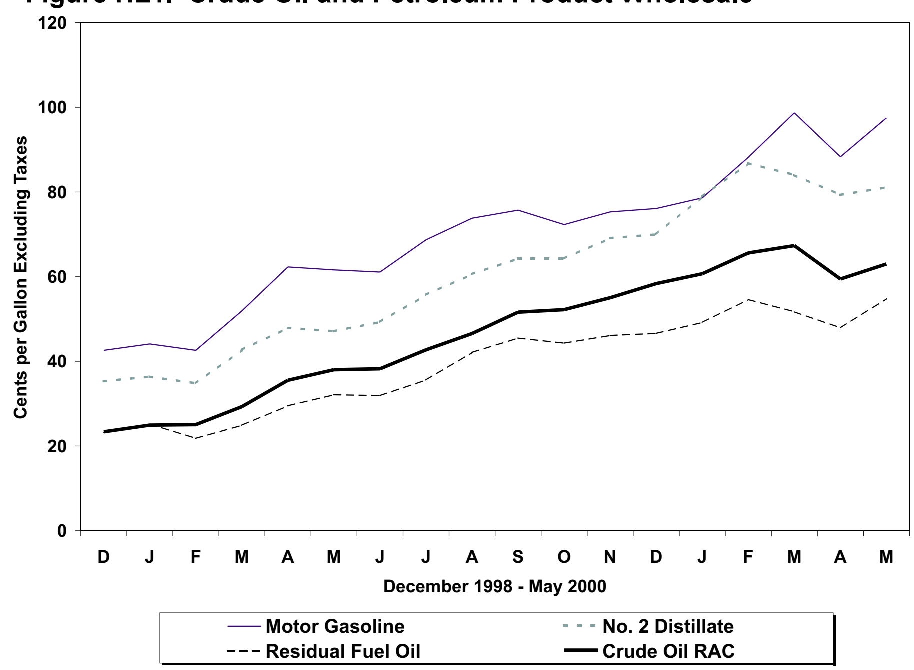
Highlights

International crude oil prices rose solidly in May, despite rising wellhead production and growing stockpiles throughout world markets. Several issues including fundamental factors, technical matters associated with commodities markets, and political events prompted prices to rise. At the beginning of the month, a widespread labor strike in Norway that included oil workers hindered exports as onshore export terminals remained closed until a settlement of issues involved in the stand down was reached. By May 9 the strike ended and oil exports resumed. At mid-month, a statement made by the Saudi Arabian, Venezuelan, and Mexican oil ministers indicated that they believed there was no need to adjust current production levels supported rising prices. At the same time, reports released by the U.S. Energy Information Administration and the International Energy Agency included forecasts for robust demand growth during the second half of 2000 provided further support for crude oil prices. Despite these events, some pointed to counter trends that should have slowed or stopped the upward movement in prices. Some of indicators cited included growth in crude oil stocks in major markets, an excess of supply at the global level when compared to demand levels, and efforts toward a seamless transition to a new phase of the U.N. "oil-for-food" deal with Iraq (slated to take place in early June). However, technical factors related to activity in commodities markets and pressure from finished product prices in the U.S. were seen as neutralizing the effects of increased supplies of crude oil, and prices continued to rise through the end of the month.

Prices for crude oil and finished products in the United States were quite volatile during May. Throughout the month, concerns about finished product stock levels, particularly for gasoline, dominated price trends in markets across the country. While data show stocks of the major products have risen moderately in recent months, they have generally remained below average since late 1999. When unexpected disruptions to refining and delivery systems occur–as they did in May–lean stockpiles commonly intensify market reaction to the incidents. Complicating this situation, federal and state air pollution regulations stipulate that certain products, particularly gasoline, must meet mandated standards to reduce pollution in certain areas of the country. These requirements vary depending on the region and the time of the year. Further, the federal Clean Air Act Amendments of 1990 called for the implementation of the more stringent Complex Model, Phase II reformulated gasoline (RFG) rules as of January 1, 2000. The rules required that the specific for-

