

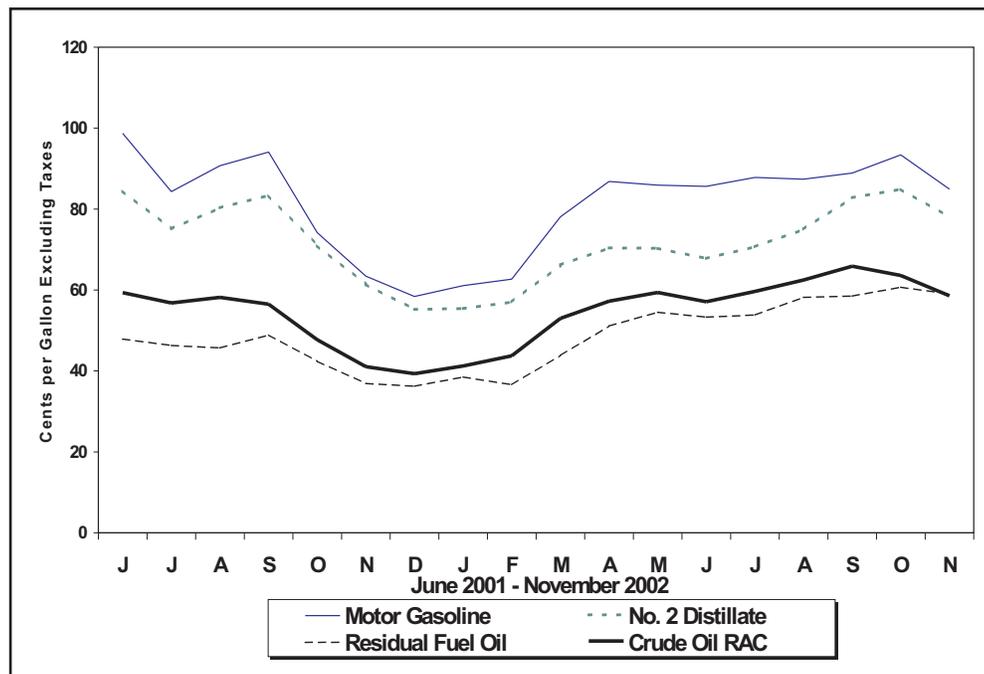
# Highlights

International crude oil prices were unsettled in November as various issues exerted their influence in world markets at different times in the month. Prices fell during the initial weeks of the month in response to more product reaching markets and to political events involving Iraq. The increase in supply was largely attributed to production overruns, particularly during the past few months, from members of the Organization of Petroleum Exporting Countries (OPEC). Various estimates put OPEC-10 (excludes Iraq, which has not been party to the agreements) wellhead production in September and October 10 to 15 percent over quota levels. Additionally, the market saw the chance of a U.S.-led attack on Iraq as less likely in the immediate future, reducing the so-called "war premium" on crude oil prices. The United Nations Security Council issued resolution 1441 calling for Iraq to submit unconditionally to weapons inspections on November 8. The resolution was finally accepted by Iraq on November 13, sending many benchmark streams' prices to the lowest levels seen in months. However, shortly after that prices began to rise and continued to rise through the end of the month in response to a number of issues, including political unrest in Venezuela, signals that OPEC members intended to reduce excess production, and events relating to Iraq. In Venezuela, demonstrations and calls for a general strike by opponents of president, Hugo Chavez, had been taking place since the start of November. The situation gained significance as the civil unrest continued throughout the month, causing uneasiness about oil production and exports. Venezuela is one of the top 10 crude oil producers and exporters in the world. Rising

prices were also supported by renewed concern about a U.S.-led invasion of Iraq with the arrival of the U.N. weapons inspection team in Iraq at mid-month. Skirmishes with British and American warplanes in the "no-fly" zone in Northern Iraq added to the tension. At the same time, public statements by OPEC representatives on reducing production overruns supported the upward trend in crude oil prices.

