

# **Petroleum Supply Monthly**

**December 1997**

**With Data for October 1997**

**Energy Information Administration**  
Office of Oil and Gas  
U.S. Department of Energy  
Washington, DC 20585

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Released for printing: December 24, 1997

The *Petroleum Supply Monthly* (ISSN 0733-0553) is published monthly by the Energy Information Administration, 1000 Independence Avenue, SW., Washington, DC 20585, and sells for \$85.00 per year (price is subject to change without advance notice). Second-class postage paid at Washington, DC 20066-9998, and at additional mailing offices. POSTMASTER: Send address changes to *Petroleum Supply Monthly*, Energy Information Administration, EI-231, 1000 Independence Avenue, SW, Washington, DC 20585.

*On The Cover: Artist's rendition of a wellhead at Bryan Mound in Texas which is part of the Strategic Petroleum Reserve program. This program develops underground storage areas to hold emergency supplies of petroleum. Since 1976, the Department of Energy has been involved in a major facilities development program to stockpile crude oil. The Strategic Petroleum Reserve has four underground crude oil storage sites in salt domes. These sites are organized into three distribution systems and connected by DOE pipelines to commercial crude oil pipeline networks and marine terminals for drawdown and distribution.*

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Publications/Sources	Platform	Information
<b>Weekly Petroleum Status Report</b>		
Wednesday 9:00 a.m. (weekly)	EPUB/WWW	Table 1 (U.S. Balance Sheet) and Data Log (Table 14 plus 4-week averages)
Wednesday 5:00 p.m. 6th-12th (monthly)	EPUB/WWW	Table H1 (Petroleum Supply Summary)
Thursday by Noon (weekly)	COGIS	Table 1 (U.S. Balance Sheet) and Table 14 (Most recent 5-weeks)
Thursday by Noon 7th-13th (monthly)	COGIS	Table H1 (Petroleum Supply Summary)
<b>Winter Fuels Report</b> (October through March)		
Wednesday 5:00 p.m. (weekly)	EPUB/WWW	All tables and highlights
Thursday by Noon (weekly)	COGIS	All tables and highlights
<b>Propane Data</b> (April through September)		
Second Wednesday of the month (9:00 a.m.)	EPUB/WWW	Propane Stocks
<b>Petroleum Supply Monthly</b>		
23rd-26th (monthly)	EPUB/WWW	Table H1 (Petroleum Supply Summary) and all Summary Statistics and Detailed Statistics Tables
23rd-26th (monthly)	COGIS	Table H1 (Petroleum Supply Summary), and all Summary Statistics and Detailed Statistics Tables
<b>Petroleum Supply Annual</b>	WWW	All tables and data bases
<b>Oxygenate Data</b>		
15 working days after the report month	EPUB/WWW	Table D1 U.S. Summary Table D2 (Fuel Ethanol Production/Stocks) and Table D3 (MTBE Production/Stocks) Table D4 (MTBE Merchant and Captive)
<b>Imports Data</b>		
7th-10th (preliminary)	EPUB/WWW	Import data by company from the Form EIA-814, "Monthly Imports Report"
23rd-26th (final)		

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*Weekly Petroleum Status Report*, updated on Wednesdays (Thursday in event of a holiday) at 9:00 a.m.

*Petroleum Supply Monthly*, updated between the 23rd and 26th of the month

*Petroleum Marketing Monthly*, updated by the 8th of the month

*Winter Fuels Report*, propane and distillate highlights and distillate data updated Wednesday at 5:00 p.m. All other data updated Thursday at 5:00 p.m. (October through March)

*Natural Gas Monthly*, updated on the 20th of the month

*Weekly Coal Production*, updated on Fridays by 5:00 p.m.

*Quarterly Coal Report*, updated 60 days after the end of the quarter

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*Short Term Energy Outlook*, updated 60 days after the end of the quarter

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The *Petroleum Supply Monthly* is prepared by the Petroleum Supply Division of the Office of Oil and Gas, Energy Information Administration, under the direction of Ronald W. O'Neill.

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# Preface

The *Petroleum Supply Monthly* (PSM) is one of a family of four publications produced by the Petroleum Supply Division within the Energy Information Administration (EIA) reflecting different levels of data timeliness and completeness. The other publications are the *Weekly Petroleum Status Report* (WPSR), the *Winter Fuels Report*, and the *Petroleum Supply Annual* (PSA).

Data presented in the *PSM* describe the supply and disposition of petroleum products in the United States and major U.S. geographic regions. The data series describe production, imports and exports, inter-Petroleum Administration for Defense (PAD) District movements, and inventories by the primary suppliers of petroleum products in the United States (50 States and the District of Columbia). The reporting universe includes those petroleum sectors in primary supply. Included are: petroleum refiners, motor gasoline blenders, operators of natural gas processing plants and fractionators, inter-PAD transporters, importers, and major inventory holders of petroleum products and crude oil. When aggregated, the data reported by these sectors approximately represent the consumption of petroleum products in the United States.

Data presented in the *PSM* are divided into two sections: Summary Statistics and Detailed Statistics.

## Summary Statistics

The tables and figures in the Summary Statistics section of the *PSM* present a time series of selected petroleum data on a U.S. level. Most time series include preliminary estimates for one month based on the Weekly Petroleum Supply Reporting System; statistics based on the most recent data from the Monthly Petroleum Supply Reporting System (MPSRS); and statistics published in prior issues of the *PSM* and *PSA*.

## Detailed Statistics

The Detailed Statistics tables of the *PSM* present statistics for the most current month available as well as year-to-date. In most cases, the statistics are presented for several geographic areas - - the United States (50 States and the District of Columbia), five PAD Districts, and 12 Refining Districts. At the U.S. and PAD District level, the total volume and the daily rate of activities are presented. The statistics are developed from monthly survey forms submitted by respondents to the EIA and from data provided from other sources.

## Appendices

Four appendices are provided to assist in understanding and interpreting the data presented in this publication:

- Appendix A (District Descriptions and Maps) - Geographic aggregations of the 50 States and the District of Columbia into Refining Districts which make up the PAD Districts.
- Appendix B (Detailed Statistics Explanatory Notes) - Information describing data collection, sources, estimation methodology, data quality control procedures, modifications to reporting requirements and interpretation of tables.
- Appendix C (Impact of Resubmissions) - Information on revisions to published statistics caused by resubmission of respondent survey forms.
- Appendix D (EIA-819M, Monthly Oxygenate Telephone Report) - Preliminary information on production and stocks of fuel ethanol and methyl tertiary butyl ether (MTBE) by PAD District. Data are collected from a sample of respondents reporting on the MPSRS surveys. Data are also published in the *WPSR* and are available electronically approximately 15 working days after the end of the month.

Industry terminology and product definitions are listed alphabetically in the Glossary. Final statistics for the data series published in the *PSM*, as well as additional data from the annual refinery and oxygenate capacity surveys are published in the *PSA*. The *PSA* is published approximately five months after the end of the report year.

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# Articles

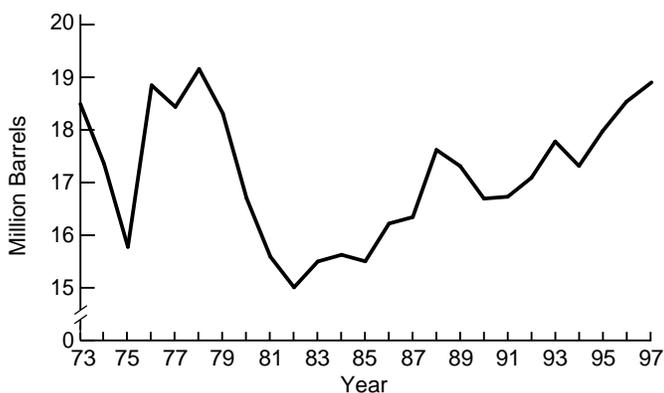
Feature articles on energy-related subjects are frequently included in this publication. The following articles have appeared in previous issues.

U.S. Petroleum Trade Trends: 1989 .....	January 1990
Motor Gasoline Outlook: 1990.....	February 1990
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# Highlights

Reaching a near record level for the month, total demand for refined petroleum products (measured as products supplied) for November 1997<sup>1</sup> averaged 18.9 million barrels per day (Table H1 and Figure H1). Although temperatures during the month were on average 5 percent warmer than last year, due to last November's unusually cold weather, temperatures across the United States were still 12 percent colder-than-normal.<sup>2</sup> The latest November economic data suggest a thriving economy. Unemployment figures for the month dropped to 4.6 percent, pressuring average hourly earnings up<sup>3</sup> while advance monthly retail sales increased only 0.2 percent during November.<sup>4</sup>

**Figure H1. Total Product Supplied, Year-to-Year November Comparisons, 1973-1997**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Other November 1997 highlights include:

- Both **demand** and **production** of finished motor gasoline averaged near record levels for the month at 7.9 million barrels per day each. **Stocks** of finished motor gasoline totaled 199.1 million barrels, the highest level for this time of year since 1994.
- **Demand** for distillate fuel oil averaged 3.5 million barrels per day, the highest level for the month since 1978. Distillate fuel oil **production** was just shy of the November record set last year. **Stocks** of distillate fuel oil totaled 134.2 million barrels by month's end, more than 12 million barrels higher than last year.

<sup>1</sup> November 1997 data are monthly-from-weekly estimates based on the Energy Information Administration's Weekly Petroleum Supply Reporting System.

<sup>2</sup> Based on national population-weighted average heating-degree day data, National Oceanic and Atmospheric Administration, Climate Analysis Center, "Heating Degree Day Data Monthly Summary, Monthly Data for November 1997."

<sup>3</sup> "Jobless Rate Fell to 4.6% in November", *The Wall Street Journal*, December 8, 1997, p. A2.

<sup>4</sup> "Advance Monthly Retail Sales November 1997", United States Department of Commerce News, accessible via Internet at <http://www.census.gov>.

<sup>5</sup> "Table 2 - Estimated Cumulative Monthly Motor Vehicle Travel in the United States", *Traffic Volume Trends*, September 1997, accessible via Internet at <http://cti1.volpe.dot.gov/ohim>.

- **Production** of residual fuel oil reached its highest level for November since 1994, while **imports** were 164 thousand barrels per day, their lowest level for the month in over 20 years.
- **Demand** for kerosene-type jet fuel averaged 1.7 million barrels per day, a record for November and the second highest level for any month. Kerosene-type jet fuel **production** set a November record also, averaging 1.6 million barrels per day. By the end of the month, **stocks** of kerosene-type jet fuel totaled 45.3 million barrels, a November record.
- U.S. propane inventories **dropped 9.4 million barrels during the month**. For the first time since April, propane inventories dropped within their normal monthly range.
- Domestic **production** of crude oil averaged 6.4 million barrels per day, a slight decline from last November's level. Crude oil **imports** set a record high for the month averaging 8.3 million barrels per day. End-of-month **stocks** of crude oil (excluding the Strategic Petroleum Reserve) totaled 320.2 million barrels, exceeding last November by more than 20 million barrels.

## Motor Gasoline

Averaging 7.9 million barrels per day, **production** of finished motor gasoline was close to the record high for November. **Demand** for finished motor gasoline was also at a near record level for the month, averaging 7.9 million barrels per day (Figure H2). The latest estimates from the Federal Highway Administration suggest cumulative monthly travel on all roads is increasing at a rate of more than 2 percent this year.<sup>5</sup> **Imports** of finished motor gasoline averaged 238 thousand barrels per day which is normal for this time of year. Finished motor gasoline **exports** were also normal for November, averaging 118 thousand barrels per day. **Total stocks** of motor gasoline ended the month at the highest level for this time of year since 1994, totaling 199.1 million barrels. Of the total **stocks**, inventories of finished motor gasoline accounted for 158 million barrels, an increase of over 7 million barrels compared to last November.

**Table H1. Petroleum Supply Summary**  
(Million Barrels per Day, Except Where Noted)

Category	1997			1996	January - November	
	Estimated November	October	Difference <sup>a</sup>	November	1997	1996
<b>Products Supplied</b> .....	18.9	19.1	-0.2	18.5	18.6	18.3
Finished Motor Gasoline.....	7.9	8.2	-0.3	7.9	8.0	7.9
Distillate Fuel Oil.....	3.5	3.7	-0.1	3.4	3.4	3.4
Residual Fuel Oil .....	0.7	0.7	(s)	0.7	0.8	0.8
Jet Fuel.....	1.7	1.6	0.1	1.6	1.6	1.6
Other Petroleum Products <sup>b</sup> .....	5.1	5.0	0.1	4.8	4.8	4.6
<b>Crude Oil Inputs</b> .....	14.7	14.8	-0.1	14.2	14.6	14.2
<b>Operating Utilization Rate (%)</b> .....	95.6	97.6	-2.0	95.1	96.0	95.1
<b>Imports</b> .....	9.8	10.4	-0.6	9.2	10.0	9.5
<b>Crude Oil</b> .....	8.3	8.5	-0.3	7.3	8.1	7.5
Strategic Petroleum Reserve .....	0.0	0.0	0.0	0.0	0.0	0.0
Other.....	8.3	8.5	-0.3	7.3	8.1	7.5
<b>Products</b> .....	1.5	1.9	-0.3	1.9	1.9	2.0
Finished Motor Gasoline .....	0.2	0.3	-0.1	0.2	0.3	0.3
Distillate Fuel Oil .....	0.2	0.2	-0.1	0.2	0.2	0.2
Residual Fuel Oil .....	0.2	0.2	(s)	0.3	0.2	0.2
Jet Fuel.....	0.1	0.1	(s)	0.1	0.1	0.1
Other Petroleum Products <sup>c</sup> .....	0.9	1.1	-0.2	1.1	1.1	1.0
<b>Exports</b> .....	1.0	1.1	-0.1	1.0	1.0	1.0
Crude Oil .....	0.1	0.2	-0.1	0.2	0.1	0.1
Products .....	0.9	0.9	(s)	0.9	0.9	0.9
<b>Total Net Imports</b> .....	8.8	9.3	-0.5	8.2	9.0	8.5
<b>Stock Change<sup>d</sup></b> .....	-0.2	0.1	-0.3	-0.5	0.2	-0.1
Crude Oil .....	0.3	0.4	-0.1	-0.4	0.1	-0.1
Products .....	-0.5	-0.3	-0.2	-0.1	0.1	(s)
<b>Total Stocks</b> .....	1,584	1,598	-13	1,522	--	--
<b>(million barrels)</b>						
<b>Crude Oil</b> .....	884	879	4	869	--	--
Strategic Petroleum Reserve.....	563	563	0	570	--	--
Other.....	320	316	4	299	--	--
<b>Products</b> .....	701	718	-18	653	--	--
Finished Motor Gasoline.....	158	158	(s)	151	--	--
Distillate Fuel Oil.....	134	136	-2	122	--	--
Residual Fuel Oil .....	38	36	2	42	--	--
Jet Fuel.....	45	46	(s)	40	--	--
Other Petroleum Products <sup>c</sup> .....	325	343	-18	298	--	--

<sup>a</sup> Difference is equal to volume for current month minus volume for previous month.

<sup>b</sup> Includes crude oil product supplied, natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and jet fuel.

<sup>c</sup> Includes natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate fuel oil, and residual fuel oil.

<sup>d</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

(s) = Less than 0.05 million barrels per day, or less than 0.05 percent, or less than 0.5 million barrels.

E=Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), 1996, *Petroleum Supply Annual*, Volume II; appropriate issues of the *Petroleum Supply Monthly* and the *Weekly Petroleum Status Report*.

Data for the current month are preliminary estimates, based on weekly submissions. For an explanation of estimation methodology and accuracy, see Appendix A of *Weekly Petroleum Status Report* and the article, "Accuracy of Petroleum Supply Data", published in the September 1996, *Petroleum Supply Monthly*.

**Table H2. U.S. Refinery Inputs, Capacities and Utilization Rates: 1996-1997**  
(Thousand Barrels per Day, Except Where Noted)

Item	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>1996</b>												
Gross Refinery Inputs .....	13,894	13,679	13,941	14,432	14,538	14,681	14,478	14,538	14,637	14,442	14,379	14,391
Operating Refinery Capacity <sup>2</sup> .....	15,083	14,903	14,950	15,044	15,037	15,073	15,112	15,168	15,121	15,109	15,121	15,069
<b>Idle Capacity<sup>3</sup></b>	<b>251</b>	<b>261</b>	<b>236</b>	<b>141</b>	<b>145</b>	<b>152</b>	<b>138</b>	<b>138</b>	<b>138</b>	<b>149</b>	<b>138</b>	<b>189</b>
Idle Three Months or Less .....	120	130	77	11	8	14	0	0	0	12	0	92
Idle More than Three Months .....	131	131	159	131	138	138	138	138	138	138	138	98
Operable Refinery Capacity .....	15,333	15,164	15,186	15,186	15,182	15,224	15,249	15,306	15,259	15,259	15,259	15,259
Utilization Rate (percent)												
Operating Capacity .....	92.1	91.8	93.3	95.9	96.7	97.4	95.8	95.8	96.8	95.6	95.1	95.5
Operable Capacity .....	90.6	90.2	91.8	95.0	95.8	96.4	94.9	95.0	95.9	94.6	94.2	94.3
<b>1997</b>												
Gross Refinery Inputs .....	13,804	13,486	14,174	14,454	15,197	15,286	15,178	15,421	15,548	15,088	0	0
Operating Refinery Capacity <sup>2</sup> .....	15,167	15,205	15,233	15,229	15,449	15,461	15,462	15,452	15,464	15,464	0	0
<b>Idle Capacity<sup>3</sup></b>	<b>284</b>	<b>247</b>	<b>219</b>	<b>387</b>	<b>167</b>	<b>177</b>	<b>177</b>	<b>189</b>	<b>139</b>	<b>139</b>	<b>0</b>	<b>0</b>
Idle Three Months or Less .....	197	160	40	220	0	10	10	22	12	12	0	0
Idle More than Three Months .....	87	87	179	167	167	167	167	167	127	127	0	0
Operable Refinery Capacity .....	15,451	15,452	15,452	15,616	15,616	15,638	15,638	15,640	15,602	15,602	0	0
Utilization Rate (percent)												
Operating Capacity .....	91.0	88.7	93.0	94.9	98.4	98.9	98.2	99.8	100.5	97.6	0	0
Operable Capacity .....	89.3	87.3	91.7	92.6	97.3	97.7	97.1	98.6	99.7	96.7	0	0

<sup>1</sup>Capacities are on a calendar day basis.

<sup>2</sup>Operating capacity equals the operable capacity less the total idle capacity.

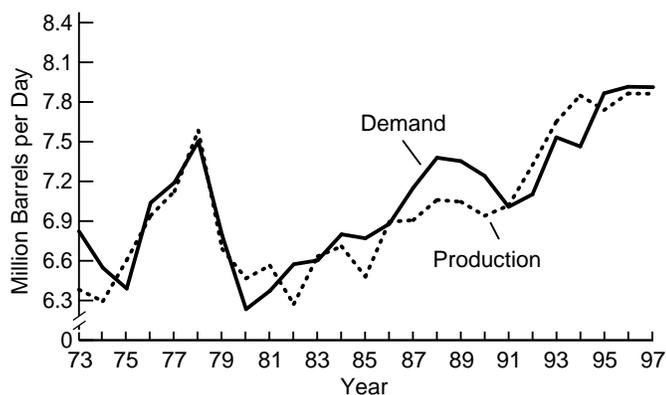
<sup>3</sup> Idle capacity is the component of operable capacity that is not in operation and not under active repair, but is capable of being placed in operation within 30 days; and capacity not in operation but is under active repair that can be completed within 90 days.

NA = Not Available

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA), 1996, *Petroleum Supply Annual*, Volume 2, Table 16; EIA, *Petroleum Supply Monthly*, 1997 data issue, Table 28.

**Figure H2. Motor Gasoline, Year-to-Year November Comparisons, 1973-1997**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Distillate Fuel Oil

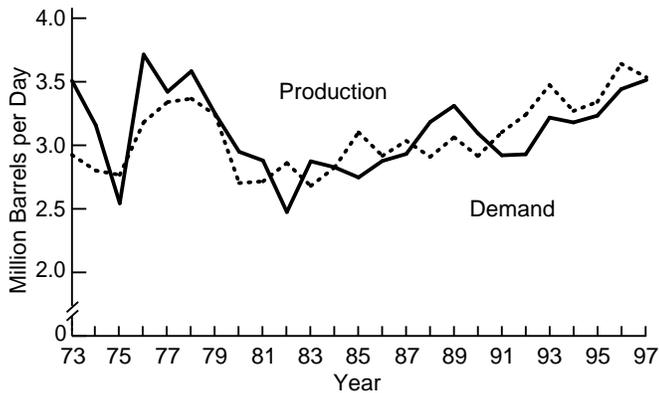
**Demand** for distillate fuel oil averaged 3.5 million barrels per day, the highest level for the month in 19 years (Figure H3). Both trucking and agricultural demand were strong during the month, contributing to the increased demand for distillates during November.<sup>6</sup> Near November record levels, **production** of distillate fuel oil averaged 3.5 million barrels per day. **Imports** of distillate fuel oil were unusually low for this time of the year, averaging only 162 thousand barrels per day. Distillate fuel oil **exports** averaged 191 thousand barrels per day which is normal for the month.

Distillate fuel oil **stocks** ended the month at 134.2 million barrels, 12.4 million barrels higher than last year's low level. High sulfur distillate fuel oil, or heating oil, made up 70.2 million barrels of the total, **an increase of 24 percent over last year**. One reason behind the build was due to the tension between the United Nations and Iraq, distillates were put in storage as traders expected prices to be at a premium in the coming months if a diplomatic resolution was not found.

<sup>6</sup> "Refinery Problems Boost Mid-Continent Diesel", *Bloomberg Oil Buyers' Guide*, November 17, 1997, p. 10 & 11.

<sup>7</sup> "FORWARDS AND FUTURES - Bailing Out", *Jet Fuel Intelligence Weekly*, November 24, 1997, p. 3.

**Figure H3. Distillate, Year-to-Year November Comparisons, 1973-1997**

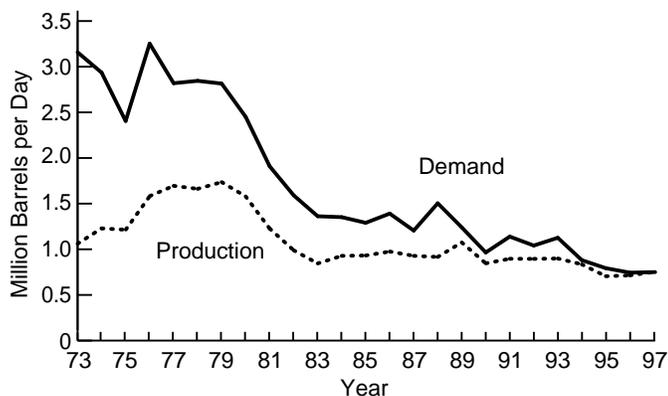


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Residual Fuel Oil

Showing a slight increase over last November, **demand** for residual fuel oil averaged 750 thousand barrels per day (Figure H4). Residual fuel oil remained the fuel of choice with the utilities that have the capability of running either natural gas or residual fuel oil.<sup>8</sup> **Production** of residual fuel oil climbed to 754 thousand barrels per day, the highest level for November since 1994. As some refineries have taken units off line for maintenance, more residual fuel becomes available since the refiners are not able to process it further. During November, **imports** of residual fuel oil were 164 thousand barrels per day, the lowest level for the month in more than 20 years. **Exports** of residual fuel oil were normal for this time of year averaging 107 thousand barrels per day.

**Figure H4. Residual, Year-to-Year November Comparisons, 1973-1997**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

<sup>8</sup> "Residual Oil Prices Show Surprising Strength As Bottom of Barrel Rises to Top of Market", *The Oil Daily*, November 21, 1997, p. 3 & 6.

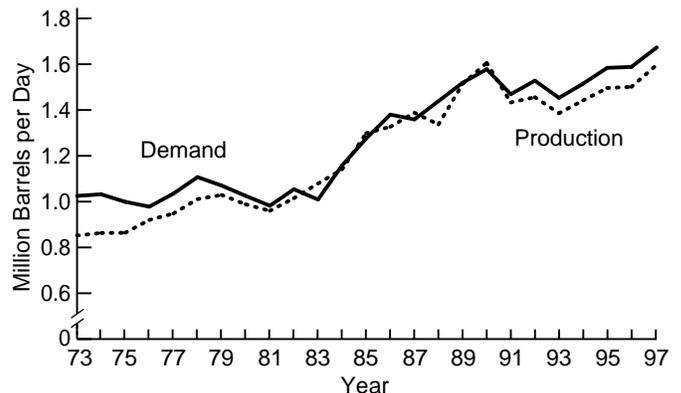
<sup>9</sup> "Preliminary Scheduled Passenger Traffic Statistics" and "Preliminary Scheduled Cargo Traffic Statistics", Air Transportation Association, accessible via Internet at <http://www.air-transport.org/data>.

**Stocks** of residual fuel oil increased more than 2.3 million barrels during the month for a total of 38.2 million barrels by month's end.

## Kerosene-Type Jet Fuel

Demand for kerosene-type jet fuel continues to reach record levels as November's average of 1.7 million barrels per day **not only set a record for the month, but was also the second highest average ever** (Figure H5). Contributing to the record level demand, both airline passenger and air cargo traffic increased over the last year's figures according to the latest statistics from the Air Transportation Association (ATA) for the month of November.<sup>9</sup> Setting another November record, **production** of kerosene-type jet fuel averaged 1.6 million barrels per day, also one of the highest months on record. Total **imports** of jet fuel, kerosene and naphtha-type, averaged an unusually low 54 thousand barrels per day, the lowest level for any month since January 1992. Total **exports** of jet fuel averaged a healthy 31 thousand barrels per day. **Stocks** of kerosene-type jet fuel ended the month totaling 45.3 million barrels, the highest level ever for the month.

**Figure H5. Kerojet, Year-to-Year November Comparisons, 1973-1997**



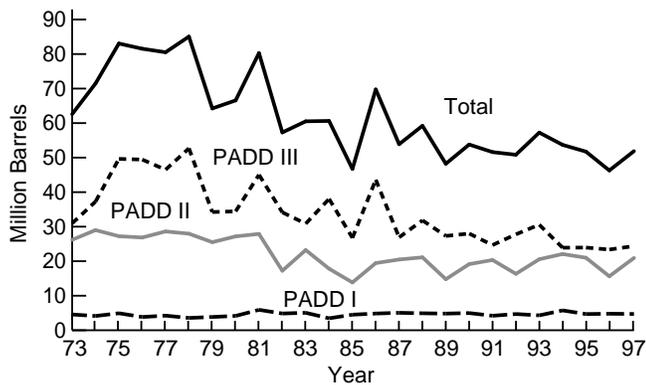
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Propane

Propane inventories experienced the **largest November draw in at least 24 years**, dropping 9.4 million barrels from October's level. Despite November's record stock draw, U.S. inventories remain in the normal range for this time of year at 51.9 million barrels (Figure H6). Inventories in the Midwest had the largest decline, dropping 3.7 million barrels to settle at 20.9 million barrels, followed by the Gulf Coast dropping 3.1 million barrels to end the month at 24.4 million barrels. Inventories remain well within the normal range in both the Midwest and Gulf Coast regions. In the East Coast, stocks dropped to 4.7 million barrels, also within the normal range for this time of year. Contributing to

the sharp decline in inventories, increased demand from the petrochemical industry in the Gulf Coast combined with seasonal declines prompted by colder than normal weather across the country. Total propane inventories dropped within the normal range for the first time this year since April and the outlook for the 1997-98 heating season remains favorable.

**Figure H6. Propane Stocks Year-to-Year Comparisons, as of November 30**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Crude Oil

Domestic production of crude oil increased slightly from October's level but remains at a level similar to the early 1950's. November's crude oil **production** averaged only 6.4 million barrels per day. Alaskan field **production** declined to 1.3 million barrels per day, the lowest level for this time of year since 1977. Some refiners along the West Coast have noted changes in the quality of the crude coming out of Alaska, combined with increasing competition from short-haul destinations such as Canada and the South American countries, which have led to a decrease in domestic demand for ANS supplies.<sup>10</sup> Crude oil **imports** during the month remained high, averaging 8.3 million barrels per day, a record for the month. Exports were relatively low compared to the past few years. November **exports** of crude oil averaged 101 thousand barrels per day. Due to lofty import volumes and low exports, **net imports** of crude oil averaged 8.1 million barrels per day (Figure H7). November's net imports were nearly 1 million barrels per day more than this time last year.

<sup>10</sup> "Competition And Quality Issues Haunt ANS Market", *Petroleum Intelligence Weekly*, November 17, 1997, p. 5.

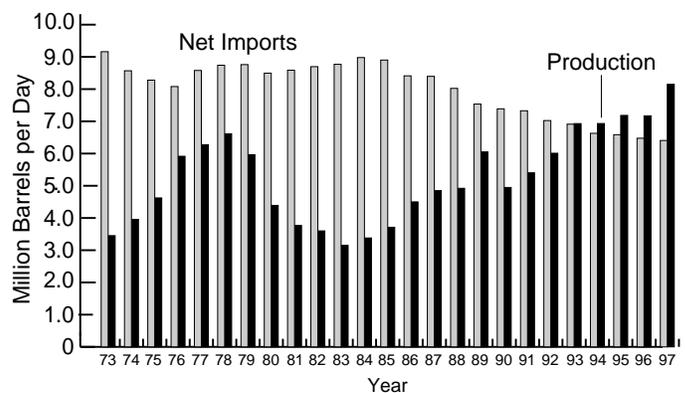
<sup>11</sup> "PDVSA Officials Back Driving Down Prices", *The Oil Daily*, December 3, 1997, p. 1 & 4.

<sup>12</sup> "US Crude Oil Markets To Be Spared Lifo Trading This Year", *Petroleum Intelligence Weekly*, November 17, 1997, p. 2 & 3.

In a move which will probably add to this continuing trend, the members of the Organization of the Petroleum Exporting Countries (OPEC) agreed to reset the OPEC production ceiling to 27.5 million barrels per day, for the first half of 1998. This could lead to decreasing crude oil prices in the short term thereby making some marginal production uneconomical and possibly slowing development in other areas.<sup>11</sup>

End-of-month crude oil **stocks** (excluding the Strategic Petroleum Reserve) totaled 320.2 million barrels, **nearly 7 percent higher than last November**. Year end inventory adjustments to suit LIFO accounting practices usually mean a drop in inventories, but this year, stocks are not expected to decline as much as usual due to relatively lower crude prices this year and due to the mergers and acquisitions throughout the industry.<sup>12</sup> Total crude oil stocks (including the Strategic Petroleum Reserve) ended the month at 883.7 million barrels, roughly 14.6 million barrels higher than this time last year.

**Figure H7. Crude Oil, Year-to-Year November Comparisons of Production and Net Imports 1973-1997**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Refinery Operations

Crude oil **inputs** averaged 14.7 million barrels per day, the highest level for this time of year since 1978. The estimated refinery operable utilization rate averaged 94.5 percent, the lowest level since April.

# Accuracy of Petroleum Supply Data

by Tammy G. Heppner and Carol L. French

## Overview

Data collected by the Petroleum Supply Division (PSD) of the Energy Information Administration (EIA) provided an accurate picture of petroleum supply in 1996. These data were presented in a series of PSD publications: the *Weekly Petroleum Status Report (WPSR)*, the *Winter Fuels Report (WFR)*, the *Petroleum Supply Monthly (PSM)*, and the *Petroleum Supply Annual (PSA)*. Weekly estimates in the *WPSR* and *WFR* were the first values available.

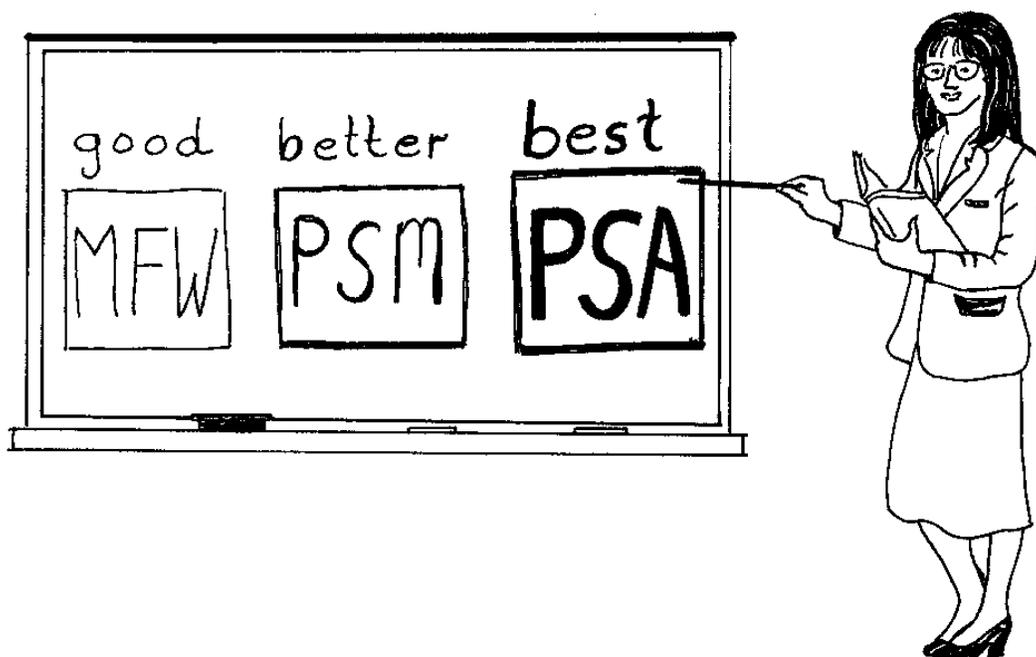
Figure FE1 illustrates the improvement in accuracy from the weekly estimates to the interim monthly values to the final petroleum supply values. The monthly-from-weekly (MFW) data are the least accurate but "good." The *PSM* data are more accurate or "better" and the *PSA* data are the most accurate or "best." For 1996, 66 petroleum supply data series were analyzed to determine how close the *PSM* values were to the final *PSA* values. For these series, 47 out of the 66 were within 1 percent of the *PSA* values in terms of mean absolute percent error. Sixty-one petroleum supply data series were analyzed to see how close the MFW estimates were to the final *PSA* values. For these 61 series, 26 were within 2 percent of the

*PSA* values in terms of mean absolute percent error and, of those, 11 were within 1 percent.

Two major factors that contribute to the *PSM* values being more accurate than the MFW estimates are: (1) the greater length of time between the close of the reference period and the publication date of the *PSM*; and, (2) some MFW values are estimates whereas many *PSM* respondents extract their actual data from automated accounting systems. The greater length of time allows more in-depth review of the data by the respondents and EIA. Within 2 months of the close of a reference month, interim values are published in the *PSM*. The weekly data are more quickly available. The *WPSR* is available electronically 5 days after and in hardcopy 7 days after the close of the reference week (excluding holiday weeks). Propane data are available electronically and in the *WPSR*. Additionally, they were published until February 1996 in hardcopy in the *WFR*. About 5 months after the end of the reference year, final monthly values, reflecting any resubmissions, are published in the *PSA*.

Historically, the weekly publications (the *WPSR* and *WFR*) and the monthly (*PSM*) provided volumes of crude oil and

Figure FE1. Grading the Accuracy of 1996 PSD Data



petroleum products data at relatively increasing levels of accuracy. This article provides petroleum analysts with a measure of the degree to which, on average, estimates and interim values vary from their final values.

## The Petroleum Supply Reporting System

The 15 surveys in the Petroleum Supply Reporting System (PSRS) track the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. To maintain a database with historically accurate observations and current estimates from the petroleum industry, EIA administers three survey series: weekly, monthly, and biennial (every other year).

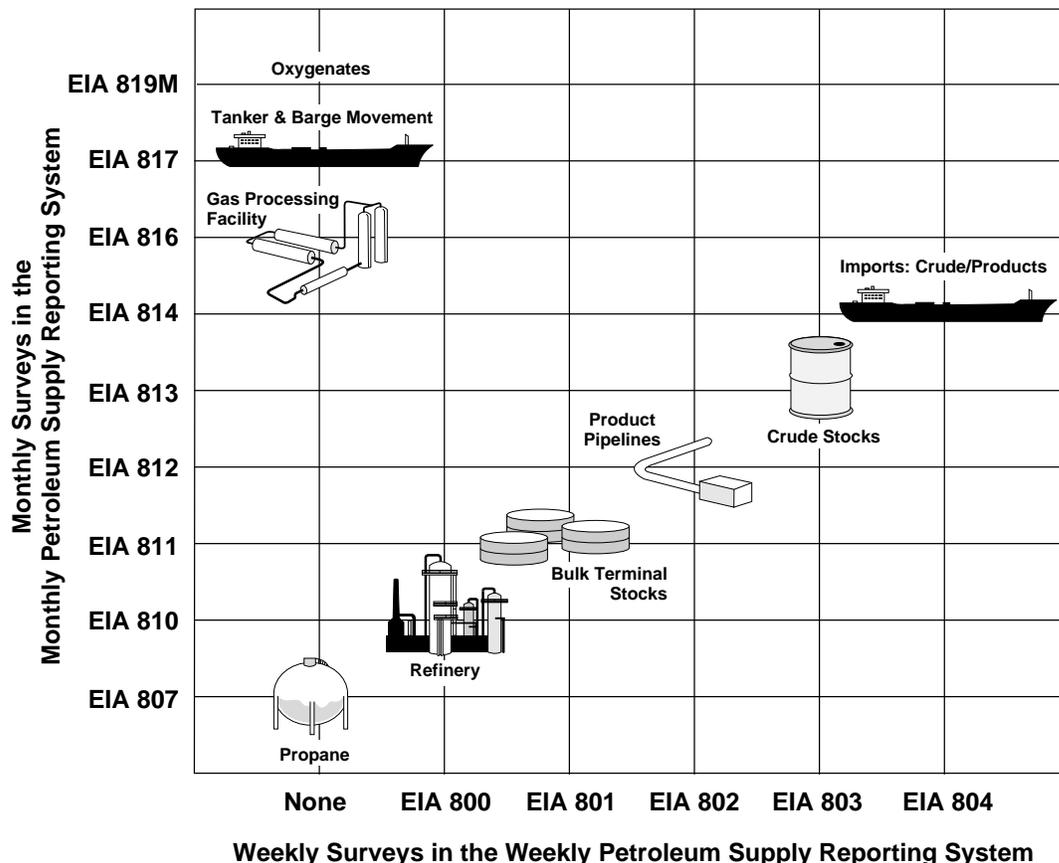
The PSRS is organized into two data collection subsystems, the Weekly Petroleum Supply Reporting System (WPSRS) and the Monthly Petroleum Supply Reporting System (MPSRS). The WPSRS processes data from the five weekly surveys. The MPSRS includes eight monthly surveys, one biennial survey, and the Form EIA-807, which collects propane data monthly

from April through September and weekly from October through March.

Figure FE2 displays the petroleum supply and distribution system and indicates the points at which petroleum supply data are collected. Both weekly and monthly surveys are administered at five key points along the petroleum production and supply path: (1) refineries, (2) bulk terminals, (3) product pipelines, (4) crude oil stock holders, and (5) importers of crude oil and products.

Due to 1996 budget reductions, EIA has eliminated and/or changed the collection and publication of two data series. The two data series affected by this decision are U.S. refinery capacity, collected on the Form EIA-820, "Biennial Refinery Report," and U.S. oxygenate production capacity, collected on the Form EIA-819A, "Annual Oxygenate Capacity Report." Annual U.S. refinery capacity data collection and publication normally presented each year in Volume 1 of the *PSA* have been moved to a biennial schedule. These data were collected for 1996. The annual U.S. oxygenate production capacity data normally presented each year in Volume 1 of the *PSA* have been eliminated. Also, since February 1996, publication of the *Winter Fuels Report* has been eliminated, but the data are still available electronically.

**Figure FE2. Petroleum Supply Reporting System: Surveys and Subsystems**



Source: Energy Information Administration, Petroleum Supply Reporting System.

## **The Weekly Petroleum Supply Reporting System**

The WPSRS contains the data collected from the five weekly surveys. Each weekly survey is distributed to a sample of the corresponding monthly survey's universe. In Figure FE2, the icons represent the target population of the monthly and weekly surveys of the PSRS. For example, the target population for the survey Forms EIA-801 and EIA-811 are bulk terminal stocks. Thus, the respondents to the Form EIA-801 are a sample of the respondents who report to Form EIA-811. For the weekly surveys, EIA aims for a minimum 90-percent multi-attribute-cutoff sample from the respondents to the corresponding monthly survey. In choosing the sample for each product, companies are ranked in descending order by volume. Respondents are chosen in order, down the list until the sample includes those companies contributing at least 90 percent of a variable's total volume. For example, for distillate fuel oil stocks, the weekly sample includes those respondents whose combined volumes of stocks for distillate fuel oil from refineries, bulk terminals, and pipelines constitute at least 90 percent of the total volume of distillate fuel oil stocks as reported in the corresponding monthly surveys.

With these weekly surveys, EIA can provide timely, relatively accurate snapshots of the U.S. petroleum industry every week. The weekly surveys collect information on the supply and disposition of selected petroleum products and crude oil. The reference period for each weekly survey begins at 7:01 a.m. each Friday and ends at 7:00 a.m. the following Friday. Respondents report their data via telephone, facsimile, or EIA's electronic data collection software package, the Personal Computer Electronic Data Reporting Option (PEDRO). All respondents must submit their data by 5:00 p.m. on the Monday following the end of the reference period. During 2 working days, quality control procedures are executed. Cell values determined to be unusual or inconsistent with other cell values are flagged. The validity of the value of each flagged cell is investigated. Some flagged values are verified by the respondent to be correct; other flagged cells are corrected; and the remaining flagged values are referred to as unresolved. Nonrespondent and unresolved flagged data are imputed using an exponentially smoothed mean of the respondents' historical data.

Within 7 days of the close of the reference week, data are made available to the public in three forms: through the EIA electronic publishing system (EPUB), hardcopy (through the *WPSR*), and EIA's internet web site. Except when holidays delay data processing schedules, values for the weekly variables are available via EPUB at 9:00 a.m. on the Wednesday following the close of the reference week. The hardcopy *WPSR* is distributed on the Friday morning following the close of the reference week. Beginning in September 1995, the weekly data were made available on the internet (<http://www.eia.doe.gov>) and are on the same schedule as EPUB.

## **The Monthly Petroleum Supply Reporting System**

The reference period for the monthly surveys starts on the first day of the month at 12:01 a.m. and ends on the last day of the month at midnight. Except for the Form EIA-819M, the deadline for filing monthly surveys is the 20th calendar day following the end of the report month. Data collection for the Form EIA-819M begins on the seventh working day of the month. Form EIA-819M data are solicited by telephone or received by facsimile. Data for the other monthly surveys are reported via telephone, facsimile, or PEDRO.

During the period of data editing, either the respondent or EIA staff may identify an error. If the respondent discovers an error, the EIA representative for a particular survey is notified and the value is corrected. If EIA's edits diagnose an unusual value, an EIA representative will determine if the value is correct or incorrect by calling the company and/or reviewing historical data.

Within 60 days of the close of the reference month, all of the interim monthly data are published in the *PSM*. However, customer satisfaction surveys conducted by EIA during 1995 showed a need for faster release of available monthly data. In response to this need, beginning in November 1995, EIA implemented a plan for early release of monthly petroleum statistics approximately 45 days after the end of the report period. The preliminary data are presented in four tables: "U.S. Daily Average Supply and Disposition of Crude Oil and Petroleum Products," "Imports of Crude Oil and Petroleum Products into the United States by Country of Origin," "Stocks of Crude Oil and Petroleum Products by Petroleum Administration for Defense (PAD) District," and "Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State". These preliminary tables are available on the internet and EPUB approximately on the 13th of each month. After incorporation of petroleum exports and crude oil production, these tables are replaced with final tables between the 20th and the 23rd of each month. In addition to the internet, beginning in March 1996, monthly data became available on EIA's CD-ROM called the Energy InfoDisc, which is released quarterly.

Throughout the year, EIA accepts data revisions of monthly data. If a revision is made after the *PSM* has been published, it is referred to as a resubmission. Resubmissions for earlier months are published in Appendix C of the *PSM* and are reflected in the *PSA*. Beginning with the February 1994 *PSM*, a new table (Table H1, Petroleum Supply Summary) was included to show early estimates of monthly data. The current-month values in Table H1 are preliminary estimates based on weekly submissions. These monthly-from-weekly estimates become available in the *WPSR* and on EPUB on the Wednesday following the first Friday of each month.

**Table FE1. Average Coverage for Weekly Surveys, 1996 and 1995 (Percent of Final Monthly Volumes Included in Monthly-from-Weekly Sample)**

Product	Stocks						Production		Imports	
	Refinery		Bulk Terminal		Pipeline		1996	1995	1996	1995
	1996	1995	1996	1995	1996	1995				
Total Motor Gasoline .....	98	97	93	92	97	97	99	98	96	98
Jet Fuel .....	98	98	94	94	99	99	99	98	98	80
Distillate Fuel Oil .....	97	96	88	87	98	98	97	97	89	87
Residual Fuel Oil .....	94	94	91	90	--	--	94	94	94	96
Crude Oil .....	96	95	--	--	--	--	--	--	95	96

-- = Not Applicable.

Source: Energy Information Administration, Petroleum Supply Reporting System.

Within 5 months of the end of the calendar year, the final monthly values for the previous year are published in the *PSA*. These values reflect all *PSM* resubmissions and other data corrections. The values contained in the *PSA* are EIA's most accurate measures of petroleum supply industry activity.

## Factors Affecting Data Accuracy

Maintaining an accurate database is a major goal of EIA. The quality of the data drives the quality of all qualitative and quantitative analyses conducted using these data. Accuracy and timeliness are primary attributes of high quality data. Accuracy of survey data is measured as the closeness of the published values to the true values (i.e., those values that would be obtained if the target population had been correctly surveyed and all the data had been precisely recorded).

Respondents to the monthly surveys have more time to file than the weekly respondents, enabling them to collect, review, and revise their monthly data more carefully than they do their weekly data. Additionally, EIA has more time to edit the monthly data. Also, some weekly respondents report estimates while many monthly respondents extract actual data from accounting systems. Thus, the monthly data are more accurate.

Some mechanisms introducing error, such as nonresponse, are not totally preventable. Other sources for errors, such as sampling errors, are unique to a particular type of survey. One situation where sampling error occurs is if the group of sampled respondents is dissimilar to the full population. Within the PSRS, only weekly surveys, the monthly oxygenate survey, Form EIA-819M, and the propane survey, Form EIA-807, are at risk of having sampling errors. However, all surveys in the PSRS are at risk for nonsampling errors, such as: (1) insufficient coverage of respondents (the survey frame does not include all members of the target population); (2) nonresponse; (3) response error; and (4) internal processing errors such as incorrect data entry. A detailed discussion of factors influencing data accuracy and how they are minimized in the PSRS follows.

## Samples and Sampling Error

A sample is a subsection of a universe identifying members of a target population. The weekly surveys are administered to samples of the monthly populations to reduce respondent burden and to expedite the turnaround of data from survey respondents to the public. As with any sample, the values obtained are different from those obtained if the full universe had been surveyed. Sampling error is the difference between a sample estimate and a population value.

There are five samples, one for each weekly petroleum supply survey, in the WPSRS. For these surveys, the sampling error is minimized by using a minimum 90-percent multi-attribute-cutoff sample from the corresponding monthly survey's frame. At the end of each month, updates are made to the samples and survey frames if a 90-percent coverage was not obtained.

For the weekly surveys, better coverage will most likely reduce sampling error. As shown in Table FE1, 1996 coverage was comparable to 1995. Nineteen of the 21 product and supply type combinations had coverage above 90 percent in 1996. For 14 of the 21 combinations, 1996 coverage increased from 1995. Tabulations were done before rounding of the coverage values. The average coverage of jet fuel refinery imports increased by 18 percentage points, from 80 to 98 percent.

## Nonsampling Error

Unlike sampling errors, all survey data, even those from a census survey, are at risk of incurring nonsampling errors. There are two categories of nonsampling errors, random and systematic. With random error, on average, and over time, values will be overestimated by the same amount they are underestimated. Therefore, over time, random errors do not bias the data, but they will give an inaccurate portrayal at any point in time. On the other hand, systematic error is a source of bias in the data, since these patterns of errors are made repeatedly. The following is a discussion of how the

**Table FE2. Average Response Rates for Monthly and Weekly Surveys, 1996**

Survey Site	Respondents to Monthly Surveys			Respondents to Weekly Surveys		
	Average Universe Size	Average Number of Respondents	Percent <sup>1</sup>	Average Weekly Sample Size	Average Number of Respondents	Percent <sup>2</sup>
Refinery.....	264	257	97.4	188	184	97.9
Bulk Terminal.....	318	313	98.4	75	72	96.2
Pipeline .....	82	82	99.8	43	42	97.6
Crude Oil Stocks.....	175	174	99.5	85	83	98.6

<sup>1</sup> The average response rates for monthly surveys are calculated by summing the individual monthly response rates and dividing by 12.

<sup>2</sup> The average response rates for weekly surveys are calculated by summing the individual weekly response rates and dividing by 52.

Note: Percents are calculated before rounding.

Source: Energy Information Administration, Petroleum Supply Reporting System.

four most frequently occurring types of nonsampling error are minimized within the PSRS.

### Frame Updates

The list of all companies identified as members of the target population is called a frame. If members of the target population are not included in the frame, there is an undercount of the aggregate data. To diminish the chance of undercounting, the PSRS frames are continually updated. New companies are identified through continual review of petroleum industry periodicals, newspaper articles, and correspondence from respondents. During the frames update, each frame is scrutinized to assure completeness.

### Maintaining a Low Nonresponse

Survey respondents are required by law to report to EIA (see Explanatory Note 6 of the *PSM* for a description of action for chronic nonresponse). The 1996 response rates for the weekly surveys and their complementary monthly surveys are enumerated in Table FE2. The 1996 average response rate for each of the EIA weekly surveys was over 96 percent (same as 1995). The corresponding monthly surveys had slightly better response rates of over 97 percent (an increase of 1 percent from 1995).

To mitigate the effect of nonresponse, imputed values are calculated for all unreported values except monthly imports. Weekly imputed values are the exponentially smoothed mean of that respondent's historical values for that variable. Monthly imputed values are the previous month's value for the particular respondent and variable. For imports, however, there is a great deal of fluctuation from one reference period to another, with respondents frequently having no imports of a particular product. As a result, zero is the value imputed for nonreported cells on the monthly survey. In addition, the monthly imports are collected at a much greater level of detail than the weekly imports, which makes imputation difficult.

### Reducing Response Error

Over the past 5 years, many structural and procedural improvements to the PSRS system have been made in order to reduce the problem of nonsampling errors. One such

improvement has been the PEDRO system, which permits all weekly and monthly survey data except the Form EIA-819M and Form EIA-807 to be submitted to EIA electronically. A respondent entering values via PEDRO may execute edit routines prior to transmission of the survey responses. These routines include consistency and outlier (extreme value) checks of the data. Unusual or nonreported cells are flagged and, prior to transmission of the data, a representative of the company is able to review and verify or correct data in the flagged cells.

Even with sophisticated edit checks, response error (the difference between the reported value and the actual value) remains the most likely cause of data inaccuracy. The weekly surveys are more susceptible to response error since some of their values are estimates. Many monthly respondents abstract their actual data from accounting systems and thus are generally more accurate.

Maintaining accurate accounting records, however, does not ensure against response error. For example, numbers can be transposed within the correct cell; an otherwise correct value may be entered in the wrong cell; a respondent may misinterpret the intent of a question; or the wrong units may be used.

### Survey Clarity

The terms, layout, and definitions on all survey forms are periodically reviewed for completeness, clarity, and consistency across surveys. At regular intervals, survey intent, as well as what data are collected, are subject to industry and government review. To the extent possible, industry changes in terminology and practice are incorporated into the PSRS on an ongoing basis.

## Data Assessment

Each of the variables included in these analyses is of current and historical interest. Of the 66 variables for which both *PSM* and *PSA* values were published, only 61 of them were published weekly throughout 1996. For each variable, six measures of accuracy were calculated to compare the differences between the MFW and *PSM* values relative to the *PSA* values.

- **Error** is the difference between the estimate or interim value and the final value for a given month. For inputs, production, stock change, imports, exports, and product supplied, values are expressed in units of thousands of barrels per day. For stocks, values are expressed in units of thousands of barrels.

$$\text{MFW Error} = \text{MFW Volume} - \text{PSA Volume}$$

$$\text{PSM Error} = \text{PSM Volume} - \text{PSA Volume}$$

- **Percent Error** is the error for a given month divided by the final value for a given month, and multiplied by 100.

$$\text{MFW Percent Error} = \frac{\text{MFW Error}}{\text{PSA Volume}} \times 100$$

$$\text{PSM Percent Error} = \frac{\text{PSM Error}}{\text{PSA Volume}} \times 100$$

- **Mean absolute error** is the weighted average over the 12 months of the year of the absolute values of the errors for each month. The mean absolute error measures the average magnitude of the revisions that took place over a year. Outliers increase the mean absolute error. The number of days in the month is used for weighting all product categories except stocks. Stocks are weighted equally for each of the 12 months.
- **Mean absolute percent error** is the weighted average over the 12 months of the year of the absolute values of the percent errors. It provides a measure of the average magnitude of the revisions relative to final values. The mean absolute percent error has an inverse relationship with data accuracy; i.e., the smaller the mean absolute error, the closer the interim data are to the final data; conversely, the larger the mean absolute percent error, the greater the difference in the interim value and the final value. Outliers inflate the mean absolute percent error.
- **Range** is the difference between the smallest and largest percent errors. The range shows the dispersion of the percent differences between interim and final values.
- **Median** of the percent errors is the point at which half the values are higher and half are lower. Unlike the mean, the median is not affected by an outlier. In these analyses, each distribution has 12 observations. The median is the average of the sixth and seventh ordered observation.

The average final absolute volumes and the mean absolute percent error for MFW estimates and *PSM* interim values for 1996 and 1995 are presented in Table FE3. The average final absolute volumes are presented to give the reader an idea of the magnitude of these volumes. Variables with very small volumes are prone to larger percent changes because a modest volume change is being compared to a small final volume. The

mean absolute error and the size of the volumes involved must both be included in the interpretation of data accuracy.

The 1996 MFW mean absolute percent errors which were within 2 percent of their respective *PSA* values (26 of the 61 MFW series), and the 1996 *PSM* mean absolute percent errors which were within 1 percent of their *PSA* values (47 of the 66 *PSM* series), are distinguished by a single asterisk. Mean absolute percent errors that were greater than 10 percent are marked by a double asterisk. There were 15 such MFW series and 1 *PSM* series.

For 1996, 12 of the 14 production series have a single asterisk in the *PSM* column, indicating a mean absolute percent error of less than 1 percent from the *PSA*. For distillate fuel oil, two relatively new subcategories are low sulfur (0.05 percent sulfur and under) and high sulfur (over 0.05 percent sulfur). In prior years, respondents had trouble classifying distillate fuel oil into these subcategories. This has been resolved as the table shows the decrease in mean absolute percent error from 1995 to 1996 for each of the products. The increase in the MFW mean absolute percent error for oxygenated motor gasoline production is partially a result of a decrease in the average absolute volume. Another factor is that weekly fuel ethanol supply and disposition data are not available; therefore, the weekly oxygenated motor gasoline field production is based on the latest available monthly value.

The single asterisks in Table FE3 by the stock series show that, as in prior years, the stock values for both MFW estimates and *PSM* interim values are very close to the final *PSA* values. A major exception is the double asterisk shown by the MFW percent error for oxygenated motor gasoline stocks. Similar to the percent error for production of this product, the increase is related to the average absolute volume. Reformulated gasoline was first reported on the weekly system for the week ending September 23, 1994; therefore, now there are two full years of data to compare. Fuel ethanol and methyl tertiary butyl ether stocks are not collected weekly, but are collected on the Form EIA-819M, "Monthly Oxygenate Telephone Report." The survey provides production data and preliminary stock data from a sample of respondents reporting on the monthly surveys and from the universe of oxygenate producers. These data are displayed in Appendix D of the *PSM*. Interim data are collected later on the monthly surveys and published in the *PSM*.

Stock change is the difference between stocks at the beginning of the month and stocks at the end of the month. Since the monthly change in stock levels is small compared to the stock levels themselves, a large percent error in stock change can occur when the percent errors in stock levels are small.

Crude oil stock change is one of the components in the calculation of unaccounted for crude oil (calculated disposition minus calculated supply of crude oil). For both the MFW and the *PSM* numbers, the volume of the unaccounted for crude oil may be increased by a combination of factors including an

**Table FE3. Summary Statistics for Differences Between Interim and Final Data, 1996 and 1995**

Variable	PSA Average Absolute Volumes		Monthly-from-Weekly Mean Absolute Percent Error		PSM Mean Absolute Percent Error	
	1996	1995	1996	1995	1996	1995
<b>Crude Oil Production (thousand barrels/day)</b> .....	6,465	6,560	* 0.79	0.83	* 0.50	0.52
<b>Refinery Operations</b>						
Refinery Crude Oil Inputs (thousand barrels/day).....	14,195	13,973	* 0.32	0.45	* 0.19	0.08
Operable Utilization Rate (percent) .....	94	92	* 1.20	1.95	* 0.70	1.50
<b>Production (thousand barrels/day)</b>						
Total Production .....	18,467	18,060	--	--	* 0.25	0.26
Refinery Production .....	16,324	15,994	* 1.44	1.45	* 0.25	0.29
Finished Motor Gasoline .....	7,647	7,589	* 0.96	0.89	* 0.70	0.21
Reformulated Motor Gasoline .....	2,221	1,884	2.97	2.44	1.83	1.39
Oxygenated Motor Gasoline .....	454	876	** 56.41	22.39	3.09	3.19
Other Motor Gasoline .....	4,972	4,828	4.00	2.97	* 0.60	0.48
Jet Fuel .....	1,515	1,416	* 1.27	0.91	* 0.11	0.18
Distillate Fuel Oil .....	3,316	3,155	* 0.42	1.26	* 0.30	0.14
Low Sulfur Distillate Fuel Oil .....	2,084	1,944	* 1.72	2.63	* 0.25	1.92
High Sulfur Distillate Fuel Oil .....	1,232	1,211	2.52	2.85	* 0.77	2.89
Residual Fuel Oil .....	726	788	4.17	2.69	* 0.80	0.40
Other Products .....	5,264	5,112	--	--	* 0.59	0.77
Propane .....	1,044	1,022	--	--	* 0.18	0.32
Other Products Refinery Production .....	3,204	3,176	7.18	5.86	* 0.58	0.48
<b>Stocks (thousand barrels)</b>						
Total Stocks .....	1,525,640	1,608,840	* 0.57	0.32	* 0.07	0.11
Total Stocks, excl. SPR.....	944,599	1,017,175	* 0.95	0.50	* 0.12	0.17
Total Crude Stocks.....	884,400	913,192	* 0.27	0.47	* 0.11	0.17
Crude Oil Stocks, excl. SPR .....	303,359	321,526	* 0.76	1.34	* 0.31	0.49
SPR Stocks .....	581,041	591,666	* 0.04	0.00	* 0.00	0.00
Refined Products Stocks.....	641,240	695,648	* 1.43	0.90	* 0.10	0.07
Total Motor Gasoline Stocks.....	200,699	206,435	* 1.03	0.96	* 0.22	0.15
Reformulated Motor Gasoline Stocks .....	39,413	37,658	2.18	2.71	1.24	0.42
Oxygenated Motor Gasoline Stocks .....	1,522	3,326	** 22.23	13.70	8.92	44.06
Other Motor Gasoline Stocks .....	118,855	124,030	* 1.56	0.88	* 0.20	0.42
Jet Fuel Stocks.....	38,246	40,600	* 1.68	1.68	* 0.20	0.31
Distillate Fuel Oil Stocks .....	106,959	125,824	* 1.22	1.57	* 0.19	0.13
Low Sulfur Distillate Fuel Oil Stocks .....	59,291	63,007	* 1.67	1.62	* 0.28	0.61
High Sulfur Distillate Fuel Oil Stocks .....	47,668	62,817	2.48	1.98	* 0.33	0.63
Residual Fuel Oil Stocks.....	36,367	38,041	2.69	1.80	* 0.27	0.41
Other Products Stocks .....	258,969	284,748	3.30	1.76	* 0.18	0.17
Propane Stocks .....	38,386	42,670	4.89	1.69	* 0.48	0.20
Fuel Ethanol Stocks .....	1,425	3,282	5.62	2.92	1.39	0.78
Methyl Tertiary Butyl Ether Stocks .....	9,718	10,344	6.26	6.43	* 0.62	0.74
<b>Stock Change (thousand barrels/day)</b>						
Total Stock Change .....	563	422	** 84.30	259.63	7.56	16.10
Total Crude Stock Change .....	211	220	** 1,258.53	86.77	** 220.89	9.30
Refined Products Stock Change .....	535	456	** 71.92	114.79	8.08	11.44
<b>Imports (thousand barrels/day)</b>						
Total Imports .....	9,478	8,835	2.68	1.87	* 0.84	0.25
Total Crude Imports .....	7,508	7,230	* 1.75	1.91	* 0.39	0.28
Crude Oil Imports, excl. SPR.....	7,508	7,230	* 1.75	1.91	* 0.39	0.28
SPR Imports.....	0	0	* 0.00	0.00	* 0.00	0.00
Refined Products Imports .....	1,971	1,605	** 10.37	8.41	2.74	0.97
Finished Motor Gasoline Imports.....	336	265	** 13.68	9.77	4.16	2.91
Reformulated Motor Gasoline Imports.....	174	117	** 15.10	8.44	6.27	3.38
Oxygenated Motor Gasoline Imports .....	0	7	* 0.00	38.76	* 0.00	8.49
Other Motor Gasoline Imports.....	163	142	** 22.45	14.37	3.61	3.84
Jet Fuel Imports .....	111	106	** 10.75	15.80	2.87	0.83

See footnotes at end of table.

**Table FE3. Summary Statistics for Differences Between Interim and Final Data, 1996 and 1995 (Continued)**

Variable	PSA Average Absolute Volumes		Monthly-from-Weekly Mean Absolute Percent Error		PSM Mean Absolute Percent Error	
	1996	1995	1996	1995	1996	1995
Distillate Fuel Oil Imports .....	230	193	** 11.31	12.91	2.45	1.30
Low Sulfur Distillate Fuel Oil Imports .....	112	77	9.92	23.83	2.84	0.11
High Sulfur Distillate Fuel Oil Imports .....	118	116	** 19.54	10.82	2.29	2.14
Residual Fuel Oil Imports .....	248	187	** 13.03	9.73	* 0.79	0.69
Other Products Imports .....	1,045	863	** 15.95	12.55	5.63	1.91
Propane Imports .....	119	102	--	--	2.22	0.37
<b>Exports (thousand barrels/day)</b>						
Total Exports .....	981	949	6.31	8.19	* 0.00	0.01
Crude Oil Exports .....	110	95	** 41.76	28.12	* 0.00	0.18
Refined Products Exports .....	871	855	7.13	8.54	* 0.00	0.03
Total Net Imports (thousand barrels/day) .....	8,498	7,886	3.03	10.40	* 0.94	0.28
<b>Products Supplied (thousand barrels/day)</b>						
Total Products Supplied .....	18,309	17,725	* 1.49	1.51	* 0.41	0.23
Finished Motor Gasoline Supplied .....	7,891	7,789	* 1.43	1.25	* 0.52	0.22
Jet Fuel Supplied .....	1,578	1,514	3.07	2.30	* 0.43	0.34
Distillate Fuel Oil Supplied .....	3,365	3,207	* 1.88	4.09	* 0.30	0.41
Residual Fuel Oil Supplied .....	848	852	6.65	5.07	1.10	0.84
Other Products Supplied .....	4,627	4,363	3.98	3.81	* 0.73	0.49
Propane Supplied .....	1,136	1,096	--	--	* 0.47	0.49

-- = Not Applicable.

\* = For MFW values, mean absolute percent error less than or equal to 2; for PSM values, mean absolute percent error less than or equal to 1.

\*\* = Mean absolute percent error greater than or equal to 10.

SPR = Strategic Petroleum Reserve

Notes: •Error is the difference between Monthly-from-Weekly estimates or interim monthly data published in the *Petroleum Supply Monthly* and the final value as published in the *Petroleum Supply Annual*. Percent error is the error multiplied by 100 and divided by the final published value. Mean absolute error is the weighted average of the absolute errors. Mean absolute percent error is the weighted average of the absolute percent errors. The number of days in the month is used for weighting all product categories except stocks. Stocks are weighted equally for each of the 12 months. •Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Petroleum Supply Reporting System and the U.S. Bureau of the Census.

understatement of imports, an overstatement of exports, an understatement of crude oil production, an understatement of stock withdrawals, and an overstatement of crude oil inputs. The overstatement of crude oil inputs can be caused by injections along crude oil pipelines of natural gas liquids. When refiners receive this mixture, they process it as crude oil. As seen in Table FE3, the production, imports, and refinery inputs of crude oil have a small mean absolute percent error relative to crude oil stock change.

For petroleum products, stock change is a component in the calculation of product supplied (representing the consumption of petroleum products). Unlike the other variables, stock change values can be negative. Stock change thus has an added dimension by which to evaluate accuracy; this is the correctness of the direction of the change. Table FE4 provides a measure of accuracy of the direction of MFW and PSM stock change values for 1996 and 1995. The 1996 direction of stock change was similar to the 1995 direction.

**Table FE4. Number of Months In Which the Direction of MFW and PSM Stock Change Values Differed From PSA**

	Number of Months	
	1996	1995
<b>Total Stock Change</b>		
MFW and PSA Values .....	4	5
PSM and PSA Values .....	0	0
<b>Total Crude Stock Change</b>		
MFW and PSA Values .....	1	1
PSM and PSA Values .....	2	0
<b>Refined Products Stock Change</b>		
MFW and PSA Values .....	2	2
PSM and PSA Values .....	0	0

Source: Energy Information Administration, Petroleum Supply Reporting System.

For imports, one reason for the large mean absolute percent errors in the MFW values is that shipments do not always arrive during the week in which they were expected. This has a greater impact when the end of the month occurs in the middle of the week. Eight of the 15 MFW import series in Table FE3 showed an increase in mean absolute percent error from 1995 to 1996. For the *PSM*, 13 of the 16 import series increased.

With the exception of refinery receipts in the Virgin Islands, EIA does not collect export data. They are gathered by the U.S. Customs Service on a monthly basis and are compiled by the U.S. Bureau of the Census. They are received by EIA on a monthly basis approximately 7 weeks after the close of the reporting month. The weekly estimates for exports are projections based on past monthly data. Because the export data are highly variable, it is difficult to obtain estimates of comparable quality to domestic estimates.

Product supplied is the calculation of field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude oil losses, minus refinery inputs, minus exports. Therefore, the accuracy of product supplied is affected by the individual components.

### **Box and Whisker Plots**

Example 1 in the shaded box titled "Structure of Box and Whisker Plots," is a simplified illustration of the box and whisker plots that follow. The box and whisker plots map the 5-year trends in historical accuracy of weekly estimates and monthly interim values. The details provided by the box and whisker plots include: historical trends, the range of monthly percent errors, direction of the error (i.e., overestimation or underestimation), and the identification of unusual values.

Each box and whisker plot is placed on a graph, where the horizontal axis represents the year and the vertical axis represents the percent error. The center horizontal line for all the box and whisker plots is zero percent error. For each variable studied, a pair of charts, each containing five box and whisker plots (one for each year, from 1992 through 1996), are presented side-by-side; the chart on the left contains the percent errors for the MFW estimates, and the chart on the right contains the percent errors for the *PSM* values. To facilitate the comparison of MFW percent errors and the *PSM* percent errors, the plots have the same scale.

The position of the box along the y-axis denotes whether the MFW or *PSM* values are predominantly overestimates or underestimates of the *PSA* values. For example, if the majority of the MFW values were over estimates, more than half of the box would be above the zero percent error line.

### **Crude Oil Production and Crude Oil Inputs**

Crude oil production data are not collected through any of EIA's surveys. EIA's Dallas Field Office assembles data collected from State agencies responsible for measuring crude oil production. Based on historical trends and data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report," EIA estimates weekly and monthly production. Final estimates based on revised Form EIA-182 data are published in the *PSA*. Figure FE3 presents errors of MFW and *PSM* values relative to *PSA* values for crude oil production and inputs. Over the last 5 years, both MFW and *PSM* crude oil production values have been quite close to the *PSA* values. The 1996 MFW percent error distribution has values ranging from -1.63 to 1.16 percent. Similarly, there is a tight distribution for the percent errors of crude oil *PSM* values, ranging between -0.89 and 0.77 percent. All of the months are within 1 percent of the final *PSA* values. In 1996, it was the first time in the past five years for the MFW and *PSM* percent errors to have a positive median. The small percent errors of both MFW and *PSM* crude oil values demonstrate the consistency and precision of EIA's estimation procedures for weekly and monthly crude oil production.

Refinery crude oil inputs had the smallest range (1.31) of all the other MFW plots analyzed. Most of the MFW values were within 0.50 percent of the final values. Historically, the *PSM* refinery crude oil inputs have been extremely close to their final values. In 1996, all of the *PSM* values were within 0.28 percent of the final values, except one outlier in November (0.51). This was due to resubmissions. The majority of *PSM* values were underestimates.

### **Product Production**

As expected, *PSM* interim values for production of each of the four major petroleum products were superior to their comparable MFW estimates. Figures FE4 and FE5 contain the box and whisker plots for motor gasoline and distillate fuel oil production, and residual fuel oil and jet fuel production, respectively.

In contrast to last year, Figure FE4 illustrates that the 1996 MFW estimates of motor gasoline production were primarily underestimates of the final values. Over the 5-year period, 1996 had the smallest range (2.53) and the largest absolute median (-0.80). With the exception of 1996, the *PSM* interim motor gasoline production values have historically been excellent. The 1996 *PSM* percent error distribution has values ranging from -1.43 to -0.28. This is the largest range over the 5-year period, with July 1996 (-1.43) having the largest *PSM* absolute percent error over the 60-month period. During the annual processing of 1996 data, there were additional submissions that increased the *PSA* volumes of motor gasoline production. Therefore, the MFW and *PSM* underestimated motor gasoline production.

## Structure of Box and Whisker Plots

All box and whisker plots discussed in this article are the visual presentation of a variable's distribution of 12 values of percent errors for either MFW or PSM values relative to PSA values for a given year. In general, box and whisker plots group data, ordered from smallest to largest, into four areas of equal frequency, quartiles, and show the range and dispersion of data within the quartiles. Sometimes the values of quartiles must be interpolated, i.e., if there are two values that meet the criteria of a quartile, then the average of the two must be taken. Presented below is a discussion of components of box and whisker plots and how they apply to the 12-value distribution illustrated in Example 1: -35, -20, -11, -9, 0, 0, 0, 0, 4.5, 5.5, 15, and 20.

- **First Quartile**

Twenty-five percent of the values are equal to or below the first quartile. In Example 1, the first quartile is the average of the third and fourth ordered observations, i.e.,  $(-11+(-9))/2=-10$ . The first quartile demarcates the lower boundary of the box.

- **Second Quartile**

The second quartile is the median, and it intersects the box. Fifty percent of the observations are equal to or below the median; in our example, the values of these six observations are: 0, 0, -9, -11, -20, and -35. Also, for this example, the median is the average of the sixth and seventh value, 0, i.e.,  $(0+0)/2$ . The plot provides the value of the median (the second quartile) as well as information on how the median compares in magnitude to the rest of the observations. Outliers distort the magnitude of the mean, whereas a median is not distorted since it is the actual value that falls in the middle of the distribution. Since outliers have occurred in the distributions of values of PSRS variables, a median is preferred to a mean when assessing accuracy.

- **Third Quartile**

Seventy-five percent of the observations (9 in this case) have values equal to or below the third quartile. In Example 1, the third quartile is 5, i.e.,  $(4.5+5.5)/2$ . The third quartile demarcates the upper boundary of the box.

- **Box**

The box contains half of all the values. In Example 1, as well as in each box found in Figures FE3-FE11, a minimum of six values are contained within the box. The interquartile range is the length of the box, the difference between the first and third quartiles. The interquartile range for Example 1 is 15, i.e.,  $5-(-10)$ .

- **Whiskers**

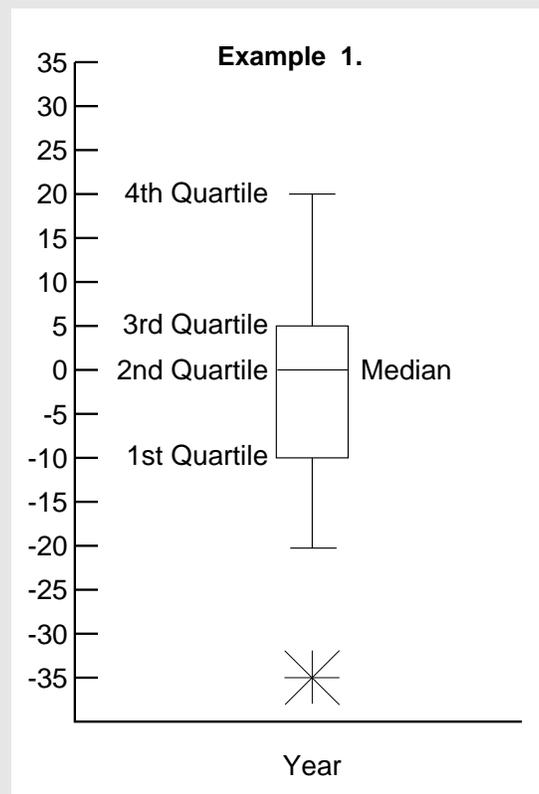
Each whisker extends out from the box, one from the first quartile and the other from the third quartile, to the most extreme value that still falls within 1.5 times the interquartile range. In Example 1, a whisker extends from the third quartile, 5, to 20, which is the maximum value and is within 1.5 interquartile ranges of 5 (as it is less than  $5+(1.5*15)=27.5$ ). Also in Example 1, the lower whisker extends from the first quartile -10, to -20, which is the lowest value of the distribution within 1.5 interquartile ranges of the first quartile.

- **Fourth Quartile**

The fourth quartile is the maximum value of the distribution. In Example 1, the fourth quartile, 20, also demarcates the upper value of the top whisker as it is within 1.5 interquartile ranges of the third quartile.

