## Highlights

World crude oil prices reached new heights early in July only to fall sharply during the latter part of the month as the effects of contrasting fundamental issues came into play. A number of political issues underpinned the rise in prices. Ongoing discord between Iran, Western nations and Israel over Iran's nuclear fuels program continued to drive prices higher during the early days of the month. The dissension led prices for many benchmark streams to new, all-time highs on July 3. Prices retreated briefly on a combination of market technical factors and a step-down in tensions with Iran. They began to climb again on reports that Iran was conducting missile tests in the Persian Gulf and a Nigerian rebel group calling for an end to a self-imposed cease-fire. Prices drew near the record levels set earlier in the month as fears of a resurgence of violence in Nigeria mounted and a strike by Brazilian oil workers went into effect. Nevertheless, prices began their steep slide shortly thereafter. While an unexpected rise in U.S. crude oil stocks sparked the decline at mid-month, reports of slower demand in markets worldwide along with more pronounced worries about the health of the U.S. economy also helped to fuel the subsequent decrease in prices. Despite news of violence in Nigeria and Iran's announced intention to continue its nuclear fuels program during the final days of July, prices closed the month at the lowest levels seen since the beginning of May.

Despite reaching record or near-record highs early in the month, prices for crude oil and refined products in U.S. markets registered substantial declines during July. Fundamental issues, most prominently demand and supply levels, drove the changes.

Recent high prices have affected the consumption of oil products. At the retail level, weekly price data show the average retail price for regular gasoline at the national level reached $\$ 4.114$ per gallon, including taxes, as of July 7, 2008, while the average retail price for on-highway diesel fuel hit its high of $\$ 4.727$ per gallon one week later. Notably, monthly EIA supply data show demand for gasoline fell 4.4 percent year-on-year in June, while distillate demand fell 9.4 percent. Further, high crude oil prices and anemic refining margins for gasoline have led to discretionary runs cuts at some facilities, and despite the reduced production rates, weekly inventory data showed increases for the major refined products until the last week of the month. Imports of refined products also lagged below the rates seen at this time last year. Weather-related issues had only a modest effect on prices despite an early start to the North Atlantic hurricane season (defined as beginning at