In the United States, prices for crude oil and petroleum products were also unsettled during November. Although prices fell on average from October levels, they showed some volatility in reaction to a number of factors including international political issues, trim inventories, refinery outages, and a snap of cold weather in the Northeast. Notably, on the West Coast, a 7.9 magnitude earthquake in Alaska on November 3 caused the Alaska Pipeline (which carries crude oil from the North Slope) to be shut down for 3 days. While petroleum

**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					
	November 2002		October 2002		November 2001		November 2002		October 2002		November 2001	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
<b>Motor Gasoline</b> .....	101.2	63.2	104.0	63.3	76.9	60.0	84.9	309.6	93.4	313.7	63.4	298.9
<b>Conventional</b> .....	98.0	35.5	103.2	35.8	73.0	33.6	80.6	203.5	91.6	206.3	59.8	192.5
Regular .....	94.9	27.1	100.3	27.5	69.7	25.5	79.1	167.3	90.0	169.8	58.2	156.4
Midgrade .....	104.3	4.6	109.0	4.6	79.2	4.3	84.8	12.0	95.8	12.2	63.9	11.3
Premium .....	112.7	3.8	116.9	3.7	87.4	3.9	89.3	24.2	100.1	24.4	67.8	24.7
<b>Oxygenated</b> .....	103.0	3.7	107.6	3.2	86.9	4.3	88.4	11.8	96.6	11.2	73.4	12.2
Regular .....	99.2	2.8	104.0	2.5	84.3	3.3	86.8	9.2	94.8	8.6	72.2	9.5
Midgrade .....	112.0	0.5	117.2	0.4	91.0	0.6	89.1	1.4	100.0	1.4	72.1	1.4
Premium .....	120.3	0.3	124.0	0.3	102.4	0.4	99.9	1.2	105.7	1.1	83.2	1.3
<b>Reformulated</b> .....	105.5	24.1	104.9	24.2	81.0	22.1	93.8	94.3	97.0	96.2	69.4	94.3
Regular .....	101.2	17.2	100.7	17.4	76.6	15.7	90.5	70.4	94.0	71.9	66.2	69.9
Midgrade .....	112.1	3.2	111.6	3.2	87.7	3.1	100.8	7.0	102.3	7.1	75.5	8.0
Premium .....	120.0	3.7	118.9	3.6	95.7	3.3	104.8	16.9	107.3	17.2	79.8	16.4
<b>Aviation Gasoline</b> .....	138.0	0.1	140.3	0.1	119.4	0.1	118.4	0.4	123.8	0.6	100.5	0.5
<b>Kerosene-Type Jet Fuel</b> .....	76.9	47.5	84.8	49.1	62.5	46.2	75.0	13.5	83.8	12.3	61.9	16.2
<b>Propane (Consumer Grade)</b> .....	46.9	3.1	47.1	2.5	43.5	3.5	49.4	37.3	48.9	36.5	41.6	38.8
<b>Kerosene</b> .....	103.8	0.2	110.2	0.1	100.9	0.1	82.3	3.4	88.8	2.3	63.5	2.1
<b>No. 1 Distillate</b> .....	95.7	0.3	98.1	0.3	76.7	0.4	94.7	2.1	97.5	1.4	73.2	2.5
<b>No. 2 Distillate</b> .....	83.3	21.4	88.1	22.6	68.1	24.7	78.0	123.8	84.9	131.1	61.3	124.7
No. 2 Fuel Oil .....	80.0	3.3	81.8	3.0	65.8	3.4	74.8	24.2	79.6	22.8	60.6	24.0
No. 2 Diesel Fuel .....	83.9	18.2	89.1	19.5	68.5	21.3	78.7	99.6	86.1	108.3	61.5	100.7
Low Sulfur .....	86.7	12.3	91.5	13.6	70.3	14.2	79.2	87.4	86.6	96.4	61.8	88.8
High Sulfur .....	78.0	5.9	83.4	5.9	64.9	7.1	75.2	12.2	81.3	11.8	59.6	11.9
<b>No. 4 Fuel<sup>a</sup></b> .....	72.6	0.3	72.0	0.2	54.5	0.5	67.0	0.3	72.0	0.2	60.7	0.1
<b>Residual Fuel Oil</b> .....	60.0	11.7	65.8	9.7	42.8	11.6	59.0	8.5	60.7	8.6	36.9	8.8
Sulfur Content not > 1 % .....	73.6	3.3	72.7	2.3	52.3	2.5	58.9	4.9	64.5	5.2	40.5	5.1
Sulfur Content > 1 % .....	54.6	8.4	63.6	7.4	40.2	9.1	59.3	3.6	55.0	3.4	31.9	3.6

