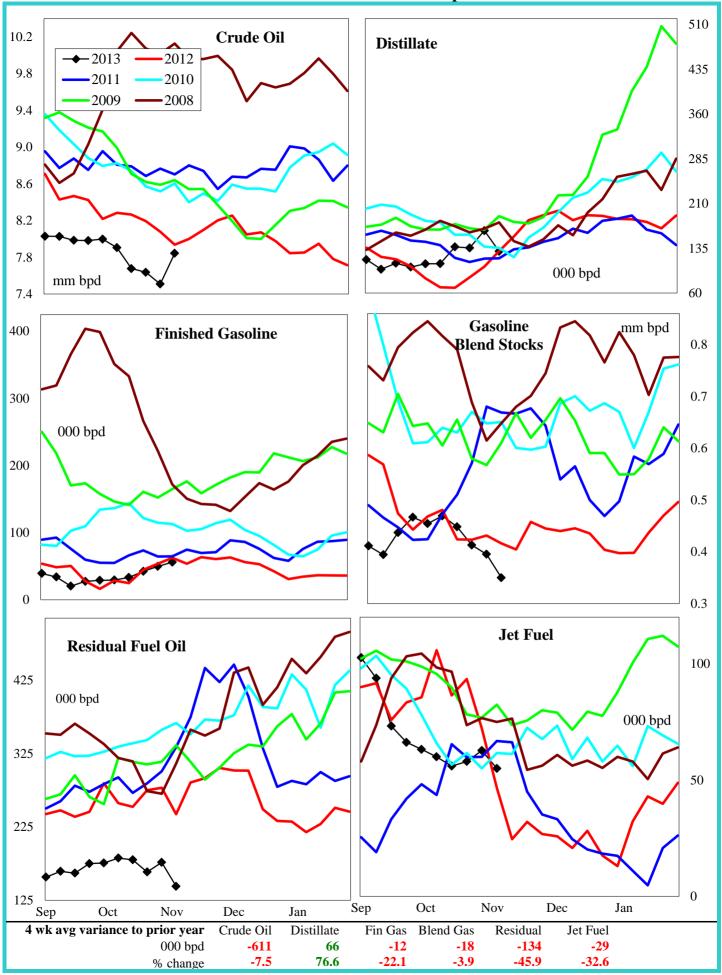
# **United States Product Stocks: Days Forward Coverage**



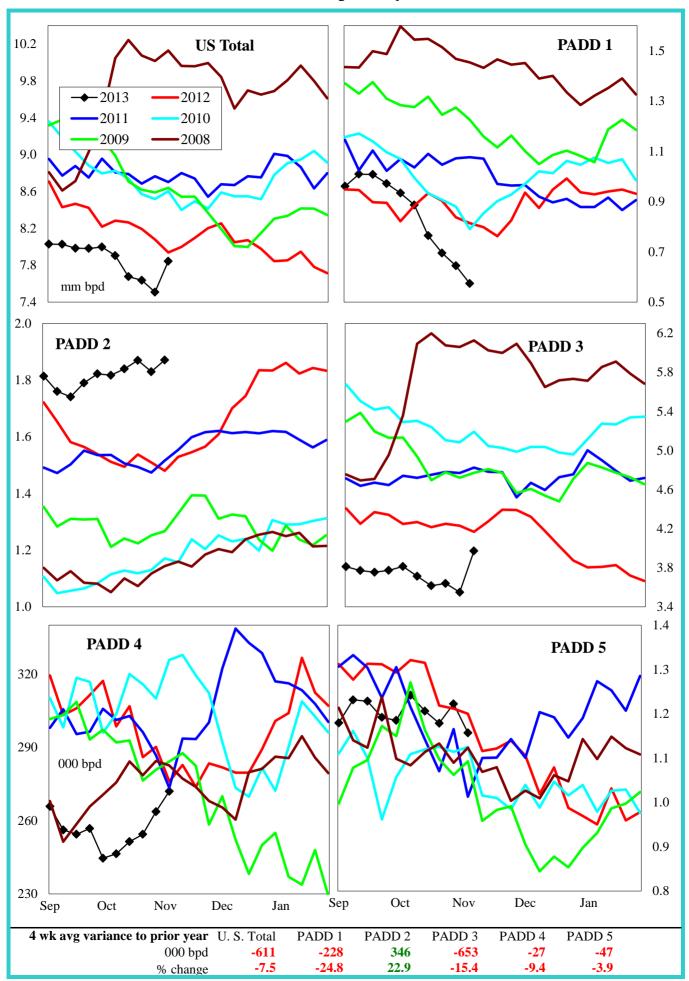
# **United States Refinery Percent Utilization Rate and Product Yields**



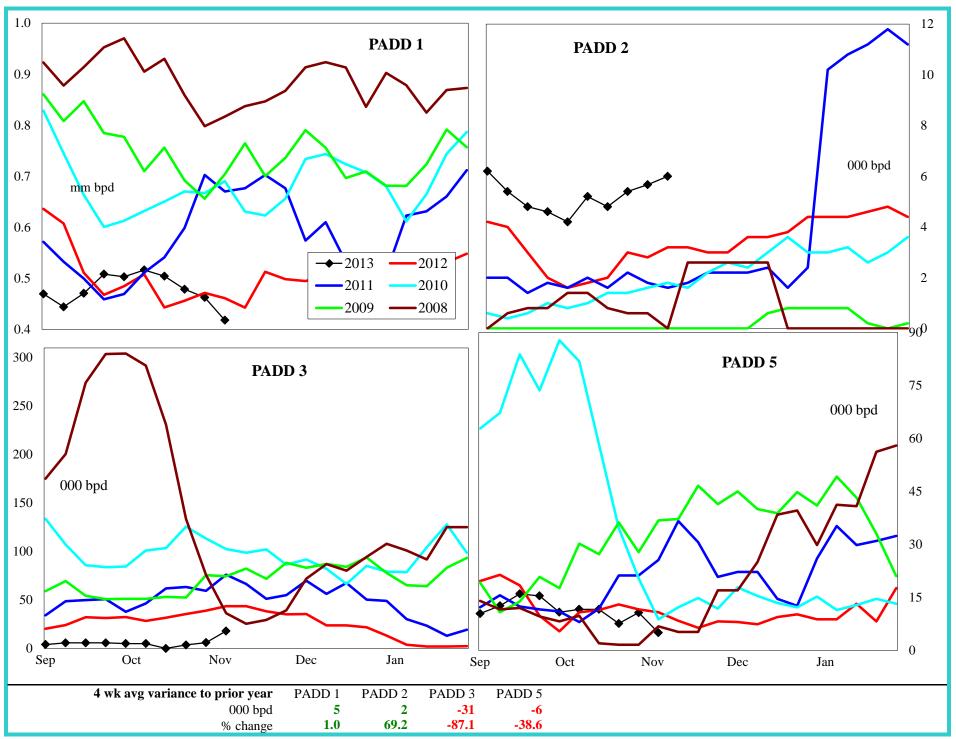
#### **United States Petroleum Imports**



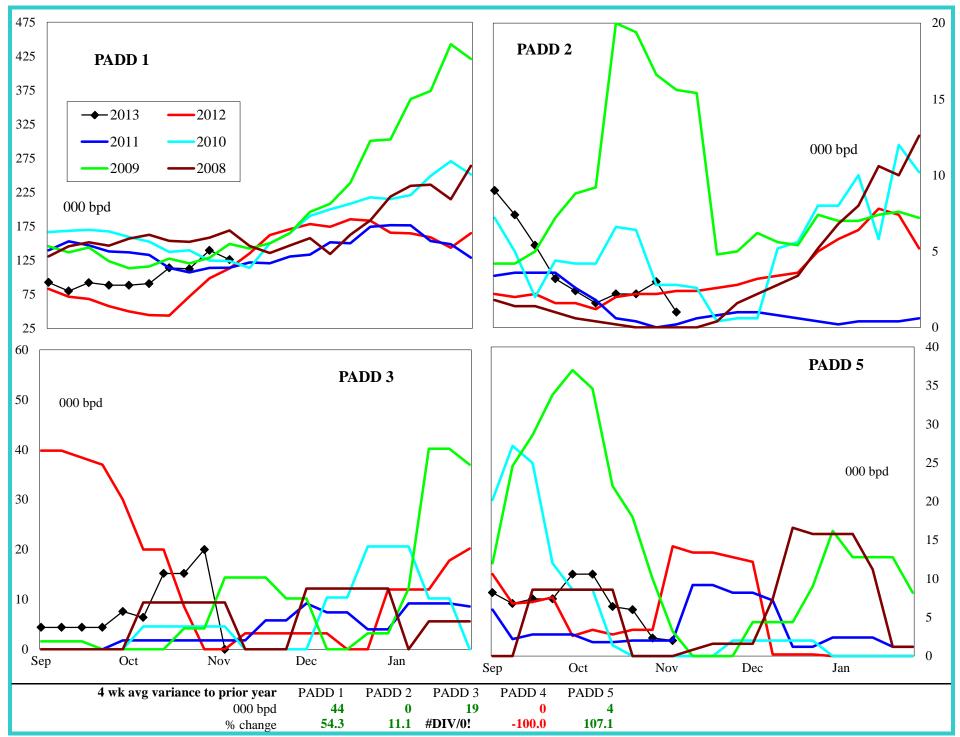
## **Crude Oil Imports by PADD**



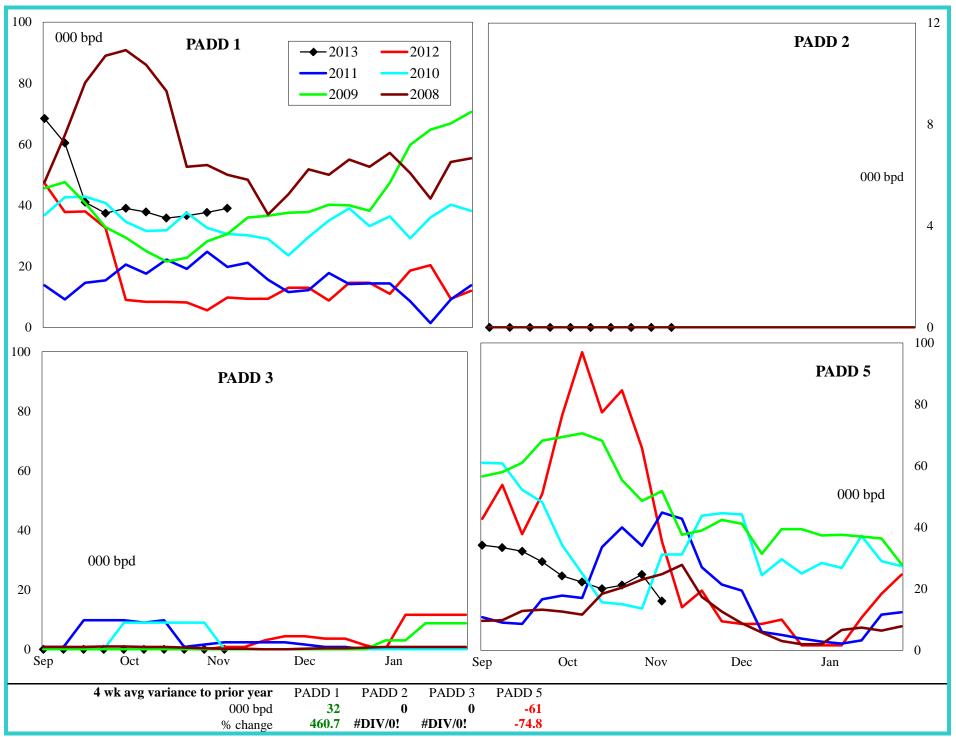
#### **Gasoline Imports by PADD (Finished + Blend Stocks)**



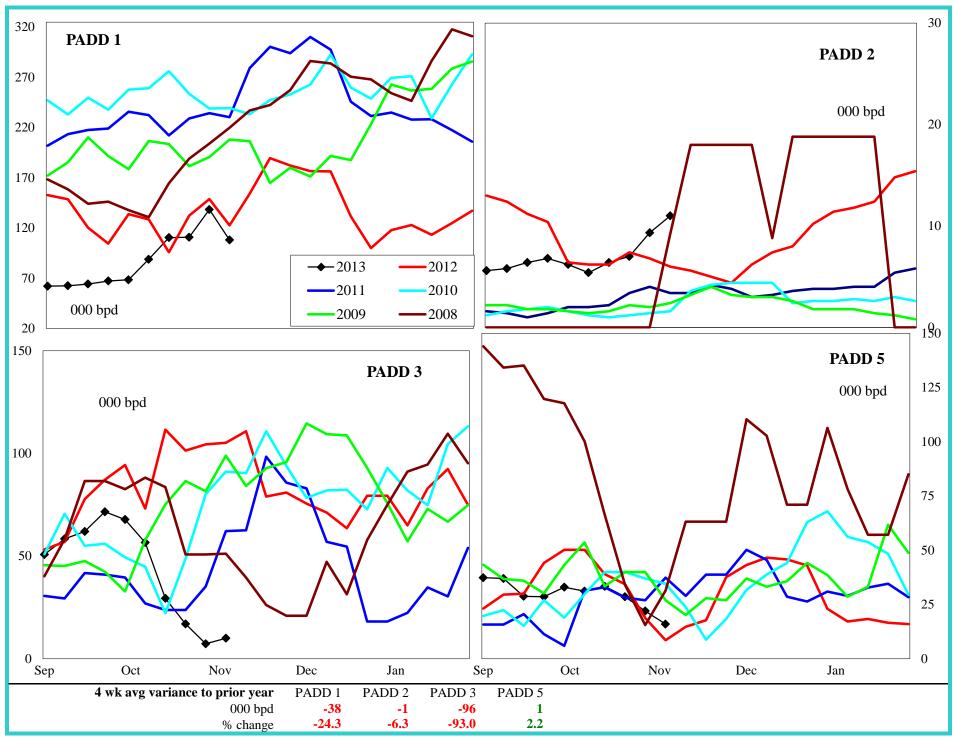
#### **Distillate Imports by PADD**



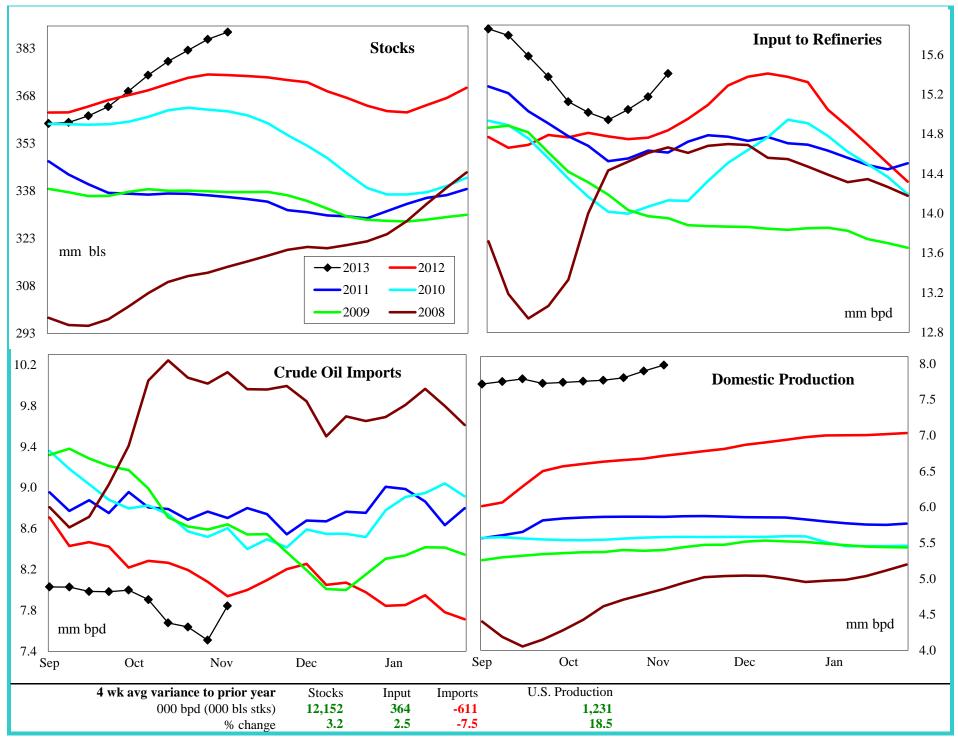
#### **Jet Fuel Imports by PADD**



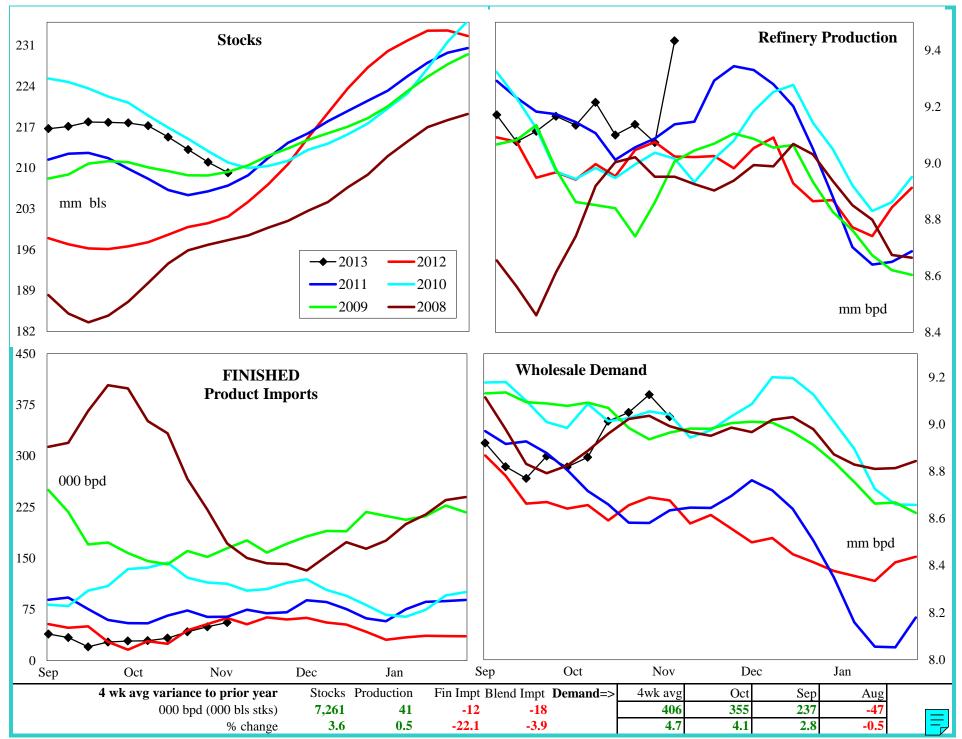
## **Residual Fuel Oil Imports by PADD**



