

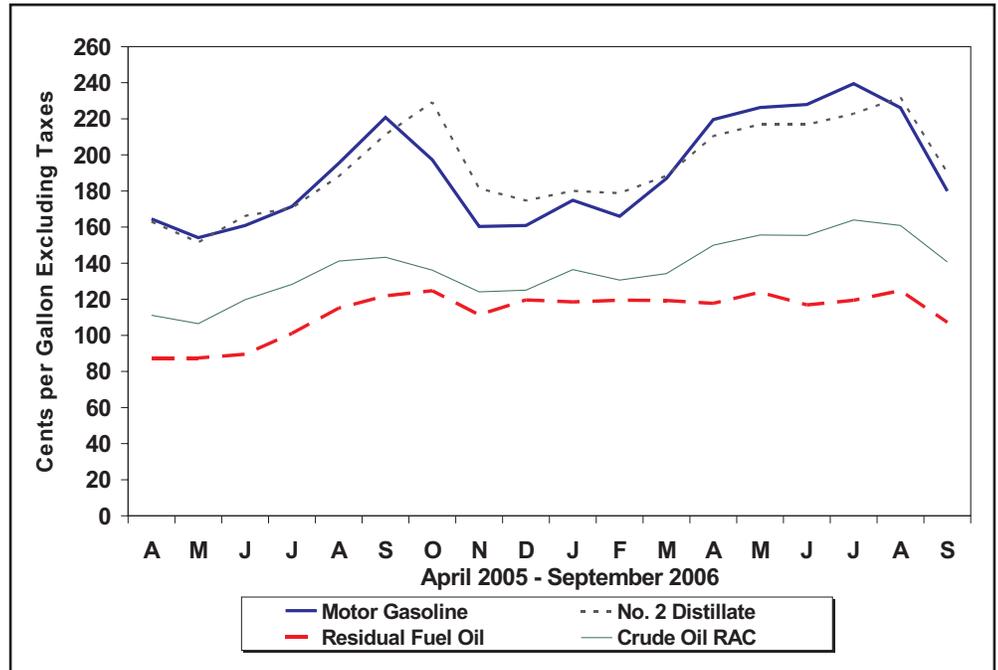
# Highlights

Paired with subsiding pressure from political issues and the possibility of inclement weather, robust petroleum products inventories and falling demand for them led world crude oil prices much lower in September. In North America, few storms have materialized in the Gulf of Mexico region during the hurricane season thus far and none have seriously threatened oil production and refinery operations in the area. Early in the month, prospects that oil production operations at Prudhoe Bay would be at least partially restarted by the end of September also helped dampen prices. In the Middle East, several potentially volatile political matters remained stable during September. The cease-fire agreement between Israel and Lebanon stemming from the conflict in August remained intact. News on the negotiations between Iran and Western nations over its nuclear fuels program indicated some progress in the situation, and though it remained to be seen whether any substantive goals would be achieved in the dispute, oil prices responded to the developments. In Nigeria, oil workers unions called for a 3-day warning strike beginning on September 13 to draw attention to their concerns about security in the country's oil producing region. However, the strike ended on September 14, when the unions expressed their satisfaction that their concerns would be addressed by the government and crude oil loadings at export terminals resumed. Nevertheless, at the end of the month Nigeria, along with Venezuela, announced production cuts totaling 170,000 barrels per day in an effort to stem falling crude oil prices. Both countries are members of the Organization of Oil Exporting Countries (OPEC) and the reduction followed reports of informal talk that some OPEC members wanted to trim production to prop up prices that had

fallen substantially since midsummer. However, market watchers believed the cuts would have only a modest effect on prices since the decrease was relatively small and the market was currently well supplied. Further, speculation as to how the cuts would be counted, from actual production rates or from assigned production levels, affected the impact of the announcement since both countries actual production rates were already below quotas levels.

