



The Distillate Outlook, Winter 95-96

Slides and Talking Points for a Presentation by

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The Distillate Outlook, Winter 95-96



Slowing Low S Demand
Rising High S Demand, when/if NORMAL temp.

Nimble Markets:

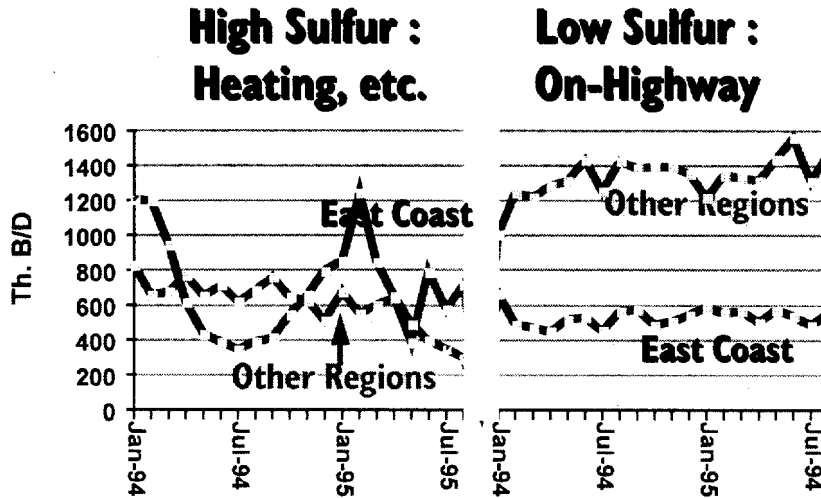
Local Refinery Output, Short Haul Imports
Add'l Imports Quickly Available
Mechanisms to Cope with Extremes



Low S Demand Dependent on Economy

- The Central Point: As industry restructures at all levels, markets of necessity are becoming more nimble, more responsive, a development that provides a big benefit for the Winter outlook.
- Supply patterns reflect the market's search for supply from the closest supply source: local refinery output on the East Coast has risen, displacing imports.
- Imports come from the closest areas.
- Additional import supplies are readily available, if prices signal a market need.

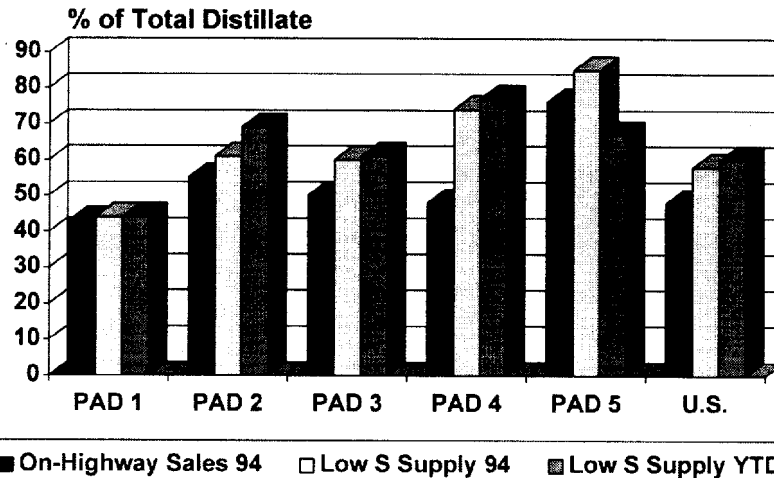
Distillate Demand: East Coast Heats, Others Drive



- Overall, distillate demand swings 500-600 thousand barrels per day between the high 1st quarter and the low 3rd quarter. Most of this seasonal swing, which is obviously concentrated in the market for high sulfur distillate oil, is on the East Coast, and particularly in the Northeast, where 2/3 of all oil-heated housing units are located.
- Low sulfur distillate -- the quality required for on-highway use -- accounts for about 60% of the 3.2 million barrels per day of distillate use. Low sulfur distillate demand has been rising in 1995, showing a 7% increase over the first nine months of the year compared to 1994. (In contrast, the warm Winter helps explain the 10% decline in the demand for high sulfur distillate.)
- The year-on-year rate of increase has been decelerating: the early months of the year showed increases of 8-12%, while the most recent monthly data from the Energy Information Administration showed an August increase of just 1.5%, and the most recent monthly estimates from the American Petroleum Institute confirmed an additional slowdown in September.