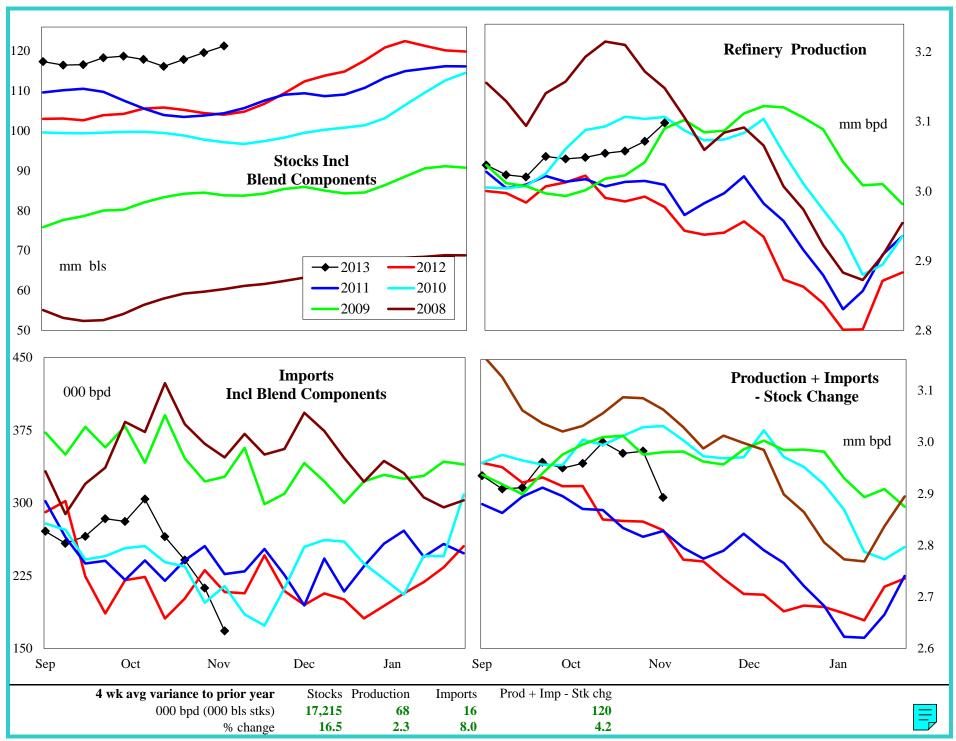
## **United States Crude Oil Supply and Demand Balance**



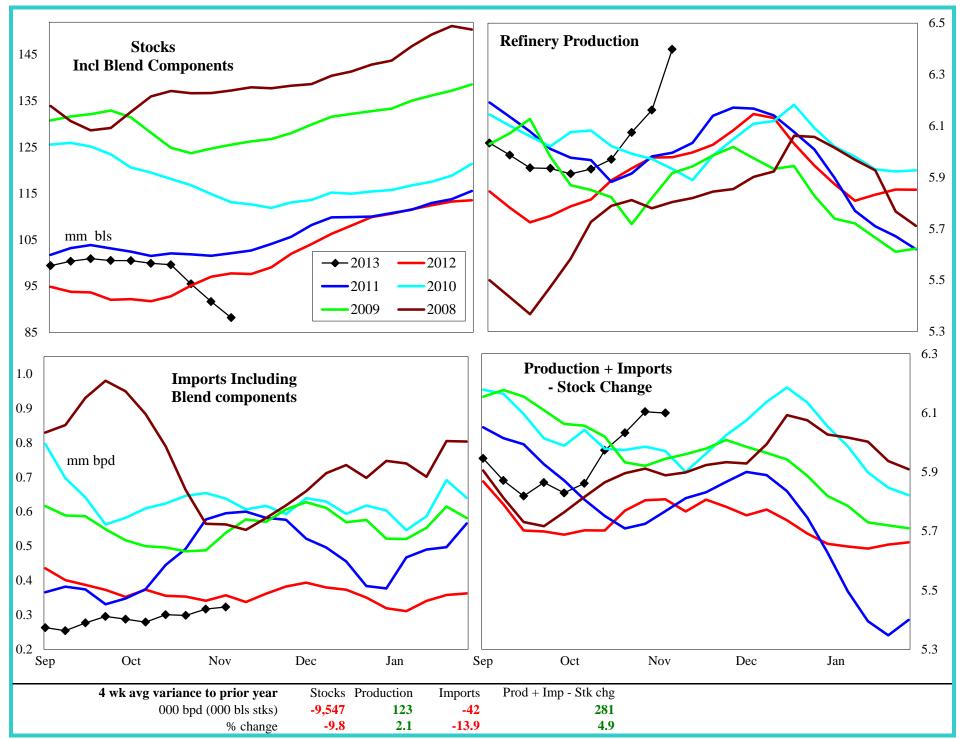
## **United States Gasoline Supply and Demand Balance**



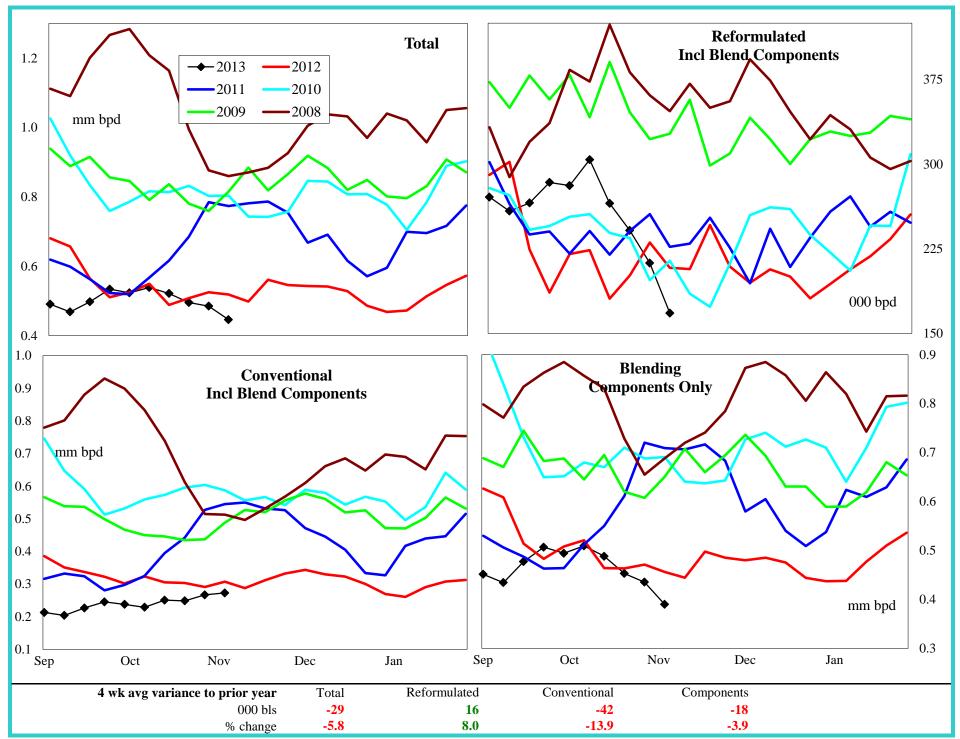
#### **United States Reformulated Gasoline Supply**



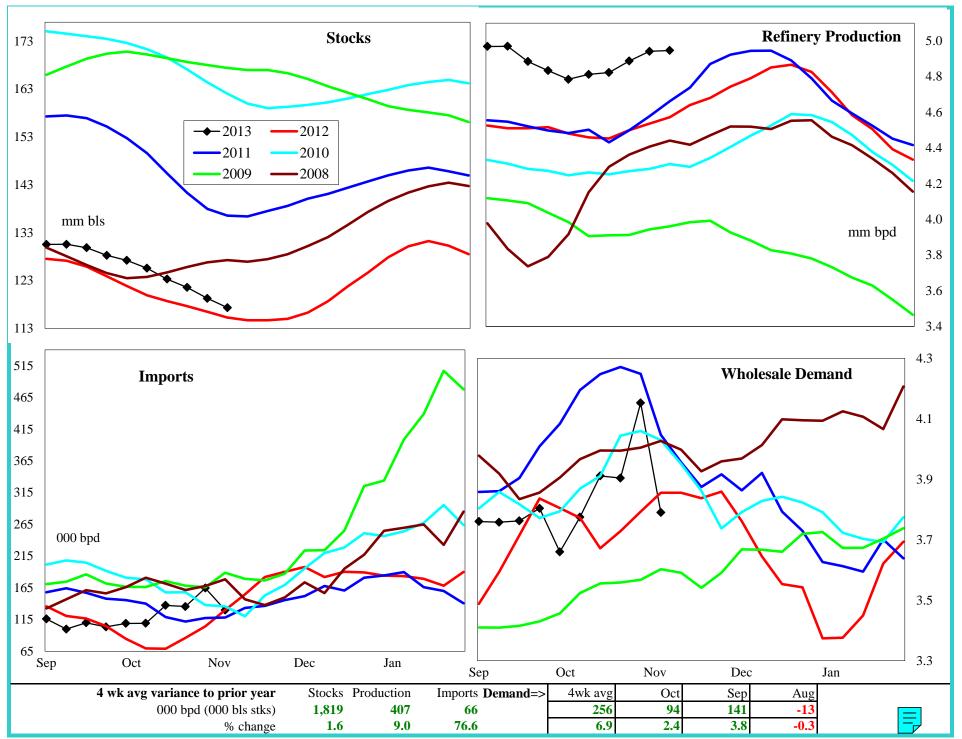
## **United States Conventional Gasoline Supply**



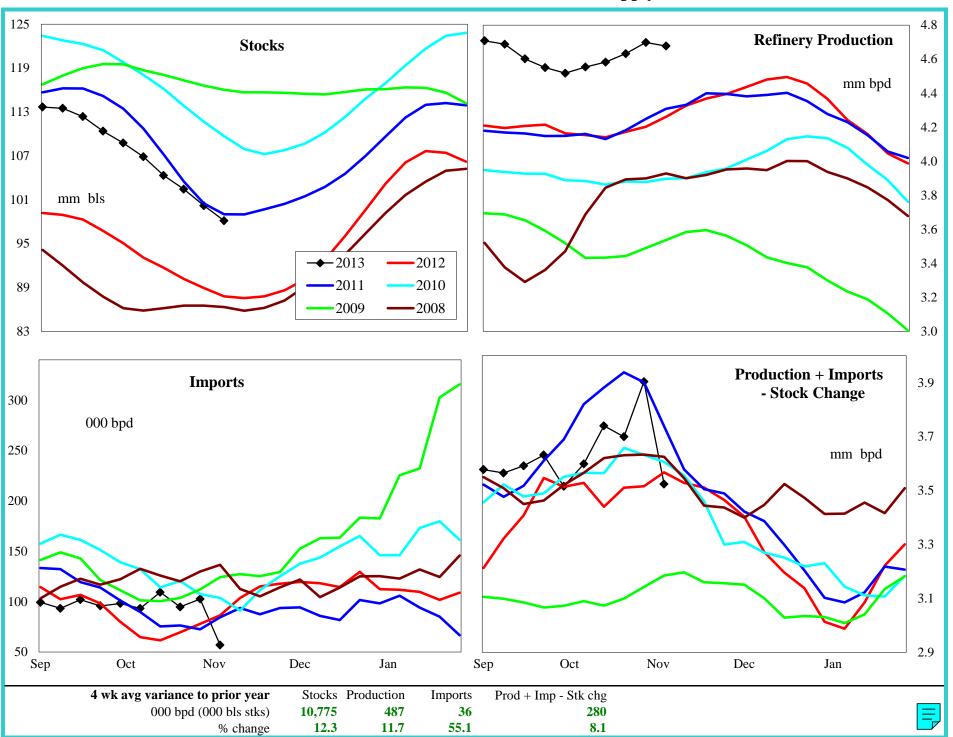
#### **United States Gasoline Imports by Type**



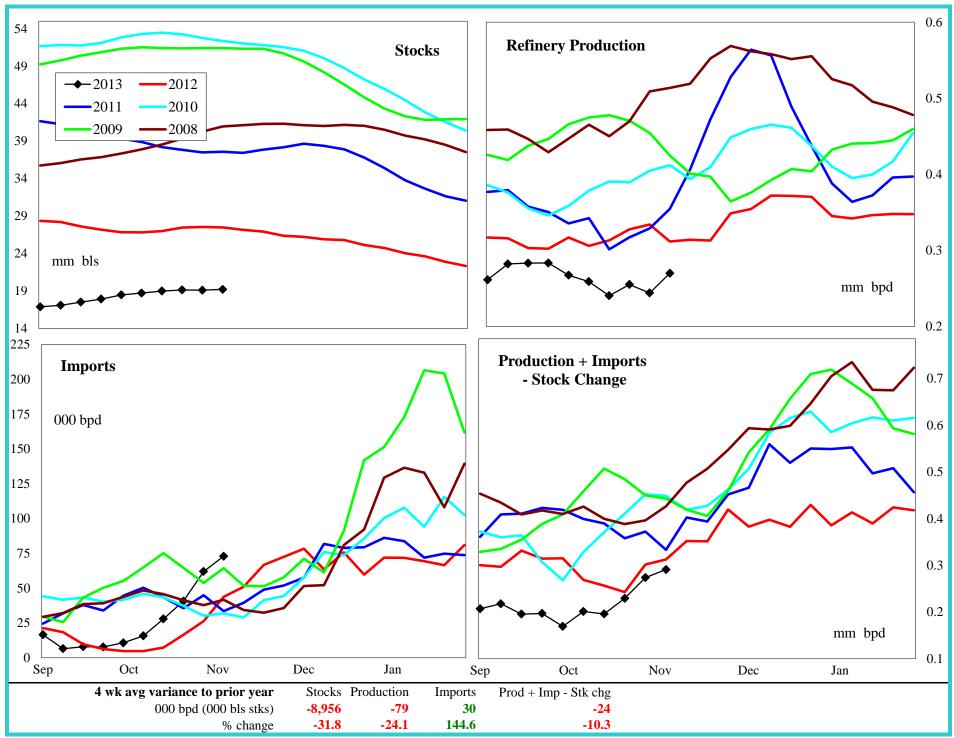
#### **United States Distillate Supply and Demand Balance**