In U.S. markets, prices for crude oil and refined products continued to decrease during September. Growing inventories, especially for gasoline, and lower demand for crude oil and other petroleum products played a central role in the decline. Robust refinery operations and diminished expectations for an active hurricane season in the Gulf of Mexico region—like the one seen last year—also influenced prices. Crude oil prices were also colored by BP Oil's an-

**Figure HL1. Crude Oil and Petroleum Product Wholesale Prices**



Sources: Energy Information Administration. Crude oil refiner acquisition cost: Form EIA-14, "Refiners' Monthly Cost Report"; petroleum product prices: Form EIA-782A, "Refiners' /Gas Plant Operators' Monthly Petroleum Product Sales Report."

**Table HL1. U.S. Refiner Prices and Volumes of Petroleum Products**

(Prices: Cents per Gallon Excluding Taxes, Volumes: Million Gallons per Day)

| Products                              | Sales to End Users |        |             |        |                |        | Sales for Resale |        |             |        |                |        |
|---------------------------------------|--------------------|--------|-------------|--------|----------------|--------|------------------|--------|-------------|--------|----------------|--------|
|                                       | September 2006     |        | August 2006 |        | September 2005 |        | September 2006   |        | August 2006 |        | September 2005 |        |
|                                       | Price              | Volume | Price       | Volume | Price          | Volume | Price            | Volume | Price       | Volume | Price          | Volume |
| <b>Motor Gasoline</b> .....           | 207.8              | 58.4   | 248.8       | 60.6   | 241.7          | 57.9   | 180.0            | 317.9  | 226.1       | 335.1  | 220.6          | 312.0  |
| <b>Conventional</b> .....             | 201.5              | 34.0   | 243.5       | 35.8   | 238.5          | 33.5   | 175.1            | 219.0  | 221.8       | 234.7  | 217.0          | 208.5  |
| Regular .....                         | 198.4              | 29.0   | 241.1       | 30.7   | 236.4          | 28.4   | 173.5            | 192.6  | 220.1       | 207.4  | 215.7          | 181.3  |
| Midgrade .....                        | 214.2              | 2.8    | 253.7       | 2.9    | 246.3          | 2.9    | 178.8            | 9.2    | 229.9       | 10.3   | 221.1          | 11.0   |
| Premium .....                         | 225.2              | 2.3    | 263.7       | 2.2    | 255.6          | 2.2    | 190.6            | 17.3   | 238.2       | 17.0   | 229.5          | 16.2   |
| <b>Oxygenated</b> .....               | 206.7              | 1.5    | 258.1       | 1.5    | 241.3          | 1.6    | 185.6            | 8.1    | 239.7       | 7.5    | 219.8          | 8.2    |
| Regular .....                         | 204.3              | 1.3    | 256.4       | 1.4    | 238.8          | 1.4    | 184.2            | 6.6    | 238.9       | 6.2    | 218.8          | 6.7    |
| Midgrade .....                        | 217.3              | 0.1    | 267.3       | 0.1    | 252.9          | 0.1    | 184.4            | 0.9    | 239.0       | 0.8    | 220.1          | 1.0    |
| Premium .....                         | 232.0              | 0.1    | 276.1       | 0.1    | 260.6          | 0.1    | 201.8            | 0.6    | 250.1       | 0.5    | 231.6          | 0.5    |
