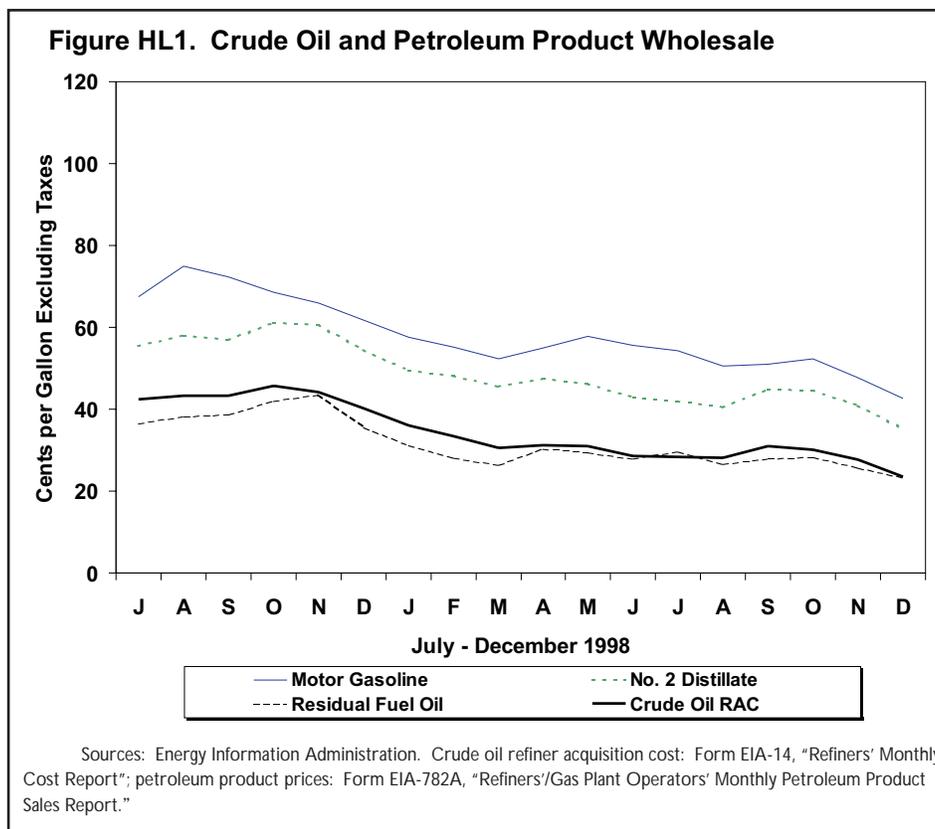


# Highlights

After November's considerable declines, world crude oil prices remained at low levels during most of December. Despite the abiding influence of brimming crude oil and finished products stockpiles throughout international markets, political events affected prices at mid-month. On December 16, the United States initiated a 4-day air strike against targets in Iraq, based on reports citing Iraqi government-led efforts to hamper weapons inspections. The repercussion from the conflict on crude oil prices was relatively brief as it became evident that Iraq's oil exports were unaffected by the air raids. By the end of the campaign, market prices had already returned to their previous low levels. In other political news, another round of meetings on December 17 in Madrid, Spain, between Saudi Arabia, Venezuela, and Mexico, to discuss production rates failed to generate any new agreements. The lack of any substantive movement on this issue continues to hinder a sustained price recovery since the imbalance between crude oil supply and demand continued to be the underlying cause behind enervated prices. More specifically, while forecasts for world oil demand in 1998 indicated growth in line with the 2.4 percent rise seen in 1997, actual data indicate demand during the first 3 quarters of 1998 to be well below initial projections. As a result, product stocks have surged. The major factors contributing to the ongoing discrepancy between supply and demand for crude oil include continued economic turmoil in Asia, increased production quotas for members of Organization of Petroleum Exporting Countries (OPEC), unusually warm weather during the 1997/98 winter season in the Northern Hemisphere, and robust stockpiles of finished products throughout world markets. Outside of OPEC's temporary production

cuts, relief from these conditions in the near future appears to be unlikely.