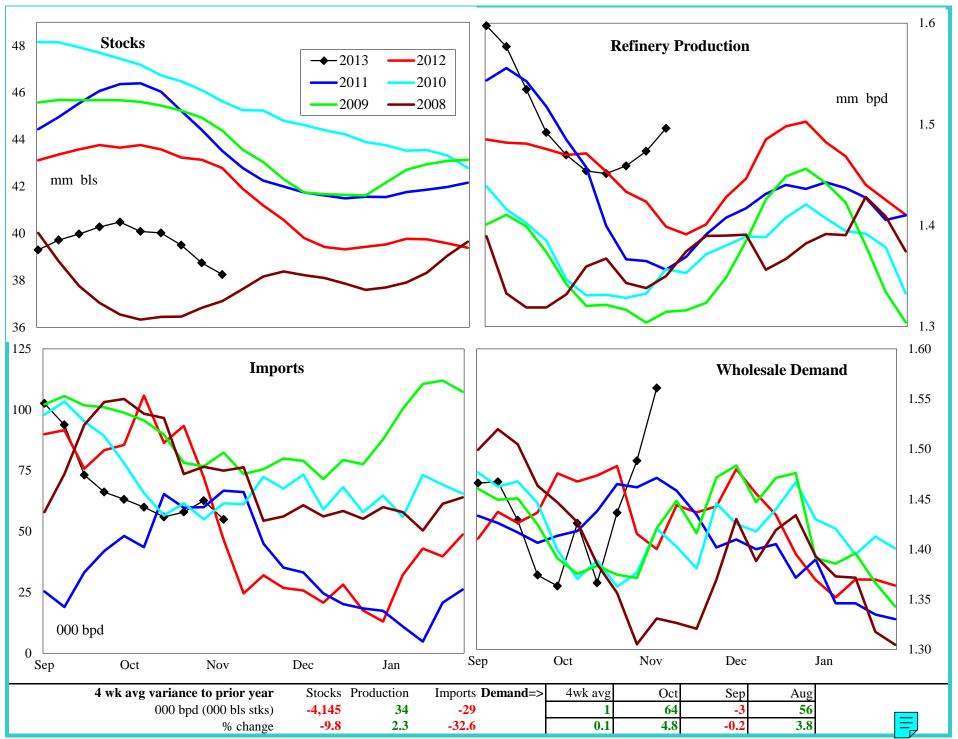
#### **United States Low Sulfur Distillate Supply**



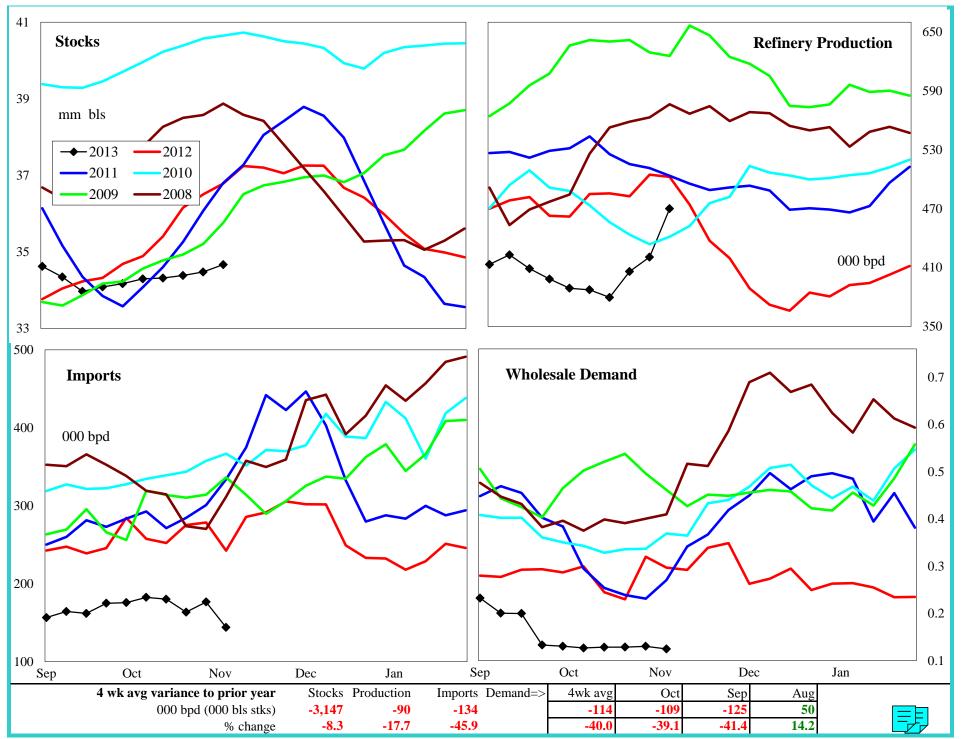
## **United States High Sulfur Distillate Supply**



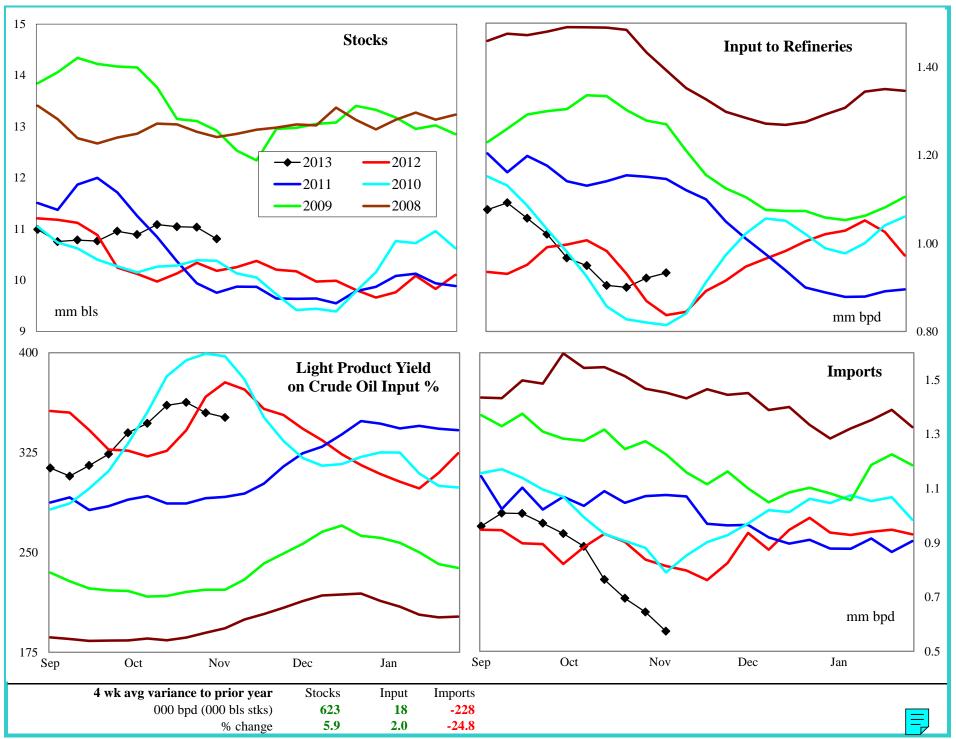
#### **United States Jet Fuel Supply and Demand Balance**



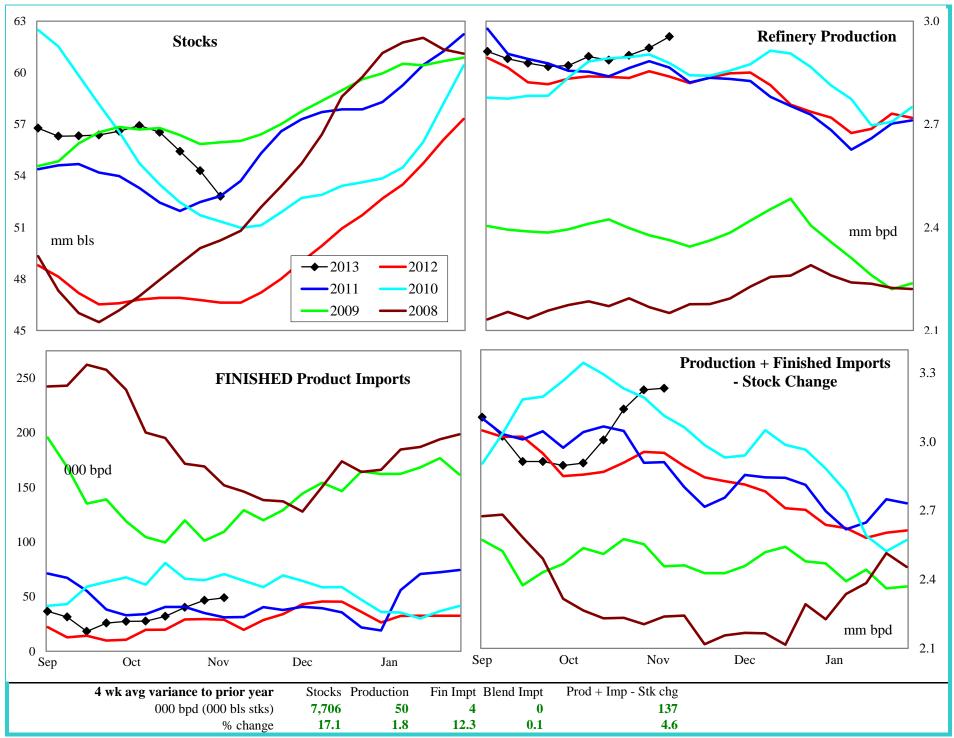
## **United States Residual Fuel Oil Supply and Demand Balance**



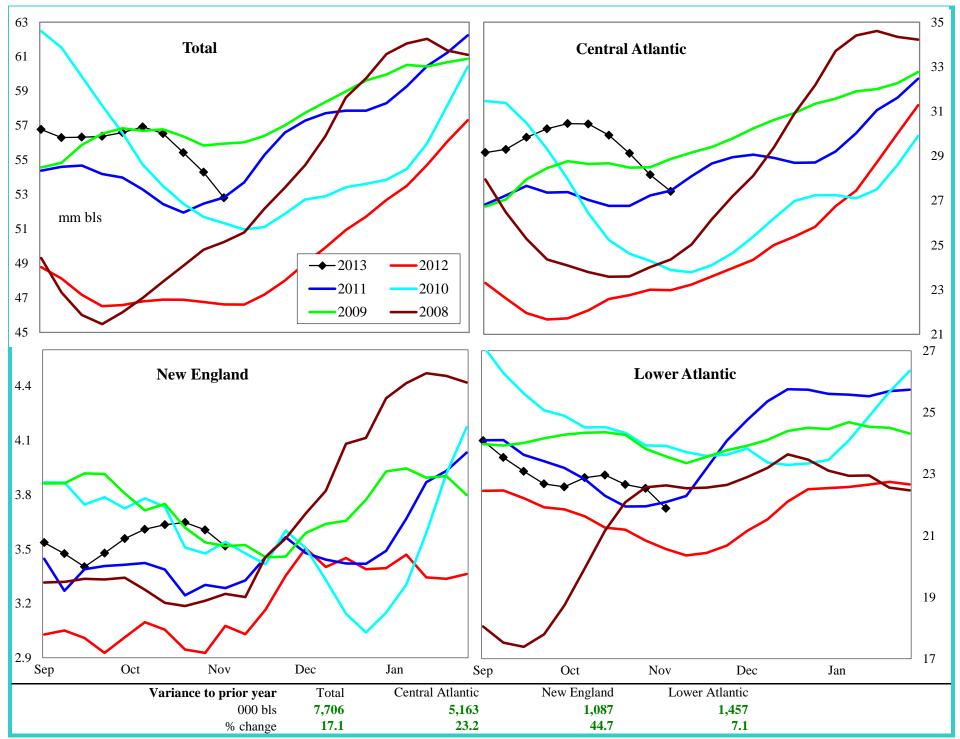
#### **PADD 1 Crude Oil Supply and Refining**



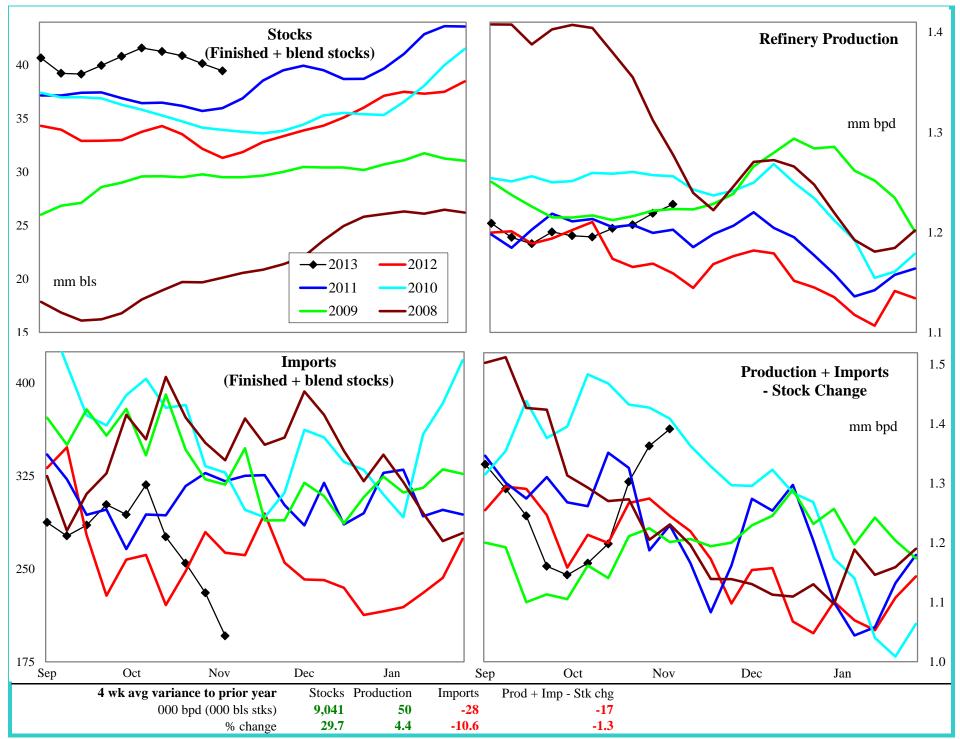
#### **PADD 1 Gasoline Supply**



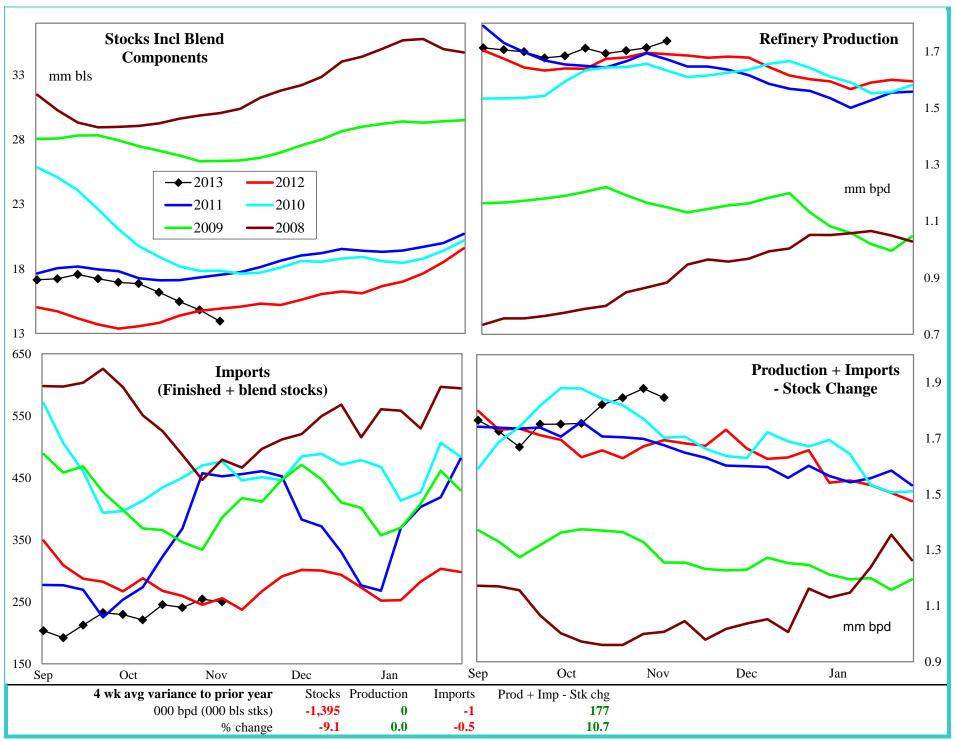
#### **PADD 1 Gasoline Stocks by Region**