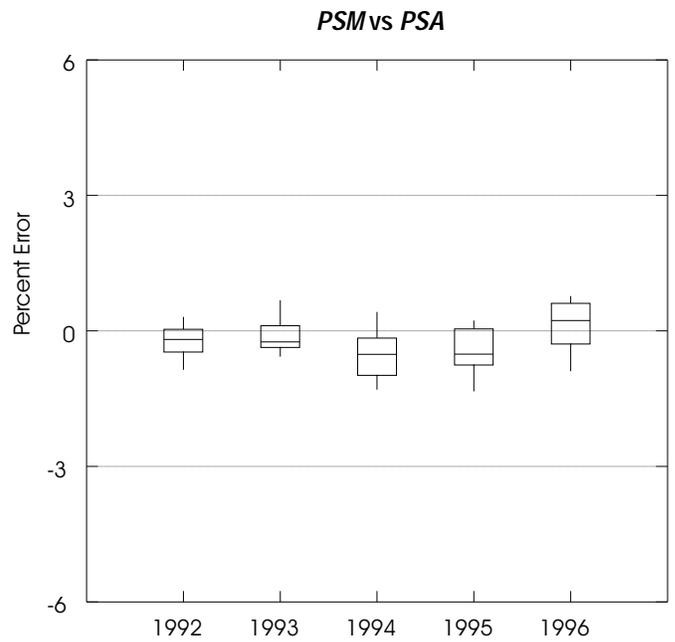
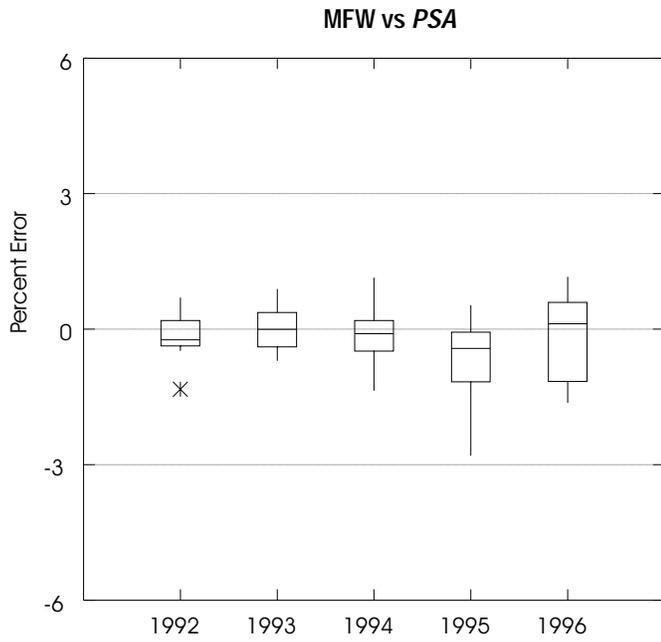
- **Outlier**

An outlier, identified as an asterisk, is an observation that is more than 1.5 interquartile ranges greater than the third quartile, or more than 1.5 interquartile ranges less than the first quartile. In Example 1, there is one outlier, -35. It is less than the lower whisker's threshold value, which is -32.5  $(-10-(1.5*15))$ . The importance of the occurrence of an outlier depends on the distribution of the variable. If the interquartile range is very tight and the outlier is in close proximity, then there is little concern about the occurrence of that outlier. (See Figure FE3, MFW vs PSA of Crude Oil Production for 1992.)

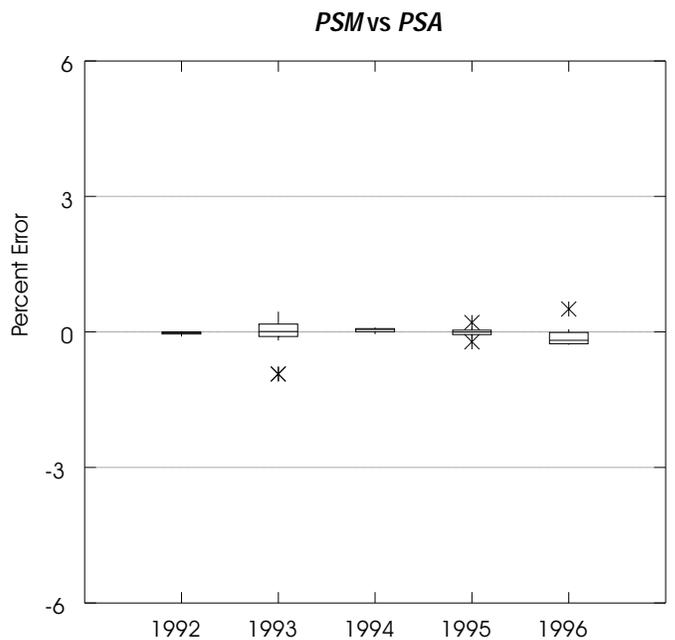
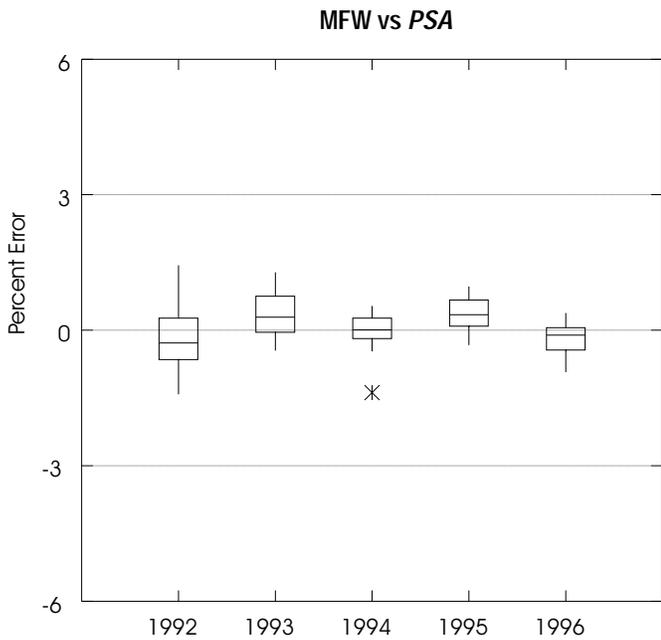


**Figure FE3. Range of Percent Errors for MFW and PSM Crude Oil Production and Refinery Crude Oil Inputs Data, 1992 - 1996**

**Crude Oil Production**



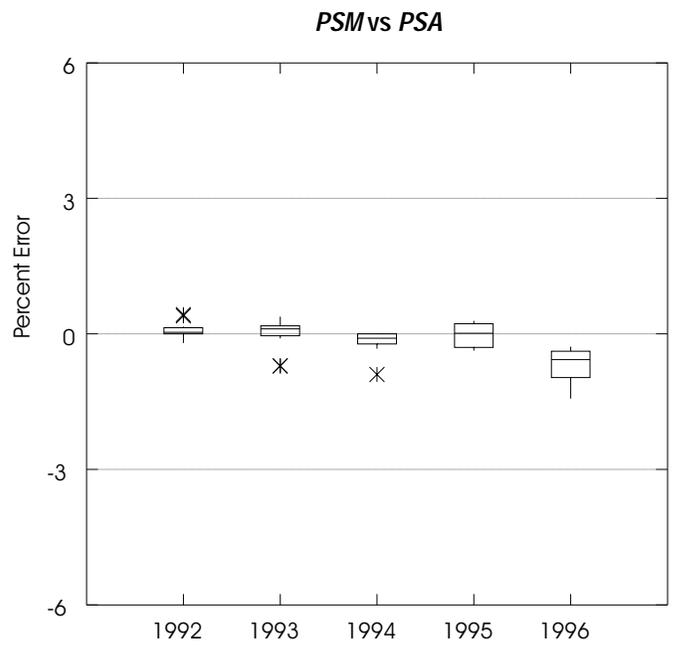
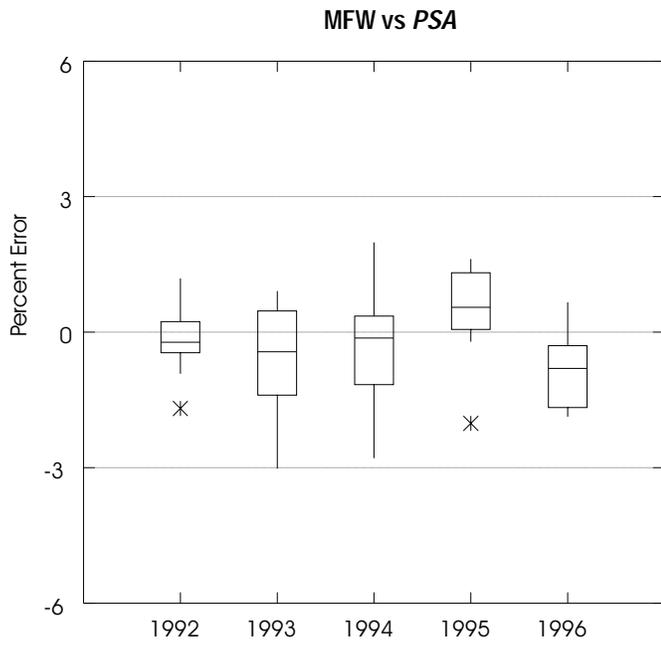
**Refinery Crude Oil Inputs**



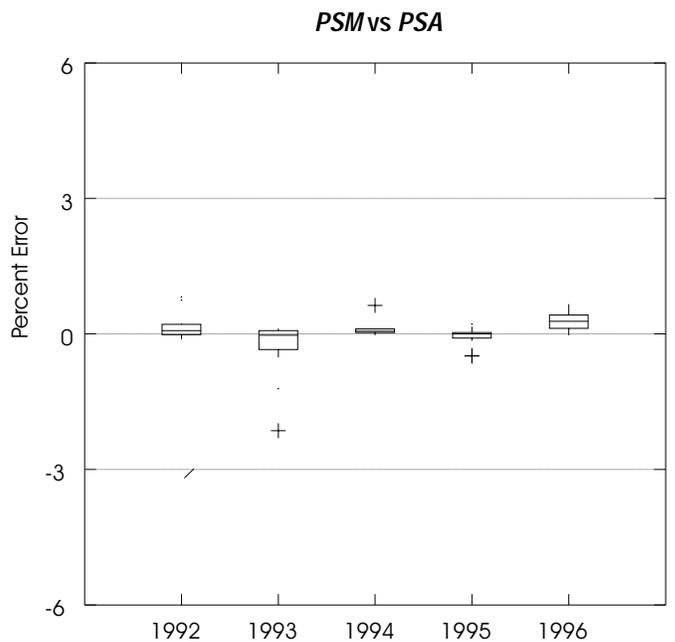
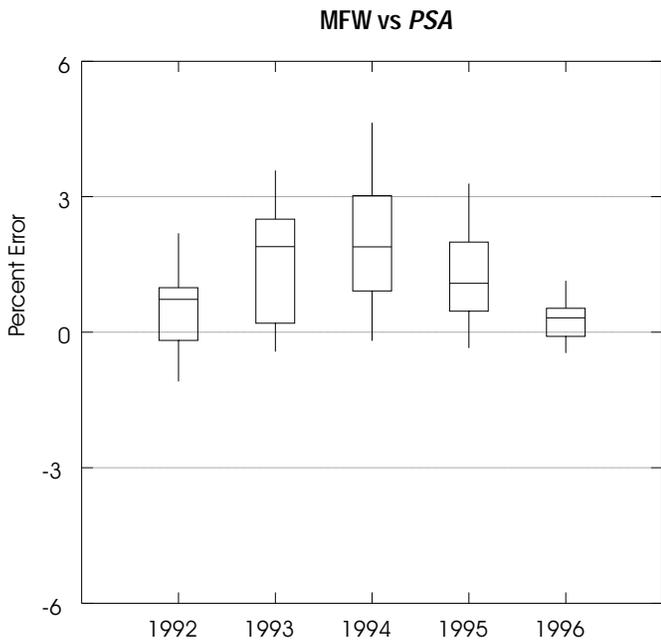
Source: Energy Information Administration, Petroleum Supply Reporting System.

**Figure FE4. Range of Percent Errors for MFW and PSM Motor Gasoline and Distillate Fuel Oil Production Data, 1992 - 1996**

**Motor Gasoline Production**



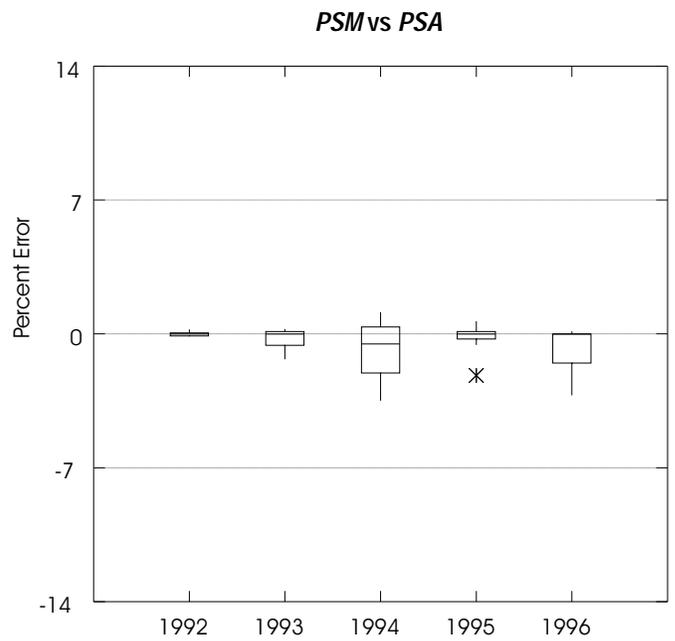
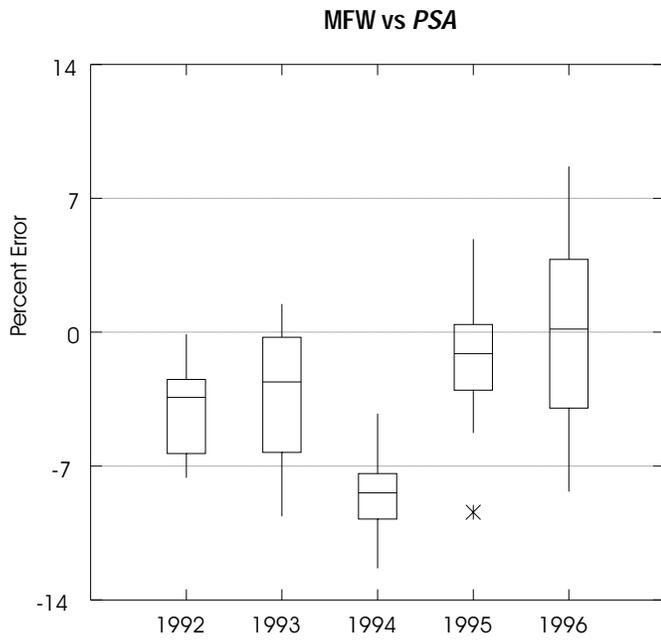
**Distillate Fuel Oil Production**



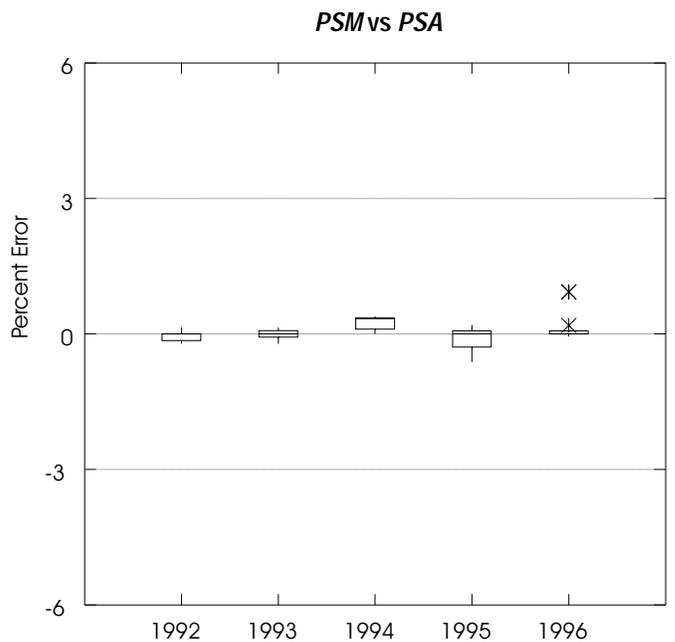
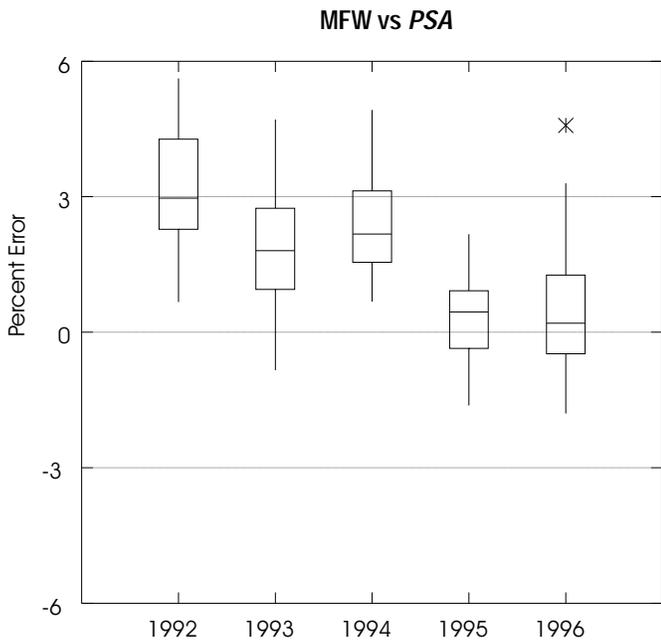
Source: Energy Information Administration, Petroleum Supply Reporting System.

**Figure FE5. Range of Percent Errors for MFW and PSM Residual Fuel Oil and Jet Fuel Production Data, 1992 - 1996**

**Residual Fuel Oil Production**



**Jet Fuel Production**



Source: Energy Information Administration, Petroleum Supply Reporting System.

For distillate fuel oil production, 1996 MFW percent errors had the smallest range over the 5-year period, ranging from -0.46 to 1.14 percent. The problem in prior years of respondents misclassifying residual fuel oil as distillate fuel oil on the weekly surveys has been resolved. As in prior years, *PSM* interim values for distillate fuel oil production are close to final values. All of the percent errors for 1996 were within 0.66 percent; and in 58 of the last 60 months, *PSM* percent errors have been within 1 percent of the final values. Distillate fuel oil production had the smallest range (0.69) of all the other *PSM* plots analyzed.

Figure FE5 shows the box and whisker plots for residual fuel oil production and jet fuel production. For MFW percent errors of residual fuel oil production, the largest range over the 5-year period was observed in 1996 (17.0). These values were not primarily underestimates as in the prior 4 years. The 1996 distribution of *PSM* percent errors for residual fuel oil ranged from -3.21 to 0.14 percent.

In 1996, the range of percent errors for the MFW and *PSM* values of jet fuel production was similar to the previous 4 years. The MFW percent errors, ranging from -1.80 to 4.58 percent, had the largest range over the 5-year period although the 1996 median was the closest to zero for that period. The outlier in October (4.58) due to company misreporting contributed to the large range. Similarly, the range for the *PSM* percent errors was the largest over the 5-year period, due to an outlier in November (0.93). This outlier was the largest percent error over the 60-month period. Also, there was an outlier in December (0.19). These outliers resulted from company resubmissions.

## Stocks

Figures FE6, FE7, and FE8 show the yearly distribution of percent errors for stocks of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, and propane. Figure FE6 shows the box and whisker plots for crude oil stocks and motor gasoline stocks. In contrast to 1995, the 1996 MFW estimates for crude oil did not predominately underestimate the final values. Over the 5-year period, the median for the 1996 percent errors was the closest to zero. In contrast to the last 2 years, the 1996 *PSM* interim values were mostly overestimates and were within 0.72 percent of the *PSA*.

The range of 1996 MFW percent errors for motor gasoline stocks, from -2.57 to 2.07 percent, was similar to the previous 4 years. The median of 0.34 percent is the closest to zero for the 5 years studied. The *PSM* percent errors were within 0.37 percent and the median was close to zero.

Figure FE7 shows box and whisker plots for distillate and residual fuel oil stocks. Similar to prior years, most of the MFW estimates for 1996 distillate fuel oil stocks were underestimates but the range of percent errors was the smallest

over the 5-year period. The *PSM* percent errors were tightly grouped around the median of -0.09 percent and were mostly underestimates of the final *PSA* values.

Residual fuel oil typically has larger percent errors than other stock series. Most of the MFW values for 1996 were underestimates, ranging from -5.21 to 1.45 percent error. The 1996 range of the *PSM* percent errors (1.10) was the smallest over the 5-year period with most of the values within 0.50 percent.

The box and whisker plots for jet fuel stocks and propane stocks are shown in Figure FE8. In contrast to prior years, most of the 1996 MFW jet fuel stocks underestimated the final values. The percent errors ranged from -4.77 to 0.86 percent with a median of -1.28 percent. As in prior years, the 1996 *PSM* percent errors were tightly grouped about the median. In 1996, the range (0.76) and median (-0.01) of percent errors for jet fuel stocks were the smallest over the 5-year period.

Most of the 1996 MFW propane stocks underestimated the *PSA* values. The range for the percent errors was the largest over the 5-year period, with March 1996 having the largest absolute percent error over the 60-month period. For 1996, all of the *PSM* interim values were underestimates and all but two were within 1 percent of the final *PSA* values.

## Imports

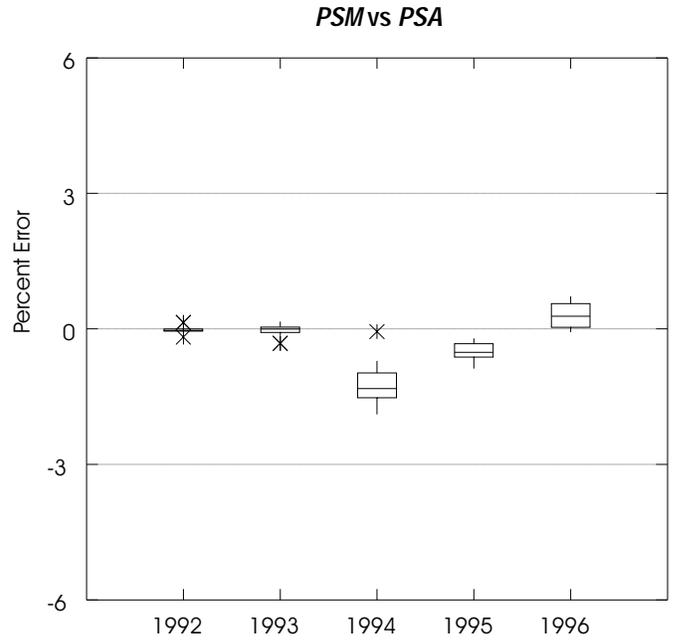
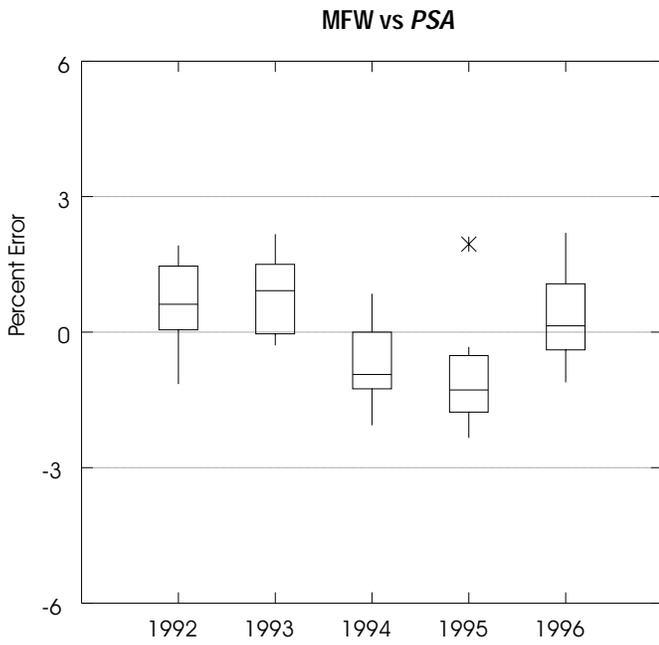
Figures FE9, FE10, and FE11 show the yearly distributions of percent errors for the imports of crude oil and four products: motor gasoline, distillate fuel oil, residual fuel oil, and jet fuel. Because of the irregularity of imports for crude oil and petroleum products, the magnitude and range of percent errors for both the MFW and the *PSM* imports numbers can be expected to be much larger and wider than for production and stocks.

Figure FE9 shows that the range of the 1996 MFW percent errors of imports of crude oil is similar to prior years, ranging from -4.27 to 2.69 percent. All but one of the *PSM* percent errors were within 1 percent of the final values.

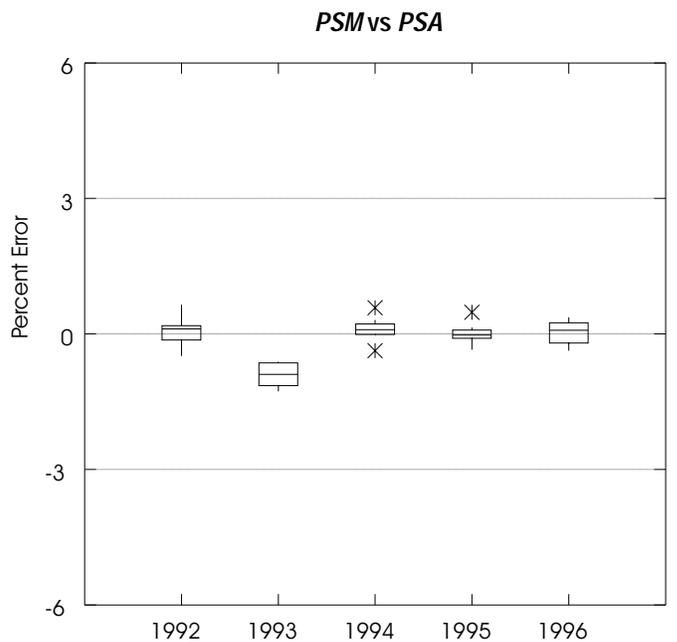
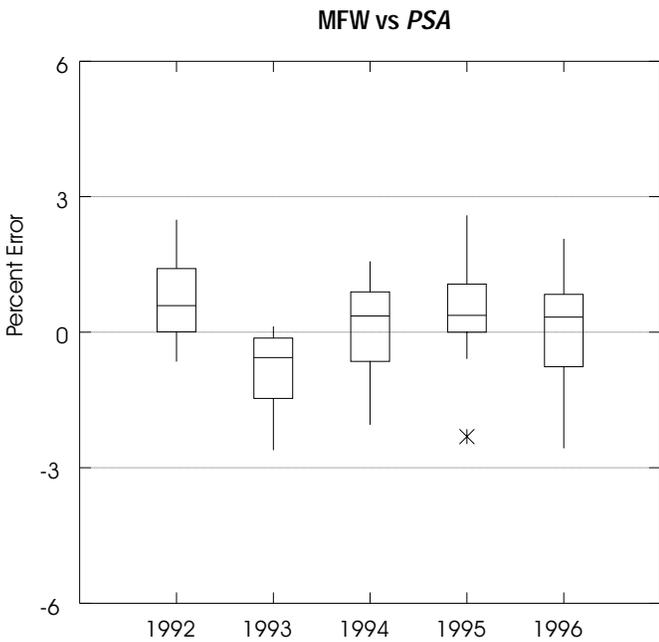
The distributions of percent errors of the MFW estimates and *PSM* interim values for 1992 through 1996 of motor gasoline and distillate fuel oil imports are shown in Figure FE10. In 1996, the MFW percent errors for motor gasoline imports ranged from -19.66 to 34.32 percent, with January having the largest percent error over the 60 months studied. This range is the largest for all the MFW plots analyzed for 1996. For all months in 1996, *PSM* interim values were overestimated and January had the largest percent error (13.20) over the 60-month period. The 1996 median percent error (3.29) was the largest compared to the prior 4 years.

**Figure FE6. Range of Percent Errors for MFW and PSM Crude Oil Stocks Excluding SPR and Motor Gasoline Stocks Data, 1992 -1996**

**Crude Oil Stocks Excluding SPR**



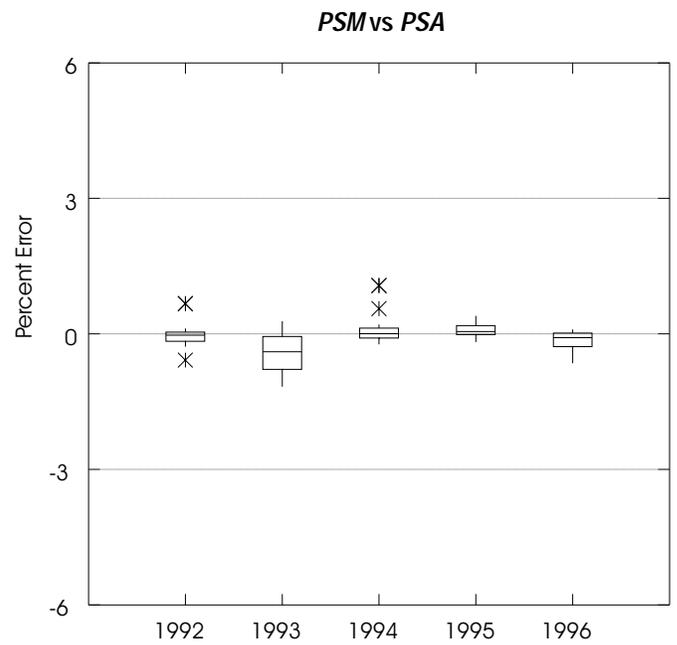
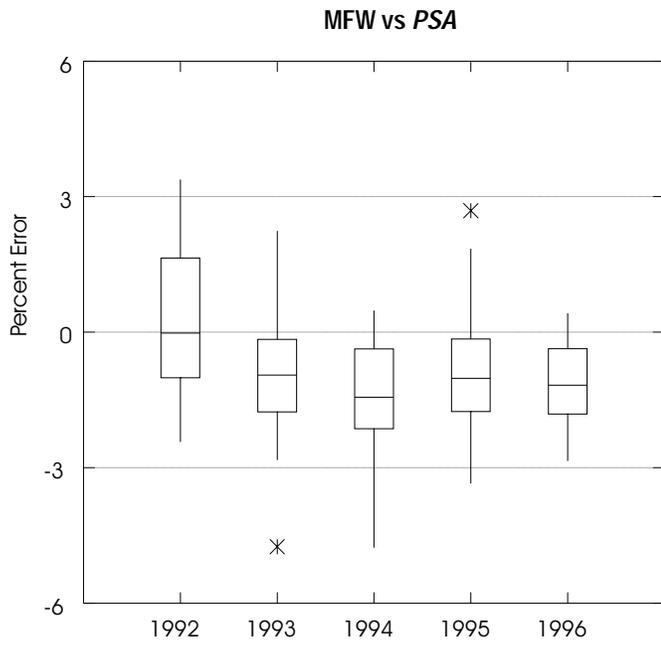
**Motor Gasoline Stocks**



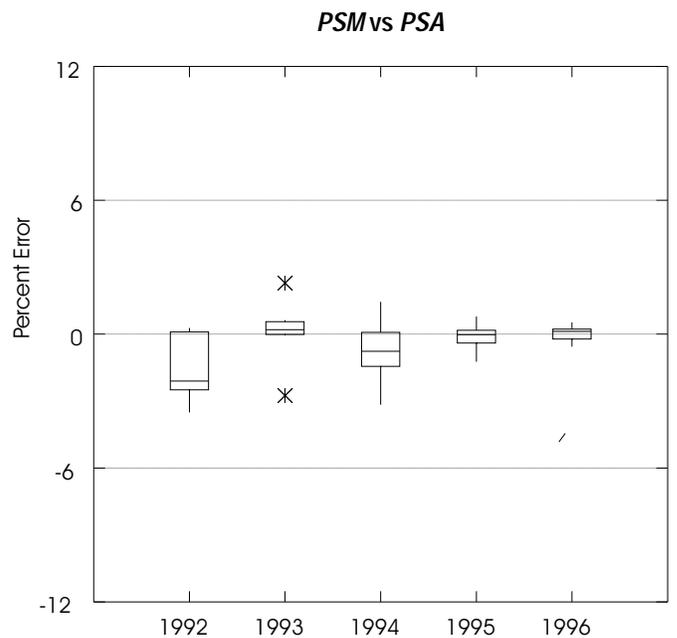
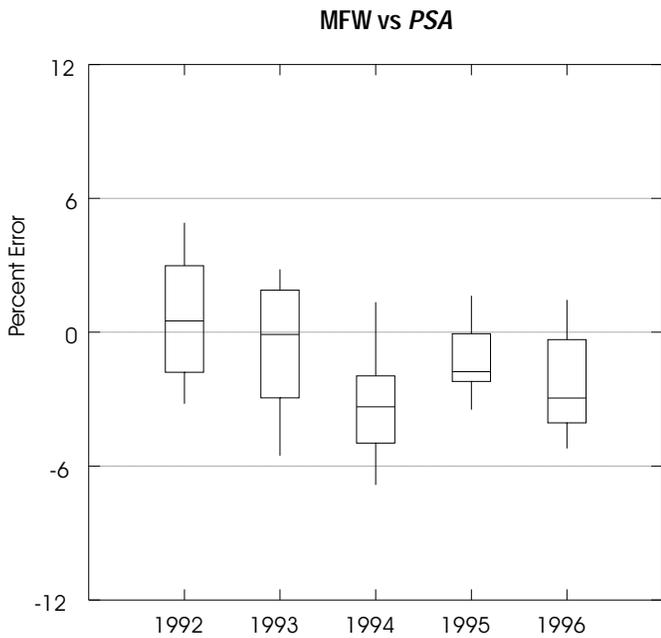
Source: Energy Information Administration, Petroleum Supply Reporting System.

**Figure FE7. Range of Percent Errors for MFW and PSM Distillate Fuel Oil and Residual Fuel Oil Stocks Data, 1992 - 1996**

**Distillate Fuel Oil Stocks**



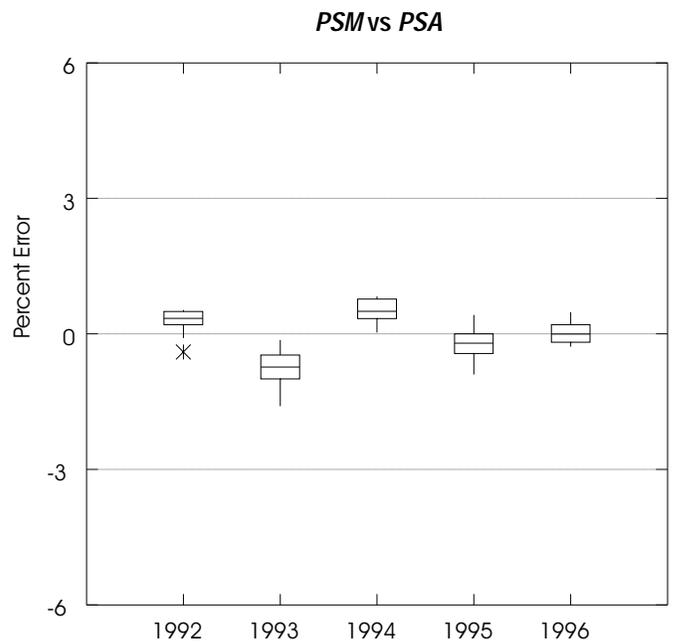
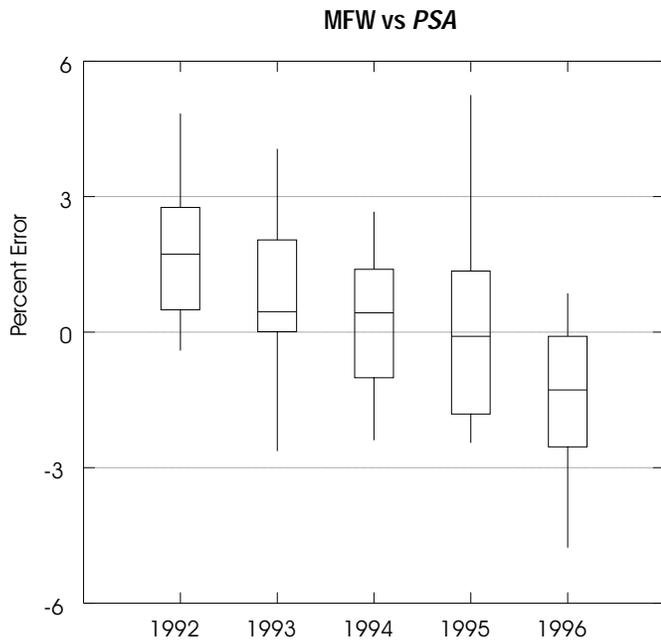
**Residual Fuel Oil Stocks**



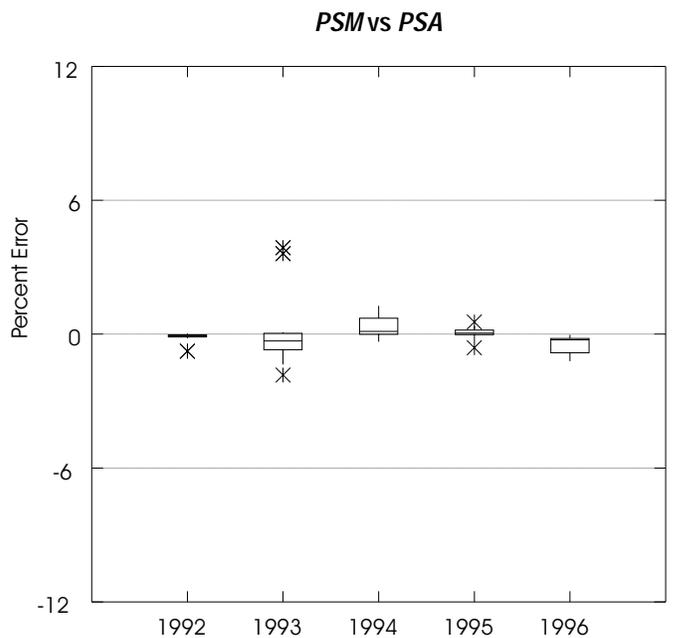
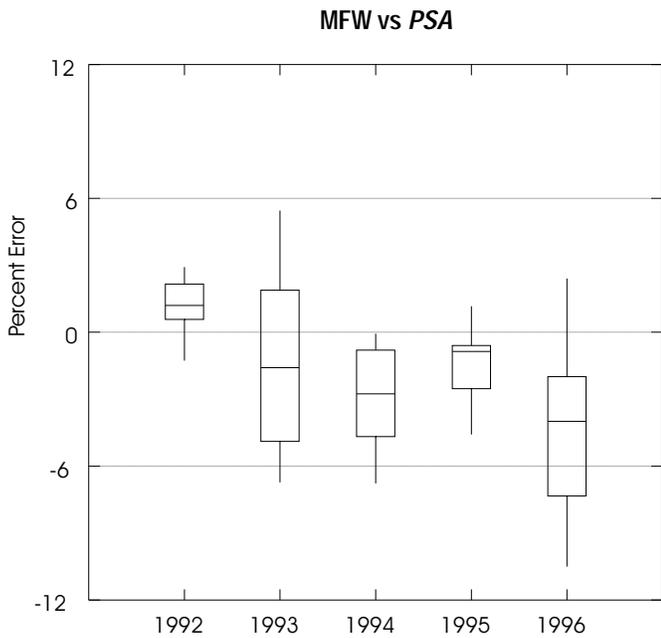
Source: Energy Information Administration, Petroleum Supply Reporting System.

**Figure FE8. Range of Percent Errors for MFW and PSM Jet Fuel Stocks and Propane Stocks Data, 1992 - 1996**

**Jet Fuel Stocks**

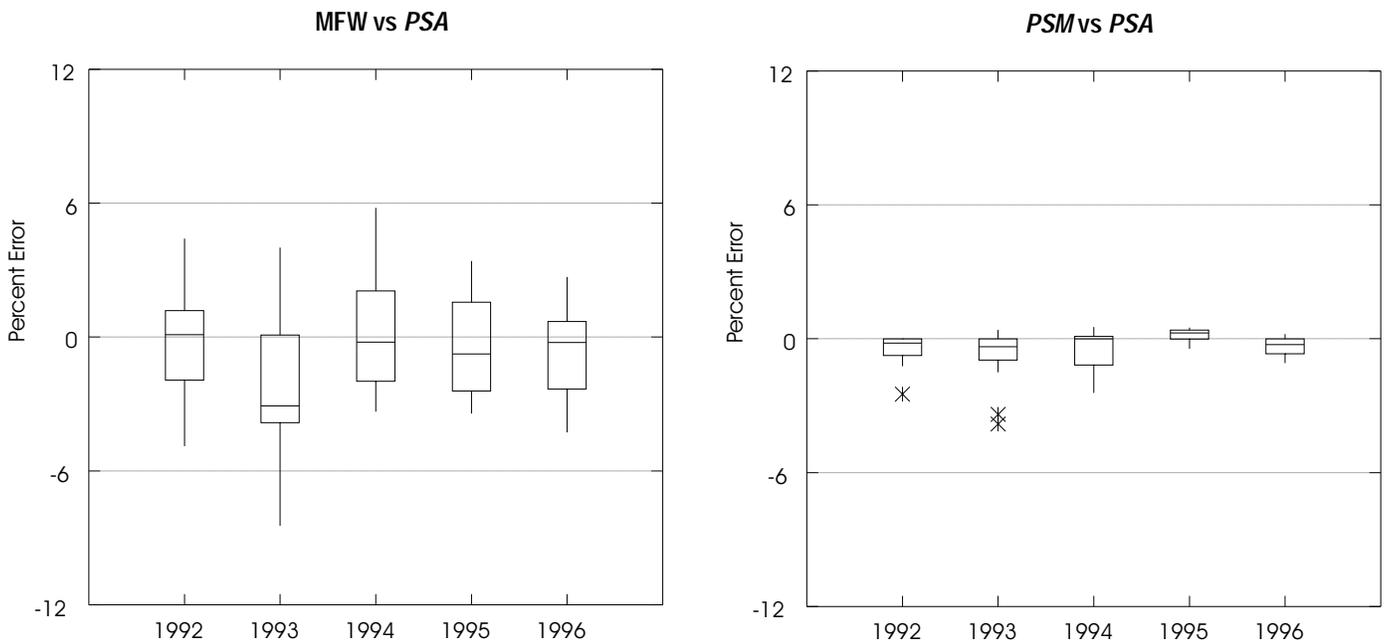


**Propane Stocks**



Source: Energy Information Administration, Petroleum Supply Reporting System.

**Figure FE9. Range of Percent Errors for MFW and PSM Crude Oil Imports Excluding Strategic Petroleum Reserve Data, 1992 - 1996**



Source: Energy Information Administration, Petroleum Supply Reporting System.

All of the 1996 MFW estimates for distillate fuel oil imports were understated except for the 2 outliers in February (12.90) and March (13.67). These were caused by the misreporting of high sulfur distillate. The median absolute percent error was the largest for the 5-year period. In contrast to prior years, there were no outliers for the 1996 PSM percent errors but there were more resubmissions.

Figure FE11 shows the box and whisker plots for residual fuel oil imports and jet fuel imports. As in prior years, most of the 1996 MFW estimates for residual fuel oil imports were underestimates. Over the 5-year period, 1996 had the largest range (45.85). Three outliers occurred in the 1996 PSM percent errors: June (3.57), August (-4.41), and November (-1.48). These were the only resubmissions for the year.

The range of percent errors for MFW estimates of jet fuel imports for 1996 was the smallest over the 5-year period, ranging from -23.60 to 8.99 percent. As in prior years, there was an outlier in PSM percent errors. This occurred in February (8.00) due to resubmissions. The range of 1996 percent errors was the largest of all PSM plots analyzed.

## Conclusion

In summary, similar to previous years, the interim PSM data were closer in value to the final PSA volumes than the MFW estimates. This is largely a result of the longer time period

provided to process the monthly data and monthly respondents' accounting systems.

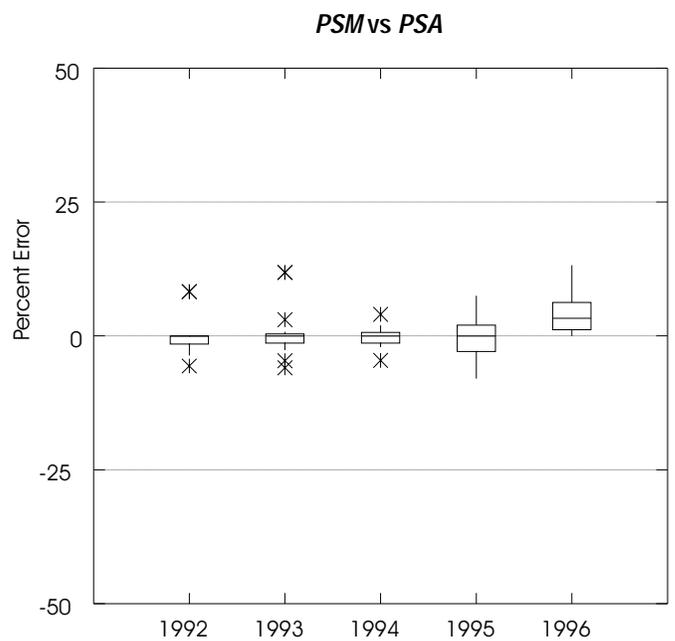
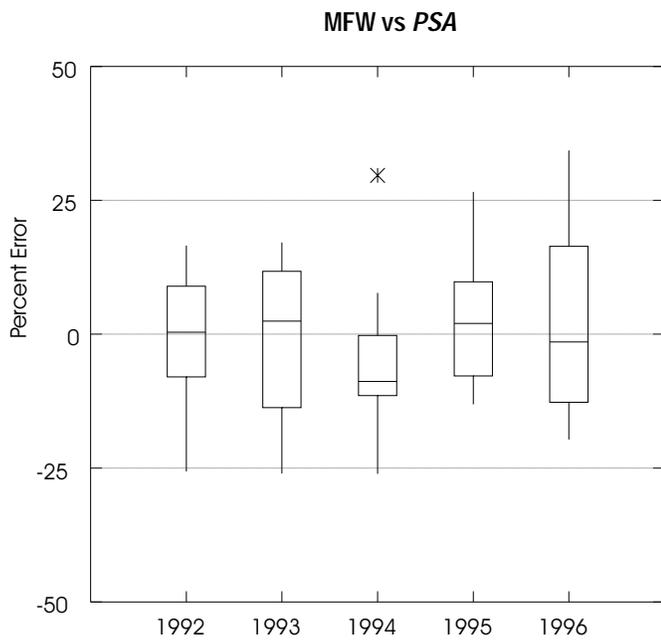
In 1996, 47 of 66 interim values were within 1 percent (mean absolute percent error) of the final values; 26 of 61 MFW estimates were within 2 percent (mean absolute percent error) of the final values; and 11 of those 26 were within 1 percent. As in previous years, the accuracy of 1996 preliminary and interim values varied by product and by petroleum supply type. As a group, stocks continued to have the most accurate MFW estimates and PSM interim values.

The good coverage for weekly surveys across petroleum supply type and product combinations has contributed to the accuracy of weekly estimates. In 1996, for 19 of the 21 categories, coverage was above 90 percent. The consistently high response rate, above 96 percent for the weekly surveys and above 97 percent for the monthly surveys, contributes to the high level of accuracy of these data.

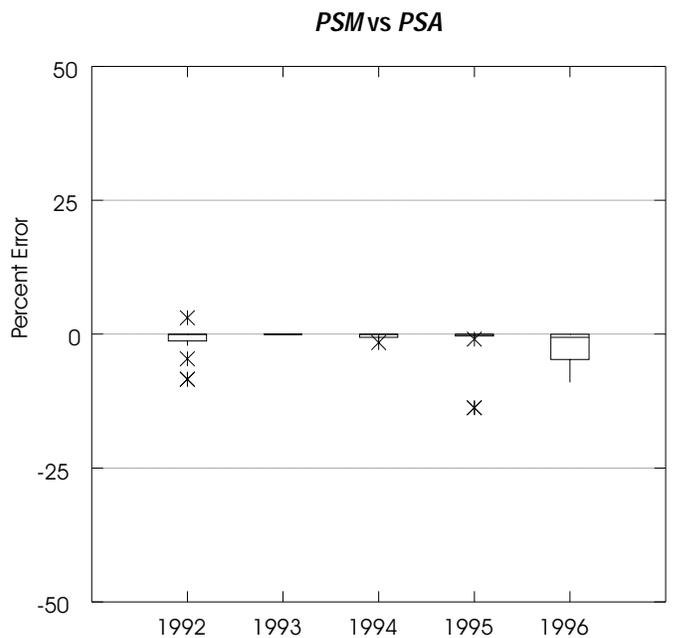
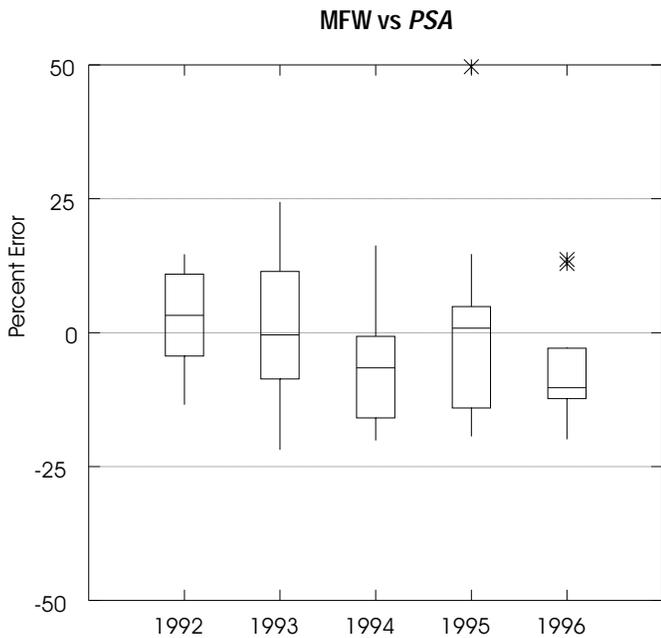
To successfully maintain and improve the accuracy of these data, PSD has made progress in its business re-engineering effort. The organization has been restructured to facilitate major processes including "getting data in the door," survey management, editing, statistical methodology, publication, and customer outreach. Some of the techniques being researched and developed are graphical data validation and optical scanning. Improvements are being made in survey design, sampling, editing procedures, and edit parameters. The result of these efforts should enable the PSD to provide more accurate weekly and monthly data estimates.

**Figure FE10. Range of Percent Errors for MFW and PSM Motor Gasoline and Distillate Fuel Oil Imports Data, 1992 - 1996**

**Motor Gasoline Imports**



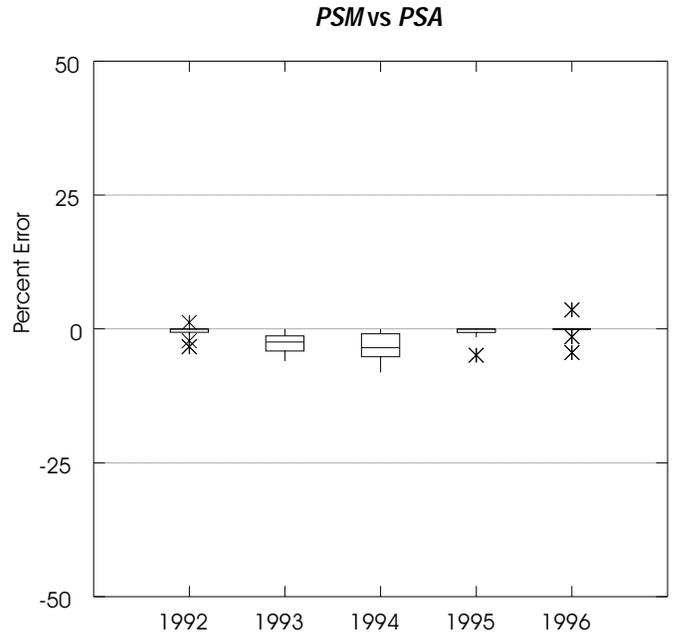
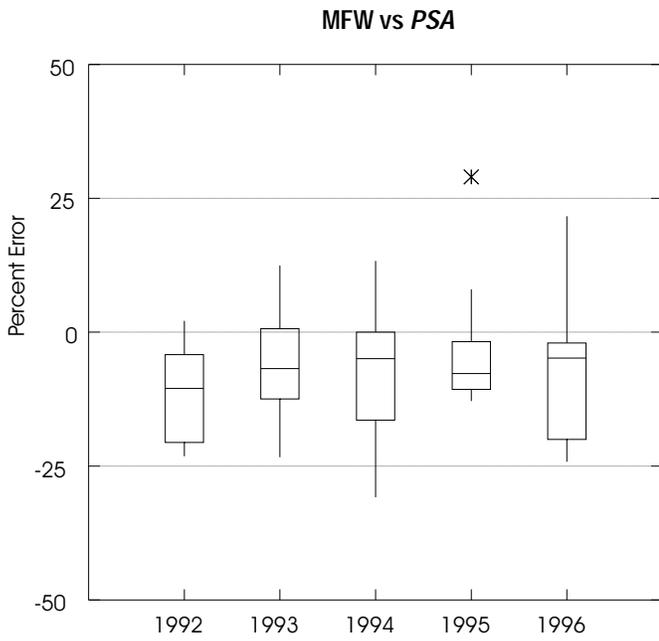
**Distillate Fuel Oil Imports**



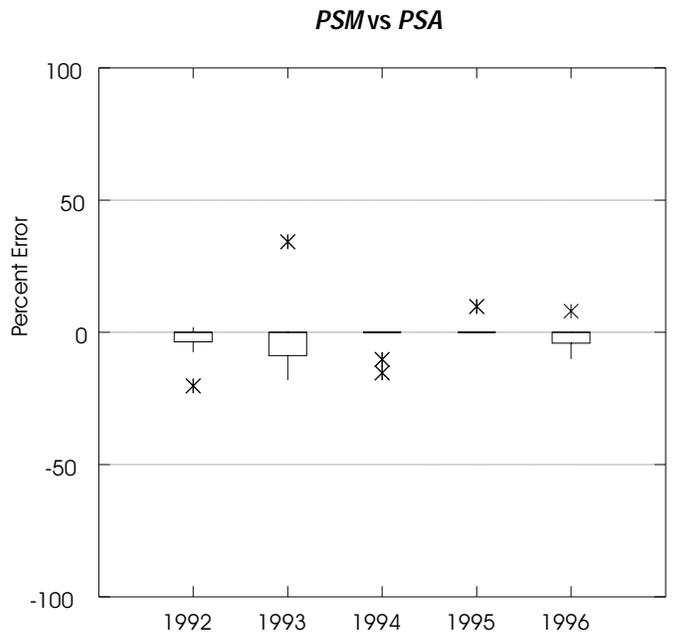
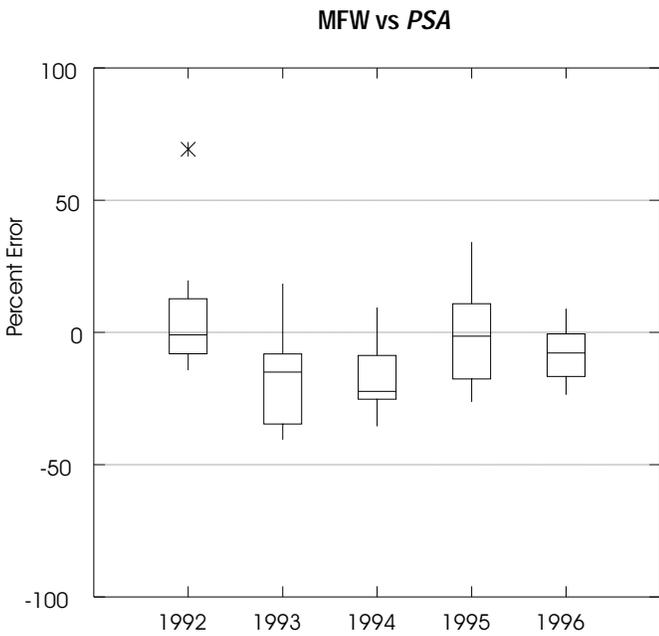
Source: Energy Information Administration, Petroleum Supply Reporting System.

**Figure FE11. Range of Percent Errors for MFW and PSM Residual Fuel Oil and Jet Fuel Imports Data, 1992 - 1996**

**Residual Fuel Oil Imports**



**Jet Fuel Imports**



Source: Energy Information Administration, Petroleum Supply Reporting System.

**Table S1. Crude Oil and Petroleum Products Overview, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Field Production			Stock Change <sup>a</sup>		Petroleum Products Supplied	Ending Stocks <sup>b</sup> (Million Barrels)
	Total Domestic <sup>c</sup>	Crude Oil	Natural Gas Plant Liquids	Crude Oil <sup>d</sup>	Petroleum Products		Crude Oil <sup>d</sup> and Petroleum Products
1981 Average .....	10,230	8,572	1,609	<sup>g</sup> 290	<sup>g</sup> -130	16,058	1,484
1982 Average .....	10,252	8,649	1,550	136	-283	15,296	<sup>g</sup> 1,430
1983 Average .....	10,299	8,688	1,559	<sup>g</sup> 214	<sup>g</sup> -234	15,231	1,454
1984 Average .....	10,554	8,879	1,630	199	81	15,726	1,556
1985 Average .....	10,636	8,971	1,609	50	-153	15,726	1,519
1986 Average .....	10,289	8,680	1,551	78	124	16,281	1,593
1987 Average .....	10,008	8,349	1,595	128	-87	16,665	1,607
1988 Average .....	9,818	8,140	1,625	1	-29	17,283	1,597
1989 Average .....	9,219	7,613	1,546	86	-129	17,325	1,581
1990 Average .....	8,994	7,355	1,559	-35	142	16,988	1,621
1991 Average .....	9,168	7,417	1,659	-42	32	16,714	1,617
1992 Average .....	8,996	7,171	1,697	-1	-68	17,033	<sup>g</sup> 1,592
1993 Average .....	8,836	6,847	1,736	81	<sup>g</sup> 70	17,237	<sup>g</sup> 1,647
1994 Average .....	8,645	6,662	1,727	18	<sup>g</sup> -2	17,718	<sup>g</sup> 1,653
1995 January .....	8,764	6,682	1,787	-219	-84	17,219	1,643
February .....	8,935	6,794	1,780	-49	-1,225	18,279	1,608
March .....	8,619	6,600	1,776	336	-552	17,484	1,601
April .....	8,720	6,604	1,794	-101	114	17,142	1,601
May .....	8,729	6,629	1,790	-132	464	17,293	1,612
June .....	8,607	6,579	1,740	-148	57	18,131	1,609
July .....	8,500	6,449	1,751	-397	897	17,147	1,624
August .....	8,498	6,447	1,730	-253	-73	18,044	1,614
September .....	8,467	6,416	1,757	-64	243	18,026	1,620
October .....	8,501	6,421	1,757	168	-589	17,651	1,607
November .....	8,662	6,585	1,797	263	-352	17,979	1,604
December .....	8,533	6,530	1,691	-505	-822	18,366	1,563
Average .....	8,626	6,560	1,762	-93	-153	17,725	--
1996 January .....	8,564	6,495	1,716	-8	-592	18,261	1,544
February .....	8,558	6,577	1,680	-63	-1,454	18,620	1,500
March .....	8,718	6,571	1,814	-132	-464	18,301	1,482
April .....	8,597	6,444	1,845	29	633	17,885	1,502
May .....	8,502	6,394	1,806	2	576	17,957	1,520
June .....	8,550	6,458	1,833	305	593	18,107	1,546
July .....	8,486	6,338	1,829	-244	358	18,211	1,550
August .....	8,535	6,360	1,858	-19	-130	18,658	1,545
September .....	8,623	6,482	1,872	-499	701	17,655	1,551
October .....	8,685	6,481	1,912	186	-630	19,171	1,538
November .....	8,730	6,476	1,915	-414	-117	18,535	1,522
December .....	8,738	6,506	1,876	-627	165	18,334	1,507
Average .....	8,607	6,465	1,830	-124	-28	18,309	--
1997 January .....	<sup>E</sup> 8,487	<sup>E</sup> 6,387	1,815	497	-717	18,560	1,503
February .....	<sup>E</sup> 8,739	<sup>E</sup> 6,514	1,900	-167	-569	18,308	1,482
March .....	<sup>E</sup> 8,690	<sup>E</sup> 6,470	1,907	529	447	17,869	1,512
April .....	<sup>E</sup> 8,672	<sup>E</sup> 6,483	1,849	208	10	18,572	1,519
May .....	<sup>E</sup> 8,559	<sup>E</sup> 6,401	1,832	212	1,172	18,244	1,562
June .....	<sup>E</sup> 8,546	<sup>E</sup> 6,341	1,842	-172	676	18,563	1,577
July .....	<sup>E</sup> 8,553	<sup>E</sup> 6,316	1,850	-399	-191	19,065	1,559
August .....	<sup>E</sup> 8,480	<sup>E</sup> 6,282	1,850	-278	634	18,506	1,570
September .....	<sup>E</sup> 8,617	<sup>E</sup> 6,388	1,871	78	720	18,480	1,594
October .....	<sup>RE</sup> 8,621	<sup>RE</sup> 6,435	<sup>R</sup> 1,840	<sup>R</sup> 412	<sup>R</sup> -279	<sup>R</sup> 19,121	<sup>R</sup> 1,598
November* .....	<sup>E</sup> 8,607	<sup>PE</sup> 6,406	<sup>E</sup> 1,851	<sup>E</sup> 294	<sup>E</sup> -484	<sup>E</sup> 18,902	<sup>E</sup> 1,584
11-Mo. Average .....	<sup>E</sup> 8,596	<sup>PE</sup> 6,401	<sup>E</sup> 1,855	<sup>E</sup> 113	<sup>E</sup> 134	<sup>E</sup> 18,564	--
1996 11-Mo. Average .....	8,595	6,461	1,826	-77	-46	18,307	--
1995 11-Mo. Average .....	8,634	6,562	1,769	-55	-91	17,665	--

<sup>a</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>b</sup> Stocks are totals as of end of period.

<sup>c</sup> Includes crude oil, natural gas plant liquids, and other liquids. Beginning in 1993, fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants are also included.

<sup>d</sup> Includes stocks located in the Strategic Petroleum Reserve.

<sup>e</sup> Includes crude oil for storage in the Strategic Petroleum Reserve.

<sup>f</sup> Net Imports equal Imports minus Exports.

<sup>g</sup> In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. Bulk terminal and pipeline stocks of oxygenates were added beginning in January 1993. See Summary Statistics Explanatory Note 4.

Footnotes continued on following page.

**Table S1. Crude Oil and Petroleum Products Overview, 1981 - Present (Continued)**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Imports			Exports			Net Imports <sup>f</sup>
	Total	Crude Oil <sup>e</sup>	Petroleum Products	Total	Crude Oil	Petroleum Products	
1981 Average .....	5,996	4,396	1,599	595	228	367	5,401
1982 Average .....	5,113	3,488	1,625	815	236	579	4,298
1983 Average .....	5,051	3,329	1,722	739	164	575	4,312
1984 Average .....	5,437	3,426	2,011	722	181	541	4,715
1985 Average .....	5,067	3,201	1,866	781	204	577	4,286
1986 Average .....	6,224	4,178	2,045	785	154	631	5,439
1987 Average .....	6,678	4,674	2,004	764	151	613	5,914
1988 Average .....	7,402	5,107	2,295	815	155	661	6,587
1989 Average .....	8,061	5,843	2,217	859	142	717	7,202
1990 Average .....	8,018	5,894	2,123	857	109	748	7,161
1991 Average .....	7,627	5,782	1,844	1,001	116	885	6,626
1992 Average .....	7,888	6,083	1,805	950	89	861	6,938
1993 Average .....	8,620	6,787	1,833	1,003	98	904	7,618
1994 Average .....	8,996	7,063	1,933	942	99	843	8,054
1995 January .....	8,015	6,505	1,509	978	113	865	7,037
February .....	8,345	6,546	1,799	1,062	95	967	7,283
March .....	9,006	7,391	1,615	948	68	880	8,059
April .....	8,465	7,038	1,427	998	155	842	7,467
May .....	8,709	7,325	1,384	876	73	803	7,832
June .....	9,558	7,927	1,631	919	101	818	8,639
July .....	8,863	7,265	1,598	895	103	792	7,969
August .....	9,061	7,437	1,624	821	61	759	8,240
September .....	9,736	8,007	1,729	805	74	731	8,930
October .....	8,577	7,075	1,502	962	50	912	7,615
November .....	9,074	7,302	1,772	1,002	118	884	8,072
December .....	8,612	6,916	1,696	1,135	127	1,008	7,477
Average .....	8,835	7,230	1,605	949	95	855	7,886
1996 January .....	9,364	7,303	2,061	1,070	89	981	8,294
February .....	8,390	6,612	1,778	1,048	92	956	7,342
March .....	9,092	7,215	1,877	867	94	773	8,225
April .....	9,429	7,371	2,058	976	148	828	8,453
May .....	10,007	8,029	1,977	891	37	854	9,116
June .....	9,938	7,958	1,980	895	130	766	9,043
July .....	9,820	7,800	2,020	945	139	806	8,876
August .....	9,986	8,041	1,944	896	44	852	9,090
September .....	9,142	7,353	1,789	1,104	147	957	8,038
October .....	9,837	7,701	2,136	1,045	134	911	8,792
November .....	9,244	7,344	1,900	1,024	172	852	8,220
December .....	9,417	7,307	2,110	1,013	96	917	8,404
Average .....	9,478	7,508	1,971	981	110	871	8,498
1997 January .....	9,633	7,393	2,240	1,038	141	897	8,595
February .....	9,475	7,384	2,091	1,015	228	787	8,460
March .....	9,712	7,665	2,047	932	136	796	8,780
April .....	9,934	7,810	2,124	937	92	845	8,997
May .....	10,442	8,279	2,163	876	26	851	9,565
June .....	10,357	8,403	1,954	955	57	898	9,402
July .....	9,703	7,938	1,764	1,012	70	942	8,691
August .....	10,155	8,333	1,822	1,074	110	964	9,081
September .....	10,201	8,537	1,664	997	122	875	9,204
October .....	<sup>R</sup> 10,414	<sup>R</sup> 8,543	<sup>R</sup> 1,870	<sup>R</sup> 1,066	<sup>R</sup> 152	<sup>R</sup> 914	<sup>R</sup> 9,347
November* .....	<sup>E</sup> 9,792	<sup>E</sup> 8,250	<sup>E</sup> 1,542	<sup>E</sup> 966	<sup>E</sup> 101	<sup>E</sup> 865	<sup>E</sup> 8,826
11-Mo. Average .....	<sup>E</sup> 9,987	<sup>E</sup> 8,052	<sup>E</sup> 1,935	<sup>E</sup> 988	<sup>E</sup> 112	<sup>E</sup> 877	<sup>E</sup> 8,999
1996 11-Mo. Average .....	9,484	7,526	1,958	978	111	866	8,507
1995 11-Mo. Average .....	8,856	7,259	1,597	932	92	840	7,924

Footnotes continued.

R = Revised data. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

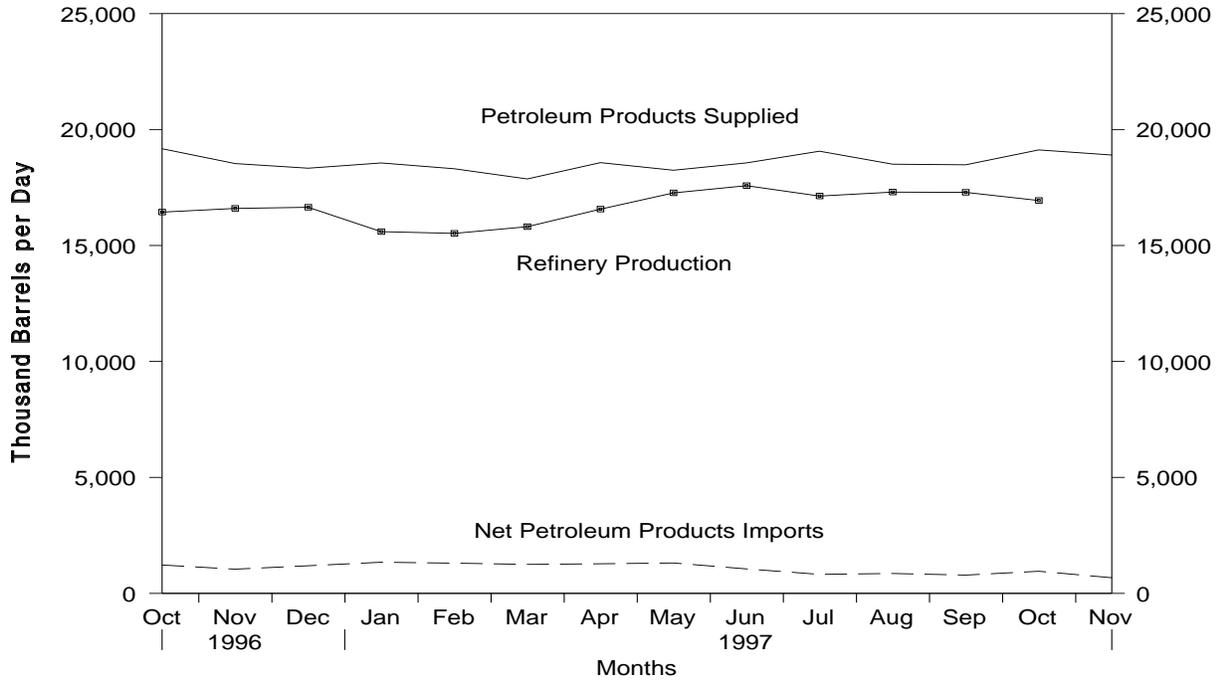
— = Not Applicable.

\* See Summary Statistics Explanatory Note 1.

Notes: • Crude oil includes lease condensate. • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

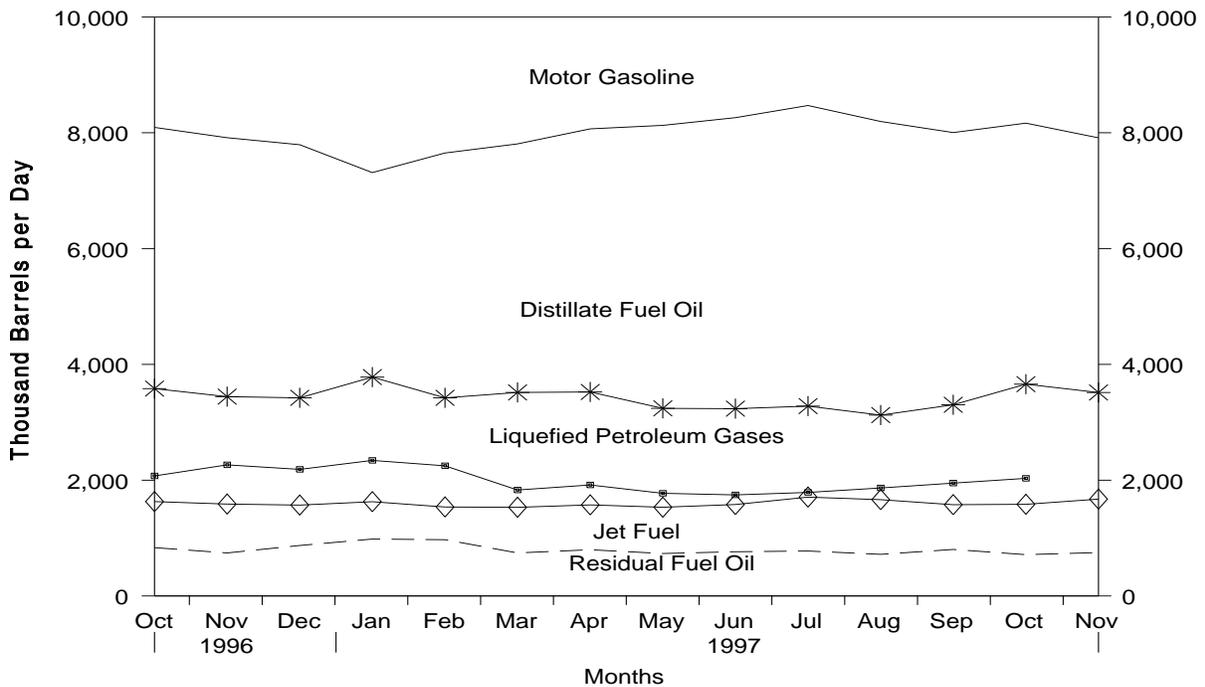
Source: See Summary Statistics Table and Figure Sources.

**Figure S1. Petroleum Overview, October 1996 - Present**



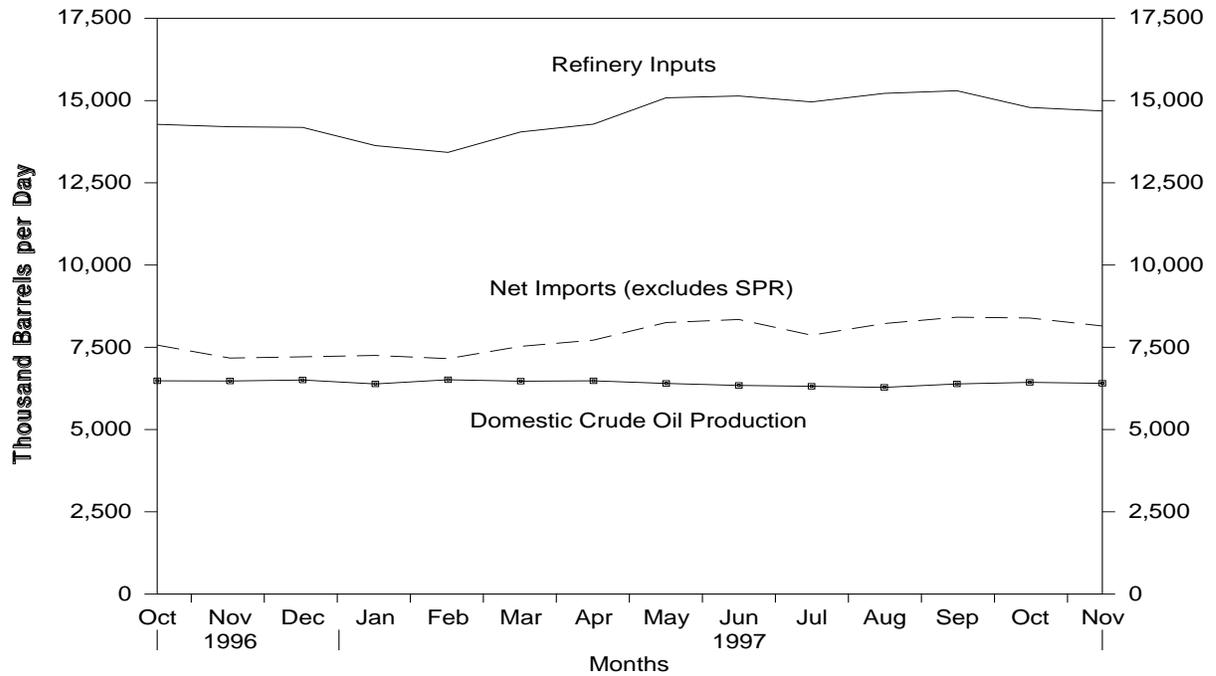
Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S1. See Summary Statistics Table and Figure Sources.