Similar conditions continued to affect crude oil and finished product prices in the United States during the final month of 1998. While month- and year-end technical factors along with tensions stemming from military actions in Iraq helped to lift prices at the end of December, major products stocks remained ample and dampened the upturn in prices. Although crude oil registered a slight month-to-month decrease (1.3 percent), a comparison to year-ago data show the December 1998 rate to be roughly 3 percent higher. Further, December 1997 crude oil stocks were notably above the prior year's level. The difference between 1997 and 1998 December monthly average spot market prices for West Texas Intermediate crude oil at Cushing, Oklahoma illustrates the impact the glut of crude oil



**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					
	December 1998		November 1998		December 1997		December 1998		November 1998		December 1997	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
<b>Motor Gasoline</b> .....	60.0	65.4	64.0	63.7	77.8	66.0	42.6	304.4	47.7	291.1	61.7	298.4
<b>Conventional</b> .....	56.0	39.6	61.0	38.9	72.9	37.7	37.9	200.9	43.6	190.7	57.1	196.8
Regular .....	51.4	26.9	56.7	26.7	68.9	26.4	35.6	150.5	41.3	143.4	55.1	150.7
Midgrade .....	61.8	6.4	66.6	6.3	78.5	6.0	42.3	15.6	47.9	15.3	61.3	16.1
Premium .....	69.4	6.3	74.3	5.9	86.4	5.3	45.7	34.7	51.6	31.9	65.3	30.0
<b>Oxygenated</b> .....	63.5	3.1	66.5	3.0	87.3	4.6	50.2	11.9	55.0	11.2	70.8	11.2
Regular .....	59.9	2.3	62.8	2.2	83.4	3.4	47.8	8.5	52.6	8.0	68.8	8.6
Midgrade .....	69.1	0.5	72.5	0.4	94.7	0.7	50.8	1.4	55.8	1.4	74.0	1.3
Premium .....	79.6	0.4	82.5	0.3	104.1	0.5	60.1	1.9	65.1	1.8	80.5	1.3
<b>Reformulated</b> .....	66.5	22.7	68.8	21.9	83.6	23.7	51.9	91.6	55.7	89.1	70.6	90.4
Regular .....	61.4	14.8	63.7	14.2	79.1	15.9	47.8	60.6	51.9	58.5	67.0	60.3
Midgrade .....	72.3	3.9	74.4	3.8	89.1	4.0	57.8	10.5	60.7	10.3	75.5	10.9
Premium .....	80.0	4.0	82.2	3.9	96.6	3.8	61.1	20.6	64.2	20.4	79.0	19.2
<b>Aviation Gasoline</b> .....	88.5	0.1	93.2	0.1	107.7	0.1	74.2	0.6	77.5	0.6	99.1	0.5
<b>Kerosene-Type Jet Fuel</b> .....	37.5	47.7	44.0	45.6	56.3	49.7	36.7	13.2	43.1	15.1	55.6	14.2
<b>Propane (Consumer Grade)</b> .....	36.2	4.4	42.3	2.7	51.8	4.4	25.8	42.6	27.7	34.2	37.5	42.5
<b>Kerosene</b> .....	42.4	0.7	44.6	0.7	75.1	0.3	38.8	3.3	44.4	2.5	57.8	4.9
<b>No. 1 Distillate</b> .....	50.2	0.6	56.2	0.5	63.8	0.6	43.4	3.8	49.4	2.6	64.1	3.2
<b>No. 2 Distillate</b> .....	42.1	24.0	47.1	23.5	60.1	24.4	35.4	124.8	40.9	118.1	54.6	125.7
No. 2 Fuel Oil .....	43.4	3.4	46.7	3.3	59.7	3.5	34.6	31.6	38.9	24.6	53.4	35.5
No. 2 Diesel Fuel .....	41.9	20.6	47.2	20.2	60.1	20.9	35.6	93.3	41.4	93.6	55.0	90.2
Low Sulfur .....	43.2	13.8	48.8	13.8	61.8	13.4	35.9	78.4	41.8	79.4	55.3	75.3
High Sulfur .....	39.2	6.8	43.8	6.4	57.1	7.5	34.3	14.9	39.3	14.1	53.6	15.0
<b>No. 4 Fuel<sup>a</sup></b> .....	39.4	0.4	43.3	0.3	56.1	0.4	30.2	0.2	36.8	0.2	49.0	0.3
<b>Residual Fuel Oil</b> .....	25.4	18.1	29.3	14.2	40.2	17.5	23.2	15.0	25.8	14.1	35.6	12.9
Sulfur Content not > 1 % .....	31.9	4.4	33.6	4.1	48.5	3.9	24.0	4.9	27.3	5.0	38.7	6.0
Sulfur Content > 1 % .....	23.3	13.7	27.6	10.1	37.8	13.6	22.7	10.1	25.0	9.2	32.8	6.8