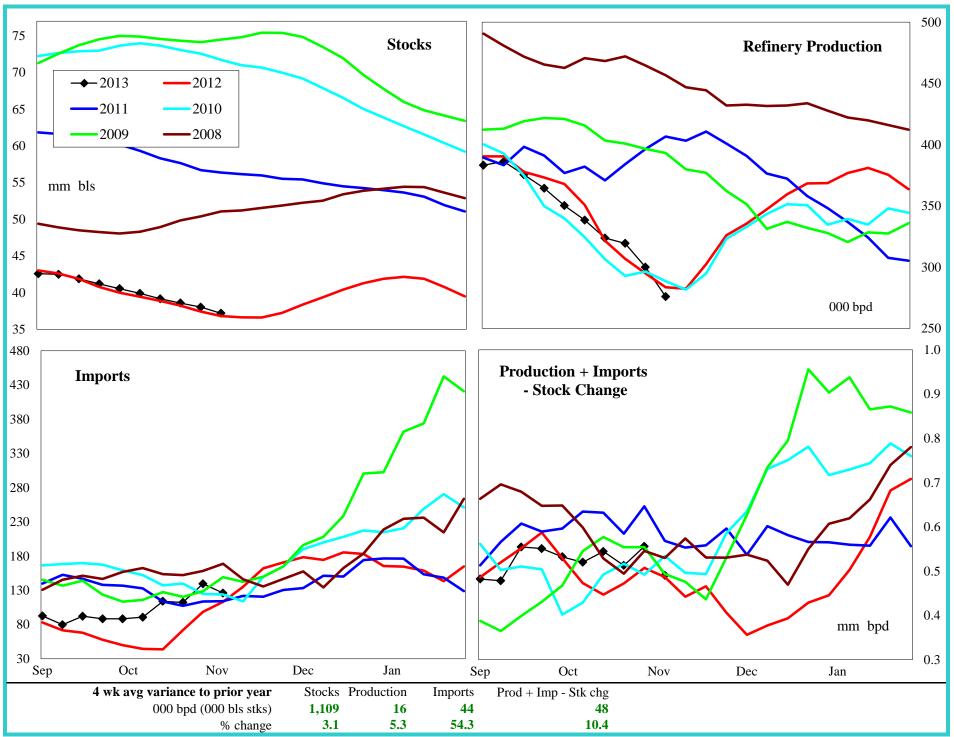
## **PADD 1 Reformulated Gasoline Supply**



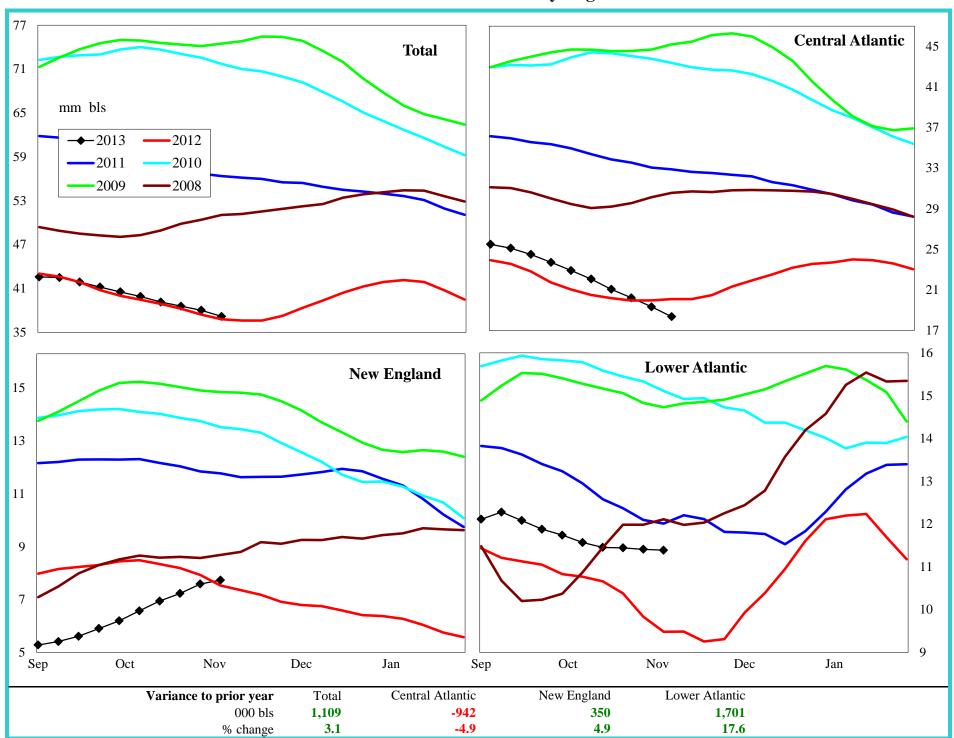
## **PADD 1 Conventional Gasoline Supply**



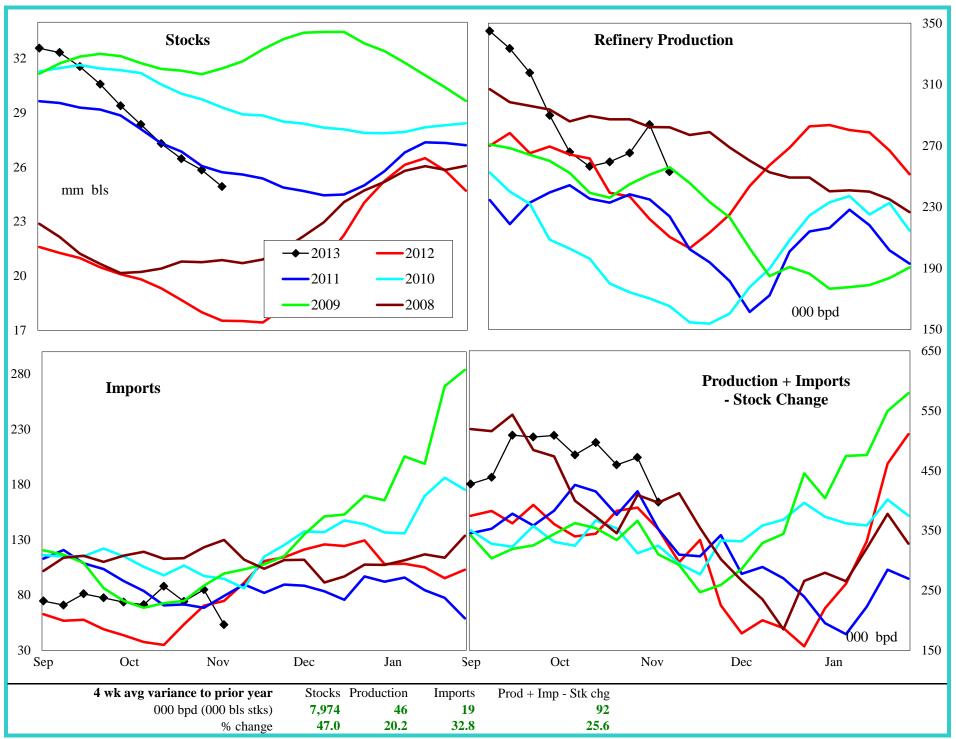
#### **PADD 1 Distillate Supply**



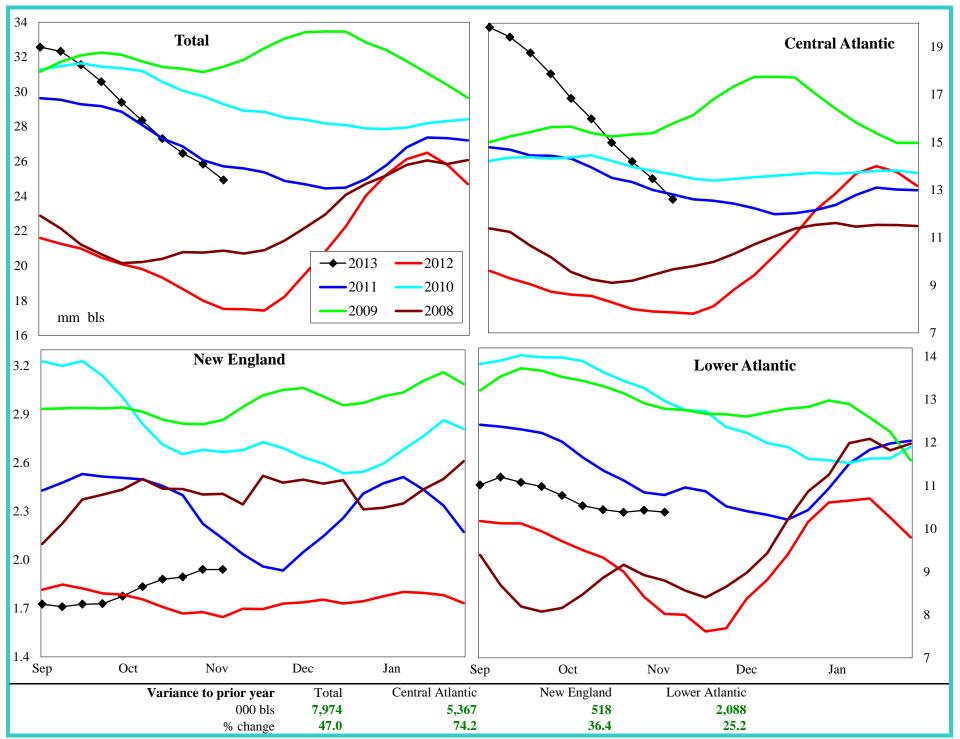
# **PADD 1 Distillate Stocks by Region**



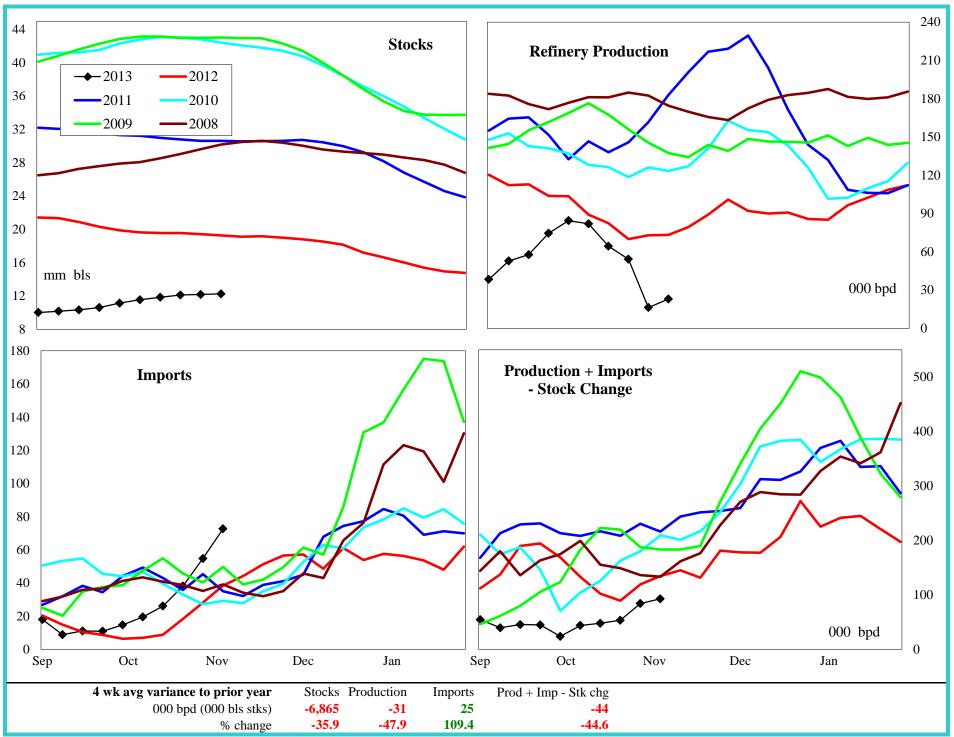
## **PADD 1 Low Sulfur Distillate Supply**



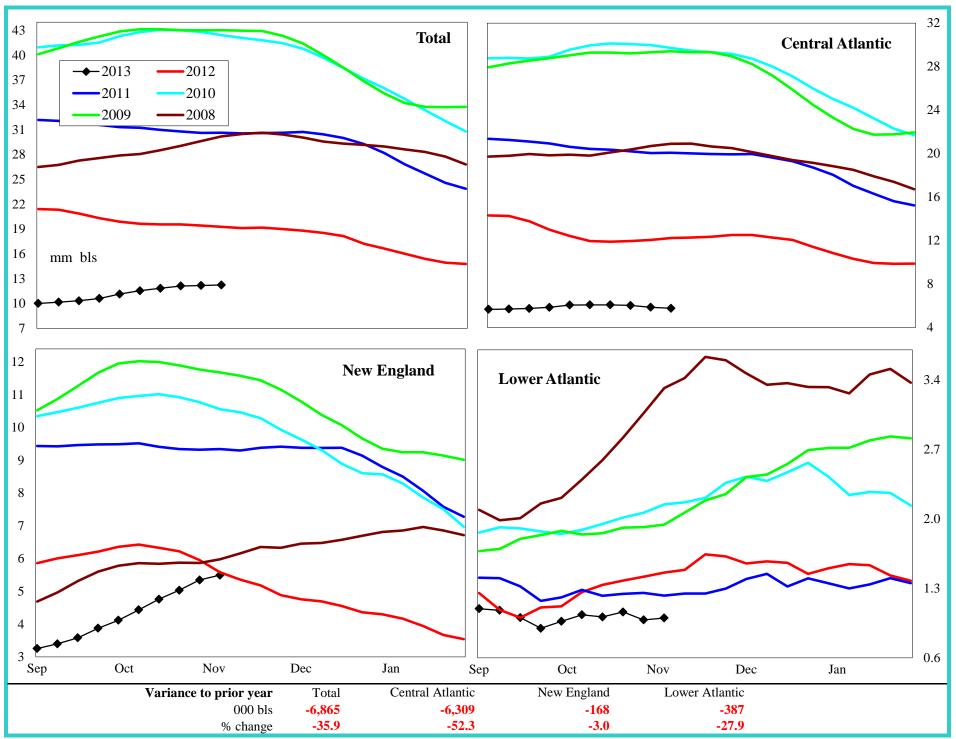
#### **PADD 1 Low Sulfur Distillate Stocks by Region**



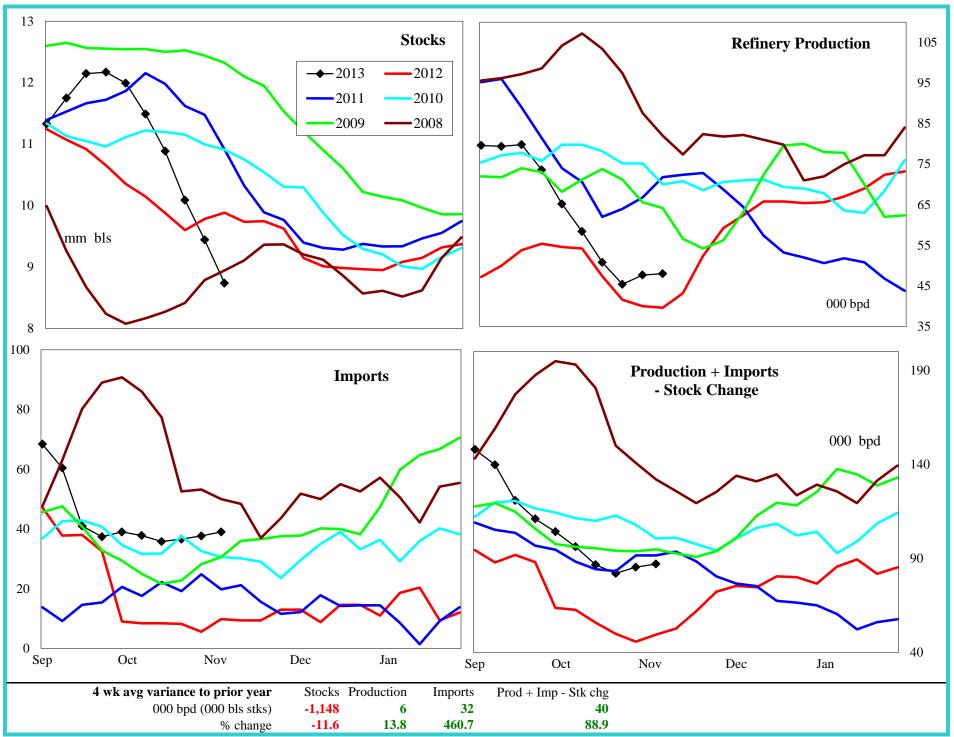
## **PADD 1 High Sulfur Distillate Supply**



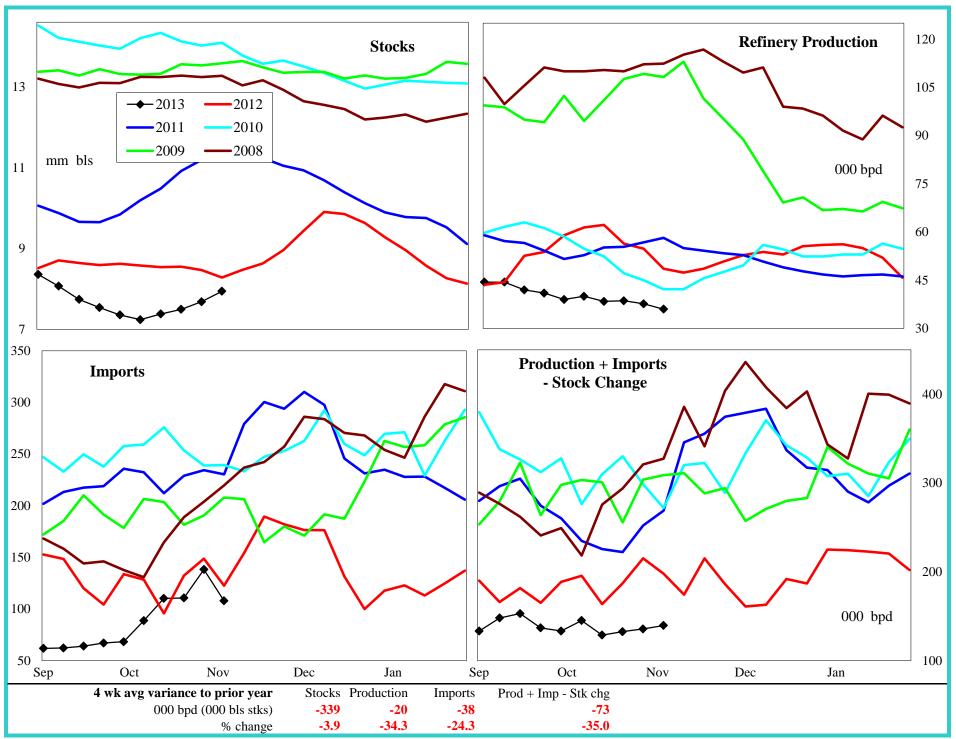
## **PADD 1 High Sulfur Distillate Stocks by Region**



