

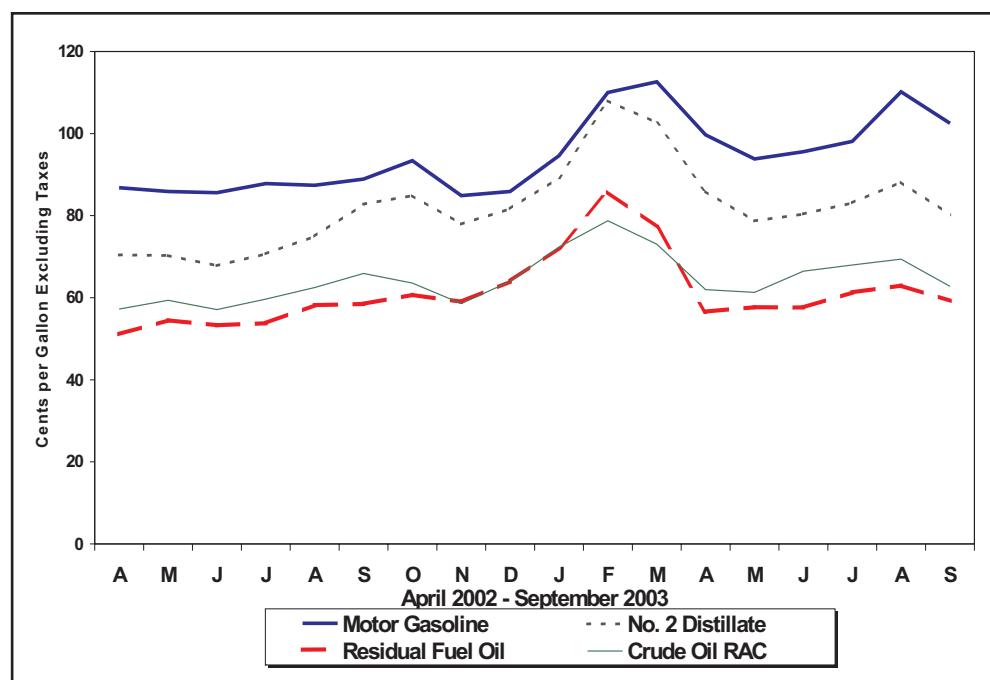
# Highlights

World crude oil prices declined in September as a variety of factors generated downward pressure on them. In addition to rising stock levels of petroleum products throughout international markets, factors including increasing supplies of Iraqi crude oil, falling gasoline prices (particularly in the United States), and lower demand for crude oil as refiners in Atlantic basin markets prepared for autumn maintenance contributed to the decline in crude oil prices. The Energy Information Administration (EIA) estimates Iraq's net oil production to have reached 1.5 million barrels per day in September. Prior to the war, estimates put Iraqi production at an average of about 2 million barrels per day. However, the decline in prices was stemmed by the unexpected decision made by the Organization of Petroleum Exporting Countries (OPEC) during its September 24 meeting to cut production by 900,000 barrels per day to 24.5 million barrels per day, beginning November 1, 2003. A number of factors were cited as influencing the group's decision: demand for crude oil was estimated to be at a normal rate of growth, a continued rise in non-OPEC supplies, stock levels near normal levels in world markets, and the ongoing recovery of Iraqi production. Plans were made to review production levels during a meeting on December 4 in Vienna, Austria. At the close of the month, talk that Nigerian workers' unions were discussing the possibility of strikes in the near future in protest of government fuel pricing rules also supported prices.