Figure HL1. Crude Oil and Petroleum Product Wholesale Prices


[^0]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 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | July 2008 |  | June 2008 |  | July 2007 |  | July 2008 |  | June 2008 |  | July 2007 |  |
|  | Price | Volume | Price | Volume | Price | Volume | Price | Volume | Price | Volume | Price | Volume |
| Motor Gasoline | 356.7 | 55.3 | 357.9 | 56.0 | 248.8 | 58.8 | 334.8 | 304.6 | 341.7 | 312.8 | 230.7 | 321.3 |
| Conventional ..................... | 351.1 | 34.1 | 350.7 | 34.1 | 246.3 | 35.8 | 331.5 | 216.9 | 336.8 | 221.7 | 228.8 | 231.4 |
| Regular | 349.1 | 30.3 | 348.8 | 30.3 | 244.1 | 31.0 | 330.2 | 192.7 | 335.5 | 197.3 | 226.5 | 202.2 |
| Midgrade .......................... | 361.8 | 2.1 | 360.5 | 2.1 | 256.2 | 2.6 | 331.0 | 10.2 | 336.2 | 10.2 | 239.0 | 11.3 |
| Premium .......................... | 373.5 | 1.7 | 372.8 | 1.7 | 265.3 | 2.2 | 349.8 | 14.0 | 354.7 | 14.2 | 247.9 | 17.9 |
| Reformulated .................... | 365.7 | 21.2 | 369.0 | 21.9 | 252.6 | 23.0 | 342.7 | 87.7 | 353.5 | 91.1 | 235.6 | 89.9 |
| Regular ............................ | 361.8 | 17.1 | 365.3 | 17.7 | 248.3 | 17.9 | 340.1 | 75.8 | 351.1 | 78.9 | 232.5 | 75.3 |
| Midgrade .......................... | 375.9 | 1.9 | 379.2 | 2.0 | 261.5 | 2.4 | 351.9 | 2.1 | 361.4 | 2.1 | 243.1 | 2.8 |
| Premium .......................... | 386.8 | 2.2 | 389.6 | 2.2 | 273.1 | 2.7 | 361.0 | 9.8 | 370.8 | 10.1 | 253.4 | 11.8 |
| Aviation Gasoline .............. | 395.5 | 0.2 | 396.5 | 0.2 | 305.3 | 0.1 | 394.4 | 0.5 | 401.8 | 0.5 | 299.8 | 0.5 |
| Kerosene-Type Jet Fuel ....... | 400.9 | 43.5 | 393.3 | 43.2 | 218.5 | 42.2 | 397.6 | 18.8 | 391.2 | 15.3 | 216.7 | 15.1 |
| Propane (Consumer Grade) | 190.8 | NA | 179.3 | NA | 127.8 | 3.4 | 183.1 | 20.4 | 177.1 | 20.8 | 115.9 | 31.7 |
| Kerosene ............................ | NA | NA | 416.2 | 0.0 | 236.2 | NA | 398.0 | 0.9 | 397.3 | 0.4 | 226.1 | 0.6 |
| No. 1 Distillate ..................... | 382.8 | 0.0 | 413.3 | 0.0 | 233.2 | 0.1 | 392.2 | 0.4 | 400.1 | 0.4 | 243.0 | 0.2 |
| No. 2 Distillate ..................... | 401.2 | 20.8 | 400.0 | 21.0 | 229.9 | 22.7 | 386.9 | 153.4 | 385.2 | 161.5 | 221.0 | 141.7 |
| No. 2 Fuel Oil ...................... | 393.0 | 0.7 | 391.4 | 0.7 | 217.6 | 0.4 | 380.2 | 10.3 | 376.0 | 10.9 | 207.1 | 9.4 |
| No. 2 Diesel Fuel ................. | 401.5 | 20.1 | 400.3 | 20.3 | 230.1 | 22.3 | 387.4 | 143.1 | 385.9 | 150.7 | 222.0 | 132.3 |
| Ultra Low Sulfur ................. | 403.1 | 11.6 | 402.0 | 12.3 | 232.8 | 12.2 | 388.0 | 122.4 | 386.3 | 126.4 | 223.7 | 104.6 |
| Low Sulfur ......................... | 401.7 | 6.9 | 401.3 | 6.5 | 228.7 | 7.4 | 383.0 | 19.5 | 384.3 | 22.0 | 215.8 | 20.6 |
| High Sulfur ........................ | 389.3 | 1.6 | 382.6 | 1.5 | 222.6 | 2.8 | 388.0 | 1.2 | 377.8 | 2.3 | 215.1 | 7.1 |
| No. 4 Fuel ${ }^{\text {a }}$......................... | W | W | W | W | W | W | W | W | W | W | 163.9 | 0.3 |
| Residual Fuel Oil ................. | 272.5 | 7.6 | 243.3 | 7.8 | 141.5 | 11.2 | 263.8 | 10.1 | 227.4 | 12.2 | 137.8 | 7.5 |
| Sulfur Content not > 1 \% ..... | 294.5 | 1.8 | 265.7 | 2.4 | 153.9 | 2.3 | 283.3 | 3.2 | 257.8 | 2.8 | 146.1 | 3.0 |
| Sulfur Content > 1 \% .......... | 265.9 | 5.9 | 233.3 | 5.4 | 138.3 | 8.9 | 254.5 | 6.8 | 218.2 | 9.3 | 132.1 | 4.4 |