<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."

has had on prices. In December 1997, the price was \$18.33 per barrel, while the price in December 1998 averaged \$11.35 per barrel. Combined with low prices for finished product prices, December refining margins remained thin. In spite of these economic factors, refinery utilization continued at a substantial pace with inputs remaining on par with November's rate, contributing to further growth in gasoline and distillate stocks (up 2.7 percent and 1.1 percent, respectively). Additionally, while demand for these products increased, prices continued at long-term low levels. The December average price for conventional unleaded regular gasoline was 30.7 cents per gallon, while the average No. 2 heating oil price was 31.3 cents per gallon. These trends were reflected at the retail level where the national average outlet price for conventional regular gasoline was 51.3 cents per gallon and the average end-user price for No. 2 distillate was 57.4 cents per gallon. Last year at this

time, the same products prices averaged 70.2 cents per gallon and 73.8 cents per gallon, respectively.

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

## Crude Oil

The December daily spot price for West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma followed a varied path over the course of the month. After opening at \$11.37 per barrel, the price showed little vitality during the next week and a half, dropping to a new 12-year low of \$10.82 per barrel on December 10. The price rose sharply after that and reached its high of

\$12.55 per barrel on December 16 as tensions between the U.S. and Iraq increased. After a sharp decline, the price began a more gradual ascent before closing December at \$12.14 per barrel, 77 cents higher than where it began the month.

- Once again, monthly average crude oil prices show substantial decreases from the previous month's rates. The December average domestic crude oil first purchase price declined \$1.51 (15.6 percent), to \$8.14 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil fell \$1.37 (14.6 percent), to \$7.99 per barrel. The average landed cost of foreign crude oil dropped \$1.35 (12.9 percent), to \$9.15 per barrel.
- The monthly average refiner acquisition costs for domestic crude oil declined \$1.97 (15.8 percent), to \$10.52 per barrel. The average cost of imported crude oil to U.S. refiners fell \$1.60 (14.6 percent), to \$9.39 per barrel. The composite refiner acquisition cost of crude oil dropped \$1.75 (15.1 percent), to \$9.84 per barrel.

## Petroleum Products

### *Motor Gasoline*

Following an unsettled course through December, the daily spot price for unleaded regular gasoline at New York Harbor reacted to both political and fundamental market issues. Opening at 30.3 cents per gallon, the price wavered during the initial days of the month, reaching the low of 29.1 cents per gallon on December 4 before turning sharply upward during the following week in reaction to tensions in the Middle East. The high for the month, 34.5 cents per gallon, was struck on December 16. Forming a volatile pattern during the ensuing weeks, the price closed December at 33.2 cents per gallon, 2.9 cents higher than where it began the month.

- December monthly average gasoline prices show considerable declines from November rates. The average price for retail sales of motor gasoline by refiners dropped 4.0 cents to 60.0 cents per gallon, while the average wholesale price slipped 5.1 cents to 42.6 cents per gallon. Including data reported by a sample of motor gasoline marketers, the national average retail price at company-operated retail outlets

declined 4.4 cents to 58.2 cents per gallon. The average wholesale price fell 4.9 cents to 42.9 cents per gallon. The average dealer tank wagon (DTW) price dropped 3.7 cents to 53.0 cents per gallon while the average rack price tumbled 5.6 cents to 38.6 cents per gallon. The average bulk sales price dropped 5.5 cents to 34.5 cents per gallon. The difference between reformulated and conventional gasoline prices widened to 8.9 cents at retail and 11.6 cents at wholesale. The margin between conventional and oxygenated gasoline prices increased to 7.7 cents at retail and 10.7 cents at wholesale.

