

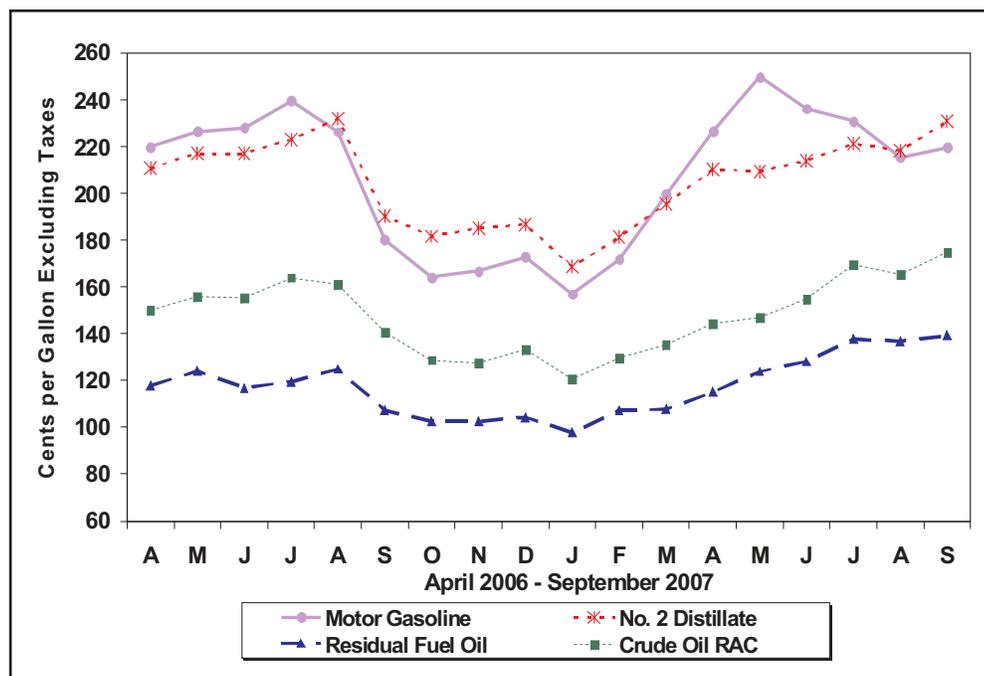
# Highlights

Declining oil product inventories, storms in the Gulf of Mexico, and economic and political issues led world crude oil prices sharply higher in September. At the start of the month, prices were on the rise due to the expectation of, and actual decrease in crude oil and product stocks in the United States. Shortly after that, a statement from the U.S. embassy in Nigeria noting that the United States and other Western interests were at risk of a terrorist attack in the region, and a flare-up of strife between Israel and Syria, highlighted the possibility that political discord could disrupt oil market logistics. Prices were further underpinned by talk of whether the Organization of Petroleum Exporting Countries (OPEC) would officially increase output at its next meeting on September 11. Although early indications pointed to no increase, the group voted to raise output 500,000 barrels per day, beginning November 1, 2007, noting tightening fundamentals and the approaching high-demand winter season as reasons for a step-up. Nevertheless, the decision failed to dampen rising prices. A larger-than-expected drop in U.S. oil stocks, the threat of another storm in the Gulf of Mexico, and the U.S. dollar's slide in value compared with other currencies pressured prices for many benchmark streams to record highs at mid-month. Additionally, contentious words between Iran and Western governments underpinned rising oil prices. After a short-lived decline towards the end of the month, prices for many benchmark streams jumped at the close of September as a weakened dollar may have prompted some speculative purchases in futures contracts. Some argue that the weakening value of the dollar has affected

the market dynamic. Many oil products are valued in dollars, so a favorable monetary exchange rate dampens the effect of escalating prices.