| <b>Reformulated</b> .....             | 217.3              | 23.0   | 256.4       | 23.3   | 246.5          | 22.7   | 191.5            | 90.7   | 235.7       | 92.8   | 228.6          | 95.2   |
| Regular .....                         | 212.6              | 17.7   | 252.7       | 18.3   | 243.2          | 17.7   | 188.1            | 74.8   | 232.7       | 77.1   | 226.3          | 78.8   |
| Midgrade .....                        | 227.4              | 2.5    | 264.7       | 2.4    | 253.8          | 2.5    | 203.7            | 3.2    | 245.4       | 3.4    | 235.5          | 3.8    |
| Premium .....                         | 238.4              | 2.8    | 275.1       | 2.6    | 261.8          | 2.5    | 208.0            | 12.8   | 251.9       | 12.4   | 241.1          | 12.6   |
| <b>Aviation Gasoline</b> .....        | 253.2              | 0.1    | 305.8       | 0.1    | 280.8          | 0.1    | 232.1            | 0.6    | 284.1       | 0.7    | 264.7          | 0.6    |
| <b>Kerosene-Type Jet Fuel</b> .....   | 199.8              | 41.3   | 222.9       | 44.4   | 210.3          | 45.0   | 194.7            | 18.6   | 221.4       | 14.0   | 206.9          | 15.2   |
| <b>Propane (Consumer Grade)</b> ..... | 126.6              | 2.6    | 136.8       | 1.8    | 120.4          | 3.1    | 103.2            | 37.8   | 111.3       | 36.0   | 108.2          | 30.5   |
| <b>Kerosene</b> .....                 | 251.3              | 0.0    | NA          | 0.0    | 231.2          | 0.1    | 203.7            | 1.4    | 229.3       | 1.0    | 221.3          | 0.9    |
| <b>No. 1 Distillate</b> .....         | 222.6              | 0.1    | 253.2       | 0.1    | 229.1          | 0.2    | 204.0            | 0.6    | 237.9       | 0.7    | 220.6          | 0.8    |
| <b>No. 2 Distillate</b> .....         | 204.3              | 18.3   | 237.9       | 19.4   | 217.2          | 19.4   | 190.2            | 143.7  | 231.8       | 140.3  | 211.0          | 136.7  |
| No. 2 Fuel Oil .....                  | 185.6              | 1.1    | 221.1       | 0.9    | 207.8          | 1.9    | 179.6            | 14.0   | 206.1       | 12.7   | 199.3          | 16.5   |
| No. 2 Diesel Fuel .....               | 205.5              | 17.2   | 238.7       | 18.5   | 218.2          | 17.5   | 191.4            | 129.7  | 234.3       | 127.5  | 212.7          | 120.1  |
| Low Sulfur .....                      | 209.3              | 12.6   | 242.9       | 13.5   | 222.3          | 12.1   | 192.6            | 114.7  | 236.8       | 113.3  | 214.1          | 104.7  |
| High Sulfur .....                     | 195.1              | 4.6    | 227.4       | 5.0    | 209.1          | 5.4    | 182.0            | 14.9   | 214.9       | 14.3   | 202.8          | 15.4   |
| <b>No. 4 Fuel<sup>a</sup></b> .....   | W                  | W      | W           | W      | 182.1          | 0.1    | W                | W      | W           | W      | 169.1          | NA     |
| <b>Residual Fuel Oil</b> .....        | 116.0              | 10.6   | 130.1       | 11.0   | 125.2          | 10.4   | 107.2            | 8.6    | 124.8       | 8.3    | 121.9          | 3.5    |
| Sulfur Content not > 1 % .....        | 132.4              | 2.2    | 145.1       | 2.6    | 138.4          | 4.3    | 111.8            | 3.5    | 130.9       | 3.9    | 140.2          | 1.8    |
| Sulfur Content > 1 % .....            | 111.8              | 8.4    | 125.3       | 8.3    | 115.8          | 6.1    | 104.1            | 5.1    | 119.3       | 4.4    | 103.6          | 1.7    |