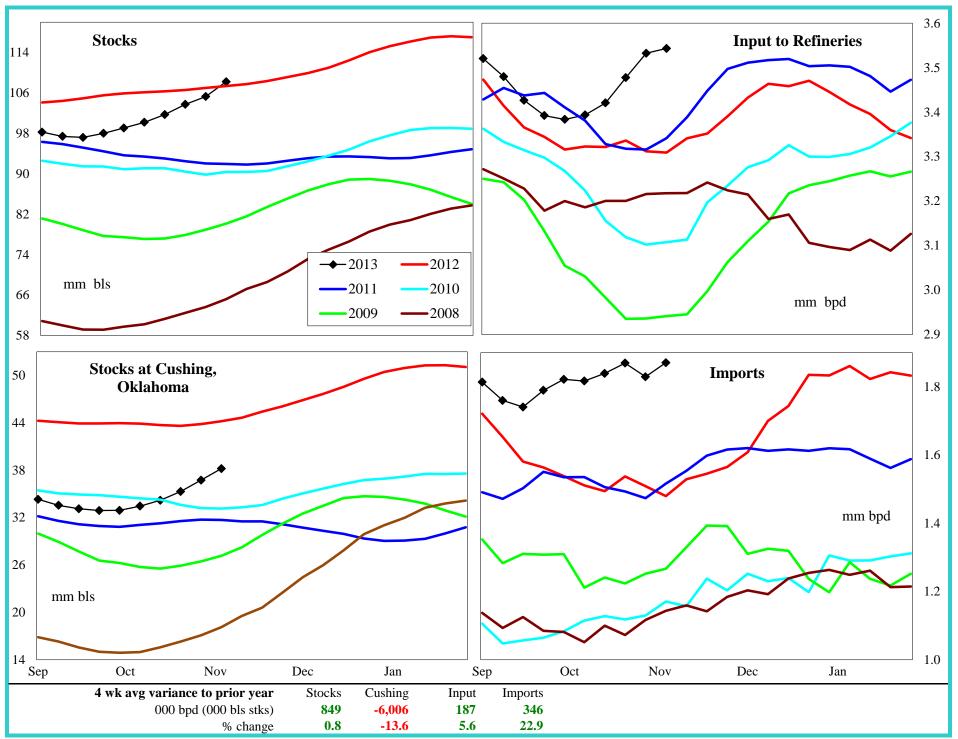
#### **PADD 1 Jet Fuel Supply**



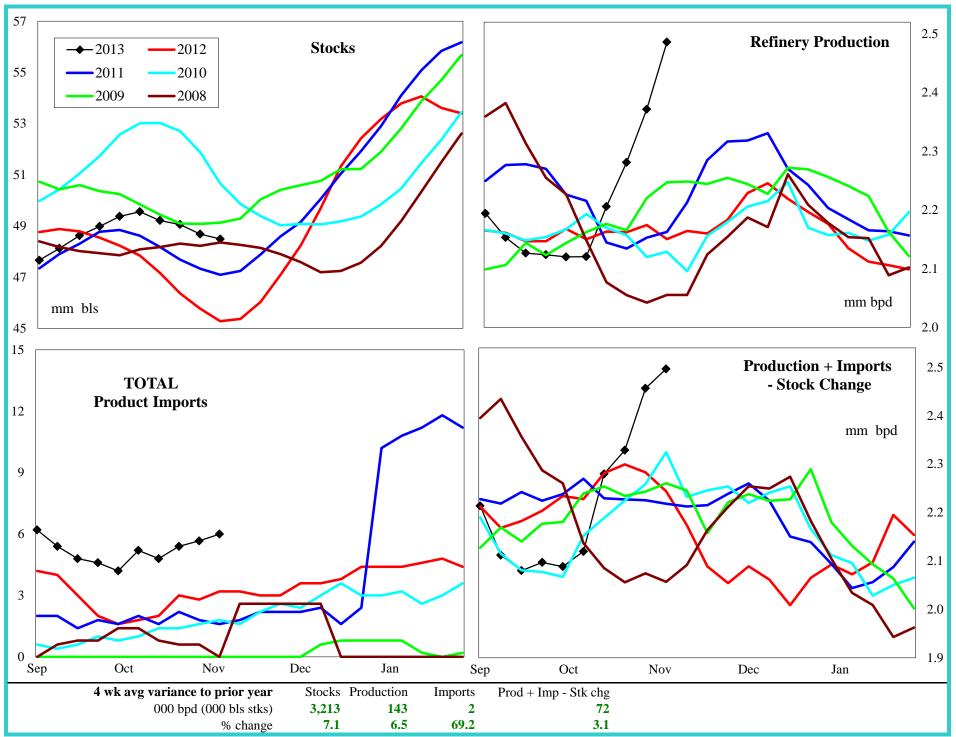
## **PADD 1 Residual Fuel Oil Supply**



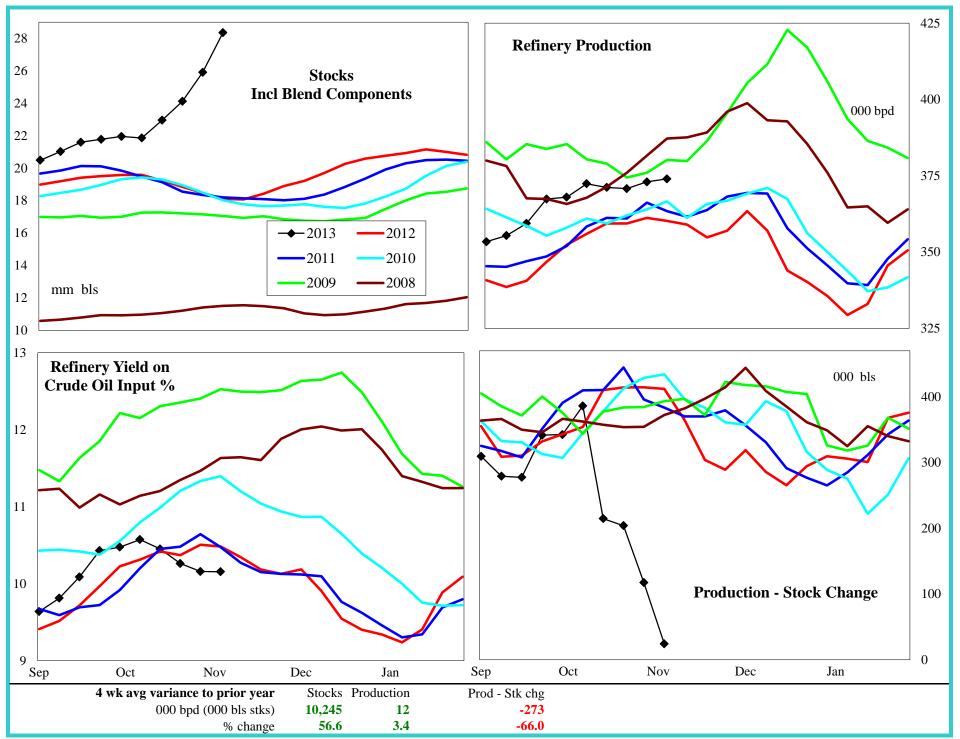
### **PADD 2 Crude Oil Supply and Refining**



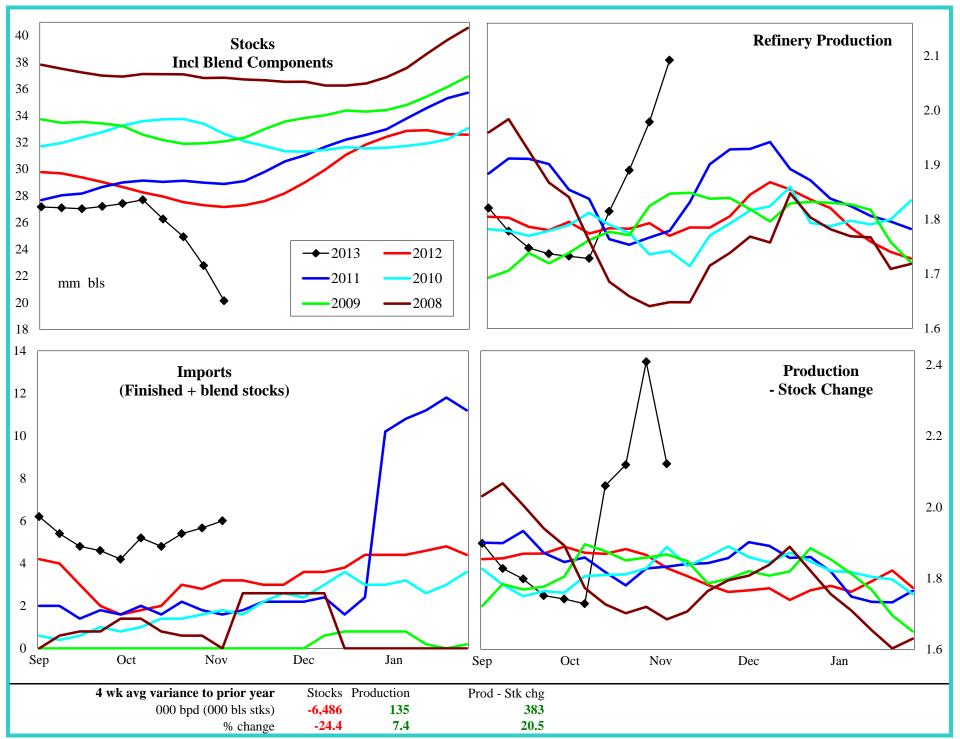
### **PADD 2 Gasoline Supply**



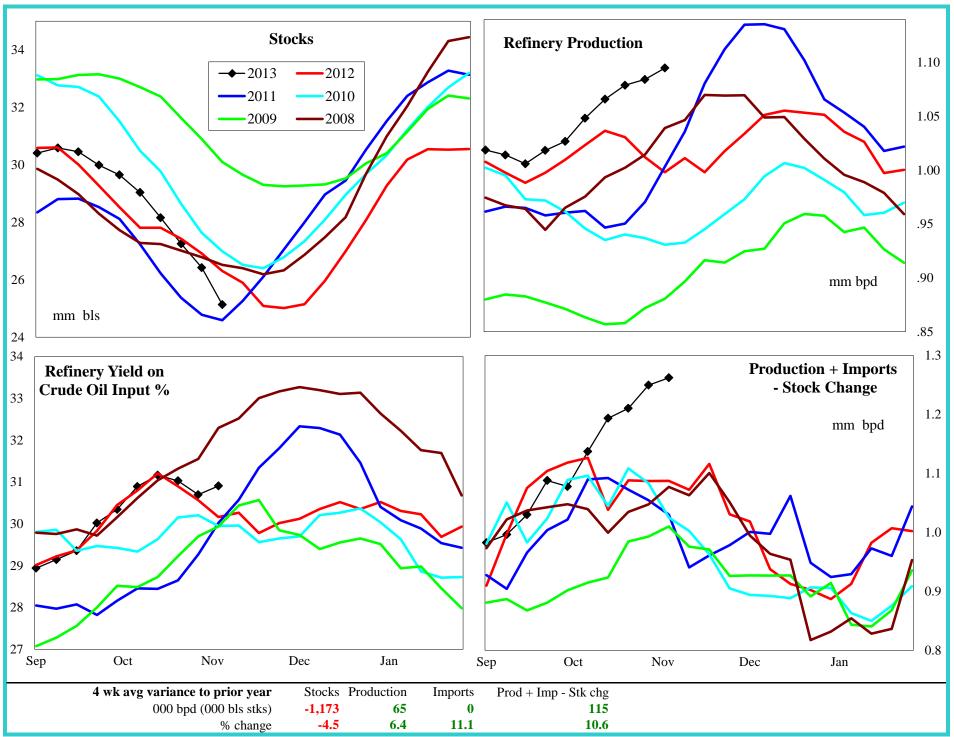
### **PADD 2 Reformulated Gasoline Supply**



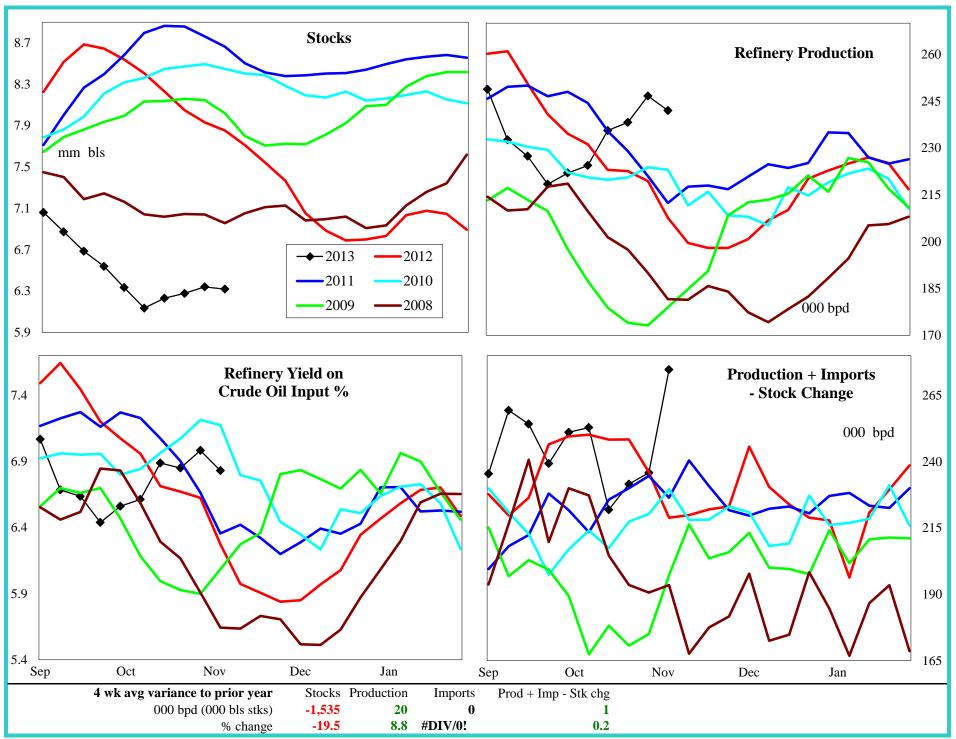
### **PADD 2 Conventional Gasoline Supply**