**Figure S2. Petroleum Products Supplied, October 1996 - Present**



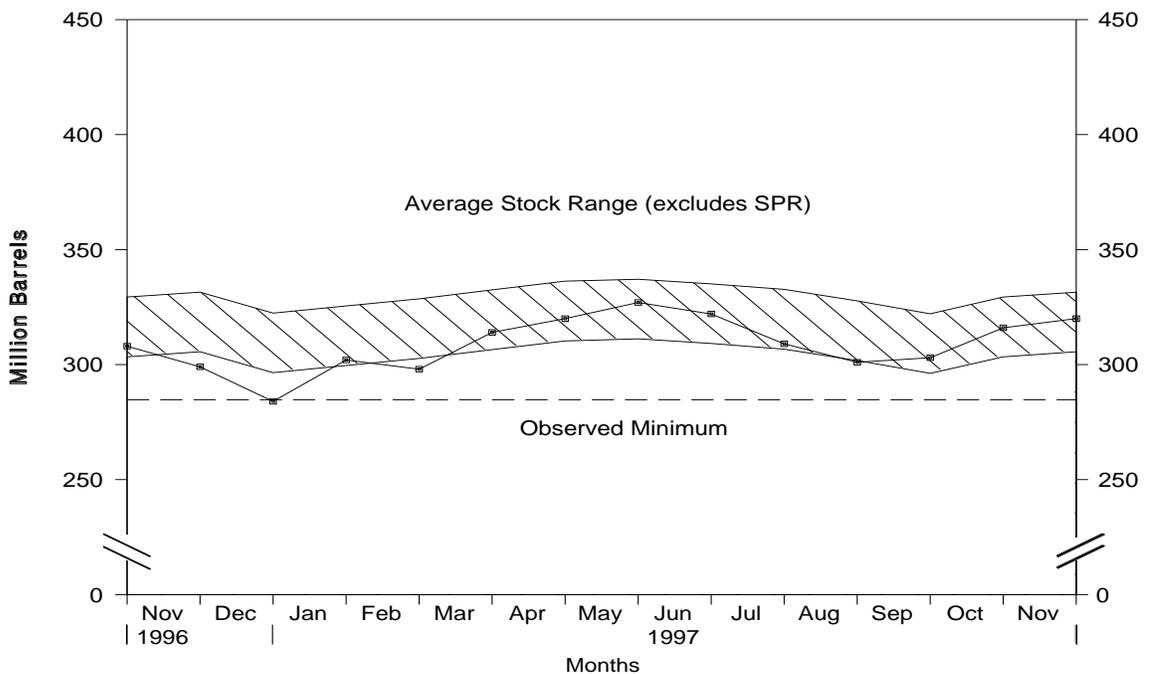
Source: Energy Information Administration, *Petroleum Supply Monthly*, Tables S4-S7, and S9. See Summary Statistics Table and Figure Sources.

**Figure S3. Crude Oil Supply and Disposition, October 1996 - Present**



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S2. See Summary Statistics Table and Figure Sources.

**Figure S4. Crude Oil Ending Stocks,<sup>1</sup> October 1996 - Present**



<sup>1</sup>Excludes stocks held in the Strategic Petroleum Reserve (SPR).

Note: The Observed Minimum for crude oil stocks in the last 36-month period was 284.7 million barrels, occurring in December 1996.  
 Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S2. See Summary Statistics Table and Figure Sources.

**Table S2. Crude Oil Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply						Disposition	
	Field Production		Imports			Unaccounted for Crude Oil <sup>c</sup>	Crude Losses	
	Total Domestic	Alaskan	Total	SPR	Other			
1981 Average .....	8,572	1,609	4,396	256	4,141	83	5	
1982 Average .....	8,649	1,696	3,488	165	3,323	71	3	
1983 Average .....	8,688	1,714	3,329	234	3,096	114	2	
1984 Average .....	8,879	1,722	3,426	197	3,229	185	2	
1985 Average .....	8,971	1,825	3,201	118	3,083	145	1	
1986 Average .....	8,680	1,867	4,178	48	4,130	139	(s)	
1987 Average .....	8,349	1,962	4,674	73	4,601	145	(s)	
1988 Average .....	8,140	2,017	5,107	51	5,055	196	(s)	
1989 Average .....	7,613	1,874	5,843	56	5,787	200	(s)	
1990 Average .....	7,355	1,773	5,894	27	5,867	258	(s)	
1991 Average .....	7,417	1,798	5,782	0	5,782	195	(s)	
1992 Average .....	7,171	1,714	6,083	10	6,073	258	(s)	
1993 Average .....	6,847	1,582	6,787	15	6,772	168	(s)	
1994 Average .....	6,662	1,559	7,063	12	7,051	266	(s)	
1995 January .....	6,682	1,575	6,505	0	6,505	318	(s)	
February .....	6,794	1,578	6,546	0	6,546	78	0	
March .....	6,600	1,525	7,391	0	7,391	-101	(s)	
April .....	6,604	1,511	7,038	0	7,038	237	0	
May .....	6,629	1,518	7,325	0	7,325	296	0	
June .....	6,579	1,484	7,927	0	7,927	6	0	
July .....	6,449	1,401	7,265	0	7,265	402	0	
August .....	6,447	1,432	7,437	0	7,437	207	(s)	
September .....	6,416	1,377	8,007	0	8,007	-5	0	
October .....	6,421	1,475	7,075	0	7,075	328	(s)	
November .....	6,585	1,472	7,302	0	7,302	334	0	
December .....	6,530	1,466	6,916	0	6,916	193	0	
<b>Average .....</b>	<b>6,560</b>	<b>1,484</b>	<b>7,230</b>	<b>0</b>	<b>7,230</b>	<b>193</b>	<b>(s)</b>	
1996 January .....	6,495	1,444	7,303	0	7,303	20	0	
February .....	6,577	1,482	6,612	0	6,612	413	0	
March .....	6,571	1,454	7,215	0	7,215	-25	0	
April .....	6,444	1,367	7,371	0	7,371	665	(s)	
May .....	6,394	1,341	8,029	0	8,029	61	0	
June .....	6,458	1,419	7,958	0	7,958	594	0	
July .....	6,338	1,317	7,800	0	7,800	121	(s)	
August .....	6,360	1,327	8,041	0	8,041	54	0	
September .....	6,482	1,401	7,353	0	7,353	303	0	
October .....	6,481	1,379	7,701	0	7,701	420	0	
November .....	6,476	1,403	7,344	0	7,344	148	0	
December .....	6,506	1,392	7,307	0	7,307	-153	0	
<b>Average .....</b>	<b>6,465</b>	<b>1,393</b>	<b>7,508</b>	<b>0</b>	<b>7,508</b>	<b>215</b>	<b>(s)</b>	
1997 January .....	E 6,387	E 1,380	7,393	0	7,393	496	0	
February .....	E 6,514	E 1,384	7,384	0	7,384	-407	0	
March .....	E 6,470	E 1,331	7,665	0	7,665	582	0	
April .....	E 6,483	E 1,330	7,810	0	7,810	293	0	
May .....	E 6,401	E 1,303	8,279	0	8,279	646	0	
June .....	E 6,341	E 1,260	8,403	0	8,403	282	0	
July .....	E 6,316	E 1,238	7,938	0	7,938	377	0	
August .....	E 6,282	E 1,200	8,333	0	8,333	434	0	
September .....	E 6,388	E 1,276	8,537	0	8,537	572	0	
October .....	RE 6,435	RE 1,286	R 8,543	0	R 8,543	R 376	0	
November* .....	PE 6,406	PE 1,269	E 8,250	E 0	E 8,250	E 422	E 0	
<b>11-Mo. Average .....</b>	<b>PE 6,401</b>	<b>PE 1,295</b>	<b>E 8,052</b>	<b>E 0</b>	<b>E 8,052</b>	<b>E 377</b>	<b>E 0</b>	
1996 11-Mo. Average .....	6,461	1,394	7,526	0	7,526	249	(s)	
1995 11-Mo. Average .....	6,562	1,486	7,259	0	7,259	193	(s)	

<sup>a</sup> Stocks are totals as of end of period.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>c</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50 thousand barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

<sup>d</sup> Previously published as crude used directly.

<sup>e</sup> Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.

Footnotes continued on following page.

**Table S2. Crude Oil Supply and Disposition, 1981 - Present (Continued)**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Disposition					Ending Stocks <sup>a</sup> (Million Barrels)		
	Stock Change <sup>b</sup>		Refinery Inputs	Exports	Product Supplied	Total	SPR	Other Primary
	SPR	Other						
1981 Average .....	336	<sup>e</sup> -46	12,470	228	<sup>d</sup> 58	594	230	363
1982 Average .....	174	-38	11,774	236	<sup>d</sup> 59	<sup>e</sup> 644	294	<sup>e</sup> 350
1983 Average .....	234	<sup>e</sup> -20	11,685	164	66	723	379	344
1984 Average .....	195	4	12,044	181	64	796	451	345
1985 Average .....	117	-67	12,002	204	60	814	493	321
1986 Average .....	50	28	12,716	154	49	843	512	331
1987 Average .....	80	49	12,854	151	34	890	541	349
1988 Average .....	52	-51	13,246	155	40	890	560	330
1989 Average .....	56	30	13,401	142	28	921	580	341
1990 Average .....	16	-51	13,409	109	24	908	586	323
1991 Average .....	-47	5	13,301	116	18	893	569	325
1992 Average .....	17	-18	13,411	89	13	893	575	318
1993 Average .....	34	47	13,613	98	10	922	587	335
1994 Average .....	13	5	13,866	99	9	929	592	337
1995 January .....	(s)	-219	13,604	113	7	922	592	330
February .....	(s)	-49	13,365	95	8	921	592	329
March .....	(s)	336	13,480	68	7	931	592	339
April .....	(s)	-101	13,817	155	7	928	592	336
May .....	(s)	-132	14,303	73	7	924	592	332
June .....	(s)	-148	14,553	101	5	920	592	328
July .....	(s)	-397	14,403	103	7	907	592	316
August .....	(s)	-253	14,276	61	6	899	592	308
September .....	(s)	-63	14,402	74	6	898	592	306
October .....	(s)	169	13,598	50	8	903	592	311
November .....	-1	264	13,833	118	7	911	592	319
December .....	(s)	-505	14,011	127	6	895	592	303
Average .....	(s)	-93	13,973	95	7	--	--	--
1996 January .....	(s)	-8	13,728	89	11	895	592	303
February .....	(s)	-62	13,564	92	8	893	592	301
March .....	-80	-52	13,793	94	7	889	589	300
April .....	-88	117	14,295	148	6	890	586	303
May .....	-22	24	14,439	37	7	890	586	304
June .....	-45	350	14,569	130	6	899	584	314
July .....	-50	-194	14,359	139	5	891	583	308
August .....	-172	153	14,424	44	6	891	578	313
September .....	-130	-368	14,484	147	6	876	574	302
October .....	-1	187	14,277	134	5	882	574	308
November .....	-127	-288	14,204	172	5	869	570	299
December .....	-129	-498	14,185	96	6	850	566	284
Average .....	-71	-53	14,195	110	6	--	--	--
1997 January .....	-75	572	13,632	141	5	866	563	302
February .....	(s)	-167	13,425	228	6	861	563	298
March .....	(s)	529	14,047	136	5	878	563	314
April .....	(s)	208	14,283	92	3	884	563	320
May .....	(s)	212	15,083	26	4	890	563	327
June .....	(s)	-171	15,139	57	2	885	563	322
July .....	(s)	-399	14,958	70	2	873	563	309
August .....	(s)	-278	15,217	110	(s)	864	563	301
September .....	(s)	78	15,297	122	(s)	867	563	303
October .....	(s)	<sup>R</sup> 412	<sup>R</sup> 14,790	<sup>R</sup> 152	<sup>R</sup> 0	<sup>R</sup> 879	563	<sup>R</sup> 316
November* .....	<sup>E</sup> (s)	<sup>E</sup> 294	<sup>E</sup> 14,685	<sup>E</sup> 101	<sup>E</sup> 0	<sup>E</sup> 884	<sup>E</sup> 563	<sup>E</sup> 320
11-Mo. Average ....	<sup>E</sup> -7	<sup>E</sup> 120	<sup>E</sup> 14,603	<sup>E</sup> 112	<sup>E</sup> 2	--	--	--
1996 11-Mo. Average ....	-65	-12	14,196	111	7	--	--	--
1995 11-Mo. Average ....	(s)	-55	13,970	92	7	--	--	--

Footnotes continued.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. PE = Preliminary estimate. RE = Revised estimate.

SPR = Strategic Petroleum Reserve.

-- = Not Applicable.

\* See Summary Statistics Explanatory Note 1.

Notes: • Crude oil includes lease condensate. • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present**  
(Thousand Barrels per Day)

Year/Month	Imports from Arab-OPEC Sources							
	Algeria		Iraq		Kuwait <sup>b</sup>		Libya	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
<b>1981</b> Average .....	311	261	(s)	0	0	0	319	317
<b>1982</b> Average .....	170	90	3	3	5	2	26	23
<b>1983</b> Average .....	240	176	10	10	14	7	0	0
<b>1984</b> Average .....	323	194	12	12	36	24	1	0
<b>1985</b> Average .....	187	84	46	46	21	4	4	0
<b>1986</b> Average .....	271	78	81	81	68	28	0	0
<b>1987</b> Average .....	295	115	83	82	84	70	0	0
<b>1988</b> Average .....	300	58	345	343	92	80	0	0
<b>1989</b> Average .....	269	60	449	441	157	155	0	0
<b>1990</b> Average .....	280	63	518	514	86	79	0	0
<b>1991</b> Average .....	253	44	0	0	6	6	0	0
<b>1992</b> Average .....	196	24	0	0	51	39	0	0
<b>1993</b> Average .....	220	24	0	0	353	344	0	0
<b>1994</b> Average .....	243	21	0	0	312	307	0	0
<b>1995</b> January .....	153	0	0	0	130	120	0	0
February .....	358	64	0	0	346	324	0	0
March .....	196	19	0	0	252	252	0	0
April .....	251	31	0	0	171	164	0	0
May .....	163	36	0	0	208	204	0	0
June .....	277	39	0	0	260	259	0	0
July .....	257	11	0	0	195	195	0	0
August .....	298	65	0	0	180	175	0	0
September .....	250	20	0	0	187	182	0	0
October .....	229	39	0	0	250	244	0	0
November .....	241	0	0	0	238	238	0	0
December .....	152	0	0	0	215	215	0	0
<b>Average</b> .....	<b>234</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>218</b>	<b>213</b>	<b>0</b>	<b>0</b>
<b>1996</b> January .....	313	38	0	0	148	145	0	0
February .....	200	16	0	0	216	216	0	0
March .....	241	38	0	0	127	127	0	0
April .....	211	2	0	0	201	201	0	0
May .....	340	0	0	0	230	230	0	0
June .....	313	0	0	0	388	388	0	0
July .....	305	0	0	0	266	266	0	0
August .....	323	0	0	0	271	266	0	0
September .....	186	0	0	0	236	236	0	0
October .....	209	0	0	0	260	260	0	0
November .....	214	3	0	0	228	228	0	0
December .....	214	0	14	14	262	262	0	0
<b>Average</b> .....	<b>256</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>236</b>	<b>235</b>	<b>0</b>	<b>0</b>
<b>1997</b> January .....	282	0	0	0	209	209	0	0
February .....	319	0	0	0	172	172	0	0
March .....	309	0	35	35	315	315	0	0
April .....	320	23	69	69	204	204	0	0
May .....	290	0	102	102	128	128	0	0
June .....	349	0	115	115	361	361	0	0
July .....	291	0	88	88	331	331	0	0
August .....	261	4	(s)	(s)	229	229	0	0
September .....	259	6	0	0	322	322	0	0
October .....	272	3	177	177	349	349	0	0
<b>10-Mo. Average</b> .....	<b>295</b>	<b>4</b>	<b>59</b>	<b>59</b>	<b>262</b>	<b>262</b>	<b>0</b>	<b>0</b>
<b>1996 10-Mo. Average</b> .....	<b>265</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>234</b>	<b>233</b>	<b>0</b>	<b>0</b>
<b>1995 10-Mo. Average</b> .....	<b>242</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>217</b>	<b>211</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month	Imports from Arab-OPEC Sources							
	Qatar		Saudi Arabia <sup>b</sup>		United Arab Emirates		Total Arab OPEC	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981 Average .....	7	7	1,129	1,112	81	77	1,848	1,774
1982 Average .....	7	7	552	530	92	81	854	736
1983 Average .....	(s)	0	337	321	30	18	632	533
1984 Average .....	5	4	325	309	117	90	819	634
1985 Average .....	(s)	0	168	132	45	35	472	300
1986 Average .....	13	12	685	618	44	38	1,162	854
1987 Average .....	0	0	751	642	61	56	1,274	965
1988 Average .....	0	0	1,073	911	29	23	1,839	1,415
1989 Average .....	2	2	1,224	1,116	28	21	2,130	1,794
1990 Average .....	4	4	1,339	1,195	17	9	2,244	1,864
1991 Average .....	0	0	1,802	1,703	3	2	2,064	1,754
1992 Average .....	1	0	1,720	1,597	6	0	1,974	1,660
1993 Average .....	1	0	1,414	1,282	14	12	2,000	1,661
1994 Average .....	0	0	1,402	1,297	13	11	1,970	1,636
1995 January .....	0	0	1,309	1,251	20	20	1,613	1,391
February .....	0	0	1,181	1,134	13	13	1,897	1,535
March .....	0	0	1,535	1,410	0	0	1,983	1,681
April .....	0	0	1,375	1,321	0	0	1,798	1,516
May .....	0	0	1,281	1,237	0	0	1,653	1,477
June .....	0	0	1,287	1,221	12	1	1,835	1,520
July .....	0	0	1,265	1,165	0	0	1,716	1,371
August .....	0	0	1,340	1,245	20	20	1,838	1,505
September .....	0	0	1,474	1,357	29	0	1,941	1,559
October .....	0	0	1,260	1,181	14	0	1,753	1,464
November .....	0	0	1,429	1,326	10	10	1,918	1,574
December .....	0	0	1,378	1,263	0	0	1,745	1,478
Average .....	0	0	1,344	1,260	10	5	1,806	1,505
1996 January .....	0	0	1,398	1,334	0	0	1,859	1,517
February .....	0	0	1,128	1,053	0	0	1,544	1,285
March .....	0	0	1,422	1,318	0	0	1,790	1,484
April .....	0	0	1,288	1,200	0	0	1,700	1,403
May .....	0	0	1,518	1,414	0	0	2,087	1,643
June .....	0	0	1,138	1,035	11	11	1,850	1,433
July .....	0	0	1,548	1,371	4	4	2,123	1,642
August .....	0	0	1,477	1,333	0	0	2,070	1,599
September .....	0	0	1,355	1,255	0	0	1,777	1,491
October .....	0	0	1,357	1,209	17	17	1,844	1,486
November .....	0	0	1,297	1,201	0	0	1,738	1,432
December .....	0	0	1,400	1,236	0	0	1,889	1,511
Average .....	0	0	1,363	1,248	3	3	1,859	1,496
1997 January .....	0	0	1,344	1,253	0	0	1,835	1,462
February .....	0	0	1,361	1,250	0	0	1,852	1,421
March .....	0	0	1,292	1,157	0	0	1,950	1,506
April .....	15	0	1,573	1,408	0	0	2,182	1,705
May .....	0	0	1,475	1,333	0	0	1,996	1,564
June .....	0	0	1,303	1,180	6	0	2,134	1,656
July .....	0	0	1,285	1,188	14	0	2,010	1,607
August .....	0	0	1,621	1,501	0	0	2,111	1,735
September .....	0	0	1,551	1,463	0	0	2,132	1,791
October .....	16	0	1,340	1,245	0	0	2,154	1,774
10-Mo. Average .....	3	0	1,415	1,298	2	0	2,036	1,623
1996 10-Mo. Average .....	0	0	1,365	1,254	3	3	1,867	1,500
1995 10-Mo. Average .....	0	0	1,332	1,253	11	5	1,801	1,501

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Other-OPEC Sources							
		Ecuador <sup>c</sup>		Gabon <sup>d</sup>		Indonesia		Iran	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	48	38	35	35	366	318	0	0
1982	Average .....	42	32	40	40	248	226	35	35
1983	Average .....	61	56	59	59	338	315	48	48
1984	Average .....	55	47	58	57	343	304	10	10
1985	Average .....	67	56	52	51	314	292	27	27
1986	Average .....	77	64	26	25	318	297	19	19
1987	Average .....	29	23	35	35	285	262	98	98
1988	Average .....	47	33	16	15	205	186	<sup>g</sup> (s)	<sup>g</sup> (s)
1989	Average .....	89	80	50	49	183	158	0	0
1990	Average .....	49	38	64	64	114	98	0	0
1991	Average .....	63	53	84	84	111	102	32	32
1992	Average .....	65	62	124	123	78	70	0	0
1993	Average .....	81	78	152	151	81	65	0	0
1994	Average .....	(c)	(c)	194	194	111	92	0	0
1995	January .....	(c)	(c)	(d)	(d)	38	38	0	0
	February .....	(c)	(c)	(d)	(d)	129	87	0	0
	March .....	(c)	(c)	(d)	(d)	51	29	0	0
	April .....	(c)	(c)	(d)	(d)	95	87	0	0
	May .....	(c)	(c)	(d)	(d)	65	36	0	0
	June .....	(c)	(c)	(d)	(d)	96	51	0	0
	July .....	(c)	(c)	(d)	(d)	104	96	0	0
	August .....	(c)	(c)	(d)	(d)	122	95	0	0
	September .....	(c)	(c)	(d)	(d)	94	66	0	0
	October .....	(c)	(c)	(d)	(d)	87	68	0	0
	November .....	(c)	(c)	(d)	(d)	107	73	0	0
	December .....	(c)	(c)	(d)	(d)	72	41	0	0
	Average .....	(c)	(c)	(d)	(d)	88	64	0	0
1996	January .....	(c)	(c)	(d)	(d)	52	43	0	0
	February .....	(c)	(c)	(d)	(d)	44	43	0	0
	March .....	(c)	(c)	(d)	(d)	58	55	0	0
	April .....	(c)	(c)	(d)	(d)	57	57	0	0
	May .....	(c)	(c)	(d)	(d)	49	15	0	0
	June .....	(c)	(c)	(d)	(d)	72	65	0	0
	July .....	(c)	(c)	(d)	(d)	56	48	0	0
	August .....	(c)	(c)	(d)	(d)	53	49	0	0
	September .....	(c)	(c)	(d)	(d)	26	26	0	0
	October .....	(c)	(c)	(d)	(d)	125	82	0	0
	November .....	(c)	(c)	(d)	(d)	36	12	0	0
	December .....	(c)	(c)	(d)	(d)	81	32	0	0
	Average .....	(c)	(c)	(d)	(d)	59	44	0	0
1997	January .....	(c)	(c)	(d)	(d)	73	38	0	0
	February .....	(c)	(c)	(d)	(d)	51	39	0	0
	March .....	(c)	(c)	(d)	(d)	18	15	0	0
	April .....	(c)	(c)	(d)	(d)	40	32	0	0
	May .....	(c)	(c)	(d)	(d)	86	86	0	0
	June .....	(c)	(c)	(d)	(d)	57	50	0	0
	July .....	(c)	(c)	(d)	(d)	73	66	0	0
	August .....	(c)	(c)	(d)	(d)	14	11	0	0
	September .....	(c)	(c)	(d)	(d)	82	75	0	0
	October .....	(c)	(c)	(d)	(d)	42	42	0	0
	10-Mo. Average ...	(c)	(c)	(d)	(d)	54	45	0	0
1996	10-Mo. Average ...	(c)	(c)	(d)	(d)	59	49	0	0
1995	10-Mo. Average ...	(c)	(c)	(d)	(d)	88	65	0	0

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month	Imports from Other-OPEC Sources						Total OPEC <sup>c,d,e</sup>	
	Nigeria		Venezuela		Total Other OPEC <sup>c,d</sup>			
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981 Average .....	620	611	406	147	1,476	1,149	3,323	2,922
1982 Average .....	514	510	412	155	1,291	998	2,146	1,734
1983 Average .....	302	301	422	164	1,231	944	1,862	1,477
1984 Average .....	216	207	548	253	1,230	878	2,049	1,512
1985 Average .....	293	280	605	306	1,358	1,012	1,830	1,312
1986 Average .....	440	437	793	416	1,674	1,259	2,837	2,113
1987 Average .....	535	529	804	488	1,787	1,435	3,060	2,400
1988 Average .....	618	607	794	439	1,681	1,281	3,520	2,696
1989 Average .....	815	800	873	495	2,010	1,582	4,140	3,376
1990 Average .....	800	784	1,025	666	2,052	1,650	4,296	3,514
1991 Average .....	703	683	1,035	668	2,028	1,622	4,092	3,377
1992 Average .....	681	665	1,170	826	2,117	1,746	4,092	3,406
1993 Average .....	740	722	1,300	1,010	2,354	2,026	4,354	3,687
1994 Average .....	637	624	1,334	1,034	2,277	1,944	4,247	3,580
1995 January .....	625	617	1,442	1,061	2,105	1,717	3,718	3,108
February .....	463	463	1,439	1,083	2,031	1,633	3,929	3,168
March .....	687	676	1,499	1,208	2,236	1,913	4,220	3,595
April .....	467	458	1,365	1,083	1,926	1,628	3,724	3,144
May .....	603	592	1,480	1,176	2,148	1,804	3,801	3,281
June .....	696	696	1,479	1,209	2,271	1,956	4,106	3,476
July .....	696	696	1,536	1,162	2,336	1,954	4,052	3,325
August .....	482	463	1,449	1,162	2,054	1,719	3,892	3,225
September .....	851	841	1,655	1,288	2,600	2,195	4,541	3,753
October .....	649	649	1,453	1,159	2,189	1,876	3,942	3,340
November .....	646	637	1,507	1,140	2,260	1,851	4,178	3,424
December .....	652	652	1,459	1,074	2,182	1,767	3,927	3,245
Average .....	627	621	1,480	1,151	2,196	1,835	4,002	3,341
1996 January .....	690	663	1,518	1,148	2,261	1,854	4,120	3,371
February .....	647	639	1,495	1,166	2,185	1,849	3,730	3,133
March .....	594	548	1,719	1,341	2,371	1,943	4,161	3,427
April .....	518	497	1,732	1,288	2,307	1,842	4,007	3,245
May .....	705	705	1,700	1,333	2,454	2,054	4,541	3,697
June .....	711	697	1,642	1,236	2,425	1,999	4,275	3,432
July .....	750	696	1,690	1,332	2,496	2,076	4,619	3,718
August .....	793	785	1,749	1,431	2,595	2,265	4,665	3,865
September .....	694	677	1,708	1,269	2,428	1,972	4,204	3,463
October .....	521	488	1,781	1,448	2,427	2,019	4,271	3,504
November .....	465	453	1,728	1,303	2,229	1,767	3,967	3,199
December .....	320	298	1,641	1,324	2,042	1,654	3,931	3,166
Average .....	617	595	1,676	1,303	2,353	1,942	4,211	3,438
1997 January .....	531	505	1,637	1,212	2,242	1,755	4,077	3,217
February .....	625	620	1,595	1,255	2,271	1,913	4,123	3,335
March .....	558	557	1,753	1,324	2,329	1,895	4,279	3,402
April .....	705	696	1,640	1,254	2,385	1,982	4,567	3,687
May .....	961	944	1,872	1,384	2,919	2,414	4,915	3,977
June .....	768	768	1,852	1,475	2,677	2,293	4,811	3,949
July .....	580	571	1,628	1,312	2,281	1,949	4,291	3,556
August .....	882	866	1,703	1,310	2,599	2,186	4,710	3,921
September .....	765	765	1,771	1,443	2,618	2,283	4,750	4,074
October .....	688	675	1,948	1,562	2,678	2,279	4,833	4,054
10-Mo. Average ....	707	697	1,741	1,354	2,502	2,096	4,538	3,719
1996 10-Mo. Average ....	663	640	1,674	1,300	2,396	1,989	4,264	3,489
1995 10-Mo. Average ....	623	616	1,480	1,160	2,191	1,841	3,992	3,342

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Non-OPEC Sources <sup>a</sup>											
		Angola		Australia		Bahama Islands		Brazil		Canada		China, People's Republic of	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	49	45	5	0	74	0	23	14	447	164	18	0
1982	Average .....	44	42	5	(s)	65	0	47	19	482	214	40	8
1983	Average .....	78	71	4	0	125	0	41	2	547	274	34	6
1984	Average .....	90	85	38	25	88	0	60	(s)	630	341	46	15
1985	Average .....	110	104	37	21	40	0	61	0	770	468	59	36
1986	Average .....	112	102	41	30	37	0	50	0	807	570	90	68
1987	Average .....	192	180	58	49	37	0	84	0	848	608	82	63
1988	Average .....	212	203	64	59	32	0	98	0	999	681	88	82
1989	Average .....	284	279	36	31	34	0	82	0	931	630	80	76
1990	Average .....	237	236	53	47	37	0	49	0	934	643	80	77
1991	Average .....	254	254	26	21	35	0	22	0	1,033	743	91	87
1992	Average .....	336	336	19	17	36	0	20	0	1,069	797	90	84
1993	Average .....	336	336	19	18	28	0	33	0	1,181	900	51	50
1994	Average .....	331	322	17	16	29	0	31	1	1,272	983	65	64
1995	January .....	273	262	21	21	6	0	1	0	1,345	1,011	64	62
	February .....	348	335	22	22	8	0	0	0	1,311	965	21	21
	March .....	427	416	0	0	7	0	0	0	1,208	891	54	54
	April .....	412	402	33	33	0	0	0	0	1,243	999	65	65
	May .....	419	407	21	21	0	0	0	0	1,406	1,167	35	35
	June .....	371	358	10	10	0	0	0	0	1,420	1,169	26	26
	July .....	295	287	42	42	0	0	8	0	1,279	1,028	80	80
	August .....	367	355	0	0	0	0	9	0	1,345	1,058	40	40
	September .....	444	444	0	0	8	0	43	0	1,252	959	73	73
	October .....	366	366	15	15	0	0	9	0	1,300	1,057	40	40
	November .....	318	318	(s)	0	0	0	12	0	1,403	1,069	66	66
	December .....	366	366	23	23	0	0	12	0	1,471	1,099	73	73
	Average .....	367	360	16	16	2	0	8	0	1,332	1,040	53	53
1996	January .....	312	312	21	21	0	0	1	0	1,490	1,117	86	86
	February .....	195	195	0	0	0	0	4	0	1,413	1,026	42	42
	March .....	257	257	0	0	12	0	1	0	1,322	1,001	53	53
	April .....	244	233	22	22	0	0	(s)	0	1,427	1,030	18	18
	May .....	403	379	22	22	0	0	9	0	1,373	1,056	19	19
	June .....	356	356	56	47	1	0	10	0	1,395	1,091	37	37
	July .....	292	292	11	0	0	0	28	0	1,393	1,093	78	78
	August .....	480	456	43	43	0	0	38	0	1,393	1,042	73	73
	September .....	391	391	47	27	0	0	13	0	1,276	1,000	64	64
	October .....	502	485	79	65	0	0	1	0	1,407	1,059	36	36
	November .....	353	353	35	25	0	0	1	0	1,516	1,151	104	104
	December .....	420	405	39	21	0	0	3	0	1,675	1,232	78	78
	Average .....	351	344	31	25	1	0	9	0	1,424	1,075	57	57
1997	January .....	485	485	21	21	0	0	1	0	1,508	1,137	84	84
	February .....	422	422	0	0	13	0	0	0	1,548	1,127	50	50
	March .....	467	461	37	37	0	0	4	0	1,412	1,103	120	120
	April .....	435	422	22	22	0	0	0	0	1,448	1,071	46	46
	May .....	312	307	61	44	0	0	0	0	1,423	1,068	21	21
	June .....	418	418	23	23	0	0	20	0	1,406	1,057	44	44
	July .....	416	416	77	48	0	0	21	0	1,403	1,085	0	0
	August .....	270	270	91	60	0	0	4	0	1,499	1,158	42	42
	September .....	399	399	53	12	0	0	3	0	1,503	1,185	26	20
	October .....	475	457	92	53	0	0	6	0	1,370	1,059	48	47
	10-Mo. Average ..	410	405	48	32	1	0	6	0	1,451	1,105	48	48
1996	10-Mo. Average ..	344	337	30	25	1	0	11	0	1,389	1,052	51	51
1995	10-Mo. Average ..	372	363	16	16	3	0	7	0	1,311	1,031	50	50

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Non-OPEC Sources <sup>a</sup>											
		Colombia		Ecuador <sup>c</sup>		Gabon <sup>d</sup>		Italy		Malaysia		Mexico	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	1	0	(c)	(c)	(d)	(d)	11	0	36	33	522	469
1982	Average .....	5	0	(c)	(c)	(d)	(d)	18	(s)	20	18	685	645
1983	Average .....	10	0	(c)	(c)	(d)	(d)	18	(s)	4	3	826	766
1984	Average .....	8	0	(c)	(c)	(d)	(d)	45	(s)	1	0	748	659
1985	Average .....	23	0	(c)	(c)	(d)	(d)	60	(s)	3	1	816	715
1986	Average .....	87	57	(c)	(c)	(d)	(d)	76	0	12	11	699	621
1987	Average .....	148	115	(c)	(c)	(d)	(d)	54	1	13	12	655	602
1988	Average .....	134	106	(c)	(c)	(d)	(d)	65	5	19	19	747	674
1989	Average .....	172	136	(c)	(c)	(d)	(d)	34	3	39	39	767	716
1990	Average .....	182	140	(c)	(c)	(d)	(d)	58	2	41	40	755	689
1991	Average .....	163	123	(c)	(c)	(d)	(d)	47	3	24	24	807	759
1992	Average .....	126	102	(c)	(c)	(d)	(d)	55	0	10	10	830	787
1993	Average .....	171	141	(c)	(c)	(d)	(d)	31	0	11	10	919	863
1994	Average .....	161	146	91	91	(d)	(d)	22	0	10	6	984	939
1995	January .....	223	214	130	130	193	193	4	0	21	21	925	892
	February .....	139	129	107	107	186	186	1	0	0	0	922	890
	March .....	239	221	104	104	159	159	8	0	0	0	1,006	961
	April .....	175	175	146	146	163	163	13	0	7	0	993	963
	May .....	171	153	116	116	206	206	0	0	0	0	1,118	1,063
	June .....	225	202	137	137	357	357	13	0	7	0	1,138	1,076
	July .....	223	223	87	87	311	311	4	0	0	0	1,188	1,166
	August .....	330	311	116	104	246	246	0	0	0	0	1,201	1,172
	September .....	252	236	61	61	216	216	0	0	14	14	1,311	1,238
	October .....	199	190	12	12	270	270	11	0	13	5	894	854
	November .....	240	229	102	102	271	271	4	0	16	16	1,114	1,060
	December .....	200	190	51	51	171	171	3	0	17	11	996	978
	Average .....	219	207	97	96	229	229	5	0	8	6	1,068	1,027
1996	January .....	186	183	126	120	171	171	2	0	0	0	1,281	1,245
	February .....	149	139	81	81	191	191	0	0	24	17	1,083	1,062
	March .....	262	250	131	125	154	154	13	0	4	0	1,176	1,165
	April .....	280	280	158	143	212	212	(s)	0	0	0	1,303	1,273
	May .....	263	249	100	95	154	154	0	0	47	40	1,288	1,222
	June .....	250	247	138	133	218	218	16	0	19	11	1,351	1,274
	July .....	204	198	113	96	191	191	19	0	0	0	1,216	1,186
	August .....	221	217	83	71	156	156	8	0	5	0	1,157	1,142
	September .....	213	213	48	48	104	104	15	0	0	0	1,355	1,306
	October .....	265	252	66	60	226	226	4	0	31	0	1,213	1,189
	November .....	267	267	111	111	253	253	13	0	7	0	1,157	1,110
	December .....	246	218	89	72	184	184	8	0	0	0	1,346	1,301
	Average .....	234	226	104	96	184	184	8	0	11	6	1,244	1,207
1997	January .....	227	226	112	107	62	62	8	0	32	0	1,307	1,264
	February .....	248	248	110	110	262	262	27	0	7	7	1,277	1,241
	March .....	260	257	148	148	217	217	5	0	33	0	1,310	1,249
	April .....	236	236	73	73	203	203	26	0	33	0	1,448	1,416
	May .....	288	282	109	104	178	178	9	0	9	0	1,429	1,408
	June .....	228	228	121	121	226	226	0	0	32	24	1,401	1,382
	July .....	251	241	122	122	264	264	0	0	28	0	1,366	1,347
	August .....	303	303	128	128	203	203	2	0	14	6	1,425	1,421
	September .....	271	271	143	143	271	271	0	0	37	29	1,386	1,371
	October .....	286	286	143	143	235	235	8	0	19	19	1,463	1,437
	10-Mo. Average ...	260	258	121	120	211	211	8	0	25	8	1,382	1,354
1996	10-Mo. Average ...	230	223	105	97	178	178	8	0	13	7	1,242	1,207
1995	10-Mo. Average ...	219	206	101	100	231	231	5	0	6	4	1,070	1,028

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Non-OPEC Sources <sup>a</sup>											
		Netherlands		Netherlands Antilles		Norway		Puerto Rico		Russia <sup>f</sup>		Spain	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	30	(s)	197	0	119	114	62	0	5	(s)	1	(s)
1982	Average .....	35	(s)	175	0	102	102	50	0	1	0	3	(s)
1983	Average .....	65	3	189	0	66	65	40	0	1	(s)	2	(s)
1984	Average .....	65	3	188	0	114	112	42	0	13	(s)	11	0
1985	Average .....	58	0	40	0	32	31	28	0	8	(s)	29	1
1986	Average .....	54	0	25	0	60	53	21	0	18	(s)	53	0
1987	Average .....	60	0	29	0	80	70	21	0	11	0	55	0
1988	Average .....	61	0	36	0	67	62	22	0	29	0	68	0
1989	Average .....	49	0	42	0	138	127	32	0	48	0	67	0
1990	Average .....	55	0	31	0	102	96	32	0	45	1	47	0
1991	Average .....	29	0	81	0	82	74	27	0	29	1	33	0
1992	Average .....	26	0	65	0	127	119	26	0	18	5	32	0
1993	Average .....	10	0	82	0	142	137	29	0	55	36	37	0
1994	Average .....	32	0	98	0	202	190	22	0	30	27	37	0
1995	January .....	0	0	60	0	195	158	6	0	0	0	7	0
	February .....	17	0	58	0	194	164	7	0	0	0	9	0
	March .....	21	0	68	0	241	209	13	0	0	0	16	0
	April .....	3	0	0	0	315	291	9	0	0	0	16	7
	May .....	24	0	86	0	292	292	19	0	12	0	25	0
	June .....	37	0	50	0	370	370	16	0	15	0	27	0
	July .....	9	0	65	0	263	256	17	0	41	32	10	0
	August .....	21	0	62	0	279	264	26	0	136	98	21	0
	September .....	0	0	33	0	364	359	12	0	50	32	27	0
	October .....	31	0	48	0	163	163	15	0	0	0	6	0
	November .....	20	0	69	0	255	255	27	0	28	0	16	0
	December .....	0	0	24	0	348	316	15	0	15	0	12	5
	Average .....	15	0	52	0	273	258	15	0	25	14	16	1
1996	January .....	16	0	59	0	199	178	6	0	11	0	23	0
	February .....	38	0	101	0	236	221	17	0	14	0	23	0
	March .....	35	0	35	0	284	264	24	0	18	0	58	0
	April .....	20	0	50	0	375	357	17	0	0	0	36	0
	May .....	9	0	47	0	380	364	22	0	63	63	21	0
	June .....	26	0	52	0	434	408	25	0	14	14	12	0
	July .....	7	0	45	0	375	359	25	0	42	33	47	10
	August .....	14	0	53	0	369	362	33	0	32	32	21	0
	September .....	13	0	56	0	274	254	22	0	39	37	21	0
	October .....	24	0	97	0	389	359	14	0	42	33	34	0
	November .....	18	0	79	0	249	220	20	0	0	0	33	0
	December .....	14	0	98	0	187	166	18	0	26	0	13	0
	Average .....	19	0	64	0	313	293	20	0	25	18	29	1
1997	January .....	40	0	94	0	244	230	18	0	21	0	31	0
	February .....	31	0	62	0	204	179	16	0	19	0	36	0
	March .....	39	0	103	0	295	276	7	0	13	0	6	0
	April .....	20	0	114	0	307	294	12	0	20	0	9	0
	May .....	13	0	116	0	351	329	21	0	0	0	23	0
	June .....	37	0	66	0	356	345	13	0	8	0	45	0
	July .....	5	0	106	45	386	360	24	0	9	0	6	0
	August .....	15	0	65	0	321	320	20	0	32	19	41	0
	September .....	52	0	71	0	282	261	14	0	0	0	21	0
	October .....	13	0	46	0	336	302	19	0	13	6	12	0
	10-Mo. Average ..	26	0	85	5	309	290	17	0	13	2	23	0
1996	10-Mo. Average ..	20	0	59	0	332	313	21	0	28	21	30	1
1995	10-Mo. Average ..	16	0	53	0	268	253	14	0	26	16	16	1

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month	Imports from Non-OPEC Sources <sup>a</sup>										Total Imports		
	Trinidad and Tobago		United Kingdom		Virgin Islands		Other Non-OPEC		Total Non-OPEC <sup>c,d</sup>				
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	
1981	Average	133	102	375	369	327	0	236	163	2,672	1,474	5,996	4,396
1982	Average	112	92	456	441	316	0	306	174	2,968	1,754	5,113	3,488
1983	Average	96	83	382	365	282	0	378	215	3,189	1,853	5,051	3,329
1984	Average	94	87	402	378	294	0	411	210	3,388	1,914	5,437	3,426
1985	Average	113	98	310	278	247	0	394	137	3,237	1,888	5,067	3,201
1986	Average	125	93	350	317	244	0	426	144	3,387	2,065	6,224	4,178
1987	Average	106	75	352	304	272	0	459	196	3,617	2,274	6,678	4,674
1988	Average	97	71	315	254	242	0	487	196	3,882	2,411	7,402	5,107
1989	Average	94	73	215	160	321	0	457	197	3,921	2,467	8,061	5,843
1990	Average	96	76	189	155	282	0	417	180	3,721	2,381	8,018	5,894
1991	Average	88	72	138	106	243	0	282	137	3,535	2,405	7,627	5,782
1992	Average	95	70	230	200	249	0	335	149	3,796	2,676	7,888	6,083
1993	Average	74	55	350	312	254	0	452	240	4,266	3,100	8,620	6,787
1994	Average	77	62	458	396	328	0	450	239	4,749	3,483	8,996	7,063
1995	January	91	91	240	213	283	0	209	131	4,297	3,397	8,015	6,505
	February	58	58	382	359	322	0	304	143	4,416	3,378	8,345	6,546
	March	70	70	663	621	298	0	183	91	4,787	3,797	9,006	7,391
	April	55	55	491	450	284	0	317	143	4,741	3,894	8,465	7,038
	May	61	53	405	366	203	0	286	165	4,907	4,044	8,709	7,325
	June	78	74	520	418	268	0	368	253	5,453	4,451	9,558	7,927
	July	73	54	137	97	240	0	441	277	4,812	3,940	8,863	7,265
	August	74	53	288	249	264	0	343	261	5,168	4,212	9,061	7,437
	September	73	55	427	386	223	0	312	180	5,194	4,254	9,736	8,007
	October	86	70	528	479	299	0	331	214	4,635	3,735	8,577	7,075
	November	61	53	284	284	317	0	273	155	4,896	3,878	9,074	7,302
	December	53	53	238	177	334	0	262	156	4,684	3,671	8,612	6,916
	Average	70	62	383	341	278	0	302	181	4,833	3,889	8,835	7,230
1996	January	92	71	364	238	390	0	406	188	5,244	3,932	9,364	7,303
	February	56	56	374	280	343	0	275	169	4,660	3,479	8,390	6,612
	March	63	52	346	252	311	0	373	215	4,932	3,788	9,092	7,215
	April	87	55	481	347	359	0	333	157	5,421	4,125	9,429	7,371
	May	97	71	421	316	298	0	429	282	5,465	4,332	10,007	8,029
	June	86	54	312	234	292	0	561	402	5,663	4,526	9,938	7,958
	July	70	58	244	195	344	0	456	292	5,201	4,082	9,820	7,800
	August	81	59	274	177	279	0	508	348	5,321	4,177	9,986	8,041
	September	51	37	165	90	268	0	502	318	4,938	3,891	9,142	7,353
	October	70	55	264	136	325	0	477	240	5,566	4,196	9,837	7,701
	November	96	75	199	160	253	0	513	318	5,277	4,145	9,244	7,344
	December	58	54	253	167	294	0	438	245	5,487	4,142	9,417	7,307
	Average	76	58	308	216	313	0	440	265	5,267	4,070	9,478	7,508
1997	January	62	55	400	333	335	0	464	173	5,557	4,176	9,633	7,393
	February	69	61	239	172	331	0	380	170	5,352	4,049	9,475	7,384
	March	56	55	236	161	254	0	411	180	5,433	4,263	9,712	7,665
	April	69	62	124	35	321	0	401	242	5,366	4,123	9,934	7,810
	May	70	66	261	181	300	0	531	314	5,527	4,301	10,442	8,279
	June	55	55	372	311	300	0	375	220	5,546	4,453	10,357	8,403
	July	62	54	198	165	310	0	357	237	5,411	4,382	9,703	7,938
	August	41	37	268	220	319	0	343	225	5,445	4,411	10,155	8,333
	September	66	58	167	110	248	0	439	334	5,451	4,463	10,201	8,537
	October	58	55	154	119	301	0	484	271	5,581	4,490	10,414	8,543
	10-Mo. Average	61	56	242	181	302	0	419	237	5,468	4,313	10,006	8,033
1996	10-Mo. Average	75	57	324	226	321	0	433	261	5,244	4,055	9,508	7,544
1995	10-Mo. Average	72	64	408	363	268	0	309	186	4,842	3,912	8,834	7,254

<sup>a</sup> Includes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC) primarily from Caribbean and West European areas as petroleum products that were refined from crude oil produced by OPEC.

<sup>b</sup> Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from Saudi Arabia.

<sup>c</sup> On December 31, 1992, Ecuador withdrew as a member of OPEC. As of January 1, 1994, imports of petroleum from Ecuador appear under imports from Non-OPEC Sources.

<sup>d</sup> On December 31, 1994, Gabon withdrew as a member of OPEC. As of January 1, 1995, imports of petroleum from Gabon appear under imports from Non-OPEC Sources.

<sup>e</sup> Excludes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC), primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced by OPEC.

<sup>f</sup> Imports from other States in the former U.S.S.R. may be included in imports from Russia for the years 1981 through 1992.

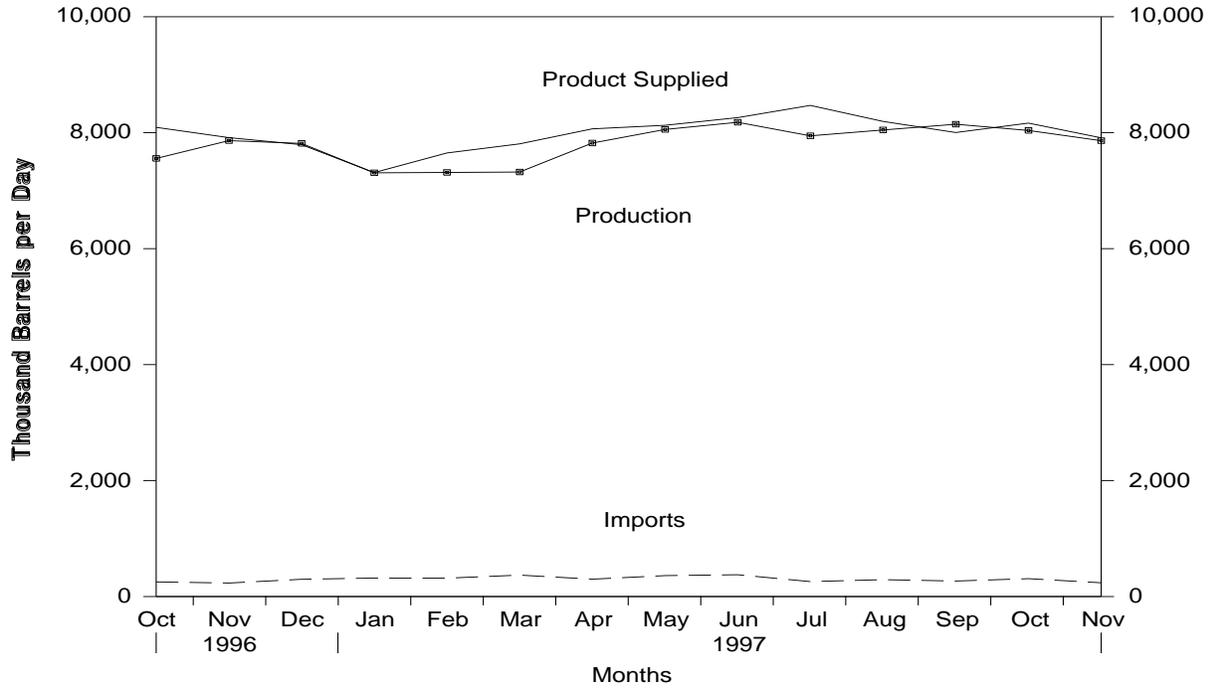
<sup>g</sup> A small amount of Iranian crude oil entered the United States in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

(s) = Less than 500 barrels per day.

— = Not Applicable.

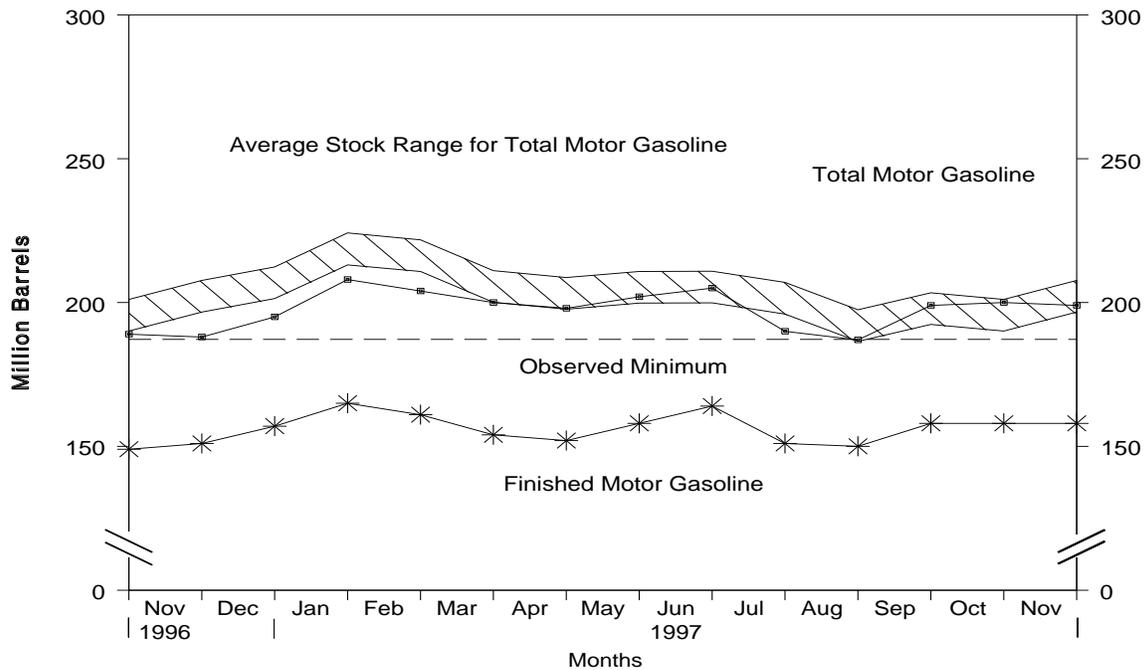
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: See Summary Statistics Table and Figure Sources.

**Figure S5. Finished Motor Gasoline Supply and Disposition, October 1996 - Present**



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S4. See Summary Statistics Table and Figure Sources.

**Figure S6. Motor Gasoline Ending Stocks, October 1996 - Present**



Note: • Total motor gasoline includes motor gasoline blending components and finished motor gasoline. • The Observed Minimum for total motor gasoline stocks in the last 36-month period was 187.2 million barrels, occurring in August 1997.

Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S4. See Summary Statistics Table and Figure Sources.

**Table S4. Finished Motor Gasoline Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition			Ending Stocks <sup>a</sup> (Million Barrels)		Ending Stocks (Million Barrels)
	Total Production <sup>b</sup>	Imports <sup>c</sup>	Stock Change <sup>c,d</sup>	Exports	Product Supplied <sup>b</sup>	Motor Gasoline		Oxygenates
						Total <sup>e</sup>	Finished	
1981 Average .....	6,405	157	<sup>f</sup> -28	2	6,588	253	203	--
1982 Average .....	6,338	197	-25	20	6,539	<sup>f</sup> 235	<sup>f</sup> 194	--
1983 Average .....	6,340	247	<sup>f</sup> -45	10	6,622	222	186	--
1984 Average .....	6,453	299	54	6	6,693	243	205	--
1985 Average .....	6,419	381	-41	10	6,831	223	190	--
1986 Average .....	6,752	326	11	33	7,034	233	194	--
1987 Average .....	6,841	384	-15	35	7,206	226	189	--
1988 Average .....	6,956	405	3	22	7,336	228	190	--
1989 Average .....	6,963	369	-35	39	7,328	213	177	--
1990 Average .....	6,959	342	10	55	7,235	220	181	--
1991 Average .....	6,975	297	3	82	7,188	219	182	--
1992 Average .....	7,058	294	-11	96	7,268	216	178	--
1993 Average .....	7,360	247	26	105	7,476	226	187	13
1994 Average .....	7,312	356	-31	97	7,601	215	176	17
1995 January .....	7,303	182	221	100	7,163	227	183	16
February .....	7,243	223	-99	84	7,481	225	180	16
March .....	7,168	336	-391	107	7,788	211	168	15
April .....	7,529	235	-26	139	7,651	208	167	15
May .....	7,678	286	3	67	7,894	208	167	15
June .....	7,843	347	-122	91	8,220	205	163	14
July .....	7,747	306	80	86	7,888	207	166	15
August .....	7,642	280	-367	103	8,187	192	155	16
September .....	7,785	238	143	94	7,786	199	159	15
October .....	7,544	253	-106	121	7,781	197	156	14
November .....	7,739	246	1	118	7,866	196	156	11
December .....	7,821	244	182	141	7,742	202	161	12
<b>Average .....</b>	<b>7,588</b>	<b>265</b>	<b>-40</b>	<b>104</b>	<b>7,789</b>	--	--	--
1996 January .....	7,370	303	240	163	7,271	215	169	12
February .....	7,369	293	-10	72	7,599	214	168	12
March .....	7,289	303	-327	128	7,792	203	158	13
April .....	7,497	501	49	77	7,873	203	160	13
May .....	7,804	414	66	81	8,071	205	162	12
June .....	7,858	393	68	95	8,088	205	164	11
July .....	7,924	359	-5	123	8,165	202	164	11
August .....	7,796	346	-284	82	8,343	191	155	12
September .....	7,606	339	215	68	7,662	200	161	11
October .....	7,557	253	-396	113	8,093	189	149	11
November .....	7,864	234	55	128	7,915	188	151	12
December .....	7,815	298	202	117	7,794	195	157	13
<b>Average .....</b>	<b>7,647</b>	<b>336</b>	<b>-12</b>	<b>104</b>	<b>7,891</b>	--	--	--
1997 January .....	7,308	320	240	75	7,312	208	165	13
February .....	7,315	317	-130	111	7,651	204	161	13
March .....	7,322	370	-240	123	7,808	200	154	13
April .....	7,822	300	-62	117	8,067	198	152	13
May .....	8,056	362	189	101	8,128	202	158	13
June .....	8,180	377	202	96	8,260	205	164	12
July .....	7,947	259	-429	164	8,471	190	151	13
August .....	8,048	292	-30	175	8,195	187	150	13
September .....	8,147	269	282	130	8,004	199	158	13
October .....	<sup>R</sup> 8,039	<sup>R</sup> 309	<sup>R</sup> -4	<sup>R</sup> 186	<sup>R</sup> 8,166	<sup>R</sup> 200	<sup>R</sup> 158	12
November* .....	<sup>E</sup> 7,862	<sup>E</sup> 238	<sup>E</sup> 70	<sup>E</sup> 118	<sup>E</sup> 7,912	<sup>E</sup> 199	<sup>E</sup> 158	NA
<b>11-Mo. Average ....</b>	<b><sup>E</sup> 7,825</b>	<b><sup>E</sup> 310</b>	<b><sup>E</sup> 8</b>	<b><sup>E</sup> 127</b>	<b><sup>E</sup> 8,000</b>	--	--	--
1996 11-Mo. Average ....	7,631	340	-32	103	7,899	--	--	--
1995 11-Mo. Average ....	7,567	267	-61	101	7,793	--	--	--

<sup>a</sup> Stocks are totals as of end of period.

<sup>b</sup> Beginning in 1993, motor gasoline production and product supplied includes blending of fuel ethanol and an adjustment to correct for the imbalance of motor gasoline blending components.

<sup>c</sup> Beginning in 1981, excludes blending components.

<sup>d</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>e</sup> Includes motor gasoline blending components but excludes stocks of oxygenates.

<sup>f</sup> In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.

R = Revised data. E = Estimated. NA = Not Available.

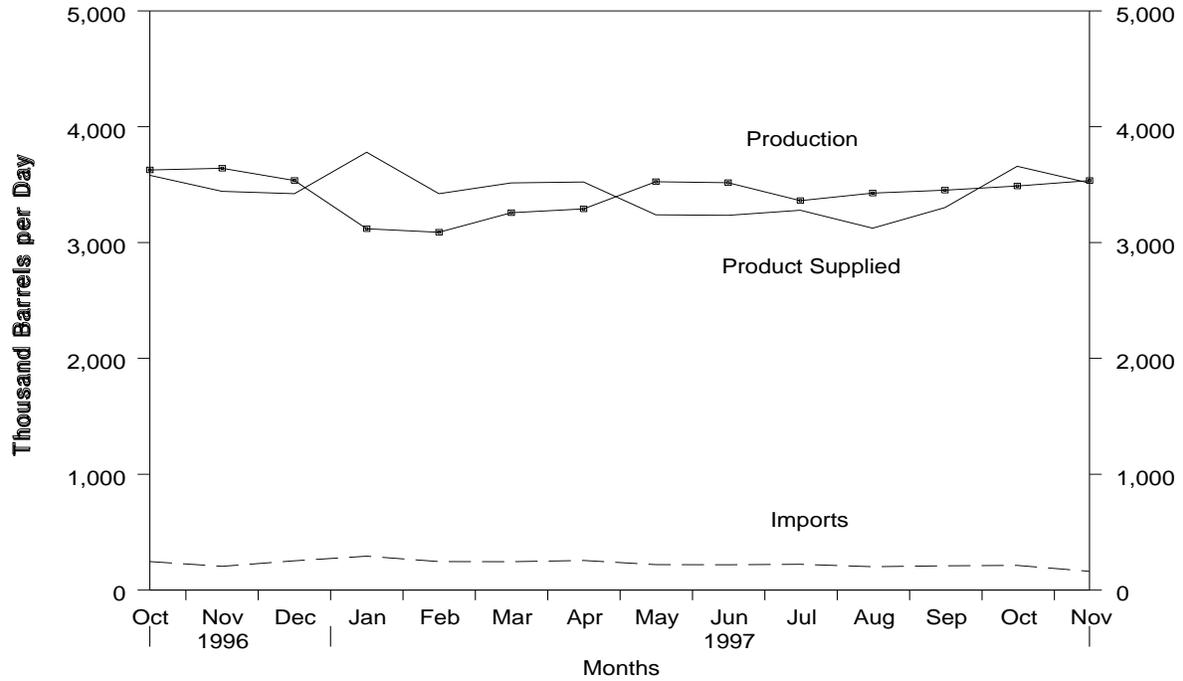
-- = Not Applicable.

\* See Summary Statistics Explanatory Note 1.

Notes: • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

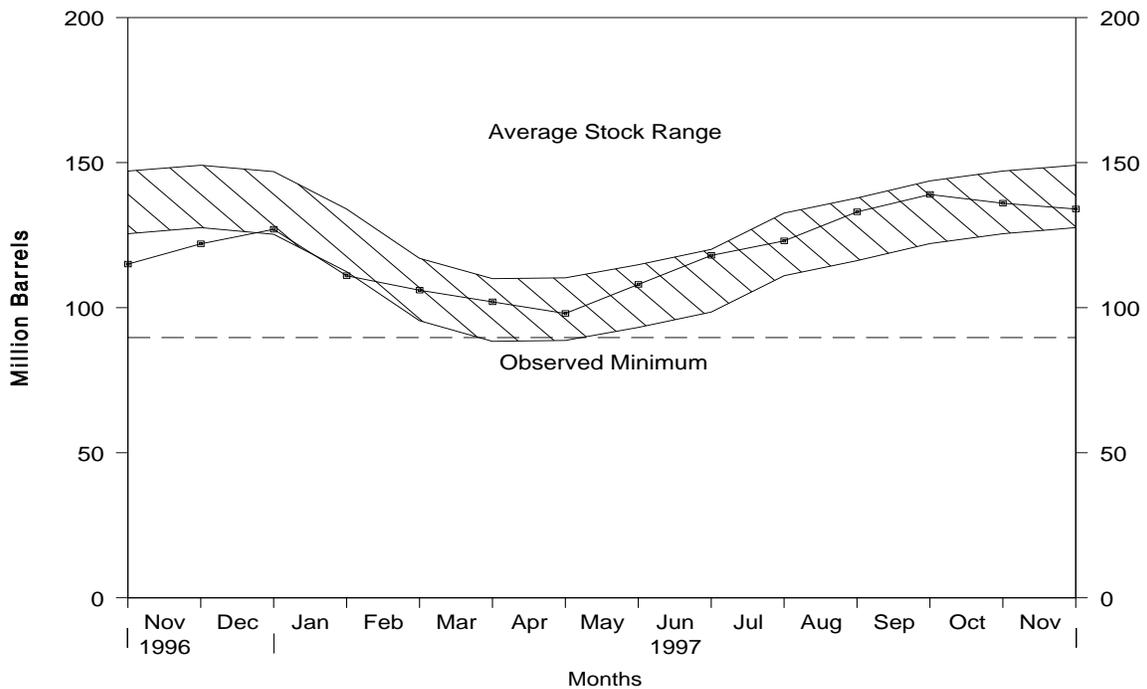
Source: See Summary Statistics Table and Figure Sources.

**Figure S7. Distillate Fuel Oil Supply and Disposition, October 1996 - Present**



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S5. See Summary Statistics Table and Figure Sources.

**Figure S8. Distillate Fuel Oil Ending Stocks, October 1996 - Present**



Note: The Observed Minimum for distillate fuel oil stocks in the last 36-month period was 89.7 million barrels, occurring in March 1996.  
 Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S5. See Summary Statistics Table and Figure Sources.

**Table S5. Distillate Fuel Oil Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply <sup>a</sup>		Disposition			Ending Stocks <sup>b</sup> (Million Barrels)		
	Total Production	Imports	Stock Change <sup>c</sup>	Exports	Product Supplied <sup>a</sup>	Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur
<b>1981</b> Average .....	2,613	173	<sup>d</sup> -38	5	2,829	192	--	--
<b>1982</b> Average .....	2,606	93	-35	74	2,671	<sup>d</sup> 179	--	--
<b>1983</b> Average .....	2,456	174	<sup>d</sup> -124	64	2,690	140	--	--
<b>1984</b> Average .....	2,681	272	57	51	2,845	161	--	--
<b>1985</b> Average .....	2,687	200	-48	67	2,868	144	--	--
<b>1986</b> Average .....	2,798	247	31	100	2,914	155	--	--
<b>1987</b> Average .....	2,731	255	-56	66	2,976	134	--	--
<b>1988</b> Average .....	2,859	302	-30	69	3,122	124	--	--
<b>1989</b> Average .....	2,899	306	-49	97	3,157	106	--	--
<b>1990</b> Average .....	2,925	278	73	109	3,021	132	--	--
<b>1991</b> Average .....	2,962	205	31	215	2,921	144	--	--
<b>1992</b> Average .....	2,974	216	-8	219	2,979	141	--	--
<b>1993</b> Average .....	3,132	184	1	274	3,041	141	64	77
<b>1994</b> Average .....	3,205	203	12	234	3,162	145	73	73
<b>1995</b> January .....	3,054	313	-163	141	3,389	140	70	70
February .....	2,954	289	-645	212	3,675	122	63	59
March .....	3,157	188	-216	216	3,344	115	59	56
April .....	3,126	125	-27	172	3,106	115	62	53
May .....	3,111	109	119	202	2,899	118	62	56
June .....	3,109	176	-119	137	3,267	115	60	55
July .....	3,056	157	333	148	2,732	125	62	63
August.....	3,145	171	189	84	3,044	131	62	69
September .....	3,287	142	28	116	3,285	132	64	68
October .....	3,169	162	-11	238	3,104	131	61	70
November .....	3,341	262	135	236	3,233	135	65	70
December .....	3,344	235	-168	298	3,449	130	67	63
<b>Average</b> .....	<b>3,155</b>	<b>193</b>	<b>-41</b>	<b>183</b>	<b>3,207</b>	--	--	--
<b>1996</b> January .....	3,105	267	-528	216	3,684	114	58	55
February .....	3,133	279	-570	256	3,727	97	53	44
March .....	3,107	256	-247	139	3,471	90	49	40
April .....	3,300	258	13	166	3,379	90	52	38
May .....	3,256	231	182	176	3,128	96	57	39
June .....	3,283	185	198	81	3,189	102	60	41
July .....	3,127	194	166	134	3,021	107	62	45
August.....	3,280	195	112	182	3,180	110	62	49
September .....	3,392	193	157	256	3,172	115	64	51
October .....	3,627	246	-8	300	3,581	115	60	54
November .....	3,641	205	234	171	3,442	122	65	57
December .....	3,536	253	160	206	3,422	127	68	58
<b>Average</b> .....	<b>3,316</b>	<b>230</b>	<b>-10</b>	<b>190</b>	<b>3,365</b>	--	--	--
<b>1997</b> January .....	3,119	293	-502	133	3,780	111	60	51
February .....	3,089	246	-193	107	3,422	106	57	49
March .....	3,258	245	-133	120	3,515	102	59	43
April .....	3,291	256	-142	166	3,523	98	59	39
May .....	3,525	220	352	153	3,240	108	63	45
June .....	3,517	219	327	174	3,235	118	65	53
July .....	3,362	223	154	151	3,279	123	65	58
August .....	3,427	202	320	185	3,124	133	69	64
September .....	3,452	210	201	160	3,302	139	70	69
October .....	R 3,488	R 213	R -90	R 133	R 3,659	R 136	R 64	R 73
November* .....	E 3,535	E 162	E -9	E 191	E 3,514	E 134	E 64	E 70
<b>11-Mo. Average</b> .....	<b>E 3,371</b>	<b>E 226</b>	<b>E 27</b>	<b>E 152</b>	<b>E 3,418</b>	--	--	--
<b>1996 11-Mo. Average</b> .....	<b>3,295</b>	<b>228</b>	<b>-25</b>	<b>189</b>	<b>3,360</b>	--	--	--
<b>1995 11-Mo. Average</b> .....	<b>3,138</b>	<b>190</b>	<b>-29</b>	<b>173</b>	<b>3,184</b>	--	--	--

<sup>a</sup> Excludes 10,000 barrels per day in 1981 and 1982 previously published as crude used directly.

<sup>b</sup> Stocks are totals as of end of period.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>d</sup> In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new stock basis stock levels. See Summary Statistics Explanatory Note 4.

R = Revised data. E = Estimated.

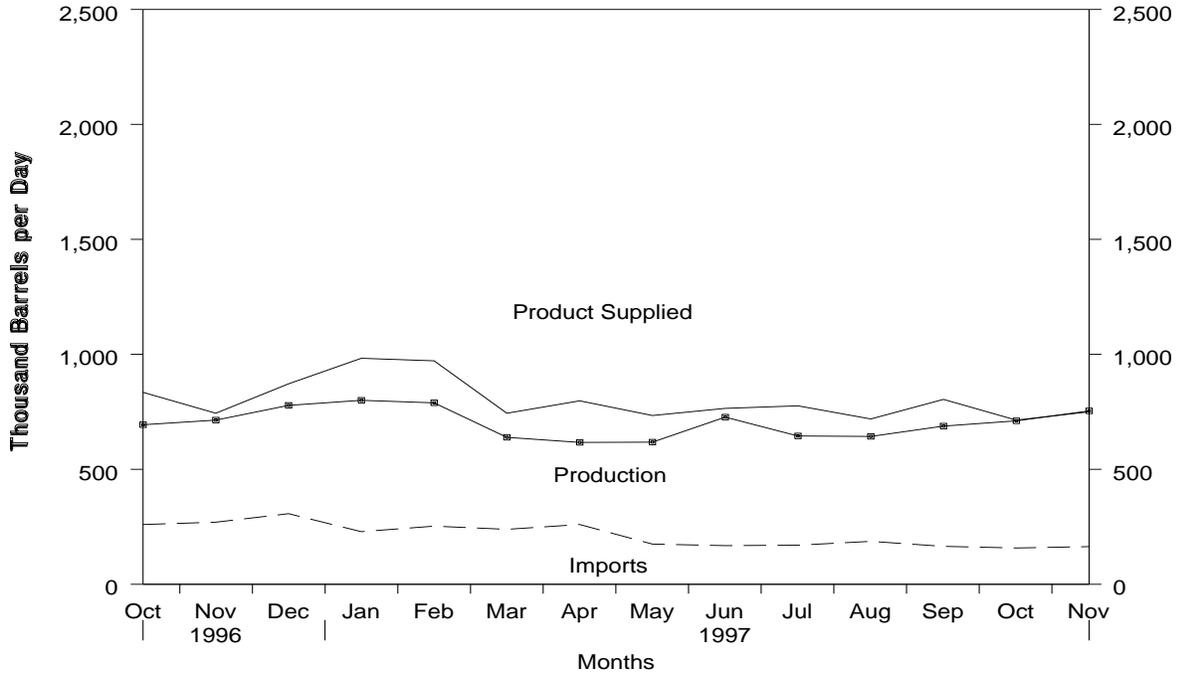
-- = Not Applicable.

\* See Summary Statistics Explanatory Note 1.

Notes: • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

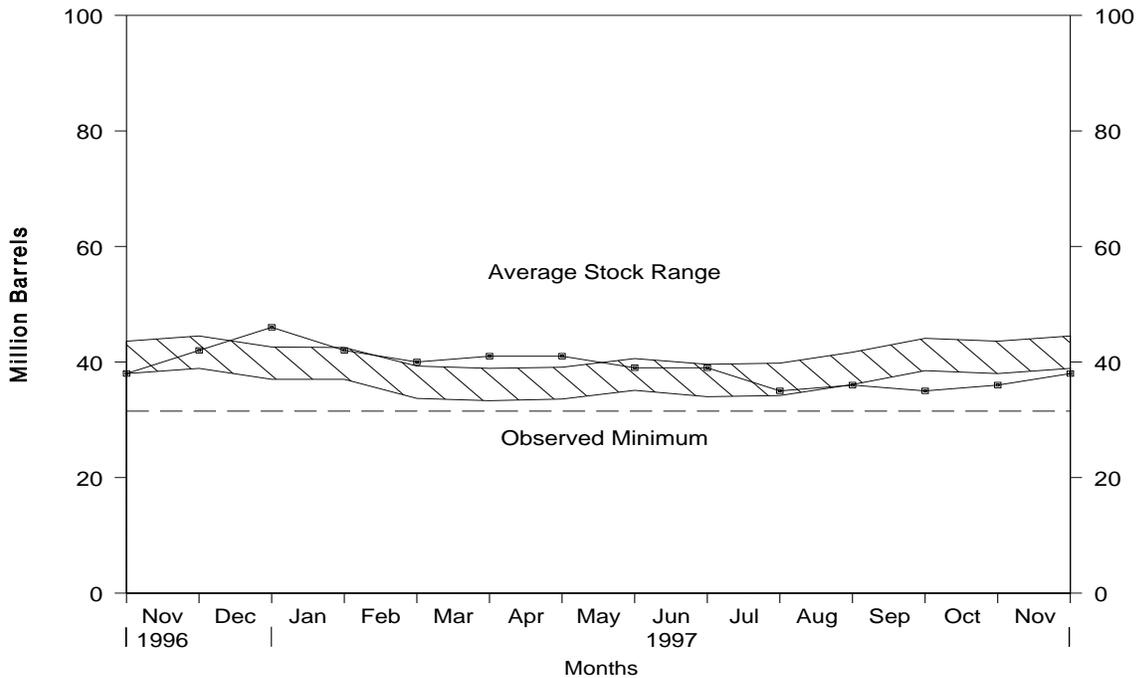
Source: See Summary Statistics Table and Figure Sources.

**Figure S9. Residual Fuel Oil Supply and Disposition, October 1996 - Present**



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S6. See Summary Statistics Table and Figure Sources.

**Figure S10. Residual Fuel Oil Ending Stocks, October 1996 - Present**



Note: The Observed Minimum for residual fuel oil stocks in the last 36-month period was 31.5 million barrels, occurring in February 1996.  
 Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S6. See Summary Statistics Table and Figure Sources.

**Table S6. Residual Fuel Oil Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply <sup>a</sup>		Disposition			Ending Stocks <sup>c</sup> (Million Barrels)
	Total Production	Imports	Stock Change <sup>b</sup>	Exports	Product Supplied <sup>a</sup>	
1981 Average .....	1,321	800	<sup>d</sup> -37	118	2,088	78
1982 Average .....	1,070	776	-32	209	1,716	<sup>d</sup> 66
1983 Average .....	852	699	<sup>d</sup> -55	185	1,421	49
1984 Average .....	891	681	12	190	1,369	53
1985 Average .....	882	510	-7	197	1,202	50
1986 Average .....	889	669	-8	147	1,418	47
1987 Average .....	885	565	(s)	186	1,264	47
1988 Average .....	926	644	-8	200	1,378	45
1989 Average .....	954	629	-2	215	1,370	44
1990 Average .....	950	504	13	211	1,229	49
1991 Average .....	934	453	4	226	1,158	50
1992 Average .....	892	375	-20	193	1,094	43
1993 Average .....	835	373	4	123	1,080	44
1994 Average .....	826	314	-6	125	1,021	42
1995 January .....	903	204	56	203	848	44
February .....	776	225	-246	208	1,040	37
March .....	778	209	35	154	798	38
April .....	789	128	-22	129	810	37
May .....	748	177	48	115	762	39
June .....	746	184	-87	120	896	36
July .....	797	149	27	164	755	37
August .....	801	177	36	122	820	38
September .....	811	220	58	124	848	40
October .....	724	131	-55	84	825	38
November .....	705	182	-17	111	793	37
December .....	874	257	-8	98	1,040	37
<b>Average .....</b>	<b>788</b>	<b>187</b>	<b>-13</b>	<b>136</b>	<b>852</b>	<b>--</b>
1996 January .....	799	320	-54	108	1,064	36
February .....	798	222	-132	114	1,038	32
March .....	700	227	-4	95	836	32
April .....	671	237	69	96	743	34
May .....	732	203	18	89	827	34
June .....	731	168	21	144	735	35
July .....	646	335	-3	88	896	35
August .....	732	227	32	56	871	36
September .....	713	197	68	125	717	38
October .....	694	260	16	104	835	38
November .....	714	270	139	101	744	42
December .....	778	307	112	102	872	46
<b>Average .....</b>	<b>726</b>	<b>248</b>	<b>24</b>	<b>102</b>	<b>848</b>	<b>--</b>
1997 January .....	800	229	-124	171	983	42
February .....	789	253	-68	137	972	40
March .....	639	239	45	89	744	41
April .....	617	260	-27	105	798	41
May .....	618	175	-44	102	734	39
June .....	727	168	-1	130	765	39
July .....	645	170	-119	159	776	35
August .....	643	187	31	80	719	36
September .....	688	165	-42	91	804	35
October .....	<sup>R</sup> 711	<sup>R</sup> 158	<sup>R</sup> 22	<sup>R</sup> 133	<sup>R</sup> 714	<sup>R</sup> 36
November .....	<sup>E</sup> 754	<sup>E</sup> 164	<sup>E</sup> 61	<sup>E</sup> 107	<sup>E</sup> 750	<sup>E</sup> 38
<b>11-Mo. Average .....</b>	<sup>E</sup> <b>693</b>	<sup>E</sup> <b>197</b>	<sup>E</sup> <b>-24</b>	<sup>E</sup> <b>119</b>	<sup>E</sup> <b>795</b>	<sup>E</sup> <b>--</b>
1996 11-Mo. Average .....	721	243	16	101	846	--
1995 11-Mo. Average .....	780	180	-13	139	834	--

<sup>a</sup> Excludes 48,000 barrels per day in 1981 and 1982 previously published as crude used directly.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>c</sup> Stocks are totals as of end of period.