<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."

product prices were affected in Pacific Northwest markets, prices in California were unfazed by this incident. Gasoline and diesel prices in California markets were however, affected by refinery operations and some technical market factors. In the face of lean stock levels of gasoline in the region, prices reacted to news of refinery operations restarting at a number of facilities. The spot price for CaRFG in Los Angeles opened November at 95.0 cents per gallon but closed the month at 73.0 cents per gallon, a drop of 22.0 cents. In other regional markets, particularly in the Midwest and Gulf Coast regions, product prices still felt some lingering effects of the storms that hit the Gulf Coast in late September and early October. As refinery operations approached more typical levels, and refined products reach their delivery points, prices declined soundly. Additionally, in the case of gasoline, previously robust demand be-

gan to taper off. The spot price for reformulated regular gasoline in Chicago dropped 23.9 cents over the course of the month, opening November at 94.7 cents per gallon and closing at 70.8 cents per gallon. Distillate prices did not experience such large changes in any regional market. Low stock levels of distillates, caused in part by refiners focusing on producing more gasoline to meet flourishing post-driving season demand, supported prices throughout regional markets. While all prices were spurred upward by world political events during the latter part of November, a snap of cold weather in the Northeast provided an extra boost to heating oil prices.

Additional November 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 followed a varied path during November. Opening at \$27.18, the price entered into a period of decline caused by reports of crude oil stock builds, OPEC overproduction, and market perception that a U.S. attack on Iraq was less likely to happen in the immediate future. The low for the month, \$25.28 per barrel, was reached on November 13 following Iraq's acceptance of the U. N. Security Council resolution 1441 calling for complete disarmament. However, the price began to rise amid rekindled concerns about war with Iraq, reports that OPEC intended to curb overproduction, and political turmoil in Venezuela. Amid these conditions, the price reached its high of \$27.73 on November 22. Retreating somewhat during the final days of November, the price closed the month at \$26.87 per barrel, 37 cents higher than where it began the month.

- Monthly average crude oil prices fell in all categories during November. The average domestic crude oil first purchase price declined \$1.92 (7.6 percent), to \$23.37 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil fell \$2.25 (9.3 percent), to \$22.04 per barrel. The average landed cost of foreign crude oil decreased \$1.94 (7.6 percent), to \$23.66 per barrel.
- The average refiner acquisition cost for domestic crude oil fell \$1.80 (6.5 percent), to \$26.02 per barrel. The average cost of imported crude oil to U.S. refiners decreased \$2.31 (8.9 percent), to \$23.68 per barrel. The composite refiner acquisition cost for crude oil declined \$2.10 (7.9 percent), to \$24.60 per barrel.

## Petroleum Products

### *Motor Gasoline*

Despite a run up at the beginning of the month, the November daily spot price for regular gasoline at New York Harbor retreated considerably from October levels. After opening at 79.7 cents per gallon, the price jumped to 89.9 cents per gallon on November 4, its highest level for the month. The increase was caused by a combination of market fundamental and technical factors. The rise was short-lived however, and the price declined substantially during the rest of the

month, driven by stock builds and increased refinery utilization. The price closed November at its lowest point, 69.2 cents per gallon, 10.5 cents lower than where it began the month.

- National average gasoline prices declined in November. The average price for retail sales of motor gasoline by refiners fell 2.8 cents to \$1.012 per gallon. The average wholesale price dropped 8.5 cents to 84.9 cents per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets fell 3.7 cents to \$1.009 per gallon. The average wholesale price decreased 8.6 cents to 84.8 cents per gallon. The average dealer tank wagon (DTW) price tumbled 10.7 cents to 82.5 cents per gallon, while the average rack price fell 7.5 cents to 75.9 cents per gallon. The average price for bulk sales decreased 7.5 cents to 75.9 cents per gallon. Reformulated gasoline (RFG) prices were 6.4 cents above conventional gasoline prices at retail, and 11.3 cents higher at wholesale. Oxygenated gasoline prices were 4.9 cents more than conventional gasoline prices at retail, and 6.9 cents higher at wholesale.
- Motor gasoline sales by refiners waned in November. Total sales fell 4.2 million gallons per day (1.1 percent), to an average of 372.8 million gallons per day. Retail sales were essentially flat, falling 100,000 gallons per day (0.2 percent), while wholesales declined 4.1 million gallons per day (1.3 percent). Rack sales amounted to 64.9 percent of wholesales, while DTW and bulk sales made up 20.8 percent and 14.3 percent, respectively. Reformulated gasoline constituted 31.8 percent of total motor gasoline sales, while oxygenated gasoline accounted for 4.2 percent of sales.

