Highlights

Crude oil

- Monthly average crude oil prices increased in October. The average domestic crude oil first purchase price climbed \$4.46 (11.0%), to \$45.00 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil rose \$4.29 (11.2%) to \$42.58 per barrel. The average landed cost of foreign crude oil increased \$3.34 (8.2%), to \$43.86 per barrel.
- The average refiner acquisition cost for domestic crude oil rose \$4.16 (9.4%), to \$48.63 per barrel. The average cost of imported crude oil increased \$3.90 (9.5%), to \$44.76 per barrel. The composite refiner acquisition cost for crude oil rose \$4.09 (9.6%), to \$46.82 per barrel.

Petroleum products

Motor gasoline

- Monthly average prices for refiner sales of motor gasoline increased in October. The average retail price rose 3.1 cents to \$1.819 per gallon, while the average wholesale price climbed 5.4 cents to \$1.568 per gallon.
- Refiner sales of finished motor gasoline continued to fall in October. Total sales decreased 6.4 million gallons per day (1.9%) to an average of 327.8 million gallons per day. Retail sales fell 500,000 gallons per day (1.9%), while wholesales declined 5.9 million gallons per day (1.9%). DTW sales accounted for 7.6% of wholesales, while rack and bulk sales made up 86.3% and 6.1%, respectively.

No. 2 distillate

- October monthly average prices for refiner sales of No. 2 distillates rose from September levels. The average price for No. 2 diesel fuel sold to end users increased 10.5 cents to \$1.706 per gallon, while the average wholesale price climbed 12.1 cents to \$1.592 per gallon. The average price for sales of No. 2 fuel oil sold to end users increased 13.6 cents to \$1.941 per gallon, while the wholesale price for No. 2 fuel oil rose 10.2 cents to \$1.443 per gallon.
- Overall, refiner sales of No. 2 ultra-low sulfur diesel fuel increased in October. Retail sales dropped 200,000 gallons per day (1.6%), while wholesales rose 2.8 million gallons per day (2.0%).

Residual Fuel Oil

- Monthly average prices for residual fuel oil sold by refiners rose again in October. The wholesale price for low-sulfur residual fuel oil climbed 11.5 cents to 96.1 cents per gallon. Prices for high-sulfur residual fuel oil increased 3.2 cents to \$1.091 per gallon at retail, while the wholesale price rose 8.0 cents to 93.5 cents per gallon.
- Sales of residual fuel oil by refiners dropped in October. Retail sales fell 300,000 gallons per day (6.4%), while wholesales decreased 800,000 gallons per day (10.1%).

Other products

- Monthly average prices for refiner sales of the remaining surveyed products increased in October. Propane, kerosenetype jet fuel, and No. 1 distillate prices rose at both the retail and wholesale levels. Prices for aviation gasoline and kerosene also increased at wholesale.
- Refiner sales of products included in this section varied in October. Propane sales dropped at retail but increased at
 wholesale. Sales of kerosene-type jet fuel fell at both the retail and wholesale levels, while No. 1 distillate sales show
 the opposite trend. Aviation gasoline sales fell at the wholesale level, while sales of kerosene increased in the same
 sales category.