<sup>d</sup> In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

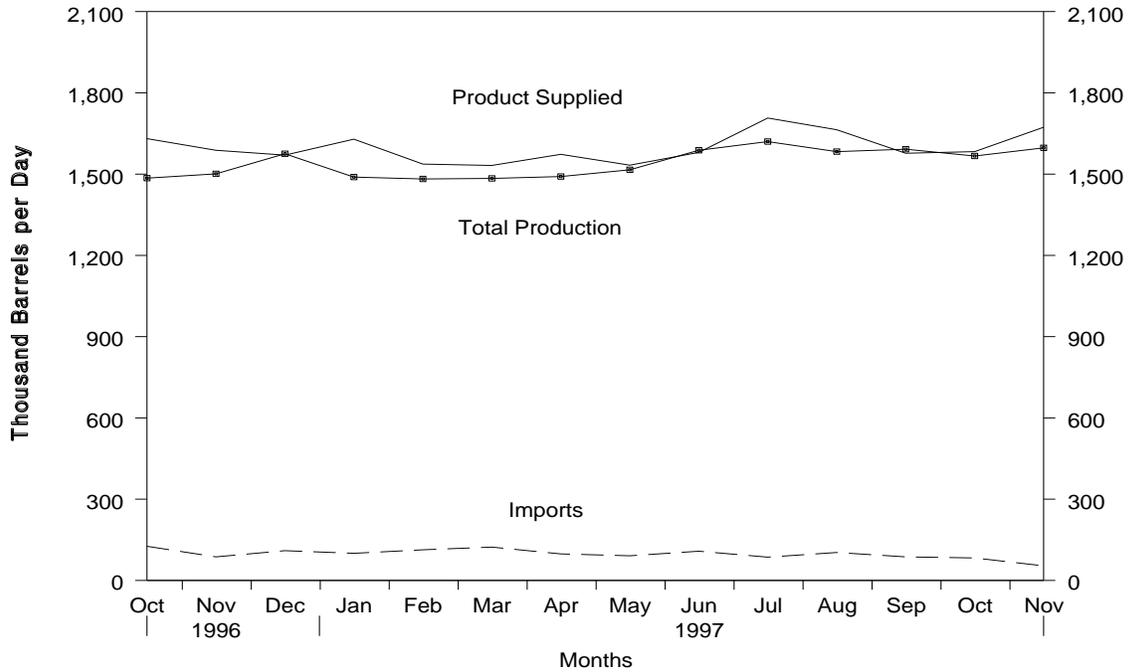
— = Not Applicable.

\* See Summary Statistics Explanatory Note 1.

Notes: • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

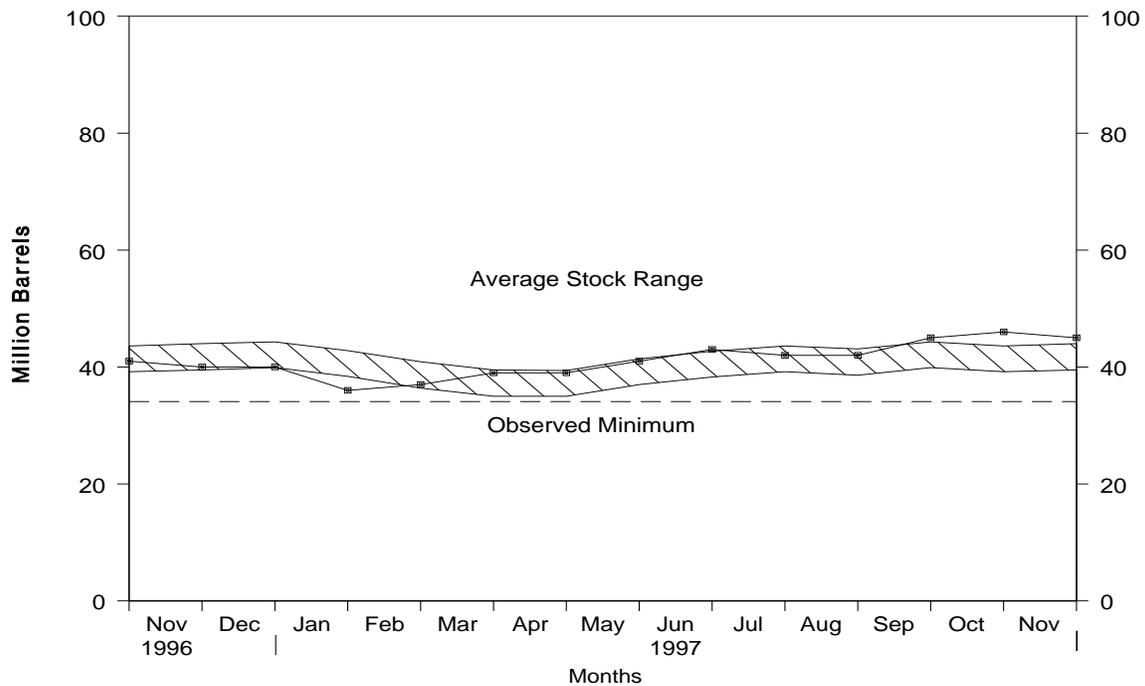
Source: See Summary Statistics Table and Figure Sources.

**Figure S11. Jet Fuel Supply and Disposition, October 1996 - Present**



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S7. See Summary Statistics Table and Figure Sources.

**Figure S12. Jet Fuel Ending Stocks, October 1996 - Present**



Note: The Observed Minimum for total jet fuel stocks in the last 36-month period was 34.1 million barrels, occurring in March 1996.  
 Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S7. See Summary Statistics Table and Figure Sources.

**Table S7. Jet Fuel Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply			Disposition				Ending Stocks <sup>a</sup> (Million Barrels)	
	Production		Imports	Stock Change <sup>b</sup>	Exports	Product Supplied		Total	Kerosene-Type
	Total	Kerosene-Type				Total	Kerosene-Type		
1981 Average	968	775	38	<sup>c</sup> -4	2	1,007	809	41	34
1982 Average	978	778	29	-12	6	1,013	804	<sup>c</sup> 37	<sup>c</sup> 31
1983 Average	1,022	817	29	<sup>c</sup> (s)	6	1,046	839	39	32
1984 Average	1,132	919	62	9	9	1,175	953	42	35
1985 Average	1,189	983	39	-4	13	1,218	1,005	40	34
1986 Average	1,293	1,097	57	25	18	1,307	1,105	50	43
1987 Average	1,343	1,138	67	(s)	24	1,385	1,181	50	42
1988 Average	1,370	1,164	90	-17	28	1,449	1,236	44	38
1989 Average	1,403	1,197	106	-8	27	1,489	1,284	41	34
1990 Average	1,488	1,311	108	31	43	1,522	1,340	52	46
1991 Average	1,438	1,274	67	-9	43	1,471	1,296	49	44
1992 Average	1,399	1,254	82	-16	43	1,454	1,310	43	39
1993 Average	1,422	1,309	100	-7	59	1,469	1,357	40	38
1994 Average	1,448	1,410	117	18	20	1,527	1,480	47	46
1995 January	1,412	1,402	79	-84	33	1,542	1,525	44	43
February	1,375	1,366	123	-43	21	1,520	1,514	43	42
March	1,281	1,272	99	-115	17	1,478	1,464	39	39
April	1,326	1,317	82	-12	5	1,414	1,402	39	38
May	1,367	1,354	104	-35	18	1,487	1,478	38	37
June	1,412	1,398	99	67	11	1,433	1,393	40	39
July	1,458	1,444	97	23	27	1,505	1,469	41	40
August	1,427	1,418	82	-23	21	1,511	1,505	40	39
September	1,465	1,459	155	44	20	1,557	1,500	41	41
October	1,426	1,422	99	-54	57	1,521	1,518	40	39
November	1,496	1,493	164	64	13	1,584	1,578	42	41
December	1,542	1,538	89	-51	63	1,619	1,618	40	39
<b>Average</b>	<b>1,416</b>	<b>1,407</b>	<b>106</b>	<b>-19</b>	<b>26</b>	<b>1,514</b>	<b>1,497</b>	--	--
1996 January	1,596	1,593	89	-49	111	1,624	1,607	38	38
February	1,499	1,495	100	-129	67	1,661	1,658	35	35
March	1,470	1,468	105	-24	59	1,541	1,547	34	34
April	1,466	1,464	113	51	11	1,517	1,515	36	35
May	1,419	1,418	122	39	13	1,489	1,467	37	37
June	1,514	1,512	127	71	11	1,558	1,556	39	39
July	1,496	1,493	89	-14	27	1,572	1,569	38	38
August	1,510	1,507	104	-2	34	1,582	1,580	38	38
September	1,650	1,647	159	152	51	1,606	1,604	43	43
October	1,485	1,484	126	-55	35	1,631	1,636	41	41
November	1,501	1,500	87	-45	45	1,588	1,588	40	40
December	1,575	1,574	110	(s)	115	1,570	1,573	40	40
<b>Average</b>	<b>1,515</b>	<b>1,513</b>	<b>111</b>	<b>(s)</b>	<b>48</b>	<b>1,578</b>	<b>1,575</b>	--	--
1997 January	1,489	1,488	100	-117	78	1,629	1,625	36	36
February	1,482	1,482	113	35	23	1,537	1,530	37	37
March	1,484	1,483	123	63	11	1,532	1,531	39	39
April	1,491	1,490	98	-5	21	1,573	1,572	39	39
May	1,516	1,515	91	65	9	1,533	1,533	41	41
June	1,588	1,588	108	78	38	1,580	1,579	43	43
July	1,620	1,619	86	-34	33	1,707	1,706	42	42
August	1,583	1,583	103	-5	27	1,664	1,663	42	42
September	1,592	1,591	87	85	16	1,577	1,576	45	45
October	<sup>R</sup> 1,567	<sup>R</sup> 1,566	<sup>R</sup> 83	<sup>R</sup> 26	<sup>R</sup> 40	<sup>R</sup> 1,583	<sup>R</sup> 1,584	<sup>R</sup> 46	<sup>R</sup> 46
November*	<sup>E</sup> 1,597	<sup>E</sup> 1,597	<sup>E</sup> 54	<sup>E</sup> -53	<sup>E</sup> 31	<sup>E</sup> 1,673	<sup>E</sup> 1,672	<sup>E</sup> 45	<sup>E</sup> 45
<b>11-Mo. Average</b>	<b><sup>E</sup> 1,547</b>	<b><sup>E</sup> 1,546</b>	<b><sup>E</sup> 95</b>	<b><sup>E</sup> 12</b>	<b><sup>E</sup> 30</b>	<b><sup>E</sup> 1,599</b>	<b><sup>E</sup> 1,598</b>	--	--
1996 11-Mo. Average	1,509	1,507	111	(s)	42	1,579	1,575	--	--
1995 11-Mo. Average	1,404	1,395	107	-16	22	1,505	1,486	--	--

<sup>a</sup> Stocks are totals as of end of period.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>c</sup> In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.

R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

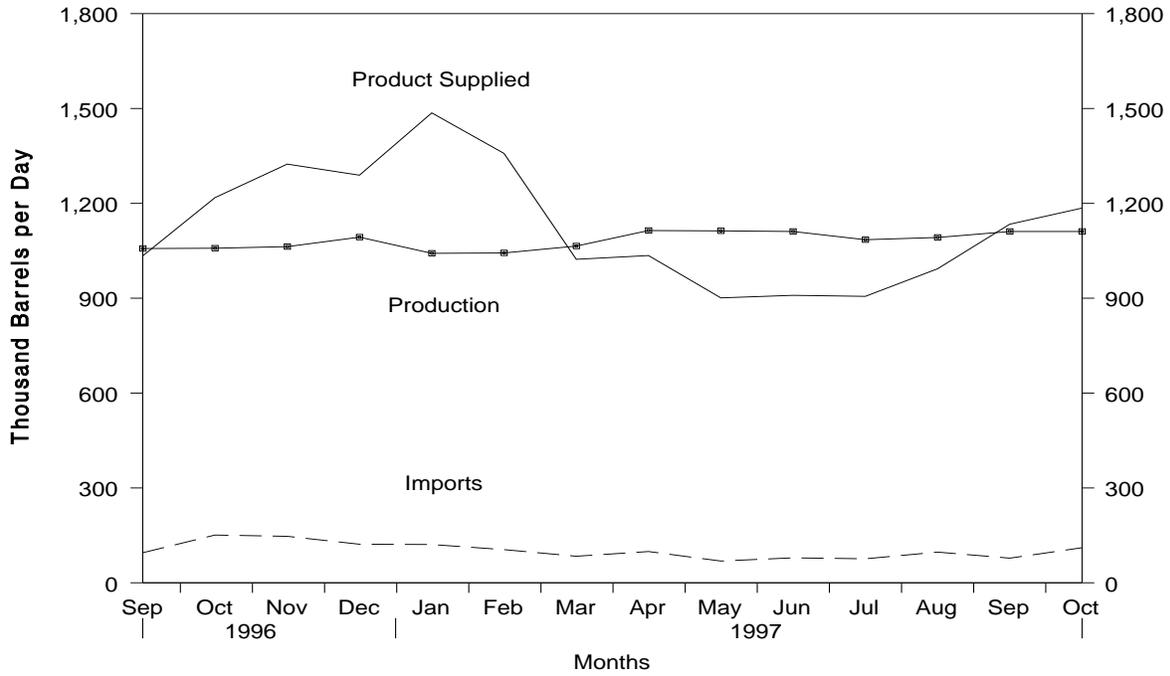
— = Not Applicable.

\* See Summary Statistics Explanatory Note 1.

Notes: • Italics denote estimates based upon preliminary data. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

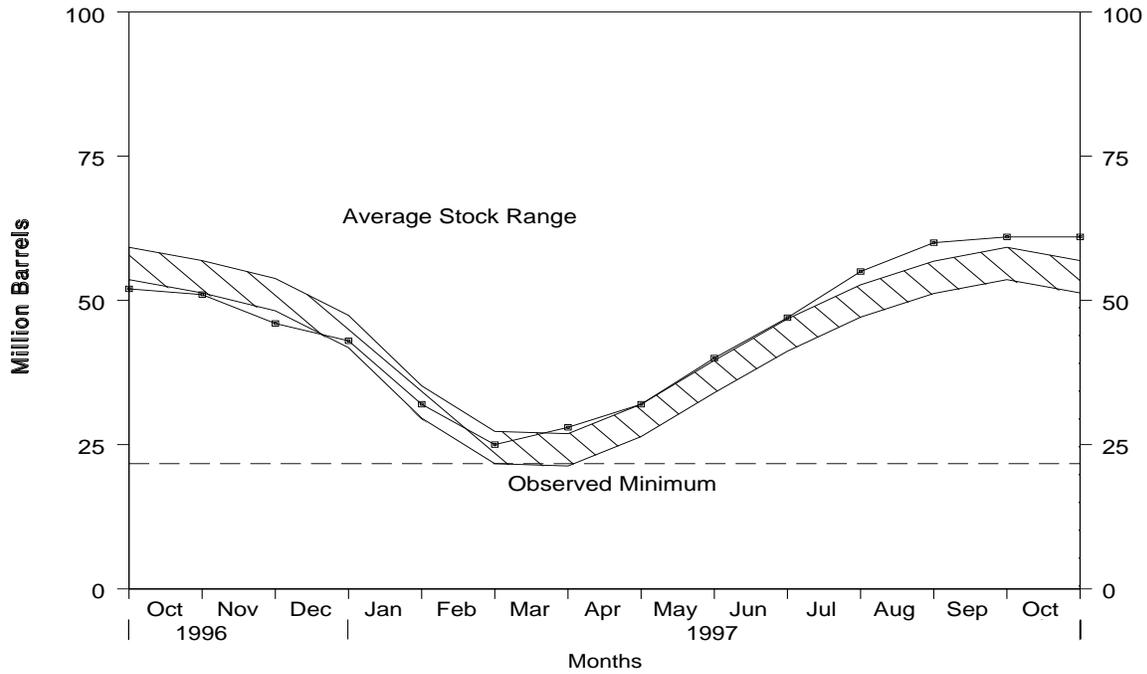
Source: See Summary Statistics Table and Figure Sources.

**Figure S13. Propane/Propylene Supply and Disposition, September 1996 - Present**



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S8. See Summary Statistics Table and Figure Sources.

**Figure S14. Propane/Propylene Ending Stocks, September 1996 - Present**



Note: The Observed Minimum for propane stocks in the last 36 month period was 21.7 million barrels, occurring in February 1996.  
 Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S8. See Summary Statistics Table and Figure Sources.

**Table S8. Propane/Propylene Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				Ending Stocks <sup>b</sup> (Million Barrels)
	Total Production	Imports	Stock Change <sup>a</sup>	Refinery Inputs	Exports	Product Supplied	
1981 Average .....	745	70	<sup>c</sup> 18	5	18	773	76
1982 Average .....	711	63	-59	4	31	798	<sup>c</sup> 54
1983 Average .....	730	44	<sup>c</sup> -24	4	43	751	<sup>c</sup> 48
1984 Average .....	806	67	<sup>c</sup> 7	4	30	833	58
1985 Average .....	816	67	-50	3	48	883	39
1986 Average .....	817	110	64	4	28	831	63
1987 Average .....	828	88	-41	8	24	924	48
1988 Average .....	863	106	7	8	31	923	50
1989 Average .....	862	111	-52	11	24	990	32
1990 Average .....	878	115	48	(s)	28	917	49
1991 Average .....	915	91	-3	(s)	28	982	48
1992 Average .....	956	85	-24	(s)	33	1,032	39
1993 Average .....	963	103	34	(s)	26	1,006	51
1994 Average .....	969	124	-13	0	24	1,082	46
1995 January .....	1,007	108	-349	0	55	1,409	36
February .....	985	94	-362	0	100	1,341	26
March .....	1,017	90	14	0	39	1,055	26
April .....	1,040	107	157	0	31	958	31
May .....	1,046	73	209	0	29	882	37
June .....	1,042	114	188	0	27	941	43
July .....	1,011	75	236	0	27	823	50
August .....	1,008	107	187	0	24	905	56
September .....	1,022	146	45	0	25	1,098	57
October .....	999	98	-22	0	30	1,090	57
November .....	1,045	76	-160	0	37	1,243	52
December .....	1,033	135	-285	0	31	1,422	43
Average .....	1,021	102	-10	0	38	1,096	--
1996 January .....	995	151	-353	0	30	1,468	32
February .....	1,001	106	-347	0	39	1,415	22
March .....	1,043	116	-1	0	25	1,135	22
April .....	1,047	78	114	0	31	981	25
May .....	1,048	104	209	0	21	922	32
June .....	1,031	122	293	0	21	839	41
July .....	1,043	114	188	0	29	940	46
August .....	1,051	126	83	0	24	1,069	49
September .....	1,057	95	97	0	21	1,034	52
October .....	1,058	151	-37	0	29	1,218	51
November .....	1,063	147	-148	0	34	1,324	46
December .....	1,093	122	-106	0	31	1,289	43
Average .....	1,044	119	(s)	0	28	1,136	--
1997 January .....	1,042	121	-352	0	28	1,486	32
February .....	1,043	105	-252	0	42	1,358	25
March .....	1,065	84	86	0	40	1,023	28
April .....	1,114	99	146	0	32	1,035	32
May .....	1,113	69	258	0	23	901	40
June .....	1,111	79	250	0	31	909	47
July .....	1,085	76	231	0	24	906	55
August .....	1,092	97	172	0	24	993	60
September .....	1,111	78	39	0	16	1,134	61
October .....	1,111	111	7	0	29	1,185	61
10-Mo. Average .....	1,089	92	60	0	29	1,091	--
1996 10-Mo. Average .....	1,038	117	26	0	27	1,101	--
1995 10-Mo. Average .....	1,018	101	33	0	38	1,048	--

<sup>a</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>b</sup> Stocks are totals as of end of period.

<sup>c</sup> In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.

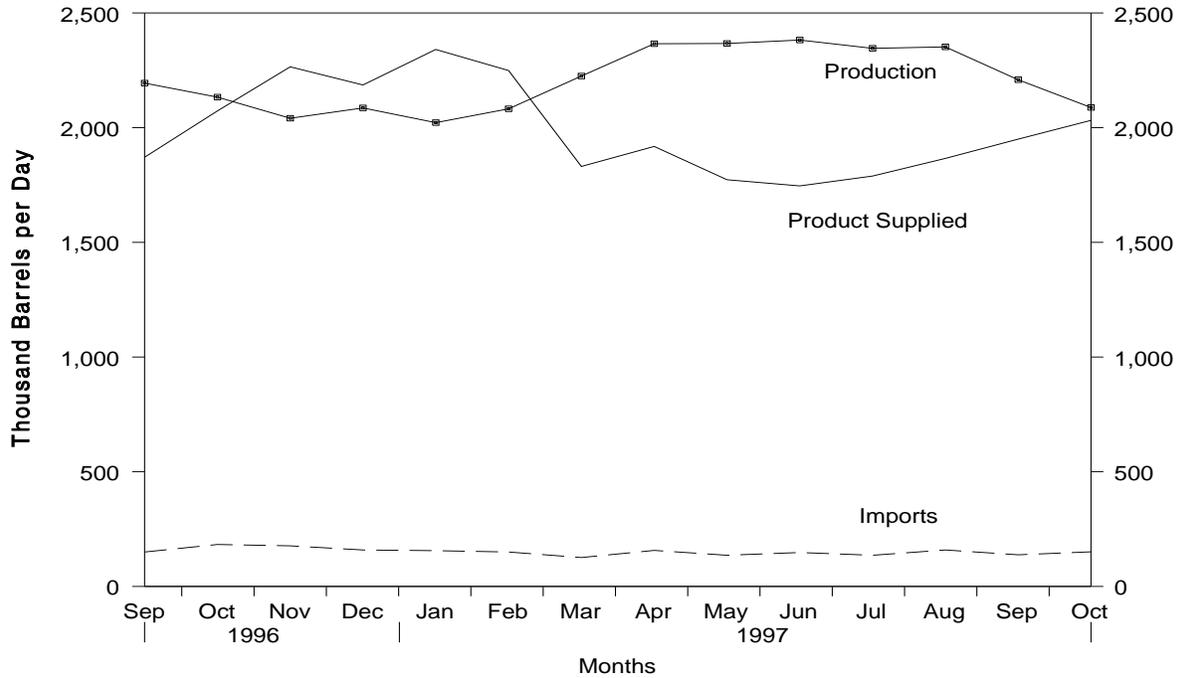
(s) = Less than 500 barrels per day.

-- = Not Applicable.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

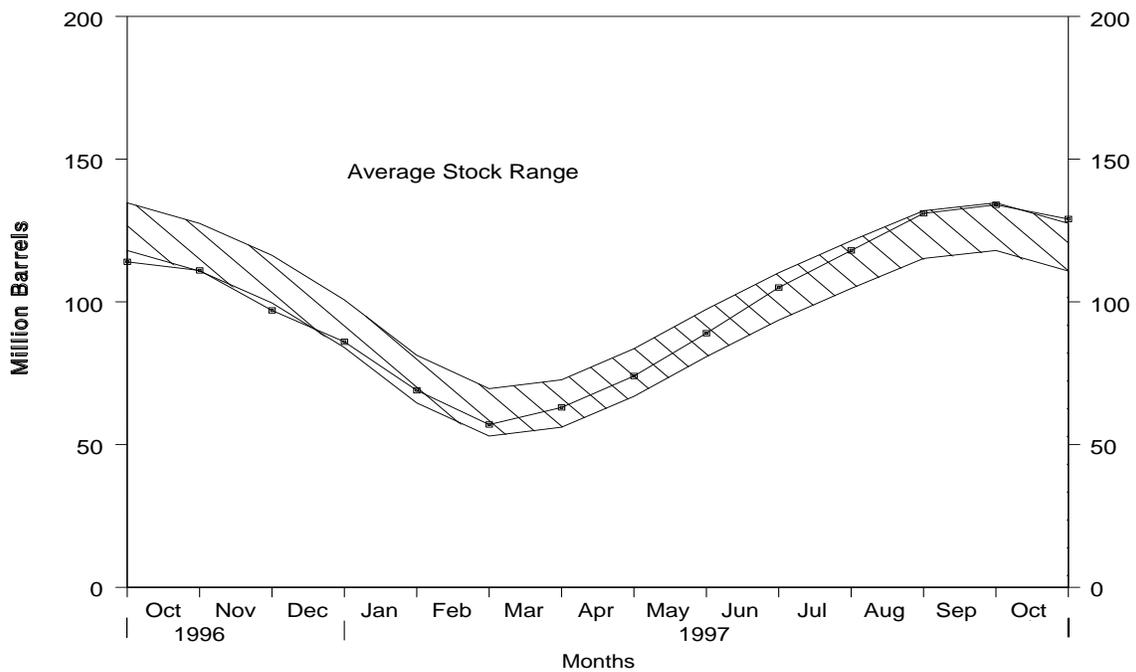
Source: See Summary Statistics Table and Figure Sources.

**Figure S15. Liquefied Petroleum Gases Supply and Disposition, September 1996 - Present**



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S9. See Summary Statistics Table and Figure Sources.

**Figure S16. Liquefied Petroleum Gases Ending Stocks, September 1996 - Present**



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S9. See Summary Statistics Table and Figure Sources.

**Table S9. Liquefied Petroleum Gases Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				Ending Stocks <sup>b</sup> (Million Barrels)
	Total Production	Imports	Stock Change <sup>a</sup>	Refinery Inputs	Exports	Product Supplied	
1981 Average .....	1,571	244	<sup>c</sup> 18	289	42	1,466	135
1982 Average .....	1,528	226	-111	300	65	1,499	<sup>c</sup> 94
1983 Average .....	1,642	190	<sup>c</sup> -4	253	73	1,509	<sup>c</sup> 101
1984 Average .....	1,697	195	<sup>c</sup> -19	291	48	1,572	101
1985 Average .....	1,704	187	-75	304	62	1,599	74
1986 Average .....	1,695	242	80	302	42	1,512	103
1987 Average .....	1,748	190	-15	304	38	1,612	97
1988 Average .....	1,817	209	1	321	49	1,656	97
1989 Average .....	1,791	181	-47	315	35	1,668	80
1990 Average .....	1,749	188	48	293	40	1,556	98
1991 Average .....	1,871	147	-15	304	41	1,689	92
1992 Average .....	1,972	131	-10	309	49	1,755	89
1993 Average .....	1,993	160	49	327	43	1,734	106
1994 Average .....	2,012	183	-19	296	38	1,880	99
1995 January .....	1,952	172	-527	363	64	2,225	83
February .....	1,969	134	-463	306	122	2,138	70
March .....	2,126	111	170	247	57	1,763	75
April .....	2,259	147	307	216	43	1,841	85
May .....	2,269	115	403	211	62	1,709	97
June .....	2,233	174	448	198	55	1,705	111
July .....	2,203	124	488	217	41	1,581	126
August .....	2,178	169	343	217	57	1,730	136
September .....	2,038	195	14	300	29	1,890	137
October .....	1,940	130	-245	358	35	1,921	129
November .....	1,943	115	-500	407	63	2,087	114
December .....	1,865	169	-680	424	67	2,223	93
<b>Average .....</b>	<b>2,082</b>	<b>146</b>	<b>-17</b>	<b>289</b>	<b>58</b>	<b>1,899</b>	<b>--</b>
1996 January .....	1,906	208	-649	419	49	2,295	73
February .....	1,912	138	-596	320	60	2,267	56
March .....	2,181	165	15	246	38	2,047	56
April .....	2,305	122	279	226	56	1,867	65
May .....	2,287	156	315	215	67	1,846	74
June .....	2,285	184	439	211	36	1,783	87
July .....	2,264	182	385	201	72	1,787	99
August .....	2,271	166	321	201	50	1,864	109
September .....	2,194	150	165	260	47	1,871	114
October .....	2,133	183	-103	309	37	2,073	111
November .....	2,041	177	-466	377	41	2,265	97
December .....	2,086	159	-352	355	56	2,186	86
<b>Average .....</b>	<b>2,156</b>	<b>166</b>	<b>-19</b>	<b>278</b>	<b>51</b>	<b>2,012</b>	<b>--</b>
1997 January .....	2,022	156	-555	356	36	2,341	69
February .....	2,082	150	-424	330	78	2,249	57
March .....	2,225	126	206	252	62	1,831	63
April .....	2,366	157	345	218	41	1,918	74
May .....	2,367	136	485	207	40	1,773	89
June .....	2,382	148	531	210	43	1,746	105
July .....	2,346	136	430	206	56	1,789	118
August .....	2,352	159	407	201	37	1,866	131
September .....	2,209	138	110	258	29	1,950	134
October .....	2,088	151	-147	312	42	2,032	129
<b>10-Mo. Average .....</b>	<b>2,245</b>	<b>146</b>	<b>142</b>	<b>255</b>	<b>46</b>	<b>1,947</b>	<b>--</b>
1996 10-Mo. Average .....	2,175	166	59	261	51	1,969	--
1995 10-Mo. Average .....	2,118	147	98	263	56	1,848	--

<sup>a</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>b</sup> Stocks are totals as of end of period.

<sup>c</sup> In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 4.

-- = Not Applicable.

Notes: • Liquefied petroleum gases includes ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. • Beginning in January 1984, unfractionated stream, is reported by individual product. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.

**Table S10. Other Petroleum Products Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				Ending Stocks <sup>b</sup> (Million Barrels)
	Total Production	Imports	Stock Change <sup>a</sup>	Refinery Inputs	Exports	Products Supplied	
1981 Average .....	2,771	188	<sup>c</sup> -42	723	197	2,081	241
1982 Average .....	2,475	305	-68	787	205	1,856	<sup>c</sup> 216
1983 Average .....	2,437	382	<sup>c</sup> -6	712	236	1,877	<sup>c</sup> 217
1984 Average .....	2,500	503	<sup>c</sup> -32	791	236	2,007	198
1985 Average .....	2,532	550	22	886	227	1,947	206
1986 Average .....	2,704	504	-15	888	291	2,045	201
1987 Average .....	2,737	543	-1	829	264	2,187	200
1988 Average .....	2,773	645	22	799	294	2,303	208
1989 Average .....	2,771	627	12	797	305	2,285	213
1990 Average .....	2,842	705	-32	887	289	2,402	201
1991 Average .....	2,826	675	18	936	277	2,269	208
1992 Average .....	2,928	707	-3	906	263	2,470	<sup>c</sup> 207
1993 Average .....	3,035	770	-2	1,081	300	2,426	206
1994 Average .....	2,973	761	<sup>c</sup> 24	861	329	2,518	215
1995 January .....	2,879	559	413	657	324	2,044	227
February .....	2,960	806	271	758	320	2,417	235
March .....	2,842	672	-35	914	329	2,306	234
April .....	2,916	711	-106	1,064	355	2,313	231
May .....	3,009	593	-74	801	339	2,535	229
June .....	3,142	651	-130	917	403	2,604	225
July .....	3,312	765	-54	1,126	326	2,679	223
August .....	3,246	745	-250	1,123	372	2,746	215
September .....	3,256	779	-44	1,077	348	2,654	214
October .....	2,939	727	-120	919	376	2,491	210
November .....	2,918	803	-35	1,003	343	2,409	209
December .....	2,953	701	-97	1,125	341	2,286	206
<b>Average .....</b>	<b>3,031</b>	<b>708</b>	<b>-23</b>	<b>958</b>	<b>348</b>	<b>2,457</b>	<b>--</b>
1996 January .....	2,833	873	448	613	335	2,311	220
February .....	2,817	745	-18	872	388	2,320	219
March .....	2,983	820	122	759	315	2,607	223
April .....	3,108	828	174	841	421	2,500	228
May .....	3,128	852	-45	1,010	427	2,588	227
June .....	3,227	923	-203	1,207	399	2,748	221
July .....	3,223	862	-170	1,131	361	2,764	216
August .....	3,332	907	-311	1,289	448	2,812	206
September .....	3,306	751	-56	1,083	410	2,620	204
October .....	3,146	1,068	-84	1,023	323	2,952	202
November .....	3,093	928	-34	1,113	366	2,576	201
December .....	3,088	982	42	1,224	321	2,485	202
<b>Average .....</b>	<b>3,108</b>	<b>879</b>	<b>-11</b>	<b>1,014</b>	<b>376</b>	<b>2,608</b>	<b>--</b>
1997 January .....	2,963	1,142	341	850	403	2,511	214
February .....	2,990	1,012	213	988	332	2,470	219
March .....	3,103	945	505	718	391	2,434	235
April .....	3,172	1,053	-99	1,240	395	2,689	232
May .....	3,343	1,178	125	1,119	446	2,831	236
June .....	3,391	934	-461	1,395	417	2,976	222
July .....	3,451	892	-193	1,114	380	3,041	216
August .....	3,446	880	-89	1,017	460	2,937	213
September .....	3,434	796	83	853	450	2,843	216
October .....	3,235	957	-86	930	381	2,966	213
<b>10-Mo. Average .....</b>	<b>3,255</b>	<b>979</b>	<b>34</b>	<b>1,021</b>	<b>406</b>	<b>2,772</b>	<b>--</b>
1996 <b>10-Mo. Average .....</b>	<b>3,111</b>	<b>864</b>	<b>-14</b>	<b>983</b>	<b>382</b>	<b>2,624</b>	<b>--</b>
1995 <b>10-Mo. Average .....</b>	<b>3,050</b>	<b>700</b>	<b>-15</b>	<b>937</b>	<b>349</b>	<b>2,479</b>	<b>--</b>

<sup>a</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>b</sup> Stocks are totals as of end of period.

<sup>c</sup> In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. Bulk terminal and pipeline stocks of oxygenates were added beginning in January 1993. See Summary Statistics Explanatory Note 4.

-- = Not Applicable.

Notes: • Other petroleum products includes pentanes plus, other hydrocarbons and oxygenates, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, liquefied petroleum gases, and crude oil product supplied. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.

# Summary Statistics Tables and Figures Sources

Information about petroleum supply and disposition at the National level are presented in the Summary Statistics tables. Industry terminology and product definitions are listed alphabetically in the Glossary.

The data presented in these tables are from several sources and represent different levels of timeliness and data finality.

- U.S. Department of Energy, Energy Information Administration (EIA), *Petroleum Supply Annual* (1981 through 1994).
- EIA, *Petroleum Supply Monthly* (January 1994 through October 1997).
- EIA, Weekly Petroleum Supply Reporting System (except domestic crude oil production) (November 1997). A more detailed explanation is provided in Summary Statistics Explanatory Note 1.
- Domestic crude oil production estimate is based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. (January 1994 through November 1997). Refer to Summary Statistics Explanatory Note 2 for a more detailed explanation.

# Summary Statistics Explanatory Notes

The following explanatory notes are provided to assist in understanding and interpreting the data presented in the Summary Statistics section of this publication.

## Note 1. Preliminary Monthly Statistics Derivation

Data collected from the Weekly Petroleum Supply Reporting System (WPSRS) are used to develop estimates of the most current monthly quantities. The forms that comprise the WPSRS are:

<u>Form Number</u>	<u>Name</u>
EIA-800	“Weekly Refinery Report”
EIA-801	“Weekly Bulk Terminal Report”
EIA-802	“Weekly Product Pipeline Report”
EIA-803	“Weekly Crude Oil Stocks Report”
EIA-804	“Weekly Imports Report”

A sample of all petroleum companies report weekly data to the Energy Information Administration (EIA) on crude oil and petroleum products stocks, refinery inputs and production, and crude oil and petroleum product imports. The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys.

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during a 12-month period. Companies are chosen for the sample beginning with the largest companies with additional companies added until the total sample coverage represents a minimum of 90 percent of each item by geographic region being measured. All monthly-from-weekly estimates are shown in italics.

In calculating monthly estimates based upon weekly submissions, an interpolation process is used to make the weekly figures comparable to the monthly. The interpolation process is designed to resolve the timing differences between the weekly and the monthly systems — the time-of-day of reporting periods and the day-of-month of reporting periods. The end of the weekly reporting period (exactly 1 week long) is 7 a.m. Friday. The end of the monthly reporting period (one calendar month long) is 12 midnight on the last day of the month. To resolve the difference in the time-of-day of the weekly and monthly reporting periods, it is assumed that there is no activity during the period 12 midnight Thursday through

7 a.m. Friday. Thus, for the purposes of interpolation, the weekly system reporting period is assumed to end at 12 midnight on Thursday. The resolution of the day-of-month differences depends on whether the series is a cumulative one (such as production and imports) or a value at a fixed point-in-time (i.e., stocks).

For cumulative items (all items except stocks) the following method is used to calculate a monthly-from-weekly figure for a given month. First, a weight is assigned to each week in the month based on the number of days in that week that are in the month. (All intermediate weeks in a month will have a weight of seven; the beginning and ending weeks in the month may have a weight of less than seven, according to the number of days of the week that are in the month.) The weight for each week is then multiplied by the average daily volume for that week. To arrive at the monthly-from-weekly figure, a sum is taken of these weighted weekly volumes. The daily average for the monthly-from-weekly figure is calculated by dividing the total monthly-from-weekly figure by the number of days in the month.

Stock figures are not cumulative but represent inventories as of the last day of the reporting period. When the reporting week does not coincide with the end of a reporting month, an interpolation is necessary to derive a monthly-from-weekly figure for end-of-month stocks.

To derive the monthly-from-weekly stock figures, the two weekly reports that bracket the end of the month are used. Average daily stock change and the number of interpolated days are determined. The average daily stock change is defined as one-seventh of the difference between the stock level at the end of the last full week of the month and the stock level at the end of the week containing the last day of the month. The number of interpolation days is defined as the number of days between the end of the preceding weekly reporting period (midnight Thursday) and the end of the monthly reporting period. The end-of-month stock levels are then estimated as the sum of (a) the stock level reported the last full week of the month, plus (b) the number of interpolation days multiplied by the average daily stock change for the week.

The monthly-from-weekly exports data are derived from the most recent data published in the *Weekly Petroleum Status Report*. Beginning with statistics for the first week ending in October 1991, weekly estimates of exports are forecast using an autoregressive integrated moving-average (ARIMA) procedure. The ARIMA procedure models a value as a linear combination of its own past values and present and past values of other related time series. The most recent 5 years of

past data are used to obtain the forecast. In addition, for the major products and crude oil, 5 years of related price data are used. The price data include some U.S. and some foreign series.

## Note 2. Domestic Crude Oil Production

The Energy Information Administration (EIA) collects monthly crude oil production data on an ongoing basis. Data on crude oil production for States are reported to the EIA by State government agencies. Data on crude oil production for Federal offshore areas are reported to the EIA by the Minerals Management Service of the U.S. Department of the Interior and the Conservation Committee of California Oil Producers.

Currently, all except four crude oil producing States (Michigan, New York, Ohio, and Pennsylvania) report production on a monthly basis. These four States report crude oil production on an annual basis. Estimates of monthly crude oil production for these four States are made by the EIA using data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report." After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Minerals Management Service, and the Conservation Committee of California Oil Producers. The final estimate is published in the *Petroleum Supply Annual*. There is a time lag of approximately 4 months between the end of the production month and the time when most monthly State crude oil production data become available.

In order to present more timely crude oil production estimates, the EIA prepares an original, forecast estimate on the first day of the production month (indicated with a "PE"). Approximately 45 days later, this original estimate of monthly crude oil production is replaced by State-level interim estimates (indicated with an "RE"). The State-level interim estimates are based on: (a) data reported by the States (e.g., production data for Alaska are typically reported to the EIA before the interim estimate is made); (b) first purchase data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report;" (c) exponential or hyperbolic curve fitted projections based on recent State data; or (d) constant level projections based on the average production rate during a recent time period.

## Note 3. Figures

Figures associated with the Summary Statistics tables are provided which depict the balance between supply, disposition, and ending stocks for various commodities.

The national inventory (stocks) graphs (Figures S4, S6, S8, S10, S12, S14, and S16) for crude oil, finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel,

propane/propylene, and liquefied petroleum gases, in this publication include features to assist in comparing current inventory levels with past inventory levels and observed minimum operating levels. These features are described below.

The graphs displaying inventory levels provide the reader with actual inventory data compared to an *average range* from the most recent 3-year period running from January through December or from July through June. The ranges are updated every 6 months in April and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a 7-year period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the U.S. Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The intent of deseasonalization is to remove only variation from the data. Thus, a deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data.

After seasonal factors are derived, data from the most recent 3-year period (January through December or July through June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36 months is calculated adjusting for extreme data points. The upper curve of the average range is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the average range is twice the standard deviation.

The lines labeled "observed minimum" are the lowest inventory level observed during the most recent 36-month period as published in the *Petroleum Supply Monthly*.

## Note 4. Frames Maintenance

In January 1981 and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock change calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been as listed below.

- Crude Oil: 1982- 645 (Total) and 351 (Other Primary).

- Crude Oil and Petroleum Products: 1980- 1,425; and 1982- 1,461.
- Motor Gasoline: 1980- 263 (Total) and 214 (Finished); 1982- 244 (Total) and 202 (Finished).
- Distillate Fuel Oil: 1980- 205; and 1982- 186.
- Residual Fuel Oil: 1980- 91; and 1982- 69.
- Jet Fuel: 1980- 42 (Total) and 36 (Kerosene-type); and 1982- 39 (Total) and 32 (Kerosene-type).
- Propane/Propylene: 1980- 69; and 1982- 57.
- Liquefied Petroleum Gases: 1980- 128; and 1982-102.
- Other Petroleum Products: 1980- 207; and 1982-219.

Stock change calculations beginning in 1981 and 1983 were made using new basis stock levels.

Stocks of Alaskan crude oil in-transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock change calculations. Using the expanded coverage (new basis), 1980 end-of-year crude oil stocks would have been 488 million barrels (Total) and 380 million barrels (Other Primary).

Beginning with January 1984, natural gas liquids supply and disposition data were collected on a component basis rather than a product basis. This change affected stocks reported

and stock change calculations. Under the new basis, end-of-year 1983 stocks would have been:

- Propane/Propylene: 1983- 55.
- Liquefied Petroleum Gases: 1983- 108.
- Other Petroleum Products: 1983- 210.

In response to changes in the Clean Air Act Amendments of 1990 requiring that all gasoline sold in carbon monoxide nonattainment areas have an oxygen content of 2.7 percent (by weight) during winter months, the Energy Information Administration (EIA) conducted a frame identifier survey in 1991 of companies that produce, blend, store, or import oxygenates. The purpose of this survey was to (1) identify all U.S. producers, blenders, storers, and importers of oxygenates; and (2) collect supply and blending data for 1990 and end of 1990 inventory data on those oxygenates blended into motor gasoline. A summary of the results from the identification survey were published in the *Weekly Petroleum Status Report* dated February 12, 1992 and in the February 1992 issue of the *Petroleum Supply Monthly*.

In order to continue to provide relevant information about U.S. and regional gasoline supply, the EIA conducted a second frame identifier survey of these companies during 1992. As a result, a number of respondents were added to the monthly surveys effective in January 1993: 19 blenders, 25 stock holders, and 8 importers. This change did not affect stocks reported and therefore did not cause a new basis stock level to be calculated.

**Table 1. U.S. Petroleum Balance, October 1997**

Commodity	Current Month		Year to Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
<b>Crude Oil</b>				
Field Production				
(1) Alaska	E 39,869	E 1,286	E 394,622	E 1,298
(2) Lower 48 States	E 159,614	E 5,149	E 1,551,130	E 5,102
(3) <b>Total U.S.</b>	<b>E 199,484</b>	<b>E 6,435</b>	<b>E 1,945,752</b>	<b>E 6,401</b>
Net Imports				
(4) Imports (Gross Excluding Strategic Petroleum Reserve (SPR))	264,847	8,543	2,441,917	8,033
(5) SPR Imports	0	0	0	0
(6) Exports	4,717	152	34,209	113
(7) <b>Imports (Net Including SPR)</b>	<b>260,130</b>	<b>8,391</b>	<b>2,407,708</b>	<b>7,920</b>
Other Sources				
(8) SPR Stock Change (Withdrawal (+), Addition (-))	5	(s)	2,377	8
(9) Other Stock Change (Withdrawal (+), Addition (-))	-12,787	-412	-31,280	-103
(10) Product Supplied and Losses	0	0	-797	-3
(11) Unaccounted for <sup>a</sup>	11,659	376	113,250	373
(12) <b>Total Other Sources</b>	<b>-1,123</b>	<b>-36</b>	<b>83,550</b>	<b>275</b>
(13) <b>Crude Input to Refineries</b>	<b>458,490</b>	<b>14,790</b>	<b>4,437,010</b>	<b>14,595</b>
(13) = (3) + (7) + (12)				
<b>Natural Gas Liquids (NGL)</b>				
(14) Field Production <sup>b</sup>	62,700	2,023	594,913	1,957
(15) Net Imports <sup>c</sup>	1,148	37	8,970	30
(16) Stock Change (Withdrawal (+), Addition (-)) <sup>c</sup>	693	22	-565	-2
(17) <b>Total NGL Supply</b>	<b>64,541</b>	<b>2,082</b>	<b>603,319</b>	<b>1,985</b>
<b>Other Liquids</b>				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Change (Withdrawal (+), Addition (-))	-1,857	-60	-9,402	-31
(19) Net Imports	16,536	533	184,666	607
(20) Other Liquids New Supply (Field Production)	5,080	164	72,207	238
(21) Refinery Processing Gain <sup>a</sup>	28,178	909	254,570	837
(22) Crude Oil Product Supplied	0	0	797	3
(23) <b>Total Other Liquids</b>	<b>47,937</b>	<b>1,546</b>	<b>502,838</b>	<b>1,654</b>
(23) = (18) through (22)				
(24) <b>Total Production of Products</b>	<b>570,968</b>	<b>18,418</b>	<b>5,543,167</b>	<b>18,234</b>
(24) = (13) + (17) + (23)				
<b>Net Imports of Refined Products</b>				
(25) Imports (Gross)	39,578	1,277	396,407	1,304
(26) Exports	27,620	891	256,936	845
(27) <b>Imports (Net)</b>	<b>11,958</b>	<b>386</b>	<b>139,471</b>	<b>459</b>
(28) <b>Total New Supply of Products</b>	<b>582,926</b>	<b>18,804</b>	<b>5,682,637</b>	<b>18,693</b>
(28) = (24) + (27)				
(29) Refined Products Stock Change (Withdrawal (+), Addition (-))	9,817	317	-49,257	-162
(30) <b>Total Petroleum Products Supplied for Domestic Use</b>	<b>592,743</b>	<b>19,121</b>	<b>5,633,380</b>	<b>18,531</b>
(30) = (28) + (29)				
(31) Finished Motor Gasoline	253,156	8,166	2,434,699	8,009
(32) Distillate Fuel Oil	113,429	3,659	1,036,153	3,408
(33) Residual Fuel Oil	22,133	714	242,976	799
(34) Jet Fuel	49,076	1,583	484,002	1,592
(35) Liquefied Petroleum Gases	63,000	2,032	591,996	1,947
(36) Other <sup>d</sup>	91,949	2,966	842,757	2,772
(37) Crude Oil	0	0	797	3
(38) <b>Total Products Supplied</b>	<b>592,743</b>	<b>19,121</b>	<b>5,633,380</b>	<b>18,531</b>
(38) = (31) through (37)				
<b>Ending Stocks, All Oils</b>				
(39) Crude Oil (Excluding SPR)	315,940	--	315,940	--
(40) Strategic Petroleum Reserve	563,439	--	563,439	--
(41) Finished Motor Gasoline	157,984	--	157,984	--
(42) Distillate Fuel Oil	136,155	--	136,155	--
(43) Residual Fuel Oil	35,829	--	35,829	--
(44) Jet Fuel	45,668	--	45,668	--
(45) Liquefied Petroleum Gases	129,388	--	129,388	--
(46) Other <sup>d</sup>	213,247	--	213,247	--
(47) <b>Total Stocks</b>	<b>1,597,650</b>	<b>--</b>	<b>1,597,650</b>	<b>--</b>
(47) = (39) through (46)				

<sup>a</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Refinery processing gain represents the volumetric amount by which total output is greater than input for a given period of time. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50 thousand barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

<sup>b</sup> Includes field production of fuel ethanol and an adjustment for motor gasoline blending components.

<sup>c</sup> Includes products in the pentanes plus category only.

<sup>d</sup> Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, and liquefied petroleum gases.

E = Estimated.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA), Monthly Petroleum Supply Reporting System. • Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 2. U.S. Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products,  
October 1997**  
(Thousand Barrels)

Commodity	Supply				Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil <sup>a</sup>	Stock Change <sup>b</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>c</sup>	
<b>Crude Oil</b> .....	E 199,484	--	264,847	11,659	12,782	0	458,490	4,717	0	879,379
<b>Natural Gas Liquids and LRGs</b> .....	57,027	18,090	5,868	--	-5,262	--	14,972	1,321	69,954	136,318
Pentanes Plus .....	10,402	--	1,179	--	-693	--	5,289	31	6,954	6,930
Liquefied Petroleum Gases .....	46,625	18,090	4,689	--	-4,569	--	9,683	1,290	63,000	129,388
Ethane/Ethylene .....	19,511	707	445	--	-322	--	0	0	20,985	24,031
Propane/Propylene .....	16,348	18,087	3,430	--	216	--	0	910	36,739	61,290
Normal Butane/Butylene .....	4,681	-994	487	--	-3,798	--	5,918	380	1,674	34,897
Isobutane/Isobutylene .....	6,085	290	327	--	-665	--	3,765	0	3,602	9,170
<b>Other Liquids</b> .....	5,080	--	17,227	--	1,857	--	23,539	691	-3,780	149,181
Other Hydrocarbons/Oxygenates .....	8,555	--	1,658	--	-1,068	--	10,934	347	0	11,755
Unfinished Oils .....	--	--	11,575	--	1,652	--	13,839	0	-3,916	95,274
Motor Gasoline Blend. Comp. ....	-3,475	--	3,994	--	1,201	--	-1,026	344	0	41,934
Aviation Gasoline Blend. Comp. ....	--	--	0	--	72	--	-208	0	136	218
<b>Finished Petroleum Products</b> .....	5,673	507,089	34,889	--	-5,248	--	--	26,330	526,569	432,772
Finished Motor Gasoline .....	5,673	243,537	9,581	--	-121	--	--	5,756	253,156	157,984
Reformulated .....	--	76,227	4,992	--	-241	--	--	0	81,460	40,891
Oxygenated .....	21,980	2,957	0	--	241	--	--	46	24,650	1,254
Other .....	-16,307	164,353	4,589	--	-121	--	--	5,710	147,046	115,839
Finished Aviation Gasoline .....	--	787	0	--	75	--	--	0	712	1,698
Jet Fuel .....	--	48,573	2,559	--	814	--	--	1,242	49,076	45,668
Naphtha-Type .....	--	13	0	--	3	--	--	28	-18	21
Kerosene-Type .....	--	48,560	2,559	--	811	--	--	1,214	49,094	45,647
Kerosene .....	--	1,938	25	--	406	--	--	10	1,547	7,453
Distillate Fuel Oil .....	--	108,138	6,611	--	-2,789	--	--	4,109	113,429	136,155
0.05 percent sulfur and under .....	--	68,969	3,211	--	-6,342	--	--	750	77,772	63,610
Greater than 0.05 percent sulfur .....	--	39,169	3,400	--	3,553	--	--	3,359	35,657	72,545
Residual Fuel Oil .....	--	22,038	4,890	--	671	--	--	4,124	22,133	35,829
Naphtha For Petro. Feed. Use .....	--	7,641	1,828	--	359	--	--	0	9,110	2,686
Other Oils For Petro. Feed. Use .....	--	6,193	7,860	--	67	--	--	0	13,986	2,002
Special Naphthas .....	--	1,560	137	--	168	--	--	298	1,231	2,214
Lubricants .....	--	5,683	526	--	-592	--	--	1,071	5,730	11,726
Waxes .....	--	760	33	--	-123	--	--	91	825	985
Petroleum Coke .....	--	21,782	0	--	-282	--	--	9,475	12,589	9,724
Asphalt and Road Oil .....	--	16,160	823	--	-3,853	--	--	146	20,690	16,950
Still Gas .....	--	20,757	0	--	0	--	--	0	20,757	0
Miscellaneous Products .....	--	1,542	16	--	-48	--	--	7	1,599	1,698
<b>Total</b> .....	267,264	525,179	322,831	11,659	4,129	0	497,001	33,059	592,743	1,597,650

<sup>a</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50,000 barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>c</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.

(s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 3. U.S. Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels)

Commodity	Supply				Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil <sup>a</sup>	Stock Change <sup>b</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>c</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 1,945,752	--	2,441,917	113,250	28,903	0	4,437,010	34,209	797	879,379
<b>Natural Gas Liquids and LRGs</b> .....	563,958	219,952	55,567	--	43,848	--	127,817	16,294	651,518	136,318
Pentanes Plus .....	101,508	--	11,293	--	565	--	50,391	2,323	59,522	6,930
Liquefied Petroleum Gases .....	462,450	219,952	44,274	--	43,283	--	77,426	13,971	591,996	129,388
Ethane/Ethylene .....	196,352	7,598	5,039	--	6,512	--	0	0	202,477	24,031
Propane/Propylene .....	161,138	169,861	27,878	--	18,389	--	0	8,786	331,702	61,290
Normal Butane/Butylene .....	46,102	38,451	6,115	--	16,906	--	38,502	5,186	30,074	34,897
Isobutane/Isobutylene .....	58,858	4,042	5,242	--	1,476	--	38,924	0	27,742	9,170
<b>Other Liquids</b> .....	72,207	--	192,256	--	9,402	--	260,126	7,590	-12,655	149,181
Other Hydrocarbons/Oxygenates .....	88,690	--	17,497	--	-1,376	--	104,039	3,524	0	11,755
Unfinished Oils .....	--	--	107,627	--	6,917	--	114,778	0	-14,068	95,274
Motor Gasoline Blend. Comp. ....	-16,483	--	67,132	--	3,897	--	42,686	4,066	0	41,934
Aviation Gasoline Blend. Comp. ....	--	--	0	--	-36	--	-1,377	0	1,413	218
<b>Finished Petroleum Products</b> .....	30,955	4,859,571	352,133	--	5,974	--	--	242,965	4,993,720	432,772
Finished Motor Gasoline .....	30,955	2,346,672	96,548	--	508	--	--	38,968	2,434,699	157,984
Reformulated .....	--	729,799	47,609	--	2,966	--	--	79	774,363	40,891
Oxygenated .....	144,720	26,255	0	--	-333	--	--	270	171,038	1,254
Other .....	-113,765	1,590,618	48,939	--	-2,125	--	--	38,619	1,489,298	115,839
Finished Aviation Gasoline .....	--	6,355	38	--	-574	--	--	0	6,967	1,698
Jet Fuel .....	--	468,623	30,078	--	5,698	--	--	9,001	484,002	45,668
Naphtha-Type .....	--	198	0	--	-296	--	--	69	425	21
Kerosene-Type .....	--	468,425	30,078	--	5,994	--	--	8,932	483,577	45,647
Kerosene .....	--	17,847	461	--	358	--	--	103	17,847	7,453
Distillate Fuel Oil .....	--	1,019,848	70,687	--	9,300	--	--	45,082	1,036,153	136,155
0.05 percent sulfur and under .....	--	648,485	33,302	--	-4,924	--	--	11,585	675,126	63,610
Greater than 0.05 percent sulfur .....	--	371,363	37,385	--	14,224	--	--	33,497	361,027	72,545
Residual Fuel Oil .....	--	208,719	60,764	--	-9,882	--	--	36,389	242,976	35,829
Naphtha For Petro. Feed. Use .....	--	69,761	16,795	--	913	--	--	0	85,643	2,686
Other Oils For Petro. Feed. Use .....	--	67,291	60,041	--	575	--	--	0	126,757	2,002
Special Naphthas .....	--	15,341	2,336	--	319	--	--	5,963	11,395	2,214
Lubricants .....	--	54,847	3,221	--	-948	--	--	9,405	49,611	11,726
Waxes .....	--	8,052	380	--	85	--	--	848	7,499	985
Petroleum Coke .....	--	209,791	263	--	2,747	--	--	94,822	112,485	9,724
Asphalt and Road Oil .....	--	150,513	10,402	--	-3,533	--	--	2,272	162,176	16,950
Still Gas .....	--	201,600	0	--	0	--	--	0	201,600	0
Miscellaneous Products .....	--	14,311	119	--	408	--	--	113	13,909	1,698
<b>Total</b> .....	<b>2,612,872</b>	<b>5,079,523</b>	<b>3,041,873</b>	<b>113,250</b>	<b>88,127</b>	<b>0</b>	<b>4,824,953</b>	<b>301,058</b>	<b>5,633,380</b>	<b>1,597,650</b>

<sup>a</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50,000 barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>c</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.

(s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 4. U.S. Daily Average Supply and Disposition of Crude Oil and Petroleum Products,  
October 1997**  
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil <sup>a</sup>	Stock Change <sup>b</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>c</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 6,435	--	8,543	376	412	0	14,790	152	0
<b>Natural Gas Liquids and LRGs</b> .....	1,840	584	189	--	-170	--	483	43	2,257
Pentanes Plus .....	336	--	38	--	-22	--	171	1	224
Liquefied Petroleum Gases .....	1,504	584	151	--	-147	--	312	42	2,032
Ethane/Ethylene .....	629	23	14	--	-10	--	0	0	677
Propane/Propylene .....	527	583	111	--	7	--	0	29	1,185
Normal Butane/Butylene .....	151	-32	16	--	-123	--	191	12	54
Isobutane/Isobutylene .....	196	9	11	--	-21	--	121	0	116
<b>Other Liquids</b> .....	164	--	556	--	60	--	759	22	-122
Other Hydrocarbons/Oxygenates .....	276	--	53	--	-34	--	353	11	0
Unfinished Oils .....	--	--	373	--	53	--	446	0	-126
Motor Gasoline Blend. Comp. ....	-112	--	129	--	39	--	-33	11	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	2	--	-7	0	4
<b>Finished Petroleum Products</b> .....	183	16,358	1,125	--	-169	--	--	849	16,986
Finished Motor Gasoline .....	183	7,856	309	--	-4	--	--	186	8,166
Reformulated .....	--	2,459	161	--	-8	--	--	0	2,628
Oxygenated .....	709	95	0	--	8	--	--	1	795
Other .....	-526	5,302	148	--	-4	--	--	184	4,743
Finished Aviation Gasoline .....	--	25	0	--	2	--	--	0	23
Jet Fuel .....	--	1,567	83	--	26	--	--	40	1,583
Naphtha-Type .....	--	(s)	0	--	(s)	--	--	1	-1
Kerosene-Type .....	--	1,566	83	--	26	--	--	39	1,584
Kerosene .....	--	63	1	--	13	--	--	(s)	50
Distillate Fuel Oil .....	--	3,488	213	--	-90	--	--	133	3,659
0.05 percent sulfur and under .....	--	2,225	104	--	-205	--	--	24	2,509
Greater than 0.05 percent sulfur ...	--	1,264	110	--	115	--	--	108	1,150
Residual Fuel Oil .....	--	711	158	--	22	--	--	133	714
Naphtha For Petro. Feed. Use .....	--	246	59	--	12	--	--	0	294
Other Oils For Petro. Feed. Use .....	--	200	254	--	2	--	--	0	451
Special Naphthas .....	--	50	4	--	5	--	--	10	40
Lubricants .....	--	183	17	--	-19	--	--	35	185
Waxes .....	--	25	1	--	-4	--	--	3	27
Petroleum Coke .....	--	703	0	--	-9	--	--	306	406
Asphalt and Road Oil .....	--	521	27	--	-124	--	--	5	667
Still Gas .....	--	670	0	--	0	--	--	0	670
Miscellaneous Products .....	--	50	1	--	-2	--	--	(s)	52
<b>Total</b> .....	<b>8,621</b>	<b>16,941</b>	<b>10,414</b>	<b>376</b>	<b>133</b>	<b>0</b>	<b>16,032</b>	<b>1,066</b>	<b>19,121</b>

<sup>a</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50,000 barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>c</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.

(s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 5. U.S. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil <sup>a</sup>	Stock Change <sup>b</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>c</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 6,401	--	8,033	373	95	0	14,595	113	3
<b>Natural Gas Liquids and LRGs</b> .....	1,855	724	183	--	144	--	420	54	2,143
Pentanes Plus .....	334	--	37	--	2	--	166	8	196
Liquefied Petroleum Gases .....	1,521	724	146	--	142	--	255	46	1,947
Ethane/Ethylene .....	646	25	17	--	21	--	0	0	666
Propane/Propylene .....	530	559	92	--	60	--	0	29	1,091
Normal Butane/Butylene .....	152	126	20	--	56	--	127	17	99
Isobutane/Isobutylene .....	194	13	17	--	5	--	128	0	91
<b>Other Liquids</b> .....	238	--	632	--	31	--	856	25	-42
Other Hydrocarbons/Oxygenates .....	292	--	58	--	-5	--	342	12	0
Unfinished Oils .....	--	--	354	--	23	--	378	0	-46
Motor Gasoline Blend. Comp. ....	-54	--	221	--	13	--	140	13	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	(s)	--	-5	0	5
<b>Finished Petroleum Products</b> .....	102	15,985	1,158	--	20	--	--	799	16,427
Finished Motor Gasoline .....	102	7,719	318	--	2	--	--	128	8,009
Reformulated .....	--	2,401	157	--	10	--	--	(s)	2,547
Oxygenated .....	476	86	0	--	-1	--	--	1	563
Other .....	-374	5,232	161	--	-7	--	--	127	4,899
Finished Aviation Gasoline .....	--	21	(s)	--	-2	--	--	0	23
Jet Fuel .....	--	1,542	99	--	19	--	--	30	1,592
Naphtha-Type .....	--	1	0	--	-1	--	--	(s)	1
Kerosene-Type .....	--	1,541	99	--	20	--	--	29	1,591
Kerosene .....	--	59	2	--	1	--	--	(s)	59
Distillate Fuel Oil .....	--	3,355	233	--	31	--	--	148	3,408
0.05 percent sulfur and under .....	--	2,133	110	--	-16	--	--	38	2,221
Greater than 0.05 percent sulfur ...	--	1,222	123	--	47	--	--	110	1,188
Residual Fuel Oil .....	--	687	200	--	-33	--	--	120	799
Naphtha For Petro. Feed. Use .....	--	229	55	--	3	--	--	0	282
Other Oils For Petro. Feed. Use .....	--	221	198	--	2	--	--	0	417
Special Naphthas .....	--	50	8	--	1	--	--	20	37
Lubricants .....	--	180	11	--	-3	--	--	31	163
Waxes .....	--	26	1	--	(s)	--	--	3	25
Petroleum Coke .....	--	690	1	--	9	--	--	312	370
Asphalt and Road Oil .....	--	495	34	--	-12	--	--	7	533
Still Gas .....	--	663	0	--	0	--	--	0	663
Miscellaneous Products .....	--	47	(s)	--	1	--	--	(s)	46
<b>Total</b> .....	<b>8,595</b>	<b>16,709</b>	<b>10,006</b>	<b>373</b>	<b>290</b>	<b>0</b>	<b>15,872</b>	<b>990</b>	<b>18,531</b>

<sup>a</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Preliminary estimates of crude oil imports at the National level have historically understated final values by approximately 50,000 barrels per day. This causes the preliminary values of unaccounted for crude oil to overstate the final values by the same amount.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>c</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.