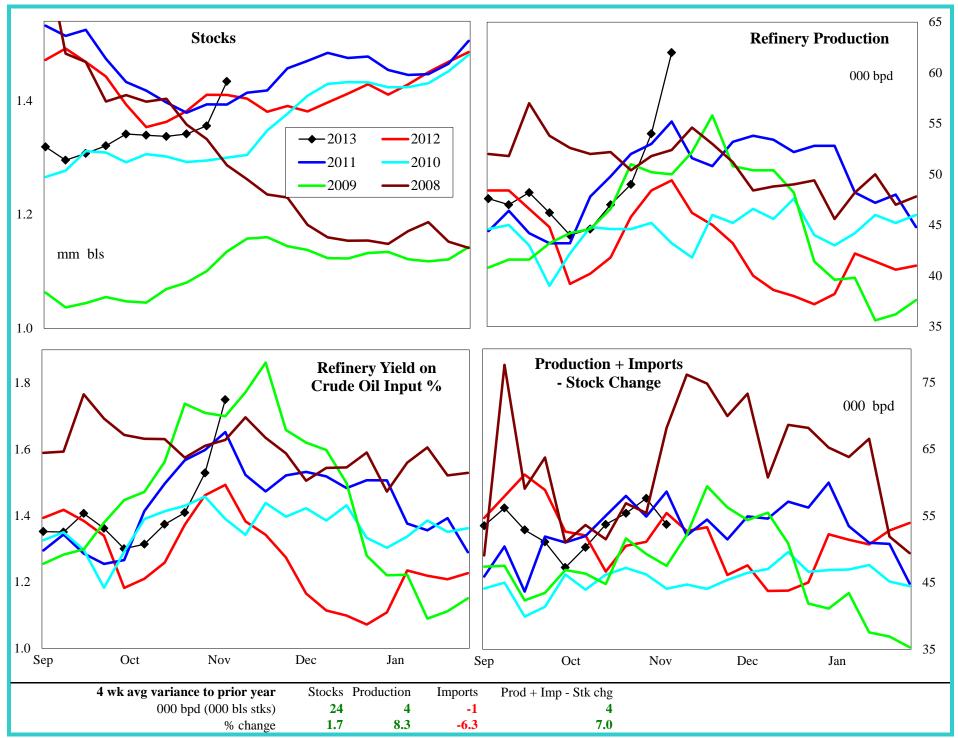
### **PADD 2 Distillate Supply**



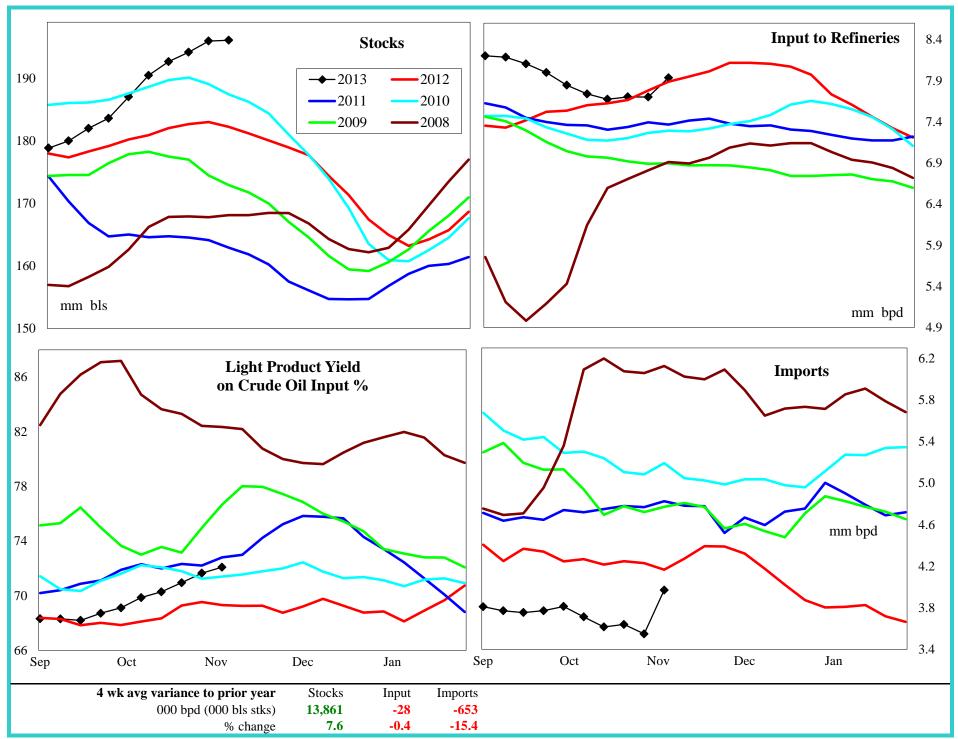
### **PADD 2 Jet Fuel Supply**



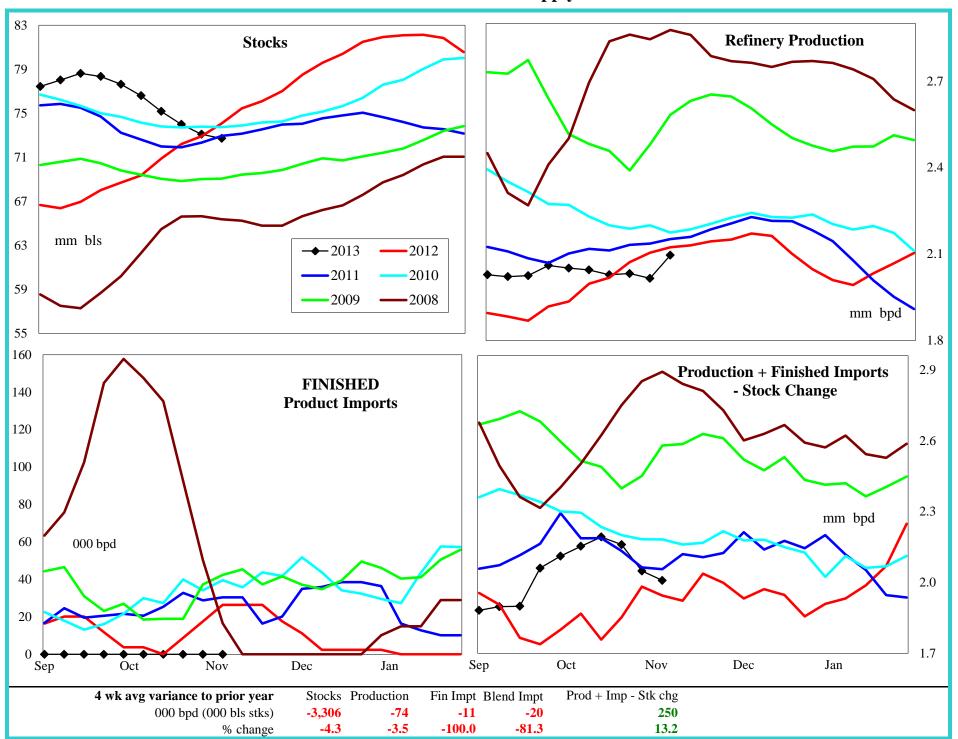
# **PADD 2 Residual Fuel Oil Supply**



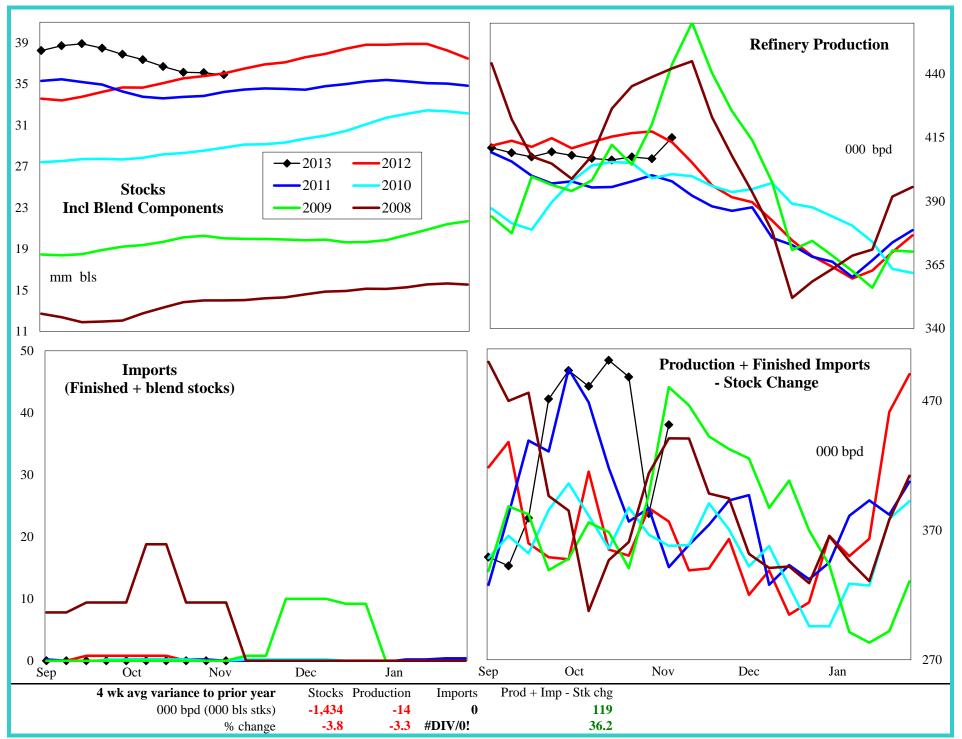
### **PADD 3 Crude Oil Supply and Refining**



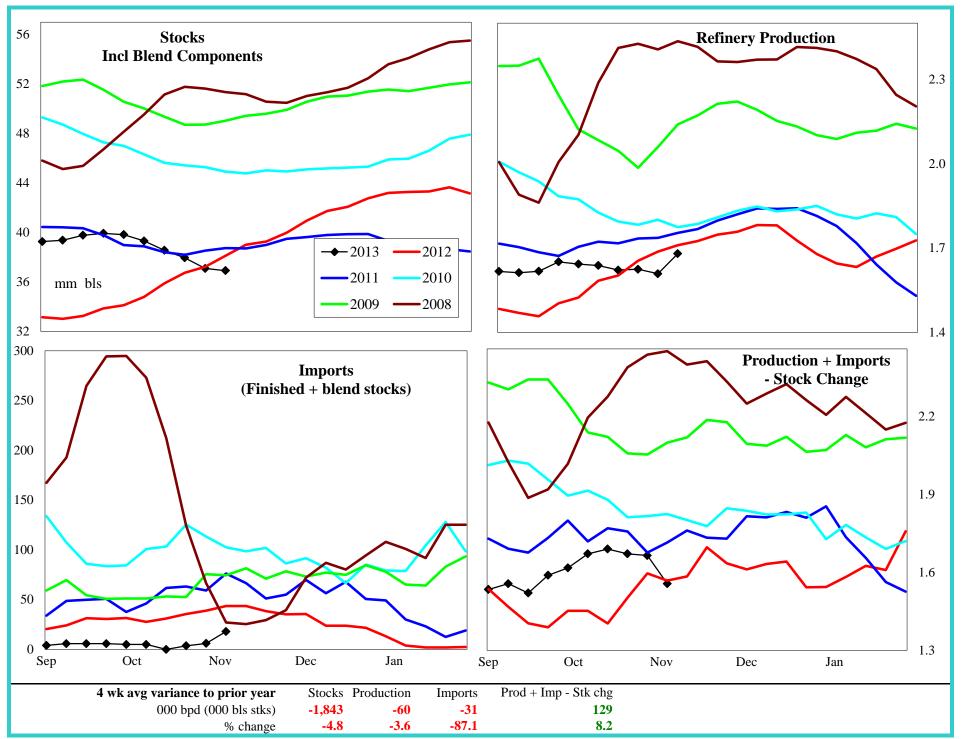
### **PADD 3 Gasoline Supply**



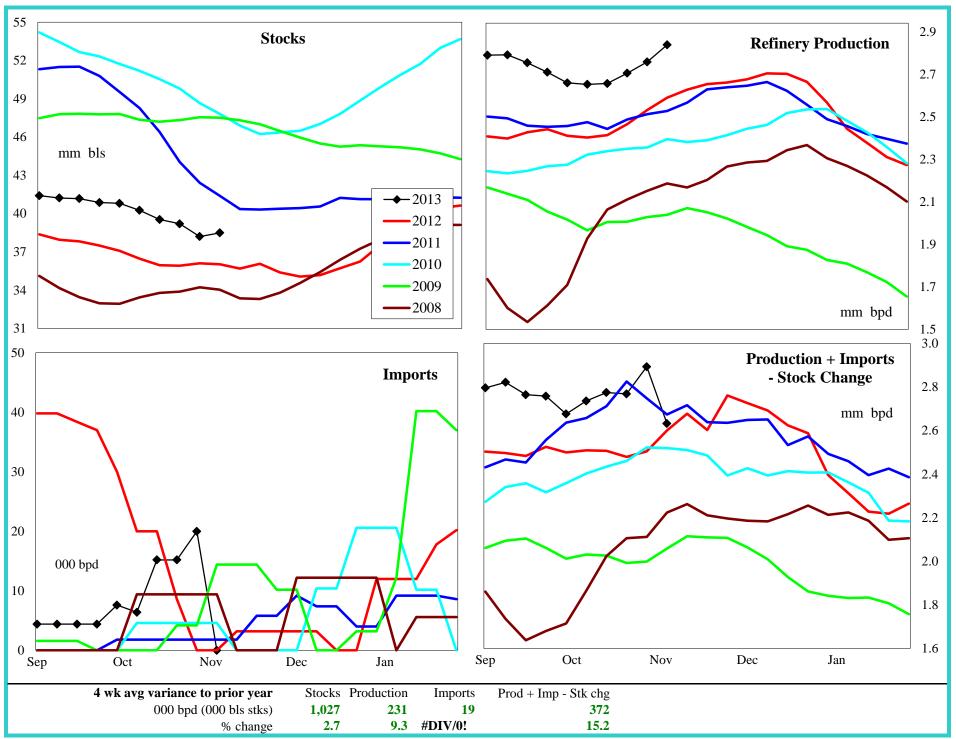
### **PADD 3 Reformulated Gasoline Supply**



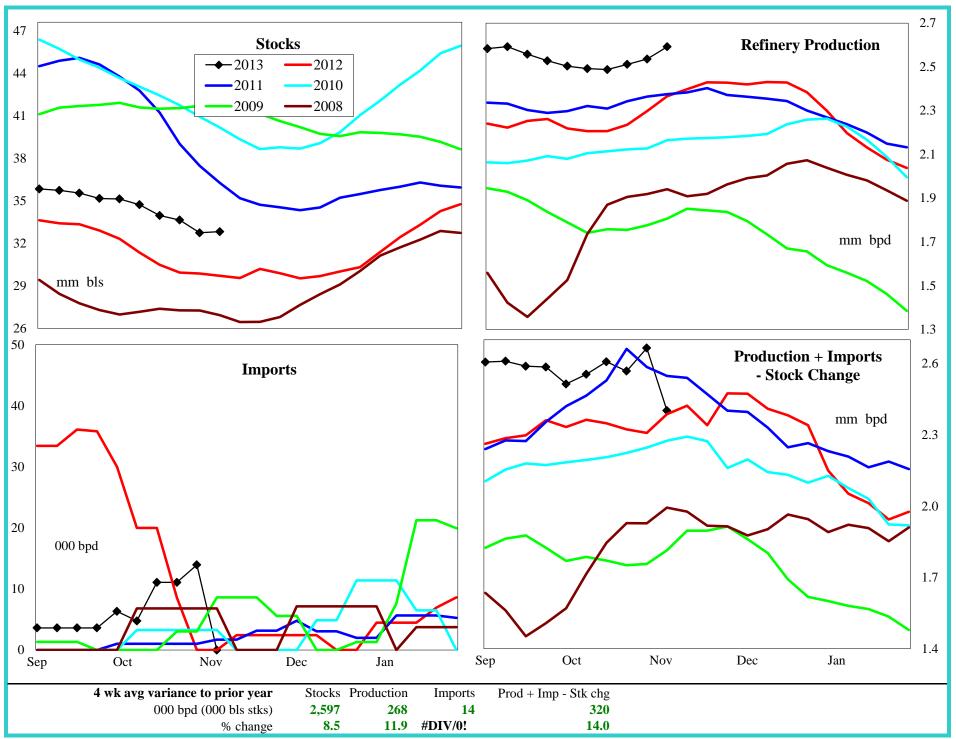
### **PADD 3 Conventional Gasoline Supply**