[^1]the start of July through the end of November). Hurricane Dolly caused oil prices to firm briefly before making landfall on the southern Texas coastline on July 23, but did little damage to refining facilities and offshore production infrastructure. Monthly average spot market prices reflect the changing atmosphere in the U.S. petroleum products marketplace during July. Month-to-month comparisons show relatively small differences when considered within the context of recent history. The spot price for WTI crude oil at Cushing, Oklahoma averaged $\$ 133.37$ per barrel in July 2008, reflecting a change of only 51 cents from the June 2008 average of $\$ 133.88$ per barrel. The difference from the July 2007 price of $\$ 74.12$ per barrel amounts to a change of $\$ 59.25$ (79.9 percent.) The July 2008 average spot price for
regular gasoline at New York Harbor was $\$ 3.148$ per gallon, reflecting a 14.5 -cents ( 4.4 percent) decrease from June's average of $\$ 3.292$ per gallon. The current month's average remains $\$ 1.011$ (47.3 percent) above the July 2007 level of $\$ 2.137$ per gallon. Last, the July 2008 spot price for No. 2 fuel oil at New York Harbor averaged $\$ 3.759$ per gallon, a decrease of 4.2 cents from last month's average of $\$ 3.801$ per gallon. Compared with the July 2007 price of $\$ 2.072$ per gallon, the July 2008 price is $\$ 1.687$ (81.4 percent) higher.

Additional July 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 was quite unsettled during July, registering both a new record high and the largest one-month decline in several years. Opening at $\$ 139.96$ per barrel, the price moved quickly to a new all-time record high of $\$ 145.31$ per barrel on July 3, principally due to political tensions in the Middle East. Following a brief retreat, the price increased again on a variety of fundamental issues. Once those concerns abated, the price declined firmly. The low for the month was marked on July 29, when the price reached $\$ 122.21$ per barrel. Rising modestly during the final days of the month, the price closed July at $\$ 124.17$ per barrel, and $\$ 15.79$ below its opening level for the month.

- July monthly average crude oil prices show comparatively modest changes from June levels. The average domestic crude oil first purchase price rose 91 cents ( 0.7 percent), to $\$ 128.38$ per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil dropped 90 cents ( 0.7 percent), to $\$ 122.77$ per barrel. The average landed cost of foreign crude oil fell 53 cents ( 0.4 percent), to $\$ 125.87$ per barrel.
- The average refiner acquisition cost for domestic crude oil increased $\$ 1.95$ ( 1.5 percent), to $\$ 131.40$ per barrel. The average cost of imported crude oil climbed $\$ 1.55$ ( 1.2 percent), to $\$ 127.77$ per barrel. The composite refiner acquisition cost for crude oil rose $\$ 1.68$ (1.3 percent), to $\$ 129.00$ per barrel.


## Petroleum Products

## Motor Gasoline

Driven by anemic demand and the overall downward trend in the complex, the daily spot price for regular gasoline at New York Harbor declined significantly in July. After opening at $\$ 3.321$ per gallon, the price entered a period of volatility, supported by crude oil price activity. The month's high of $\$ 3.410$ per gallon was reached on July 14. The price dropped firmly after that point, falling to its low of $\$ 2.913$ per gallon-the first time it has fallen below $\$ 3.00$ per gallon since early May-on July 23. Reports of growing stock levels drove the decline. Nevertheless, the price regained a modest amount of ground during the waning days of July,
closing at $\$ 2.991$ per gallon, 33.0 cents lower than its opening level for the month.

- July monthly average prices for finished gasoline mostly show small declines from June levels. The average price for retail sales of motor gasoline by refiners fell 1.2 cents to $\$ 3.567$ per gallon, while the average wholesale price dropped 6.9 cents to $\$ 3.348$ per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets barely changed, rising 0.1 cent to $\$ 3.566$ per gallon. The average wholesale price for gasoline fell 6.8 cents to $\$ 3.349$ per gallon. The average dealer tank wagon (DTW) price declined 6.7 cents to $\$ 3.440$ per gallon, while the average rack price decreased 8.7 cents to $\$ 3.323$ per gallon. The average bulk sale price dropped 1.4 cents to $\$ 3.274$ per gallon. Reformulated gasoline prices were 13.0 cents higher than conventional gasoline prices at the retail, and 8.1 cents more than wholesale.
- Refiner sales of motor gasoline declined during July. Total sales decreased 8.9 million gallons per day ( 2.4 percent) to an average of 359.9 million gallons per day. Retail sales fell 700,000 gallons per day ( 1.3 percent), while wholesales decreased 8.2 million gallons per day ( 2.6 percent.) DTW sales made up 12.6 percent of wholesales, while rack and bulk sales accounted for 72.8 percent and 14.6 percent, respectively.


