

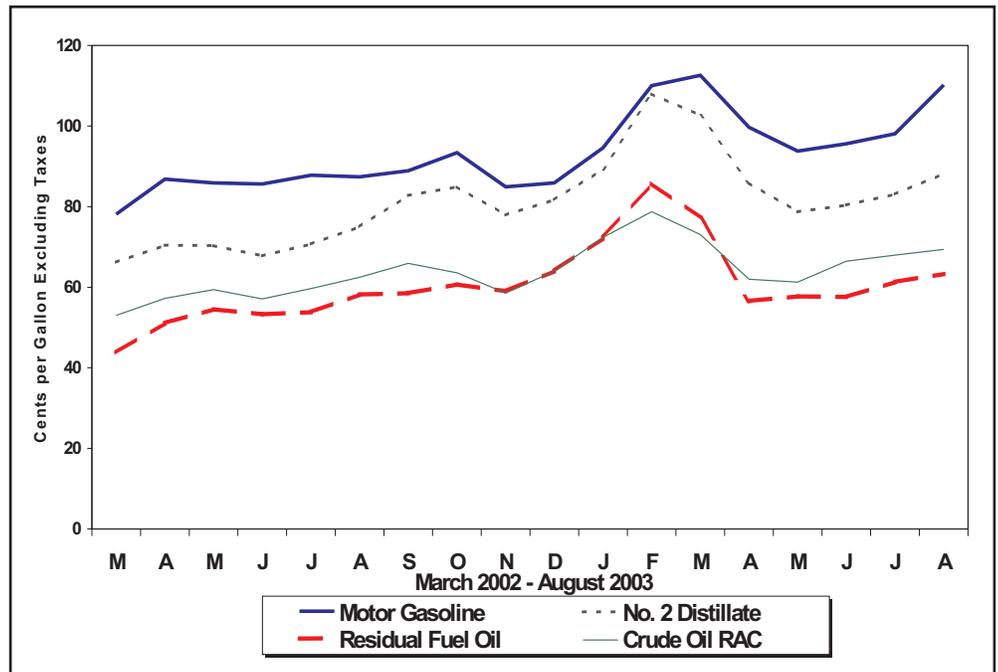
# Highlights

Influenced by low stock levels in key markets, political matters, and soaring prices for gasoline, international crude oil prices remained at robust levels during August. Throughout the month, prices were influenced by ongoing lower-than-expected oil production and exports from post-war Iraq. Although Iraqi oil production was reckoned to have risen in August, efforts to increase wellhead production to desired levels and maintain a steady pace of pipeline operations have been thwarted by equipment breakdowns and other disruptions. Estimates put production at about half of prewar levels. In what some saw as a measure to compensate for the loss of Iraqi crude oil, the Organization of Petroleum Exporting Countries (OPEC) elected not to change its production rates during the group's July 31 meeting. Prices were also influenced by a drop in Venezuelan production and exports in June and July, and more incidents of political unrest in Nigeria and the Middle East. While the drop in Venezuela's overall rate of production and exports was not seen as particularly significant in itself, some market watchers saw production declines in certain regions of the country as an indication of waning government investment in exploration and production activities and interpreted that as a sign for the potential of more political dissent. In Nigeria, the threat of disruption to production and export operations at mid-month caused by clashes between ethnic groups in oil producing regions also supported prices in international markets before the unrest was quelled by government troops.

In the United States, crude oil and most finished product prices moved along a generally smooth path in August. In contrast, however, gasoline prices underwent dramatic increases in response to

a number of pressures. At the start of the month, prices reacted to another reported decline in gasoline stocks on the heels of three consecutive decreases previously chronicled in weekly stocks data. In conjunction with falling stocks, indications that demand was on the rise (as can be expected at the height of the driving season) were also evident in the reports. Unplanned refinery outages in the West Coast, Gulf Coast, and Midwestern markets already in effect at the start of August exacerbated the effect of the supply and demand conditions. In Arizona, a rupture on a section of the Kinder-Morgan pipeline between Tucson and Phoenix led to a scarcity of gasoline in Phoenix, causing prices to spike dramatically. Further, suppliers were forced to purchase gasoline in California markets that were already affected by the earlier refinery outages. Additionally, refinery production in the Pacific Northwest area was affected by delays on a pipeline carrying crude oil and other petroleum products from Canada.