Figure HL1. Crude Oil and Petroleum Product Wholesale



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					
	May 2000		April 2000		May 1999		May 2000		April 2000		May 1999	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
Motor Gasoline	110.3	61.6	108.7	59.7	78.2	64.5	97.5	317.3	88.3	308.1	61.6	313.0
Conventional	106.8	37.5	103.4	36.4	73.3	39.6	94.3	214.8	82.8	203.8	57.3	211.7
Regular	103.6	28.2	99.9	27.2	69.3	27.8	92.5	173.9	81.1	167.2	55.1	163.7
Midgrade	113.2	5.3	110.5	5.2	79.0	6.2	98.9	14.0	87.9	12.9	61.9	15.5
Premium	120.7	4.0	118.2	4.0	86.7	5.5	103.3	27.0	92.1	23.7	66.1	32.4
Oxygenated	114.5	1.8	109.9	1.9	83.3	1.7	103.0	6.8	96.4	7.0	71.8	5.8
Regular	112.4	1.5	108.0	1.5	81.4	1.4	102.1	5.3	95.8	5.5	71.4	4.3
Midgrade	121.3	0.2	115.1	0.2	87.7	0.2	102.8	1.0	92.8	1.0	67.3	0.9
Premium	130.9	0.1	125.0	0.1	96.6	0.1	113.7	0.5	110.1	0.5	NA	NA
Reformulated	115.8	22.3	117.6	21.5	86.2	23.2	104.5	95.7	99.3	97.3	NA	NA
Regular	112.0	16.0	113.8	15.4	82.5	15.8	101.5	69.4	96.2	72.0	67.5	66.2
Midgrade	122.1	3.4	123.8	3.2	90.5	3.7	109.8	9.0	107.6	8.7	NA	NA
Premium	129.5	3.0	130.8	2.8	97.8	3.7	113.6	17.3	108.6	16.6	NA	NA
Aviation Gasoline	133.6	0.2	130.7	0.1	103.5	0.1	130.1	0.7	124.8	0.6	97.8	0.7
Kerosene-Type Jet Fuel	78.8	48.0	78.0	48.9	46.8	50.3	78.1	18.3	77.7	16.5	47.2	10.5
Propane (Consumer Grade)	49.6	1.4	NA	3.3	42.4	2.3	49.4	24.4	48.8	26.1	29.0	25.3
Kerosene	86.8	0.1	99.6	0.1	49.5	0.1	78.8	1.4	77.3	2.2	45.2	1.1
No. 1 Distillate	94.0	0.2	93.0	0.2	NA	NA	89.0	0.3	87.3	0.4	56.7	0.3
No. 2 Distillate	84.9	25.7	84.6	25.1	51.5	23.7	81.1	118.4	79.3	114.2	47.1	119.6
No. 2 Fuel Oil	83.1	2.9	81.7	2.7	NA	NA	78.4	18.3	76.4	20.0	43.7	21.0
No. 2 Diesel Fuel	85.2	22.8	84.9	22.4	52.1	20.6	81.6	100.1	79.9	94.2	47.8	98.7
Low Sulfur	87.8	15.8	87.8	15.0	54.3	13.7	82.2	86.6	80.7	81.2	48.2	85.1
High Sulfur	79.3	7.0	78.9	7.4	47.8	6.9	77.6	13.5	75.0	13.0	45.3	13.6
No. 4 Fuel[a]	66.6	0.2	66.1	0.2	NA	NA	69.1	0.1	63.2	0.2	NA	NA
Residual Fuel Oil	57.2	11.1	54.7	11.3	34.6	14.7	54.8	11.9	47.9	13.3	32.1	9.6
Sulfur Content not > 1 %	66.2	2.3	65.1	2.0	NA	NA	58.7	5.7	52.3	6.0	34.9	4.9
Sulfur Content > 1 %	54.9	8.8	52.5	9.3	33.2	7.8	51.3	6.2	44.3	7.4	29.2	4.7

NA = Not available.