## No. 2 Distillate

At New York Harbor, the daily spot price for No. 2 heating oil moved along an unsettled path during July, reaching a record-setting high then dropping precipitously to its lowest point since the beginning of May. Opening at $\$ 3.890$ per gallon, the price quickly rose to a new record high of $\$ 4.083$ per gallon on July 3, spurred by international political tensions and a lower-than-expected build in stockpiles of the product. Nevertheless, the price embarked on a steep decline after that point, pressured by softening demand and rising inventory levels. The month's low was reached at the end of July when the price reached $\$ 3.435$ per gallon, 45.5 cents lower than its opening level for the month.

- Prices for No. 2 distillates rose slightly in July. The national average residential sales price increased 9.5 cents to $\$ 4.297$ per gallon. The average wholesale price rose 1.8 cents to $\$ 3.878$ per gallon. Both the average price for No. 2 diesel fuel at
company-operated retail outlets and the average wholesale price increased 1.6 cents. Ultra low-sulfur diesel fuel prices were 2.2 cents higher than low-sulfur diesel fuel at retail, and 4.1 cents more at wholesale.
- Refiner sales of No. 2 distillates inched up in July. Total sales rose 100,000 gallons per day ( 0.1 percent), to 178.2 million gallons per day. Sales of No. 2 fuel oil fell 600,000 gallons per day ( 5.5 percent), while sales of No. 2 diesel fuel rose 800,000 gallons per day ( 0.5 percent). Ultra low-sulfur diesel fuel made up 82.5 percent of all refiner diesel fuel sales, while total diesel fuel sales accounted for 93.8 percent of all refiner No. 2 distillate sales.


## Residual Fuel Oil

- Residual fuel oil prices continued to rise sharply in July. Refiner prices for low-sulfur residual fuel oil climbed 28.8 cents to $\$ 2.945$ per gallon at retail, and 25.5 cents to $\$ 2.833$ per gallon at wholesale. Refiner prices for high-sulfur residual fuel oil jumped 32.6 cents to $\$ 2.659$ per gallon at retail, and 36.3 cents to $\$ 2.545$ per gallon at wholesale. Including data reported by a sample of residual fuel oil marketers, average prices for low-sulfur residual fuel oil rose 30.0 cents to $\$ 2.969$ per gallon at retail, and 27.4 cents to $\$ 2.723$ per gallon at wholesale. Prices for high-sulfur residual fuel oil increased 32.8 cents to $\$ 2.660$ per
gallon at retail, and 32.7 cents to $\$ 2.517$ per gallon at wholesale.
- Refiner sales of residual fuel oil decreased in July. Total sales fell 2.3 million gallons ( 11.5 percent) to 17.7 million gallons per day. Low-sulfur residual fuel oil sales declined 200,000 gallons ( 3.8 percent), while high-sulfur residual fuel oil sales declined 2.0 million gallons (13.6 percent).


## Other Products

- Prices for the remaining surveyed products showed mixed changes in July. The refiner retail sales price for propane climbed 11.5 cents per gallon, while the wholesale price rose 6.0 cents per gallon. Including data from a sample of propane marketers, the average residential price rose a modest 0.6 cent per gallon, while the average retail price increased 9.5 cents per gallon. The average wholesale price for propane climbed 6.1 cents per gallon. Prices for kerosene-type jet fuel rose at both levels, while prices for aviation gasoline and No. 1 distillate did just the opposite. The wholesale price for kerosene rose slightly in July.
- Refiner sales of these products varied in July. Sales of propane fell at the wholesale level, while sales of kerosene rose at wholesale. Kerosene-type jet fuel and No. 1 distillate sales increased at both levels.


[^0]:    Sources: Energy Information Administration. C rude 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."

[^1]:    NA = Not available.
    $\mathrm{W}=$ Withheld to avoid disclosure of individual company data.
    a Includes No. 4 fuel oil and No. 4 diesel fuel.
    Note: Beginning January 2007, oxygenated gasoline is included in conventional gasoline.
    Note: In January 2007, ultra low-sulfur diesel fuel was added.
    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. Total volumes may not equal the sum of the components due to rounding.
    Source: Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