Even with the increases caused by the unanticipated OPEC decision at the end of the month, prices for crude oil and the major refined products declined overall in U.S. markets during September. Although most prices showed comparatively smooth

downward trends through most of the month due to rising inventories, gasoline prices remained volatile in regional markets across the country. Rising stocks and lower demand for gasoline led prices downward from the very high levels seen during August. Refinery production of gasoline remaining stable in September, along with gasoline imports from foreign markets, attracted by the very high prices in August, reaching U.S. markets early in the month helped dampened prices. In contrast to those factors, the seasonal change in product specifications, refiners purchasing product on the open market to meet immediate needs, and the coming refinery maintenance season caused much of the volatility seen during September. In regional market events, the U.S. Environmental Protection Agency granted a 30-day waiver from the requirement to use only reformulated gasoline in the Phoenix, Arizona area. The waiver, running from August 20 through September 19, came as a result of a rupture on the

**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 2003		August 2003		September 2002		September 2003		August 2003		September 2002	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
<b>Motor Gasoline</b>	126.5	63.8	123.1	66.7	100.1	62.4	102.5	318.7	110.2	336.0	88.9	302.7
<b>Conventional</b>	119.2	36.6	118.7	38.3	97.2	36.3	96.0	213.4	106.2	225.4	85.8	200.2
Regular	116.4	28.9	116.1	30.1	94.1	27.5	94.5	181.6	104.7	189.9	84.1	164.3
Midgrade	126.1	4.4	125.1	4.6	103.3	4.8	100.9	11.4	111.1	12.0	90.2	11.5
Premium	133.4	3.4	132.3	3.6	111.5	3.9	106.5	20.4	116.1	23.5	95.1	24.4
<b>Oxygenated</b>	125.4	2.4	129.1	2.2	102.7	2.2	109.6	8.7	116.5	8.0	93.4	8.5
Regular	122.9	2.0	127.0	1.8	99.9	1.8	108.9	6.9	115.6	6.3	91.9	6.5
Midgrade	130.4	0.3	131.8	0.3	110.7	0.2	106.8	1.1	116.5	1.1	95.2	1.2
Premium	142.7	0.2	144.2	0.2	119.1	0.2	121.2	0.7	126.8	0.6	103.4	0.7
<b>Reformulated</b>	137.5	24.8	129.1	26.1	104.3	23.9	116.2	96.7	118.5	102.6	94.9	94.0
Regular	133.8	18.2	125.6	19.1	100.1	17.1	113.0	76.2	115.9	80.1	91.8	70.5
Midgrade	143.1	3.0	135.0	3.2	111.1	3.4	126.1	5.7	123.8	6.3	102.4	7.5
Premium	151.4	3.5	141.4	3.8	118.6	3.5	129.1	14.7	129.0	16.2	105.2	16.0
<b>Aviation Gasoline</b>	158.9	0.1	162.2	0.1	139.1	0.1	134.9	0.6	139.7	0.7	119.2	0.7
<b>Kerosene-Type Jet Fuel</b>	81.9	46.4	87.4	46.2	82.8	49.9	81.0	11.4	86.3	11.6	81.5	13.4
<b>Propane (Consumer Grade)</b>	53.6	2.6	55.3	2.5	46.9	2.3	56.6	33.5	58.5	30.9	47.1	27.4
<b>Kerosene</b>	97.4	0.1	100.7	0.1	99.1	NA	82.7	2.1	88.2	1.1	85.5	1.4
<b>No. 1 Distillate</b>	96.9	0.2	100.2	0.2	93.4	0.2	93.1	0.6	100.4	0.2	95.2	0.6
<b>No. 2 Distillate</b>	88.0	18.1	93.2	18.7	86.1	21.4	80.2	133.2	88.2	123.1	82.6	125.1
No. 2 Fuel Oil	81.4	2.2	86.9	2.5	81.8	2.5	77.4	19.9	83.7	15.9	78.3	19.9
No. 2 Diesel Fuel	88.9	15.9	94.2	16.2	86.7	19.0	80.7	113.3	88.9	107.2	83.4	105.2
Low Sulfur	90.9	11.2	96.0	11.3	89.0	12.8	80.9	99.7	89.3	94.7	83.9	93.7
High Sulfur	84.1	4.7	90.2	4.9	81.8	6.1	78.7	13.7	85.9	12.6	79.6	11.6
<b>No. 4 Fuel<sup>a</sup></b>	70.2	0.2	72.6	0.2	71.0	0.2	78.1	0.0	73.6	0.0	69.4	NA
<b>Residual Fuel Oil</b>	64.6	10.3	69.8	9.7	63.8	9.9	59.2	5.5	63.0	6.5	58.7	7.4
Sulfur Content not > 1 %	72.0	3.2	75.4	3.1	67.8	2.3	62.2	2.2	66.9	2.8	60.1	4.2
Sulfur Content > 1 %	61.2	7.1	67.3	6.6	62.6	7.6	57.2	3.2	60.1	3.7	56.8	3.1

NA = Not available.