(s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 6. PAD District I—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 822	--	47,880	773	-241	-480	0	49,714	0	0	<b>15,394</b>
<b>Natural Gas Liquids and LRGs</b> .....	<b>842</b>	<b>811</b>	<b>900</b>	--	<b>3,966</b>	<b>851</b>	--	<b>110</b>	<b>46</b>	<b>5,512</b>	<b>8,177</b>
Pentanes Plus .....	92	--	0	--	0	-6	--	0	2	96	20
Liquefied Petroleum Gases .....	750	811	900	--	3,966	857	--	110	45	5,415	8,157
Ethane/Ethylene .....	268	0	0	--	0	-1	--	0	0	269	0
Propane/Propylene .....	332	1,561	867	--	3,682	854	--	0	42	5,546	5,527
Normal Butane/Butylene .....	111	-683	19	--	284	3	--	58	2	-332	2,261
Isobutane/Isobutylene .....	39	-67	14	--	0	1	--	52	0	-67	369
<b>Other Liquids</b> .....	<b>1,586</b>	--	<b>4,699</b>	--	<b>334</b>	<b>2,032</b>	--	<b>6,606</b>	<b>48</b>	<b>-2,067</b>	<b>22,054</b>
Other Hydrocarbons/Oxygenates ...	1,881	--	465	--	0	-44	--	2,386	4	0	2,321
Unfinished Oils .....	--	--	703	--	9	1,181	--	1,734	0	-2,203	12,157
Motor Gasoline Blend. Comp. ....	-295	--	3,531	--	325	831	--	2,686	44	0	7,412
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	64	--	-200	0	136	164
<b>Finished Petroleum Products</b> .....	<b>493</b>	<b>57,818</b>	<b>23,461</b>	--	<b>92,807</b>	<b>4,809</b>	--	--	<b>1,685</b>	<b>168,085</b>	<b>154,353</b>
Finished Motor Gasoline .....	493	29,036	8,590	--	54,793	1,251	--	--	317	91,344	49,369
Reformulated .....	--	19,637	4,892	--	11,603	973	--	--	0	35,159	19,718
Oxygenated .....	1,978	0	0	--	164	99	--	--	0	2,043	304
Other .....	-1,485	9,399	3,698	--	43,026	179	--	--	317	54,141	29,347
Finished Aviation Gasoline .....	--	12	0	--	69	11	--	--	0	70	251
Jet Fuel .....	--	3,491	2,262	--	14,181	877	--	--	8	19,049	13,198
Naphtha-Type .....	--	0	0	--	0	0	--	--	3	-3	0
Kerosene-Type .....	--	3,491	2,262	--	14,181	877	--	--	5	19,052	13,198
Kerosene .....	--	345	25	--	178	419	--	--	1	128	4,349
Distillate Fuel Oil .....	--	12,898	6,180	--	20,523	3,560	--	--	173	35,868	64,754
0.05 percent sulfur and under ....	--	5,308	3,055	--	12,693	551	--	--	6	20,499	18,694
Greater than 0.05 percent sulfur	--	7,590	3,125	--	7,830	3,009	--	--	167	15,369	46,060
Residual Fuel Oil .....	--	4,037	4,890	--	1,705	-174	--	--	232	10,574	14,816
Petrochemical Feedstocks <sup>e</sup> .....	--	428	181	--	0	-95	--	--	0	704	473
Special Naphthas .....	--	47	105	--	61	11	--	--	13	189	122
Lubricants .....	--	525	457	--	736	34	--	--	177	1,507	2,393
Waxes .....	--	139	21	--	0	-21	--	--	35	146	177
Petroleum Coke .....	--	1,537	0	--	0	-42	--	--	701	878	449
Asphalt and Road Oil .....	--	3,393	750	--	561	-992	--	--	24	5,672	3,921
Still Gas .....	--	1,883	0	--	0	0	--	--	0	1,883	0
Miscellaneous Products .....	--	47	0	--	0	-30	--	--	4	73	81
<b>Total</b> .....	<b>3,743</b>	<b>58,629</b>	<b>76,940</b>	<b>773</b>	<b>96,866</b>	<b>7,212</b>	<b>0</b>	<b>56,430</b>	<b>1,779</b>	<b>171,529</b>	<b>199,978</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 7. PAD District I—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 8,146	--	440,363	8,546	-3,767	1,857	0	451,431	(s)	0	15,394
<b>Natural Gas Liquids and LRGs</b> .....	7,838	15,920	6,379	--	32,005	2,138	--	1,139	704	58,161	8,177
Pentanes Plus .....	844	--	0	--	0	-10	--	0	23	831	20
Liquefied Petroleum Gases .....	6,994	15,920	6,379	--	32,005	2,148	--	1,139	682	57,329	8,157
Ethane/Ethylene .....	2,416	0	0	--	0	-1	--	0	0	2,417	0
Propane/Propylene .....	3,110	15,354	6,201	--	31,174	649	--	0	415	54,775	5,527
Normal Butane/Butylene .....	1,099	1,137	103	--	570	1,314	--	442	267	886	2,261
Isobutane/Isobutylene .....	369	-571	75	--	261	186	--	697	0	-749	369
<b>Other Liquids</b> .....	8,012	--	79,083	--	5,403	3,750	--	107,097	290	-18,639	22,054
Other Hydrocarbons/Oxygenates .....	16,772	--	4,067	--	0	479	--	20,332	28	0	2,321
Unfinished Oils .....	--	--	10,689	--	-43	2,392	--	28,304	0	-20,050	12,157
Motor Gasoline Blend. Comp. ....	-8,760	--	64,327	--	5,446	908	--	59,843	262	0	7,412
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	-29	--	-1,382	0	1,411	164
<b>Finished Petroleum Products</b> .....	9,825	563,395	254,684	--	823,889	18,370	--	--	9,580	1,623,842	154,353
Finished Motor Gasoline .....	9,825	294,430	91,569	--	464,752	4,354	--	--	737	855,485	49,369
Reformulated .....	--	188,592	45,699	--	97,822	2,465	--	--	(s)	329,648	19,718
Oxygenated .....	10,646	8	0	--	1,274	-54	--	--	1	11,981	304
Other .....	-822	105,830	45,870	--	365,656	1,943	--	--	735	513,856	29,347
Finished Aviation Gasoline .....	--	37	3	--	675	-566	--	--	0	1,281	251
Jet Fuel .....	--	27,924	28,148	--	130,402	3,581	--	--	337	182,556	13,198
Naphtha-Type .....	--	0	0	--	0	0	--	--	25	-25	0
Kerosene-Type .....	--	27,924	28,148	--	130,402	3,581	--	--	312	182,581	13,198
Kerosene .....	--	2,238	386	--	2,036	-184	--	--	13	4,831	4,349
Distillate Fuel Oil .....	--	129,136	64,424	--	200,650	17,364	--	--	2,086	374,760	64,754
0.05 percent sulfur and under .....	--	44,501	30,166	--	118,079	-385	--	--	184	192,947	18,694
Greater than 0.05 percent sulfur ...	--	84,635	34,258	--	82,571	17,749	--	--	1,903	181,812	46,060
Residual Fuel Oil .....	--	37,166	53,889	--	13,747	-6,964	--	--	868	110,898	14,816
Petrochemical Feedstocks <sup>e</sup> .....	--	4,676	1,748	--	0	92	--	--	0	6,332	473
Special Naphthas .....	--	575	1,758	--	930	4	--	--	129	3,130	122
Lubricants .....	--	5,737	2,894	--	6,805	-26	--	--	1,449	14,013	2,393
Waxes .....	--	1,460	218	--	0	-35	--	--	258	1,455	177
Petroleum Coke .....	--	15,325	0	--	0	-24	--	--	3,470	11,879	449
Asphalt and Road Oil .....	--	25,891	9,631	--	3,892	797	--	--	189	38,428	3,921
Still Gas .....	--	18,161	0	--	0	0	--	--	0	18,161	0
Miscellaneous Products .....	--	639	16	--	0	-23	--	--	44	634	81
<b>Total</b> .....	<b>33,821</b>	<b>579,315</b>	<b>780,509</b>	<b>8,546</b>	<b>857,530</b>	<b>26,115</b>	<b>0</b>	<b>559,667</b>	<b>10,575</b>	<b>1,663,364</b>	<b>199,978</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 8. PAD District I—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 27	--	1,545	25	-8	-15	0	1,604	0	0
<b>Natural Gas Liquids and LRGs</b> .....	27	26	29	--	128	27	--	4	1	178
Pentanes Plus .....	3	--	0	--	0	(s)	--	0	(s)	3
Liquefied Petroleum Gases .....	24	26	29	--	128	28	--	4	1	175
Ethane/Ethylene .....	9	0	0	--	0	(s)	--	0	0	9
Propane/Propylene .....	11	50	28	--	119	28	--	0	1	179
Normal Butane/Butylene .....	4	-22	1	--	9	(s)	--	2	(s)	-11
Isobutane/Isobutylene .....	1	-2	(s)	--	0	(s)	--	2	0	-2
<b>Other Liquids</b> .....	51	--	152	--	11	66	--	213	2	-67
Other Hydrocarbons/Oxygenates .....	61	--	15	--	0	-1	--	77	(s)	0
Unfinished Oils .....	--	--	23	--	(s)	38	--	56	0	-71
Motor Gasoline Blend. Comp. ....	-10	--	114	--	10	27	--	87	1	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	2	--	-6	0	4
<b>Finished Petroleum Products</b> .....	16	1,865	757	--	2,994	155	--	--	54	5,422
Finished Motor Gasoline .....	16	937	277	--	1,768	40	--	--	10	2,947
Reformulated .....	--	633	158	--	374	31	--	--	0	1,134
Oxygenated .....	64	0	0	--	5	3	--	--	0	66
Other .....	-48	303	119	--	1,388	6	--	--	10	1,746
Finished Aviation Gasoline .....	--	(s)	0	--	2	(s)	--	--	0	2
Jet Fuel .....	--	113	73	--	457	28	--	--	(s)	614
Naphtha-Type .....	--	0	0	--	0	0	--	--	(s)	(s)
Kerosene-Type .....	--	113	73	--	457	28	--	--	(s)	615
Kerosene .....	--	11	1	--	6	14	--	--	(s)	4
Distillate Fuel Oil .....	--	416	199	--	662	115	--	--	6	1,157
0.05 percent sulfur and under .....	--	171	99	--	409	18	--	--	(s)	661
Greater than 0.05 percent sulfur ...	--	245	101	--	253	97	--	--	5	496
Residual Fuel Oil .....	--	130	158	--	55	-6	--	--	7	341
Petrochemical Feedstocks <sup>e</sup> .....	--	14	6	--	0	-3	--	--	0	23
Special Naphthas .....	--	2	3	--	2	(s)	--	--	(s)	6
Lubricants .....	--	17	15	--	24	1	--	--	6	49
Waxes .....	--	4	1	--	0	-1	--	--	1	5
Petroleum Coke .....	--	50	0	--	0	-1	--	--	23	28
Asphalt and Road Oil .....	--	109	24	--	18	-32	--	--	1	183
Still Gas .....	--	61	0	--	0	0	--	--	0	61
Miscellaneous Products .....	--	2	0	--	0	-1	--	--	(s)	2
<b>Total</b> .....	121	1,891	2,482	25	3,125	233	0	1,820	57	5,533

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 9. PAD District I—Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 27	--	1,449	28	-12	6	0	1,485	(s)	0
<b>Natural Gas Liquids and LRGs</b> .....	26	52	21	--	105	7	--	4	2	191
Pentanes Plus .....	3	--	0	--	0	(s)	--	0	(s)	3
Liquefied Petroleum Gases .....	23	52	21	--	105	7	--	4	2	189
Ethane/Ethylene .....	8	0	0	--	0	(s)	--	0	0	8
Propane/Propylene .....	10	51	20	--	103	2	--	0	1	180
Normal Butane/Butylene .....	4	4	(s)	--	2	4	--	1	1	3
Isobutane/Isobutylene .....	1	-2	(s)	--	1	1	--	2	0	-2
<b>Other Liquids</b> .....	26	--	260	--	18	12	--	352	1	-61
Other Hydrocarbons/Oxygenates ....	55	--	13	--	0	2	--	67	(s)	0
Unfinished Oils .....	--	--	35	--	(s)	8	--	93	0	-66
Motor Gasoline Blend. Comp. ....	-29	--	212	--	18	3	--	197	1	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	-5	0	5
<b>Finished Petroleum Products</b> .....	32	1,853	838	--	2,710	60	--	--	32	5,342
Finished Motor Gasoline .....	32	969	301	--	1,529	14	--	--	2	2,814
Reformulated .....	--	620	150	--	322	8	--	--	(s)	1,084
Oxygenated .....	35	(s)	0	--	4	(s)	--	--	(s)	39
Other .....	-3	348	151	--	1,203	6	--	--	2	1,690
Finished Aviation Gasoline .....	--	(s)	(s)	--	2	-2	--	--	0	4
Jet Fuel .....	--	92	93	--	429	12	--	--	1	601
Naphtha-Type .....	--	0	0	--	0	0	--	--	(s)	(s)
Kerosene-Type .....	--	92	93	--	429	12	--	--	1	601
Kerosene .....	--	7	1	--	7	-1	--	--	(s)	16
Distillate Fuel Oil .....	--	425	212	--	660	57	--	--	7	1,233
0.05 percent sulfur and under .....	--	146	99	--	388	-1	--	--	1	635
Greater than 0.05 percent sulfur ...	--	278	113	--	272	58	--	--	6	598
Residual Fuel Oil .....	--	122	177	--	45	-23	--	--	3	365
Petrochemical Feedstocks <sup>e</sup> .....	--	15	6	--	0	(s)	--	--	0	21
Special Naphthas .....	--	2	6	--	3	(s)	--	--	(s)	10
Lubricants .....	--	19	10	--	22	(s)	--	--	5	46
Waxes .....	--	5	1	--	0	(s)	--	--	1	5
Petroleum Coke .....	--	50	0	--	0	(s)	--	--	11	39
Asphalt and Road Oil .....	--	85	32	--	13	3	--	--	1	126
Still Gas .....	--	60	0	--	0	0	--	--	0	60
Miscellaneous Products .....	--	2	(s)	--	0	(s)	--	--	(s)	2
<b>Total</b> .....	111	1,906	2,567	28	2,821	86	0	1,841	35	5,472

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.  
<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.  
<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.  
<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.  
<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.  
(s) = Less than 500 barrels per day.  
E = Estimated.  
LRG = Liquefied Refinery Gas.  
-- = Not Applicable.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 10. PAD District II—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 17,716	--	23,571	3,746	63,470	2,747	0	104,453	1,303	0	74,441
<b>Natural Gas Liquids and LRGs</b> .....	8,929	2,939	2,106	--	683	-3,981	--	3,260	99	15,279	40,568
Pentanes Plus .....	1,321	--	54	--	858	-344	--	963	29	1,585	2,365
Liquefied Petroleum Gases .....	7,608	2,939	2,052	--	-175	-3,637	--	2,297	69	13,695	38,203
Ethane/Ethylene .....	2,664	0	11	--	-1,567	-153	--	0	0	1,261	3,365
Propane/Propylene .....	3,252	3,697	1,762	--	994	-2,257	--	0	44	11,918	24,623
Normal Butane/Butylene .....	1,177	-812	112	--	140	-859	--	1,394	25	57	8,132
Isobutane/Isobutylene .....	515	54	167	--	258	-368	--	903	0	459	2,083
<b>Other Liquids</b> .....	-2,546	--	4	--	1,668	487	--	-919	1	-443	26,763
Other Hydrocarbons/Oxygenates .....	893	--	0	--	0	-180	--	1,072	1	0	2,168
Unfinished Oils .....	--	--	2	--	37	638	--	-156	0	-443	13,939
Motor Gasoline Blend. Comp. ....	-3,439	--	2	--	1,631	21	--	-1,827	(s)	0	10,635
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	8	--	-8	0	0	21
<b>Finished Petroleum Products</b> .....	4,912	109,680	349	--	26,299	-6,616	--	--	368	147,487	93,730
Finished Motor Gasoline .....	4,912	56,194	60	--	15,083	-1,297	--	--	131	77,414	39,060
Reformulated .....	--	7,013	0	--	511	-145	--	--	0	7,669	1,142
Oxygenated .....	14,727	2,034	0	--	-179	68	--	--	1	16,513	708
Other .....	-9,815	47,147	60	--	14,751	-1,220	--	--	130	53,233	37,210
Finished Aviation Gasoline .....	--	138	0	--	138	38	--	--	0	238	338
Jet Fuel .....	--	6,692	0	--	3,643	-374	--	--	(s)	10,709	8,987
Naphtha-Type .....	--	0	0	--	0	0	--	--	0	0	0
Kerosene-Type .....	--	6,692	0	--	3,643	-374	--	--	(s)	10,709	8,987
Kerosene .....	--	606	0	--	69	241	--	--	4	430	1,502
Distillate Fuel Oil .....	--	26,876	133	--	7,094	-3,905	--	--	2	38,006	28,245
0.05 percent sulfur and under .....	--	19,529	103	--	6,094	-2,803	--	--	(s)	28,529	19,874
Greater than 0.05 percent sulfur ...	--	7,347	30	--	1,000	-1,102	--	--	1	9,478	8,371
Residual Fuel Oil .....	--	1,649	0	--	-208	-89	--	--	21	1,509	2,422
Petrochemical Feedstocks <sup>e</sup> .....	--	1,356	37	--	41	186	--	--	0	1,248	418
Special Naphthas .....	--	655	31	--	90	181	--	--	7	588	394
Lubricants .....	--	792	22	--	228	-10	--	--	60	992	1,563
Waxes .....	--	112	12	--	0	-18	--	--	21	121	161
Petroleum Coke .....	--	4,181	0	--	0	213	--	--	40	3,928	2,737
Asphalt and Road Oil .....	--	6,012	52	--	121	-1,827	--	--	81	7,931	7,642
Still Gas .....	--	4,110	0	--	0	0	--	--	0	4,110	0
Miscellaneous Products .....	--	307	2	--	0	45	--	--	(s)	264	261
<b>Total</b> .....	<b>29,011</b>	<b>112,619</b>	<b>26,030</b>	<b>3,746</b>	<b>92,120</b>	<b>-7,363</b>	<b>0</b>	<b>106,794</b>	<b>1,771</b>	<b>162,324</b>	<b>235,502</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 11. PAD District II—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 172,947	--	247,990	-1,075	616,954	11,189	0	1,015,993	9,634	0	74,441
<b>Natural Gas Liquids and LRGs</b> .....	92,375	42,409	19,166	--	-378	14,155	--	24,796	4,392	110,229	40,568
Pentanes Plus .....	12,986	--	259	--	5,761	441	--	8,188	2,137	8,240	2,365
Liquefied Petroleum Gases .....	79,389	42,409	18,907	--	-6,139	13,714	--	16,608	2,256	101,988	38,203
Ethane/Ethylene .....	28,778	0	109	--	-19,393	-104	--	0	0	9,598	3,365
Propane/Propylene .....	33,404	37,200	15,090	--	12,665	11,189	--	0	696	86,474	24,623
Normal Butane/Butylene .....	10,778	4,226	1,506	--	-1,927	2,552	--	7,600	1,560	2,871	8,132
Isobutane/Isobutylene .....	6,429	983	2,202	--	2,516	77	--	9,008	0	3,045	2,083
<b>Other Liquids</b> .....	-10,914	--	88	--	18,032	4,746	--	10,222	9	-7,771	26,763
Other Hydrocarbons/Oxygenates .....	11,085	--	0	--	0	514	--	10,564	7	0	2,168
Unfinished Oils .....	--	--	44	--	436	2,267	--	5,989	0	-7,776	13,939
Motor Gasoline Blend. Comp. ....	-21,998	--	44	--	17,596	1,972	--	-6,333	3	0	10,635
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	-7	--	2	0	5	21
<b>Finished Petroleum Products</b> .....	32,408	1,058,478	3,844	--	253,520	-5,593	--	--	5,169	1,348,674	93,730
Finished Motor Gasoline .....	32,408	549,856	859	--	147,607	-2,418	--	--	254	732,894	39,060
Reformulated .....	--	73,188	0	--	640	-22	--	--	0	73,850	1,142
Oxygenated .....	104,098	17,758	0	--	-1,328	-236	--	--	7	120,757	708
Other .....	-71,690	458,910	859	--	148,295	-2,160	--	--	247	538,288	37,210
Finished Aviation Gasoline .....	--	1,233	21	--	830	-88	--	--	0	2,172	338
Jet Fuel .....	--	65,685	75	--	33,209	262	--	--	36	98,671	8,987
Naphtha-Type .....	--	15	0	--	0	-37	--	--	1	51	0
Kerosene-Type .....	--	65,670	75	--	33,209	299	--	--	35	98,620	8,987
Kerosene .....	--	4,651	0	--	102	81	--	--	13	4,659	1,502
Distillate Fuel Oil .....	--	251,438	1,400	--	68,136	-3,988	--	--	488	324,474	28,245
0.05 percent sulfur and under .....	--	177,521	985	--	59,656	-2,723	--	--	4	240,881	19,874
Greater than 0.05 percent sulfur ...	--	73,917	415	--	8,480	-1,265	--	--	484	83,593	8,371
Residual Fuel Oil .....	--	17,355	70	--	-2,068	538	--	--	513	14,306	2,422
Petrochemical Feedstocks <sup>e</sup> .....	--	13,626	340	--	426	205	--	--	0	14,187	418
Special Naphthas .....	--	4,323	262	--	545	161	--	--	342	4,627	394
Lubricants .....	--	6,870	219	--	1,961	-52	--	--	578	8,524	1,563
Waxes .....	--	916	140	--	0	-4	--	--	159	901	161
Petroleum Coke .....	--	42,243	0	--	0	976	--	--	1,172	40,095	2,737
Asphalt and Road Oil .....	--	57,614	417	--	2,772	-1,279	--	--	1,610	60,472	7,642
Still Gas .....	--	39,898	0	--	0	0	--	--	0	39,898	0
Miscellaneous Products .....	--	2,770	41	--	0	13	--	--	3	2,795	261
<b>Total</b> .....	<b>286,816</b>	<b>1,100,887</b>	<b>271,088</b>	<b>-1,075</b>	<b>888,128</b>	<b>24,497</b>	<b>0</b>	<b>1,051,011</b>	<b>19,204</b>	<b>1,451,132</b>	<b>235,502</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.  
<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.  
<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.  
<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.  
<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.  
(s) = Less than 500 barrels.  
E = Estimated.  
LRG = Liquefied Refinery Gas.  
-- = Not Applicable.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 12. PAD District II—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 571	--	760	121	2,047	89	0	3,369	42	0
<b>Natural Gas Liquids and LRGs</b> .....	288	95	68	--	22	-128	--	105	3	493
Pentanes Plus .....	43	--	2	--	28	-11	--	31	1	51
Liquefied Petroleum Gases .....	245	95	66	--	-6	-117	--	74	2	442
Ethane/Ethylene .....	86	0	(s)	--	-51	-5	--	0	0	41
Propane/Propylene .....	105	119	57	--	32	-73	--	0	1	384
Normal Butane/Butylene .....	38	-26	4	--	5	-28	--	45	1	2
Isobutane/Isobutylene .....	17	2	5	--	8	-12	--	29	0	15
<b>Other Liquids</b> .....	-82	--	(s)	--	54	16	--	-30	(s)	-14
Other Hydrocarbons/Oxygenates ....	29	--	0	--	0	-6	--	35	(s)	0
Unfinished Oils .....	--	--	(s)	--	1	21	--	-5	0	-14
Motor Gasoline Blend. Comp. ....	-111	--	(s)	--	53	1	--	-59	(s)	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	(s)	0	0
<b>Finished Petroleum Products</b> .....	158	3,538	11	--	848	-213	--	--	12	4,758
Finished Motor Gasoline .....	158	1,813	2	--	487	-42	--	--	4	2,497
Reformulated .....	--	226	0	--	16	-5	--	--	0	247
Oxygenated .....	475	66	0	--	-6	2	--	--	(s)	533
Other .....	-317	1,521	2	--	476	-39	--	--	4	1,717
Finished Aviation Gasoline .....	--	4	0	--	4	1	--	--	0	8
Jet Fuel .....	--	216	0	--	118	-12	--	--	(s)	345
Naphtha-Type .....	--	0	0	--	0	0	--	--	0	0
Kerosene-Type .....	--	216	0	--	118	-12	--	--	(s)	345
Kerosene .....	--	20	0	--	2	8	--	--	(s)	14
Distillate Fuel Oil .....	--	867	4	--	229	-126	--	--	(s)	1,226
0.05 percent sulfur and under .....	--	630	3	--	197	-90	--	--	(s)	920
Greater than 0.05 percent sulfur ...	--	237	1	--	32	-36	--	--	(s)	306
Residual Fuel Oil .....	--	53	0	--	-7	-3	--	--	1	49
Petrochemical Feedstocks <sup>e</sup> .....	--	44	1	--	1	6	--	--	0	40
Special Naphthas .....	--	21	1	--	3	6	--	--	(s)	19
Lubricants .....	--	26	1	--	7	(s)	--	--	2	32
Waxes .....	--	4	(s)	--	0	-1	--	--	1	4
Petroleum Coke .....	--	135	0	--	0	7	--	--	1	127
Asphalt and Road Oil .....	--	194	2	--	4	-59	--	--	3	256
Still Gas .....	--	133	0	--	0	0	--	--	0	133
Miscellaneous Products .....	--	10	(s)	--	0	1	--	--	(s)	9
<b>Total</b> .....	<b>936</b>	<b>3,633</b>	<b>840</b>	<b>121</b>	<b>2,972</b>	<b>-238</b>	<b>0</b>	<b>3,445</b>	<b>57</b>	<b>5,236</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 13. PAD District II—Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 569	--	816	-4	2,029	37	0	3,342	32	0
<b>Natural Gas Liquids and LRGs</b> .....	304	140	63	--	-1	47	--	82	14	363
Pentanes Plus .....	43	--	1	--	19	1	--	27	7	27
Liquefied Petroleum Gases .....	261	140	62	--	-20	45	--	55	7	335
Ethane/Ethylene .....	95	0	(s)	--	-64	(s)	--	0	0	32
Propane/Propylene .....	110	122	50	--	42	37	--	0	2	284
Normal Butane/Butylene .....	35	14	5	--	-6	8	--	25	5	9
Isobutane/Isobutylene .....	21	3	7	--	8	(s)	--	30	0	10
<b>Other Liquids</b> .....	-36	--	(s)	--	59	16	--	34	(s)	-26
Other Hydrocarbons/Oxygenates ....	36	--	0	--	0	2	--	35	(s)	0
Unfinished Oils .....	--	--	(s)	--	1	7	--	20	0	-26
Motor Gasoline Blend. Comp. ....	-72	--	(s)	--	58	6	--	-21	(s)	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	(s)	0	(s)
<b>Finished Petroleum Products</b> .....	107	3,482	13	--	834	-18	--	--	17	4,436
Finished Motor Gasoline .....	107	1,809	3	--	486	-8	--	--	1	2,411
Reformulated .....	--	241	0	--	2	(s)	--	--	0	243
Oxygenated .....	342	58	0	--	-4	-1	--	--	(s)	397
Other .....	-236	1,510	3	--	488	-7	--	--	1	1,771
Finished Aviation Gasoline .....	--	4	(s)	--	3	(s)	--	--	0	7
Jet Fuel .....	--	216	(s)	--	109	1	--	--	(s)	325
Naphtha-Type .....	--	(s)	0	--	0	(s)	--	--	(s)	(s)
Kerosene-Type .....	--	216	(s)	--	109	1	--	--	(s)	324
Kerosene .....	--	15	0	--	(s)	(s)	--	--	(s)	15
Distillate Fuel Oil .....	--	827	5	--	224	-13	--	--	2	1,067
0.05 percent sulfur and under ....	--	584	3	--	196	-9	--	--	(s)	792
Greater than 0.05 percent sulfur ..	--	243	1	--	28	-4	--	--	2	275
Residual Fuel Oil .....	--	57	(s)	--	-7	2	--	--	2	47
Petrochemical Feedstocks <sup>e</sup> .....	--	45	1	--	1	1	--	--	0	47
Special Naphthas .....	--	14	1	--	2	1	--	--	1	15
Lubricants .....	--	23	1	--	6	(s)	--	--	2	28
Waxes .....	--	3	(s)	--	0	(s)	--	--	1	3
Petroleum Coke .....	--	139	0	--	0	3	--	--	4	132
Asphalt and Road Oil .....	--	190	1	--	9	-4	--	--	5	199
Still Gas .....	--	131	0	--	0	0	--	--	0	131
Miscellaneous Products .....	--	9	(s)	--	0	(s)	--	--	(s)	9
<b>Total</b> .....	<b>943</b>	<b>3,621</b>	<b>892</b>	<b>-4</b>	<b>2,921</b>	<b>81</b>	<b>0</b>	<b>3,457</b>	<b>63</b>	<b>4,773</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 14. PAD District III—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 101,145	--	173,141	4,967	-57,597	7,686	0	213,970	0	0	716,504
<b>Natural Gas Liquids and LRGs</b> .....	38,537	12,066	2,426	--	-470	-2,595	--	7,429	765	46,960	78,304
Pentanes Plus .....	6,266	--	1,033	--	-471	-351	--	2,609	0	4,570	4,299
Liquefied Petroleum Gases .....	32,271	12,066	1,393	--	1	-2,244	--	4,820	765	42,390	74,005
Ethane/Ethylene .....	14,779	707	434	--	3,641	-172	--	0	0	19,733	20,451
Propane/Propylene .....	10,897	11,152	595	--	-3,595	1,620	--	0	694	16,735	27,518
Normal Butane/Butylene .....	2,033	-92	218	--	-30	-3,334	--	2,687	72	2,704	20,245
Isobutane/Isobutylene .....	4,562	299	146	--	-15	-358	--	2,133	0	3,217	5,791
<b>Other Liquids</b> .....	3,866	--	10,519	--	-2,537	-2,522	--	14,522	641	-793	64,323
Other Hydrocarbons/Oxygenates ....	3,395	--	0	--	0	-264	--	3,317	342	0	4,315
Unfinished Oils .....	--	--	10,210	--	-46	-1,627	--	12,584	0	-793	45,555
Motor Gasoline Blend. Comp. ....	472	--	309	--	-2,491	-632	--	-1,378	300	0	14,421
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	1	--	-1	0	0	32
<b>Finished Petroleum Products</b> .....	-296	238,648	10,213	--	-123,843	-669	--	--	17,941	107,450	127,455
Finished Motor Gasoline .....	-296	110,901	649	--	-72,251	567	--	--	4,778	33,659	46,966
Reformulated .....	--	20,534	100	--	-12,114	-606	--	--	0	9,126	9,286
Oxygenated .....	1,758	162	0	--	0	3	--	--	(s)	1,917	3
Other .....	-2,054	90,205	549	--	-60,137	1,170	--	--	4,777	22,615	37,677
Finished Aviation Gasoline .....	--	410	0	--	-215	-86	--	--	0	281	499
Jet Fuel .....	--	25,261	17	--	-19,221	304	--	--	956	4,797	14,716
Naphtha-Type .....	--	1	0	--	0	0	--	--	25	-24	1
Kerosene-Type .....	--	25,260	17	--	-19,221	304	--	--	932	4,820	14,715
Kerosene .....	--	807	0	--	-219	-240	--	--	0	828	1,478
Distillate Fuel Oil .....	--	49,567	0	--	-28,624	-1,001	--	--	3,354	18,590	30,715
0.05 percent sulfur and under ....	--	29,241	0	--	-19,642	-2,801	--	--	732	11,668	16,348
Greater than 0.05 percent sulfur ...	--	20,326	0	--	-8,982	1,800	--	--	2,621	6,923	14,367
Residual Fuel Oil .....	--	10,178	0	--	-1,497	868	--	--	2,142	5,671	12,779
Petrochemical Feedstocks <sup>e</sup> .....	--	11,719	9,470	--	-41	240	--	--	0	20,908	3,416
Special Naphthas .....	--	777	0	--	-151	-18	--	--	29	615	1,643
Lubricants .....	--	3,621	47	--	-942	-553	--	--	728	2,551	6,296
Waxes .....	--	377	0	--	0	-37	--	--	23	391	420
Petroleum Coke .....	--	10,839	0	--	0	-263	--	--	5,914	5,188	4,375
Asphalt and Road Oil .....	--	3,565	21	--	-682	-364	--	--	16	3,252	3,061
Still Gas .....	--	9,725	0	--	0	0	--	--	0	9,725	0
Miscellaneous Products .....	--	901	9	--	0	-86	--	--	1	995	1,091
<b>Total</b> .....	143,253	250,714	196,299	4,967	-184,447	1,900	0	235,921	19,348	153,617	986,586

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 15. PAD District III—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 976,308	--	1,600,874	63,449	-555,780	16,189	0	2,068,631	31	0	716,504
<b>Natural Gas Liquids and LRGs</b> .....	379,255	134,984	27,054	--	11,141	23,450	--	63,477	5,735	459,772	78,304
Pentanes Plus .....	60,413	--	10,497	--	-1,494	97	--	25,229	161	43,929	4,299
Liquefied Petroleum Gases .....	318,842	134,984	16,557	--	12,635	23,353	--	38,248	5,573	415,844	74,005
Ethane/Ethylene .....	147,902	7,598	4,930	--	39,842	6,622	--	0	0	193,650	20,451
Propane/Propylene .....	106,522	99,915	5,030	--	-32,861	4,804	--	0	5,072	168,730	27,518
Normal Butane/Butylene .....	22,321	24,847	3,845	--	5,735	11,122	--	16,353	501	28,772	20,245
Isobutane/Isobutylene .....	42,097	2,624	2,752	--	-81	805	--	21,895	0	24,692	5,791
<b>Other Liquids</b> .....	45,752	--	92,054	--	-23,592	3,367	--	98,612	6,713	5,522	64,323
Other Hydrocarbons/Oxygenates ....	35,157	--	202	--	0	-843	--	32,720	3,482	0	4,315
Unfinished Oils .....	--	--	91,299	--	-11	3,295	--	82,468	0	5,525	45,555
Motor Gasoline Blend. Comp. ....	10,596	--	553	--	-23,581	905	--	-16,569	3,232	0	14,421
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	10	--	-7	0	-3	32
<b>Finished Petroleum Products</b> .....	-9,755	2,228,858	82,350	--	-1,127,353	2,243	--	151,025	1,020,832	1,020,832	127,455
Finished Motor Gasoline .....	-9,755	1,025,708	2,773	--	-639,051	2,314	--	32,265	345,096	345,096	46,966
Reformulated .....	--	189,130	1,910	--	-100,981	606	--	0	89,453	89,453	9,286
Oxygenated .....	8,406	1,657	0	--	0	2	--	1	10,061	10,061	3
Other .....	-18,162	834,921	863	--	-538,070	1,706	--	32,264	245,582	245,582	37,677
Finished Aviation Gasoline .....	--	3,591	0	--	-1,630	65	--	0	1,896	1,896	499
Jet Fuel .....	--	235,758	181	--	-177,868	1,623	--	5,163	51,285	51,285	14,716
Naphtha-Type .....	--	8	0	--	0	1	--	25	-18	-18	1
Kerosene-Type .....	--	235,750	181	--	-177,868	1,622	--	5,138	51,303	51,303	14,715
Kerosene .....	--	9,295	0	--	-2,042	567	--	44	6,642	6,642	1,478
Distillate Fuel Oil .....	--	461,851	0	--	-277,505	-729	--	26,755	158,320	158,320	30,715
0.05 percent sulfur and under .....	--	287,552	0	--	-184,604	903	--	7,572	94,473	94,473	16,348
Greater than 0.05 percent sulfur ...	--	174,299	0	--	-92,901	-1,632	--	19,184	63,846	63,846	14,367
Residual Fuel Oil .....	--	87,481	4,591	--	-11,679	-2,470	--	21,429	61,434	61,434	12,779
Petrochemical Feedstocks <sup>e</sup> .....	--	115,405	74,043	--	-426	1,095	--	0	187,927	187,927	3,416
Special Naphthas .....	--	9,663	305	--	-1,475	145	--	370	7,978	7,978	1,643
Lubricants .....	--	35,059	108	--	-9,013	-777	--	6,263	20,668	20,668	6,296
Waxes .....	--	3,902	15	--	0	32	--	272	3,613	3,613	420
Petroleum Coke .....	--	100,500	0	--	0	1,176	--	58,239	41,085	41,085	4,375
Asphalt and Road Oil .....	--	38,186	300	--	-6,664	-1,152	--	220	32,754	32,754	3,061
Still Gas .....	--	93,607	0	--	0	0	--	0	93,607	93,607	0
Miscellaneous Products .....	--	8,852	34	--	0	354	--	4	8,528	8,528	1,091
<b>Total</b> .....	<b>1,391,560</b>	<b>2,363,842</b>	<b>1,802,332</b>	<b>63,449</b>	<b>-1,695,584</b>	<b>45,249</b>	<b>0</b>	<b>2,230,720</b>	<b>163,505</b>	<b>1,486,126</b>	<b>986,586</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.  
<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.  
<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.  
<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.  
<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.  
(s) = Less than 500 barrels.  
E = Estimated.  
LRG = Liquefied Refinery Gas.  
-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.  
Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 16. PAD District III—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 3,263	--	5,585	160	-1,858	248	0	6,902	0	0
<b>Natural Gas Liquids and LRGs</b> .....	1,243	389	78	--	-15	-84	--	240	25	1,515
Pentanes Plus .....	202	--	33	--	-15	-11	--	84	0	147
Liquefied Petroleum Gases .....	1,041	389	45	--	(s)	-72	--	155	25	1,367
Ethane/Ethylene .....	477	23	14	--	117	-6	--	0	0	637
Propane/Propylene .....	352	360	19	--	-116	52	--	0	22	540
Normal Butane/Butylene .....	66	-3	7	--	-1	-108	--	87	2	87
Isobutane/Isobutylene .....	147	10	5	--	(s)	-12	--	69	0	104
<b>Other Liquids</b> .....	125	--	339	--	-82	-81	--	468	21	-26
Other Hydrocarbons/Oxygenates ....	110	--	0	--	0	-9	--	107	11	0
Unfinished Oils .....	--	--	329	--	-1	-52	--	406	0	-26
Motor Gasoline Blend. Comp. ....	15	--	10	--	-80	-20	--	-44	10	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	(s)	0	0
<b>Finished Petroleum Products</b> .....	-10	7,698	329	--	-3,995	-22	--	--	579	3,466
Finished Motor Gasoline .....	-10	3,577	21	--	-2,331	18	--	--	154	1,086
Reformulated .....	--	662	3	--	-391	-20	--	--	0	294
Oxygenated .....	57	5	0	--	0	(s)	--	--	(s)	62
Other .....	-66	2,910	18	--	-1,940	38	--	--	154	730
Finished Aviation Gasoline .....	--	13	0	--	-7	-3	--	--	0	9
Jet Fuel .....	--	815	1	--	-620	10	--	--	31	155
Naphtha-Type .....	--	(s)	0	--	0	0	--	--	1	-1
Kerosene-Type .....	--	815	1	--	-620	10	--	--	30	155
Kerosene .....	--	26	0	--	-7	-8	--	--	0	27
Distillate Fuel Oil .....	--	1,599	0	--	-923	-32	--	--	108	600
0.05 percent sulfur and under .....	--	943	0	--	-634	-90	--	--	24	376
Greater than 0.05 percent sulfur ...	--	656	0	--	-290	58	--	--	85	223
Residual Fuel Oil .....	--	328	0	--	-48	28	--	--	69	183
Petrochemical Feedstocks <sup>e</sup> .....	--	378	305	--	-1	8	--	--	0	674
Special Naphthas .....	--	25	0	--	-5	-1	--	--	1	20
Lubricants .....	--	117	2	--	-30	-18	--	--	23	82
Waxes .....	--	12	0	--	0	-1	--	--	1	13
Petroleum Coke .....	--	350	0	--	0	-8	--	--	191	167
Asphalt and Road Oil .....	--	115	1	--	-22	-12	--	--	1	105
Still Gas .....	--	314	0	--	0	0	--	--	0	314
Miscellaneous Products .....	--	29	(s)	--	0	-3	--	--	(s)	32
<b>Total</b> .....	<b>4,621</b>	<b>8,088</b>	<b>6,332</b>	<b>160</b>	<b>-5,950</b>	<b>61</b>	<b>0</b>	<b>7,610</b>	<b>624</b>	<b>4,955</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 17. PAD District III—Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 3,212	--	5,266	209	-1,828	53	0	6,805	(s)	0
<b>Natural Gas Liquids and LRGs</b> .....	1,248	444	89	--	37	77	--	209	19	1,512
Pentanes Plus .....	199	--	35	--	-5	(s)	--	83	1	145
Liquefied Petroleum Gases .....	1,049	444	54	--	42	77	--	126	18	1,368
Ethane/Ethylene .....	487	25	16	--	131	22	--	0	0	637
Propane/Propylene .....	350	329	17	--	-108	16	--	0	17	555
Normal Butane/Butylene .....	73	82	13	--	19	37	--	54	2	95
Isobutane/Isobutylene .....	138	9	9	--	(s)	3	--	72	0	81
<b>Other Liquids</b> .....	151	--	303	--	-78	11	--	324	22	18
Other Hydrocarbons/Oxygenates .....	116	--	1	--	0	-3	--	108	11	0
Unfinished Oils .....	--	--	300	--	(s)	11	--	271	0	18
Motor Gasoline Blend. Comp. ....	35	--	2	--	-78	3	--	-55	11	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	(s)	0	(s)
<b>Finished Petroleum Products</b> .....	-32	7,332	271	--	-3,708	7	--	--	497	3,358
Finished Motor Gasoline .....	-32	3,374	9	--	-2,102	8	--	--	106	1,135
Reformulated .....	--	622	6	--	-332	2	--	--	0	294
Oxygenated .....	28	5	0	--	0	(s)	--	--	(s)	33
Other .....	-60	2,746	3	--	-1,770	6	--	--	106	808
Finished Aviation Gasoline .....	--	12	0	--	-5	(s)	--	--	0	6
Jet Fuel .....	--	776	1	--	-585	5	--	--	17	169
Naphtha-Type .....	--	(s)	0	--	0	(s)	--	--	(s)	(s)
Kerosene-Type .....	--	775	1	--	-585	5	--	--	17	169
Kerosene .....	--	31	0	--	-7	2	--	--	(s)	22
Distillate Fuel Oil .....	--	1,519	0	--	-913	-2	--	--	88	521
0.05 percent sulfur and under .....	--	946	0	--	-607	3	--	--	25	311
Greater than 0.05 percent sulfur ...	--	573	0	--	-306	-5	--	--	63	210
Residual Fuel Oil .....	--	288	15	--	-38	-8	--	--	70	202
Petrochemical Feedstocks <sup>e</sup> .....	--	380	244	--	-1	4	--	--	0	618
Special Naphthas .....	--	32	1	--	-5	(s)	--	--	1	26
Lubricants .....	--	115	(s)	--	-30	-3	--	--	21	68
Waxes .....	--	13	(s)	--	0	(s)	--	--	1	12
Petroleum Coke .....	--	331	0	--	0	4	--	--	192	135
Asphalt and Road Oil .....	--	126	1	--	-22	-4	--	--	1	108
Still Gas .....	--	308	0	--	0	0	--	--	0	308
Miscellaneous Products .....	--	29	(s)	--	0	1	--	--	(s)	28
<b>Total</b> .....	<b>4,578</b>	<b>7,776</b>	<b>5,929</b>	<b>209</b>	<b>-5,578</b>	<b>149</b>	<b>0</b>	<b>7,338</b>	<b>538</b>	<b>4,889</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.  
<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.  
<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.  
<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.  
<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.  
(s) = Less than 500 barrels per day.  
E = Estimated.  
LRG = Liquefied Refinery Gas.  
-- = Not Applicable.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 18. PAD District IV—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 10,771	--	5,131	3,569	-3,706	485	0	15,280	0	0	<b>11,970</b>
<b>Natural Gas Liquids and LRGs</b> .....	<b>4,975</b>	<b>116</b>	<b>423</b>	--	<b>-4,179</b>	<b>5</b>	--	<b>525</b>	<b>1</b>	<b>804</b>	<b>1,555</b>
Pentanes Plus .....	810	--	92	--	-387	9	--	109	0	397	217
Liquefied Petroleum Gases .....	4,165	116	331	--	-3,792	-4	--	416	1	407	1,338
Ethane/Ethylene .....	1,799	0	0	--	-2,074	4	--	0	0	-279	215
Propane/Propylene .....	1,485	276	193	--	-1,081	0	--	0	1	872	574
Normal Butane/Butylene .....	576	-111	138	--	-394	8	--	293	0	-92	356
Isobutane/Isobutylene .....	305	-49	0	--	-243	-16	--	123	0	-94	193
<b>Other Liquids</b> .....	<b>302</b>	--	<b>0</b>	--	<b>0</b>	<b>233</b>	--	<b>108</b>	<b>0</b>	<b>-39</b>	<b>3,835</b>
Other Hydrocarbons/Oxygenates .....	30	--	0	--	0	-40	--	70	0	0	247
Unfinished Oils .....	--	--	0	--	0	119	--	-80	0	-39	2,101
Motor Gasoline Blend. Comp. ....	272	--	0	--	0	154	--	118	0	0	1,487
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	0	--	0	0	0	0
<b>Finished Petroleum Products</b> .....	<b>-206</b>	<b>16,197</b>	<b>288</b>	--	<b>2,040</b>	<b>-182</b>	--	--	<b>16</b>	<b>18,485</b>	<b>8,711</b>
Finished Motor Gasoline .....	-206	7,997	10	--	481	237	--	--	2	8,043	3,889
Reformulated .....	--	0	0	--	0	0	--	--	0	0	0
Oxygenated .....	659	733	0	--	15	58	--	--	2	1,348	214
Other .....	-865	7,264	10	--	466	179	--	--	0	6,696	3,675
Finished Aviation Gasoline .....	--	14	0	--	8	-2	--	--	0	24	34
Jet Fuel .....	--	673	0	--	904	-116	--	--	0	1,693	705
Naphtha-Type .....	--	0	0	--	0	0	--	--	0	0	0
Kerosene-Type .....	--	673	0	--	904	-116	--	--	0	1,693	705
Kerosene .....	--	120	0	--	-28	-6	--	--	0	98	56
Distillate Fuel Oil .....	--	4,458	278	--	675	-112	--	--	0	5,523	1,986
0.05 percent sulfur and under .....	--	3,615	53	--	670	-85	--	--	0	4,423	1,649
Greater than 0.05 percent sulfur ...	--	843	225	--	5	-27	--	--	0	1,100	337
Residual Fuel Oil .....	--	345	0	--	0	-61	--	--	0	406	547
Petrochemical Feedstocks <sup>e</sup> .....	--	19	0	--	0	1	--	--	0	18	1
Special Naphthas .....	--	-1	0	--	0	-1	--	--	(s)	(s)	0
Lubricants .....	--	0	0	--	0	0	--	--	10	-10	0
Waxes .....	--	62	0	--	0	-20	--	--	3	79	15
Petroleum Coke .....	--	465	0	--	0	-32	--	--	0	497	215
Asphalt and Road Oil .....	--	1,392	0	--	0	-64	--	--	2	1,454	1,244
Still Gas .....	--	601	0	--	0	0	--	--	0	601	0
Miscellaneous Products .....	--	52	0	--	0	-6	--	--	0	58	19
<b>Total</b> .....	<b>15,842</b>	<b>16,313</b>	<b>5,842</b>	<b>3,569</b>	<b>-5,845</b>	<b>541</b>	<b>0</b>	<b>15,913</b>	<b>17</b>	<b>19,250</b>	<b>26,071</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 19. PAD District IV—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 108,511	--	37,781	28,196	-27,883	952	0	145,653	1	0	11,970
<b>Natural Gas Liquids and LRGs</b> .....	<b>47,803</b>	<b>2,150</b>	<b>2,879</b>	--	<b>-42,768</b>	<b>344</b>	--	<b>4,070</b>	<b>8</b>	<b>5,642</b>	<b>1,555</b>
Pentanes Plus .....	7,805	--	537	--	-4,267	48	--	952	1	3,074	217
Liquefied Petroleum Gases .....	39,998	2,150	2,342	--	-38,501	296	--	3,118	7	2,568	1,338
Ethane/Ethylene .....	17,245	0	0	--	-20,449	-5	--	0	0	-3,199	215
Propane/Propylene .....	14,412	2,850	1,536	--	-10,978	171	--	0	7	7,642	574
Normal Butane/Butylene .....	5,311	-265	661	--	-4,378	79	--	1,791	(s)	-541	356
Isobutane/Isobutylene .....	3,030	-435	145	--	-2,696	51	--	1,327	0	-1,334	193
<b>Other Liquids</b> .....	<b>2,617</b>	--	<b>0</b>	--	<b>0</b>	<b>-404</b>	--	<b>3,830</b>	<b>0</b>	<b>-809</b>	<b>3,835</b>
Other Hydrocarbons/Oxygenates ....	671	--	0	--	0	61	--	610	0	0	247
Unfinished Oils .....	--	--	0	--	0	386	--	423	0	-809	2,101
Motor Gasoline Blend. Comp. ....	1,946	--	0	--	0	-851	--	2,797	0	0	1,487
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	0	--	0	0	0	0
<b>Finished Petroleum Products</b> .....	<b>-1,512</b>	<b>155,505</b>	<b>3,225</b>	--	<b>18,534</b>	<b>-2,541</b>	--	--	<b>145</b>	<b>178,148</b>	<b>8,711</b>
Finished Motor Gasoline .....	-1,512	76,839	210	--	3,748	-737	--	--	20	80,002	3,889
Reformulated .....	--	0	0	--	0	0	--	--	0	0	0
Oxygenated .....	4,342	4,444	0	--	54	-66	--	--	15	8,890	214
Other .....	-5,853	72,395	210	--	3,694	-671	--	--	5	71,111	3,675
Finished Aviation Gasoline .....	--	141	5	--	125	10	--	--	0	261	34
Jet Fuel .....	--	7,941	0	--	10,337	-98	--	--	0	18,376	705
Naphtha-Type .....	--	0	0	--	0	-25	--	--	0	25	0
Kerosene-Type .....	--	7,941	0	--	10,337	-73	--	--	0	18,351	705
Kerosene .....	--	604	0	--	-96	-69	--	--	(s)	577	56
Distillate Fuel Oil .....	--	41,950	2,956	--	4,420	-949	--	--	(s)	50,275	1,986
0.05 percent sulfur and under ....	--	34,035	538	--	4,333	-815	--	--	0	39,721	1,649
Greater than 0.05 percent sulfur ...	--	7,915	2,418	--	87	-134	--	--	(s)	10,554	337
Residual Fuel Oil .....	--	3,876	0	--	0	80	--	--	1	3,795	547
Petrochemical Feedstocks <sup>e</sup> .....	--	197	0	--	0	1	--	--	0	196	1
Special Naphthas .....	--	-1	0	--	0	-1	--	--	3	-3	0
Lubricants .....	--	0	0	--	0	0	--	--	66	-66	0
Waxes .....	--	949	0	--	0	15	--	--	40	894	15
Petroleum Coke .....	--	4,447	0	--	0	29	--	--	1	4,417	215
Asphalt and Road Oil .....	--	12,209	54	--	0	-822	--	--	14	13,071	1,244
Still Gas .....	--	5,799	0	--	0	0	--	--	0	5,799	0
Miscellaneous Products .....	--	554	0	--	0	0	--	--	(s)	554	19
<b>Total</b> .....	<b>157,420</b>	<b>157,655</b>	<b>43,885</b>	<b>28,196</b>	<b>-52,117</b>	<b>-1,649</b>	<b>0</b>	<b>153,553</b>	<b>154</b>	<b>182,981</b>	<b>26,071</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.  
<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.  
<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.  
<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.  
<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.  
(s) = Less than 500 barrels.  
E = Estimated.  
LRG = Liquefied Refinery Gas.  
-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.  
Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 20. PAD District IV—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 347	--	166	115	-120	16	0	493	0	0
<b>Natural Gas Liquids and LRGs</b> .....	160	4	14	--	-135	(s)	--	17	(s)	26
Pentanes Plus .....	26	--	3	--	-12	(s)	--	4	0	13
Liquefied Petroleum Gases .....	134	4	11	--	-122	(s)	--	13	(s)	13
Ethane/Ethylene .....	58	0	0	--	-67	(s)	--	0	0	-9
Propane/Propylene .....	48	9	6	--	-35	0	--	0	(s)	28
Normal Butane/Butylene .....	19	-4	4	--	-13	(s)	--	9	0	-3
Isobutane/Isobutylene .....	10	-2	0	--	-8	-1	--	4	0	-3
<b>Other Liquids</b> .....	10	--	0	--	0	8	--	3	0	-1
Other Hydrocarbons/Oxygenates ....	1	--	0	--	0	-1	--	2	0	0
Unfinished Oils .....	--	--	0	--	0	4	--	-3	0	-1
Motor Gasoline Blend. Comp. ....	9	--	0	--	0	5	--	4	0	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	0	--	0	0	0
<b>Finished Petroleum Products</b> .....	-7	522	9	--	66	-6	--	--	1	596
Finished Motor Gasoline .....	-7	258	(s)	--	16	8	--	--	(s)	259
Reformulated .....	--	0	0	--	0	0	--	--	0	0
Oxygenated .....	21	24	0	--	(s)	2	--	--	(s)	43
Other .....	-28	234	(s)	--	15	6	--	--	0	216
Finished Aviation Gasoline .....	--	(s)	0	--	(s)	(s)	--	--	0	1
Jet Fuel .....	--	22	0	--	29	-4	--	--	0	55
Naphtha-Type .....	--	0	0	--	0	0	--	--	0	0
Kerosene-Type .....	--	22	0	--	29	-4	--	--	0	55
Kerosene .....	--	4	0	--	-1	(s)	--	--	0	3
Distillate Fuel Oil .....	--	144	9	--	22	-4	--	--	0	178
0.05 percent sulfur and under .....	--	117	2	--	22	-3	--	--	0	143
Greater than 0.05 percent sulfur ...	--	27	7	--	(s)	-1	--	--	0	35
Residual Fuel Oil .....	--	11	0	--	0	-2	--	--	0	13
Petrochemical Feedstocks <sup>e</sup> .....	--	1	0	--	0	(s)	--	--	0	1
Special Naphthas .....	--	(s)	0	--	0	(s)	--	--	(s)	(s)
Lubricants .....	--	0	0	--	0	0	--	--	(s)	(s)
Waxes .....	--	2	0	--	0	-1	--	--	(s)	3
Petroleum Coke .....	--	15	0	--	0	-1	--	--	0	16
Asphalt and Road Oil .....	--	45	0	--	0	-2	--	--	(s)	47
Still Gas .....	--	19	0	--	0	0	--	--	0	19
Miscellaneous Products .....	--	2	0	--	0	(s)	--	--	0	2
<b>Total</b> .....	<b>511</b>	<b>526</b>	<b>188</b>	<b>115</b>	<b>-189</b>	<b>17</b>	<b>0</b>	<b>513</b>	<b>1</b>	<b>621</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 21. PAD District IV—Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 357	--	124	93	-92	3	0	479	(s)	0
<b>Natural Gas Liquids and LRGs</b> .....	157	7	9	--	-141	1	--	13	(s)	19
Pentanes Plus .....	26	--	2	--	-14	(s)	--	3	(s)	10
Liquefied Petroleum Gases .....	132	7	8	--	-127	1	--	10	(s)	8
Ethane/Ethylene .....	57	0	0	--	-67	(s)	--	0	0	-11
Propane/Propylene .....	47	9	5	--	-36	1	--	0	(s)	25
Normal Butane/Butylene .....	17	-1	2	--	-14	(s)	--	6	(s)	-2
Isobutane/Isobutylene .....	10	-1	(s)	--	-9	(s)	--	4	0	-4
<b>Other Liquids</b> .....	9	--	0	--	0	-1	--	13	0	-3
Other Hydrocarbons/Oxygenates .....	2	--	0	--	0	(s)	--	2	0	0
Unfinished Oils .....	--	--	0	--	0	1	--	1	0	-3
Motor Gasoline Blend. Comp. ....	6	--	0	--	0	-3	--	9	0	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	0	--	0	0	0
<b>Finished Petroleum Products</b> .....	-5	512	11	--	61	-8	--	--	(s)	586
Finished Motor Gasoline .....	-5	253	1	--	12	-2	--	--	(s)	263
Reformulated .....	--	0	0	--	0	0	--	--	0	0
Oxygenated .....	14	15	0	--	(s)	(s)	--	--	(s)	29
Other .....	-19	238	1	--	12	-2	--	--	(s)	234
Finished Aviation Gasoline .....	--	(s)	(s)	--	(s)	(s)	--	--	0	1
Jet Fuel .....	--	26	0	--	34	(s)	--	--	0	60
Naphtha-Type .....	--	0	0	--	0	(s)	--	--	0	(s)
Kerosene-Type .....	--	26	0	--	34	(s)	--	--	0	60
Kerosene .....	--	2	0	--	(s)	(s)	--	--	(s)	2
Distillate Fuel Oil .....	--	138	10	--	15	-3	--	--	(s)	165
0.05 percent sulfur and under .....	--	112	2	--	14	-3	--	--	0	131
Greater than 0.05 percent sulfur ...	--	26	8	--	(s)	(s)	--	--	(s)	35
Residual Fuel Oil .....	--	13	0	--	0	(s)	--	--	(s)	12
Petrochemical Feedstocks <sup>e</sup> .....	--	1	0	--	0	(s)	--	--	0	1
Special Naphthas .....	--	(s)	0	--	0	(s)	--	--	(s)	(s)
Lubricants .....	--	0	0	--	0	0	--	--	(s)	(s)
Waxes .....	--	3	0	--	0	(s)	--	--	(s)	3
Petroleum Coke .....	--	15	0	--	0	(s)	--	--	(s)	15
Asphalt and Road Oil .....	--	40	(s)	--	0	-3	--	--	(s)	43
Still Gas .....	--	19	0	--	0	0	--	--	0	19
Miscellaneous Products .....	--	2	0	--	0	0	--	--	(s)	2
<b>Total</b> .....	<b>518</b>	<b>519</b>	<b>144</b>	<b>93</b>	<b>-171</b>	<b>-5</b>	<b>0</b>	<b>505</b>	<b>1</b>	<b>602</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 22. PAD District V—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 69,029	--	15,124	-1,396	-1,926	2,344	0	75,073	3,414	0	<b>61,070</b>
<b>Natural Gas Liquids and LRGs</b> .....	<b>3,744</b>	<b>2,158</b>	<b>13</b>	<b>--</b>	<b>0</b>	<b>458</b>	<b>--</b>	<b>3,648</b>	<b>410</b>	<b>1,399</b>	<b>7,714</b>
Pentanes Plus .....	1,913	--	0	--	0	-1	--	1,608	0	306	29
Liquefied Petroleum Gases .....	1,831	2,158	13	--	0	459	--	2,040	410	1,093	7,685
Ethane/Ethylene .....	1	0	0	--	0	0	--	0	0	1	0
Propane/Propylene .....	382	1,401	13	--	0	-1	--	0	129	1,668	3,048
Normal Butane/Butylene .....	784	704	0	--	0	384	--	1,486	281	-663	3,903
Isobutane/Isobutylene .....	664	53	0	--	0	76	--	554	0	87	734
<b>Other Liquids</b> .....	<b>1,872</b>	<b>--</b>	<b>2,005</b>	<b>--</b>	<b>535</b>	<b>1,627</b>	<b>--</b>	<b>3,222</b>	<b>1</b>	<b>-438</b>	<b>32,206</b>
Other Hydrocarbons/Oxygenates .....	2,357	--	1,193	--	0	-540	--	4,089	1	0	2,704
Unfinished Oils .....	--	--	660	--	0	1,341	--	-243	0	-438	21,522
Motor Gasoline Blend. Comp. ....	-485	--	152	--	535	827	--	-625	0	0	7,979
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	-1	--	1	0	0	1
<b>Finished Petroleum Products</b> .....	<b>771</b>	<b>84,746</b>	<b>578</b>	<b>--</b>	<b>2,697</b>	<b>-2,590</b>	<b>--</b>	<b>--</b>	<b>6,319</b>	<b>85,062</b>	<b>48,523</b>
Finished Motor Gasoline .....	771	39,409	272	--	1,894	-879	--	--	529	42,696	18,700
Reformulated .....	--	29,043	0	--	0	-463	--	--	0	29,506	10,745
Oxygenated .....	2,857	28	0	--	0	13	--	--	44	2,829	25
Other .....	-2,087	10,338	272	--	1,894	-429	--	--	485	10,361	7,930
Finished Aviation Gasoline .....	--	213	0	--	0	114	--	--	0	99	576
Jet Fuel .....	--	12,456	280	--	493	123	--	--	278	12,828	8,062
Naphtha-Type .....	--	12	0	--	0	3	--	--	(s)	9	20
Kerosene-Type .....	--	12,444	280	--	493	120	--	--	278	12,820	8,042
Kerosene .....	--	60	0	--	0	-8	--	--	6	62	68
Distillate Fuel Oil .....	--	14,339	20	--	332	-1,331	--	--	581	15,441	10,455
0.05 percent sulfur and under .....	--	11,276	0	--	185	-1,204	--	--	11	12,654	7,045
Greater than 0.05 percent sulfur ...	--	3,063	20	--	147	-127	--	--	570	2,787	3,410
Residual Fuel Oil .....	--	5,829	0	--	0	127	--	--	1,728	3,974	5,265
Petrochemical Feedstocks <sup>e</sup> .....	--	312	0	--	0	94	--	--	0	218	380
Special Naphthas .....	--	82	1	--	0	-5	--	--	249	-161	55
Lubricants .....	--	745	0	--	-22	-63	--	--	95	691	1,474
Waxes .....	--	70	0	--	0	-27	--	--	9	88	212
Petroleum Coke .....	--	4,760	0	--	0	-158	--	--	2,819	2,099	1,948
Asphalt and Road Oil .....	--	1,798	0	--	0	-606	--	--	25	2,379	1,082
Still Gas .....	--	4,438	0	--	0	0	--	--	0	4,438	0
Miscellaneous Products .....	--	235	5	--	0	29	--	--	1	210	246
<b>Total</b> .....	<b>75,416</b>	<b>86,904</b>	<b>17,720</b>	<b>-1,396</b>	<b>1,306</b>	<b>1,839</b>	<b>0</b>	<b>81,943</b>	<b>10,144</b>	<b>86,023</b>	<b>149,513</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.  
<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.  
<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.  
<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.  
<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.  
(s) = Less than 500 barrels.  
E = Estimated.  
LRG = Liquefied Refinery Gas.  
-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.  
Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 23. PAD District V—Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b> .....	<sup>E</sup> 679,840	--	114,909	14,134	-29,524	-1,284	0	755,302	24,543	797	61,070
<b>Natural Gas Liquids and LRGs</b> .....	36,687	24,489	89	--	0	3,761	--	34,335	5,454	17,715	7,714
Pentanes Plus .....	19,460	--	0	--	0	-11	--	16,022	1	3,448	29
Liquefied Petroleum Gases .....	17,227	24,489	89	--	0	3,772	--	18,313	5,453	14,267	7,685
Ethane/Ethylene .....	11	0	0	--	0	0	--	0	0	11	0
Propane/Propylene .....	3,690	14,542	21	--	0	1,576	--	0	2,595	14,082	3,048
Normal Butane/Butylene .....	6,593	8,506	0	--	0	1,839	--	12,316	2,858	-1,914	3,903
Isobutane/Isobutylene .....	6,933	1,441	68	--	0	357	--	5,997	0	2,088	734
<b>Other Liquids</b> .....	26,739	--	21,031	--	157	-2,057	--	40,365	577	9,042	32,206
Other Hydrocarbons/Oxygenates .....	25,006	--	13,228	--	0	-1,587	--	39,813	8	0	2,704
Unfinished Oils .....	--	--	5,595	--	-382	-1,423	--	-2,406	0	9,042	21,522
Motor Gasoline Blend. Comp. ....	1,733	--	2,208	--	539	963	--	2,948	569	0	7,979
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	-10	--	10	0	0	1
<b>Finished Petroleum Products</b> .....	-10	853,335	8,030	--	31,410	-6,505	--	--	77,046	822,223	48,523
Finished Motor Gasoline .....	-10	399,839	1,137	--	22,944	-3,005	--	--	5,692	421,223	18,700
Reformulated .....	--	278,889	0	--	2,519	-83	--	--	79	281,412	10,745
Oxygenated .....	17,228	2,388	0	--	0	21	--	--	245	19,350	25
Other .....	-17,238	118,562	1,137	--	20,425	-2,943	--	--	5,368	120,461	7,930
Finished Aviation Gasoline .....	--	1,353	9	--	0	5	--	--	0	1,357	576
Jet Fuel .....	--	131,315	1,674	--	3,920	330	--	--	3,465	133,114	8,062
Naphtha-Type .....	--	175	0	--	0	-235	--	--	18	392	20
Kerosene-Type .....	--	131,140	1,674	--	3,920	565	--	--	3,447	132,722	8,042
Kerosene .....	--	1,059	75	--	0	-37	--	--	32	1,139	68
Distillate Fuel Oil .....	--	135,473	1,907	--	4,299	-2,398	--	--	15,752	128,325	10,455
0.05 percent sulfur and under .....	--	104,876	1,613	--	2,536	-1,904	--	--	3,826	107,103	7,045
Greater than 0.05 percent sulfur ...	--	30,597	294	--	1,763	-494	--	--	11,926	21,222	3,410
Residual Fuel Oil .....	--	62,841	2,214	--	0	-1,066	--	--	13,578	52,543	5,265
Petrochemical Feedstocks <sup>e</sup> .....	--	3,148	705	--	0	95	--	--	0	3,758	380
Special Naphthas .....	--	781	11	--	0	10	--	--	5,119	-4,337	55
Lubricants .....	--	7,181	0	--	247	-93	--	--	1,049	6,472	1,474
Waxes .....	--	825	7	--	0	77	--	--	119	636	212
Petroleum Coke .....	--	47,276	263	--	0	590	--	--	31,940	15,009	1,948
Asphalt and Road Oil .....	--	16,613	0	--	0	-1,077	--	--	238	17,452	1,082
Still Gas .....	--	44,135	0	--	0	0	--	--	0	44,135	0
Miscellaneous Products .....	--	1,496	28	--	0	64	--	--	61	1,399	246
<b>Total</b> .....	<b>743,255</b>	<b>877,824</b>	<b>144,059</b>	<b>14,134</b>	<b>2,043</b>	<b>-6,085</b>	<b>0</b>	<b>830,002</b>	<b>107,620</b>	<b>849,777</b>	<b>149,513</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 24. PAD District V — Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 2,227	--	488	-45	-62	76	0	2,422	110	0
<b>Natural Gas Liquids and LRGs</b> .....	121	70	(s)	--	0	15	--	118	13	45
Pentanes Plus .....	62	--	0	--	0	(s)	--	52	0	10
Liquefied Petroleum Gases .....	59	70	(s)	--	0	15	--	66	13	35
Ethane/Ethylene .....	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene .....	12	45	(s)	--	0	(s)	--	0	4	54
Normal Butane/Butylene .....	25	23	0	--	0	12	--	48	9	-21
Isobutane/Isobutylene .....	21	2	0	--	0	2	--	18	0	3
<b>Other Liquids</b> .....	60	--	65	--	17	52	--	104	(s)	-14
Other Hydrocarbons/Oxygenates .....	76	--	38	--	0	-17	--	132	(s)	0
Unfinished Oils .....	--	--	21	--	0	43	--	-8	0	-14
Motor Gasoline Blend. Comp. ....	-16	--	5	--	17	27	--	-20	0	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	(s)	0	0
<b>Finished Petroleum Products</b> .....	25	2,734	19	--	87	-84	--	--	204	2,744
Finished Motor Gasoline .....	25	1,271	9	--	61	-28	--	--	17	1,377
Reformulated .....	--	937	0	--	0	-15	--	--	0	952
Oxygenated .....	92	1	0	--	0	(s)	--	--	1	91
Other .....	-67	333	9	--	61	-14	--	--	16	334
Finished Aviation Gasoline .....	--	7	0	--	0	4	--	--	0	3
Jet Fuel .....	--	402	9	--	16	4	--	--	9	414
Naphtha-Type .....	--	(s)	0	--	0	(s)	--	--	(s)	(s)
Kerosene-Type .....	--	401	9	--	16	4	--	--	9	414
Kerosene .....	--	2	0	--	0	(s)	--	--	(s)	2
Distillate Fuel Oil .....	--	463	1	--	11	-43	--	--	19	498
0.05 percent sulfur and under .....	--	364	0	--	6	-39	--	--	(s)	408
Greater than 0.05 percent sulfur ...	--	99	1	--	5	-4	--	--	18	90
Residual Fuel Oil .....	--	188	0	--	0	4	--	--	56	128
Petrochemical Feedstocks <sup>e</sup> .....	--	10	0	--	0	3	--	--	0	7
Special Naphthas .....	--	3	(s)	--	0	(s)	--	--	8	-5
Lubricants .....	--	24	0	--	-1	-2	--	--	3	22
Waxes .....	--	2	0	--	0	-1	--	--	(s)	3
Petroleum Coke .....	--	154	0	--	0	-5	--	--	91	68
Asphalt and Road Oil .....	--	58	0	--	0	-20	--	--	1	77
Still Gas .....	--	143	0	--	0	0	--	--	0	143
Miscellaneous Products .....	--	8	(s)	--	0	1	--	--	(s)	7
<b>Total</b> .....	2,433	2,803	572	-45	42	59	0	2,643	327	2,775

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.  
<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.  
<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.  
<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.  
<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.  
(s) = Less than 500 barrels per day.  
E = Estimated.  
LRG = Liquefied Refinery Gas.  
-- = Not Applicable.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 25. PAD District V — Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 1997**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	<sup>E</sup> 2,236	--	378	46	-97	-4	0	2,485	81	3
<b>Natural Gas Liquids and LRGs</b> .....	121	81	(s)	--	0	12	--	113	18	58
Pentanes Plus .....	64	--	0	--	0	(s)	--	53	(s)	11
Liquefied Petroleum Gases .....	57	81	(s)	--	0	12	--	60	18	47
Ethane/Ethylene .....	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene .....	12	48	(s)	--	0	5	--	0	9	46
Normal Butane/Butylene .....	22	28	0	--	0	6	--	41	9	-6
Isobutane/Isobutylene .....	23	5	(s)	--	0	1	--	20	0	7
<b>Other Liquids</b> .....	88	--	69	--	1	-7	--	133	2	30
Other Hydrocarbons/Oxygenates .....	82	--	44	--	0	-5	--	131	(s)	0
Unfinished Oils .....	--	--	18	--	-1	-5	--	-8	0	30
Motor Gasoline Blend. Comp. ....	6	--	7	--	2	3	--	10	2	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	(s)	0	0
<b>Finished Petroleum Products</b> .....	(s)	2,807	26	--	103	-21	--	--	253	2,705
Finished Motor Gasoline .....	(s)	1,315	4	--	75	-10	--	--	19	1,386
Reformulated .....	--	917	0	--	8	(s)	--	--	(s)	926
Oxygenated .....	57	8	0	--	0	(s)	--	--	1	64
Other .....	-57	390	4	--	67	-10	--	--	18	396
Finished Aviation Gasoline .....	--	4	(s)	--	0	(s)	--	--	0	4
Jet Fuel .....	--	432	6	--	13	1	--	--	11	438
Naphtha-Type .....	--	1	0	--	0	-1	--	--	(s)	1
Kerosene-Type .....	--	431	6	--	13	2	--	--	11	437
Kerosene .....	--	3	(s)	--	0	(s)	--	--	(s)	4
Distillate Fuel Oil .....	--	446	6	--	14	-8	--	--	52	422
0.05 percent sulfur and under .....	--	345	5	--	8	-6	--	--	13	352
Greater than 0.05 percent sulfur ...	--	101	1	--	6	-2	--	--	39	70
Residual Fuel Oil .....	--	207	7	--	0	-4	--	--	45	173
Petrochemical Feedstocks <sup>e</sup> .....	--	10	2	--	0	(s)	--	--	0	12
Special Naphthas .....	--	3	(s)	--	0	(s)	--	--	17	-14
Lubricants .....	--	24	0	--	1	(s)	--	--	3	21
Waxes .....	--	3	(s)	--	0	(s)	--	--	(s)	2
Petroleum Coke .....	--	156	1	--	0	2	--	--	105	49
Asphalt and Road Oil .....	--	55	0	--	0	-4	--	--	1	57
Still Gas .....	--	145	0	--	0	0	--	--	0	145
Miscellaneous Products .....	--	5	(s)	--	0	(s)	--	--	(s)	5
<b>Total</b> .....	2,445	2,888	474	46	7	-20	0	2,730	354	2,795

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

E = Estimated.

LRG = Liquefied Refinery Gas.

-- = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 26. Production of Crude Oil by PAD District and State**  
(Thousand Barrels)

PAD District and State	August 1997		January-August 1997	
	Total	Daily Average	Total	Daily Average
<b>PAD District I</b> .....	E 837	E 27	E 6,531	E 27
Florida .....	536	17	4,255	18
New York .....	E 31	E 1	E 227	E 1
Pennsylvania .....	E 108	E 3	E 935	E 4
Virginia .....	(s)	(s)	6	(s)
West Virginia .....	E 130	E 4	E 1,006	E 4
Adjustment <sup>a</sup> .....	32	1	102	(s)
<b>PAD District II</b> .....	E 17,700	E 571	E 137,912	E 568
Illinois .....	1,420	46	10,515	43
Indiana .....	201	6	1,573	6
Kansas .....	E 3,556	E 115	E 27,913	E 115
Kentucky .....	168	5	1,920	8
Michigan .....	E 836	E 27	E 6,790	E 28
Missouri .....	10	(s)	79	(s)
Nebraska .....	277	9	2,205	9
North Dakota .....	3,107	100	23,298	96
Ohio .....	E 625	E 20	E 5,581	E 23
Oklahoma .....	6,937	224	55,757	229
South Dakota .....	117	4	876	4
Tennessee .....	31	1	247	1
Adjustment <sup>a</sup> .....	414	13	1,157	5
<b>PAD District III</b> .....	E 99,126	E 3,198	E 778,753	E 3,205
Alabama .....	1,197	39	E 9,910	E 41
Arkansas .....	E 640	E 21	E 5,167	E 21
Louisiana <sup>b</sup> .....	E 11,290	E 364	E 89,223	E 367
Mississippi .....	1,819	59	13,686	56
New Mexico .....	E 5,458	E 176	E 42,812	E 176
Texas <sup>b</sup> .....	44,708	1,442	E 356,564	E 1,467
Federal Offshore PAD District III .....	E 32,530	E 1,049	E 257,136	E 1,058
Adjustment <sup>a</sup> .....	1,484	48	4,254	18
<b>PAD District IV</b> .....	E 10,798	E 348	E 87,290	E 359
Colorado .....	1,892	61	E 15,906	E 65
Montana .....	E 1,354	E 44	E 10,470	E 43
Utah .....	1,608	52	12,657	52
Wyoming .....	E 5,810	E 187	E 45,793	E 188
Adjustment <sup>a</sup> .....	134	4	2,465	10
<b>PAD District V</b> .....	E 66,286	E 2,138	E 544,154	E 2,239
Alaska <sup>b</sup> .....	E 37,205	E 1,200	E 316,470	E 1,302
South Alaska .....	1,011	33	8,382	34
North Slope .....	36,194	1,168	308,088	1,268
Adjustment for Alaska <sup>a</sup> .....	0	0	(s)	(s)
Arizona .....	8	(s)	55	(s)
California <sup>b</sup> .....	24,558	792	184,897	761
Nevada .....	79	3	681	3
Federal Offshore PAD District V .....	4,827	156	37,602	155
Adjustment excluding Alaska <sup>a</sup> .....	-390	-13	4,449	18
<b>U.S. Total<sup>b</sup></b> .....	E 194,747	E 6,282	E 1,554,639	E 6,398

<sup>a</sup> These adjustments are used to reconcile the national and PAD District level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PAD District level figures published in a previous issue. Revised data at the State, PAD District, and national levels will be published without adjustments in the *Petroleum Supply Annual*.

<sup>b</sup> Includes the following current month offshore production (thousand barrels): Alaska: State - 7,159; California: State - 1,855; Louisiana: State - E1,914; Texas: State - 100; U.S. Total, including Federal offshore - E48,384.

(s) = Less than 500 barrels or less than 500 barrels per day.

E = Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Sources: State government agencies, U.S. Department of the Interior, Minerals Management Service and the Conservation Committee of California Oil Producers.

**Table 27. Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining Districts, October 1997**  
(Thousand Barrels)

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
<b>Net Production</b>							
<b>Natural Gas Liquids</b> .....	<b>139</b>	<b>703</b>	<b>842</b>	<b>584</b>	<b>337</b>	<b>8,008</b>	<b>8,929</b>
Pentanes Plus .....	13	79	92	100	93	1,128	1,321
Liquefied Petroleum Gases .....	126	624	750	484	244	6,880	7,608
Ethane .....	51	217	268	128	0	2,536	2,664
Propane .....	48	284	332	220	145	2,887	3,252
Normal Butane .....	27	84	111	74	99	1,004	1,177
Isobutane .....	0	39	39	62	0	453	515
<b>Stocks</b>							
<b>Natural Gas Liquids</b> .....	<b>8</b>	<b>38</b>	<b>46</b>	<b>89</b>	<b>34</b>	<b>1,607</b>	<b>1,730</b>
Pentanes Plus .....	0	2	2	10	6	146	162
Liquefied Petroleum Gases .....	8	36	44	79	28	1,461	1,568
Ethane .....	0	0	0	17	0	237	254
Propane .....	4	20	24	35	18	666	719
Normal Butane .....	4	11	15	12	10	447	469
Isobutane .....	0	5	5	15	0	111	126

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
<b>Net Production</b>									
<b>Natural Gas Liquids</b> .....	<b>19,010</b>	<b>3,911</b>	<b>8,540</b>	<b>769</b>	<b>6,307</b>	<b>38,537</b>	<b>4,975</b>	<b>3,744</b>	<b>57,027</b>
Pentanes Plus .....	3,203	587	1,510	248	718	6,266	810	1,913	10,402
Liquefied Petroleum Gases .....	15,807	3,324	7,030	521	5,589	32,271	4,165	1,831	46,625
Ethane .....	7,122	1,826	2,857	76	2,898	14,779	1,799	1	19,511
Propane .....	5,460	953	2,488	238	1,758	10,897	1,485	382	16,348
Normal Butane .....	2,251	-1,839	867	136	618	2,033	576	784	4,681
Isobutane .....	974	2,384	818	71	315	4,562	305	664	6,085
<b>Stocks</b>									
<b>Natural Gas Liquids</b> .....	<b>166</b>	<b>277</b>	<b>1,149</b>	<b>50</b>	<b>106</b>	<b>1,748</b>	<b>316</b>	<b>221</b>	<b>4,061</b>
Pentanes Plus .....	70	99	130	14	13	326	145	19	654
Liquefied Petroleum Gases .....	96	178	1,019	36	93	1,422	171	202	3,407
Ethane .....	8	32	0	0	0	40	5	0	299
Propane .....	57	32	412	20	63	584	93	129	1,549
Normal Butane .....	22	62	399	11	26	520	46	13	1,063
Isobutane .....	9	52	208	5	4	278	27	60	496

Note: Refer to Appendix A for Refining District descriptions.  
Source: Energy Information Administration (EIA) Form EIA-816, "Monthly Natural Gas Liquids Report."

**Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 1997**

(Thousand Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II			Total
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	
<b>Crude Oil</b> .....	<b>47,381</b>	<b>2,333</b>	<b>49,714</b>	<b>71,483</b>	<b>12,730</b>	<b>20,240</b>	<b>104,453</b>
<b>Natural Gas Liquids</b> .....	<b>110</b>	<b>0</b>	<b>110</b>	<b>2,071</b>	<b>115</b>	<b>1,074</b>	<b>3,260</b>
Pentanes Plus .....	0	0	0	225	58	680	963
Liquefied Petroleum Gases .....	110	0	110	1,846	57	394	2,297
Ethane .....	0	0	0	0	0	0	0
Propane .....	0	0	0	0	0	0	0
Normal Butane .....	58	0	58	1,142	2	250	1,394
Isobutane .....	52	0	52	704	55	144	903
<b>Other Liquids</b> .....	<b>6,441</b>	<b>165</b>	<b>6,606</b>	<b>718</b>	<b>94</b>	<b>-1,731</b>	<b>-919</b>
Other Hydrocarbons/Hydrogen/Oxygenates .....	2,386	0	2,386	755	229	88	1,072
Other Hydrocarbons/Hydrogen .....	0	0	0	31	0	30	61
Oxygenates .....	W	W	2,386	724	229	58	1,011
Fuel Ethanol .....	W	W	W	W	W	W	884
Methanol .....	W	W	W	W	W	W	W
MTBE .....	W	W	2,237	W	W	W	W
Other Oxygenates <sup>a</sup> .....	W	W	W	W	W	W	W
Unfinished Oils (net) .....	1,569	165	1,734	1,628	-279	-1,505	-156
Motor Gasoline Blend. Comp. (net) .....	2,686	0	2,686	-1,657	144	-314	-1,827
Aviation Gasoline Blend. Comp. (net) .....	-200	0	-200	-8	0	0	-8
<b>Total Input to Refineries</b> .....	<b>53,932</b>	<b>2,498</b>	<b>56,430</b>	<b>74,272</b>	<b>12,939</b>	<b>19,583</b>	<b>106,794</b>
<b>Atmospheric Crude Oil Distillation</b>							
Gross Input (daily average) .....	1,497	75	1,572	2,358	411	658	3,427
Operable Capacity (daily average) .....	1,545	98	1,643	2,339	413	696	3,448
Operable Utilization Rate (percent) <sup>b,c</sup> .....	96.9	76.5	95.7	100.8	99.6	94.5	99.4
<b>Downstream Processing</b>							
<b>Fresh Feed Input (daily average)</b>							
Catalytic Cracking .....	556	13	569	809	124	175	1,108
Catalytic Hydrocracking .....	61	0	61	139	0	5	144
Delayed and Fluid Coking .....	81	0	81	189	69	64	322
<b>Crude Oil Qualities</b>							
Sulfur Content, Weighted Average (percent) .....	0.97	1.02	0.97	1.20	2.30	0.72	1.24
API Gravity, Weighted Average (degrees) .....	33.13	33.10	33.13	33.25	27.29	35.56	32.97
<b>Operable Capacity (daily average)</b> .....	<b>1,545</b>	<b>98</b>	<b>1,643</b>	<b>2,339</b>	<b>413</b>	<b>696</b>	<b>3,448</b>
Operating .....	1,465	98	1,563	2,339	413	696	3,448
Idle .....	80	0	80	0	0	0	0
<b>Alaskan Crude Oil Receipts</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>181</b>	<b>0</b>	<b>0</b>	<b>181</b>

See footnotes at end of table.

**Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 1997 (Continued)**

(Thousand Barrels, Except Where Noted)

Commodity	PAD District III						PAD Dist.	PAD Dist.	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	IV	V	
							Rocky Mt.	West Coast	
<b>Crude Oil</b> .....	<b>18,341</b>	<b>102,493</b>	<b>85,775</b>	<b>5,393</b>	<b>1,968</b>	<b>213,970</b>	<b>15,280</b>	<b>75,073</b>	<b>458,490</b>
<b>Natural Gas Liquids</b> .....	<b>1,059</b>	<b>3,376</b>	<b>2,638</b>	<b>208</b>	<b>148</b>	<b>7,429</b>	<b>525</b>	<b>3,648</b>	<b>14,972</b>
Pentanes Plus .....	545	1,434	331	177	122	2,609	109	1,608	5,289
Liquefied Petroleum Gases .....	514	1,942	2,307	31	26	4,820	416	2,040	9,683
Ethane .....	0	0	0	0	0	0	0	0	0
Propane .....	0	0	0	0	0	0	0	0	0
Normal Butane .....	444	913	1,326	3	1	2,687	293	1,486	5,918
Isobutane .....	70	1,029	981	28	25	2,133	123	554	3,765
<b>Other Liquids</b> .....	<b>-21</b>	<b>9,871</b>	<b>5,230</b>	<b>-233</b>	<b>-325</b>	<b>14,522</b>	<b>108</b>	<b>3,222</b>	<b>23,539</b>
Other Hydrocarbons/Hydrogen/Oxygenates .....	139	2,061	1,081	0	36	3,317	70	4,089	10,934
Other Hydrocarbons/Hydrogen .....	125	359	694	0	0	1,178	6	842	2,087
Oxygenates .....	14	1,702	387	W	W	2,139	64	3,247	8,847
Fuel Ethanol .....	W	W	W	W	W	W	W	W	1,031
Methanol .....	W	W	W	W	W	W	W	W	62
MTBE .....	W	1,574	W	W	W	1,917	W	3,163	7,440
Other Oxygenates <sup>a</sup> .....	W	W	W	W	W	W	W	W	314
Unfinished Oils (net) .....	282	9,482	3,334	-152	-362	12,584	-80	-243	13,839
Motor Gasoline Blend. Comp. (net) .....	-443	-1,672	817	-81	1	-1,378	118	-625	-1,026
Aviation Gasoline Blend. Comp. (net) .....	1	0	-2	0	0	-1	0	1	-208
<b>Total Input to Refineries</b> .....	<b>19,379</b>	<b>115,740</b>	<b>93,643</b>	<b>5,368</b>	<b>1,791</b>	<b>235,921</b>	<b>15,913</b>	<b>81,943</b>	<b>497,001</b>
<b>Atmospheric Crude Oil Distillation</b>									
Gross Input (daily average) .....	594	3,325	2,809	166	64	6,958	497	2,634	15,088
Operable Capacity (daily average) .....	621	3,428	2,756	201	95	7,101	520	2,890	15,602
Operable Utilization Rate (percent) <sup>b,c</sup> .....	95.7	97.0	101.9	82.6	67.2	98.0	95.6	91.1	96.7
<b>Downstream Processing</b>									
<b>Fresh Feed Input (daily average)</b>									
Catalytic Cracking .....	201	1,394	990	23	14	2,622	154	697	5,150
Catalytic Hydrocracking .....	14	244	215	0	0	473	2	412	1,092
Delayed and Fluid Coking .....	6	360	411	8	0	785	38	469	1,696
<b>Crude Oil Qualities</b>									
Sulfur Content, Weighted Average (percent) .....	0.82	1.41	1.32	1.89	0.46	1.33	1.43	1.29	1.27
API Gravity, Weighted Average (degrees) .....	38.62	30.18	30.48	30.21	39.35	31.12	32.33	26.46	30.99
<b>Operable Capacity (daily average)</b> .....	<b>621</b>	<b>3,428</b>	<b>2,756</b>	<b>201</b>	<b>95</b>	<b>7,101</b>	<b>520</b>	<b>2,890</b>	<b>15,602</b>
Operating .....	621	3,401	2,734	201	95	7,052	520	2,880	15,464
Idle .....	0	27	22	0	0	49	0	10	139
<b>Alaskan Crude Oil Receipts</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>26</b>	<b>0</b>	<b>35,244</b>	<b>35,451</b>

<sup>a</sup> Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

<sup>b</sup> Represents gross input divided by operable calendar day capacity.