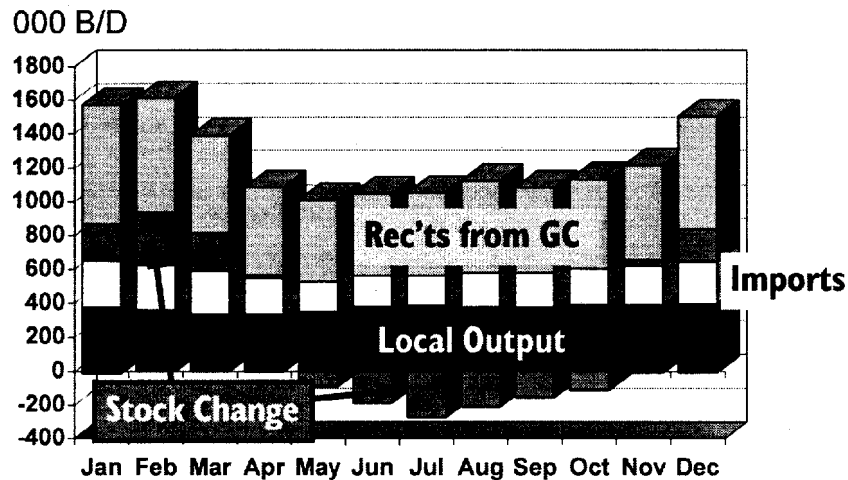
The Sulfur "Giveaway": On-Highway Sales v. Low S Supplies



- Some low sulfur distillate is going to uses where high sulfur would suffice.
- Low sulfur quality is required for on-highway diesel nationwide, and for all distillate in California. In 1994, these accounted for a little less than 50% of all distillate use nationwide, with the share predictably highest in PAD 5 and lowest in oil-heat dependent PAD 1. Yet low sulfur product accounted for about 60% of the total distillate supplied.
- The mis-match between the expected demand for low sulfur and the observed supply of this specialty product is due to:
 - ➔ A learning curve in handling a new product efficiently. As we move further up the curve, the "excess" low sulfur will stabilize.
 - ➔ A measuring curve, as the change in the tax collection point uncovered additional taxable diesel.
 - ➔ A logistics factor, where the inefficiency of segregating two products for widely dispersed rural customers outweighs the economic penalty of supplying higher quality product.



East Coast Distillate Supply: Stocks, not Imports, are the Swing

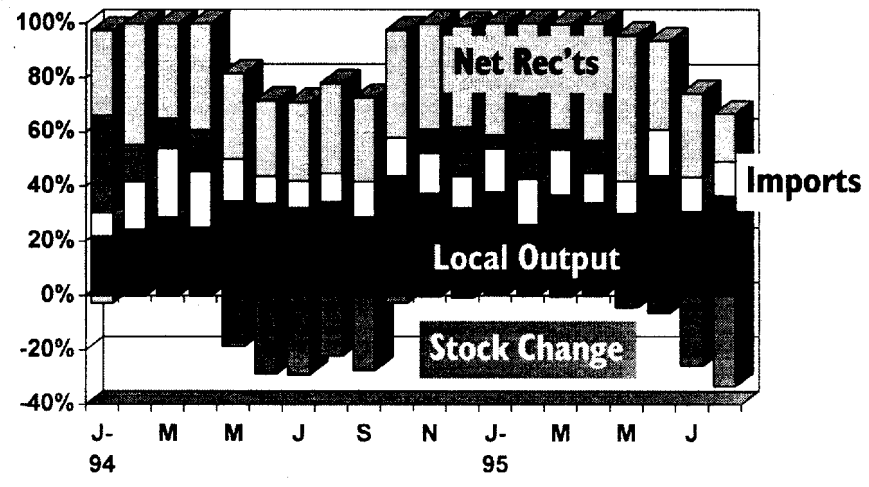


Based on average, 1988-94

- The seasonal swing in distillate supplies to the East Coast comes not from imports, but from stocks.
- Using the average supply pattern for each month over the 1988-94 period, we see that the seasonal peak in January and February amounts to about 1.6 million barrels per day, and the seasonal low approaches 1 million.
- Output from local refineries and receipts from the Gulf Coast provide a base load of supply. Even imports vary relatively little over the year, on average.