<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."

Kinder-Morgan pipeline that supplies gasoline to the Phoenix market. On the East Coast, although Hurricane Isabel carved a swath through the Mid-Atlantic region, leaving 5.5 million homes without power, it did not have a significant impact on petroleum product prices or on production or delivery systems in the region. A look at current and year-ago New York Harbor spot market prices helps to illustrate price activity during September. The monthly average price for regular gasoline was 90.3 cents per gallon in September 2003 compared with \$1.007 last month, and 77.8 cents per gallon in September 2002. The average price for No. 2 heating oil was 81.61 cents per gallon in August 2003, 73.6 cents per gallon in September 2003, and 77.3 cents per gallon in September 2002. At Cushing, Oklahoma, the monthly average price for West Texas Intermediate (WTI) crude oil was \$28.31 per barrel in September 2003

compared with \$29.66 per barrel on year ago, and \$31.57 per barrel last month.

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 West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma experienced a moderate degree of change during September. Falling relatively smoothly from August's robust levels during most of the month, the price rose solidly during the final week of September. Opening at \$31.76 per barrel,

the price commenced its steady decline following the long holiday weekend. The price remained essentially unaffected by Hurricane Isabel, largely because the storm did not affect the major ports, refining centers, and distribution networks in the Gulf or East Coast markets. However, following the surprise OPEC decision on September 24 to cut production quotas, the price reversed direction and rose during the final week of the month. Closing at \$29.19 per barrel, the price was \$2.57 lower than its opening level.

- September monthly average crude oil prices decreased significantly from August levels. The average domestic crude oil first purchase price declined \$2.69 (9.6 percent), to \$25.25 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil underwent the largest decrease, falling \$2.95 (11.0 percent), to \$23.90 per barrel. The average landed cost of foreign crude oil fell \$2.35 (8.4 percent), to \$25.69 per barrel.
- The average refiner acquisition cost for domestic crude oil declined \$2.56 (8.5 percent), to \$27.72 per barrel. The average cost of imported crude oil to U.S. refiners fell \$2.84 (10.0 percent), to \$25.66 per barrel. The composite refiner acquisition cost for crude oil decreased \$2.78 (9.5 percent), to \$26.37 per barrel.

## Petroleum Products

### *Motor Gasoline*

While it dropped significantly from the highs seen in August, the daily spot price for regular gasoline at New York Harbor remained volatile during September. Opening at its highest point for the month 99.4 cents per gallon, the price dropped substantially in the days following the Labor Day weekend, the traditional end of the high demand summer driving season. It was also affected by remaining market jitters surrounding supply levels in regional markets around the country. The price hit the month's low of 83.1 cents per gallon on September 17, follow the release of weekly inventory reports showing sizable increases in imports and stock levels the previous week. Following more fundamentals driven volatility, the price closed at 87.2 cents per gallon, over 12 cents below its opening level.

- Following the substantial across-the-board increases seen last month, the movement of monthly average gasoline prices was mixed in September. The average price for retail sales of motor gasoline by refiners rose 3.4 cents to \$1.265 per gallon, while the average wholesale price fell 7.7 cents to \$1.025 per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets increased 1.6 cents to \$1.229 per gallon. The average wholesale price decreased 8.2 cents to \$1.020 per gallon. The average dealer tank wagon (DTW) price fell 3.3 cents to \$1.121 per gallon, while the average rack price declined 11.3 cents to 98.1 cents per gallon. The average price for bulk sales decreased 8.9 cents to 90.4 cents per gallon. Reformulated gasoline prices were 16.6 cents higher than conventional gasoline prices at retail, and 17.3 cents more at wholesale. Oxygenated gasoline prices were 4.7 cents above conventional gasoline prices at retail, and 10.1 cents higher at wholesale.
- Sales of motor gasoline by refiners fell in September. Total sales decreased 20.2 million gallons per day (5.0 percent), to an average of 382.5 million gallons per day. Retail sales declined 2.9 million gallons per day (4.3 percent), while wholesales decreased 17.3 million gallons per day (5.1 percent). Rack sales accounted for 66.0 percent of wholesales, while DTW and bulk sales made up 17.8 percent and 16.2 percent, respectively. RFG accounted for 31.8 percent of total motor gasoline sales, while oxygenated gasoline made up 2.9 percent of sales.