Crude oil and refined product prices rose noticeably in the United States during September. Declining inventories, inclement weather, and concern about the economy all contributed to the increase. Hurricanes passing through the Caribbean Sea and the Gulf of Mexico underpinned prices early in the month, though no significant damage to petroleum industry infrastructure occurred. Notably, the Houston Ship Channel was closed on September 12 due to high seas from Tropical Storm Humberto located off the coast of Texas, but reopened the next day. While storm activity provided support for rising prices, they reacted more vigorously to weekly

**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 2007		August 2007		September 2006		September 2007		August 2007		September 2006	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
<b>Motor Gasoline</b> .....	233.8	57.4	232.0	60.3	207.6	59.8	219.5	320.6	215.2	329.9	180.0	317.4
<b>Conventional</b> .....	233.8	35.0	230.3	36.8	201.4	35.3	219.6	230.6	214.6	237.6	175.0	218.3
Regular .....	231.6	30.2	228.1	31.7	198.3	30.1	217.6	202.4	212.3	207.6	173.5	191.8
Midgrade .....	242.3	2.6	239.5	2.7	214.1	2.9	227.2	10.8	226.1	11.6	178.8	9.2
Premium .....	252.5	2.2	249.4	2.4	224.9	2.3	238.4	17.4	233.2	18.4	190.6	17.4
<b>Reformulated</b> .....	233.8	22.4	234.5	23.5	217.3	23.0	219.3	90.0	216.6	92.3	191.5	91.0
Regular .....	229.4	17.3	230.1	18.2	212.6	17.8	216.3	75.0	213.5	77.0	188.1	75.0
Midgrade .....	242.6	2.4	243.2	2.5	227.4	2.5	225.9	2.8	223.3	2.9	203.7	3.2
Premium .....	253.9	2.7	255.1	2.9	238.4	2.8	235.7	12.2	233.8	12.4	208.0	12.8
<b>Aviation Gasoline</b> .....	290.0	0.1	282.3	0.1	253.2	0.1	283.0	0.5	282.8	0.6	231.9	0.6
<b>Kerosene-Type Jet Fuel</b> .....	225.1	39.8	216.0	42.5	199.8	41.3	225.5	14.0	215.1	15.2	194.7	18.6
<b>Propane (Consumer Grade)</b> .....	142.9	2.7	138.9	2.2	126.6	2.6	124.8	40.2	116.7	36.0	103.2	37.6
<b>Kerosene</b> .....	W	W	246.7	0.0	251.3	NA	244.9	0.7	222.2	0.7	203.7	1.4
<b>No. 1 Distillate</b> .....	241.5	0.1	232.2	0.1	222.6	0.1	253.8	0.4	237.3	0.5	208.8	0.6
<b>No. 2 Distillate</b> .....	237.9	23.1	227.9	24.4	208.4	25.1	230.7	147.0	218.1	153.4	190.0	145.4
No. 2 Fuel Oil .....	231.6	0.4	215.0	0.5	191.3	0.9	213.3	11.3	202.1	10.5	179.7	13.7
No. 2 Diesel Fuel .....	238.0	22.7	228.2	23.9	209.0	24.3	232.1	135.7	219.3	142.9	191.1	131.7
Ultra Low Sulfur .....	239.6	12.9	229.7	13.2	—	—	233.7	107.4	220.8	113.8	—	—
Low Sulfur .....	238.0	7.6	227.5	8.2	212.1	19.7	225.3	21.5	213.0	22.1	192.3	116.7
High Sulfur .....	229.5	2.3	222.2	2.5	195.7	4.5	228.1	6.8	213.6	7.0	181.9	15.0
<b>No. 4 Fuel<sup>a</sup></b> .....	W	W	189.7	0.2	W	W	159.6	0.2	151.8	0.3	129.6	0.2
<b>Residual Fuel Oil</b> .....	145.0	10.7	146.2	9.7	116.0	10.6	139.3	7.9	136.7	9.5	107.3	8.6
Sulfur Content not > 1 % .....	161.0	2.1	158.4	2.6	132.4	2.2	147.4	3.2	143.6	3.6	111.8	3.5
Sulfur Content > 1 % .....	141.0	8.6	141.9	7.2	111.8	8.4	133.7	4.7	132.6	5.9	104.1	5.1

Dash (—) = No data reported.

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: Beginning January 2007, oxygenated gasoline is included in conventional gasoline. Year-ago values only include the product displayed.

Notes: In January 2007, ultra low-sulfur diesel fuel was added.