[a] 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."

mulation to be used during the summertime be available at the rack level as of May 1 and the retail level on June 1. Notably, one oil company, Unocal, holds patents on formulas for manufacturing product that meets the new RFG standards. This situation caused some concern about the adequacy of production levels of the product because of producers' fears of patent infringement and subsequent royalty payments. Besides that issue, a number of other events affected prices. At the beginning of the month, the Los Angeles spot market price for ultra-clean CARB regular gasoline spiked to $1.110 per gallon on May 3 due to problems at number of refining facilities. Once the units were back in operation, prices declined quickly. Besides refinery problems on the West Coast, troubles at other facilities across the country contributed to price increases in other regional markets. However, the most significant price changes occurred in the Midwest due to problems that arose on the Explorer pipeline in March. By mid-May, stores of RFG at some terminals in the St. Louis area were depleted. The federal Environmental Protection Agency granted several temporary waivers to alleviate the supply problem in the area. The RFG supply problem also affected prices in other areas in the region, particularly in Chicago and Milwaukee. By month's end, prices for all gasoline formulations were feeling the effects of the soaring costs for RFG. A comparison of current and year-ago spot market prices at New York Harbor help to illustrate market conditions across the nation. The spot price for West Texas Intermediate (WTI) crude oil last year varied between $16.77 and $18.94 per barrel, while the price in May 2000 ran between $25.84 per barrel and $30.43 per barrel. The respective monthly averages show a 62 percent increase: $17.72 per barrel in May 1999 and $28.79 per barrel in May 2000. The spot price for conventional unleaded regular gasoline ranged between 46.1 cents per gallon and 53.6 cents per gallon last year. This year, the price ranged between 76.9 cents per gallon and 99.8 cents per gallon. A comparison of the monthly averages shows a 39.6 cents-per-gallon difference that translates to an 81 percent increase. The price for No. 2 heating oil shows a similar level of change. The price varied between 39.6 cents per gallon and 45.94 cents per gallon last year, and between 68.0 cents per gallon and 81.5 cents per gallon this year, with a difference of 33.7 cents (79.6 percent) among the respective monthly averages.

Additional May 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 increased steadily during May. After opening at its lowest level for the month, $25.71 per barrel, the price continued to rise based on a number of influences including market-related factors, the Norwegian oil workers' strike, and indications that OPEC would not increase wellhead output in June. Supported by gasoline prices, the WTI price reached its high of $30.43 per barrel on May 25. Easing to $29.03 per barrel at month's end, the price was $3.32 higher than where it began May.

- May monthly average crude oil prices increased in all categories. The average domestic crude oil first purchase price rose $2.22 (9.6 percent), to $25.41 per barrel.

- The average free-on-board (f.o.b.) cost of imported crude oil climbed $2.02 (8.7 percent), to $25.19 per barrel. The average landed cost of foreign crude oil rose $1.51 (6.2 percent), to $25.99 per barrel.

- The average refiner acquisition cost for domestic crude oil increased 56 cents (2.1 percent), to $26.63 per barrel. The average cost of imported crude oil to U.S. refiners rose $2.06 (8.5 percent), to $26.35 per barrel. The composite refiner acquisition cost for crude oil increased $1.49 (6.0 percent), to $26.46 per barrel.

Petroleum Products

Motor Gasoline

At New York Harbor, the daily spot price for regular gasoline was quite volatile during May. Opening at 75.0 cents per gallon, the price soared during the first half of the month due to refinery problems and supply concerns. After a short-lived decrease during the latter part of the month, the price began to build again on renewed concerns about supplies of the product going into the summer driving season. Following the Memorial Day weekend, the price reached its high of 99.8 cents per gallon on May 30. Closing the month at 95.9 cents per gallon, the price was a remarkable 21.0 cents per gallon higher than where it began May.

- National average gasoline prices generally increased during May, especially in the wholesale categories. The average price for retail sales of motor gasoline by refiners rose 1.6 cents to $1.103 per gallon, while the average wholesale price jumped 9.2 cents to 97.5 cents per gallon. Including data reported by a sample of motor gasoline marketers, the national average retail price at company-operated retail outlets increased 3.4 cents to $1.098 per gallon. The average wholesale price climbed 9.4 cents to 97.7 cents per gallon. The average dealer tank wagon (DTW) price increased 3.3 cents to $1.050 per gallon, while the average rack price jumped 12.5 cents to 96.4 cents per gallon. The average price for bulk sales rose 8.5 cents to 87.2 cents per gallon. Reformulated gasoline prices exceeded conventional gasoline prices by 7.6 cents at retail and 8.6 cents at wholesale. The difference between conventional and oxygenated gasoline prices was 6.2 cents at retail and 8.9 cents at wholesale.