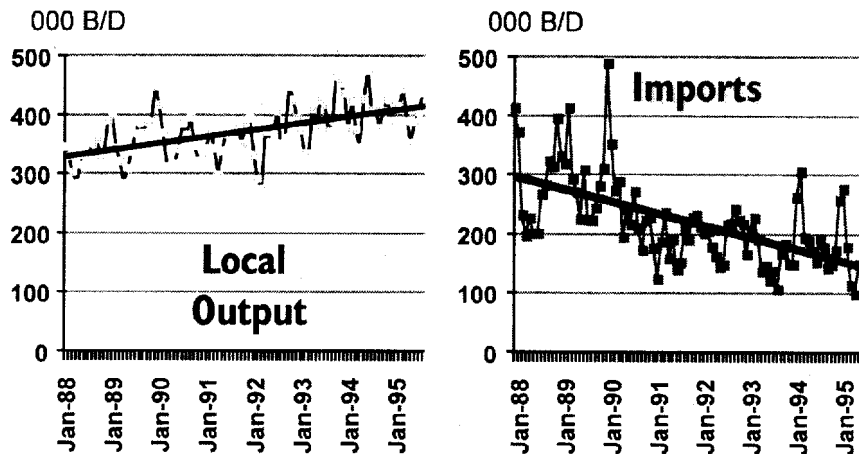


East Coast High Sulfur Supply: Even here, domestic dominates

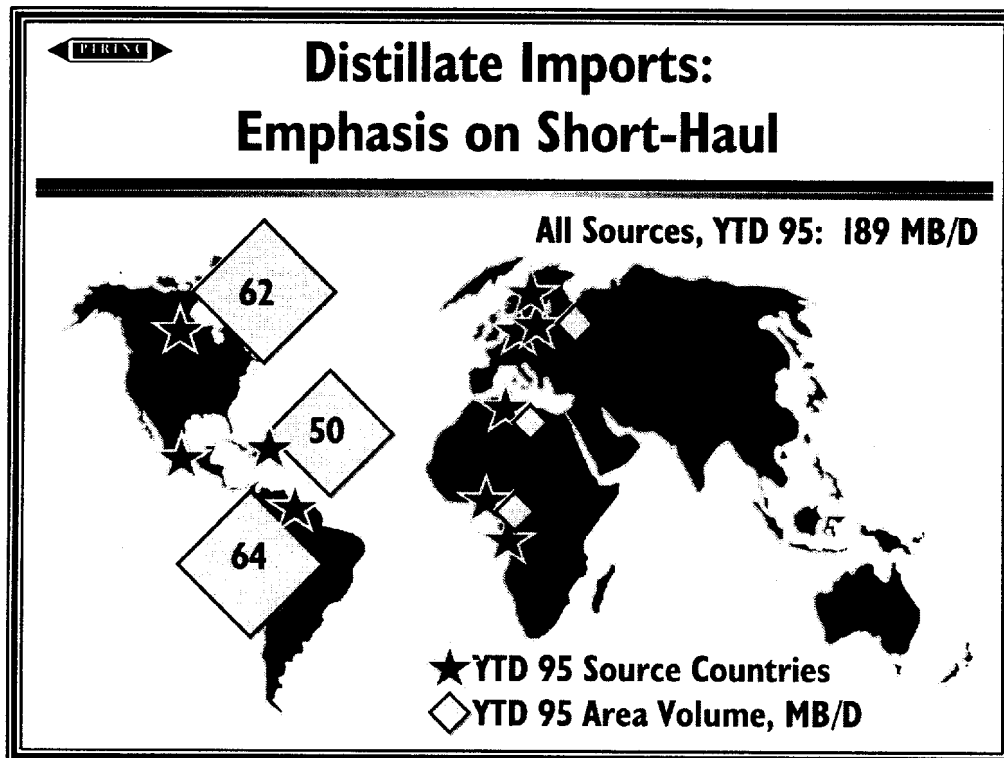


● Because the requirement for low sulfur product only began in October 1993, our experience with segregated high sulfur supply and data is still new. Even here, the importance of supplies from domestic sources dominate. Because high sulfur distillate oil is available worldwide, imports might have provided an economic option for supply. As the data show, this has not been the case.

PAD I Supply Trends: Output Upward, Imports Downward

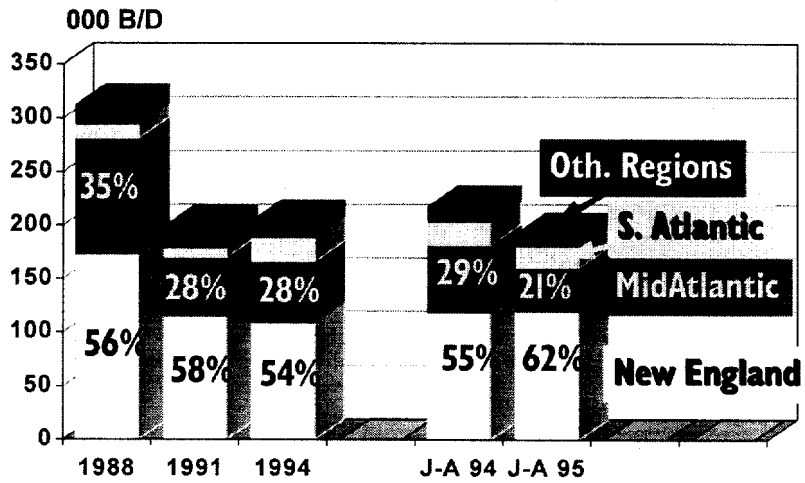


- How have markets reacted to new realities, including leaner inventories? With the dictum, "Get it from the closest source."
- Net receipts of distillate from the Gulf Coast have remained about the same over the period since 1988. The competitive battle has been between local refineries and imports. Refineries are winning.