Table HL1. U.S. refiner prices and volumes of petroleum products

prices: dollars per gallon excluding taxes, volumes: million gallons per day

Products	Sales to end users						Sales for resale					
	October 2016		September 2016		October 2015		October 2016		September 2016		October 2015	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
Motor gasoline	1.819	25.9	1.788	26.4	1.849	25.9	1.568	301.9	1.514	307.8	1.558	299.8
Conventional	1.738	16.6	1.708	16.9	1.759	16.5	1.533	203.7	1.480	208.6	1.513	202.2
Regular	1.692	14.6	1.660	14.8	1.721	14.5	1.493	181.9	1.441	186.1	1.473	180.4
Midgrade	1.933	0.9	1.905	0.9	1.923	0.9	1.681	1.8	1.629	1.8	1.679	1.9
Premium	2.178	1.1_	2.137	1.2	2.114	1.1_	1.874	20.0	1.817	20.8	1.860	19.9
Reformulated	1.962	9.3	1.931	9.5	2.007	9.4	1.641	98.1	1.585	99.2	1.651	97.6
Regular	1.868	6.8	1.838	6.9	1.919	7.0	1.588	81.7	1.531	82.5	1.593	81.6
Midgrade	2.112	1.0	2.076	1.0_	2.181	0.9	1.754	0.9	1.687	1.0_	1.786	1.0
Premium	2.275	1.6	2.228	1.7_	2.302	1.5_	1.914	15.5	1.860	15.7_	1.962	15.0
Aviation gasoline	W	W	W	W	W	W	2.572	0.4	2.506	0.4	2.475	0.6
Kerosene-type jet fuel	1.506	30.2	1.394	32.2	1.473	32.6	1.471	30.9	1.366	32.0	1.451	27.0
Propane (consumer grade)	0.599	5.0	0.507	6.3	0.479	4.2	0.608	33.1	0.494	28.4	0.524	28.5
Kerosene	W	W	W	W	W	W	1.580	1.2	1.402	1.0	1.555	1.1
No. 1 distillate	2.045	0.1	1.977	0.0	1.774	0.1	1.842	1.0	1.743	0.5	1.896	1.1
No. 2 distillate	1.708	13.2	1.602	13.3	1.703	12.7	1.584	152.4	1.466	148.8	1.563	158.9
No. 2 fuel oil	1.941	0.1	1.805	0.1	NA	0.2	1.443	8.2	1.341	6.0	1.411	9.0
No. 2 diesel fuel	1.706	13.1	1.601	13.2	1.702	12.6	1.592	144.3	1.471	142.8	1.572	149.9
Ultra low sulfur	1.708	12.7	1.604	12.9	1.707	12.1	1.594	141.8	1.475	139.0	1.576	146.9
Low sulfur	W	W	W	W	W	W	W	W	W	W	W	W
High sulfur	W_	W	W	W	W	W	W	W	W	W	W	W
No. 4 fuel[a]	W	W	W	W	-	-	W	W	W	W	W	W
Residential fuel oil	1.115	4.4	1.076	4.7	1.094	3.7	0.938	7.1	0.854	7.9	0.836	8.2
Sulfur content not > 1%	W_	W_	W_	W_	NA_	NA_	0.961	1.0	0.846	0.5_	0.812	1.2
Sulfur content > 1%	1.091	W	1.059	W	1.041	2.9	0.935	6.1	0.855	7.4	0.840	7.0

NA = Not available.

Notes: - Beginning January 2007, oxygenated gasoline is included in conventional gasoline. - In January 2007, ultra low-sulfur diesel fuel was added. - All on-highway diesel must be ultra low-sulfur as of December 1, 2010 - Values shown for the current month are preliminary. Values shown for previous months are revised. Data through 2013 are final. Total volumes may not equal the sum of the components due to rounding

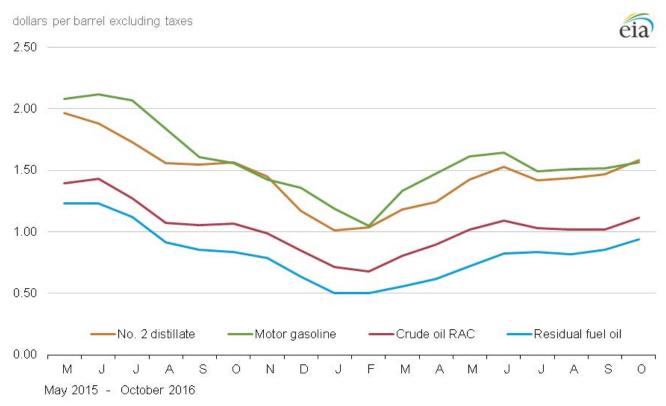
Source: U.S. Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

^{- =} No data reported.

W = Withheld to avoid disclosure of individual company data.

[[]a] Includes No. 4 fuel oil and No. 4 diesel fuel.

Figure HL1. Crude oil and petroleum product wholesale prices



Sources: U.S. 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."

Note: RAC stands for refiner acquisition cost.