### *No. 2 Distillate*

Like other product prices, the daily spot price for No. 2 heating oil at New York Harbor shifted direction halfway through November. Opening at 74.5 cents per gallon, the price declined steadily during the first half of the month until it reached its low of 67.3 cents per gallon on November 13. Supported by forecasts for cold weather along the East Coast and rising crude oil prices, the heating oil price rose during the second half of the month. The month's high of 76.8 cents per gallon was reached on November 22. Retreating only slightly during the final days of the month, the price closed November at 75.5 cents per gallon, a penny above its opening level.

- No. 2 distillate prices generally decreased during November. The national average residential sales price for No. 2 distillate shows the only increase, rising 3.3 cents to \$1.179 per gallon. The average wholesale price fell 6.8 cents to 78.5 cents per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets dropped 4.2 cents, while the average No. 2 diesel fuel wholesale price fell 7.0 cents. The difference between low- and high-sulfur diesel fuel prices was 1.9 cents at retail and 4.0 cents at wholesale. At retail, the average low-sulfur diesel fuel price was 3.3 cents more than high-sulfur diesel fuel price, while the difference at wholesale was 3.2 cents.
- Refiner sales of No. 2 distillate were mixed in November. Total sales declined 8.3 million gallons (5.4 percent), to 145.3 million gallons per day. Sales of No. 2 fuel oil rose 1.7 million gallons per day (6.6 percent), while sales of No. 2 diesel fuel fell 10.0 million gallons per day (7.8 percent). Low-sulfur diesel fuel made up 84.6 percent of all refiner diesel fuel sales, and 68.6 percent of all refiner No. 2 distillate sales.

### ***Residual Fuel Oil***

- Residual fuel oil prices varied direction in November. Refiner prices for low-sulfur residual fuel oil rose 0.9 cent to 73.6 cents per gallon at retail, but decreased 5.6 cents at wholesale. The average retail price for high-sulfur residual fuel oil tumbled 9.0 cents to 54.6 cents per gallon, while the wholesale price increased 4.3 cents to 59.3 cents per gallon. Including data reported by a sample of residual fuel oil marketers, the average low-sulfur residual fuel oil

price rose 2.1 cents to 69.1 cents per gallon at retail, while the wholesale price dropped 4.0 cents to 59.4 cents per gallon. The retail price for high-sulfur residual fuel oil fell 8.9 cents to 54.6 cents per gallon, while the wholesale price barely changed, rising 0.2 cent to 55.9 cents per gallon.

- Refiner sales of residual fuel oil rose in November. Total sales increased 1.9 million gallons per day (10.4 percent) to 20.2 million gallons per day. Low-sulfur residual fuel sales rose 700,000 gallons (9.3 percent), while high-sulfur residual fuel oil sales climbed 1.2 million gallons (11.1 percent).

### ***Other Products***

- With the exception of propane, prices for the remaining surveyed products largely declined in November. Refiner propane prices eased 0.2 cent per gallon at retail, but inched up 0.5 cent per gallon at wholesale. Including data from a sample of propane marketers, the average residential propane price increased 4.7 cents per gallon, while the average retail price climbed 6.3 cents. The average wholesale propane price rose 0.6 cent. Prices for kerosene-type jet fuel, aviation gasoline, kerosene, and No. 1 distillate fell at both levels, while No. 4 distillate prices rose at retail and fell at wholesale.
- Refiner sales of these products mostly increased in November. Sales of propane, kerosene, No. 1 distillate, No. 4 distillate climbed at both the retail and wholesale levels. Kerosene-type jet fuel sales fell at retail and rose at wholesale, while sales of aviation gasoline declined at both levels.