- The output increase has come importantly from changes in the ownership of some PAD I refineries. The new owners have run their plants as merchant refiners, not to feed an integrated downstream network.
- The output increase also is an echo of an industry-wide phenomenon: enhancing capacity with computer control and other efficiencies.



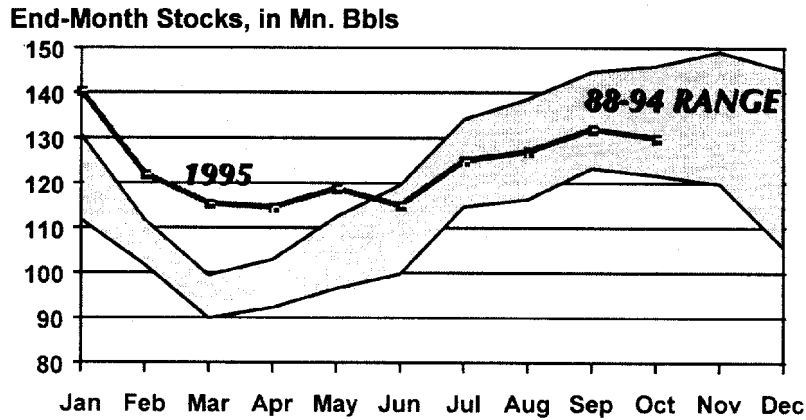
- Total distillate imports over the January-August period of 1995 have been about 190 thousand barrels per day, virtually all of it into the East Coast.
- Canada accounts for 1/3; Central/South America (essentially Venezuela) also accounts for 1/3; the Caribbean (all of it Virgin Islands) accounts for about 1/4. Hence these closest areas supply more than 90% of the total.
- Additional volumes would be readily available if needed. In the same period of 1994, for instance, we were also importing from Brazil, the Bahamas, the Netherlands Antilles, Trinidad & Tobago, Romania, and Russia.