<sup>c</sup> See Table H2 in the Highlights Section for additional information concerning utilization rates.

W = Withheld to avoid disclosure of individual company data.

Note: • Totals may not equal sum of components due to independent rounding. • Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

**Table 29. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, October 1997**  
(Thousand Barrels)

Commodity	PAD District I			PAD District II			Total
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	
Liquefied Refinery Gases .....	777	34	811	2,491	-9	457	2,939
Ethane/Ethylene .....	0	0	0	0	0	0	0
Ethane .....	W	W	W	W	W	W	W
Ethylene .....	W	W	W	W	W	W	W
Propane/Propylene .....	1,527	34	1,561	2,871	279	547	3,697
Propane .....	W	W	W	2,172	W	W	2,847
Propylene .....	W	W	W	699	W	W	850
Normal Butane/Butylene .....	-685	2	-683	-489	-278	-45	-812
Normal Butane .....	W	W	W	W	W	W	W
Butylene .....	W	W	W	W	W	W	W
Isobutane/Isobutylene .....	-65	-2	-67	109	-10	-45	54
Isobutane .....	W	W	W	W	W	W	W
Isobutylene .....	W	W	W	W	W	W	W
Finished Motor Gasoline .....	28,129	907	29,036	39,417	6,627	10,150	56,194
Reformulated .....	19,637	0	19,637	6,321	692	0	7,013
Oxygenated .....	0	0	0	636	1,377	21	2,034
Other .....	8,492	907	9,399	32,460	4,558	10,129	47,147
Finished Aviation Gasoline .....	12	0	12	62	48	28	138
Jet Fuel .....	3,466	25	3,491	4,881	941	870	6,692
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	3,466	25	3,491	4,881	941	870	6,692
Commercial .....	3,466	25	3,491	4,593	859	788	6,240
Military .....	0	0	0	288	82	82	452
Kerosene .....	307	38	345	441	4	161	606
Distillate Fuel Oil .....	12,196	702	12,898	17,268	3,501	6,107	26,876
0.05 percent sulfur and under .....	4,695	613	5,308	12,243	2,659	4,627	19,529
Greater than 0.05 percent sulfur .....	7,501	89	7,590	5,025	842	1,480	7,347
Residual Fuel Oil .....	3,980	57	4,037	1,309	265	75	1,649
Less than 0.31 percent sulfur .....	1,181	22	1,203	-2	0	0	-2
0.31 to 1.00 percent sulfur .....	2,538	35	2,573	375	0	0	375
Greater than 1.00 percent sulfur .....	261	0	261	936	265	75	1,276
Naphtha for Petrochemical Feedstock Use .....	428	0	428	650	0	22	672
Other Oils for Petrochemical Feedstock Use .....	0	0	0	630	0	54	684
Special Naphthas .....	24	23	47	596	0	59	655
Lubricants .....	345	180	525	530	0	262	792
Naphthenic .....	0	0	0	0	0	0	0
Paraffinic .....	345	180	525	530	0	262	792
Waxes .....	0	139	139	67	0	45	112
Petroleum Coke .....	1,519	18	1,537	2,674	831	676	4,181
Marketable .....	640	0	640	1,539	681	507	2,727
Catalyst .....	879	18	897	1,135	150	169	1,454
Asphalt and Road Oil .....	3,026	367	3,393	4,072	1,222	718	6,012
Still Gas .....	1,843	40	1,883	2,933	481	696	4,110
Miscellaneous Products .....	26	21	47	192	76	39	307
Fuel Use .....	0	0	0	0	0	0	0
Nonfuel Use .....	26	21	47	192	76	39	307
<b>Total .....</b>	<b>56,078</b>	<b>2,551</b>	<b>58,629</b>	<b>78,213</b>	<b>13,987</b>	<b>20,419</b>	<b>112,619</b>
Processing Gain(-) or Loss(+) <sup>a</sup> .....	-2,146	-53	-2,199	-3,941	-1,048	-836	-5,825

See footnotes at end of table.

**Table 29. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, October 1997 (Continued)**  
(Thousand Barrels)

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Liquefied Refinery Gases .....	832	6,813	4,345	15	61	12,066	116	2,158	18,090
Ethane/Ethylene .....	48	527	132	0	0	707	0	0	707
Ethane .....	W	W	W	W	W	W	W	W	543
Ethylene .....	W	W	W	W	W	W	W	W	164
Propane/Propylene .....	721	6,172	4,141	82	36	11,152	276	1,401	18,087
Propane .....	W	2,794	3,405	W	W	6,737	W	W	12,396
Propylene .....	W	3,378	736	W	W	4,415	W	W	5,691
Normal Butane/Butylene .....	142	-148	-45	-62	21	-92	-111	704	-994
Normal Butane .....	W	W	W	W	W	W	W	W	-1,088
Butylene .....	W	W	W	W	W	W	W	W	94
Isobutane/Isobutylene .....	-79	262	117	-5	4	299	-49	53	290
Isobutane .....	W	W	W	W	W	W	W	W	233
Isobutylene .....	W	W	W	W	W	W	W	W	57
Finished Motor Gasoline .....	10,119	54,718	43,655	1,492	917	110,901	7,997	39,409	243,537
Reformulated .....	497	15,472	4,565	0	0	20,534	0	29,043	76,227
Oxygenated .....	0	0	29	0	133	162	733	28	2,957
Other .....	9,622	39,246	39,061	1,492	784	90,205	7,264	10,338	164,353
Finished Aviation Gasoline .....	182	55	173	0	0	410	14	213	787
Jet Fuel .....	1,801	10,650	12,535	246	29	25,261	673	12,456	48,573
Naphtha-Type .....	1	0	0	0	0	1	0	12	13
Kerosene-Type .....	1,800	10,650	12,535	246	29	25,260	673	12,444	48,560
Commercial .....	1,208	10,003	11,939	194	-6	23,338	599	11,212	44,880
Military .....	592	647	596	52	35	1,922	74	1,232	3,680
Kerosene .....	7	524	202	79	-5	807	120	60	1,938
Distillate Fuel Oil .....	4,785	23,137	19,775	1,265	605	49,567	4,458	14,339	108,138
0.05 percent sulfur and under .....	3,716	16,089	8,411	567	458	29,241	3,615	11,276	68,969
Greater than 0.05 percent sulfur .....	1,069	7,048	11,364	698	147	20,326	843	3,063	39,169
Residual Fuel Oil .....	374	5,325	4,246	207	26	10,178	345	5,829	22,038
Less than 0.31 percent sulfur .....	141	4	246	0	0	391	64	304	1,960
0.31 to 1.00 percent sulfur .....	167	1,380	769	182	26	2,524	59	1,259	6,790
Greater than 1.00 percent sulfur .....	66	3,941	3,231	25	0	7,263	222	4,266	13,288
Naphtha for Petrochemical Feedstock Use .....	134	5,280	989	0	39	6,442	0	99	7,641
Other Oils for Petrochemical Feedstock Use .....	163	2,618	2,496	0	0	5,277	19	213	6,193
Special Naphthas .....	110	476	34	157	0	777	-1	82	1,560
Lubricants .....	W	1,714	W	W	W	3,621	0	745	5,683
Naphthenic .....	W	254	W	W	W	734	0	328	1,062
Paraffinic .....	W	1,460	W	W	W	2,887	0	417	4,621
Waxes .....	5	212	82	78	0	377	62	70	760
Petroleum Coke .....	312	5,824	4,599	77	27	10,839	465	4,760	21,782
Marketable .....	33	3,802	3,369	57	0	7,261	267	3,659	14,554
Catalyst .....	279	2,022	1,230	20	27	3,578	198	1,101	7,228
Asphalt and Road Oil .....	477	844	1,161	1,017	66	3,565	1,392	1,798	16,160
Still Gas .....	752	5,421	3,341	179	32	9,725	601	4,438	20,757
Miscellaneous Products .....	86	400	415	0	0	901	52	235	1,542
Fuel Use .....	21	0	110	0	0	131	0	35	166
Nonfuel Use .....	65	400	305	0	0	770	52	200	1,376
<b>Total .....</b>	<b>20,179</b>	<b>124,011</b>	<b>99,303</b>	<b>5,424</b>	<b>1,797</b>	<b>250,714</b>	<b>16,313</b>	<b>86,904</b>	<b>525,179</b>
Processing Gain(-) or Loss(+) <sup>a</sup> .....	-800	-8,271	-5,660	-56	-6	-14,793	-400	-4,961	-28,178

<sup>a</sup> Represents the arithmetic difference between input and production.  
W = Withheld to avoid disclosure of individual company data.  
Note: Refer to Appendix A for Refining District descriptions.  
Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

**Table 30. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, October 1997**  
(Thousand Barrels)

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
<b>Crude Oil</b> .....	<b>13,728</b>	<b>678</b>	<b>14,406</b>	<b>8,466</b>	<b>1,622</b>	<b>2,456</b>	<b>12,544</b>
<b>Petroleum Products</b> .....	<b>58,195</b>	<b>2,301</b>	<b>60,496</b>	<b>37,520</b>	<b>8,295</b>	<b>13,556</b>	<b>59,371</b>
Pentanes Plus .....	0	0	0	5	310	99	414
Liquefied Petroleum Gases .....	2,471	30	2,501	3,031	705	1,191	4,927
Ethane/Ethylene .....	0	0	0	3	0	0	3
Propane/Propylene .....	691	7	698	1,639	23	726	2,388
Normal Butane/Butylene .....	1,418	21	1,439	1,055	578	352	1,985
Isobutane/Isobutylene .....	362	2	364	334	104	113	551
Other Hydrocarbons/Hydrogen/Oxygenates .....	1,818	9	1,827	373	119	46	538
Other Hydrocarbons/Hydrogen .....	0	0	0	24	0	0	24
Oxygenates .....	W	W	1,827	349	119	46	514
Fuel Ethanol .....	W	W	W	W	W	W	326
Methanol .....	W	W	W	W	W	W	W
MTBE .....	W	W	1,410	W	W	W	W
Other Oxygenates <sup>a</sup> .....	W	W	W	W	W	W	W
Unfinished Oils .....	11,422	735	12,157	8,308	597	5,034	13,939
Naphthas and Lighter .....	2,184	290	2,474	2,478	175	1,221	3,874
Kerosene and Light Gas Oils .....	2,651	3	2,654	1,374	66	224	1,664
Heavy Gas Oils .....	5,232	361	5,593	2,929	352	2,384	5,665
Residuum .....	1,355	81	1,436	1,527	4	1,205	2,736
Motor Gasoline Blending Components .....	7,151	35	7,186	6,498	1,026	1,284	8,808
Aviation Gasoline Blending Components .....	164	0	164	21	0	0	21
Finished Motor Gasoline .....	8,866	286	9,152	5,520	984	1,622	8,126
Reformulated .....	5,740	0	5,740	303	0	0	303
Oxygenated .....	0	8	8	148	228	0	376
Other .....	3,126	278	3,404	5,069	756	1,622	7,447
Finished Aviation Gasoline .....	40	0	40	23	44	60	127
Jet Fuel .....	2,016	20	2,036	2,858	161	465	3,484
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	2,016	20	2,036	2,858	161	465	3,484
Kerosene .....	722	37	759	369	41	71	481
Distillate Fuel Oil .....	16,496	210	16,706	4,388	1,697	1,970	8,055
0.05 percent sulfur and under .....	2,757	183	2,940	2,612	1,007	1,159	4,778
Greater than 0.05 percent sulfur .....	13,739	27	13,766	1,776	690	811	3,277
Residual Fuel Oil .....	4,169	30	4,199	1,133	260	104	1,497
Less than 0.31 percent sulfur .....	1,250	16	1,266	11	0	0	11
0.31 to 1.00 percent sulfur .....	1,926	14	1,940	247	0	1	248
Greater than 1.00 percent sulfur .....	993	0	993	875	260	103	1,238
Naphtha for Petrochemical Feedstock Use .....	473	0	473	185	0	3	188
Other Oils for Petrochemical Feedstock Use .....	0	0	0	230	0	0	230
Special Naphthas .....	77	16	93	369	0	25	394
Lubricants .....	358	347	705	760	0	0	760
Waxes .....	0	177	177	130	0	31	161
Petroleum Coke (Marketable) .....	449	0	449	579	1,797	361	2,737
Asphalt and Road Oil .....	1,498	330	1,828	2,654	539	1,159	4,352
Miscellaneous Products .....	5	39	44	86	15	31	132
<b>Total Stocks, All Oils</b> .....	<b>71,923</b>	<b>2,979</b>	<b>74,902</b>	<b>45,986</b>	<b>9,917</b>	<b>16,012</b>	<b>71,915</b>

See footnotes at end of table.

**Table 30. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, October 1997 (Continued)**  
(Thousand Barrels)

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
<b>Crude Oil</b> .....	<b>995</b>	<b>27,861</b>	<b>17,058</b>	<b>1,073</b>	<b>445</b>	<b>47,432</b>	<b>2,073</b>	<b>23,165</b>	<b>99,620</b>
<b>Petroleum Products</b> .....	<b>11,191</b>	<b>72,026</b>	<b>51,160</b>	<b>4,099</b>	<b>1,553</b>	<b>140,029</b>	<b>9,392</b>	<b>60,781</b>	<b>330,069</b>
Pentanes Plus .....	196	89	27	13	6	331	6	0	751
Liquefied Petroleum Gases .....	2,931	3,537	5,450	164	62	12,144	500	1,941	22,013
Ethane/Ethylene .....	63	640	0	0	0	703	0	0	706
Propane/Propylene .....	1,523	1,027	690	6	4	3,250	137	167	6,640
Normal Butane/Butylene .....	1,063	1,163	3,926	142	48	6,342	235	1,286	11,287
Isobutane/Isobutylene .....	282	707	834	16	10	1,849	128	488	3,380
Other Hydrocarbons/Hydrogen/Oxygenates .....	96	1,442	670	8	15	2,231	95	1,963	6,654
Other Hydrocarbons/Hydrogen .....	0	0	1	0	0	1	0	7	32
Oxygenates .....	96	1,442	669	W	W	2,230	95	1,956	6,622
Fuel Ethanol .....	W	W	W	W	W	W	W	W	480
Methanol .....	W	W	W	W	W	W	W	W	747
MTBE .....	W	1,183	W	W	W	1,837	W	1,938	5,339
Other Oxygenates <sup>a</sup> .....	W	W	W	W	W	W	W	W	56
Unfinished Oils .....	2,296	24,241	17,299	1,032	687	45,555	2,101	21,522	95,274
Naphthas and Lighter .....	772	6,299	3,765	200	303	11,339	355	3,251	21,293
Kerosene and Light Gas Oils .....	294	3,130	2,451	268	98	6,241	272	3,977	14,808
Heavy Gas Oils .....	833	10,206	7,375	510	286	19,210	917	11,199	42,584
Residuum .....	397	4,606	3,708	54	0	8,765	557	3,095	16,589
Motor Gasoline Blending Components .....	1,356	6,964	4,668	158	201	13,347	1,487	7,067	37,895
Aviation Gasoline Blending Components .....	6	0	26	0	0	32	0	1	218
Finished Motor Gasoline .....	1,538	10,777	6,853	287	126	19,581	1,768	9,556	48,183
Reformulated .....	184	2,668	497	0	0	3,349	0	5,928	15,320
Oxygenated .....	0	0	0	0	0	0	84	23	491
Other .....	1,354	8,109	6,356	287	126	16,232	1,684	3,605	32,372
Finished Aviation Gasoline .....	66	211	170	0	0	447	26	293	933
Jet Fuel .....	576	3,408	3,065	68	28	7,145	351	4,494	17,510
Naphtha-Type .....	1	0	0	0	0	1	0	20	21
Kerosene-Type .....	575	3,408	3,065	68	28	7,144	351	4,474	17,489
Kerosene .....	29	145	244	56	13	487	36	52	1,815
Distillate Fuel Oil .....	974	8,984	4,508	360	197	15,023	1,034	5,643	46,461
0.05 percent sulfur and under .....	487	4,870	1,734	145	53	7,289	801	4,001	19,809
Greater than 0.05 percent sulfur .....	487	4,114	2,774	215	144	7,734	233	1,642	26,652
Residual Fuel Oil .....	207	3,374	2,172	338	18	6,109	547	3,498	15,850
Less than 0.31 percent sulfur .....	37	1	41	0	0	79	30	616	2,002
0.31 to 1.00 percent sulfur .....	74	490	740	234	18	1,556	340	824	4,908
Greater than 1.00 percent sulfur .....	96	2,883	1,391	104	0	4,474	177	2,058	8,940
Naphtha for Petrochemical Feedstock Use .....	17	1,435	305	0	50	1,807	0	218	2,686
Other Oils for Petrochemical Feedstock Use .....	75	1,029	505	0	0	1,609	1	162	2,002
Special Naphthas .....	90	1,087	38	110	0	1,325	0	55	1,867
Lubricants .....	14	2,189	1,934	767	0	4,904	0	1,014	7,383
Waxes .....	5	234	165	16	0	420	15	212	985
Petroleum Coke (Marketable) .....	0	2,162	2,213	0	0	4,375	215	1,948	9,724
Asphalt and Road Oil .....	684	573	382	722	150	2,511	1,210	1,021	10,922
Miscellaneous Products .....	35	145	466	0	0	646	0	121	943
<b>Total Stocks, All Oils</b> .....	<b>12,186</b>	<b>99,887</b>	<b>68,218</b>	<b>5,172</b>	<b>1,998</b>	<b>187,461</b>	<b>11,465</b>	<b>83,946</b>	<b>429,689</b>

<sup>a</sup> Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

W = Withheld to avoid disclosure of individual company data.

Notes: • Stocks are reported as of the last day of the month. • Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

**Table 31. Percent Refinery Yield of Petroleum Products by PAD and Refining Districts,<sup>a</sup>  
October 1997**

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Liquefied Refinery Gases .....	1.6	1.4	1.6	3.4	-0.1	2.4	2.8
Finished Motor Gasoline <sup>b</sup> .....	46.9	36.3	46.4	52.3	49.3	49.7	51.5
Finished Aviation Gasoline <sup>c</sup> .....	0.4	0.0	0.4	0.1	0.4	0.1	0.1
Naphtha-Type Jet Fuel .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel .....	7.1	1.0	6.8	6.7	7.6	4.6	6.4
Kerosene .....	0.6	1.5	0.7	0.6	0.0	0.9	0.6
Distillate Fuel Oil .....	24.9	28.1	25.1	23.6	28.1	32.6	25.8
Residual Fuel Oil .....	8.1	2.3	7.8	1.8	2.1	0.4	1.6
Naphtha for Petrochemical Feedstock Use .....	0.9	0.0	0.8	0.9	0.0	0.1	0.6
Other Oils for Petrochemical Feedstock Use .....	0.0	0.0	0.0	0.9	0.0	0.3	0.7
Special Naphthas .....	0.0	0.9	0.1	0.8	0.0	0.3	0.6
Lubricants .....	0.7	7.2	1.0	0.7	0.0	1.4	0.8
Waxes .....	0.0	5.6	0.3	0.1	0.0	0.2	0.1
Petroleum Coke .....	3.1	0.7	3.0	3.7	6.7	3.6	4.0
Asphalt and Road Oil .....	6.2	14.7	6.6	5.6	9.8	3.8	5.8
Still Gas .....	3.8	1.6	3.7	4.0	3.9	3.7	3.9
Miscellaneous Products .....	0.1	0.8	0.1	0.3	0.6	0.2	0.3
Processing Gain(-) or Loss(+) <sup>d</sup> .....	-4.4	-2.1	-4.3	-5.4	-8.4	-4.5	-5.6

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Liquefied Refinery Gases .....	4.5	6.1	4.9	0.3	3.8	5.3	0.8	2.9	3.8
Finished Motor Gasoline <sup>b</sup> .....	50.3	45.5	43.9	26.0	45.6	44.8	47.9	43.2	46.3
Finished Aviation Gasoline <sup>c</sup> .....	1.0	0.0	0.2	0.0	0.0	0.2	0.1	0.3	0.2
Naphtha-Type Jet Fuel .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel .....	9.7	9.5	14.1	4.7	1.8	11.1	4.4	16.6	10.3
Kerosene .....	0.0	0.5	0.2	1.5	-0.3	0.4	0.8	0.1	0.4
Distillate Fuel Oil .....	25.7	20.7	22.2	24.1	37.7	21.9	29.3	19.2	22.9
Residual Fuel Oil .....	2.0	4.8	4.8	3.9	1.6	4.5	2.3	7.8	4.7
Naphtha for Petrochemical Feedstock Use .....	0.7	4.7	1.1	0.0	2.4	2.8	0.0	0.1	1.6
Other Oils for Petrochemical Feedstock Use .....	0.9	2.3	2.8	0.0	0.0	2.3	0.1	0.3	1.3
Special Naphthas .....	0.6	0.4	0.0	3.0	0.0	0.3	0.0	0.1	0.3
Lubricants .....	0.2	1.5	1.4	11.7	0.0	1.6	0.0	1.0	1.2
Waxes .....	0.0	0.2	0.1	1.5	0.0	0.2	0.4	0.1	0.2
Petroleum Coke .....	1.7	5.2	5.2	1.5	1.7	4.8	3.1	6.4	4.6
Asphalt and Road Oil .....	2.6	0.8	1.3	19.4	4.1	1.6	9.2	2.4	3.4
Still Gas .....	4.0	4.8	3.7	3.4	2.0	4.3	4.0	5.9	4.4
Miscellaneous Products .....	0.5	0.4	0.5	0.0	0.0	0.4	0.3	0.3	0.3
Processing Gain(-) or Loss(+) <sup>d</sup> .....	-4.3	-7.4	-6.4	-1.1	-0.4	-6.5	-2.6	-6.6	-6.0

<sup>a</sup> Based on crude oil input and net reruns of unfinished oils.

<sup>b</sup> Based on total finished motor gasoline output minus net input of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and oxygenates.

<sup>c</sup> Based on finished aviation gasoline output minus net input of aviation gasoline blending components.

<sup>d</sup> Represents the difference between input and production.

Notes: • Totals may not equal sum of components due to independent rounding. • Refer to Appendix A for Refining District descriptions.

Sources: Calculated from data on Tables 28 and 29.

**Table 32. Imports of Residual Fuel Oil by Sulfur Content and by PAD District and State of Entry, October 1997**  
(Thousand Barrels)

PAD District and State of Entry	Residual Fuel Oil			
	Less than 0.31% Sulfur	0.31 to 1.00% Sulfur	Greater than 1.00% Sulfur	Total
<b>PAD District I</b> .....	<b>753</b>	<b>1,255</b>	<b>2,882</b>	<b>4,890</b>
Delaware .....	0	0	158	158
Florida .....	0	0	810	810
Maine .....	136	0	221	357
Maryland .....	0	255	118	373
New Jersey .....	254	483	655	1,392
New York .....	363	517	520	1,400
North Carolina .....	0	0	170	170
South Carolina .....	0	0	228	228
Vermont .....	0	0	2	2
<b>U.S. Total</b> .....	<b>753</b>	<b>1,255</b>	<b>2,882</b>	<b>4,890</b>

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 33. Imports of Crude Oil and Petroleum Products by PAD District,  
October 1997**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
<b>Crude Oil<sup>a,b</sup></b> .....	<b>47,880</b>	<b>49,812</b>	<b>147,799</b>	<b>4,232</b>	<b>15,124</b>	<b>264,847</b>	<b>8,543</b>
<b>Natural Gas Liquids</b> .....	<b>900</b>	<b>2,106</b>	<b>2,426</b>	<b>423</b>	<b>13</b>	<b>5,868</b>	<b>189</b>
Pentanes Plus .....	0	54	1,033	92	0	1,179	38
Liquefied Petroleum Gases .....	900	2,052	1,393	331	13	4,689	151
Ethane .....	0	0	434	0	0	434	14
Ethylene .....	0	11	0	0	0	11	(s)
Propane .....	867	1,685	510	193	13	3,268	105
Propylene .....	0	77	85	0	0	162	5
Normal Butane .....	19	112	218	138	0	487	16
Butylene .....	0	0	0	0	0	0	0
Isobutane .....	14	167	146	0	0	327	11
Isobutylene .....	0	0	0	0	0	0	0
<b>Other Liquids</b> .....	<b>4,699</b>	<b>4</b>	<b>10,519</b>	<b>0</b>	<b>2,005</b>	<b>17,227</b>	<b>556</b>
Other Hydrocarbons/Hydrogen/Oxygenates .....	465	0	0	0	1,193	1,658	53
Other Hydrocarbons/Hydrogen .....	0	0	0	0	0	0	0
Oxygenates .....	465	0	0	0	1,193	1,658	53
Fuel Ethanol .....	0	0	0	0	17	17	1
MTBE .....	465	0	0	0	1,176	1,641	53
Other Oxygenates <sup>c</sup> .....	0	0	0	0	0	0	0
Unfinished Oils <sup>a</sup> .....	703	2	10,210	0	660	11,575	373
Naphthas and Lighter .....	0	2	1,514	0	245	1,761	57
Kerosene and Light Gas Oils .....	0	0	0	0	0	0	0
Heavy Gas Oils .....	703	0	4,920	0	0	5,623	181
Residuum .....	0	0	3,776	0	415	4,191	135
Motor Gasoline Blending Components .....	3,531	2	309	0	152	3,994	129
Aviation Gasoline Blending Components .....	0	0	0	0	0	0	0
<b>Finished Petroleum Products</b> .....	<b>23,461</b>	<b>349</b>	<b>10,213</b>	<b>288</b>	<b>578</b>	<b>34,889</b>	<b>1,125</b>
Finished Motor Gasoline .....	8,590	60	649	10	272	9,581	309
Reformulated .....	4,892	0	100	0	0	4,992	161
Oxygenated .....	0	0	0	0	0	0	0
Other .....	3,698	60	549	10	272	4,589	148
Finished Aviation Gasoline .....	0	0	0	0	0	0	0
Jet Fuel .....	2,262	0	17	0	280	2,559	83
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	2,262	0	17	0	280	2,559	83
Bonded Aircraft Fuel .....	1,575	0	0	0	3	1,578	51
Other .....	687	0	17	0	277	981	32
Kerosene .....	25	0	0	0	0	25	1
Distillate Fuel Oil .....	6,180	133	0	278	20	6,611	213
Bonded Ship Bunkers .....	0	0	0	1	20	21	1
0.05 percent sulfur and under .....	0	0	0	1	0	1	(s)
Greater than 0.05 percent sulfur .....	0	0	0	0	20	20	1
Other .....	6,180	133	0	277	0	6,590	213
0.05 percent sulfur and under .....	3,055	103	0	52	0	3,210	104
Greater than 0.05 percent sulfur .....	3,125	30	0	225	0	3,380	109
Residual Fuel Oil .....	4,890	0	0	0	0	4,890	158
Bonded Ship Bunkers .....	0	0	0	0	0	0	0
Less than 0.31 percent sulfur .....	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur .....	0	0	0	0	0	0	0
Greater than 1.00 percent sulfur .....	0	0	0	0	0	0	0
Other .....	4,890	0	0	0	0	4,890	158
Less than 0.31 percent sulfur .....	753	0	0	0	0	753	24
0.31 to 1.00 percent sulfur .....	1,255	0	0	0	0	1,255	40
Greater than 1.00 percent sulfur .....	2,882	0	0	0	0	2,882	93
Naphtha for Petrochemical Feedstock Use .....	181	37	1,610	0	0	1,828	59
Other Oils for Petrochemical Feedstock Use .....	0	0	7,860	0	0	7,860	254
Special Naphthas .....	105	31	0	0	1	137	4
Lubricants .....	457	22	47	0	0	526	17
Waxes .....	21	12	0	0	0	33	1
Petroleum Coke .....	0	0	0	0	0	0	0
Asphalt and Road Oil .....	750	52	21	0	0	823	27
Miscellaneous Products .....	0	2	9	0	5	16	1
<b>Total</b> .....	<b>76,940</b>	<b>52,271</b>	<b>170,957</b>	<b>4,943</b>	<b>17,720</b>	<b>322,831</b>	<b>10,414</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 34. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January-October 1997**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
<b>Crude Oil<sup>a,b</sup></b> .....	<b>440,363</b>	<b>472,269</b>	<b>1,378,756</b>	<b>35,620</b>	<b>114,909</b>	<b>2,441,917</b>	<b>8,033</b>
<b>Natural Gas Liquids</b> .....	<b>6,379</b>	<b>19,166</b>	<b>27,054</b>	<b>2,879</b>	<b>89</b>	<b>55,567</b>	<b>183</b>
Pentanes Plus .....	0	259	10,497	537	0	11,293	37
Liquefied Petroleum Gases .....	6,379	18,907	16,557	2,342	89	44,274	146
Ethane .....	0	0	4,930	0	0	4,930	16
Ethylene .....	0	109	0	0	0	109	(s)
Propane .....	6,201	13,362	4,864	1,536	21	25,984	85
Propylene .....	0	1,728	166	0	0	1,894	6
Normal Butane .....	103	1,506	3,845	661	0	6,115	20
Butylene .....	0	0	0	0	0	0	0
Isobutane .....	75	2,202	2,752	145	68	5,242	17
Isobutylene .....	0	0	0	0	0	0	0
<b>Other Liquids</b> .....	<b>79,083</b>	<b>88</b>	<b>92,054</b>	<b>0</b>	<b>21,031</b>	<b>192,256</b>	<b>632</b>
Other Hydrocarbons/Hydrogen/Oxygenates .....	4,067	0	202	0	13,228	17,497	58
Other Hydrocarbons/Hydrogen .....	0	0	0	0	0	0	0
Oxygenates .....	4,067	0	202	0	13,228	17,497	58
Fuel Ethanol .....	0	0	0	0	85	85	(s)
MTBE .....	4,067	0	44	0	13,143	17,254	57
Other Oxygenates <sup>c</sup> .....	0	0	158	0	0	158	1
Unfinished Oils <sup>a</sup> .....	10,689	44	91,299	0	5,595	107,627	354
Naphthas and Lighter .....	1,992	44	15,357	0	650	18,043	59
Kerosene and Light Gas Oils .....	0	0	0	0	0	0	0
Heavy Gas Oils .....	8,577	0	39,798	0	206	48,581	160
Residuum .....	120	0	36,144	0	4,739	41,003	135
Motor Gasoline Blending Components .....	64,327	44	553	0	2,208	67,132	221
Aviation Gasoline Blending Components .....	0	0	0	0	0	0	0
<b>Finished Petroleum Products</b> .....	<b>254,684</b>	<b>3,844</b>	<b>82,350</b>	<b>3,225</b>	<b>8,030</b>	<b>352,133</b>	<b>1,158</b>
Finished Motor Gasoline .....	91,569	859	2,773	210	1,137	96,548	318
Reformulated .....	45,699	0	1,910	0	0	47,609	157
Oxygenated .....	0	0	0	0	0	0	0
Other .....	45,870	859	863	210	1,137	48,939	161
Finished Aviation Gasoline .....	3	21	0	5	9	38	(s)
Jet Fuel .....	28,148	75	181	0	1,674	30,078	99
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	28,148	75	181	0	1,674	30,078	99
Bonded Aircraft Fuel .....	17,194	0	0	0	161	17,355	57
Other .....	10,954	75	181	0	1,513	12,723	42
Kerosene .....	386	0	0	0	75	461	2
Distillate Fuel Oil .....	64,424	1,400	0	2,956	1,907	70,687	233
Bonded Ship Bunkers .....	0	0	0	16	293	309	1
0.05 percent sulfur and under .....	0	0	0	16	0	16	(s)
Greater than 0.05 percent sulfur .....	0	0	0	0	293	293	1
Other .....	64,424	1,400	0	2,940	1,614	70,378	232
0.05 percent sulfur and under .....	30,166	985	0	522	1,613	33,286	109
Greater than 0.05 percent sulfur .....	34,258	415	0	2,418	1	37,092	122
Residual Fuel Oil .....	53,889	70	4,591	0	2,214	60,764	200
Bonded Ship Bunkers .....	0	0	0	0	0	0	0
Less than 0.31 percent sulfur .....	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur .....	0	0	0	0	0	0	0
Greater than 1.00 percent sulfur .....	0	0	0	0	0	0	0
Other .....	53,889	70	4,591	0	2,214	60,764	200
Less than 0.31 percent sulfur .....	12,886	70	469	0	2,049	15,474	51
0.31 to 1.00 percent sulfur .....	9,633	0	1,223	0	0	10,856	36
Greater than 1.00 percent sulfur .....	31,370	0	2,899	0	165	34,434	113
Naphtha for Petrochemical Feedstock Use .....	1,748	340	14,671	0	36	16,795	55
Other Oils for Petrochemical Feedstock Use .....	0	0	59,372	0	669	60,041	198
Special Naphthas .....	1,758	262	305	0	11	2,336	8
Lubricants .....	2,894	219	108	0	0	3,221	11
Waxes .....	218	140	15	0	7	380	1
Petroleum Coke .....	0	0	0	0	263	263	1
Asphalt and Road Oil .....	9,631	417	300	54	0	10,402	34
Miscellaneous Products .....	16	41	34	0	28	119	(s)
<b>Total</b> .....	<b>780,509</b>	<b>495,367</b>	<b>1,580,214</b>	<b>41,724</b>	<b>144,059</b>	<b>3,041,873</b>	<b>10,006</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.  
<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.  
<sup>c</sup> Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).  
(s) = Less than 500 barrels per day.  
Note: Totals may not equal sum of components due to independent rounding.  
Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 35. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,<sup>a</sup>  
October 1997**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphtas
<b>Arab OPEC</b> .....	<b>55,008</b>	<b>733</b>	<b>2,274</b>	<b>0</b>	<b>1,177</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Algeria .....	100	733	1,197	0	0	0	0	0	0	0
Iraq .....	5,487	0	0	0	0	0	0	0	0	0
Kuwait .....	10,825	0	0	0	0	0	0	0	0	0
Qatar .....	0	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	38,596	0	1,077	0	1,177	0	0	0	0	0
<b>Other OPEC</b> .....	<b>70,659</b>	<b>401</b>	<b>3,566</b>	<b>1,703</b>	<b>943</b>	<b>1,041</b>	<b>1,628</b>	<b>1,854</b>	<b>0</b>	<b>0</b>
Indonesia .....	1,317	0	0	0	0	0	0	0	0	0
Nigeria .....	20,931	0	0	0	0	0	0	388	0	0
Venezuela .....	48,411	401	3,566	1,703	943	1,041	1,628	1,466	0	0
<b>Non OPEC</b> .....	<b>139,180</b>	<b>3,555</b>	<b>5,735</b>	<b>2,291</b>	<b>7,461</b>	<b>1,518</b>	<b>4,983</b>	<b>3,036</b>	<b>25</b>	<b>137</b>
Angola .....	14,171	0	0	0	549	0	0	0	0	0
Argentina .....	2,875	0	0	401	0	0	0	254	0	0
Australia .....	1,657	0	0	0	0	0	0	0	0	0
Belgium .....	0	0	602	0	257	0	0	0	0	0
Brazil .....	0	85	0	0	0	0	0	0	0	0
Canada .....	32,838	3,231	79	169	1,988	38	2,329	906	25	137
China, People's Republic of .....	1,463	0	0	0	30	0	0	0	0	0
Colombia .....	8,869	0	0	0	0	0	0	0	0	0
Congo (Brazzaville) .....	2,258	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) <sup>d</sup> .....	181	0	0	0	0	0	0	0	0	0
Ecuador .....	4,423	0	0	0	0	0	0	0	0	0
France .....	0	0	409	231	0	0	0	0	0	0
Gabon .....	7,297	0	0	0	0	0	0	0	0	0
Germany, FR .....	0	0	0	0	0	0	0	146	0	0
Guatemala .....	670	0	0	0	0	0	0	0	0	0
India .....	0	0	0	0	0	0	0	0	0	0
Italy .....	0	0	0	0	220	0	0	0	0	0
Japan .....	0	0	0	152	0	120	0	0	0	0
Korea, Republic of .....	0	0	0	0	0	157	0	0	0	0
Malaysia .....	579	0	0	0	0	0	0	0	0	0
Mexico .....	44,561	0	0	0	0	17	0	0	0	0
Netherlands .....	0	0	342	51	0	0	0	0	0	0
Netherlands Antilles .....	0	0	705	0	0	554	0	0	0	0
Norway .....	9,356	239	191	0	229	0	0	0	0	0
Oman .....	0	0	527	0	0	0	0	0	0	0
Peru .....	1,414	0	0	0	0	0	0	0	0	0
Portugal .....	0	0	0	278	325	0	0	0	0	0
Puerto Rico .....	0	0	0	0	0	0	0	0	0	0
Russia .....	180	0	232	0	0	0	0	0	0	0
Singapore .....	0	0	415	0	0	0	0	0	0	0
Spain .....	0	0	370	0	0	0	0	0	0	0
Sweden .....	0	0	500	0	0	0	0	0	0	0
Thailand .....	0	0	0	0	229	0	0	0	0	0
Trinidad and Tobago .....	1,696	0	0	0	0	0	0	0	0	0
Turkey .....	0	0	96	0	0	0	0	0	0	0
United Kingdom .....	3,678	0	227	612	268	0	0	0	0	0
Virgin Islands .....	0	0	703	189	3,366	632	2,654	1,730	0	0
Other .....	1,014	0	337	208	0	0	0	0	0	0
<b>Total</b> .....	<b>264,847</b>	<b>4,689</b>	<b>11,575</b>	<b>3,994</b>	<b>9,581</b>	<b>2,559</b>	<b>6,611</b>	<b>4,890</b>	<b>25</b>	<b>137</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>54,908</b>	<b>0</b>	<b>1,077</b>	<b>0</b>	<b>1,177</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 35. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,<sup>a</sup>  
October 1997 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>284</b>	<b>5,568</b>	<b>0</b>	<b>0</b>	<b>1,735</b>	<b>11,771</b>	<b>66,779</b>	<b>1,774</b>	<b>380</b>	<b>2,154</b>
Algeria .....	284	5,087	0	0	1,033	8,334	8,434	3	269	272
Iraq .....	0	0	0	0	0	0	5,487	177	0	177
Kuwait .....	0	0	0	0	0	0	10,825	349	0	349
Qatar .....	0	481	0	0	0	481	481	0	16	16
Saudi Arabia .....	0	0	0	0	702	2,956	41,552	1,245	95	1,340
<b>Other OPEC</b> .....	<b>464</b>	<b>0</b>	<b>0</b>	<b>315</b>	<b>456</b>	<b>12,371</b>	<b>83,030</b>	<b>2,279</b>	<b>399</b>	<b>2,678</b>
Indonesia .....	0	0	0	0	0	0	1,317	42	0	42
Nigeria .....	0	0	0	0	0	388	21,319	675	13	688
Venezuela .....	464	0	0	315	456	11,983	60,394	1,562	387	1,948
<b>Non OPEC</b> .....	<b>1,080</b>	<b>2,292</b>	<b>526</b>	<b>508</b>	<b>695</b>	<b>33,842</b>	<b>173,022</b>	<b>4,490</b>	<b>1,092</b>	<b>5,581</b>
Angola .....	0	0	0	0	0	549	14,720	457	18	475
Argentina .....	0	0	0	0	0	655	3,530	93	21	114
Australia .....	0	1,186	0	0	0	1,186	2,843	53	38	92
Belgium .....	0	0	0	0	0	859	859	0	28	28
Brazil .....	62	0	0	0	53	200	200	0	6	6
Canada .....	111	0	51	382	176	9,622	42,460	1,059	310	1,370
China, People's Republic of .....	0	0	0	0	0	30	1,493	47	1	48
Colombia .....	0	0	0	0	0	0	8,869	286	0	286
Congo (Brazzaville) .....	0	0	0	0	0	0	2,258	73	0	73
Congo (Kinshasa) <sup>d</sup> .....	0	0	0	0	0	0	181	6	0	6
Ecuador .....	0	0	0	0	0	0	4,423	143	0	143
France .....	0	0	0	0	245	885	885	0	29	29
Gabon .....	0	0	0	0	0	0	7,297	235	0	235
Germany, FR .....	0	0	0	0	8	154	154	0	5	5
Guatemala .....	0	0	0	0	0	0	670	22	0	22
India .....	0	514	0	0	0	514	514	0	17	17
Italy .....	21	0	0	0	0	241	241	0	8	8
Japan .....	4	0	0	0	9	285	285	0	9	9
Korea, Republic of .....	0	0	0	0	0	157	157	0	5	5
Malaysia .....	0	0	0	0	0	0	579	19	0	19
Mexico .....	602	0	47	126	0	792	45,353	1,437	26	1,463
Netherlands .....	0	0	0	0	0	393	393	0	13	13
Netherlands Antilles .....	0	181	0	0	0	1,440	1,440	0	46	46
Norway .....	0	411	0	0	0	1,070	10,426	302	35	336
Oman .....	0	0	0	0	0	527	527	0	17	17
Peru .....	0	0	0	0	0	0	1,414	46	0	46
Portugal .....	0	0	0	0	0	603	603	0	19	19
Puerto Rico .....	167	0	428	0	0	595	595	0	19	19
Russia .....	0	0	0	0	0	232	412	6	7	13
Singapore .....	0	0	0	0	138	553	553	0	18	18
Spain .....	0	0	0	0	0	370	370	0	12	12
Sweden .....	0	0	0	0	0	500	500	0	16	16
Thailand .....	0	0	0	0	0	229	229	0	7	7
Trinidad and Tobago .....	113	0	0	0	0	113	1,809	55	4	58
Turkey .....	0	0	0	0	0	96	96	0	3	3
United Kingdom .....	0	0	0	0	0	1,107	4,785	119	36	154
Virgin Islands .....	0	0	0	0	47	9,321	9,321	0	301	301
Other .....	0	0	0	0	19	564	1,578	33	18	51
<b>Total</b> .....	<b>1,828</b>	<b>7,860</b>	<b>526</b>	<b>823</b>	<b>2,886</b>	<b>57,984</b>	<b>322,831</b>	<b>8,543</b>	<b>1,870</b>	<b>10,414</b>
<b>Persian Gulf <sup>e</sup></b> .....	<b>0</b>	<b>481</b>	<b>0</b>	<b>0</b>	<b>702</b>	<b>3,437</b>	<b>58,345</b>	<b>1,771</b>	<b>111</b>	<b>1,882</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Formerly Zaire.

<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 36. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
October 1997**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphtas
<b>Arab OPEC</b> .....	<b>4,560</b>	<b>369</b>	<b>0</b>	<b>0</b>	<b>1,177</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Algeria .....	0	369	0	0	0	0	0	0	0	0
Saudi Arabia .....	4,560	0	0	0	1,177	0	0	0	0	0
<b>Other OPEC</b> .....	<b>16,088</b>	<b>0</b>	<b>0</b>	<b>1,394</b>	<b>943</b>	<b>1,041</b>	<b>1,628</b>	<b>1,854</b>	<b>0</b>	<b>0</b>
Nigeria .....	10,446	0	0	0	0	0	0	388	0	0
Venezuela .....	5,642	0	0	1,394	943	1,041	1,628	1,466	0	0
<b>Non OPEC</b> .....	<b>27,232</b>	<b>531</b>	<b>703</b>	<b>2,137</b>	<b>6,470</b>	<b>1,221</b>	<b>4,552</b>	<b>3,036</b>	<b>25</b>	<b>105</b>
Angola .....	7,826	0	0	0	0	0	0	0	0	0
Argentina .....	0	0	0	401	0	0	0	254	0	0
Belgium .....	0	0	0	0	257	0	0	0	0	0
Brazil .....	0	0	0	0	0	0	0	0	0	0
Canada .....	1,621	292	0	167	1,905	35	1,898	906	25	105
Colombia .....	1,668	0	0	0	0	0	0	0	0	0
Congo (Brazzaville) .....	1,029	0	0	0	0	0	0	0	0	0
Ecuador .....	2,611	0	0	0	0	0	0	0	0	0
France .....	0	0	0	231	0	0	0	0	0	0
Gabon .....	3,925	0	0	0	0	0	0	0	0	0
Germany, FR .....	0	0	0	0	0	0	0	146	0	0
Italy .....	0	0	0	0	220	0	0	0	0	0
Japan .....	0	0	0	0	0	0	0	0	0	0
Mexico .....	1,224	0	0	0	0	0	0	0	0	0
Netherlands .....	0	0	0	51	0	0	0	0	0	0
Netherlands Antilles .....	0	0	0	0	0	554	0	0	0	0
Norway .....	6,192	239	0	0	229	0	0	0	0	0
Portugal .....	0	0	0	278	225	0	0	0	0	0
Puerto Rico .....	0	0	0	0	0	0	0	0	0	0
United Kingdom .....	1,136	0	0	612	268	0	0	0	0	0
Virgin Islands .....	0	0	703	189	3,366	632	2,654	1,730	0	0
Other .....	0	0	0	208	0	0	0	0	0	0
<b>Total</b> .....	<b>47,880</b>	<b>900</b>	<b>703</b>	<b>3,531</b>	<b>8,590</b>	<b>2,262</b>	<b>6,180</b>	<b>4,890</b>	<b>25</b>	<b>105</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>4,560</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,177</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 36. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
October 1997 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>1,666</b>	<b>6,226</b>	<b>147</b>	<b>54</b>	<b>201</b>
Algeria .....	0	0	0	0	0	369	369	0	12	12
Saudi Arabia .....	0	0	0	0	120	1,297	5,857	147	42	189
<b>Other OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>294</b>	<b>0</b>	<b>7,154</b>	<b>23,242</b>	<b>519</b>	<b>231</b>	<b>750</b>
Nigeria .....	0	0	0	0	0	388	10,834	337	13	349
Venezuela .....	0	0	0	294	0	6,766	12,408	182	218	400
<b>Non OPEC</b> .....	<b>181</b>	<b>0</b>	<b>457</b>	<b>456</b>	<b>366</b>	<b>20,240</b>	<b>47,472</b>	<b>878</b>	<b>653</b>	<b>1,531</b>
Angola .....	0	0	0	0	0	0	7,826	252	0	252
Argentina .....	0	0	0	0	0	655	655	0	21	21
Belgium .....	0	0	0	0	0	257	257	0	8	8
Brazil .....	0	0	0	0	53	53	53	0	2	2
Canada .....	10	0	29	330	11	5,713	7,334	52	184	237
Colombia .....	0	0	0	0	0	0	1,668	54	0	54
Congo (Brazzaville) .....	0	0	0	0	0	0	1,029	33	0	33
Ecuador .....	0	0	0	0	0	0	2,611	84	0	84
France .....	0	0	0	0	245	476	476	0	15	15
Gabon .....	0	0	0	0	0	0	3,925	127	0	127
Germany, FR .....	0	0	0	0	8	154	154	0	5	5
Italy .....	0	0	0	0	0	220	220	0	7	7
Japan .....	4	0	0	0	0	4	4	0	(s)	(s)
Mexico .....	0	0	0	126	0	126	1,350	39	4	44
Netherlands .....	0	0	0	0	0	51	51	0	2	2
Netherlands Antilles .....	0	0	0	0	0	554	554	0	18	18
Norway .....	0	0	0	0	0	468	6,660	200	15	215
Portugal .....	0	0	0	0	0	503	503	0	16	16
Puerto Rico .....	167	0	428	0	0	595	595	0	19	19
United Kingdom .....	0	0	0	0	0	880	2,016	37	28	65
Virgin Islands .....	0	0	0	0	47	9,321	9,321	0	301	301
Other .....	0	0	0	0	2	210	210	0	7	7
<b>Total</b> .....	<b>181</b>	<b>0</b>	<b>457</b>	<b>750</b>	<b>486</b>	<b>29,060</b>	<b>76,940</b>	<b>1,545</b>	<b>937</b>	<b>2,482</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>1,297</b>	<b>5,857</b>	<b>147</b>	<b>42</b>	<b>189</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.  
<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.  
<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.  
<sup>d</sup> Formerly Zaire.  
<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.  
(s) = Less than 500 barrels per day.  
Note: Totals may not equal sum of components due to independent rounding.  
Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 37. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
October 1997  
(Thousand Barrels)**

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC</b> .....	<b>11,974</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Iraq .....	1,023	0	0	0	0	0	0	0	0	0
Kuwait .....	1,518	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	9,433	0	0	0	0	0	0	0	0	0
<b>Other OPEC</b> .....	<b>6,099</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Nigeria .....	2,664	0	0	0	0	0	0	0	0	0
Venezuela .....	3,435	0	0	0	0	0	0	0	0	0
<b>Non OPEC</b> .....	<b>31,739</b>	<b>2,052</b>	<b>2</b>	<b>2</b>	<b>60</b>	<b>0</b>	<b>133</b>	<b>0</b>	<b>0</b>	<b>31</b>
Angola .....	1,068	0	0	0	0	0	0	0	0	0
Argentina .....	249	0	0	0	0	0	0	0	0	0
Canada .....	24,470	2,052	2	2	60	0	133	0	0	31
Colombia .....	1,649	0	0	0	0	0	0	0	0	0
Congo (Brazzaville) .....	169	0	0	0	0	0	0	0	0	0
Ecuador .....	375	0	0	0	0	0	0	0	0	0
Mexico .....	2,169	0	0	0	0	0	0	0	0	0
Trinidad and Tobago .....	582	0	0	0	0	0	0	0	0	0
United Kingdom .....	500	0	0	0	0	0	0	0	0	0
Other .....	508	0	0	0	0	0	0	0	0	0
<b>Total</b> .....	<b>49,812</b>	<b>2,052</b>	<b>2</b>	<b>2</b>	<b>60</b>	<b>0</b>	<b>133</b>	<b>0</b>	<b>0</b>	<b>31</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>11,974</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 37. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
October 1997 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,974</b>	<b>386</b>	<b>0</b>	<b>386</b>
Iraq .....	0	0	0	0	0	0	1,023	33	0	33
Kuwait .....	0	0	0	0	0	0	1,518	49	0	49
Saudi Arabia .....	0	0	0	0	0	0	9,433	304	0	304
<b>Other OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,099</b>	<b>197</b>	<b>0</b>	<b>197</b>
Nigeria .....	0	0	0	0	0	0	2,664	86	0	86
Venezuela .....	0	0	0	0	0	0	3,435	111	0	111
<b>Non OPEC</b> .....	<b>37</b>	<b>0</b>	<b>22</b>	<b>52</b>	<b>68</b>	<b>2,459</b>	<b>34,198</b>	<b>1,024</b>	<b>79</b>	<b>1,103</b>
Angola .....	0	0	0	0	0	0	1,068	34	0	34
Argentina .....	0	0	0	0	0	0	249	8	0	8
Canada .....	37	0	22	52	68	2,459	26,929	789	79	869
Colombia .....	0	0	0	0	0	0	1,649	53	0	53
Congo (Brazzaville) .....	0	0	0	0	0	0	169	5	0	5
Ecuador .....	0	0	0	0	0	0	375	12	0	12
Mexico .....	0	0	0	0	0	0	2,169	70	0	70
Trinidad and Tobago .....	0	0	0	0	0	0	582	19	0	19
United Kingdom .....	0	0	0	0	0	0	500	16	0	16
Other .....	0	0	0	0	0	0	508	16	0	16
<b>Total</b> .....	<b>37</b>	<b>0</b>	<b>22</b>	<b>52</b>	<b>68</b>	<b>2,459</b>	<b>52,271</b>	<b>1,607</b>	<b>79</b>	<b>1,686</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,974</b>	<b>386</b>	<b>0</b>	<b>386</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Formerly Zaire.

<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 38. PAD District III—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
October 1997  
(Thousand Barrels)**

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC</b> .....	<b>34,992</b>	<b>364</b>	<b>2,274</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Algeria .....	100	364	1,197	0	0	0	0	0	0	0
Iraq .....	3,040	0	0	0	0	0	0	0	0	0
Kuwait .....	8,307	0	0	0	0	0	0	0	0	0
Qatar .....	0	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	23,545	0	1,077	0	0	0	0	0	0	0
<b>Other OPEC</b> .....	<b>46,842</b>	<b>401</b>	<b>3,321</b>	<b>309</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Nigeria .....	7,821	0	0	0	0	0	0	0	0	0
Venezuela .....	39,021	401	3,321	309	0	0	0	0	0	0
<b>Non OPEC</b> .....	<b>65,965</b>	<b>628</b>	<b>4,615</b>	<b>0</b>	<b>649</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Angola .....	5,277	0	0	0	549	0	0	0	0	0
Argentina .....	655	0	0	0	0	0	0	0	0	0
Australia .....	0	0	0	0	0	0	0	0	0	0
Belgium .....	0	0	602	0	0	0	0	0	0	0
Brazil .....	0	85	0	0	0	0	0	0	0	0
Canada .....	0	543	77	0	0	0	0	0	0	0
China, People's Republic of .....	1,463	0	0	0	0	0	0	0	0	0
Colombia .....	5,103	0	0	0	0	0	0	0	0	0
Congo (Brazzaville) .....	1,060	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) <sup>d</sup> .....	181	0	0	0	0	0	0	0	0	0
Ecuador .....	896	0	0	0	0	0	0	0	0	0
France .....	0	0	409	0	0	0	0	0	0	0
Gabon .....	3,372	0	0	0	0	0	0	0	0	0
Guatemala .....	670	0	0	0	0	0	0	0	0	0
India .....	0	0	0	0	0	0	0	0	0	0
Italy .....	0	0	0	0	0	0	0	0	0	0
Japan .....	0	0	0	0	0	0	0	0	0	0
Mexico .....	40,096	0	0	0	0	17	0	0	0	0
Netherlands .....	0	0	342	0	0	0	0	0	0	0
Netherlands Antilles .....	0	0	705	0	0	0	0	0	0	0
Norway .....	3,164	0	191	0	0	0	0	0	0	0
Oman .....	0	0	527	0	0	0	0	0	0	0
Peru .....	692	0	0	0	0	0	0	0	0	0
Portugal .....	0	0	0	0	100	0	0	0	0	0
Russia .....	180	0	232	0	0	0	0	0	0	0
Spain .....	0	0	370	0	0	0	0	0	0	0
Sweden .....	0	0	500	0	0	0	0	0	0	0
Trinidad and Tobago .....	1,114	0	0	0	0	0	0	0	0	0
Turkey .....	0	0	96	0	0	0	0	0	0	0
United Kingdom .....	2,042	0	227	0	0	0	0	0	0	0
Other .....	0	0	337	0	0	0	0	0	0	0
<b>Total</b> .....	<b>147,799</b>	<b>1,393</b>	<b>10,210</b>	<b>309</b>	<b>649</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>34,892</b>	<b>0</b>	<b>1,077</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 38. PAD District III—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
October 1997 (Continued)  
(Thousand Barrels)**

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>284</b>	<b>5,568</b>	<b>0</b>	<b>0</b>	<b>1,033</b>	<b>9,523</b>	<b>44,515</b>	<b>1,129</b>	<b>307</b>	<b>1,436</b>
Algeria .....	284	5,087	0	0	1,033	7,965	8,065	3	257	260
Iraq .....	0	0	0	0	0	0	3,040	98	0	98
Kuwait .....	0	0	0	0	0	0	8,307	268	0	268
Qatar .....	0	481	0	0	0	481	481	0	16	16
Saudi Arabia .....	0	0	0	0	0	1,077	24,622	760	35	794
<b>Other OPEC</b> .....	<b>464</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>4,516</b>	<b>51,358</b>	<b>1,511</b>	<b>146</b>	<b>1,657</b>
Nigeria .....	0	0	0	0	0	0	7,821	252	0	252
Venezuela .....	464	0	0	21	0	4,516	43,537	1,259	146	1,404
<b>Non OPEC</b> .....	<b>862</b>	<b>2,292</b>	<b>47</b>	<b>0</b>	<b>9</b>	<b>9,119</b>	<b>75,084</b>	<b>2,128</b>	<b>294</b>	<b>2,422</b>
Angola .....	0	0	0	0	0	549	5,826	170	18	188
Argentina .....	0	0	0	0	0	0	655	21	0	21
Australia .....	0	1,186	0	0	0	1,186	1,186	0	38	38
Belgium .....	0	0	0	0	0	602	602	0	19	19
Brazil .....	62	0	0	0	0	147	147	0	5	5
Canada .....	64	0	0	0	0	684	684	0	22	22
China, People's Republic of .....	0	0	0	0	0	0	1,463	47	0	47
Colombia .....	0	0	0	0	0	0	5,103	165	0	165
Congo (Brazzaville) .....	0	0	0	0	0	0	1,060	34	0	34
Congo (Kinshasa) <sup>d</sup> .....	0	0	0	0	0	0	181	6	0	6
Ecuador .....	0	0	0	0	0	0	896	29	0	29
France .....	0	0	0	0	0	409	409	0	13	13
Gabon .....	0	0	0	0	0	0	3,372	109	0	109
Guatemala .....	0	0	0	0	0	0	670	22	0	22
India .....	0	514	0	0	0	514	514	0	17	17
Italy .....	21	0	0	0	0	21	21	0	1	1
Japan .....	0	0	0	0	9	9	9	0	(s)	(s)
Mexico .....	602	0	47	0	0	666	40,762	1,293	21	1,315
Netherlands .....	0	0	0	0	0	342	342	0	11	11
Netherlands Antilles .....	0	181	0	0	0	886	886	0	29	29
Norway .....	0	411	0	0	0	602	3,766	102	19	121
Oman .....	0	0	0	0	0	527	527	0	17	17
Peru .....	0	0	0	0	0	0	692	22	0	22
Portugal .....	0	0	0	0	0	100	100	0	3	3
Russia .....	0	0	0	0	0	232	412	6	7	13
Spain .....	0	0	0	0	0	370	370	0	12	12
Sweden .....	0	0	0	0	0	500	500	0	16	16
Trinidad and Tobago .....	113	0	0	0	0	113	1,227	36	4	40
Turkey .....	0	0	0	0	0	96	96	0	3	3
United Kingdom .....	0	0	0	0	0	227	2,269	66	7	73
Other .....	0	0	0	0	0	337	337	0	11	11
<b>Total</b> .....	<b>1,610</b>	<b>7,860</b>	<b>47</b>	<b>21</b>	<b>1,042</b>	<b>23,158</b>	<b>170,957</b>	<b>4,768</b>	<b>747</b>	<b>5,515</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>0</b>	<b>481</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,558</b>	<b>36,450</b>	<b>1,126</b>	<b>50</b>	<b>1,176</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Formerly Zaire.

<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 39. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
October 1997  
(Thousand Barrels)**

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>PAD District IV</b>										
<b>Non OPEC</b> .....	<b>4,232</b>	<b>331</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>278</b>	<b>0</b>	<b>0</b>	<b>0</b>
Canada .....	4,232	331	0	0	10	0	278	0	0	0
<b>Total</b> .....	<b>4,232</b>	<b>331</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>278</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>PAD District V</b>										
<b>Arab OPEC</b> .....	<b>3,482</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Iraq .....	1,424	0	0	0	0	0	0	0	0	0
Kuwait .....	1,000	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	1,058	0	0	0	0	0	0	0	0	0
<b>Other OPEC</b> .....	<b>1,630</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Indonesia .....	1,317	0	0	0	0	0	0	0	0	0
Venezuela .....	313	0	245	0	0	0	0	0	0	0
<b>Non OPEC</b> .....	<b>10,012</b>	<b>13</b>	<b>415</b>	<b>152</b>	<b>272</b>	<b>280</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>1</b>
Argentina .....	1,971	0	0	0	0	0	0	0	0	0
Australia .....	1,657	0	0	0	0	0	0	0	0	0
Canada .....	2,515	13	0	0	13	3	20	0	0	1
China, People's Republic of .....	0	0	0	0	30	0	0	0	0	0
Colombia .....	449	0	0	0	0	0	0	0	0	0
Ecuador .....	541	0	0	0	0	0	0	0	0	0
Japan .....	0	0	0	152	0	120	0	0	0	0
Korea, Republic of .....	0	0	0	0	0	157	0	0	0	0
Malaysia .....	579	0	0	0	0	0	0	0	0	0
Mexico .....	1,072	0	0	0	0	0	0	0	0	0
Peru .....	722	0	0	0	0	0	0	0	0	0
Singapore .....	0	0	415	0	0	0	0	0	0	0
Thailand .....	0	0	0	0	229	0	0	0	0	0
Other .....	506	0	0	0	0	0	0	0	0	0
<b>Total</b> .....	<b>15,124</b>	<b>13</b>	<b>660</b>	<b>152</b>	<b>272</b>	<b>280</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>3,482</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 39. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
October 1997 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>PAD District IV</b>										
<b>Non OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>92</b>	<b>711</b>	<b>4,943</b>	<b>137</b>	<b>23</b>	<b>159</b>
Canada .....	0	0	0	0	92	711	4,943	137	23	159
<b>Total</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>92</b>	<b>711</b>	<b>4,943</b>	<b>137</b>	<b>23</b>	<b>159</b>
<b>PAD District V</b>										
<b>Arab OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>582</b>	<b>582</b>	<b>4,064</b>	<b>112</b>	<b>19</b>	<b>131</b>
Iraq .....	0	0	0	0	0	0	1,424	46	0	46
Kuwait .....	0	0	0	0	0	0	1,000	32	0	32
Saudi Arabia .....	0	0	0	0	582	582	1,640	34	19	53
<b>Other OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>456</b>	<b>701</b>	<b>2,331</b>	<b>53</b>	<b>23</b>	<b>75</b>
Indonesia .....	0	0	0	0	0	0	1,317	42	0	42
Venezuela .....	0	0	0	0	456	701	1,014	10	23	33
<b>Non OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>160</b>	<b>1,313</b>	<b>11,325</b>	<b>323</b>	<b>42</b>	<b>365</b>
Argentina .....	0	0	0	0	0	0	1,971	64	0	64
Australia .....	0	0	0	0	0	0	1,657	53	0	53
Canada .....	0	0	0	0	5	55	2,570	81	2	83
China, People's Republic of .....	0	0	0	0	0	30	30	0	1	1
Colombia .....	0	0	0	0	0	0	449	14	0	14
Ecuador .....	0	0	0	0	0	0	541	17	0	17
Japan .....	0	0	0	0	0	272	272	0	9	9
Korea, Republic of .....	0	0	0	0	0	157	157	0	5	5
Malaysia .....	0	0	0	0	0	0	579	19	0	19
Mexico .....	0	0	0	0	0	0	1,072	35	0	35
Peru .....	0	0	0	0	0	0	722	23	0	23
Singapore .....	0	0	0	0	138	553	553	0	18	18
Thailand .....	0	0	0	0	0	229	229	0	7	7
Other .....	0	0	0	0	17	17	523	16	1	17
<b>Total</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,198</b>	<b>2,596</b>	<b>17,720</b>	<b>488</b>	<b>84</b>	<b>572</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>582</b>	<b>582</b>	<b>4,064</b>	<b>112</b>	<b>19</b>	<b>131</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Formerly Zaire.

<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,<sup>a</sup> January-October 1997**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC</b>	<b>493,475</b>	<b>9,801</b>	<b>30,195</b>	<b>882</b>	<b>8,638</b>	<b>0</b>	<b>447</b>	<b>10,485</b>	<b>63</b>	<b>0</b>
Algeria	1,119	9,801	13,235	222	0	0	381	8,021	0	0
Iraq	18,012	0	0	0	0	0	0	0	0	0
Kuwait	79,797	0	0	0	0	0	0	0	0	0
Qatar	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	394,547	0	16,344	660	8,638	0	66	2,464	63	0
United Arab Emirates	0	0	616	0	0	0	0	0	0	0
<b>Other OPEC</b>	<b>637,149</b>	<b>3,343</b>	<b>29,111</b>	<b>16,176</b>	<b>12,920</b>	<b>12,626</b>	<b>15,928</b>	<b>20,316</b>	<b>0</b>	<b>0</b>
Indonesia	13,764	0	705	0	0	0	0	1,865	0	0
Nigeria	211,890	0	1,160	515	0	0	0	1,308	0	0
Venezuela	411,495	3,343	27,246	15,661	12,920	12,626	15,928	17,143	0	0
<b>Non OPEC</b>	<b>1,311,293</b>	<b>31,130</b>	<b>48,321</b>	<b>50,074</b>	<b>74,990</b>	<b>17,452</b>	<b>54,312</b>	<b>29,963</b>	<b>398</b>	<b>2,336</b>
Angola	123,247	0	349	0	549	0	0	0	0	0
Argentina	16,512	0	179	695	0	0	0	370	0	0
Australia	9,844	0	0	0	0	0	0	0	0	0
Bahama Islands	0	0	350	0	0	0	0	0	0	0
Belgium	0	0	4,310	3,562	911	0	0	344	0	0
Benin	193	0	0	0	0	0	0	0	0	0
Brazil	0	85	0	917	490	0	0	77	0	66
Cameroon	0	0	0	0	0	0	0	1,675	0	0
Canada	335,864	29,790	1,653	2,450	23,561	1,157	26,484	7,451	323	2,270
China, People's Republic of	14,450	0	0	10	222	0	0	0	0	0
Colombia	78,433	0	161	0	0	0	0	456	0	0
Congo (Brazzaville)	14,705	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) <sup>d</sup>	6,311	0	0	0	0	0	0	0	0	0
Ecuador	36,460	0	140	0	0	0	0	172	0	0
Egypt	9,963	0	100	0	0	0	0	0	0	0
France	0	0	2,243	3,678	1,424	0	0	0	0	0
Gabon	64,281	0	0	0	0	0	0	0	0	0
Germany, FR	121	0	903	828	397	0	0	510	0	0
Guatemala	5,039	0	0	0	0	0	0	0	0	0
India	0	0	233	0	0	0	0	0	0	0
Italy	0	0	51	1,718	761	0	0	0	0	0
Ivory Coast	0	0	499	0	0	0	0	120	0	0
Japan	0	0	0	227	0	120	0	0	0	0
Korea, Republic of	0	0	365	0	0	725	0	0	0	0
Malaysia	2,578	0	1,584	0	0	0	106	860	0	0
Mexico	411,691	197	0	1,709	0	181	0	0	0	0
Netherlands	0	0	2,648	2,447	1,256	0	0	201	0	0
Netherlands Antilles	1,380	0	10,253	1,443	1,012	7,817	0	677	0	0
New Zealand	0	0	0	0	0	0	0	0	0	0
Norway	88,300	1,058	1,905	120	1,732	0	0	430	0	0
Oman	1,511	0	1,987	0	0	0	0	0	0	0
Panama	0	0	0	0	0	0	0	135	0	0
Peru	9,128	0	260	0	141	0	0	0	0	0
Portugal	0	0	0	1,115	2,449	0	0	0	0	0
Puerto Rico	0	0	0	0	175	0	0	0	0	0
Romania	0	0	514	2,369	61	0	0	0	0	0
Russia	755	0	671	2,149	173	0	330	25	0	0
Singapore	0	0	3,310	0	0	0	0	204	0	0
Spain	0	0	3,001	1,631	860	0	0	533	0	0
Sweden	97	0	858	730	309	0	0	324	0	0
Thailand	0	0	0	0	459	0	0	0	0	0
Trinidad and Tobago	16,942	0	0	1,271	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0	0	198	0	0
Turkey	0	0	230	0	0	0	0	0	0	0
United Kingdom	55,007	0	365	13,269	4,125	0	0	850	0	0
Virgin Islands	0	0	8,063	2,238	33,103	7,452	27,311	13,176	75	0
Yemen	0	0	0	0	0	0	0	304	0	0
Other	8,481	0	1,136	5,498	820	0	81	871	0	0
<b>Total</b>	<b>2,441,917</b>	<b>44,274</b>	<b>107,627</b>	<b>67,132</b>	<b>96,548</b>	<b>30,078</b>	<b>70,687</b>	<b>60,764</b>	<b>461</b>	<b>2,336</b>
<b>Persian Gulf<sup>e</sup></b>	<b>492,356</b>	<b>0</b>	<b>16,960</b>	<b>660</b>	<b>8,638</b>	<b>0</b>	<b>66</b>	<b>2,464</b>	<b>63</b>	<b>0</b>

See footnotes at end of table.

**Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,<sup>a</sup> January-October 1997 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>2,727</b>	<b>45,007</b>	<b>0</b>	<b>0</b>	<b>17,308</b>	<b>125,553</b>	<b>619,028</b>	<b>1,623</b>	<b>413</b>	<b>2,036</b>
Algeria .....	2,727	44,065	0	0	10,067	88,519	89,638	4	291	295
Iraq .....	0	0	0	0	0	0	18,012	59	0	59
Kuwait .....	0	0	0	0	0	0	79,797	262	0	262
Qatar .....	0	942	0	0	0	942	942	0	3	3
Saudi Arabia .....	0	0	0	0	7,241	35,476	430,023	1,298	117	1,415
United Arab Emirates .....	0	0	0	0	0	616	616	0	2	2
<b>Other OPEC</b> .....	<b>4,134</b>	<b>630</b>	<b>0</b>	<b>5,151</b>	<b>3,051</b>	<b>123,386</b>	<b>760,535</b>	<b>2,096</b>	<b>406</b>	<b>2,502</b>
Indonesia .....	0	0	0	0	0	2,570	16,334	45	8	54
Nigeria .....	0	0	0	0	0	2,983	214,873	697	10	707
Venezuela .....	4,134	630	0	5,151	3,051	117,833	529,328	1,354	388	1,741
<b>Non OPEC</b> .....	<b>9,934</b>	<b>14,404</b>	<b>3,221</b>	<b>5,251</b>	<b>9,231</b>	<b>351,017</b>	<b>1,662,310</b>	<b>4,313</b>	<b>1,155</b>	<b>5,468</b>
Angola .....	376	0	0	0	0	1,274	124,521	405	4	410
Argentina .....	211	0	0	0	0	1,455	17,967	54	5	59
Australia .....	0	4,834	0	0	0	4,834	14,678	32	16	48
Bahama Islands .....	0	0	0	0	0	350	350	0	1	1
Belgium .....	367	0	0	0	0	9,494	9,494	0	31	31
Benin .....	0	0	0	0	0	0	193	1	0	1
Brazil .....	62	0	0	0	97	1,794	1,794	0	6	6
Cameroon .....	0	0	0	0	0	1,675	1,675	0	6	6
Canada .....	939	348	579	2,641	5,626	105,272	441,136	1,105	346	1,451
China, People's Republic of .....	0	0	0	0	0	232	14,682	48	1	48
Colombia .....	0	0	0	0	0	617	79,050	258	2	260
Congo (Brazzaville) .....	0	0	0	0	0	0	14,705	48	0	48
Congo (Kinshasa) <sup>d</sup> .....	0	0	0	0	0	0	6,311	21	0	21
Ecuador .....	0	0	0	0	0	312	36,772	120	1	121
Egypt .....	255	228	0	0	0	583	10,546	33	2	35
France .....	43	0	20	0	1,117	8,525	8,525	0	28	28
Gabon .....	0	0	0	0	0	0	64,281	211	0	211
Germany, FR .....	302	0	0	0	54	2,994	3,115	(s)	10	10
Guatemala .....	0	0	0	0	0	0	5,039	17	0	17
India .....	211	1,091	0	0	0	1,535	1,535	0	5	5
Italy .....	21	0	0	0	0	2,551	2,551	0	8	8
Ivory Coast .....	0	0	0	0	0	619	619	0	2	2
Japan .....	33	0	0	0	45	425	425	0	1	1
Korea, Republic of .....	122	0	0	0	108	1,320	1,320	0	4	4
Malaysia .....	0	1,872	0	0	483	4,905	7,483	8	16	25
Mexico .....	2,806	2,032	88	1,404	7	8,424	420,115	1,354	28	1,382
Netherlands .....	596	0	0	0	809	7,957	7,957	0	26	26
Netherlands Antilles .....	647	2,252	0	241	0	24,342	25,722	5	80	85
New Zealand .....	0	498	0	0	0	498	498	0	2	2
Norway .....	0	411	0	0	0	5,656	93,956	290	19	309
Oman .....	0	0	0	0	0	1,987	3,498	5	7	12
Panama .....	0	0	0	0	0	135	135	0	(s)	(s)
Peru .....	0	0	0	0	0	401	9,529	30	1	31
Portugal .....	0	0	0	0	0	3,564	3,564	0	12	12
Puerto Rico .....	2,311	0	2,534	0	0	5,020	5,020	0	17	17
Romania .....	0	0	0	0	0	2,944	2,944	0	10	10
Russia .....	0	0	0	0	0	3,348	4,103	2	11	13
Singapore .....	0	0	0	0	544	4,058	4,058	0	13	13
Spain .....	22	0	0	965	0	7,012	7,012	0	23	23
Sweden .....	0	0	0	0	0	2,221	2,318	(s)	7	8
Thailand .....	29	0	0	0	0	488	488	0	2	2
Trinidad and Tobago .....	113	135	0	0	0	1,519	18,461	56	5	61
Tunisia .....	241	0	0	0	0	439	439	0	1	1
Turkey .....	0	0	0	0	0	230	230	0	1	1
United Kingdom .....	0	0	0	0	0	18,609	73,616	181	61	242
Virgin Islands .....	110	0	0	0	193	91,721	91,721	0	302	302
Yemen .....	0	0	0	0	0	304	304	0	1	1
Other .....	117	703	0	0	148	9,374	17,855	28	31	59
<b>Total</b> .....	<b>16,795</b>	<b>60,041</b>	<b>3,221</b>	<b>10,402</b>	<b>29,590</b>	<b>599,956</b>	<b>3,041,873</b>	<b>8,033</b>	<b>1,974</b>	<b>10,006</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>0</b>	<b>942</b>	<b>0</b>	<b>0</b>	<b>7,241</b>	<b>37,034</b>	<b>529,390</b>	<b>1,620</b>	<b>122</b>	<b>1,741</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Formerly Zaire.