**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					
	August 2003		July 2003		August 2002		August 2003		July 2003		August 2002	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
<b>Motor Gasoline</b> .....	123.1	66.7	110.6	66.8	100.1	66.7	110.2	336.0	98.1	330.9	87.4	332.6
<b>Conventional</b> .....	118.7	38.3	106.9	38.5	96.7	39.5	106.2	225.4	95.2	222.6	83.9	224.5
Regular .....	116.1	30.1	104.0	29.9	93.5	30.1	104.7	190.0	93.6	185.7	82.2	185.1
Midgrade .....	125.1	4.6	113.3	4.8	103.2	5.2	111.0	11.9	99.7	11.9	88.5	12.8
Premium .....	132.3	3.6	121.3	3.9	111.2	4.3	116.1	23.5	104.5	25.1	93.7	26.7
<b>Oxygenated</b> .....	129.1	2.2	114.1	2.3	106.2	2.0	116.5	8.0	103.3	8.0	94.6	7.7
Regular .....	127.0	1.8	111.9	1.8	103.6	1.6	115.6	6.3	102.3	6.2	93.4	6.0
Midgrade .....	131.8	0.3	116.6	0.3	114.0	0.2	116.5	1.1	103.9	1.2	95.6	1.1
Premium .....	144.2	0.2	130.2	0.2	122.7	0.2	126.8	0.6	113.4	0.6	104.8	0.6
<b>Reformulated</b> .....	129.1	26.1	115.7	26.0	104.9	25.1	118.5	102.6	104.3	100.3	94.7	100.4
Regular .....	125.6	19.1	111.7	18.8	100.7	18.0	115.9	80.1	101.6	77.2	91.5	76.0
Midgrade .....	135.0	3.2	122.3	3.3	111.7	3.5	123.8	6.3	110.4	6.4	102.8	7.9
Premium .....	141.4	3.8	129.2	4.0	119.1	3.6	129.0	16.2	114.7	16.7	105.7	16.4
<b>Aviation Gasoline</b> .....	162.2	0.1	151.9	0.1	136.9	0.1	140.3	0.7	129.1	0.7	115.5	1.0
<b>Kerosene-Type Jet Fuel</b> .....	87.3	46.4	81.8	46.0	75.3	50.9	86.5	11.4	81.4	11.0	73.8	10.8
<b>Propane (Consumer Grade)</b> .....	55.3	2.5	54.3	2.6	41.5	1.7	58.5	30.9	55.9	30.0	41.5	28.4
<b>Kerosene</b> .....	100.7	0.1	89.8	0.1	79.8	0.1	88.2	1.1	82.8	1.0	76.4	1.4
<b>No. 1 Distillate</b> .....	100.2	0.2	93.6	0.2	85.1	0.2	100.4	0.2	91.1	0.2	84.9	0.3
<b>No. 2 Distillate</b> .....	93.4	18.3	87.8	19.7	78.6	22.3	88.2	123.0	83.1	126.9	75.0	125.7
No. 2 Fuel Oil .....	86.8	2.6	82.8	2.4	73.4	3.1	83.5	17.9	78.9	19.2	71.3	18.3
No. 2 Diesel Fuel .....	94.4	15.7	88.5	17.3	79.5	19.2	89.0	105.2	83.8	107.6	75.7	107.4
Low Sulfur .....	96.3	10.8	90.6	11.2	81.7	13.1	89.3	94.6	84.1	95.8	76.1	95.2
High Sulfur .....	90.4	4.9	84.5	6.1	74.7	6.1	86.6	10.6	81.8	11.9	72.2	12.2
<b>No. 4 Fuel<sup>a</sup></b> .....	72.6	0.2	72.3	0.2	68.2	0.4	73.6	0.0	71.8	0.0	63.4	NA
<b>Residual Fuel Oil</b> .....	70.0	9.6	70.1	10.5	61.4	10.5	63.3	6.6	61.3	5.2	58.4	9.6
Sulfur Content not > 1 % .....	75.4	3.1	74.5	3.7	67.4	2.8	67.0	2.8	65.0	2.3	60.6	5.2
Sulfur Content > 1 % .....	67.4	6.5	67.7	6.8	59.2	7.7	60.5	3.7	58.4	2.8	55.8	4.4

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."