Distillate Imports: MidAtlantic Shrinks



- The regional pattern of imports fits the same “closest source” theme. The decline in imports in 1995 is centered in the Mid-Atlantic, the closest customer area for the increased output of the East Coast’s refineries.

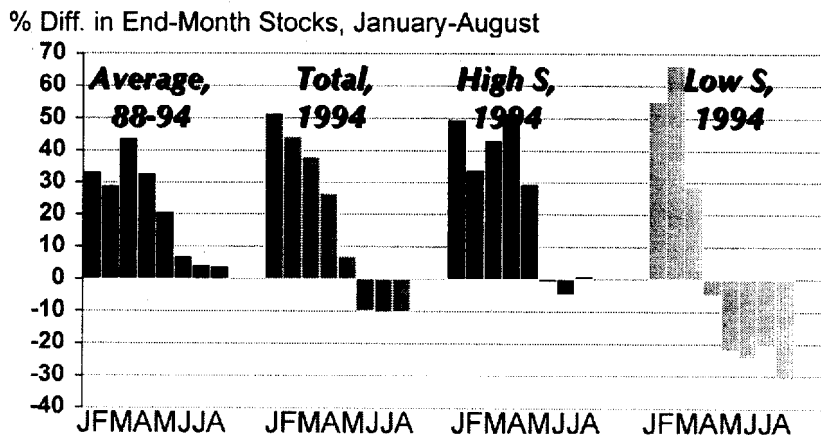
U.S. Distillate Stocks: Solidly in the 1988-94 Range



- Since stocks provide the seasonal swing in supply, we've sliced and diced the stock data in several ways to judge current levels relative to earlier patterns. While the high sulfur portion of the distillate barrel is the one we need to focus on, we have too brief a history to draw strong conclusions.
- Most comparisons that follow are based on the 1988-94 pattern. For the U.S. as a whole, current (end-October) inventories fall solidly into the range of the high/low level for the period.
- It is important to note, however, that current inventories are on the low side. For October, the low side of the range is set by the 1989 level, an unusually low volume.

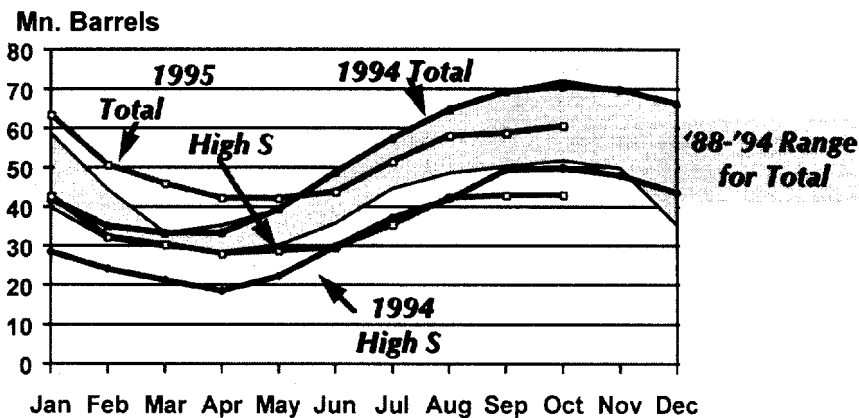


East Coast Distillate Stocks -- 1995 Compared to:



- Comparing 1995 levels to a variety of stock measures shows that through the period during which final data are available (August) distillate stocks have stayed above the average for the 1988-94 period. By end-October, however, preliminary data show them to be about 3 million barrels or 5% below the average.
- Comparing 1995 to 1994 shows that through August the differences have been focused on the low sulfur side of the distillate barrel. More recent preliminary data show a shift here as well, with high sulfur now below year ago levels.