NA = Not available.

W = Withheld to avoid disclosure of individual company data.

<sup>a</sup> Includes No. 4 fuel oil and No. 4 diesel fuel.

Notes: Motor gasoline averages and totals prior to October 1993 include leaded gasoline.

Notes: Values shown for the current month are preliminary. Values shown for previous months are revised. Data are final upon publication in the *Petroleum Marketing Annual*.

Source: Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

nouncement that some restoration of operations at Prudhoe Bay, Alaska would be feasible by the end of the month, if testing proved a portion of trunk pipeline was sound enough for use and also approved for use by government agencies. On September 7, the company issued a plan in which it would fully restore production operations (about 400,000 barrels per day) by the end of October, again subject to government inspection and approval of the affected infrastructure. In other market developments, new regulations for fuels used in the United States were also issued in September. The U.S. Environmental Protection Agency (EPA) announced its proposal on September 7 that the Renewable Fuel Standard (RFS) program, established by the Energy Policy Act of 2005 (EPAct), would require 3.71 percent

of all gasoline sold or dispensed to U.S. motorists in 2007 be renewable fuel. The EPA also stated the current standard of 2.78 percent of all gasoline sold be renewable fuel remains in effect through the end of 2006. The EPAct defines renewable fuel as a motor vehicle fuel produced from plant or animal products or wastes, as opposed to fossil fuel sources. Additionally, federal regulations regarding ultra low-sulfur diesel fuel specify the product be at the terminal level on September 1, and at the retail level by October 15. 80 percent of on-highway diesel fuel must meet the ultra low-sulfur standard. In California, the product was required at the terminal and retail levels on July 15 and September 1, respectively. Evidence suggests the transition to the new product has been smooth thus far. A look at se-

## Petroleum Products

lected monthly average spot market prices shows the changes in oil product prices in September. The September 2006 average spot price for West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma was \$63.80 per barrel compared with \$73.04 per barrel in August, which amounts to a decline of \$9.24. The spot market price for regular gasoline at New York Harbor shows a similarly significant change. The September monthly average of \$1.583 per gallon marks a change of 45.5 cents to last month's average price of \$2.038 per gallon. The New York Harbor monthly average price for No. 2 fuel oil fell 28.4 cents from \$1.984 per gallon in August to \$1.699 per gallon in September.

Additional September market and sales activity for crude oil and the principal petroleum products are summarized in the following sections.

### Crude Oil

The daily spot price for WTI crude oil at Cushing, Oklahoma declined firmly in September. After opening the month at its highest point, \$70.38 per barrel, the price dropped significantly through the first half of the month, thanks to a combination of issues including reports of inventories of both crude oil and refined products at robust levels, lower demand, and easing international political tensions. September's low was struck on September 22 when the price reached \$59.79 per barrel. During the final days of the month, the price rebounded modestly in response to talk of production cuts by some OPEC members. Closing at \$62.90 per barrel, the price was \$7.48 below September's beginning level.

- September monthly average crude oil prices declined appreciably in all categories of sales. The average domestic crude oil first purchase price fell \$6.94 (10.3 percent) to \$60.27 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil dropped \$8.37 (13.3 percent), to \$54.65 per barrel. The average landed cost of foreign crude oil decreased \$7.88 (12.1 percent), to \$57.48 per barrel.
- The average refiner acquisition cost for domestic crude oil declined \$7.44 (10.6 percent), to \$62.94 per barrel. The average cost of imported crude oil to U.S. refiners registered the largest decrease, falling \$8.90 (13.4 percent) to \$57.29 per barrel, while the composite refiner acquisition cost for crude oil fell \$8.41 (12.4 percent), to \$59.15 per barrel.

### Motor Gasoline

The daily spot price for regular gasoline at New York Harbor experienced a significant drop in September. Opening the month at its highest point, \$1.846 per gallon, the price fell dramatically following the long Labor Day weekend, dropping nearly 20 cents by September 5. After leveling off during the next several days, the price began to fall again following reports of increasing stock levels and abating demand. The price reached its lowest level since mid-February when it fell to \$1.464 per gallon on September 20. Although it regained some ground at the end of the month, the price closed September at \$1.521 per gallon, 32.5 cents below its opening level.

- Monthly average prices for finished gasoline show substantial decreases in all categories of sale in September. The average price for retail sales of motor gasoline by refiners slid 41.0 cents to \$2.078 per gallon, while the average wholesale price tumbled 46.1 cents to \$1.800 per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets dropped 43.5 cents to \$2.052 per gallon. The average wholesale price for gasoline plunged 46.1 cents to \$1.803 per gallon. The average dealer tank wagon (DTW) price fell 43.3 cents to \$1.920 per gallon, while the average rack price registered the largest decrease, plummeting 48.3 cents to \$1.760 per gallon. The average bulk sale price declined 43.4 cents to \$1.748 per gallon. The difference between reformulated and conventional gasoline prices widened in September. Reformulated gasoline prices were 13.5 cents more at retail, and 12.4 cents higher at wholesale. Oxygenated gasoline prices were 3.4 cents more than conventional gasoline prices at retail, and 7.6 cents higher at wholesale.
- Refiner sales of motor gasoline fell in September. Total sales dropped 19.4 million gallons per day (4.9 percent) to an average of 376.3 million gallons per day. Retail sales declined 2.2 million gallons per day (3.6 percent), while wholesales decreased 17.2 million gallons per day (5.1 percent). Rack sales accounted for 71.8 percent of wholesales, while DTW and bulk sales made up 13.3 percent and 14.9 percent, respectively. Reformulated gasoline amounted to 30.2 percent of total motor gasoline sales, while oxygenated gasoline made up 2.6 percent of sales.