- Gasoline sales by refiners largely rose during May. Total sales increased 11.1 million gallons per day (3.0 percent), to an average of 378.9 million gallons per day. Retail sales rose 1.9 million gallons per day (3.2 percent), while wholesales climbed 9.2 million gallons per day (3.0 percent). Rack sales accounted for 64.3 percent of wholesales, while DTW and bulk sales made up 22.1 percent and 13.6 percent, respectively. Reformulated gasoline (RFG) represented 31.1 percent of total motor gasoline sales, while oxygenated gasoline accounted for 2.3 percent.

No. 2 Distillate

The daily spot price for No. 2 heating oil at New York Harbor followed a mixed path during May. Beginning at 73.8 cents per gallon, the price declined solidly during the first week of the month, ending with the monthly low of 68.0 on May 5. Pressured by robust gasoline prices and reports showing low heating oil stock levels, the price rose substantially during the following weeks. The month's high, 81.5 cents per gallon, was reached on May 18. Retreating after that point, the price closed the month at 73.9 cents per gallon, essentially at the same level where it began May.

- May monthly average No. 2 distillate prices increased moderately in all categories of sales. The national average residential price rose 1.1 cents to $1.187 per gallon. The average wholesale price climbed 1.9 cents to 81.6 cents per gallon. The average price for No. 2 diesel fuel rose 0.3 cent at company-operated retail outlets, while the average wholesale price increased 1.8 cents. The difference between low- and high-sulfur diesel fuel prices was 3.7 cents at both the retail and wholesale levels.

- Overall, refiner sales of No. 2 distillates rose in May. Total sales of No. 2 distillate increased 4.8 million gallons (3.4 percent), to 144.1 million gallons per day. Sales of No. 2 fuel oil fell 1.5 million gallons per day (6.6 percent), while sales of No. 2 diesel fuel increased 6.3 million gallons per day (5.4 percent). Low-sulfur diesel fuel made up 83.3 percent of all refiner diesel fuel sales and 71.1 percent of all refiner No. 2 distillate sales.

Residual Fuel Oil

- Monthly average residual fuel oil prices climbed in all categories during May. Refiner prices for low-sulfur residual fuel rose 1.1 cents to 66.2 cents per gallon at retail, and 6.4 cents to 58.7 cents per gallon at wholesale. The average price for high-sulfur residual fuel at retail increased 2.4 cents to 54.9 cents per gallon, while the wholesale price jumped 7.0 cents to 51.3 cents per gallon. Including data reported by the sample of residual fuel oil marketers, the average low-sulfur price rose 2.4 cents to 63.0 cents per gallon at retail, and 4.2 cents to 58.6 cents per gallon at wholesale. The average price for high-sulfur residual fuel oil increased 2.3 cents to 55.7 cents per gallon at retail, and 6.0 cents to 51.3 cents per gallon at wholesale.

- Residual fuel oil sales by refiners declined in May. Total sales fell 1.6 million gallons per day (6.5 percent), to 23.0 million gallons per day. Low-sulfur residual fuel sales remained unchanged from last month, while high-sulfur residual fuel oil sales declined 1.7 million gallons per day (10.2 percent).

Other Products

- Prices for all products in this section generally increased during May. Refiner propane prices rose marginally at both levels, increasing 1.0 cent per gallon at retail and 0.6 cent per gallon at wholesale. Including data from a sample of propane marketers, the average residential propane price increased 3.2 cents per gallon. The average retail price for propane rose 5.3 cents, while the average wholesale price inched up 0.6 cent per gallon. Prices for kerosene-type jet fuel, aviation gasoline, No. 1 distillate, and No. 4 distillate rose at both levels while kerosene prices declined at retail and rose at wholesale.

- Refiner sales of these products were varied in May. Sales of propane and No. 4 distillate declined at both levels while sales data for aviation gasoline show the opposite trend. Sales of kerosene and No. 1 distillate rose at retail and fell at wholesale while kerosene-type jet fuel fell at retail and climbed at wholesale.