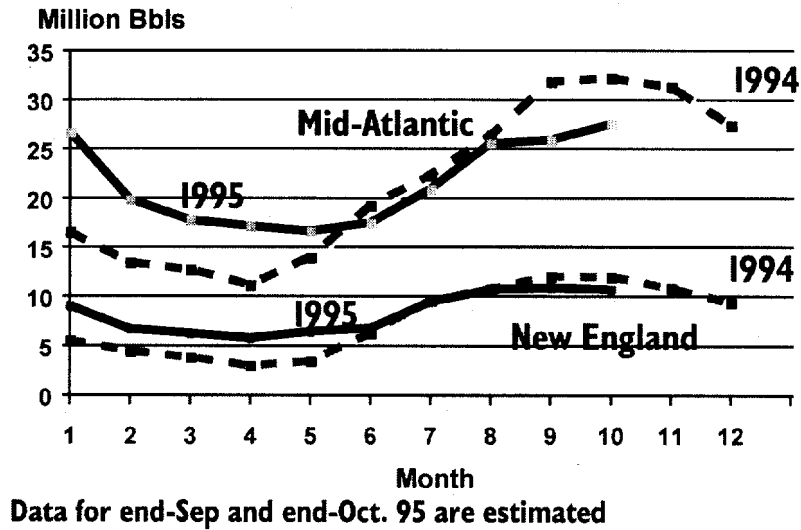
East Coast Distillate Stocks: Last Year was the High End



- Comparisons to last year may lead to distorted conclusions: East Coast distillate stocks in 1994 set the high side of the range for each month from March onward. By the end of the year, the warm weather was leading to an unwitting stock build.
- Again, although we don't yet have a long experience with high sulfur distillate as a separate product, we can see that in the 4th quarter of 1994, inventories of high sulfur distillate alone were matching the level formerly held for total distillate. Again, therefore, comparisons with 1994 alone are distorted and will be increasingly colored by last year's low demand as we move through the 4th quarter.

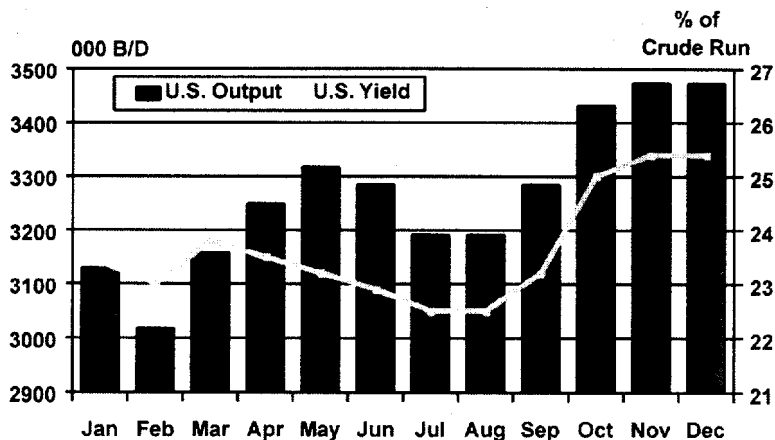


N'east High Sulfur Distillate Stocks: Mid-Atlantic Makes the 94 v 95 Difference



- Where is the difference in the high sulfur inventories? In the MidAtlantic, again fitting with the new dependence on the local refinery supplies. In more distant New England, high sulfur stocks are about even with the unusually high year-ago levels.

Maximizing Distillate Production: Highest Monthly Levels, 1988-94



- Finally, what if. . .
- The warm weather last year was worth about 80 thousand barrels per day of distillate demand in the 4th quarter and about 90 thousand barrels per day in the 1st quarter of 1995.
- An additional demand surge will send a signal to refiners and to importers.
- The graph is labelled "Maximizing Distillate Production" but it reflects only the highest observed level for each month, not the maximum technical capability. Over the 1988-94 period, refineries produced a high of almost 3.5 million barrels per day in November and December. Average output for those months, however, is about 300 thousand barrels per day lower.
- Yields have been as high as about 26% of crude runs, but have recently been in the area of 23%.
- Incremental supplies are available if necessary. The market is nimble. It will respond.