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."

supply data showing unexpected declines in crude oil stocks. As demand for gasoline dropped in September, attention began to focus on distillates, particularly No. 2 heating oil. As is common at this time of year, No. 2 heating oil prices rose above gasoline prices in key markets. While rising crude oil prices supplied additional impetus, market watchers also noted the typical off-season stock build was comparatively slight this year. With the fall refinery maintenance season already underway, concern about the adequacy of supplies played a meaningful role in the rise in values for this product. The refinery utilization rate had dropped to 88.6 percent by the end of September, markedly lower than the September 2006 rate. Other distillate products prices were bolstered by demand from the agricultural sector in the midst of the harvest season, particularly in

the Midwest. While these and other fundamental issues directly contributed to higher prices, ongoing concern about the wider U.S. economy was also a discernable factor affecting prices. A look at average spot market prices in September, particularly at New York Harbor, helps to illuminate trends in petroleum products markets across the country. The September 2007 price for regular gasoline averaged \$2.102 per gallon, marking an increase of 9.8 cents per gallon (4.9 percent) from the August 2007 average of \$2.004 per gallon. More strikingly, the price was 51.9 cents (32.8 percent) higher than the September 2006 average of \$1.583 per gallon. The average spot prices for West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma show changes of a similar degree: the price averaged \$79.91 per barrel this

## Petroleum Products

### *Motor Gasoline*

Although the high demand summer driving season ended after the Labor Day weekend, the September daily spot market price for regular gasoline remained at robust levels throughout the month at New York Harbor. The price began the month at \$2.068 per gallon, but dropped to its low of \$2.038 per gallon on September 6 following the release of weekly stocks data. In reaction to news of refinery problems related to the effects of Hurricane Humberto, the price was on the rise again at mid-month. Reported declines in gasoline inventories also underpinned the price increase, as did the overall increase in product prices in the complex. The threat of more inclement weather in the Gulf Coast region also bolstered the price as it climbed to the month's high of \$2.183 per gallon on September 20. Easing during the remainder of the month, the price closed September at \$2.083 per gallon, 1.5 cents higher than its opening level.

- September monthly average prices for finished gasoline show modest increases from August levels. The average price for retail sales of motor gasoline by refiners rose 1.3 cents to \$2.332 per gallon, while the average wholesale price increased 4.4 cents to \$2.195 per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets increased 2.2 cents to \$2.344 per gallon. The average wholesale price for gasoline climbed 4.3 cents to \$2.200 per gallon. The average dealer tank wagon (DTW) price increased 3.5 cents to \$2.246 per gallon, while the average rack price rose 5.7 cents to \$2.217 per gallon. The average bulk sale price increased 2.8 cents to \$2.076 per gallon. Prices for reformulated gasoline were 3.0 cents less than conventional gasoline prices at retail, and 0.5 cent lower at wholesale.
- Refiner sales of motor gasoline fell in September, dropping 4.9 million gallons per day (1.3 percent) to an average of 385.2 million gallons per day.

month, up \$7.55 (10.4 percent) from last month's average of \$72.36 per barrel, and \$16.11 (25.3 percent) more than the September 2006 average of \$63.80 per barrel. The average price for No. 2 fuel oil at New York Harbor rose 19.5 cents (9.8 percent) from August's average of \$1.984 per gallon, and 48.0 cents (28.2 percent) from the year-ago level.

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 market price for WTI crude oil at Cushing, Oklahoma rose significantly in September. Opening at \$73.98 per barrel, its lowest point for the month, the price climbed firmly during the next several weeks due to a combination of factors including weather, production issues, and reported stockdraws. After setting successive record highs for several days, the price reached its highest point for the month, \$83.85 per barrel, on September 20 following comments from Federal Reserve Chairman Bernanke and a tropical storm off the Gulf Coast. Following a short period of decline, reports of another storm heading for the Gulf of Mexico region reinvigorated the price. Closing the month at \$81.64 per barrel, the price was \$7.66 higher than its opening level for September.

- September monthly average crude oil prices rose in all sales categories. The average domestic crude oil first purchase price saw the largest increase, rising \$5.28 (7.8 percent) to \$73.06 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil rose \$3.85 (5.8 percent) to \$70.39 per barrel. The average landed cost of foreign crude oil increased \$2.72 (4.0 percent), to \$71.49 per barrel.
- The average refiner acquisition cost for domestic crude oil climbed \$4.24 (5.9 percent), to \$75.81 per barrel. The average cost of imported crude oil rose \$3.90 (5.7 percent), to \$72.18 per barrel, while the composite refiner acquisition cost for crude oil increased \$3.97 (5.7 percent), to \$73.43 per barrel.