### *No. 2 Distillate*

The September daily spot price for No. 2 heating oil at New York Harbor followed the overall trend set by other product prices, particularly crude oil. Opening at its highest point, 81.3 cents per gallon, the price dropped to the mid-70-cents-per-gallon range immediately following the holiday weekend. As inventory reports continued to show supplies at solid levels, the price continued to decline at a steady pace. The price reached its low of 68.9 cents per gallon on September 19. Other products' prices rose following the OPEC announcement and the price for No. 2 heating oil followed suit. Closing September at 77.9 cents per gallon, the price was 3.4 cents lower than where it began the month.

- September monthly average prices for No. 2 distillates fell from August levels in all sales categories except sales to residential users. The national average residential sales price for No. 2 distillate increased 0.9 cent to \$1.186 per gallon. The average wholesale price declined 7.7 cents to 81.0 cents per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets dropped 3.3 cents, while the average No. 2 diesel fuel wholesale price fell 8.1 cents. The difference between low- and high-sulfur diesel fuel prices was 2.3 cents at retail and 1.8 cents at wholesale.
- Refiner sales of No. 2 distillate increased firmly in September. Total sales rose 9.5 million gallons per day (6.7 percent), to 151.3 million gallons per day. Sales of No. 2 fuel oil climbed 3.7 million gallons per day (20.1 percent), while sales of No. 2 diesel fuel increased 5.8 million gallons per day (4.7 percent). Low-sulfur diesel fuel made up 85.8 percent of all refiner diesel fuel sales, and 73.3 percent of all refiner No. 2 distillate sales.

### **Residual Fuel Oil**

- September monthly average residual fuel oil prices fell from August levels in all sales categories. Refiner prices for low-sulfur residual fuel oil declined 3.4 cents to 72.0 cents per gallon at retail, and 4.7 cents to 62.2 cents per gallon at wholesale. The average retail price for high-sulfur residual fuel oil dropped 6.1 cents to 61.2 cents per gallon, while the wholesale price decreased 2.9 cents to 57.2 cents per gallon. Including data reported by a sample of residual fuel oil marketers, the average low-sulfur residual fuel oil price dropped 3.4 cents to 69.8 cents per

gallon at retail, while the wholesale price fell 3.0 cents to 67.9 cents per gallon. The retail price for high-sulfur residual fuel oil decreased 3.8 cents to 63.2 cents per gallon, while the wholesale price declined 3.6 cents to 59.1 cents per gallon.

- Refiner sales of residual fuel oil fell modestly in September. Total sales decreased 400,000 gallons per day (2.5 percent) to 15.8 million gallons per day. Low-sulfur residual fuel sales declined 500,000 gallons per day (8.5 percent), while high-sulfur residual fuel oil sales were essentially flat.

### **Other Products**

- For the most part, prices for the remaining surveyed products declined in September. Refiner propane prices dropped 1.7 cents per gallon at retail and 1.9 cents per gallon at wholesale. Including data from a sample of propane marketers, the average residential propane price increased 1.4 cents per gallon. The average retail price rose 2.4 cents per gallon, while the average wholesale propane price fell 1.7 cents per gallon. Prices for kerosene-type jet fuel, aviation gasoline, kerosene, and No. 1 distillate fell at both levels. No. 4 distillate prices decreased at retail but rose wholesale.
- Sales of products included in this section were mostly on the rise during September. Sales of propane, kerosene, No. 1 distillate, and No. 4 distillate increased both the retail and wholesale levels. Sales of kerosene-type jet fuel and aviation gasoline sales increased at retail but declined at wholesale.