## *No. 2 Distillate*

Like other oil product prices, the September daily spot market prices for No. 2 heating oil at New York Harbor decreased substantially. Opening at \$1.900 per gallon, the price moved immediately to the month's high of \$1.966 on September 1. Moving with the general trend of the complex, the heating oil price dropped precipitously after the long holiday weekend. Robust stock levels acted as a primary issue driving the sharp decline in the price during the coming weeks. The price hit the month's low when it reached \$1.578 cents per gallon on September 22. Rebounding at the end of the month, the price closed September at \$1.690 per gallon, 21.0 cents below its opening level.

- Although not as profound as the changes seen in gasoline prices, No. 2 distillate prices also registered significant decreases in all categories of sales during September. The national average residential sales price fell 13.6 cents to \$2.373 per gallon, while the average wholesale price plunged 40.6 cents to \$1.921 per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets declined 29.0 cents, while the average wholesale price for No. 2 diesel fuel slid 42.5 cents. The difference between low- and high-sulfur diesel fuel prices was 13.2 cents at retail, and 9.2 cents at wholesale.
- Refiner sales of No. 2 distillates rose modestly in September. Total sales increased 2.4 million gallons per day (1.5 percent), to 162.0 million gallons per day. Sales of No. 2 fuel oil climbed 1.5 million gallons per day (11.3 percent), while sales of No. 2 diesel fuel rose 900,000 gallons per day (0.6 percent). Low-sulfur diesel fuel accounted for 86.7 percent of all refiner diesel fuel sales, and 78.6 percent of all refiner No. 2 distillate sales.

## *Residual Fuel Oil*

- Residual fuel oil prices registered sizable decreases in September. Refiner prices for low-sulfur residual

fuel oil dropped 12.7 cents to \$1.324 per gallon at retail, and 19.1 cents to \$1.118 per gallon at wholesale. The average refiner prices for high-sulfur residual fuel oil declined 13.5 cents to \$1.118 per gallon at retail, and 15.2 cents to \$1.041 per gallon at wholesale. Including data reported by a sample of residual fuel oil marketers, average prices for low-sulfur residual fuel oil fell 12.6 cents to \$1.268 per gallon at retail, and 18.4 cents to \$1.119 per gallon at wholesale. The retail price for high-sulfur residual fuel oil dropped 13.6 cents to \$1.119 per gallon, while the wholesale price fell 18.7 cents to \$1.020 per gallon.

- Overall, refiner sales of residual fuel oil fell in September. Total sales declined 100,000 gallons per day (0.5 percent), to 19.2 million gallons per day. Low-sulfur residual fuel oil sales decreased 800,000 gallons per day (12.3 percent), while high-sulfur residual fuel oil sales increased.

## *Other Products*

- September prices for the remaining surveyed products generally decreased from August levels. The refiner retail price for propane fell 10.2 cents, while the wholesale price declined 8.1 cents per gallon. Including data from a sample of propane marketers, the average residential price rose 2.4 cents, while the average retail price dropped 3.2 cents per gallon. The average wholesale propane price fell 8.2 cents per gallon. Prices for kerosene-type jet fuel, aviation gasoline, kerosene, and No. 1 distillate declined at both retail and wholesale.
- Refiner sales of products included in this section were mixed in September. Sales of propane and kerosene increased at both retail and wholesale, while aviation gasoline sales fell at both levels. Sales of kerosene-type jet fuel declined at retail but rose at wholesale, while No. 1 distillate sales did just the opposite.