<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 41. PAD District I—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
January-October 1997**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC</b> .....	<b>46,895</b>	<b>2,826</b>	<b>0</b>	<b>882</b>	<b>8,638</b>	<b>0</b>	<b>447</b>	<b>7,679</b>	<b>0</b>	<b>0</b>
Algeria .....	0	2,826	0	222	0	0	381	7,679	0	0
Kuwait .....	243	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	46,652	0	0	660	8,638	0	66	0	0	0
<b>Other OPEC</b> .....	<b>139,676</b>	<b>251</b>	<b>120</b>	<b>15,638</b>	<b>12,920</b>	<b>12,581</b>	<b>15,928</b>	<b>18,674</b>	<b>0</b>	<b>0</b>
Indonesia .....	0	0	0	0	0	0	0	880	0	0
Nigeria .....	83,252	0	0	441	0	0	0	1,215	0	0
Venezuela .....	56,424	251	120	15,197	12,920	12,581	15,928	16,579	0	0
<b>Non OPEC</b> .....	<b>253,792</b>	<b>3,302</b>	<b>10,569</b>	<b>47,807</b>	<b>70,011</b>	<b>15,567</b>	<b>48,049</b>	<b>27,536</b>	<b>386</b>	<b>1,758</b>
Angola .....	69,797	0	0	0	0	0	0	0	0	0
Argentina .....	2,562	0	0	695	0	0	0	370	0	0
Belgium .....	0	0	391	3,562	911	0	0	344	0	0
Brazil .....	0	0	0	902	490	0	0	77	0	0
Cameroon .....	0	0	0	0	0	0	0	1,040	0	0
Canada .....	18,725	2,244	75	2,406	22,325	1,132	21,373	7,381	311	1,758
China, People's Republic of .....	1,842	0	0	0	0	0	0	0	0	0
Colombia .....	12,925	0	0	0	0	0	0	456	0	0
Congo (Brazzaville) .....	6,081	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) <sup>d</sup> .....	3,165	0	0	0	0	0	0	0	0	0
Ecuador .....	10,713	0	0	0	0	0	0	172	0	0
Egypt .....	8,156	0	0	0	0	0	0	0	0	0
France .....	0	0	0	3,678	1,424	0	0	0	0	0
Gabon .....	31,652	0	0	0	0	0	0	0	0	0
Germany, FR .....	121	0	0	828	397	0	0	510	0	0
Italy .....	0	0	51	1,718	761	0	0	0	0	0
Japan .....	0	0	0	0	0	0	0	0	0	0
Mexico .....	8,423	0	0	1,709	0	0	0	0	0	0
Netherlands .....	0	0	0	2,335	1,256	0	0	201	0	0
Netherlands Antilles .....	0	0	1,036	1,443	1,012	7,677	0	677	0	0
Norway .....	58,147	1,058	0	120	1,732	0	0	430	0	0
Panama .....	0	0	0	0	0	0	0	135	0	0
Peru .....	714	0	0	0	141	0	0	0	0	0
Portugal .....	0	0	0	1,115	225	0	0	0	0	0
Puerto Rico .....	0	0	0	0	175	0	0	0	0	0
Romania .....	0	0	514	2,369	61	0	0	0	0	0
Russia .....	0	0	439	2,149	173	0	330	25	0	0
Spain .....	0	0	0	1,631	860	0	0	533	0	0
Sweden .....	97	0	0	730	309	0	0	324	0	0
Trinidad and Tobago .....	0	0	0	1,271	0	0	0	0	0	0
United Kingdom .....	20,325	0	0	13,269	4,125	0	0	850	0	0
Virgin Islands .....	0	0	8,063	2,238	32,814	6,758	26,265	13,176	75	0
Other .....	347	0	0	3,639	820	0	81	835	0	0
<b>Total</b> .....	<b>440,363</b>	<b>6,379</b>	<b>10,689</b>	<b>64,327</b>	<b>91,569</b>	<b>28,148</b>	<b>64,424</b>	<b>53,889</b>	<b>386</b>	<b>1,758</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>46,895</b>	<b>0</b>	<b>0</b>	<b>660</b>	<b>8,638</b>	<b>0</b>	<b>66</b>	<b>0</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 41. PAD District I—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> January-October 1997 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>907</b>	<b>21,379</b>	<b>68,274</b>	<b>154</b>	<b>70</b>	<b>225</b>
Algeria .....	0	0	0	0	0	11,108	11,108	0	37	37
Kuwait .....	0	0	0	0	0	0	243	1	0	1
Saudi Arabia .....	0	0	0	0	907	10,271	56,923	153	34	187
<b>Other OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,851</b>	<b>1,259</b>	<b>82,222</b>	<b>221,898</b>	<b>459</b>	<b>270</b>	<b>730</b>
Indonesia .....	0	0	0	0	0	880	880	0	3	3
Nigeria .....	0	0	0	0	0	1,656	84,908	274	5	279
Venezuela .....	0	0	0	4,851	1,259	79,686	136,110	186	262	448
<b>Non OPEC</b> .....	<b>1,748</b>	<b>0</b>	<b>2,894</b>	<b>4,780</b>	<b>2,138</b>	<b>236,545</b>	<b>490,337</b>	<b>835</b>	<b>778</b>	<b>1,613</b>
Angola .....	0	0	0	0	0	0	69,797	230	0	230
Argentina .....	0	0	0	0	0	1,065	3,627	8	4	12
Belgium .....	0	0	0	0	0	5,208	5,208	0	17	17
Brazil .....	0	0	0	0	53	1,522	1,522	0	5	5
Cameroon .....	0	0	0	0	0	1,040	1,040	0	3	3
Canada .....	79	0	360	2,170	126	61,740	80,465	62	203	265
China, People's Republic of .....	0	0	0	0	0	0	1,842	6	0	6
Colombia .....	0	0	0	0	0	456	13,381	43	2	44
Congo (Brazzaville) .....	0	0	0	0	0	0	6,081	20	0	20
Congo (Kinshasa) <sup>d</sup> .....	0	0	0	0	0	0	3,165	10	0	10
Ecuador .....	0	0	0	0	0	172	10,885	35	1	36
Egypt .....	0	0	0	0	0	0	8,156	27	0	27
France .....	9	0	0	0	959	6,070	6,070	0	20	20
Gabon .....	0	0	0	0	0	0	31,652	104	0	104
Germany, FR .....	0	0	0	0	51	1,786	1,907	(s)	6	6
Italy .....	0	0	0	0	0	2,530	2,530	0	8	8
Japan .....	8	0	0	0	11	19	19	0	(s)	(s)
Mexico .....	0	0	0	1,404	0	3,113	11,536	28	10	38
Netherlands .....	0	0	0	0	696	4,488	4,488	0	15	15
Netherlands Antilles .....	0	0	0	241	0	12,086	12,086	0	40	40
Norway .....	0	0	0	0	0	3,340	61,487	191	11	202
Panama .....	0	0	0	0	0	135	135	0	(s)	(s)
Peru .....	0	0	0	0	0	141	855	2	(s)	3
Portugal .....	0	0	0	0	0	1,340	1,340	0	4	4
Puerto Rico .....	1,652	0	2,534	0	0	4,361	4,361	0	14	14
Romania .....	0	0	0	0	0	2,944	2,944	0	10	10
Russia .....	0	0	0	0	0	3,116	3,116	0	10	10
Spain .....	0	0	0	965	0	3,989	3,989	0	13	13
Sweden .....	0	0	0	0	0	1,363	1,460	(s)	4	5
Trinidad and Tobago .....	0	0	0	0	0	1,271	1,271	0	4	4
United Kingdom .....	0	0	0	0	0	18,244	38,569	67	60	127
Virgin Islands .....	0	0	0	0	193	89,582	89,582	0	295	295
Other .....	0	0	0	0	49	5,424	5,771	1	18	19
<b>Total</b> .....	<b>1,748</b>	<b>0</b>	<b>2,894</b>	<b>9,631</b>	<b>4,304</b>	<b>340,146</b>	<b>780,509</b>	<b>1,449</b>	<b>1,119</b>	<b>2,567</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>907</b>	<b>10,271</b>	<b>57,166</b>	<b>154</b>	<b>34</b>	<b>188</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Formerly Zaire.

<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 42. PAD District II—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
January-October 1997  
(Thousand Barrels)**

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC</b> .....	<b>52,498</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Iraq .....	1,472	0	0	0	0	0	0	0	0	0
Kuwait .....	15,414	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	35,612	0	0	0	0	0	0	0	0	0
<b>Other OPEC</b> .....	<b>79,272</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Nigeria .....	32,557	0	0	0	0	0	0	0	0	0
Venezuela .....	46,715	0	0	0	0	0	0	0	0	0
<b>Non OPEC</b> .....	<b>340,499</b>	<b>18,907</b>	<b>44</b>	<b>44</b>	<b>859</b>	<b>75</b>	<b>1,400</b>	<b>70</b>	<b>0</b>	<b>262</b>
Angola .....	15,805	0	0	0	0	0	0	0	0	0
Argentina .....	1,027	0	0	0	0	0	0	0	0	0
Canada .....	250,938	18,907	44	44	859	0	1,400	70	0	262
Colombia .....	19,991	0	0	0	0	0	0	0	0	0
Congo (Brazzaville) .....	1,052	0	0	0	0	0	0	0	0	0
Ecuador .....	5,072	0	0	0	0	0	0	0	0	0
Mexico .....	35,072	0	0	0	0	0	0	0	0	0
Norway .....	4,286	0	0	0	0	0	0	0	0	0
Trinidad and Tobago .....	1,990	0	0	0	0	0	0	0	0	0
United Kingdom .....	4,758	0	0	0	0	0	0	0	0	0
Virgin Islands .....	0	0	0	0	0	75	0	0	0	0
Other .....	508	0	0	0	0	0	0	0	0	0
<b>Total</b> .....	<b>472,269</b>	<b>18,907</b>	<b>44</b>	<b>44</b>	<b>859</b>	<b>75</b>	<b>1,400</b>	<b>70</b>	<b>0</b>	<b>262</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>52,498</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 42. PAD District II—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
January-October 1997 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>52,498</b>	<b>173</b>	<b>0</b>	<b>173</b>
Iraq .....	0	0	0	0	0	0	1,472	5	0	5
Kuwait .....	0	0	0	0	0	0	15,414	51	0	51
Saudi Arabia .....	0	0	0	0	0	0	35,612	117	0	117
<b>Other OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>79,272</b>	<b>261</b>	<b>0</b>	<b>261</b>
Nigeria .....	0	0	0	0	0	0	32,557	107	0	107
Venezuela .....	0	0	0	0	0	0	46,715	154	0	154
<b>Non OPEC</b> .....	<b>340</b>	<b>0</b>	<b>219</b>	<b>417</b>	<b>461</b>	<b>23,098</b>	<b>363,597</b>	<b>1,120</b>	<b>76</b>	<b>1,196</b>
Angola .....	0	0	0	0	0	0	15,805	52	0	52
Argentina .....	0	0	0	0	0	0	1,027	3	0	3
Canada .....	340	0	219	417	459	23,021	273,959	825	76	901
Colombia .....	0	0	0	0	0	0	19,991	66	0	66
Congo (Brazzaville) .....	0	0	0	0	0	0	1,052	3	0	3
Ecuador .....	0	0	0	0	0	0	5,072	17	0	17
Mexico .....	0	0	0	0	0	0	35,072	115	0	115
Norway .....	0	0	0	0	0	0	4,286	14	0	14
Trinidad and Tobago .....	0	0	0	0	0	0	1,990	7	0	7
United Kingdom .....	0	0	0	0	0	0	4,758	16	0	16
Virgin Islands .....	0	0	0	0	0	75	75	0	(s)	(s)
Other .....	0	0	0	0	2	2	510	2	(s)	2
<b>Total</b> .....	<b>340</b>	<b>0</b>	<b>219</b>	<b>417</b>	<b>461</b>	<b>23,098</b>	<b>495,367</b>	<b>1,554</b>	<b>76</b>	<b>1,629</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>52,498</b>	<b>173</b>	<b>0</b>	<b>173</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Formerly Zaire.

<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 43. PAD District III—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup>  
January-October 1997  
(Thousand Barrels)**

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC</b>	<b>375,229</b>	<b>6,975</b>	<b>30,195</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,806</b>	<b>0</b>	<b>0</b>
Algeria	1,119	6,975	13,235	0	0	0	0	342	0	0
Iraq	10,097	0	0	0	0	0	0	0	0	0
Kuwait	56,671	0	0	0	0	0	0	0	0	0
Qatar	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	307,342	0	16,344	0	0	0	0	2,464	0	0
United Arab Emirates	0	0	616	0	0	0	0	0	0	0
<b>Other OPEC</b>	<b>399,936</b>	<b>3,092</b>	<b>28,510</b>	<b>538</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>492</b>	<b>0</b>	<b>0</b>
Indonesia	424	0	528	0	0	0	0	0	0	0
Nigeria	96,081	0	1,160	74	0	0	0	93	0	0
Venezuela	303,431	3,092	26,822	464	0	0	0	399	0	0
<b>Non OPEC</b>	<b>603,591</b>	<b>6,490</b>	<b>32,594</b>	<b>15</b>	<b>2,773</b>	<b>181</b>	<b>0</b>	<b>1,293</b>	<b>0</b>	<b>305</b>
Angola	37,645	0	349	0	549	0	0	0	0	0
Argentina	8,558	0	179	0	0	0	0	0	0	0
Australia	0	0	0	0	0	0	0	0	0	0
Bahama Islands	0	0	350	0	0	0	0	0	0	0
Belgium	0	0	3,919	0	0	0	0	0	0	0
Benin	193	0	0	0	0	0	0	0	0	0
Brazil	0	85	0	15	0	0	0	0	0	66
Cameroon	0	0	0	0	0	0	0	635	0	0
Canada	482	6,208	1,534	0	0	0	0	0	0	239
China, People's Republic of	4,888	0	0	0	0	0	0	0	0	0
Colombia	42,810	0	161	0	0	0	0	0	0	0
Congo (Brazzaville)	7,572	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) <sup>d</sup>	3,146	0	0	0	0	0	0	0	0	0
Ecuador	12,888	0	140	0	0	0	0	0	0	0
Egypt	1,807	0	100	0	0	0	0	0	0	0
France	0	0	2,243	0	0	0	0	0	0	0
Gabon	32,629	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	903	0	0	0	0	0	0	0
Guatemala	5,039	0	0	0	0	0	0	0	0	0
India	0	0	233	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0	0
Ivory Coast	0	0	499	0	0	0	0	120	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	365	0	0	0	0	0	0	0
Malaysia	1,350	0	0	0	0	0	0	0	0	0
Mexico	365,381	197	0	0	0	181	0	0	0	0
Netherlands	0	0	2,648	0	0	0	0	0	0	0
Netherlands Antilles	1,380	0	8,871	0	0	0	0	0	0	0
New Zealand	0	0	0	0	0	0	0	0	0	0
Norway	25,867	0	1,905	0	0	0	0	0	0	0
Oman	0	0	1,987	0	0	0	0	0	0	0
Peru	4,214	0	260	0	0	0	0	0	0	0
Portugal	0	0	0	0	2,224	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Russia	755	0	232	0	0	0	0	0	0	0
Singapore	0	0	408	0	0	0	0	0	0	0
Spain	0	0	2,719	0	0	0	0	0	0	0
Sweden	0	0	858	0	0	0	0	0	0	0
Thailand	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	14,952	0	0	0	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0	0	198	0	0
Turkey	0	0	230	0	0	0	0	0	0	0
United Kingdom	29,924	0	365	0	0	0	0	0	0	0
Virgin Islands	0	0	0	0	0	0	0	0	0	0
Yemen	0	0	0	0	0	0	0	304	0	0
Other	2,111	0	1,136	0	0	0	0	36	0	0
<b>Total</b>	<b>1,378,756</b>	<b>16,557</b>	<b>91,299</b>	<b>553</b>	<b>2,773</b>	<b>181</b>	<b>0</b>	<b>4,591</b>	<b>0</b>	<b>305</b>
<b>Persian Gulf<sup>e</sup></b>	<b>374,110</b>	<b>0</b>	<b>16,960</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,464</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 43. PAD District III—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> January-October 1997 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>2,727</b>	<b>45,007</b>	<b>0</b>	<b>0</b>	<b>10,067</b>	<b>97,777</b>	<b>473,006</b>	<b>1,234</b>	<b>322</b>	<b>1,556</b>
Algeria .....	2,727	44,065	0	0	10,067	77,411	78,530	4	255	258
Iraq .....	0	0	0	0	0	0	10,097	33	0	33
Kuwait .....	0	0	0	0	0	0	56,671	186	0	186
Qatar .....	0	942	0	0	0	942	942	0	3	3
Saudi Arabia .....	0	0	0	0	0	18,808	326,150	1,011	62	1,073
United Arab Emirates .....	0	0	0	0	0	616	616	0	2	2
<b>Other OPEC</b> .....	<b>4,134</b>	<b>309</b>	<b>0</b>	<b>300</b>	<b>0</b>	<b>37,375</b>	<b>437,311</b>	<b>1,316</b>	<b>123</b>	<b>1,439</b>
Indonesia .....	0	0	0	0	0	528	952	1	2	3
Nigeria .....	0	0	0	0	0	1,327	97,408	316	4	320
Venezuela .....	4,134	309	0	300	0	35,520	338,951	998	117	1,115
<b>Non OPEC</b> .....	<b>7,810</b>	<b>14,056</b>	<b>108</b>	<b>0</b>	<b>681</b>	<b>66,306</b>	<b>669,897</b>	<b>1,985</b>	<b>218</b>	<b>2,204</b>
Angola .....	376	0	0	0	0	1,274	38,919	124	4	128
Argentina .....	211	0	0	0	0	390	8,948	28	1	29
Australia .....	0	4,834	0	0	0	4,834	4,834	0	16	16
Bahama Islands .....	0	0	0	0	0	350	350	0	1	1
Belgium .....	367	0	0	0	0	4,286	4,286	0	14	14
Benin .....	0	0	0	0	0	0	193	1	0	1
Brazil .....	62	0	0	0	44	272	272	0	1	1
Cameroon .....	0	0	0	0	0	635	635	0	2	2
Canada .....	520	0	0	0	0	8,501	8,983	2	28	30
China, People's Republic of .....	0	0	0	0	0	0	4,888	16	0	16
Colombia .....	0	0	0	0	0	161	42,971	141	1	141
Congo (Brazzaville) .....	0	0	0	0	0	0	7,572	25	0	25
Congo (Kinshasa) <sup>d</sup> .....	0	0	0	0	0	0	3,146	10	0	10
Ecuador .....	0	0	0	0	0	140	13,028	42	(s)	43
Egypt .....	255	228	0	0	0	583	2,390	6	2	8
France .....	34	0	20	0	158	2,455	2,455	0	8	8
Gabon .....	0	0	0	0	0	0	32,629	107	0	107
Germany, FR .....	302	0	0	0	3	1,208	1,208	0	4	4
Guatemala .....	0	0	0	0	0	0	5,039	17	0	17
India .....	211	1,091	0	0	0	1,535	1,535	0	5	5
Italy .....	21	0	0	0	0	21	21	0	(s)	(s)
Ivory Coast .....	0	0	0	0	0	619	619	0	2	2
Japan .....	25	0	0	0	34	59	59	0	(s)	(s)
Korea, Republic of .....	86	0	0	0	0	451	451	0	1	1
Malaysia .....	0	1,872	0	0	430	2,302	3,652	4	8	12
Mexico .....	2,806	2,032	88	0	0	5,304	370,685	1,202	17	1,219
Netherlands .....	596	0	0	0	0	3,244	3,244	0	11	11
Netherlands Antilles .....	647	2,252	0	0	0	11,770	13,150	5	39	43
New Zealand .....	0	498	0	0	0	498	498	0	2	2
Norway .....	0	411	0	0	0	2,316	28,183	85	8	93
Oman .....	0	0	0	0	0	1,987	1,987	0	7	7
Peru .....	0	0	0	0	0	260	4,474	14	1	15
Portugal .....	0	0	0	0	0	2,224	2,224	0	7	7
Puerto Rico .....	659	0	0	0	0	659	659	0	2	2
Russia .....	0	0	0	0	0	232	987	2	1	3
Singapore .....	0	0	0	0	0	408	408	0	1	1
Spain .....	22	0	0	0	0	2,741	2,741	0	9	9
Sweden .....	0	0	0	0	0	858	858	0	3	3
Thailand .....	29	0	0	0	0	29	29	0	(s)	(s)
Trinidad and Tobago .....	113	135	0	0	0	248	15,200	49	1	50
Tunisia .....	241	0	0	0	0	439	439	0	1	1
Turkey .....	0	0	0	0	0	230	230	0	1	1
United Kingdom .....	0	0	0	0	0	365	30,289	98	1	100
Virgin Islands .....	110	0	0	0	0	110	110	0	(s)	(s)
Yemen .....	0	0	0	0	0	304	304	0	1	1
Other .....	117	703	0	0	12	2,004	4,115	7	7	14
<b>Total</b> .....	<b>14,671</b>	<b>59,372</b>	<b>108</b>	<b>300</b>	<b>10,748</b>	<b>201,458</b>	<b>1,580,214</b>	<b>4,535</b>	<b>663</b>	<b>5,198</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>0</b>	<b>942</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20,366</b>	<b>394,476</b>	<b>1,231</b>	<b>67</b>	<b>1,298</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Formerly Zaire.

<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 44. PAD Districts IV and V—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> January-October 1997**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>PAD District IV</b>										
<b>Non OPEC</b> .....	<b>35,620</b>	<b>2,342</b>	<b>0</b>	<b>0</b>	<b>210</b>	<b>0</b>	<b>2,956</b>	<b>0</b>	<b>0</b>	<b>0</b>
Canada .....	35,620	2,342	0	0	210	0	2,956	0	0	0
<b>Total</b> .....	<b>35,620</b>	<b>2,342</b>	<b>0</b>	<b>0</b>	<b>210</b>	<b>0</b>	<b>2,956</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>PAD District V</b>										
<b>Arab OPEC</b> .....	<b>18,853</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>0</b>
Iraq .....	6,443	0	0	0	0	0	0	0	0	0
Kuwait .....	7,469	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	4,941	0	0	0	0	0	0	0	63	0
<b>Other OPEC</b> .....	<b>18,265</b>	<b>0</b>	<b>481</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>0</b>	<b>1,150</b>	<b>0</b>	<b>0</b>
Indonesia .....	13,340	0	177	0	0	0	0	985	0	0
Venezuela .....	4,925	0	304	0	0	45	0	165	0	0
<b>Non OPEC</b> .....	<b>77,791</b>	<b>89</b>	<b>5,114</b>	<b>2,208</b>	<b>1,137</b>	<b>1,629</b>	<b>1,907</b>	<b>1,064</b>	<b>12</b>	<b>11</b>
Argentina .....	4,365	0	0	0	0	0	0	0	0	0
Australia .....	9,844	0	0	0	0	0	0	0	0	0
Canada .....	30,099	89	0	0	167	25	755	0	12	11
China, People's Republic of .....	7,720	0	0	10	222	0	0	0	0	0
Colombia .....	2,707	0	0	0	0	0	0	0	0	0
Ecuador .....	7,787	0	0	0	0	0	0	0	0	0
Japan .....	0	0	0	227	0	120	0	0	0	0
Korea, Republic of .....	0	0	0	0	0	725	0	0	0	0
Malaysia .....	1,228	0	1,584	0	0	0	106	860	0	0
Mexico .....	2,815	0	0	0	0	0	0	0	0	0
Netherlands .....	0	0	0	112	0	0	0	0	0	0
Netherlands Antilles .....	0	0	346	0	0	140	0	0	0	0
Oman .....	1,511	0	0	0	0	0	0	0	0	0
Peru .....	4,200	0	0	0	0	0	0	0	0	0
Singapore .....	0	0	2,902	0	0	0	0	204	0	0
Spain .....	0	0	282	0	0	0	0	0	0	0
Thailand .....	0	0	0	0	459	0	0	0	0	0
Virgin Islands .....	0	0	0	0	289	619	1,046	0	0	0
Other .....	5,515	0	0	1,859	0	0	0	0	0	0
<b>Total</b> .....	<b>114,909</b>	<b>89</b>	<b>5,595</b>	<b>2,208</b>	<b>1,137</b>	<b>1,674</b>	<b>1,907</b>	<b>2,214</b>	<b>75</b>	<b>11</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>18,853</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>0</b>

See footnotes at end of table.

**Table 44. PAD Districts IV and V—Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> January-October 1997 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>PAD District IV</b>										
<b>Non OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>542</b>	<b>6,104</b>	<b>41,724</b>	<b>117</b>	<b>20</b>	<b>137</b>
Canada .....	0	0	0	54	542	6,104	41,724	117	20	137
<b>Total</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>542</b>	<b>6,104</b>	<b>41,724</b>	<b>117</b>	<b>20</b>	<b>137</b>
<b>PAD District V</b>										
<b>Arab OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,334</b>	<b>6,397</b>	<b>25,250</b>	<b>62</b>	<b>21</b>	<b>83</b>
Iraq .....	0	0	0	0	0	0	6,443	21	0	21
Kuwait .....	0	0	0	0	0	0	7,469	25	0	25
Saudi Arabia .....	0	0	0	0	6,334	6,397	11,338	16	21	37
<b>Other OPEC</b> .....	<b>0</b>	<b>321</b>	<b>0</b>	<b>0</b>	<b>1,792</b>	<b>3,789</b>	<b>22,054</b>	<b>60</b>	<b>12</b>	<b>73</b>
Indonesia .....	0	0	0	0	0	1,162	14,502	44	4	48
Venezuela .....	0	321	0	0	1,792	2,627	7,552	16	9	25
<b>Non OPEC</b> .....	<b>36</b>	<b>348</b>	<b>0</b>	<b>0</b>	<b>5,409</b>	<b>18,964</b>	<b>96,755</b>	<b>256</b>	<b>62</b>	<b>318</b>
Argentina .....	0	0	0	0	0	0	4,365	14	0	14
Australia .....	0	0	0	0	0	0	9,844	32	0	32
Canada .....	0	348	0	0	4,499	5,906	36,005	99	19	118
China, People's Republic of .....	0	0	0	0	0	232	7,952	25	1	26
Colombia .....	0	0	0	0	0	0	2,707	9	0	9
Ecuador .....	0	0	0	0	0	0	7,787	26	0	26
Japan .....	0	0	0	0	0	347	347	0	1	1
Korea, Republic of .....	36	0	0	0	108	869	869	0	3	3
Malaysia .....	0	0	0	0	53	2,603	3,831	4	9	13
Mexico .....	0	0	0	0	7	7	2,822	9	(s)	9
Netherlands .....	0	0	0	0	113	225	225	0	1	1
Netherlands Antilles .....	0	0	0	0	0	486	486	0	2	2
Oman .....	0	0	0	0	0	0	1,511	5	0	5
Peru .....	0	0	0	0	0	0	4,200	14	0	14
Singapore .....	0	0	0	0	544	3,650	3,650	0	12	12
Spain .....	0	0	0	0	0	282	282	0	1	1
Thailand .....	0	0	0	0	0	459	459	0	2	2
Virgin Islands .....	0	0	0	0	0	1,954	1,954	0	6	6
Other .....	0	0	0	0	85	1,944	7,459	18	6	25
<b>Total</b> .....	<b>36</b>	<b>669</b>	<b>0</b>	<b>0</b>	<b>13,535</b>	<b>29,150</b>	<b>144,059</b>	<b>378</b>	<b>96</b>	<b>474</b>
<b>Persian Gulf<sup>e</sup></b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,334</b>	<b>6,397</b>	<b>25,250</b>	<b>62</b>	<b>21</b>	<b>83</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Formerly Zaire.

<sup>e</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 45. Exports of Crude Oil and Petroleum Products by PAD District,  
October 1997**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						U.S. Total	Daily Average
	I	II	III	IV	V			
<b>Crude Oil<sup>a</sup></b> .....	<b>0</b>	<b>1,303</b>	<b>0</b>	<b>0</b>	<b>3,414</b>	<b>4,717</b>	<b>152</b>	
<b>Natural Gas Liquids</b> .....	<b>46</b>	<b>99</b>	<b>765</b>	<b>1</b>	<b>410</b>	<b>1,321</b>	<b>43</b>	
Pentanes Plus .....	2	29	0	0	0	31	1	
Liquefied Petroleum Gases .....	45	69	765	1	410	1,290	42	
Ethane/Ethylene .....	0	0	0	0	0	0	0	
Propane/Propylene .....	42	44	694	1	129	910	29	
Normal Butane/Butylene .....	2	25	72	0	281	380	12	
Isobutane/Isobutylene .....	0	0	0	0	0	0	0	
<b>Other Liquids</b> .....	<b>48</b>	<b>1</b>	<b>641</b>	<b>0</b>	<b>1</b>	<b>691</b>	<b>22</b>	
Other Hydrocarbons/Oxygenates .....	4	1	342	0	1	347	11	
Motor Gasoline Blend. Comp. ....	44	(s)	300	0	0	344	11	
<b>Finished Petroleum Products</b> .....	<b>1,685</b>	<b>368</b>	<b>17,941</b>	<b>16</b>	<b>6,319</b>	<b>26,330</b>	<b>849</b>	
Finished Motor Gasoline .....	317	131	4,778	2	529	5,756	186	
Naphtha-Type Jet Fuel .....	3	0	25	0	(s)	28	1	
Kerosene-Type Jet Fuel .....	5	(s)	932	0	278	1,214	39	
Kerosene .....	1	4	0	0	6	10	(s)	
Distillate Fuel Oil .....	173	2	3,354	0	581	4,109	133	
Residual Fuel Oil .....	232	21	2,142	0	1,728	4,124	133	
Special Naphthas .....	13	7	29	(s)	249	298	10	
Lubricants .....	177	60	728	10	95	1,071	35	
Waxes .....	35	21	23	3	9	91	3	
Petroleum Coke .....	701	40	5,914	0	2,819	9,475	306	
Asphalt and Road Oil .....	24	81	16	2	25	146	5	
Miscellaneous Products .....	4	(s)	1	0	1	7	(s)	
<b>Total</b> .....	<b>1,779</b>	<b>1,771</b>	<b>19,348</b>	<b>17</b>	<b>10,144</b>	<b>33,059</b>	<b>1,066</b>	

<sup>a</sup> Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and the U.S. Bureau of the Census.

**Table 46. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January-October 1997**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						U.S. Total	Daily Average
	I	II	III	IV	V			
<b>Crude Oil<sup>a</sup></b> .....	<b>(s)</b>	<b>9,634</b>	<b>31</b>	<b>1</b>	<b>24,543</b>	<b>34,209</b>	<b>113</b>	
<b>Natural Gas Liquids</b> .....	<b>704</b>	<b>4,392</b>	<b>5,735</b>	<b>8</b>	<b>5,454</b>	<b>16,294</b>	<b>54</b>	
Pentanes Plus .....	23	2,137	161	1	1	2,323	8	
Liquefied Petroleum Gases .....	682	2,256	5,573	7	5,453	13,971	46	
Ethane/Ethylene .....	0	0	0	0	0	0	0	
Propane/Propylene .....	415	696	5,072	7	2,595	8,786	29	
Normal Butane/Butylene .....	267	1,560	501	(s)	2,858	5,186	17	
Isobutane/Isobutylene .....	0	0	0	0	0	0	0	
<b>Other Liquids</b> .....	<b>290</b>	<b>9</b>	<b>6,713</b>	<b>0</b>	<b>577</b>	<b>7,590</b>	<b>25</b>	
Other Hydrocarbons/Oxygenates .....	28	7	3,482	0	8	3,524	12	
Motor Gasoline Blend. Comp. ....	262	3	3,232	0	569	4,066	13	
<b>Finished Petroleum Products</b> .....	<b>9,580</b>	<b>5,169</b>	<b>151,025</b>	<b>145</b>	<b>77,046</b>	<b>242,965</b>	<b>799</b>	
Finished Motor Gasoline .....	737	254	32,265	20	5,692	38,968	128	
Naphtha-Type Jet Fuel .....	25	1	25	0	18	69	(s)	
Kerosene-Type Jet Fuel .....	312	35	5,138	0	3,447	8,932	29	
Kerosene .....	13	13	44	(s)	32	103	(s)	
Distillate Fuel Oil .....	2,086	488	26,755	(s)	15,752	45,082	148	
Residual Fuel Oil .....	868	513	21,429	1	13,578	36,389	120	
Special Naphthas .....	129	342	370	3	5,119	5,963	20	
Lubricants .....	1,449	578	6,263	66	1,049	9,405	31	
Waxes .....	258	159	272	40	119	848	3	
Petroleum Coke .....	3,470	1,172	58,239	1	31,940	94,822	312	
Asphalt and Road Oil .....	189	1,610	220	14	238	2,272	7	
Miscellaneous Products .....	44	3	4	(s)	61	113	(s)	
<b>Total</b> .....	<b>10,575</b>	<b>19,204</b>	<b>163,505</b>	<b>154</b>	<b>107,620</b>	<b>301,058</b>	<b>990</b>	

<sup>a</sup> Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and the U.S. Bureau of the Census.

**Table 47. Exports of Crude Oil and Petroleum Products by Destination, October 1997**  
(Thousand Barrels)

Destination	Crude Oil <sup>a</sup>	Pentanes Plus	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Kerosene	Distillate Fuel Oil	Residual Fuel Oil
Argentina .....	0	0	0	0	0	0	2	0
Australia .....	0	0	3	1	0	0	1	0
Bahama Islands .....	0	0	12	0	2	0	41	70
Bahrain .....	0	0	0	0	0	0	0	0
Belgium & Luxembourg .....	0	0	0	(s)	0	0	1	0
Brazil .....	0	0	0	0	147	0	422	0
Canada .....	1,303	31	87	433	280	9	52	821
Chile .....	0	0	0	141	52	0	137	0
China, People's Republic of .....	1,289	0	0	0	0	0	3	0
China, Taiwan .....	0	0	0	0	0	(s)	7	0
Colombia .....	0	0	0	275	(s)	0	(s)	0
Costa Rica .....	0	0	(s)	0	20	0	191	0
Denmark .....	0	0	0	0	0	0	0	0
Dominican Republic .....	0	0	21	0	0	0	(s)	261
Ecuador .....	0	0	56	0	0	0	667	0
Egypt .....	0	0	0	0	0	0	0	0
El Salvador .....	0	0	40	117	8	0	119	0
Finland .....	0	0	0	0	0	0	1	0
France .....	0	0	136	0	(s)	0	0	0
French Pacific Islands .....	0	0	0	0	0	0	38	0
Germany, FR .....	0	0	0	0	0	0	6	0
Ghana .....	0	0	0	0	0	0	0	0
Greece .....	0	0	0	0	0	0	0	0
Guatemala .....	0	0	0	276	25	0	255	0
Guinea .....	0	0	0	0	0	0	0	0
Honduras .....	0	0	0	90	30	0	241	0
Hong Kong .....	0	0	0	0	0	0	2	0
India .....	0	0	0	0	0	0	0	0
Indonesia .....	0	0	0	0	0	0	0	0
Ireland .....	0	0	0	0	0	0	0	0
Israel .....	0	0	1	0	0	0	186	(s)
Italy .....	0	0	0	0	0	0	0	0
Jamaica .....	0	0	1	(s)	0	0	1	620
Japan .....	0	0	0	1	(s)	0	10	57
Korea, Republic of .....	2,125	0	(s)	0	0	1	1	50
Malaysia .....	0	0	0	0	0	0	2	0
Mexico .....	0	0	898	3,838	0	1	60	1,683
Netherlands .....	0	0	0	0	0	0	693	0
Netherlands Antilles .....	0	0	0	0	0	0	51	0
New Zealand .....	0	0	(s)	(s)	0	0	0	0
Nigeria .....	0	0	0	0	336	0	0	0
Norway .....	0	0	0	0	0	0	1	0
Panama .....	0	0	24	70	20	0	344	200
Peru .....	0	0	0	0	0	0	0	0
Philippines .....	0	0	0	0	0	0	0	0
Portugal .....	0	0	0	0	0	0	0	0
Puerto Rico .....	0	0	(s)	256	0	0	4	(s)
Russia .....	0	0	0	85	0	0	24	0
Saudi Arabia .....	0	0	(s)	0	0	0	24	0
Singapore .....	0	0	0	0	0	0	269	357
South Africa .....	0	0	0	0	0	0	0	0
Spain .....	0	0	0	0	0	0	0	0
Suriname .....	0	0	0	0	0	0	0	0
Sweden .....	0	0	0	0	0	0	0	0
Switzerland .....	0	0	0	0	0	0	0	0
Thailand .....	0	0	0	0	0	0	170	0
Trinidad and Tobago .....	0	0	1	0	0	0	(s)	0
Turkey .....	0	0	0	0	0	0	0	0
United Arab Emirates .....	0	0	0	0	0	0	0	0
United Kingdom .....	0	0	2	0	319	0	1	0
Uruguay .....	0	0	0	0	0	0	0	0
Venezuela .....	0	0	0	100	0	0	25	3
Virgin Islands .....	0	0	0	0	0	0	0	0
Yugoslavia .....	0	0	0	0	0	0	0	0
Other .....	0	0	8	73	2	0	56	0
<b>Total .....</b>	<b>4,717</b>	<b>31</b>	<b>1,290</b>	<b>5,756</b>	<b>1,242</b>	<b>10</b>	<b>4,109</b>	<b>4,124</b>

See footnotes at end of table.

**Table 47. Exports of Crude Oil and Petroleum Products by Destination, October 1997 (Continued)**  
(Thousand Barrels)

Destination	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products <sup>b</sup>	Crude Oil and Products	
							Total	Daily Average
Argentina .....	0	7	1	1	(s)	(s)	12	(s)
Australia .....	(s)	3	1	352	1	(s)	362	12
Bahama Islands .....	0	4	0	0	2	0	131	4
Bahrain .....	0	0	0	98	(s)	0	98	3
Belgium & Luxembourg .....	(s)	5	(s)	358	(s)	(s)	365	12
Brazil .....	(s)	188	(s)	0	0	3	761	25
Canada .....	14	150	52	447	92	3	3,773	122
Chile .....	0	8	(s)	242	(s)	0	581	19
China, People's Republic of .....	4	2	(s)	0	0	0	1,299	42
China, Taiwan .....	(s)	29	1	3	(s)	(s)	40	1
Colombia .....	(s)	4	1	0	0	1	282	9
Costa Rica .....	(s)	8	(s)	0	0	0	220	7
Denmark .....	0	(s)	0	0	0	0	(s)	(s)
Dominican Republic .....	(s)	16	0	0	0	(s)	299	10
Ecuador .....	0	2	0	0	0	(s)	725	23
Egypt .....	0	3	0	0	0	0	3	(s)
El Salvador .....	0	3	(s)	0	0	0	287	9
Finland .....	0	1	0	0	0	(s)	2	(s)
France .....	0	1	1	0	1	(s)	139	4
French Pacific Islands .....	0	(s)	0	0	0	0	38	1
Germany, FR .....	(s)	3	4	6	4	(s)	24	1
Ghana .....	0	(s)	0	0	0	0	(s)	(s)
Greece .....	0	8	0	209	0	0	217	7
Guatemala .....	(s)	9	(s)	0	0	0	565	18
Guinea .....	0	1	0	0	0	0	1	(s)
Honduras .....	(s)	8	(s)	0	2	0	371	12
Hong Kong .....	(s)	4	1	0	0	(s)	6	(s)
India .....	0	23	1	0	2	(s)	26	1
Indonesia .....	(s)	2	(s)	0	0	0	3	(s)
Ireland .....	(s)	(s)	(s)	0	0	0	(s)	(s)
Israel .....	0	3	0	0	(s)	0	190	6
Italy .....	0	1	(s)	457	(s)	(s)	459	15
Jamaica .....	2	3	0	0	0	19	646	21
Japan .....	245	29	2	2,304	1	2	2,651	86
Korea, Republic of .....	0	9	1	1	1	1	2,190	71
Malaysia .....	(s)	1	(s)	(s)	(s)	(s)	3	(s)
Mexico .....	5	185	21	238	19	472	7,420	239
Netherlands .....	1	3	(s)	458	6	17	1,177	38
Netherlands Antilles .....	0	1	0	0	0	0	52	2
New Zealand .....	(s)	2	(s)	96	(s)	0	98	3
Nigeria .....	0	(s)	0	0	0	(s)	336	11
Norway .....	0	(s)	(s)	24	0	0	25	1
Panama .....	0	226	(s)	0	0	0	885	29
Peru .....	0	2	(s)	0	0	0	2	(s)
Philippines .....	0	2	(s)	(s)	0	0	2	(s)
Portugal .....	0	(s)	0	390	0	(s)	391	13
Puerto Rico .....	23	21	(s)	0	0	54	359	12
Russia .....	0	5	0	0	0	0	114	4
Saudi Arabia .....	0	1	(s)	0	0	0	25	1
Singapore .....	0	32	(s)	(s)	(s)	(s)	658	21
South Africa .....	(s)	8	(s)	155	0	(s)	163	5
Spain .....	0	1	(s)	1,565	(s)	0	1,566	51
Suriname .....	0	1	0	0	0	0	1	(s)
Sweden .....	0	(s)	0	0	0	0	(s)	(s)
Switzerland .....	0	(s)	0	0	0	0	(s)	(s)
Thailand .....	0	2	(s)	0	1	(s)	174	6
Trinidad and Tobago .....	(s)	1	0	0	0	(s)	2	(s)
Turkey .....	(s)	(s)	0	780	(s)	0	781	25
United Arab Emirates .....	0	7	0	69	0	(s)	77	2
United Kingdom .....	(s)	6	1	401	1	(s)	731	24
Uruguay .....	0	1	(s)	0	0	0	1	(s)
Venezuela .....	(s)	2	(s)	345	(s)	81	555	18
Virgin Islands .....	0	(s)	0	0	(s)	43	44	1
Yugoslavia .....	0	(s)	0	0	0	0	(s)	(s)
Other .....	2	20	(s)	475	10	0	645	21
<b>Total .....</b>	<b>298</b>	<b>1,071</b>	<b>91</b>	<b>9,475</b>	<b>146</b>	<b>698</b>	<b>33,059</b>	<b>1,066</b>

<sup>a</sup> Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

<sup>b</sup> Includes miscellaneous products, motor gasoline blending components, and other hydrocarbons and oxygenates.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and the U.S. Bureau of the Census.

**Table 48. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination,  
January-October 1997**  
(Thousand Barrels)

Destination	Crude Oil <sup>a</sup>	Pentanes Plus	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Kerosene	Distillate Fuel Oil	Residual Fuel Oil
Argentina .....	0	0	2	0	206	0	312	0
Australia .....	0	0	14	4	0	1	16	1
Bahama Islands .....	0	(s)	129	287	104	1	1,236	532
Bahrain .....	0	0	0	0	0	0	(s)	0
Belgium & Luxembourg .....	0	0	3	1	0	0	9	399
Brazil .....	0	0	1	0	1,272	0	2,307	0
Cameroon .....	0	0	0	1	0	0	0	0
Canada .....	9,667	2,150	2,531	2,801	3,064	33	3,138	4,939
Chile .....	0	0	186	1,323	98	(s)	2,351	151
China, People's Republic of .....	4,668	0	772	0	0	2	2,589	352
China, Taiwan .....	1,281	0	1	783	(s)	(s)	520	61
Colombia .....	0	0	213	3,220	2	(s)	4	0
Costa Rica .....	0	0	(s)	126	20	0	216	159
Denmark .....	0	0	0	0	0	(s)	7	0
Dominican Republic .....	0	5	257	88	0	0	332	558
Ecuador .....	0	0	56	655	35	0	2,122	0
Egypt .....	0	0	0	0	0	0	(s)	0
El Salvador .....	0	3	252	552	33	0	931	115
Finland .....	0	0	0	0	0	0	249	0
France .....	0	0	136	0	(s)	0	3	11
French Pacific Islands .....	0	(s)	0	0	0	0	311	0
Germany, FR .....	0	0	0	(s)	0	0	16	0
Ghana .....	0	0	0	0	0	0	0	0
Greece .....	0	0	0	0	0	0	4	0
Guatemala .....	0	0	4	1,649	176	10	1,032	554
Guinea .....	0	0	0	0	(s)	0	1	0
Honduras .....	0	0	24	934	228	0	1,775	461
Hong Kong .....	0	(s)	(s)	0	3	(s)	338	266
India .....	0	0	0	0	0	0	419	0
Indonesia .....	0	0	0	0	0	3	4	0
Ireland .....	0	0	0	0	0	0	1	(s)
Israel .....	0	0	3	(s)	1,526	0	389	1
Italy .....	0	0	3	(s)	0	0	3	272
Jamaica .....	0	0	172	1	75	(s)	3	7,137
Japan .....	3,223	0	261	225	886	1	1,245	565
Korea, Republic of .....	11,410	0	779	(s)	190	6	2,690	423
Malaysia .....	0	0	(s)	(s)	0	0	18	0
Mexico .....	6	(s)	7,862	24,053	51	21	5,345	10,167
Netherlands .....	0	0	0	0	0	0	2,658	398
Netherlands Antilles .....	0	0	0	254	0	0	1,592	680
New Zealand .....	0	0	(s)	169	(s)	0	3	(s)
Nigeria .....	0	0	0	0	336	0	2	0
Norway .....	0	0	1	0	0	0	1	(s)
Panama .....	0	161	178	136	115	0	2,521	3,109
Peru .....	0	0	1	110	165	0	12	0
Philippines .....	0	0	0	0	0	0	405	0
Poland .....	0	0	0	0	0	0	(s)	0
Portugal .....	0	0	0	0	0	0	(s)	0
Puerto Rico .....	0	0	7	521	2	0	670	10
Russia .....	0	0	0	321	0	0	528	2
Saudi Arabia .....	0	0	2	0	0	0	38	0
Singapore .....	0	0	(s)	0	0	0	4,572	3,568
South Africa .....	0	0	(s)	0	0	0	1	(s)
Spain .....	0	0	1	0	(s)	0	321	(s)
Suriname .....	0	0	0	0	0	0	0	0
Sweden .....	0	1	0	1	0	1	7	0
Switzerland .....	0	0	0	0	0	0	1	0
Thailand .....	0	0	0	0	0	0	271	162
Trinidad and Tobago .....	0	0	3	1	0	0	4	1
Turkey .....	0	0	(s)	0	0	0	394	0
United Arab Emirates .....	0	0	1	0	0	0	346	0
United Kingdom .....	0	0	24	3	322	(s)	21	35
Uruguay .....	0	0	0	1	(s)	0	0	0
Venezuela .....	0	0	1	100	0	23	386	232
Virgin Islands .....	3,892	0	0	0	0	0	(s)	0
Yugoslavia .....	0	0	0	0	0	0	0	2
Other .....	63	1	92	649	93	0	397	1,062
<b>Total .....</b>	<b>34,209</b>	<b>2,323</b>	<b>13,971</b>	<b>38,968</b>	<b>9,001</b>	<b>103</b>	<b>45,082</b>	<b>36,389</b>

See footnotes at end of table.

**Table 48. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-October 1997 (Continued)**  
(Thousand Barrels)

Destination	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products <sup>b</sup>	Crude Oil and Products	
							Total	Daily Average
Argentina .....	4	64	6	8	3	1	607	2
Australia .....	(s)	74	6	3,069	4	(s)	3,191	10
Bahama Islands .....	0	26	0	0	19	(s)	2,332	8
Bahrain .....	0	1	0	589	(s)	0	590	2
Belgium & Luxembourg .....	1	93	3	5,889	5	4	6,407	21
Brazil .....	24	304	5	927	7	5	4,851	16
Cameroon .....	0	(s)	0	91	0	0	92	(s)
Canada .....	410	1,365	400	4,462	1,792	80	36,831	121
Chile .....	5	199	2	656	(s)	(s)	4,971	16
China, People's Republic of .....	25	63	3	0	2	(s)	8,477	28
China, Taiwan .....	9	274	4	28	1	2	2,965	10
Colombia .....	2	116	6	7	2	7	3,578	12
Costa Rica .....	8	218	2	(s)	(s)	1	750	2
Denmark .....	0	1	1	794	(s)	(s)	804	3
Dominican Republic .....	7	138	1	31	(s)	21	1,438	5
Ecuador .....	(s)	240	(s)	0	(s)	50	3,158	10
Egypt .....	(s)	8	(s)	(s)	2	0	11	(s)
El Salvador .....	4	32	1	0	0	2	1,925	6
Finland .....	0	7	0	0	(s)	(s)	257	1
France .....	22	27	17	3,183	7	1	3,407	11
French Pacific Islands .....	15	1	0	0	0	0	327	1
Germany, FR .....	1	41	38	1,422	57	3	1,579	5
Ghana .....	0	2	0	479	0	0	482	2
Greece .....	(s)	26	(s)	1,773	1	(s)	1,804	6
Guatemala .....	12	86	6	0	0	10	3,539	12
Guinea .....	0	10	0	0	0	0	11	(s)
Honduras .....	6	87	1	0	2	(s)	3,519	12
Hong Kong .....	2	69	7	0	1	(s)	688	2
India .....	0	488	7	16	26	3	959	3
Indonesia .....	1	25	1	224	3	3	263	1
Ireland .....	(s)	1	2	586	0	6	597	2
Israel .....	(s)	29	(s)	962	1	(s)	2,911	10
Italy .....	0	47	5	8,893	6	1	9,229	30
Jamaica .....	13	52	1	163	0	91	7,710	25
Japan .....	5,053	261	38	17,739	14	543	30,053	99
Korea, Republic of .....	1	71	11	1,489	6	5	17,080	56
Malaysia .....	(s)	34	2	4	(s)	2	62	(s)
Mexico .....	67	1,628	233	2,004	170	4,133	55,739	183
Netherlands .....	26	37	2	7,212	21	22	10,376	34
Netherlands Antilles .....	0	370	1	0	1	0	2,898	10
New Zealand .....	(s)	18	(s)	574	(s)	(s)	765	3
Nigeria .....	0	148	0	0	1	(s)	486	2
Norway .....	(s)	3	(s)	995	(s)	0	1,001	3
Panama .....	0	287	1	(s)	0	0	6,507	21
Peru .....	1	42	2	(s)	(s)	1	333	1
Philippines .....	(s)	34	5	9	(s)	(s)	453	1
Poland .....	0	2	0	0	0	0	2	(s)
Portugal .....	0	1	(s)	1,329	(s)	(s)	1,330	4
Puerto Rico .....	201	170	3	0	(s)	491	2,076	7
Russia .....	1	59	(s)	0	0	0	911	3
Saudi Arabia .....	(s)	11	1	137	(s)	(s)	190	1
Singapore .....	1	356	2	28	3	1	8,531	28
South Africa .....	(s)	122	(s)	994	1	(s)	1,118	4
Spain .....	(s)	149	3	12,509	2	0	12,986	43
Suriname .....	0	4	0	0	0	0	4	(s)
Sweden .....	0	11	1	466	0	(s)	489	2
Switzerland .....	10	4	(s)	0	0	(s)	15	(s)
Thailand .....	3	74	2	6	10	4	532	2
Trinidad and Tobago .....	5	230	(s)	(s)	(s)	1	245	1
Turkey .....	(s)	51	(s)	5,596	1	0	6,042	20
United Arab Emirates .....	1	612	(s)	836	1	(s)	1,795	6
United Kingdom .....	1	65	7	3,255	43	2	3,777	12
Uruguay .....	0	28	(s)	0	(s)	(s)	30	(s)
Venezuela .....	3	36	4	1,762	34	1,924	4,506	15
Virgin Islands .....	0	1	0	0	(s)	254	4,147	14
Yugoslavia .....	0	2	(s)	57	0	0	61	(s)
Other .....	16	267	2	3,567	20	26	6,255	21
<b>Total .....</b>	<b>5,963</b>	<b>9,405</b>	<b>848</b>	<b>94,822</b>	<b>2,272</b>	<b>7,702</b>	<b>301,058</b>	<b>990</b>

<sup>a</sup> Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

<sup>b</sup> Includes miscellaneous products, motor gasoline blending components, and other hydrocarbons and oxygenates.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

**Table 49. Net Imports of Crude Oil and Petroleum Products into the United States by Country, October 1997**  
(Thousand Barrels per Day)

Country	Crude Oil <sup>a</sup>	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products <sup>b</sup>	Total Products	Total Crude Oil and Products
<b>Arab OPEC</b> .....	<b>1,774</b>	<b>24</b>	<b>38</b>	<b>0</b>	<b>-1</b>	<b>0</b>	<b>-2</b>	<b>(s)</b>	<b>318</b>	<b>376</b>	<b>2,151</b>
Algeria .....	3	24	0	0	(s)	0	0	0	245	269	272
Iraq .....	177	0	0	0	0	0	0	0	0	0	177
Kuwait .....	349	0	0	0	0	0	0	0	0	0	349
Qatar .....	0	0	0	0	0	0	0	(s)	16	16	16
Saudi Arabia .....	1,245	(s)	38	0	-1	0	0	(s)	57	95	1,340
United Arab Emirates .....	0	0	0	0	0	0	-2	(s)	(s)	-2	-2
<b>Other OPEC</b> .....	<b>2,279</b>	<b>13</b>	<b>27</b>	<b>23</b>	<b>52</b>	<b>60</b>	<b>-11</b>	<b>(s)</b>	<b>207</b>	<b>370</b>	<b>2,650</b>
Indonesia .....	42	0	0	0	0	0	0	(s)	(s)	(s)	42
Nigeria .....	675	0	0	-11	0	13	0	(s)	(s)	2	677
Venezuela .....	1,562	13	27	34	52	47	-11	(s)	207	369	1,930
<b>Non OPEC</b> .....	<b>4,338</b>	<b>73</b>	<b>58</b>	<b>20</b>	<b>30</b>	<b>-35</b>	<b>-292</b>	<b>-17</b>	<b>373</b>	<b>210</b>	<b>4,547</b>
Angola .....	457	0	18	0	0	0	0	(s)	0	18	475
Argentina .....	93	0	0	0	(s)	8	(s)	(s)	13	21	113
Australia .....	53	(s)	(s)	0	(s)	0	-11	(s)	38	27	80
Bahama Islands .....	0	(s)	0	(s)	-1	-2	0	(s)	(s)	-4	-4
Belgium & Luxembourg .....	0	0	8	0	(s)	0	-12	(s)	19	16	16
Brazil .....	0	3	0	-5	-14	0	0	-6	4	-18	-18
Canada .....	1,017	101	50	-8	73	3	-14	-3	28	231	1,248
China, People's Republic of .....	6	0	1	0	(s)	0	0	(s)	(s)	1	6
China, Taiwan .....	0	0	0	0	(s)	0	(s)	-1	(s)	-1	-1
Colombia .....	286	0	-9	(s)	(s)	0	0	(s)	(s)	-9	277
Congo (Brazzaville) .....	73	0	0	0	0	0	0	(s)	0	(s)	73
Congo (Kinshasa) <sup>c</sup> .....	6	0	0	0	0	0	0	0	0	0	6
Ecuador .....	143	-2	0	0	-22	0	0	(s)	(s)	-23	119
Egypt .....	0	0	0	0	0	0	0	(s)	0	(s)	(s)
France .....	0	-4	0	(s)	0	0	0	(s)	28	24	24
Gabon .....	235	0	0	0	0	0	0	0	0	0	235
Germany, FR .....	0	0	0	0	(s)	5	(s)	(s)	(s)	4	4
Greece .....	0	0	0	0	0	0	-7	(s)	0	-7	-7
Guatemala .....	22	0	-9	-1	-8	0	0	(s)	(s)	-18	3
India .....	0	0	0	0	0	0	0	-1	16	16	16
Italy .....	0	0	7	0	0	0	-15	(s)	1	-7	-7
Jamaica .....	0	(s)	(s)	0	(s)	-20	0	(s)	-1	-21	-21
Japan .....	0	0	(s)	4	(s)	-2	-74	-1	-3	-76	-76
Korea, Republic of .....	-69	(s)	0	5	(s)	-2	(s)	(s)	(s)	3	-66
Malaysia .....	19	0	0	0	(s)	0	(s)	(s)	(s)	(s)	19
Mexico .....	1,437	-29	-124	1	-2	-54	-8	-4	7	-214	1,224
Netherlands .....	0	0	0	0	-22	0	-15	(s)	12	-25	-25
Netherlands Antilles .....	0	0	0	18	-2	0	0	(s)	29	45	45
Norway .....	302	8	7	0	(s)	0	-1	(s)	19	34	336
Oman .....	0	(s)	0	0	0	0	0	(s)	17	17	17
Panama .....	0	-1	-2	-1	-11	-6	0	-7	(s)	-29	-29
Peru .....	46	0	0	0	0	0	0	(s)	(s)	(s)	46
Puerto Rico .....	0	(s)	-8	0	(s)	(s)	0	13	3	8	8
Romania .....	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Russia .....	6	0	-3	0	-1	0	0	(s)	7	4	10
Syria .....	0	0	0	0	(s)	0	0	(s)	0	(s)	(s)
Spain .....	0	0	0	0	0	0	-50	(s)	12	-39	-39
Sweden .....	0	0	0	0	0	0	0	(s)	16	16	16
Thailand .....	0	0	7	0	-5	0	0	(s)	(s)	2	2
Trinidad and Tobago .....	55	(s)	0	0	(s)	0	0	(s)	4	4	58
Turkey .....	0	0	0	0	0	0	-25	(s)	3	-22	-22
United Kingdom .....	119	(s)	9	-10	(s)	0	-13	(s)	27	12	131
Virgin Islands .....	0	0	109	20	86	56	0	(s)	29	299	299
Other .....	33	-2	-3	-4	-40	-20	-47	-4	44	-75	-43
<b>Total</b> .....	<b>8,391</b>	<b>110</b>	<b>123</b>	<b>42</b>	<b>81</b>	<b>25</b>	<b>-306</b>	<b>-18</b>	<b>899</b>	<b>956</b>	<b>9,347</b>
<b>Persian Gulf</b> <sup>d</sup> .....	<b>1,771</b>	<b>(s)</b>	<b>38</b>	<b>0</b>	<b>-1</b>	<b>0</b>	<b>-5</b>	<b>(s)</b>	<b>73</b>	<b>104</b>	<b>1,876</b>

<sup>a</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>b</sup> Includes asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, miscellaneous products, motor gasoline blending components, naphtha for petrochemical feedstock use, other hydrocarbons and oxygenates, other oils for petrochemical feedstock use, pentanes plus, special naphthas, unfinished oils, and waxes.

<sup>c</sup> Formerly Zaire.

<sup>d</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-814, "Monthly Imports Report" and the U.S. Bureau of the Census.

**Table 50. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-October 1997**  
(Thousand Barrels per Day)

Country	Crude Oil <sup>a</sup>	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products <sup>b</sup>	Total Products	Total Crude Oil and Products
<b>Arab OPEC</b> .....	<b>1,623</b>	<b>32</b>	<b>28</b>	<b>0</b>	<b>(s)</b>	<b>34</b>	<b>-3</b>	<b>-2</b>	<b>316</b>	<b>406</b>	<b>2,030</b>
Algeria .....	4	32	0	0	1	26	0	(s)	231	291	295
Iraq .....	59	0	0	0	0	0	0	0	0	0	59
Kuwait .....	262	(s)	0	0	0	0	0	(s)	(s)	(s)	262
Qatar .....	0	0	0	0	0	0	0	(s)	3	3	3
Saudi Arabia .....	1,298	(s)	28	0	(s)	8	(s)	(s)	80	116	1,414
United Arab Emirates .....	0	(s)	0	0	-1	0	-3	-2	2	-4	-4
<b>Other OPEC</b> .....	<b>2,096</b>	<b>11</b>	<b>42</b>	<b>40</b>	<b>51</b>	<b>66</b>	<b>-7</b>	<b>-1</b>	<b>185</b>	<b>389</b>	<b>2,484</b>
Indonesia .....	45	0	0	0	(s)	6	-1	(s)	2	8	53
Nigeria .....	697	0	0	-1	(s)	4	0	(s)	6	8	705
Venezuela .....	1,354	11	42	42	51	56	-6	(s)	177	373	1,726
<b>Non OPEC</b> .....	<b>4,201</b>	<b>56</b>	<b>119</b>	<b>29</b>	<b>33</b>	<b>-20</b>	<b>-301</b>	<b>-18</b>	<b>403</b>	<b>301</b>	<b>4,502</b>
Angola .....	405	0	2	0	0	0	0	(s)	2	4	410
Argentina .....	54	(s)	0	-1	-1	1	(s)	(s)	4	3	57
Australia .....	32	(s)	(s)	0	(s)	(s)	-10	(s)	16	5	38
Bahama Islands .....	0	(s)	-1	(s)	-4	-2	0	(s)	1	-7	-7
Belgium & Luxembourg .....	0	(s)	3	0	(s)	(s)	-19	(s)	27	10	10
Benin .....	1	0	0	0	0	0	0	0	0	0	1
Brazil .....	0	(s)	2	-4	-8	(s)	-3	-1	4	-10	-10
Brunei .....	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Cameroon .....	0	0	(s)	0	0	6	(s)	(s)	0	5	5
Canada .....	1,073	90	68	-6	77	8	-14	-3	37	257	1,330
China, People's Republic of .....	32	-3	1	0	-9	-1	0	(s)	(s)	-12	20
China, Taiwan .....	-4	(s)	-3	(s)	-2	(s)	(s)	-1	(s)	-6	-10
Colombia .....	258	-1	-11	(s)	(s)	2	(s)	(s)	(s)	-10	248
Congo (Brazzaville) .....	48	0	0	0	0	0	0	(s)	0	(s)	48
Congo (Kinshasa) <sup>c</sup> .....	21	0	0	0	0	0	0	(s)	0	(s)	21
Ecuador .....	120	(s)	-2	(s)	-7	1	0	-1	(s)	-9	111
Egypt .....	33	0	0	0	(s)	0	(s)	(s)	2	2	35
France .....	0	(s)	5	(s)	(s)	(s)	-10	(s)	23	17	17
Gabon .....	211	0	0	0	0	0	0	(s)	0	(s)	211
Germany, FR .....	(s)	0	1	0	(s)	2	-5	(s)	7	5	5
Greece .....	0	0	0	0	(s)	0	-6	(s)	(s)	-6	-6
Guatemala .....	17	(s)	-5	-1	-3	-2	0	(s)	(s)	-12	5
India .....	0	0	0	0	-1	0	(s)	-2	5	2	2
Italy .....	0	(s)	3	0	(s)	-1	-29	(s)	6	-22	-22
Jamaica .....	0	-1	(s)	(s)	(s)	-23	-1	(s)	(s)	-25	-25
Japan .....	-11	-1	-1	-3	-4	-2	-58	-1	-18	-87	-97
Korea, Republic of .....	-38	-3	(s)	2	-9	-1	-5	(s)	2	-14	-52
Malaysia .....	8	(s)	(s)	0	(s)	3	(s)	(s)	13	16	24
Mexico .....	1,354	-25	-79	(s)	-18	-33	-7	-5	11	-156	1,199
Netherlands .....	0	0	4	0	-9	-1	-24	(s)	21	-8	-8
Netherlands Antilles .....	5	0	2	26	-5	(s)	0	-1	49	71	75
Norway .....	290	3	6	0	(s)	1	-3	(s)	8	15	306
Oman .....	5	(s)	0	0	0	0	0	(s)	7	7	12
Panama .....	0	-1	(s)	(s)	-8	-10	(s)	-1	-1	-21	-21
Peru .....	30	(s)	(s)	-1	(s)	0	(s)	(s)	1	(s)	30
Puerto Rico .....	0	(s)	-1	(s)	-2	(s)	0	8	5	10	10
Romania .....	0	0	(s)	0	(s)	-1	-1	(s)	9	7	7
Russia .....	2	0	(s)	0	-1	(s)	0	(s)	9	8	11
Syria .....	0	(s)	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Spain .....	0	(s)	3	(s)	-1	2	-41	(s)	18	-20	-20
Sweden .....	(s)	0	1	0	(s)	1	-2	(s)	5	6	6
Thailand .....	0	0	2	0	-1	-1	(s)	(s)	(s)	(s)	(s)
Trinidad and Tobago .....	56	(s)	(s)	0	(s)	(s)	(s)	-1	5	4	60
Turkey .....	0	(s)	0	0	-1	0	-18	(s)	1	-19	-19
United Kingdom .....	181	(s)	14	-1	(s)	3	-11	(s)	45	49	230
Virgin Islands .....	-13	0	109	25	90	43	0	(s)	34	301	288
Yemen .....	0	0	0	0	0	1	0	0	0	1	1
Other .....	28	-3	-2	-7	-40	-15	-34	-5	45	-60	-33
<b>Total</b> .....	<b>7,920</b>	<b>100</b>	<b>189</b>	<b>69</b>	<b>84</b>	<b>80</b>	<b>-311</b>	<b>-20</b>	<b>904</b>	<b>1,096</b>	<b>9,016</b>
<b>Persian Gulf</b> <sup>d</sup> .....	<b>1,620</b>	<b>(s)</b>	<b>28</b>	<b>0</b>	<b>-1</b>	<b>8</b>	<b>-5</b>	<b>-2</b>	<b>85</b>	<b>113</b>	<b>1,733</b>

<sup>a</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>b</sup> Includes asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, miscellaneous products, motor gasoline blending components, naphtha for petrochemical feedstock use, other hydrocarbons and oxygenates, other oils for petrochemical feedstock use, pentanes plus, special naphthas, unfinished oils, and waxes.

<sup>c</sup> Formerly Zaire.

<sup>d</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-814, "Monthly Imports Report" and the U.S. Bureau of the Census.

**Table 51. Stocks of Crude Oil and Petroleum Products by PAD District,  
October 1997**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
<b>Crude Oil</b> .....	<b>15,394</b>	<b>74,441</b>	<b>716,504</b>	<b>11,970</b>	<b>61,070</b>	<b>879,379</b>
Refinery .....	14,406	12,544	47,432	2,073	23,165	99,620
Tank Farms and Pipelines .....	967	60,850	91,900	9,042	28,450	191,209
Leases .....	21	1,047	13,733	855	849	16,505
Strategic Petroleum Reserve .....	0	0	563,439	0	0	563,439
Alaskan In Transit .....	0	0	0	0	8,606	8,606
<b>Total Stocks, All Oils (excluding Crude Oil)</b> .....	<b>184,584</b>	<b>161,061</b>	<b>270,082</b>	<b>14,101</b>	<b>88,443</b>	<b>718,271</b>
Refinery .....	60,496	59,371	140,029	9,392	60,781	330,069
Bulk Terminal .....	93,100	63,327	76,388	1,798	21,284	255,897
Pipeline .....	30,942	36,633	51,917	2,595	6,157	128,244
Natural Gas Processing Plant .....	46	1,730	1,748	316	221	4,061
<b>Pentanes Plus</b> .....	<b>20</b>	<b>2,365</b>	<b>4,299</b>	<b>217</b>	<b>29</b>	<b>6,930</b>
Refinery .....	0	414	331	6	0	751
Bulk Terminal .....	18	1,238	2,536	1	10	3,803
Pipeline .....	0	551	1,106	65	0	1,722
Natural Gas Processing Plant .....	2	162	326	145	19	654
<b>Liquefied Petroleum Gases</b> .....	<b>8,157</b>	<b>38,203</b>	<b>74,005</b>	<b>1,338</b>	<b>7,685</b>	<b>129,388</b>
Refinery .....	2,501	4,927	12,144	500	1,941	22,013
Bulk Terminal .....	3,218	24,014	43,682	202	5,542	76,658
Pipeline .....	2,394	7,694	16,757	465	0	27,310
Natural Gas Processing Plant .....	44	1,568	1,422	171	202	3,407
<b>Ethane/Ethylene</b> .....	<b>0</b>	<b>3,365</b>	<b>20,451</b>	<b>215</b>	<b>0</b>	<b>24,031</b>
Refinery .....	0	3	703	0	0	706
Bulk Terminal .....	0	1,536	16,556	0	0	18,092
Pipeline .....	0	1,572	3,152	210	0	4,934
Natural Gas Processing Plant .....	0	254	40	5	0	299
<b>Propane/Propylene</b> .....	<b>5,527</b>	<b>24,623</b>	<b>27,518</b>	<b>574</b>	<b>3,048</b>	<b>61,290</b>
Refinery .....	698	2,388	3,250	137	167	6,640
Bulk Terminal .....	2,509	17,352	15,410	199	2,752	38,222
Pipeline .....	2,296	4,164	8,274	145	0	14,879
Natural Gas Processing Plant .....	24	719	584	93	129	1,549
<b>Normal Butane/Butylene</b> .....	<b>2,261</b>	<b>8,132</b>	<b>20,245</b>	<b>356</b>	<b>3,903</b>	<b>34,897</b>
Refinery .....	1,439	1,985	6,342	235	1,286	11,287
Bulk Terminal .....	709	4,193	8,732	3	2,604	16,241
Pipeline .....	98	1,485	4,651	72	0	6,306
Natural Gas Processing Plant .....	15	469	520	46	13	1,063
<b>Isobutane/Isobutylene</b> .....	<b>369</b>	<b>2,083</b>	<b>5,791</b>	<b>193</b>	<b>734</b>	<b>9,170</b>
Refinery .....	364	551	1,849	128	488	3,380
Bulk Terminal .....	0	933	2,984	0	186	4,103
Pipeline .....	0	473	680	38	0	1,191
Natural Gas Processing Plant .....	5	126	278	27	60	496
<b>Other Hydrocarbons/Hydrogen/Oxygenates</b> .....	<b>2,321</b>	<b>2,168</b>	<b>4,315</b>	<b>247</b>	<b>2,704</b>	<b>11,755</b>
Refinery .....	1,827	538	2,231	95	1,963	6,654
Bulk Terminal .....	494	1,534	1,838	131	567	4,564
Pipeline .....	0	96	246	21	174	537
<b>Other Hydrocarbons/Hydrogen</b> .....	<b>0</b>	<b>24</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>32</b>
Refinery .....	0	24	1	0	7	32
<b>Fuel Ethanol</b> .....	<b>377</b>	<b>1,860</b>	<b>266</b>	<b>129</b>	<b>568</b>	<b>3,200</b>
Refinery .....	W	326	W	W	W	480
Bulk Terminal <sup>a</sup> .....	W	W	W	W	W	W
Pipeline .....	W	W	W	W	W	W
<b>ETBE</b> .....	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>
Refinery .....	W	W	W	W	W	W
Bulk Terminal .....	W	W	W	W	W	W
Pipeline .....	W	W	W	W	W	W
<b>Methanol</b> .....	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>747</b>
Refinery .....	W	W	W	W	W	747

See footnotes at end of table.

**Table 51. Stocks of Crude Oil and Petroleum Products by PAD District,  
October 1997 (Continued)**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
<b>MTBE</b> .....	<b>1,576</b>	<b>W</b>	<b>3,292</b>	<b>W</b>	<b>2,122</b>	<b>7,335</b>
Refinery .....	1,410	W	1,837	W	1,938	5,339
Bulk Terminal .....	W	W	1,209	W	33	1,503
Pipeline .....	W	W	246	W	151	493
<b>Other Oxygenates<sup>b</sup></b> .....	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>
Refinery .....	W	W	W	W	W	W
Bulk Terminal .....	W	W	W	W	W	W
Pipeline .....	W	W	W	W	W	W
<b>Unfinished Oils</b> .....	<b>12,157</b>	<b>13,939</b>	<b>45,555</b>	<b>2,101</b>	<b>21,522</b>	<b>95,274</b>
Refinery .....						
Naphthas and Lighter .....	2,474	3,874	11,339	355	3,251	21,293
Kerosene and Light Gas Oils .....	2,654	1,664	6,241	272	3,977	14,808
Heavy Gas Oils .....	5,593	5,665	19,210	917	11,199	42,584
Residuum .....	1,436	2,736	8,765	557	3,095	16,589
<b>Motor Gasoline Blending Components</b> .....	<b>7,412</b>	<b>10,635</b>	<b>14,421</b>	<b>1,487</b>	<b>7,979</b>	<b>41,934</b>
Refinery .....	7,186	8,808	13,347	1,487	7,067	37,895
Bulk Terminal .....	226	448	781	0	194	1,649
Pipeline .....	0	1,379	293	0	718	2,390
<b>Aviation Gasoline Blending Components</b> .....	<b>164</b>	<b>21</b>	<b>32</b>	<b>0</b>	<b>1</b>	<b>218</b>
Refinery .....	164	21	32	0	1	218
<b>Finished Motor Gasoline</b> .....	<b>49,369</b>	<b>39,060</b>	<b>46,966</b>	<b>3,889</b>	<b>18,700</b>	<b>157,984</b>
Refinery .....	9,152	8,126	19,581	1,768	9,556	48,183
Bulk Terminal .....	25,889	17,539	9,609	869	7,167	61,073
Pipeline .....	14,328	13,395	17,776	1,252	1,977	48,728
<b>Reformulated</b> .....	<b>19,718</b>	<b>1,142</b>	<b>9,286</b>	<b>0</b>	<b>10,745</b>	<b>40,891</b>
Refinery .....	5,740	303	3,349	0	5,928	15,320
Bulk Terminal .....	9,627	697	2,164	0	3,651	16,139
Pipeline .....	4,351	142	3,773	0	1,166	9,432
<b>Oxygenated</b> .....	<b>304</b>	<b>708</b>	<b>3</b>	<b>214</b>	<b>25</b>	<b>1,254</b>
Refinery .....	8	376	0	84	23	491
Bulk Terminal .....	200	332	3	130	2	667
Pipeline .....	96	0	0	0	0	96
<b>Other</b> .....	<b>29,347</b>	<b>37,210</b>	<b>37,677</b>	<b>3,675</b>	<b>7,930</b>	<b>115,839</b>
Refinery .....	3,404	7,447	16,232	1,684	3,605	32,372
Bulk Terminal .....	16,062	16,510	7,442	739	3,514	44,267
Pipeline .....	9,881	13,253	14,003	1,252	811	39,200
<b>Finished Aviation Gasoline</b> .....	<b>251</b>	<b>338</b>	<b>499</b>	<b>34</b>	<b>576</b>	<b>1,698</b>
Refinery .....	40	127	447	26	293	933
Bulk Terminal .....	211	148	52	8	283	702
Pipeline .....	0	63	0	0	0	63
<b>Naphtha-Type Jet Fuel</b> .....	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>20</b>	<b>21</b>
Refinery .....	0	0	1	0	20	21
Bulk Terminal .....	0	0	0	0	0	0
Pipeline .....	0	0	0	0	0	0
<b>Kerosene-Type Jet Fuel</b> .....	<b>13,198</b>	<b>8,987</b>	<b>14,715</b>	<b>705</b>	<b>8,042</b>	<b>45,647</b>
Refinery .....	2,036	3,484	7,144	351	4,474	17,489
Bulk Terminal .....	5,560	2,022	2,402	168	2,067	12,219
Pipeline .....	5,602	3,481	5,169	186	1,501	15,939

See footnotes at end of table.