As the month wore on, more refinery problems in other regional markets cropped up, particularly after the power blackout in the Northeast and Midwestern regions on August 14. Three refineries in the U.S. and several more in Canada were affected by the outage, as were some pipelines. While the power outage lasted for less than two days, powering up the affected refineries to prior operating levels took several days more. A look at some current and year-ago spot market prices for gasoline reflects the impact of a combination of underlying fundamental market conditions and unexpected events. At New York Harbor, the monthly average prices for regular gasoline were \$1.007 per gallon in August 2003 compared to 76.9 cents per gallon in

August 2002. The August 2003 average price was also 23.9 cents per gallon higher than the July 2003 price. In Chicago, the average spot market price for the regular grade of reformulated gasoline (RFG) required for use in the area was 97.0 cents per gallon in July 2003, but rose 15.7 cents to \$1.128 per gallon in August 2003. In Los Angeles, the change was even more dramatic: the average price for the regular grade of California reformulated gasoline (CaRFG) in July 2003 was 96.7 cents per gallon, but jumped 34.8 cents to \$1.315 in August 2003.

Additional August 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 remained at a robust level during August, showing only modest changes over the course of the month. The price opened August at \$30.56 per barrel, its lowest level for the month. Fluctuating moderately during the first week of the month due to a variety of influences, the price rose to its high of \$32.41 per barrel on August 7. Continuing to respond to influential factors with restraint through the rest of August, the price closed at \$31.76 per barrel, \$1.20 higher than when it opened the month.

- Monthly average crude oil prices increased slightly in August. The average domestic crude oil first purchase price rose 41 cents (1.5 percent), to \$27.94 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil increased 57 cents (2.2 percent), to \$26.74 per barrel. The average landed cost of foreign crude oil increased 36 cents (1.3 percent), to \$28.19 per barrel.
- The average refiner acquisition cost for domestic crude oil climbed 74 cents (2.5 percent), to \$30.28 per barrel. The average cost of imported crude oil to U.S. refiners rose 55 cents (2.0 percent), to \$28.50 per barrel. The composite refiner acquisition cost for crude oil increased 60 cents (2.1 percent), to \$29.15 per barrel.

## Petroleum Products

### *Motor Gasoline*

The track of the August daily spot price for regular gasoline at New York Harbor shows a significant degree of volatility and illustrates the pronounced effect of certain events on gasoline prices in the United States during the last full month of summer. After opening at 88.8 cents per gallon, its lowest point for the month, a series of fundamental issues affecting production and supplies triggered a period of steep increase lasting through the third week of the month. Following the power blackout in the Northeast and parts of the Midwest on August 14, the price jumped to a long-term high of \$1.121 per gallon. While the price eased during

the final week of the month, it closed at 99.4 cents per gallon, 10.6 cents higher than where it began August.

- Monthly average gasoline prices rose substantially in August. The average price for retail sales of motor gasoline by refiners jumped 12.5 cents to \$1.231 per gallon. The average wholesale price climbed 12.1 cents to \$1.102 per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets increased 11.6 cents to \$1.213 per gallon. The average wholesale price rose 12.0 cents to \$1.102 cents per gallon. The average dealer tank wagon (DTW) price increased 11.7 cents to \$1.154 per gallon, while the average rack price climbed 12.2 cents to \$1.094 per gallon. The average price for bulk sales rose 11.3 cents to 99.3 cents per gallon. RFG prices were 9.4 cents higher than conventional gasoline prices at retail, and 11.0 cents higher at wholesale. Oxygenated gasoline prices were 8.8 cents above conventional gasoline prices at retail, and 9.1 cents more at wholesale.
- Refiner motor gasoline sales trends were mixed in August. Total sales increased 5.0 million gallons per day (1.3 percent), to an average of 402.7 million gallons per day. Retail sales dropped 100,000 gallons per day (0.1 percent), while wholesales rose 5.1 million gallons per day (1.5 percent). Rack sales accounted for 66.0 percent of wholesales, while DTW and bulk sales made up 18.5 percent and 15.5 percent, respectively. RFG accounted for 32.0 percent of total motor gasoline sales, while oxygenated gasoline made up 2.6 percent of sales.