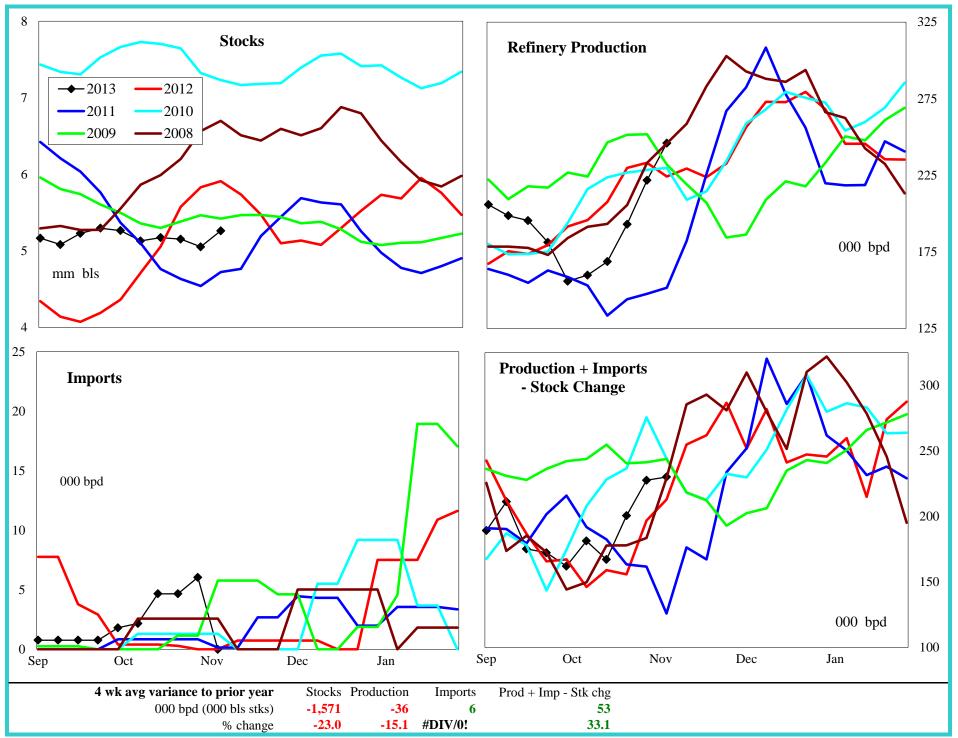
### **PADD 3 Distillate Supply**



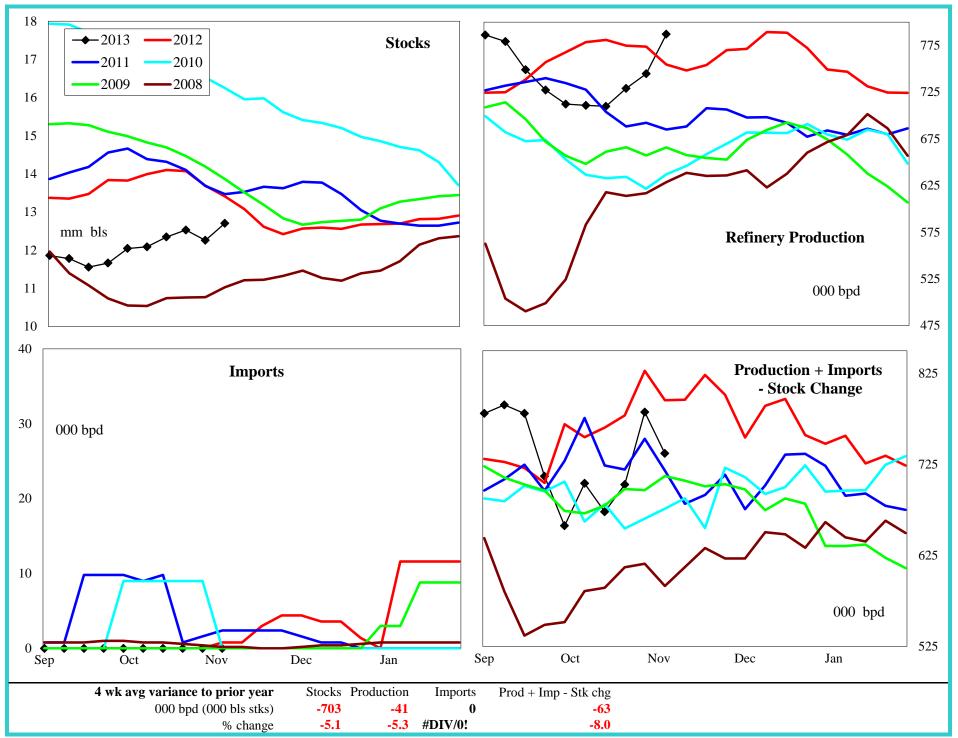
# **PADD 3 Low Sulfur Distillate Supply**



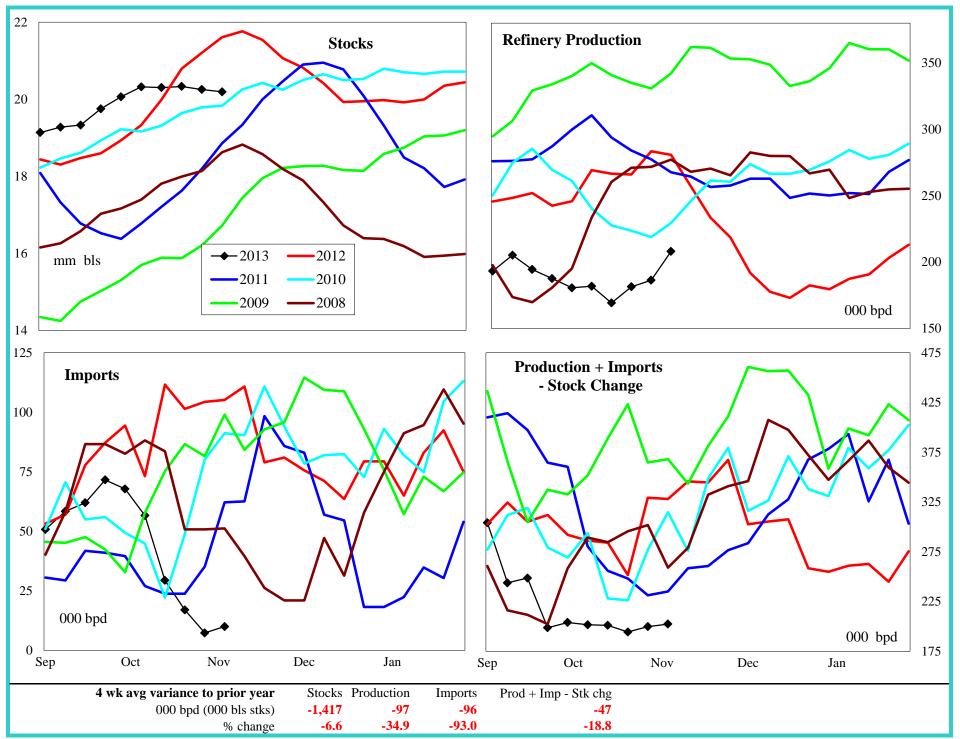
### **PADD 3 High Sulfur Distillate Supply**



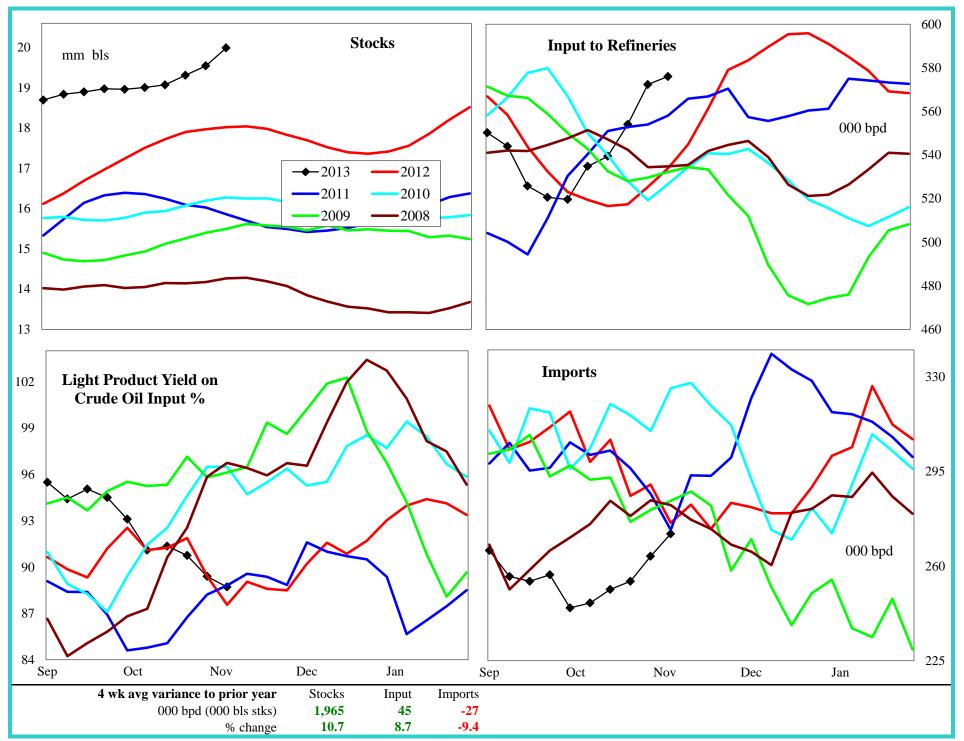
### **PADD 3 Jet Fuel Supply**



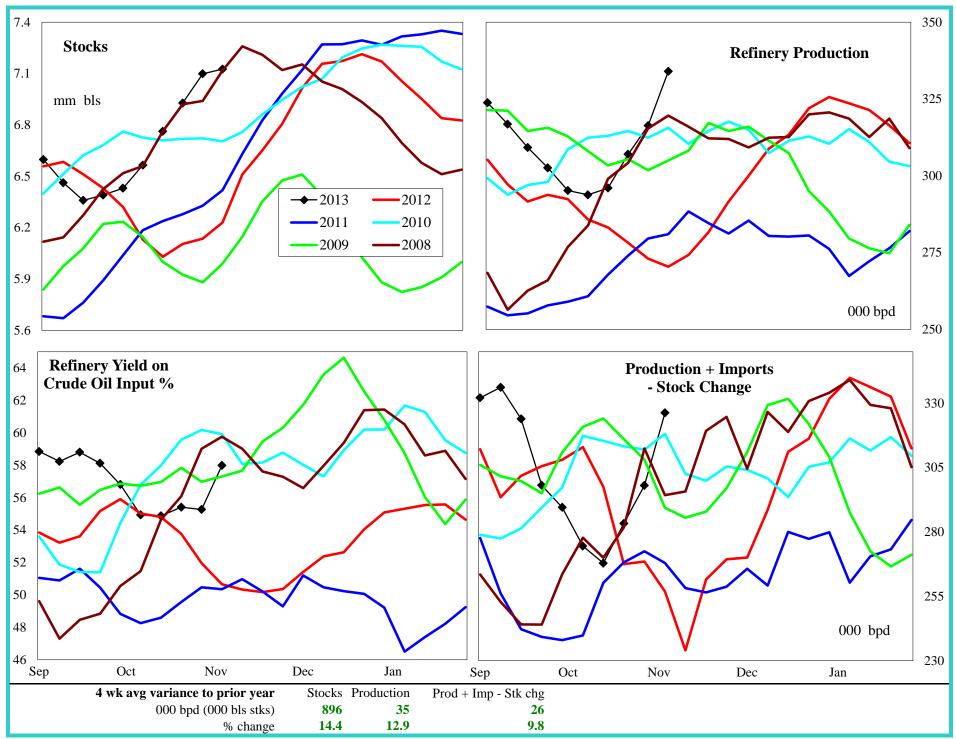
### **PADD 3 Residual Fuel Oil Supply**



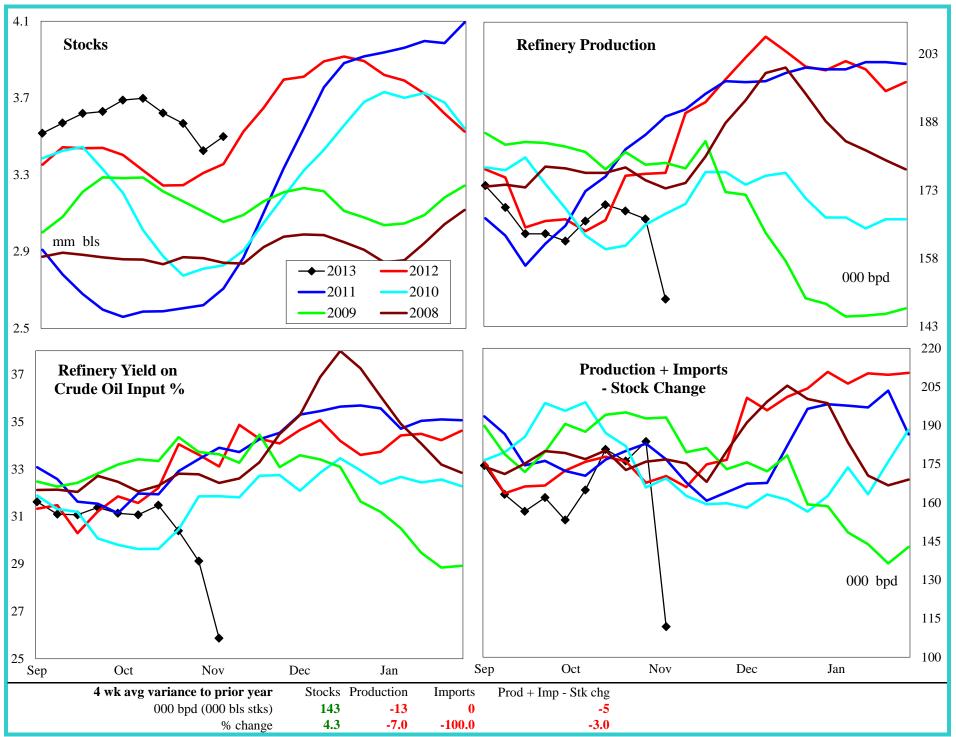
### **PADD 4 Crude Oil Supply and Refining**