- Unlike November's trend, sales of finished motor gasoline by refiners rose firmly in December. Total sales increased 15.0 million gallons per day (4.2 percent), to an average of 369.8 million gallons per day. Retail sales climbed 1.7 million gallons per day (2.7 percent), while wholesales rose 13.3 million gallons per day (4.6 percent). Rack sales made up 63.3 percent of total wholesales, while DTW and bulk sales accounted for 24.0 percent and 12.7 percent, respectively. Reformulated gasoline (RFG) comprised 30.9 percent of total motor gasoline sales, while oxygenated gasoline defined 4.1 percent of sales.

### *No. 2 Distillate*

At New York Harbor, the December daily spot price for No. 2 heating oil traced a very similar route through the month as other products. Opening at 32.3 cents per gallon, the price vacillated, finally dropping to the month's low of 29.9 cents per gallon on December 10. Shortly thereafter, on December 16, it reached its high of 34.4 cents per gallon. Closing at 32.5 cents per gallon, the price was only marginally higher than where it began December.

- Like gasoline, most December No. 2 distillate prices show substantial decreases. The national average residential price shows the least change, falling only 0.9 cent to 79.0 cents per gallon. The average wholesale price declined 5.0 cents to 36.8 cents per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets dropped 4.2 cents, while the average wholesale price decreased 5.5 cents. The margins between low- and high-sulfur diesel fuel prices were 1.6 cents at retail and 1.3 cents at wholesale.
- Overall, Refiner sales of No. 2 distillate rose during December. Total sales increased 7.2 million gallons per day (5.1 percent), to 148.9 million gallons per day. Increased sales of No. 2 fuel oil accounted for

most of the change, rising 7.1 million gallons per day (25.4 percent), while sales of No. 2 diesel fuel rose 100,000 gallons per day (0.1 percent). Low-sulfur diesel fuel sales explained 80.9 percent of all refiner diesel fuel sales, and 61.9 percent of all refiner No. 2 distillate sales.

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

- Average residual fuel oil prices fell in all categories of sales during December. Refiner prices for low-sulfur residual fuel decreased 1.7 cents to 31.9 cents per gallon at retail, and 3.3 cents to 24.0 cents per gallon at wholesale. High-sulfur residual fuel prices fell 4.3 cents to 23.3 per gallon at retail, and 2.3 cents to 22.7 cents per gallon at wholesale. Including data reported by the sample of residual fuel oil marketers, the average low-sulfur price dropped 2.3 cents to 31.9 cents per gallon at retail, and 2.7 cents to 25.6 cents per gallon at wholesale. The average price for high-sulfur residual fuel oil fell 4.1 cents to 24.0 cents per gallon at retail, and 2.7 cents to 22.4 cents per gallon at wholesale.
- Residual fuel oil sales by refiners rose in December. Total sales increased 4.8 million gallons per day (17.0

percent), to 33.1 million gallons per day. Low-sulfur residual fuel sales rose 200,000 gallons per day (2.2 percent), while high-sulfur residual fuel sales jumped 4.5 million gallons per day (23.3 percent).

### ***Other Products***

- The general price trend was downward for products included in this section. Refiner propane prices decreased 6.1 cents per gallon at retail, and 1.9 cents at wholesale. Including data from the sample of propane marketers, the average residential propane price scarcely changed, rising 0.2 cent per gallon. The average retail price for propane declined 0.5 cent, while the average wholesale price dropped 1.8 cents per gallon. Prices for kerosene-type jet fuel, aviation gasoline, kerosene, No. 4 distillate, and No. 1 distillate decreased at both levels.
- December sales of products under this heading were mixed. Refiner sales of propane, No. 1 and No. 4 distillates rose at both levels, while aviation gasoline fell at each level. Kerosene-type jet fuel sales increased at retail but fell at wholesale, while sales of kerosene fell at retail and rose at wholesale.