### *No. 2 Distillate*

Especially when compared with gasoline prices, the price for No. 2 heating oil at New York Harbor showed only limited activity during August. Opening at 79.1 cents per gallon, the price gained ground on the first day of August, supported by other major products' price activity. The price reached its high of 84.4 cents per gallon on August 7, then began a gradual decline to its low of 78.3 cents per gallon on August 19 in the absence of any directly influential issues. The price closed August at 81.3 cents per gallon, 1.2 cents higher than where it began the month.

- August monthly average prices for No. 2 distillates show moderate increases from July levels. The national average residential sales price for No. 2 distillate rose 1.1 cents to \$1.175 per gallon. The average wholesale price climbed 4.7 cents to 88.6 cents per

gallon. The average price for No. 2 diesel fuel at company-operated retail outlets increased 5.2 cents, while the average No. 2 diesel fuel wholesale price rose 5.1 cents. The difference between low- and high-sulfur diesel fuel prices was 3.0 cents at retail and 2.0 cents at wholesale.

- Refiner sales of No. 2 distillate decreased in August. Total sales fell 5.1 million gallons per day (3.5 percent), to 141.4 million gallons per day. Sales of No. 2 fuel oil declined 1.1 million gallons per day (5.1 percent), while sales of No. 2 diesel fuel dropped 4.0 million gallons per day (3.2 percent). Low-sulfur diesel fuel accounted for 87.2 percent of all refiner diesel fuel sales, and 74.5 percent of all refiner No. 2 distillate sales.

### *Residual Fuel Oil*

- Monthly average residual fuel oil prices for August show modest changes from July levels. Refiner prices for low-sulfur residual fuel oil increased 0.9 cent to 75.4 cents per gallon at retail, and 2.0 cents to 67.0 cents per gallon at wholesale. The average retail price for high-sulfur residual fuel oil fell 0.3 cent to 67.4 cents per gallon, while the wholesale price climbed 2.1 cents to 60.5 cents per gallon. Including data reported by a sample of residual fuel oil marketers, the average low-sulfur residual fuel oil price inched up 0.5 cent to 73.3 cents per gallon at retail, while the wholesale price declined 2.0 cents to 70.9 cents per gallon. The retail price for high-sulfur re-

sidual fuel oil dropped 0.5 cent to 67.1 cents per gallon, while the wholesale price moved 0.1 cent lower to 62.8 cents per gallon.

- Overall, refiner sales of residual fuel oil increased in August. Total sales rose 500,000 gallons per day (3.2 percent) to 16.2 million gallons per day. Low-sulfur residual fuel sales declined 100,000 gallons per day (1.7 percent), while high-sulfur residual fuel oil sales climbed 600,000 gallons per day (6.3 percent).

### *Other Products*

- August prices generally rose from July levels for the remaining surveyed products. Refiner propane prices increased 1.0 cent per gallon at retail and 2.6 cents at wholesale. Including data from a sample of propane marketers, the average residential propane price fell 1.5 cents per gallon. The average retail price inched up 0.2 cent, while the average wholesale propane price rose 2.5 cents. Prices for kerosene-type jet fuel, aviation gasoline, No. 1 distillate, No. 4 distillate, and kerosene increased at both retail and wholesale.
- Sales of these products were varied in August. Sales of propane, kerosene, and No. 1 distillate fell at retail but rose at wholesale. Sales of kerosene-type jet fuel increased at both levels, while No. 4 distillate sales declined at retail and wholesale. Aviation gasoline sales rose at retail but fell at wholesale.