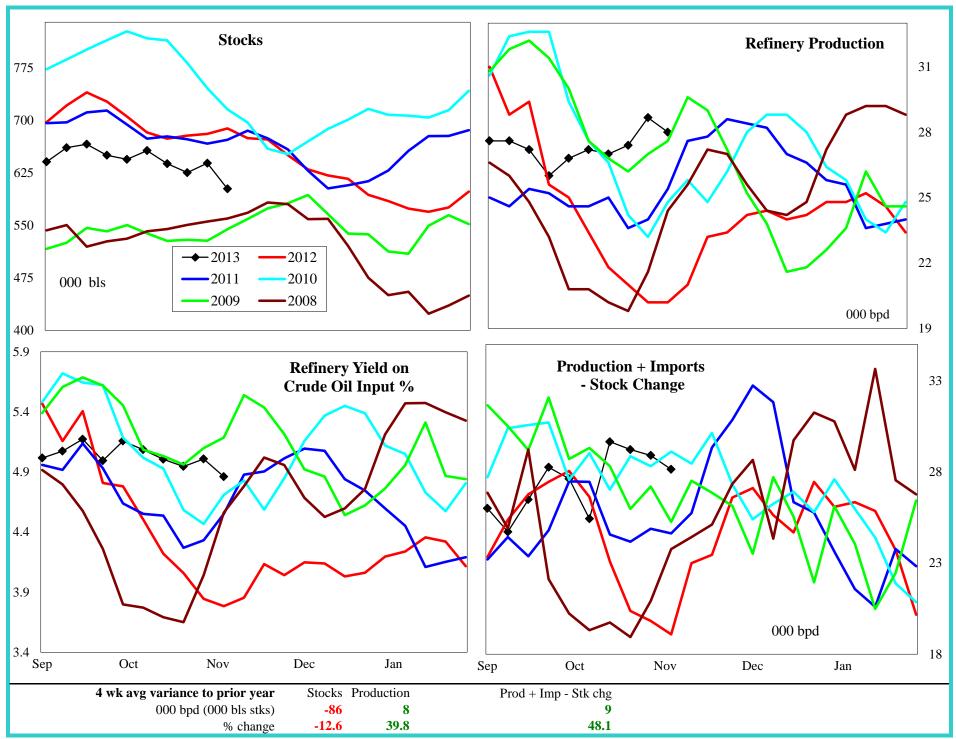
### **PADD 4 Gasoline Supply**



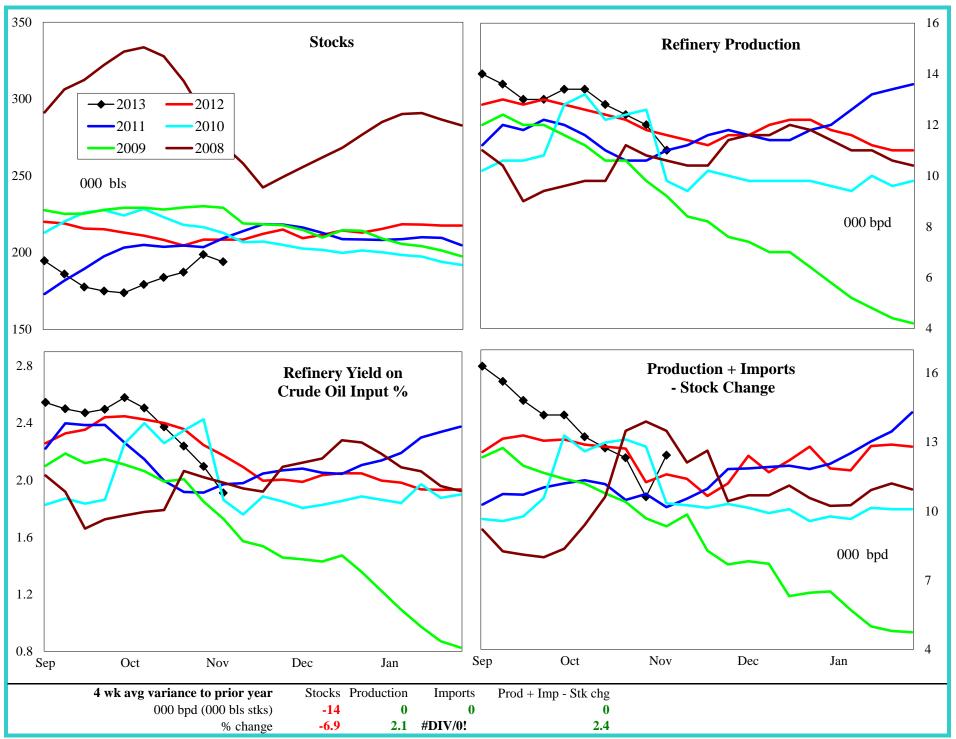
### **PADD 4 Distillate Supply**



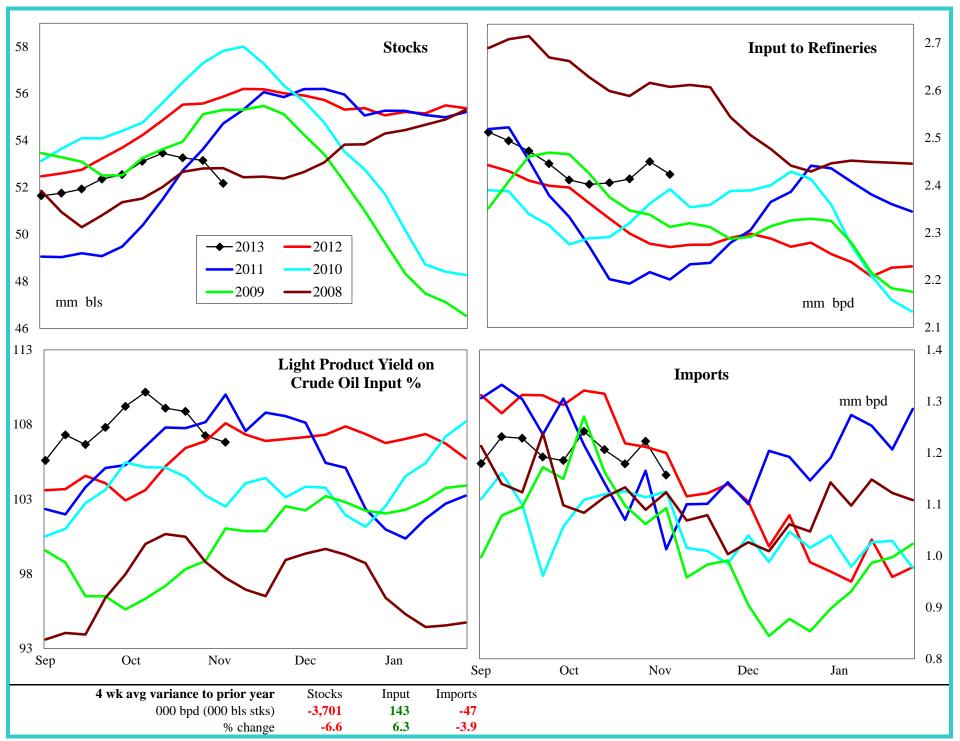
### **PADD 4 Jet Fuel Supply**



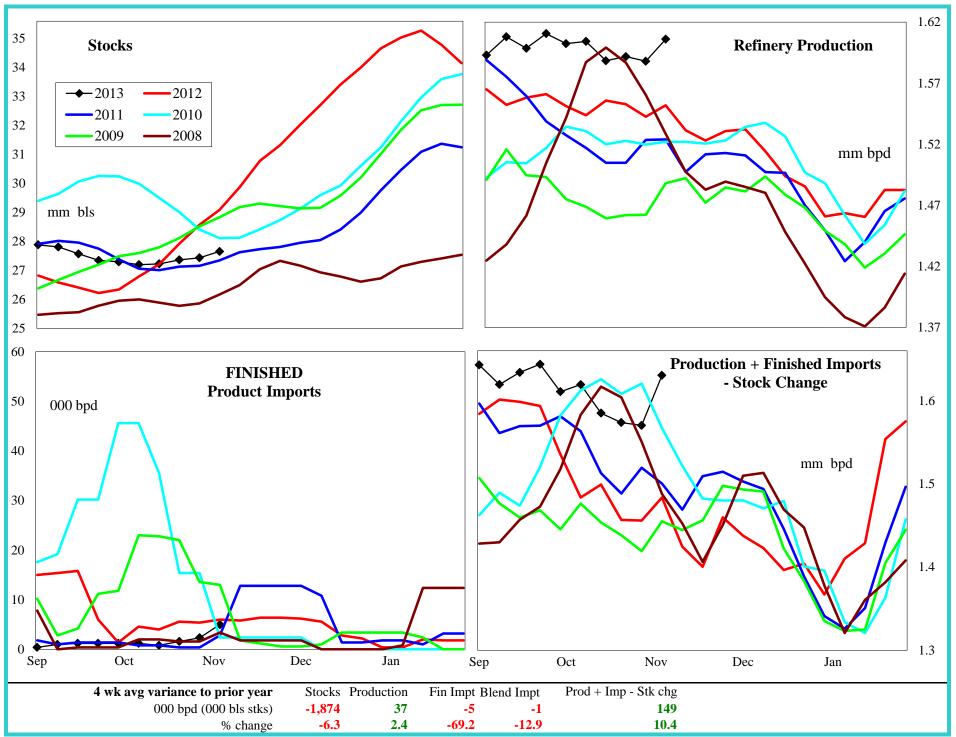
# **PADD 4 Residual Fuel Oil Supply**



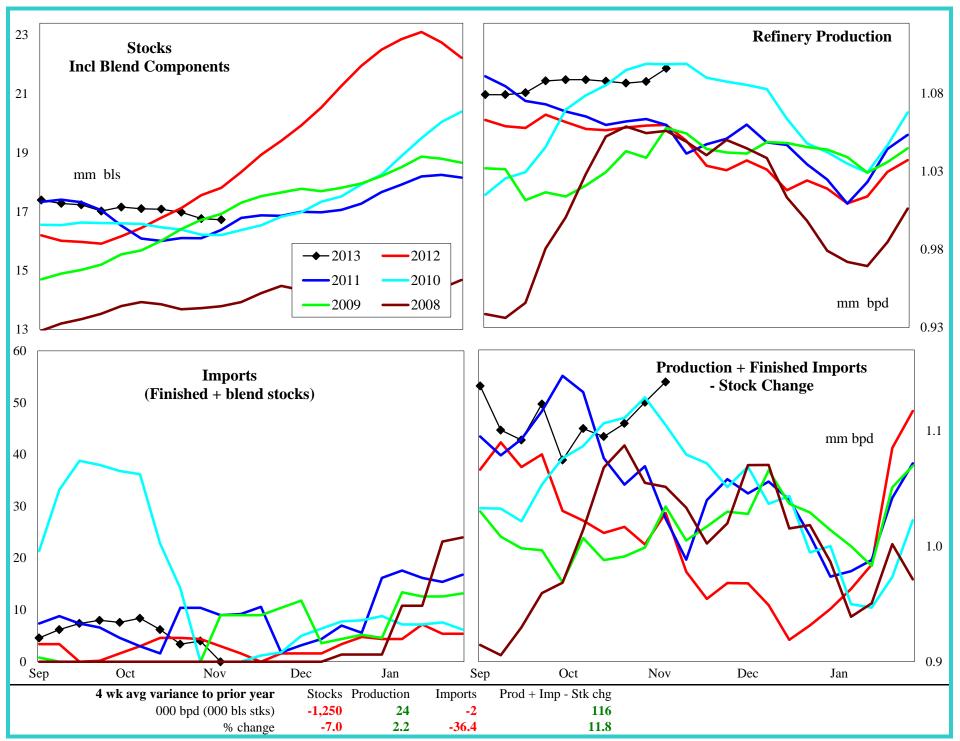
### **PADD 5 Crude Oil Supply and Refining**



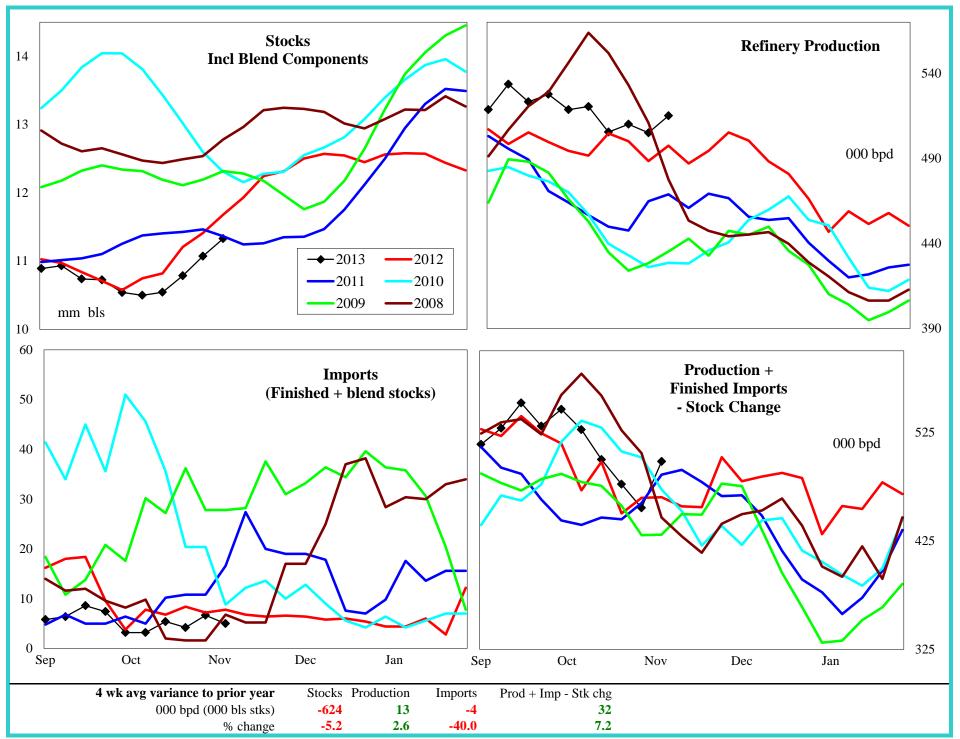
### **PADD 5 Gasoline Supply**



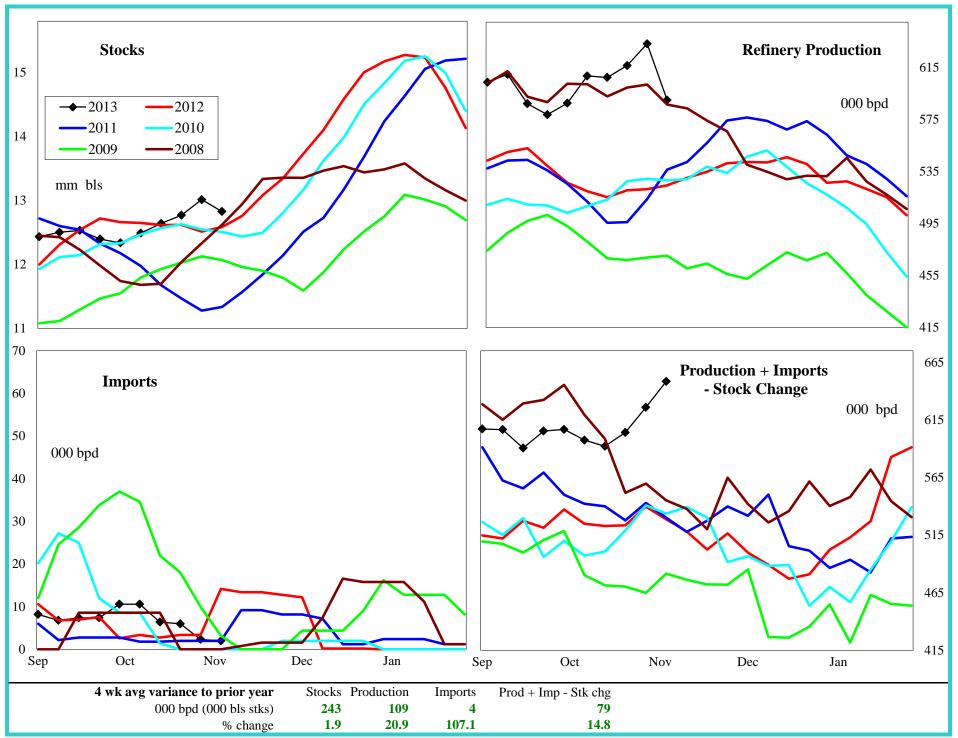
### **PADD 5 Reformulated Gasoline Supply**



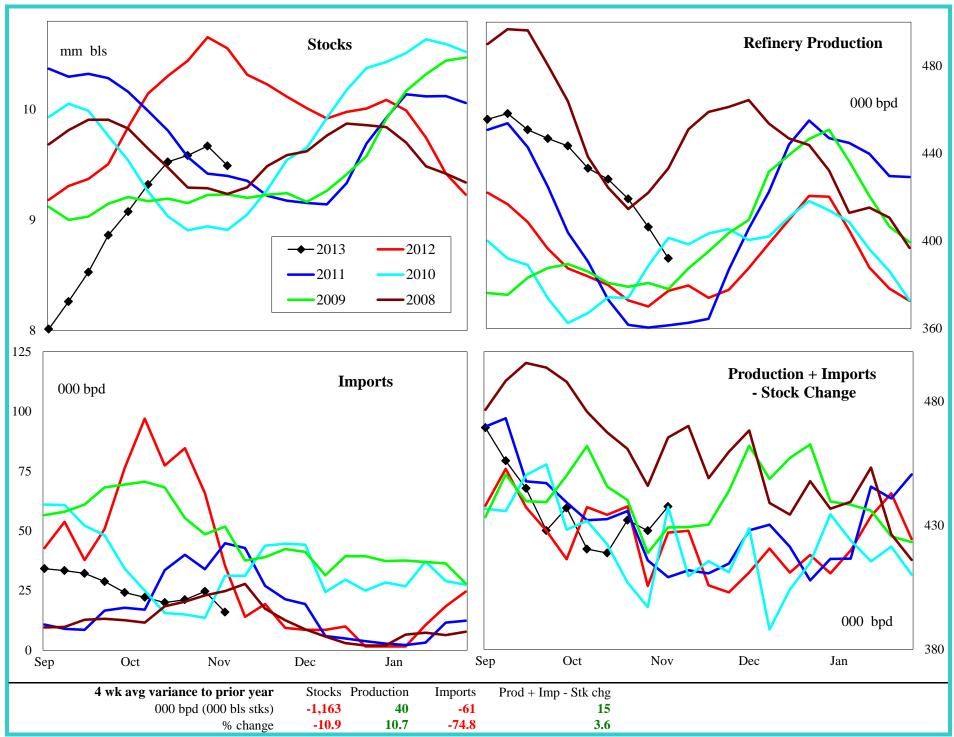
### **PADD 5 Conventional Gasoline Supply**



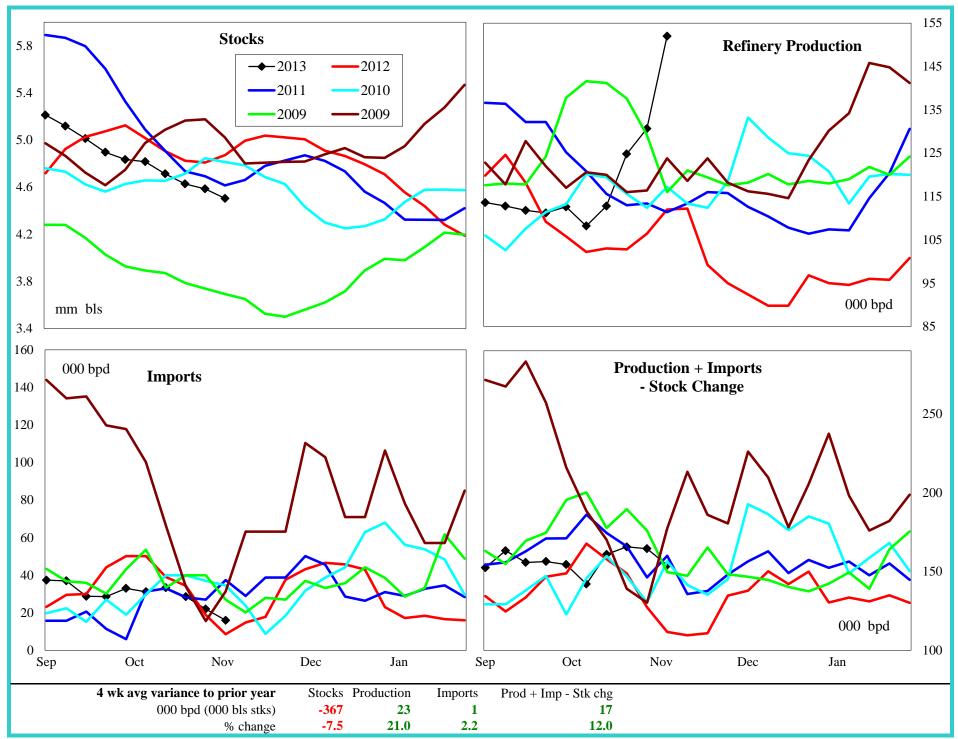
### **PADD 5 Distillate Supply**



### **PADD 5 Jet Fuel Supply**



### **PADD 5 Residual Fuel Oil Supply**



11/14/2013