Retail sales declined 2.0 million gallons per day (3.3 percent), while wholesales decreased 2.9 million gallons per day (0.9 percent). DTW sales comprised 12.8 percent of wholesales, while rack and bulk sales accounted for 70.2 percent and 17.0 percent, respectively.

### **No. 2 Distillate**

The daily spot price for No. 2 heating oil at New York Harbor rose firmly in September. Opening at the month's lowest point, \$2.037 per gallon, the price increased steadily during the coming weeks, underpinned by the overall upward momentum of the complex, inclement weather, refinery operations, and supply concerns as the winter heating season approached. After several weeks of steady growth, the price reached the month's high of \$2.235 per gallon on September 18 as Hurricane Humberto threatened the Gulf Coast region. Easing moderately after that point, the price closed the month at \$2.199 per gallon, 16.2 cents higher than opening level for September.

- No. 2 distillate prices rose significantly in all sales categories during September. The national average residential sales price climbed 10.3 cents to \$2.607 per gallon, while the average wholesale price jumped 13.0 cents to \$2.325 per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets rose 10.2 cents, while the average wholesale price increased 13.3 cents. Ultra low-sulfur diesel fuel prices were 3.4 cents more than low-sulfur diesel fuel at retail, and 5.4 cents higher at wholesale.
- Overall, refiner sales of No. 2 distillates declined in September. Total sales decreased 7.6 million gallons per day (4.3 percent), to 170.2 million gallons per day. Sales of No. 2 fuel oil increased 700,000 gallons per day (6.2 percent), while sales of No. 2 diesel fuel dropped 8.3 million gallons per day (5.0 percent). Ultra low-sulfur diesel fuel accounted for 75.9 percent of all refiner diesel fuel sales, while total diesel fuel sales made up 93.2 percent of all refiner No. 2 distillate sales.

### **Residual Fuel Oil**

- Residual fuel oil prices generally rose in September. Refiner prices for low-sulfur residual fuel oil increased 2.6 cents to \$1.610 per gallon at retail, and 3.8 cents to \$1.474 per gallon at wholesale. Refiner prices for high-sulfur residual fuel oil declined 1.2 cents to \$1.410 per gallon at retail, but rose 1.7 cents to \$1.343 per gallon at wholesale. Including data reported by a sample of residual fuel oil marketers, average prices for low-sulfur residual fuel oil climbed 3.2 cents to \$1.595 per gallon at retail, and 4.7 cents to \$1.456 per gallon at wholesale. Prices for high-sulfur residual fuel oil increased 0.8 cent to \$1.418 per gallon at retail, and 3.7 cents to \$1.358 per gallon at wholesale.
- Refiner sales of residual fuel declined in September. Total sales fell 1.0 million gallons (5.1 percent) to 18.6 million gallons per day. Low-sulfur residual fuel sales decreased 700,000 gallons (11.7 percent), while high-sulfur residual fuel oil sales fell 300,000 gallons (2.2 percent).

### **Other Products**

- September prices for the remaining surveyed products were on the increase. The average retail price for propane sales by refiners rose 4.0 cents per gallon, while the wholesale price moved 8.1 cents per gallon higher. Including data from a sample of propane marketers, the average residential price increased 5.5 cents per gallon, while the average retail price rose 4.4 cents per gallon. The average wholesale price for propane climbed 7.8 cents per gallon. Prices for kerosene-type jet fuel, aviation gasoline, and No. 1 distillate rose at both the retail and wholesale levels. Wholesale prices for kerosene and No. 4 distillate also increased during September.
- Sales trends for these products were mixed in September. Sales of propane rose at both retail and wholesale, while kerosene-type jet fuel sales fell at both levels. Sales of aviation gasoline and No. 1 distillate increased at retail but fell at wholesale. Kerosene sales rose at the wholesale level, while sales of No. 4 distillate did the opposite.