**Table 51. Stocks of Crude Oil and Petroleum Products by PAD District,  
October 1997 (Continued)**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
<b>Kerosene</b> .....	<b>4,349</b>	<b>1,502</b>	<b>1,478</b>	<b>56</b>	<b>68</b>	<b>7,453</b>
Refinery .....	759	481	487	36	52	1,815
Bulk Terminal .....	3,223	940	694	0	11	4,868
Pipeline .....	367	81	297	20	5	770
<b>Distillate Fuel Oil</b> .....	<b>64,754</b>	<b>28,245</b>	<b>30,715</b>	<b>1,986</b>	<b>10,455</b>	<b>136,155</b>
Refinery .....	16,706	8,055	15,023	1,034	5,643	46,461
Bulk Terminal .....	39,797	10,303	5,434	372	3,377	59,283
Pipeline .....	8,251	9,887	10,258	580	1,435	30,411
<b>0.05 Percent Sulfur and Under</b> .....	<b>18,694</b>	<b>19,874</b>	<b>16,348</b>	<b>1,649</b>	<b>7,045</b>	<b>63,610</b>
Refinery .....	2,940	4,778	7,289	801	4,001	19,809
Bulk Terminal .....	11,494	7,385	3,518	309	2,086	24,792
Pipeline .....	4,260	7,711	5,541	539	958	19,009
<b>Greater than 0.05 Percent Sulfur</b> .....	<b>46,060</b>	<b>8,371</b>	<b>14,367</b>	<b>337</b>	<b>3,410</b>	<b>72,545</b>
Refinery .....	13,766	3,277	7,734	233	1,642	26,652
Bulk Terminal .....	28,303	2,918	1,916	63	1,291	34,491
Pipeline .....	3,991	2,176	4,717	41	477	11,402
<b>Residual Fuel Oil<sup>c</sup></b> .....	<b>14,816</b>	<b>2,422</b>	<b>12,779</b>	<b>547</b>	<b>5,265</b>	<b>35,829</b>
Refinery .....	4,199	1,497	6,109	547	3,498	15,850
Bulk Terminal .....	10,617	925	6,670	0	1,420	19,632
Pipeline .....	0	0	0	0	347	347
<b>Less than 0.31% Sulfur</b> .....	<b>4,376</b>	<b>101</b>	<b>224</b>	<b>30</b>	<b>630</b>	<b>5,361</b>
Refinery .....	1,266	11	79	30	616	2,002
Bulk Terminal .....	3,110	90	145	0	14	3,359
<b>0.31 to 1.00% Sulfur</b> .....	<b>6,037</b>	<b>507</b>	<b>3,602</b>	<b>340</b>	<b>986</b>	<b>11,472</b>
Refinery .....	1,940	248	1,556	340	824	4,908
Bulk Terminal .....	4,097	259	2,046	0	162	6,564
<b>Greater than 1.00% Sulfur</b> .....	<b>4,403</b>	<b>1,814</b>	<b>8,953</b>	<b>177</b>	<b>3,302</b>	<b>18,649</b>
Refinery .....	993	1,238	4,474	177	2,058	8,940
Bulk Terminal .....	3,410	576	4,479	0	1,244	9,709
<b>Naphtha for Petrochemical Feedstock Use</b> .....	<b>473</b>	<b>188</b>	<b>1,807</b>	<b>0</b>	<b>218</b>	<b>2,686</b>
Refinery .....	473	188	1,807	0	218	2,686
<b>Other Oils for Petrochemical Feedstock Use</b> .....	<b>0</b>	<b>230</b>	<b>1,609</b>	<b>1</b>	<b>162</b>	<b>2,002</b>
Refinery .....	0	230	1,609	1	162	2,002
<b>Special Naphthas</b> .....	<b>122</b>	<b>394</b>	<b>1,643</b>	<b>0</b>	<b>55</b>	<b>2,214</b>
Refinery .....	93	394	1,325	0	55	1,867
Bulk Terminal .....	29	0	318	0	0	347
<b>Lubricants</b> .....	<b>2,393</b>	<b>1,563</b>	<b>6,296</b>	<b>0</b>	<b>1,474</b>	<b>11,726</b>
Refinery .....	705	760	4,904	0	1,014	7,383
Bulk Terminal .....	1,688	803	1,392	0	460	4,343
<b>Waxes</b> .....	<b>177</b>	<b>161</b>	<b>420</b>	<b>15</b>	<b>212</b>	<b>985</b>
Refinery .....	177	161	420	15	212	985
<b>Petroleum Coke</b> .....	<b>449</b>	<b>2,737</b>	<b>4,375</b>	<b>215</b>	<b>1,948</b>	<b>9,724</b>
Refinery .....	449	2,737	4,375	215	1,948	9,724
<b>Asphalt and Road Oil</b> .....	<b>3,921</b>	<b>7,642</b>	<b>3,061</b>	<b>1,244</b>	<b>1,082</b>	<b>16,950</b>
Refinery .....	1,828	4,352	2,511	1,210	1,021	10,922
Bulk Terminal .....	2,093	3,290	550	34	61	6,028
<b>Miscellaneous Products</b> .....	<b>81</b>	<b>261</b>	<b>1,091</b>	<b>19</b>	<b>246</b>	<b>1,698</b>
Refinery .....	44	132	646	0	121	943
Bulk Terminal .....	37	123	430	13	125	728
Pipeline .....	0	6	15	6	0	27
<b>Total Stocks, All Oils</b> .....	<b>199,978</b>	<b>235,502</b>	<b>986,586</b>	<b>26,071</b>	<b>149,513</b>	<b>1,597,650</b>

<sup>a</sup> Includes stocks held by producers.

<sup>b</sup> Includes tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers Intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

<sup>c</sup> Sulfur content not available for stocks held by pipelines.

W = Withheld to avoid disclosure of individual company data.

Note: Stocks are reported as of the last day of the month.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," and EIA-816, "Monthly Natural Gas Liquids Report."

**Table 52. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, October 1997**  
(Thousand Barrels)

PAD District and State	Motor Gasoline				Kerosene	Distillate Fuel Oil			Residual Fuel	Propane/Propylene
	Total	Reformulated	Oxygenated	Other		Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur		
<b>PAD District I</b>	<b>35,041</b>	<b>15,367</b>	<b>208</b>	<b>19,466</b>	<b>3,982</b>	<b>56,503</b>	<b>14,434</b>	<b>42,069</b>	<b>14,816</b>	<b>3,231</b>
Connecticut	1,320	1,320	0	0	91	5,461	680	4,781	64	W
Delaware, D.C., Maryland	2,104	1,706	0	398	217	3,324	874	2,450	2,052	W
Florida	4,650	0	0	4,650	104	1,985	1,221	764	855	32
Georgia	1,902	0	0	1,902	75	1,248	691	557	100	W
Maine, New Hampshire, Vermont	937	524	0	413	492	2,420	708	1,712	615	W
Massachusetts	1,568	1,568	0	0	217	3,818	648	3,170	620	W
New Jersey	7,003	5,420	0	1,583	395	16,755	3,103	13,652	6,301	W
New York	3,187	1,145	169	1,873	1,165	8,784	1,457	7,327	1,929	W
North Carolina	2,443	0	0	2,443	258	1,641	906	735	273	W
Pennsylvania	5,415	1,624	31	3,760	672	6,498	2,259	4,239	1,113	W
Rhode Island	367	367	0	0	W	1,372	181	1,191	W	W
South Carolina	1,247	0	0	1,247	129	1,089	655	434	W	W
Virginia	2,739	1,693	0	1,046	139	2,021	974	1,047	493	W
West Virginia	159	0	8	151	W	87	77	10	W	W
<b>PAD District II</b>	<b>25,665</b>	<b>1,000</b>	<b>708</b>	<b>23,957</b>	<b>1,421</b>	<b>18,358</b>	<b>12,163</b>	<b>6,195</b>	<b>2,422</b>	<b>20,459</b>
Illinois	3,372	291	0	3,081	264	2,621	1,789	832	868	815
Indiana	3,272	163	7	3,102	295	2,103	1,016	1,087	194	W
Iowa	1,159	0	0	1,159	W	1,246	1,105	141	W	W
Kansas, Nebraska	2,380	0	0	2,380	19	2,157	1,614	543	13	13,204
Kentucky	1,288	270	148	870	108	833	371	462	W	W
Michigan	2,741	0	0	2,741	162	1,360	1,007	353	89	3,640
Minnesota	1,379	0	228	1,151	W	1,671	1,358	313	228	W
Missouri	1,096	0	0	1,096	W	848	631	217	W	W
North Dakota, South Dakota	487	0	1	486	W	483	227	256	W	W
Ohio	3,590	16	10	3,564	362	1,587	976	611	284	W
Oklahoma	1,742	0	2	1,740	W	1,415	891	524	246	487
Tennessee	1,676	0	102	1,574	79	796	535	261	252	W
Wisconsin	1,483	260	210	1,013	W	1,238	643	595	36	W
<b>PAD District III</b>	<b>29,190</b>	<b>5,513</b>	<b>3</b>	<b>23,674</b>	<b>1,181</b>	<b>20,457</b>	<b>10,807</b>	<b>9,650</b>	<b>12,779</b>	<b>19,244</b>
Alabama	1,297	0	0	1,297	81	752	348	404	374	128
Arkansas	769	0	0	769	W	594	320	274	W	W
Louisiana	6,500	497	0	6,003	369	4,718	1,956	2,762	4,752	1,858
Mississippi	2,164	0	0	2,164	544	1,431	619	812	W	6,319
New Mexico	428	0	2	426	W	217	73	144	18	W
Texas	18,032	5,016	1	13,015	174	12,745	7,491	5,254	7,416	10,820
<b>PAD District IV</b>	<b>2,637</b>	<b>0</b>	<b>214</b>	<b>2,423</b>	<b>36</b>	<b>1,406</b>	<b>1,110</b>	<b>296</b>	<b>547</b>	<b>429</b>
Colorado	719	0	214	505	W	249	198	51	W	W
Idaho	195	0	0	195	W	158	99	59	W	W
Montana	732	0	0	732	W	381	381	0	66	17
Utah	478	0	0	478	W	262	121	141	66	328
Wyoming	513	0	0	513	W	356	311	45	W	54
<b>PAD District V</b>	<b>16,723</b>	<b>9,579</b>	<b>25</b>	<b>7,119</b>	<b>63</b>	<b>9,020</b>	<b>6,087</b>	<b>2,933</b>	<b>4,918</b>	<b>3,048</b>
Alaska	475	0	0	475	W	881	58	823	W	W
Arizona	536	17	1	518	W	246	199	47	W	W
California	10,755	9,562	23	1,170	52	5,081	4,455	626	2,923	743
Hawaii	812	0	0	812	W	557	160	397	W	W
Nevada	178	0	0	178	W	125	113	12	W	W
Oregon	1,225	0	1	1,224	W	457	259	198	122	W
Washington	2,742	0	0	2,742	W	1,673	843	830	941	384
<b>U.S. Total</b>	<b>109,256</b>	<b>31,459</b>	<b>1,158</b>	<b>76,639</b>	<b>6,683</b>	<b>105,744</b>	<b>44,601</b>	<b>61,143</b>	<b>35,482</b>	<b>46,411</b>

W = Withheld to avoid disclosure of individual company data.

Notes: • Stocks are reported as of the last day of the month. • Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Natural Gas Liquids Report."

**Table 53. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, October 1997**  
(Thousand Barrels)

Commodity	From I to			From II to				From III to	
	II	III	V	I	III	IV	V	I	II
<b>Crude Oil</b> .....	<b>0</b>	<b>434</b>	<b>0</b>	<b>193</b>	<b>1,027</b>	<b>986</b>	<b>0</b>	<b>0</b>	<b>61,865</b>
<b>Petroleum Products</b> .....	<b>9,090</b>	<b>21</b>	<b>0</b>	<b>3,934</b>	<b>5,197</b>	<b>2,910</b>	<b>0</b>	<b>102,284</b>	<b>29,874</b>
Pentanes Plus .....	0	0	0	0	113	1	0	0	832
Liquefied Petroleum Gases .....	0	0	0	1,254	4,212	37	0	2,712	4,153
Unfinished Oils .....	27	0	0	36	0	0	0	0	46
Motor Gasoline Blending Components .....	0	12	0	0	20	0	0	337	1,651
Finished Motor Gasoline .....	6,053	0	0	1,537	398	1,159	0	59,309	11,893
Reformulated .....	0	0	0	0	239	0	0	11,603	750
Oxygenated .....	0	0	0	164	0	15	0	0	0
Other .....	6,053	0	0	1,373	159	1,144	0	47,706	11,143
Finished Aviation Gasoline .....	0	0	0	0	0	8	0	69	146
Jet Fuel .....	361	0	0	81	0	916	0	14,461	4,279
Naphtha-Type .....	0	0	0	0	0	0	0	0	0
Kerosene-Type .....	361	0	0	81	0	916	0	14,461	4,279
Kerosene .....	46	0	0	65	0	0	0	159	60
Distillate Fuel Oil .....	2,603	0	0	639	235	789	0	22,487	6,001
0.05 percent sulfur and under .....	1,973	0	0	247	219	784	0	14,419	5,218
Greater than 0.05 percent sulfur .....	630	0	0	392	16	5	0	8,068	783
Residual Fuel Oil .....	0	0	0	27	181	0	0	1,678	0
Petrochemical Feedstocks <sup>a</sup> .....	0	0	0	0	0	0	0	0	41
Special Naphthas .....	0	0	0	0	0	0	0	61	90
Lubricants .....	0	9	0	76	38	0	0	669	342
Waxes .....	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil .....	0	0	0	219	0	0	0	342	340
Miscellaneous Products .....	0	0	0	0	0	0	0	0	0
<b>Total</b> .....	<b>9,090</b>	<b>455</b>	<b>0</b>	<b>4,127</b>	<b>6,224</b>	<b>3,896</b>	<b>0</b>	<b>102,284</b>	<b>91,739</b>

Commodity	From III to		From IV to			From V to			
	IV	V	II	III	V	I	II	III	IV
<b>Crude Oil</b> .....	<b>0</b>	<b>0</b>	<b>3,811</b>	<b>881</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,926</b>	<b>0</b>
<b>Petroleum Products</b> .....	<b>370</b>	<b>2,612</b>	<b>1,727</b>	<b>2,902</b>	<b>790</b>	<b>0</b>	<b>0</b>	<b>170</b>	<b>0</b>
Pentanes Plus .....	0	0	140	248	0	0	0	0	0
Liquefied Petroleum Gases .....	0	0	1,175	2,654	0	0	0	0	0
Unfinished Oils .....	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components .....	0	611	0	0	0	0	0	76	0
Finished Motor Gasoline .....	266	1,181	231	0	713	0	0	0	0
Reformulated .....	0	0	0	0	0	0	0	0	0
Oxygenated .....	0	0	0	0	0	0	0	0	0
Other .....	266	1,181	231	0	713	0	0	0	0
Finished Aviation Gasoline .....	0	0	0	0	0	0	0	0	0
Jet Fuel .....	60	421	0	0	72	0	0	0	0
Naphtha-Type .....	0	0	0	0	0	0	0	0	0
Kerosene-Type .....	60	421	0	0	72	0	0	0	0
Kerosene .....	0	0	28	0	0	0	0	0	0
Distillate Fuel Oil .....	44	327	153	0	5	0	0	0	0
0.05 percent sulfur and under .....	44	180	153	0	5	0	0	0	0
Greater than 0.05 percent sulfur .....	0	147	0	0	0	0	0	0	0
Residual Fuel Oil .....	0	0	0	0	0	0	0	0	0
Petrochemical Feedstocks <sup>a</sup> .....	0	0	0	0	0	0	0	0	0
Special Naphthas .....	0	0	0	0	0	0	0	0	0
Lubricants .....	0	72	0	0	0	0	0	94	0
Waxes .....	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil .....	0	0	0	0	0	0	0	0	0
Miscellaneous Products .....	0	0	0	0	0	0	0	0	0
<b>Total</b> .....	<b>370</b>	<b>2,612</b>	<b>5,538</b>	<b>3,783</b>	<b>790</b>	<b>0</b>	<b>0</b>	<b>2,096</b>	<b>0</b>

<sup>a</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," and EIA-817, "Monthly Tanker and Barge Movement Report."

**Table 54. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, October 1997**  
(Thousand Barrels)

Commodity	From I to		From II to			From III to	
	II	III	I	III	IV	I	II
<b>Crude Oil</b> .....	<b>0</b>	<b>434</b>	<b>170</b>	<b>1,027</b>	<b>986</b>	<b>0</b>	<b>61,865</b>
<b>Petroleum Products</b> .....	<b>9,063</b>	<b>0</b>	<b>2,127</b>	<b>4,700</b>	<b>2,910</b>	<b>77,349</b>	<b>25,633</b>
Pentanes Plus .....	0	0	0	113	1	0	832
Liquefied Petroleum Gases .....	0	0	1,254	4,212	37	2,472	4,153
Motor Gasoline Blending Components .....	0	0	0	0	0	0	1,651
Finished Motor Gasoline .....	6,053	0	745	352	1,159	43,856	9,772
Reformulated .....	0	0	0	239	0	11,103	239
Oxygenated .....	0	0	0	0	15	0	0
Other .....	6,053	0	745	113	1,144	32,753	9,533
Finished Aviation Gasoline .....	0	0	0	0	8	0	114
Jet Fuel .....	361	0	35	0	916	12,169	3,995
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	361	0	35	0	916	12,169	3,995
Kerosene .....	46	0	0	0	0	105	50
Distillate Fuel Oil .....	2,603	0	93	23	789	18,747	5,066
0.05 percent sulfur and under .....	1,973	0	0	7	784	11,543	4,679
Greater than 0.05 percent sulfur .....	630	0	93	16	5	7,204	387
Residual Fuel Oil .....	0	0	0	0	0	0	0
Miscellaneous Products .....	0	0	0	0	0	0	0
<b>Total</b> .....	<b>9,063</b>	<b>434</b>	<b>2,297</b>	<b>5,727</b>	<b>3,896</b>	<b>77,349</b>	<b>87,498</b>

Commodity	From III to		From IV to			From V to	
	IV	V	II	III	V	III	IV
<b>Crude Oil</b> .....	<b>0</b>	<b>0</b>	<b>3,811</b>	<b>881</b>	<b>0</b>	<b>1,926</b>	<b>0</b>
<b>Petroleum Products</b> .....	<b>370</b>	<b>2,071</b>	<b>1,727</b>	<b>2,902</b>	<b>790</b>	<b>0</b>	<b>0</b>
Pentanes Plus .....	0	0	140	248	0	0	0
Liquefied Petroleum Gases .....	0	0	1,175	2,654	0	0	0
Motor Gasoline Blending Components .....	0	398	0	0	0	0	0
Finished Motor Gasoline .....	266	925	231	0	713	0	0
Reformulated .....	0	0	0	0	0	0	0
Oxygenated .....	0	0	0	0	0	0	0
Other .....	266	925	231	0	713	0	0
Finished Aviation Gasoline .....	0	0	0	0	0	0	0
Jet Fuel .....	60	421	0	0	72	0	0
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	60	421	0	0	72	0	0
Kerosene .....	0	0	28	0	0	0	0
Distillate Fuel Oil .....	44	327	153	0	5	0	0
0.05 percent sulfur and under .....	44	180	153	0	5	0	0
Greater than 0.05 percent sulfur .....	0	147	0	0	0	0	0
Residual Fuel Oil .....	0	0	0	0	0	0	0
Miscellaneous Products .....	0	0	0	0	0	0	0
<b>Total</b> .....	<b>370</b>	<b>2,071</b>	<b>5,538</b>	<b>3,783</b>	<b>790</b>	<b>1,926</b>	<b>0</b>

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," and EIA-813, Monthly Crude Oil Report."

**Table 55. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, October 1997**  
(Thousand Barrels)

Commodity	From I to			From II to			From III to	
	II	III	V	I	III	V	I	New England
<b>Crude Oil</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Petroleum Products</b> .....	<b>27</b>	<b>21</b>	<b>0</b>	<b>1,807</b>	<b>497</b>	<b>0</b>	<b>24,935</b>	<b>500</b>
Liquefied Petroleum Gases .....	0	0	0	0	0	0	240	0
Unfinished Oils .....	27	0	0	36	0	0	0	0
Motor Gasoline Blending Components .....	0	12	0	0	20	0	337	0
Finished Motor Gasoline .....	0	0	0	792	46	0	15,453	500
Reformulated .....	0	0	0	0	0	0	500	500
Oxygenated .....	0	0	0	164	0	0	0	0
Other .....	0	0	0	628	46	0	14,953	0
Finished Aviation Gasoline .....	0	0	0	0	0	0	69	0
Jet Fuel .....	0	0	0	46	0	0	2,292	0
Naphtha-Type .....	0	0	0	0	0	0	0	0
Kerosene-Type .....	0	0	0	46	0	0	2,292	0
Kerosene .....	0	0	0	65	0	0	54	0
Distillate Fuel Oil .....	0	0	0	546	212	0	3,740	0
0.05 percent sulfur and under .....	0	0	0	247	212	0	2,876	0
Greater than 0.05 percent sulfur .....	0	0	0	299	0	0	864	0
Residual Fuel Oil .....	0	0	0	27	181	0	1,678	0
Less than 0.31 percent sulfur .....	0	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur .....	0	0	0	0	0	0	0	0
Greater than 1.00 percent sulfur .....	0	0	0	27	181	0	1,678	0
Petrochemical Feedstocks <sup>a</sup> .....	0	0	0	0	0	0	0	0
Special Naphthas .....	0	0	0	0	0	0	61	0
Lubricants .....	0	9	0	76	38	0	669	0
Waxes .....	0	0	0	0	0	0	0	0
Asphalt and Road Oil .....	0	0	0	219	0	0	342	0
Miscellaneous Products .....	0	0	0	0	0	0	0	0
<b>Total</b> .....	<b>27</b>	<b>21</b>	<b>0</b>	<b>1,830</b>	<b>497</b>	<b>0</b>	<b>24,935</b>	<b>500</b>

Commodity	From III to				From V to		
	Central Atlantic	Lower Atlantic	II	V	I	II	III
<b>Crude Oil</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Petroleum Products</b> .....	<b>1,748</b>	<b>22,687</b>	<b>4,241</b>	<b>541</b>	<b>0</b>	<b>0</b>	<b>170</b>
Liquefied Petroleum Gases .....	0	240	0	0	0	0	0
Unfinished Oils .....	0	0	46	0	0	0	0
Motor Gasoline Blending Components .....	314	23	0	213	0	0	76
Finished Motor Gasoline .....	466	14,487	2,121	256	0	0	0
Reformulated .....	0	0	511	0	0	0	0
Oxygenated .....	0	0	0	0	0	0	0
Other .....	466	14,487	1,610	256	0	0	0
Finished Aviation Gasoline .....	20	49	32	0	0	0	0
Jet Fuel .....	138	2,154	284	0	0	0	0
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	138	2,154	284	0	0	0	0
Kerosene .....	0	54	10	0	0	0	0
Distillate Fuel Oil .....	185	3,555	935	0	0	0	0
0.05 percent sulfur and under .....	185	2,691	539	0	0	0	0
Greater than 0.05 percent sulfur .....	0	864	396	0	0	0	0
Residual Fuel Oil .....	207	1,471	0	0	0	0	0
Less than 0.31 percent sulfur .....	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur .....	0	0	0	0	0	0	0
Greater than 1.00 percent sulfur .....	207	1,471	0	0	0	0	0
Petrochemical Feedstocks <sup>a</sup> .....	0	0	41	0	0	0	0
Special Naphthas .....	0	61	90	0	0	0	0
Lubricants .....	298	371	342	72	0	0	94
Waxes .....	0	0	0	0	0	0	0
Asphalt and Road Oil .....	120	222	340	0	0	0	0
Miscellaneous Products .....	0	0	0	0	0	0	0
<b>Total</b> .....	<b>1,748</b>	<b>22,687</b>	<b>4,241</b>	<b>541</b>	<b>0</b>	<b>0</b>	<b>170</b>

<sup>a</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.  
Source: Energy Information Administration (EIA) Form EIA-817, "Monthly Tanker and Barge Movement Report."

**Table 56. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, October 1997**  
(Thousand Barrels)

Commodity	PAD District I			PAD District II		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
<b>Crude Oil</b> .....	<b>193</b>	<b>434</b>	<b>-241</b>	<b>65,676</b>	<b>2,206</b>	<b>63,470</b>
<b>Petroleum Products</b> .....	<b>106,218</b>	<b>9,111</b>	<b>97,107</b>	<b>40,691</b>	<b>12,041</b>	<b>28,650</b>
Pentanes Plus .....	0	0	0	972	114	858
Liquefied Petroleum Gases .....	3,966	0	3,966	5,328	5,503	-175
Ethane/Ethylene .....	0	0	0	745	2,312	-1,567
Propane/Propylene .....	3,682	0	3,682	3,277	2,283	994
Normal Butane/Butylene .....	284	0	284	942	802	140
Isobutane/Isobutylene .....	0	0	0	364	106	258
Unfinished Oils .....	36	27	9	73	36	37
Motor Gasoline Blending Components .....	337	12	325	1,651	20	1,631
Finished Motor Gasoline .....	60,846	6,053	54,793	18,177	3,094	15,083
Reformulated .....	11,603	0	11,603	750	239	511
Oxygenated .....	164	0	164	0	179	-179
Other .....	49,079	6,053	43,026	17,427	2,676	14,751
Finished Aviation Gasoline .....	69	0	69	146	8	138
Jet Fuel .....	14,542	361	14,181	4,640	997	3,643
Naphtha-Type .....	0	0	0	0	0	0
Kerosene-Type .....	14,542	361	14,181	4,640	997	3,643
Kerosene .....	224	46	178	134	65	69
Distillate Fuel Oil .....	23,126	2,603	20,523	8,757	1,663	7,094
0.05 percent sulfur and under .....	14,666	1,973	12,693	7,344	1,250	6,094
Greater than 0.05 percent sulfur .....	8,460	630	7,830	1,413	413	1,000
Residual Fuel Oil .....	1,705	0	1,705	0	208	-208
Petrochemical Feedstocks <sup>a</sup> .....	0	0	0	41	0	41
Special Naphthas .....	61	0	61	90	0	90
Lubricants .....	745	9	736	342	114	228
Waxes .....	0	0	0	0	0	0
Asphalt and Road Oil .....	561	0	561	340	219	121
Miscellaneous Products .....	0	0	0	0	0	0
<b>Total</b> .....	<b>106,411</b>	<b>9,545</b>	<b>96,866</b>	<b>106,367</b>	<b>14,247</b>	<b>92,120</b>

Commodity	PAD District III			PAD District IV			PAD District V		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
<b>Crude Oil</b> .....	<b>4,268</b>	<b>61,865</b>	<b>-57,597</b>	<b>986</b>	<b>4,692</b>	<b>-3,706</b>	<b>0</b>	<b>1,926</b>	<b>-1,926</b>
<b>Petroleum Products</b> .....	<b>8,290</b>	<b>135,140</b>	<b>-126,850</b>	<b>3,280</b>	<b>5,419</b>	<b>-2,139</b>	<b>3,402</b>	<b>170</b>	<b>3,232</b>
Pentanes Plus .....	361	832	-471	1	388	-387	0	0	0
Liquefied Petroleum Gases .....	6,866	6,865	1	37	3,829	-3,792	0	0	0
Ethane/Ethylene .....	3,874	233	3,641	0	2,074	-2,074	0	0	0
Propane/Propylene .....	1,972	5,567	-3,595	37	1,118	-1,081	0	0	0
Normal Butane/Butylene .....	749	779	-30	0	394	-394	0	0	0
Isobutane/Isobutylene .....	271	286	-15	0	243	-243	0	0	0
Unfinished Oils .....	0	46	-46	0	0	0	0	0	0
Motor Gasoline Blending Components .....	108	2,599	-2,491	0	0	0	611	76	535
Finished Motor Gasoline .....	398	72,649	-72,251	1,425	944	481	1,894	0	1,894
Reformulated .....	239	12,353	-12,114	0	0	0	0	0	0
Oxygenated .....	0	0	0	15	0	15	0	0	0
Other .....	159	60,296	-60,137	1,410	944	466	1,894	0	1,894
Finished Aviation Gasoline .....	0	215	-215	8	0	8	0	0	0
Jet Fuel .....	0	19,221	-19,221	976	72	904	493	0	493
Naphtha-Type .....	0	0	0	0	0	0	0	0	0
Kerosene-Type .....	0	19,221	-19,221	976	72	904	493	0	493
Kerosene .....	0	219	-219	0	28	-28	0	0	0
Distillate Fuel Oil .....	235	28,859	-28,624	833	158	675	332	0	332
0.05 percent sulfur and under .....	219	19,861	-19,642	828	158	670	185	0	185
Greater than 0.05 percent sulfur .....	16	8,998	-8,982	5	0	5	147	0	147
Residual Fuel Oil .....	181	1,678	-1,497	0	0	0	0	0	0
Petrochemical Feedstocks <sup>a</sup> .....	0	41	-41	0	0	0	0	0	0
Special Naphthas .....	0	151	-151	0	0	0	0	0	0
Lubricants .....	141	1,083	-942	0	0	0	72	94	-22
Waxes .....	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil .....	0	682	-682	0	0	0	0	0	0
Miscellaneous Products .....	0	0	0	0	0	0	0	0	0
<b>Total</b> .....	<b>12,558</b>	<b>197,005</b>	<b>-184,447</b>	<b>4,266</b>	<b>10,111</b>	<b>-5,845</b>	<b>3,402</b>	<b>2,096</b>	<b>1,306</b>

<sup>a</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," and EIA-817, "Monthly Tanker and Barge Movement Report."

## Appendix A

# District Descriptions and Maps

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

### PAD District I

**East Coast:** District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

**Appalachian No. 1:** The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

### Sub-PAD District I

**New England:** The States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

**Central Atlantic:** The District of Columbia and the States of Delaware, Maryland, New Jersey, New York, and Pennsylvania.

**Lower Atlantic:** The States of Florida, Georgia, North Carolina, South Carolina, Virginia and West Virginia.

### PAD District II

**Indiana-Illinois-Kentucky:** The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and Ohio.

**Minnesota-Wisconsin-North and South Dakota:** The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

**Oklahoma-Kansas-Missouri:** The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

### PAD District III

**Texas Inland:** The State of Texas except the Texas Gulf Coast District.

**Texas Gulf Coast:** The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

**Louisiana Gulf Coast:** The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

**North Louisiana-Arkansas:** The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

**New Mexico:** The State of New Mexico.

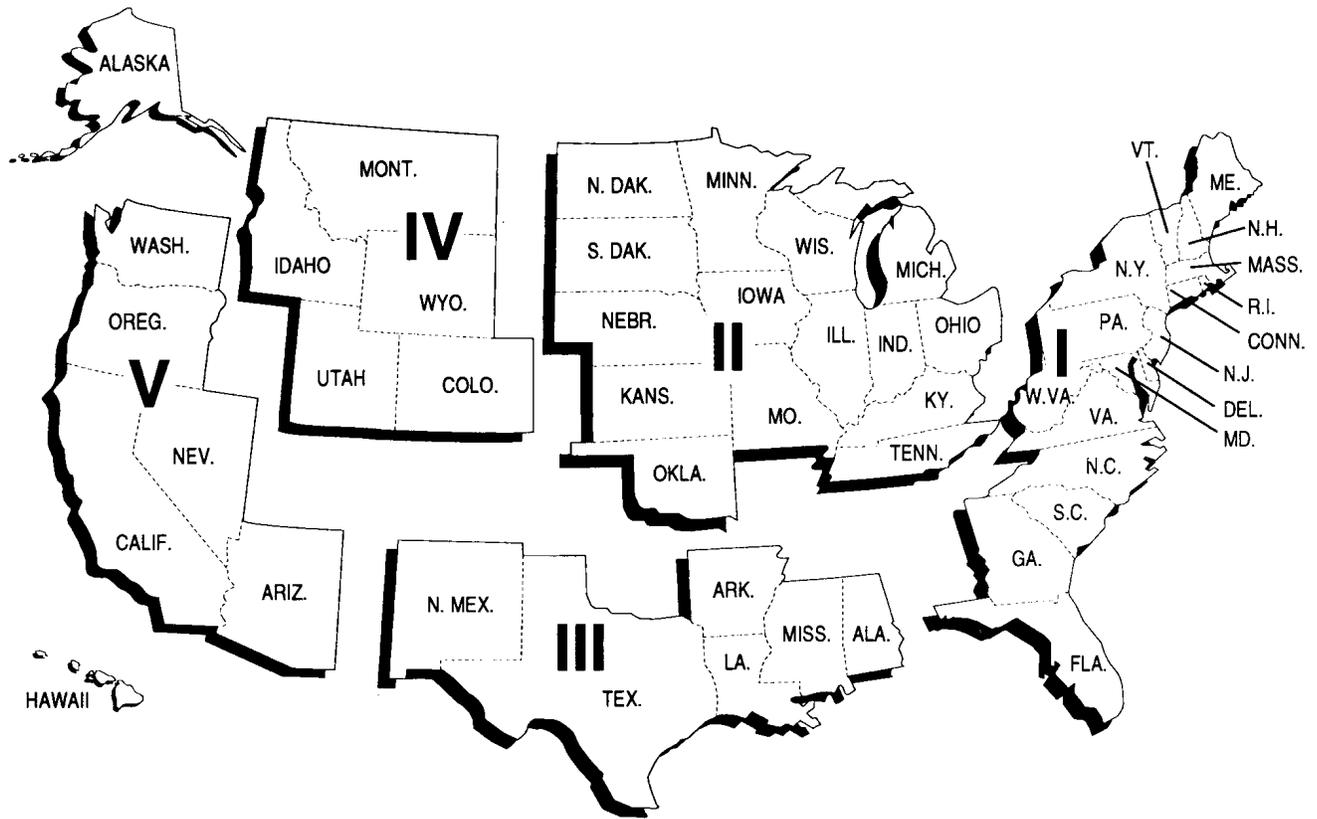
### PAD District IV

**Rocky Mountain:** The States of Montana, Idaho, Wyoming, Utah, and Colorado.

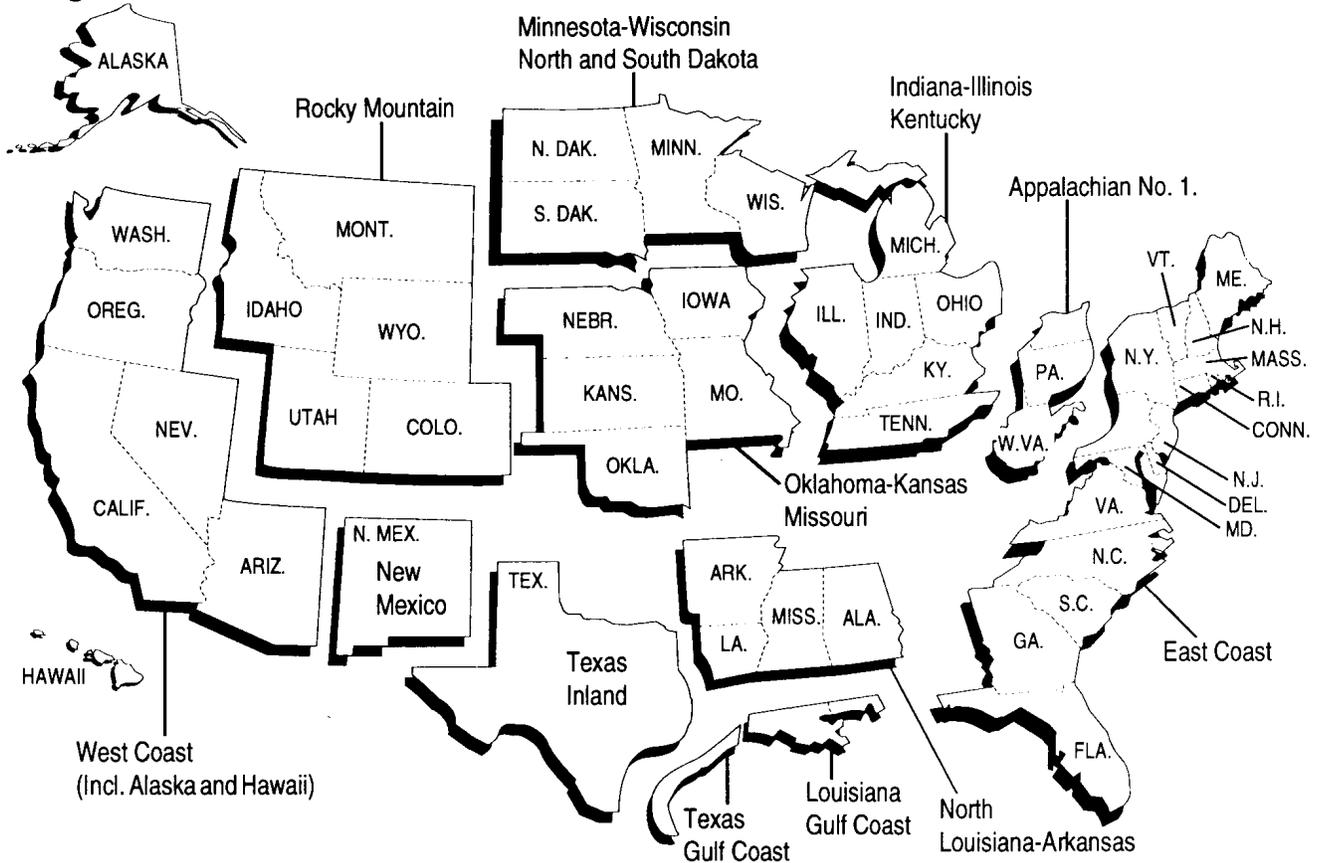
### PAD District V

**West Coast:** The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

## Petroleum Administration for Defense (PAD) Districts



## Refining Districts



# Explanatory Notes

The following Explanatory Notes are provided to assist in understanding and interpreting the data presented in the Detailed Statistics section of this publication.

- Note 1. Petroleum Supply Reporting System
- Note 2. Monthly Petroleum Supply Reporting System
- Note 3. Technical Notes for Detailed Statistics Tables
- Note 4. Domestic Crude Oil Production
- Note 5. Export Data
- Note 6. Quality Control and Data Revision
- Note 7. Frames Maintenance
- Note 8. Practical Limitations of Data Collection Efforts
- Note 9. 1994 Changes in the Petroleum Supply Monthly

## Note 1. Petroleum Supply Reporting System

The Petroleum Supply Reporting System (PSRS) represents a family of data collection survey forms, data processing systems, and publication systems that have been consolidated to achieve comparability and consistency throughout. The survey forms that comprise the PSRS are listed below:

Form Number	Name
EIA-800	"Weekly Refinery Report"
EIA-801	"Weekly Bulk Terminal Report"
EIA-802	"Weekly Product Pipeline Report"
EIA-803	"Weekly Crude Oil Stocks Report"
EIA-804	"Weekly Imports Report"
EIA-807	"Propane Telephone Survey"
EIA-810	"Monthly Refinery Report"
EIA-811	"Monthly Bulk Terminal Report"
EIA-812	"Monthly Product Pipeline Report"
EIA-813	"Monthly Crude Oil Report"
EIA-814	"Monthly Imports Report"
EIA-816	"Monthly Natural Gas Liquids Report"
EIA-817	"Monthly Tanker and Barge Movement Report"
EIA-819M	"Monthly Oxygenate Telephone Report"
EIA-820	"Biennial Refinery Report"

Forms EIA-800 through 804 comprise the Weekly Petroleum Supply Reporting System (WPSRS). A sample of all petroleum companies report weekly data to the Energy Information Administration (EIA) on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Data collected from the WPSRS are used to develop estimates of the most current monthly quantities in the Summary Statistics section of the *Petroleum Supply Monthly* (PSM) and which appear in the *Weekly Petroleum Status Report* (WPSR).

The Form EIA-807, "Propane Telephone Survey" is used to collect data on production, stocks, and imports of propane. These data are used to monitor the supply of propane and to report to the Congress and others on supplies when requested. Data are collected from a sample of respondents reporting on the Monthly Petroleum Supply Reporting System (MPSRS) surveys. Data are collected on a weekly basis during the heating season (October through March) and published electronically in the *Winter Fuels Report*. During the non-heating season (April through September) data are collected on end-of-month stocks only. These data are published in the *WPSR*.

Forms EIA-810 through 814, 816, and 817 comprise the MPSRS. These surveys are used to collect detailed refinery/blender and natural gas plant operations data; refinery/blender, bulk terminal, natural gas plant, and pipeline stocks data; crude oil and petroleum product imports data; and data on movements of petroleum products and crude oil between Petroleum Administration for Defense (PAD) Districts. A description of the MPSRS forms follows in Explanatory Note 2.

Data from these surveys are published in preliminary form in the *PSM*. They are published in final form in the *Petroleum Supply Annual* (PSA), Volumes 1 and 2.

Summary information on the revision error between preliminary and final data is published once a year in the *PSM* feature article entitled, "Accuracy of Petroleum Supply Data." The last article was published in the September 1996 issue and evaluated the accuracy of the data for the current year compared with the previous year.

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect preliminary data on production and stocks of oxygenates by PAD District. These data are

used to monitor the supply of oxygenates. Data are collected from a sample of respondents reporting on the MPSRS surveys and from the universe of oxygenate producers. Data are published in Appendix D of this publication and in the *WPSR*.

The Form EIA-820, “Annual Refinery Report,” is used to collect data on refinery fuel use and consumption of steam and electricity, refinery receipts of crude oil by method of transportation, operable capacity for atmospheric crude oil distillation units and downstream units, as well as production capacity and storage capacity for petroleum products. This survey is the primary source of data in the Refinery Capacity section of the *PSA* Volume 1.

## Note 2. Monthly Petroleum Supply Reporting System

The Monthly Petroleum Supply Reporting System (MPSRS) was implemented in January 1983 as the result of an extensive effort by the Energy Information Administration (EIA) to integrate the collection and processing of petroleum supply data that had been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the U.S. Bureau of Mines began collecting data on refinery operations, crude oil stocks and movements. The collection systems were further expanded in 1925 to include natural gas plant liquids production and storage, imports of crude oil and petroleum products and storage and movement of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS was the first effort to make them all consistent and comparable. The forms that comprise the MPSRS are:

Form Number	Name
EIA-810	“Monthly Refinery Report”
EIA-811	“Monthly Bulk Terminal Report”
EIA-812	“Monthly Product Pipeline Report”
EIA-813	“Monthly Crude Oil Report”
EIA-814	“Monthly Imports Report”
EIA-816	“Monthly Natural Gas Liquids Report”
EIA-817	“Monthly Tanker and Barge Movement Report”
EIA-819M	“Monthly Oxygenate Telephone Report”

### Respondent Frame

Form EIA-810, “Monthly Refinery Report” - Operators of all operating and idle petroleum refineries and blending plants located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. Approximately 260 respondents report on the Form EIA-810.

Form EIA-811, “Monthly Bulk Terminal Report” - Every bulk terminal operating company located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and other U.S. possessions. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. In addition, the Form EIA-811 must be completed by merchant oxygenate plants that produce oxygenates. Approximately 320 respondents report on the Form EIA-811.

Form EIA-812, “Monthly Product Pipeline Report” - All product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 80 respondents report on the Form EIA-812.

Form EIA-813, “Monthly Crude Oil Report” - All companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. Approximately 175 respondents report on the Form EIA-813.

Form EIA-814, “Monthly Imports Report” - All companies, including subsidiary or affiliated companies, that import crude oil or petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia and must be reported. A report is required only if there has been an import during the month unless the importer has been selected as part of a sample to report every month regardless of activity. Approximately 220 respondents report on the Form EIA-814.

Form EIA-816, “Monthly Natural Gas Liquids Report” - Operators of all facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator). Approximately 585 respondents report on the Form EIA-816.

Form EIA-817, “Monthly Tanker and Barge Movement Report” - All companies that have custody of crude oil or petroleum products transported by tanker or barge between Petroleum Administration for Defense (PAD) Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker or barge. Also, companies which lease

vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 40 respondents report on the Form EIA-817.

Form EIA-819M, "Monthly Oxygenate Telephone Report" - The sample of companies that report on the EIA-819M are selected from the universe of companies that report on the MPSRS surveys and from the universe of oxygenate producers. The universe consists of (1) operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations); (2) operators of petroleum refineries; and (3) operators of bulk terminals, bulk stations, blending plants, and other nonrefinery facilities that store and/or blend oxygenate. Approximately 85 respondents report on the Form EIA-819M.

### Sampling

The sampling procedure used for the survey Form EIA-819M is the cut-off method and is performed using software developed by EIA's Office of Statistical Standards. In the cut-off method, companies are ranked from largest to smallest on the basis of quantities reported (oxygenate production and oxygenate stocks.) Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers approximately 90 percent of the total for each oxygenate item and supply type by geographic region (PAD Districts I through V) for which data may be published.

### Description of Survey Forms

The Form EIA-810, "Monthly Refinery Report," is used to collect data on refinery input and capacity, sulfur content and API gravity of crude oil, and data on supply (beginning stocks, receipts, and production) and disposition (inputs, shipments, fuel use and losses, and ending stocks) of crude oil and refined products.

The Form EIA-811, "Monthly Bulk Terminal Report," is used to collect data on end-of-month stock levels of finished petroleum products by State in the custody of the bulk terminal company or merchant oxygenate plant regardless of ownership. Leased tankage at other facilities is excluded. All domestic and foreign stocks held at bulk terminals and in-transit thereto, except those in-transit by pipeline are included. Petroleum products in-transit by pipeline are reported by pipeline operators on Form EIA-812, "Monthly Product Pipeline Report."

The Form EIA-812, "Monthly Product Pipeline Report," is used to collect data on end-of-month stock levels and movements of petroleum products transported by pipeline. Intermediate movements for pipeline systems operating in more than two PAD Districts are included.

The Form EIA-813, "Monthly Crude Oil Report," is used to collect data on end-of-month stocks of crude oil held at pipeline and tank farms (associated with the pipelines) and terminals operated by the reporting company. Also, crude oil consumed by pipelines and on leases as pump fuel, boiler fuel, etc., is reported. Data are reported on a PAD District basis.

Total Alaskan crude oil stocks in-transit by water (including stocks held at transshipment terminals between Alaska and the continental United States) to the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands are also reported by the transporting company having custody of the stocks.

Inter-PAD District movements of crude oil by pipeline are collected by the shipping and receiving PAD District. Intermediate movements for pipeline systems operating in more than two PAD Districts are not included.

The Form EIA-814, "Monthly Imports Report," is used to collect data on imports of crude oil and petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands, and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands, and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia.

The type of commodity, port of entry, country of origin, quantity (thousand barrels), sulfur percent by weight, API gravity, and name and location of the processing or storage facility are reported. Sulfur percent by weight is requested for crude oil, crude oil burned as fuel, and residual fuel oil only. API gravity is requested for crude oil only. The name and location of the processing or storage facility is requested for crude oil, unfinished oils, other hydrocarbons/hydrogen/oxygenates and blending components only.

The Form EIA-816, "Monthly Natural Gas Liquids Report," is used to collect data on the operations of natural gas processing plants and fractionators. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and plant fuel use and losses during the month are collected from operators of natural gas processing plants. End-of-month stocks are collected from fractionators.

The Form EIA-817, "Monthly Tanker and Barge Movement Report," is used to collect data on the movements of crude oil and petroleum products between PAD Districts. Data are reported by shipping and receiving PAD District and sub-PAD District. Shipments to and from the Panama Canal are also included if the shipment was delivered to the Canal.

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect data on production and stocks

of oxygenates. Data on end-of-month stocks are reported on a custody basis regardless of ownership. Data are reported on a PAD District basis.

### Collection Methods

Except for the EIA-819M, survey forms for the MPSRS can be submitted by mail, facsimile, or electronic transmission. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month. Data collection for the 819M begins on the seventh working day of each month. Data are solicited by telephone or transmitted to the EIA by facsimile. Receipt of the reports are monitored using an automated respondent mailing list. Telephone follow-up calls are made to nonrespondents prior to the publication deadline.

### Response Rate

The response rate is generally 98 to 100 percent. Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

### Data Imputation

Imputation is performed for companies that fail to file Forms EIA-810 through 813, 816, and 819M. For such companies, previous monthly values are used for current values.

On the EIA-819M, data are aggregated for each geographic region. Estimation factors, which are derived from the previous year's data, are then applied to each cell to generate published estimates.

Data for nonrespondents on the Forms EIA-814 and 817 are not imputed because these data series, by respondent, are highly variable.

### Confidentiality

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the EIA to provide company-specific data to the Department of Justice, or to any Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

The information contained on Forms EIA-810 through 813, 816, 817, and 819M are kept confidential and not disclosed to the public to the extent that they satisfy the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. 552, the Department of Energy (DOE) regulations, 10 C.F.R. 1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. 1905. The information contained on Form EIA-814 are not considered confidential and historically has not been treated as such.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in this determination, respondents should demonstrate to the DOE that, for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed. Company specific data are also provided to other DOE offices for the purpose of examining operations in the context of emergency response planning and actual emergencies.

The data collected on Forms EIA-810 through 814, 816, and 817 appear in EIA publications such as *Petroleum Supply Monthly* (PSM), *Monthly Energy Review*, *Petroleum Supply Annual* (PSA), and the *Annual Energy Review*.

Data on the breakdown between liquefied refinery gases and olefins, and lubricants is suppressed on PSM Table 29, "Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts" and the corresponding PSA table to avoid disclosure of company identifiable data.

Statistics representing data aggregated from less than three companies or aggregated data representing 60 percent or more of a single company's data are suppressed on the PSM and corresponding PSA tables listed below. In addition, complementary suppression is performed to avoid any residual disclosure.

- Table 28, “Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts,” (inputs of oxygenates)
- Table 30, “Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts,” (stocks of oxygenates)
- Table 51, “Stocks of Crude Oil and Petroleum Products by PAD District,” (stocks of oxygenates)
- Table 52, “Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products,” (all products)
- Table D2, “Monthly Fuel Ethanol Production and Stocks by PAD Districts,” and
- Table D3, “Monthly MTBE Production and Stocks by PAD Districts.”

With the exception of the tables listed above, the tables in the *PSM* (and corresponding *PSA* tables) are not subject to statistical nondisclosure procedures. Thus, there may be some table cells which are based on data from only one or two respondents, or which are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable user of the data to make inferences about the data reported by a specific respondent.

### Note 3. Technical Notes for Detailed Statistics Tables

The detailed statistics tables in the *Petroleum Supply Monthly* (*PSM*) provide complete supply and demand information for the current year. The tables are organized to locate National and Petroleum Administration for Defense (*PAD*) District summary data at the front followed by tables on crude oil and petroleum product production, import/export data, stocks information, and lastly, data on crude oil and petroleum product movements. To assist in the interpretation of these tables, the following technical notes are provided. Column and row headings are defined in the Glossary.

#### Supply

**Field Production** - Field production is the sum of crude oil production, natural gas plant liquids production, other liquids production, and finished petroleum products production.

Crude oil production is an estimate based on data received from State conservation agencies and the Mineral Management Service of the U.S. Department of the Interior. Refer to Explanatory Note 4 for further details.

Field production of natural gas plant liquids is reported on Form EIA-816 and published on a net basis (i.e., production minus inputs) in this column.

Other liquids field production is calculated by forcing the product supplied to be zero; thereby backing into field production.

Field production of finished petroleum products is calculated by (1) adding the amount of fuel ethanol that has been blended into finished motor gasoline, and (2) plus (+) or minus (-) the field production of motor gasoline blending components. Refer to Explanatory Note 8 for a further discussion of this calculation.

Negative field production of motor gasoline blending components represents an understatement for finished motor gasoline.

Negative field production of other finished motor gasoline represents an overstatement of other finished motor gasoline and an understatement of oxygenated motor gasoline.

**Refinery Production** - Published production of these products equal refinery production minus refinery input. Refinery production of other hydrocarbons, hydrogen and oxygenates, unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input. Negative refinery production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

**Unaccounted for Crude Oil** - This column is a balancing item for crude oil. This data element represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production and imports. Crude oil disposition is the sum of stock change, losses, refinery inputs, exports, and products supplied. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems). A negative result indicates that more crude oil was reported to have been supplied to refiners and exporters than they reported to have used.

#### Disposition

**Stock Change** - This column is calculated as the difference between the Ending Stocks column of this table and the Ending Stocks column of this table in the prior month's publication. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

**Crude Losses** - The volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc., as opposed to refining processing losses or gains.

**Refinery Inputs** - Refinery inputs of crude oil and intermediate materials (unfinished oils, gasoline blending components, other hydrocarbons and oxygenates, lique-

fied petroleum gases, and pentanes plus) that are processed at refineries to produce finished petroleum products.

Crude oil inputs represents total crude oil (domestic and foreign) input to atmospheric crude oil distillation units and other refinery processing units (i.e., catalytic cracking units, cokers).

Inputs of natural gas liquids are natural gas liquids received from natural gas plants for blending and processing. Published inputs of natural gas liquids are reported on a gross basis.

Inputs of unfinished oils, motor and aviation gasoline blending components, and other hydrocarbons and oxygenates are published on a net basis (i.e., refinery input minus refinery production).

Inputs of finished petroleum products are published on a net basis (i.e., refinery production minus refinery inputs) and displayed under the refinery production column.

**Exports** - Exports include crude oil shipments from the 50 States to Puerto Rico, and the Virgin Islands.

**Products Supplied** - Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts on a PAD District basis), minus stock change, minus crude losses, minus refinery inputs, minus exports.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production not having been reported, e.g., streams returned to refineries from petrochemical plants.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel. Prior to January 1983, crude oil burned on leases and by pipelines as fuel were reported as either distillate or residual fuel oil and were included in product supplied for these products.

## Yields

The refinery yield of finished motor gasoline is calculated by subtracting the inputs of pentanes plus, liquefied petroleum gases, other hydrocarbons/oxygenates and motor gasoline blending components from the production of finished motor gasoline before dividing by the sum of crude oil input and unfinished oils input (net).

The refinery yield of finished aviation gasoline is calculated by subtracting the inputs of aviation gasoline blending components from the production of finished aviation gasoline before dividing by the sum of crude oil input and unfinished oils input (net).

Refinery yields for all products (except finished motor gasoline and finished aviation gasoline) are calculated by dividing the production for each product by the sum of crude oil input and unfinished oils input (net) reported in the U.S. total.

## Stocks

Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers.

## Movements

Movements of crude oil by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate, and intracompany pipelines). Intermediate movements for crude oil pipeline systems operating in more than two PAD Districts are not included.

Movements of petroleum products by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate and intracompany pipelines). Intermediate movements for product pipeline systems operating in more than two PAD Districts are included. For example, a shipment originating in PAD District 3, passing through PAD District 2 to PAD District 1, is reported as a movement from PAD District 3 to PAD District 2 and also from PAD District 2 to PAD District 1.

Waterborne movements of crude oil and petroleum products between PAD Districts include all shipments of crude oil or petroleum products for which the transporter has custody at the time of shipment. Custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker and barge.

## Note 4. Domestic Crude Oil Production

The Energy Information Administration (EIA) collects monthly crude oil production data on an ongoing basis. Data on crude oil production for States are reported to the EIA by State government agencies. Data on crude oil production for Federal offshore areas are reported to the EIA by the Minerals Management Service of the U.S. Department of the Interior and the California Department of Conservation.

Currently, all except four crude oil producing States (Michigan, New York, Ohio, and Pennsylvania) report production on a monthly basis. These four States report crude oil production on an annual basis. Estimates of monthly crude oil production for these four States are made by the EIA using data reported on Form EIA-182,

“Domestic Crude Oil First Purchase Report.” After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Minerals Management Service, and the California Department of Conservation. The final estimate is published in the Petroleum Supply Annual (PSA).

Table 26 of this publication provides estimates of crude oil production in the latest month for which most State production data are available. There is a time lag of approximately 4 months between the end of the production month and the time when most monthly State crude oil production data become available.

In order to present more timely crude oil production estimates, the EIA prepares a weekly crude oil production estimate, which is used in the Weekly Petroleum Status Report. At the end of the production month, these weekly estimates are aggregated into an original estimate of monthly crude oil production. Approximately 45 days later, this original estimate is replaced by State-level interim estimates. The State-level interim estimates are based on: (a) data reported by the States (e.g., production data for Alaska are typically reported to the EIA before the interim estimate is made); (b) first purchase data reported on Form EIA-182, “Domestic Crude Oil First Purchase Report;” (c) exponential or hyperbolic curve fitted projections based on recent State data; or (d) constant level projections based on the average production rate during a recent time period.

Table B1 is intended to provide further insight into the EIA’s estimates of monthly U.S. crude oil production. It shows: (a) how the aggregate of reported State data evolves over a period of 18 months; (b) the number of producing States that have not reported production for a given month within that period; and (c) various EIA estimates of monthly crude oil production within that period:

- The original estimate is a monthly aggregate of the weekly crude oil production estimates published in the Weekly Petroleum Status Report. This original monthly estimate is used in the Petroleum Supply Monthly (PSM) Tables S1 and S2 until replaced by the interim estimate.
- The interim estimate is used in the PSM Tables 1 through 25, and in Tables S1 and S2 until replaced by the final estimate.
- The initial estimate based upon first purchase data collected on the Form EIA-182 is used as an estimation tool in generating the interim estimate. The initial volume represents the best estimate available 40 days after the end of the production month and includes imputation for nonresponse and possible reporting errors. The revised volume is the best estimate available about 70 days after the production month and includes imputa-

tion as needed. A final revision is published concurrent with publication of Form EIA-182 price data in the Petroleum Marketing Annual.

- The final estimate is published in the PSA.

## Note 5. Export Data

Each month the Energy Information Administration (EIA) receives magnetic tapes of aggregated export statistics from the U.S. Bureau of the Census (EM-522 and EM-594).

Census export statistics used in the Petroleum Supply Monthly reflect both government and nongovernment exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

- (1) Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
- (2) Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

### Source of Export Information

The official U.S. export statistics are compiled by the U.S. Bureau of the Census. Exporters are required to file export documents with U.S. Customs officials (Customs Form 7525).

### Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## Note 6. Quality Control and Data Revision

### Quality Control

The Energy Information Administration (EIA) monitors the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. Through a tracking system, the EIA provides insight into the activities of primary operators and distributors in the petroleum industry. The tracking system, known as the Petroleum

**Table B1. U.S. Crude Oil<sup>a</sup> Production Estimates and Reported States<sup>b</sup> Data by Month**  
(Thousand Barrels per Day)

Date of Data Availability	Month of Production																	
	6-96	7-96	8-96	9-96	10-96	11-96	12-96	1-97	2-97	3-97	4-97	5-97	6-97	7-97	8-97	9-97	10-97	11-97
<b>Reported State Data</b>																		
8-14-96	1550	0																
9-14-96	1879	1451	0															
10-14-96	4767	1781	1425	0														
11-14-96	5759	3177	1823	1497	0													
12-14-96	5800	4641	4533	1915	1421	0												
1-14-97	5830	4853	4544	4628	3272	1568	0											
2-14-97	5798	5859	5738	5718	4744	4664	1889	0										
3-14-97	5799	5860	5741	5717	4815	4678	4599	1904	0									
4-14-97	5859	5741	5722	5830	4773	4685	4511	1811	1408	0								
5-14-97	6167	6226	5742	5751	5861	5782	4817	4807	4472	1802	0							
6-14-97	6286	6169	6203	5931	5855	5908	4871	4673	4490	1764	1344	0						
7-14-97	6285	6165	6205	5934	5861	5924	5837	4677	4712	4436	1759	1415	0					
8-14-97	6285	6165	6206	5935	5886	5926	5839	4699	4768	4722	4586	1780	1318	0				
9-14-97	6288	6166	6208	6312	5898	5942	5864	5671	5762	4723	4696	4572	1716	1347	0			
10-14-97	6288	6166	6208	6312	5899	5945	5869	5675	5775	5716	5670	4646	4420	1642	1359	0		
11-14-97	6288	6166	6209	6313	6263	6311	6238	5685	5787	5732	5697	5668	4644	2811	1653	1382	0	
12-14-97	6288	6166	6209	6313	6261	6311	6298	5741	5854	5799	5782	5789	5731	4577	4216	1721	1669	0
<b>Producing States Without Reported Monthly Production</b>																		
12-14-97	1	1	1	1	1	1	8	8	8	8	8	8	10	12	20	27	33	33
<b>Production Estimates</b>																		
<b>Estimate</b>																		
Original <sup>e</sup> .....	6474	6401	6434	6494	6503	6531	6509	6495	6494	6431	6437	6429	6376	6349	6291	6380	6396	6406
Interim <sup>f</sup> .....	6502	6383	6389	6504	6490	6465	6448	6387	6514	6470	6483	6401	6341	6316	6282	6388	6435	
Form EIA-182																		
Initial .....	6040	5791	5908	5959	5985	6121	5941	5837	5951	5879	5955	5937	5862	5798	5716	5868	5887	
Revised ....	5997	5841	5878	5956	6002	5971	5970	5856	5855	5991	5957	5892	5862	5795	5707	5784		
Final <sup>g</sup> .....	6458	6338	6360	6482	6481	6476	6506											

<sup>a</sup> Includes lease condensate.

<sup>b</sup> Includes Federal offshore areas, Gulf of Mexico (PADD III) and Pacific (PADD V), as two separate reporting entities.

<sup>c</sup> Includes EIA prorated monthly production in 1995 (annual average of 55 thousand barrels per day) for three States (Michigan, New York, and Ohio) for which only annual State data are available. Includes EIA prorated monthly production in 1996 (annual average of 53 thousand barrels per day) for three States (Michigan, New York, and Ohio) for which only annual State data are available.

<sup>d</sup> Michigan, New York, and Ohio are counted as having monthly reported data in 1995 after their annual reports were received. These data are first reported as of 5-16-96. Michigan, New York, and Ohio are counted as having monthly reported data in 1996 after their annual reports were received. These data are first reported as of 5-28-97.

<sup>e</sup> Original estimates are weighted averages based on the weekly estimates published in the *Weekly Petroleum Status Report*.

<sup>f</sup> Interim estimates were made 44 days after the end of the production month.

<sup>g</sup> Published in the *Petroleum Supply Annual* 1994, DOE/EIA 0340(94)/2.

Supply Reporting System (PSRS), consists of production, inputs, imports, inventories, movements, and other petroleum-related data collected on weekly, monthly, and annual surveys.

Survey forms are periodically reviewed for completeness, meaningfulness, and clarity. Modifications are made, when needed, to maintain efficient measure of the intended data items and to track product movement accurately throughout the industry. Through this process, the EIA can maintain consistency among forms, minimize respondent burden, and eliminate ambiguity.

### Sampling and Nonsampling Errors

There are two types of errors usually associated with data produced from a survey: nonsampling errors and sampling errors. Because the estimates for the monthly surveys 810 through 813, 816, and 817 are based on a complete census of the frame, there is no sampling error in the data presented. The data, however, are subject to nonsampling errors. Nonsampling errors, sometimes referred to as biases, are those which can arise from a number of sources: (1) the inability to obtain data from all companies in the frame or sample (nonresponse and the method used to account for nonresponses), (2) definitional difficulties and/or improperly worded questions which lead to different interpretations, (3) mistakes in recording or coding the data obtained from respondents, and (4) other errors of collection, response, coverage, and estimation.

Response rates on the monthly surveys are very high. In general, response rates average above 95 percent for the weekly survey and above 98 percent for monthly surveys. Whenever survey responses are not received in time to be included in published statistics, the data are imputed. Although imputing for missing data may not eliminate the total error associated with nonresponse, it can serve to reduce the error. The data reported in the previous month are used as imputed values for missing data for all surveys except the Forms EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movement Report." There is no imputation procedure for these surveys because these data series, by respondent, are highly variable.

Response error is the major factor affecting the accuracy of PSRS data. Response, or reporting error, is the difference between the true value and the value reported on a survey form. Response error can occur for any number of reasons. For example, figures may be entered incorrectly when written on forms by the respondent, or errors may result from the misunderstanding of survey form instructions or definitions. Response error can also occur from the use of preliminary data when final data are not available. This can result in differences between published preliminary and final data. To help detect and minimize probable reporting errors, automated editing procedures are used to check current data for consistency with past data, as well as for internal consistency (e.g., totals equal

to the sums of the parts), and to flag those data elements that fail edit criteria.

Errors can also be introduced during data processing. For example, while creating computer data files, key errors can occur in transcribing or coding the data; or information can be entered into the wrong cell. Using well designed edit criteria which examine orders of magnitude, cell position, and historical reporting patterns, many of these errors can be identified and corrected.

Monthly data are compared to weekly data on a regular basis. Discrepancies between weekly and monthly data are documented and respondents are called when discrepancies are either large (usually over 300 thousand barrels) or consistent (e.g., weekly data are always lower than monthly data). In addition, a comparison of the data collected on the PSRS with other similar data series from sources outside of the Petroleum Supply Division is performed each year. The results of this data comparison are published once a year in the *Petroleum Supply Monthly* (PSM) feature article, "Comparison of Independent Statistics on Petroleum Supply."

Sampling errors are those errors that occur when survey estimates are based on a sample rather than being derived from a complete census of the frame. The 819M data, which are based on sample estimates, serve as leading indicators of the PSRS monthly data for oxygenates. To assess the accuracy of the 819M statistics, data are compared with the monthly aggregate data for the EIA-810, 811, and 812 surveys. Although monthly data are still subject to error, they have been thoroughly reviewed and edited, and are considered to be the most accurate data available.

### Data Revision

Resubmissions are any changes to the originally submitted data that were either requested by the EIA or initiated by the respondent. Resubmissions are compared with the original submission and processed at the time of receipt. For Forms EIA-810 through 813, 816, and 817 the Resubmission Tracking System (RTS) is run after resubmissions have been processed for the month. The RTS enables the user to study major products and data series to see how company resubmissions impact published data on a month by month basis. During the processing year, a summary of the effect of these resubmissions to major series is provided in Appendix C.

For the EIA-819M data, a determination is made on whether to process the resubmissions based on the magnitude of the revision. Cell entries on publication tables are marked with an "R" for revised.

### Late Response

Respondents who fail to respond within the prescribed time limit (25th day following the end of the report month)

become nonrespondents for that particular report period and are contacted by phone to obtain the current month's data. Respondents who are chronically late (i.e., 3 consecutive months) are notified by EIA either by letter or telephone.

### **Nonresponse**

Follow-up action is taken when a company fails to respond adequately to data requests from the EIA. Preliminary attempts to gather delinquent reports are made by phone. Noncompliance form letters are sent to those companies that have not submitted reports and have not responded to data requests by phone.

## **Note 7. Frames Maintenance**

The Petroleum Supply Division (PSD) maintains complete lists of respondents to its monthly surveys. Each survey has a list of companies and facilities required to submit petroleum activity data. This list is known as the survey frame. Frame maintenance procedures are used to monitor the status of petroleum companies and facilities currently contained in each survey frame as well as to identify new members to be added to the frame. As a result, all known petroleum supply organizations falling within the definition of "Who Must Submit" participate in the survey.

The activities for frames maintenance are conducted on a monthly and annual basis. Monthly frames maintenance procedures focus on examining several frequently published industry periodicals that report changes in status (births, deaths, sales, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status, and information received from survey systems operated by other offices. Survey managers review these sources regularly to monitor changes in company operations and to develop lists of potential respondents. These activities assure coverage of the reporting universe and maintain accurate facility information on addresses and ownership.

Annual frames maintenance focuses on re-evaluating the "must submit" companies filing the Form EIA-814 and reviewing the sample frame for the Form EIA-819M, "Monthly Oxygenate Telephone Report."

To supplement monthly and annual frames maintenance activities and to provide more thorough coverage, the PSD periodically conducts a comprehensive frames investigation. These investigations result in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

## **Note 8. Practical Limitations of Data Collection Efforts**

### **Crude Oil Lease Stock Adjustment**

End-of-month crude oil stocks held on leases are reported on the EIA-813, "Monthly Crude Oil Report." However, only those companies that store 1,000 barrels or more of crude oil are required to submit a report. Previous frames analysis has shown that crude oil stocks held on leases reported to the EIA are consistently lower than the lease stocks reported to individual states.

Up until 1983, monthly state government data on lease stocks were substituted for EIA data wherever possible in order to rectify the understatement of lease crude oil stocks. State data were available from three states — Texas, New Mexico, and Montana. To calculate the "lease adjustment," a comparison between EIA reported data and the state government data was made and the difference added to the EIA data for the respective states.

In 1983, the EIA modified the Form EIA-813 to eliminate state data on crude oil stocks and began collecting crude oil stock data by Petroleum Administration for Defense (PAD) District. With this change, the "lease adjustment" could no longer be calculated on a state basis and was changed to a PAD District level.

### **Trans Alaskan Pipeline System Adjustment**

Beginning with the January 1989 data, adjustments are made to refinery inputs and product supplied of natural gas liquids (NGLs) and refinery inputs of crude oil to account for refiner misreporting. Substantial volumes of NGLs are produced at natural gas processing plants in Alaska and injected into the crude oil moving in the Trans Alaska Pipeline System (TAPS). Refiners receiving any crude oil commingled with NGLs are instructed to report the NGL portion of that stream separately from the crude oil portion. This has not been done for Alaskan crude oil because refiners are unable to identify these volumes for accounting purposes. As a result, the NGL production in Alaska has been credited directly toward product supplied and also toward product supplied from refinery production when the refiner processes the crude oil-NGL mixture. In addition, the reporting of the commingled stream as crude oil by the refiner has overstated crude oil inputs and resulted in an increase in unaccounted for crude oil equal to the volume of NGL in the crude oil.

To offset this reporting error, an adjustment is made to refinery input in all PAD Districts receiving Alaskan crude oil. The adjustment reduces the crude oil inputs and increases the NGL inputs by an equal amount. Each PAD District adjustment is a portion of the known Alaskan-NGL production that is proportional to the PAD District's share of Alaskan crude oil received at all refineries in the United States. The greatest impact occurs in PAD District V for butane and pentanes plus.

The reporting problem which began in 1987 grew as injections on NGLs into the TAPS increased. Data for 1988 was revised in the *Petroleum Supply Annual* to account for the adjustment.

### Finished Motor Gasoline Product Supplied Adjustment

Beginning with the reporting of January 1993 data, adjustments were made to the product supplied series for finished motor gasoline. It was recognized that motor gasoline statistics published by the EIA through 1992 were underreported because the reporting system was not collecting all fuel ethanol and motor gasoline blending components being blended downstream from the refinery. The EIA was able to quantify these volumes and make corrective adjustments for 1992 in 1993 (refer to Table B2).

### Fuel Ethanol Adjustment

Prior to 1993, an estimated 60 to 70 thousand barrels per day of fuel ethanol were added to motor gasoline to produce gasohol but were not included in the EIA finished motor gasoline production data. In 1992, the EIA attempted to collect these data from downstream fuel ethanol motor gasoline blenders but found that this effort was impractical and the results were inaccurate.

Beginning in January 1993, an estimate for the missing fuel ethanol blended into motor gasoline was calculated. This estimate was calculated as production (from the EIA-819M, "Monthly Oxygenate Telephone Report"), plus imports (from the EIA-814, "Monthly Imports Report"), minus inputs at refineries (from the EIA-810, "Monthly Refinery Report"), plus or minus stock change (from the EIA-819M survey). This estimate for the amount of fuel ethanol blended into motor gasoline was added to Table 1 for Natural Gas Liquids Field Production (line 14) and in the Field Production column for finished motor gasoline in Tables 2 through 25 published in the *PSM*.

An estimate for the total amount of gasohol produced with the ethanol is given as 10 times the estimated fuel ethanol blended (this assumes a 10 percent ethanol blend). This amount is added to the column labeled field production of "oxygenated gasoline" and subtracted from the field production of "other" finished gasoline. The PAD District level detail was obtained by allocating the national level estimates according to the percent of gasohol sales from the U.S. Department of Transportation, Federal Highway Administration, *Monthly Motor Fuel Reported by States*, 1994.

### Motor Gasoline Blending Component Adjustment

Prior to 1993, the EIA published a "product supplied" for motor gasoline blending components. Since these compo-

nents are to be blended into finished motor gasoline, there is no actual demand for this intermediate product. The EIA corrected this series by including the quantity of "product supplied" for motor gasoline blending components with "other" finished motor gasoline. This change was accomplished in Tables 2 through 25 by adding product supplied for motor gasoline blending components to the column labeled field production of "other" motor gasoline, and subtracting it from the field production column for "motor gasoline blending components."

### Fuel Ethanol Stock Adjustment

Total end-of-month stocks of fuel ethanol are underreported in the PSRS because of the inability to collect data from downstream fuel ethanol motor gasoline blenders. Total stocks of fuel ethanol are assumed to be those reported by ethanol producers on the Form EIA-819M, "Monthly Oxygenate Telephone Report." The difference between the stocks reported on the EIA-819M and the stocks reported in the PSRS (from refiners, bulk terminal and pipeline operators) is added to the stocks shown for bulk terminals. If the stocks for the PSRS are higher than those reported on the EIA-819M, no adjustment is made.

## Note 9. 1994 Changes in the Petroleum Supply Monthly

Effective with January 1994 data, several enhancements were made to the tables in the *Petroleum Supply Monthly* to reflect changes in the petroleum industry and to provide more meaningful petroleum statistics. These changes primarily affect data reported for imports, exports, and product supplied.

- On December 31, 1992, Ecuador withdrew as a member of the Organization of Petroleum Exporting Countries (OPEC). As of January 1994, imports of petroleum from Ecuador now appear under imports from Non-OPEC sources. No revision was made to 1993 data. Countries have been realphabetized accordingly. This change is evident in Tables S3 and 35 through 44, 49 and 50.
- Exports data are now published for oxygenates and the sub-categories of finished motor gasoline (reformulated, oxygenated, and other) and distillate fuel oil (0.05% sulfur and under, and greater than 0.05% sulfur).
- Product supplied is now calculated for reformulated, oxygenated, and other finished motor gasoline as well as the sulfur categories of distillate fuel oil (0.05% sulfur and under, and greater than 0.05% sulfur).

**Table B2. Finished Motor Gasoline Product Supplied Adjustment, 1994 - Present  
(Thousand Barrels per Day)**

Item/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
<b>1994</b>													
Fuel Ethanol Adj.....	86	73	76	71	69	63	65	73	59	90	82	82	74
Motor Gas Blending ....	33	-7	27	58	51	82	98	98	81	-16	56	113	57
Product Supplied.....	6,980	7,275	7,395	7,564	7,644	7,922	7,884	7,975	7,615	7,548	7,464	7,924	7,601
<b>1995</b>													
Fuel Ethanol Adj.....	66	66	79	74	58	81	49	36	57	72	91	58	65
Motor Gas Blending ....	8	37	56	86	131	113	46	110	35	89	28	29	64
Product Supplied .....	7,163	7,481	7,788	7,651	7,894	8,220	7,888	8,187	7,786	7,781	7,866	7,742	7,789
<b>1996</b>													
Fuel Ethanol Adj.....	58	53	49	37	27	14	9	20	23	36	44	38	34
Motor Gas Blending ....	39	23	-16	14	5	66	2	-18	2	40	53	31	20
Product Supplied.....	7,254	7,552	7,729	7,869	7,998	8,089	8,135	8,216	7,641	8,038	7,875	7,775	7,849
<b>1997</b>													
Fuel Ethanol Adj.....	39	50	51	46	43	35	57	34	50	112			
Motor Gas Blending ....	-18	42	-39	67	54	95	63	70	96	71			
Product Supplied.....	7,312	7,651	7,808	8,067	8,128	8,260	8,471	8,195	8,004	8,166			

Note: Totals may not equal sum of components due to independent rounding.

Source: • Fuel Ethanol Adjustment — 1994 -1996, Energy Information Administration (EIA), *Petroleum Supply Annual* (PSA), Volumes I and II (Table 3, Motor gasoline field production minus motor gasoline blending component field production); 1997 —, EIA, *Petroleum Supply Monthly* (PSM), (Table 4). • Motor Gasoline Blending Component Adjustment — 1994 - 1996, EIA, *PSA*, Volumes I and II (Table 3; Motor gasoline blending component field adjustment) 1997 —, EIA, *PSM* (Table 4).

**Table C1. Impact of Resubmissions on Major Series, 1997**  
(Thousand Barrels per Day, Except Where Noted)

Product	January		February		March		April		May		June	
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference
<b>Inputs.....</b>	<b>14,839</b>	<b>3</b>	<b>14,742</b>	<b>41</b>	<b>15,018</b>	<b>-27</b>	<b>15,742T-22</b>	<b>16,409</b>	<b>-19</b>	<b>16,743</b>	<b>-41</b>	
Crude Oil.....	13,632	4	13,425	50	14,047	-21	14,283	-1	15,083	1	15,139	0
Pentanes Plus.....	175	0	167	0	166	(s)	149	0	146	0	168	0
LPGs.....	356	(s)	330	1	252	(s)	218	(s)	207	0	210T0	
Ethane/Ethylene.....	0	0	0	0	0	0	0	0	0	0	0	0
Propane/Propylene.....	0	0	0	(s)	0	0	0	0	0	0	0	0
Normal Butane/Butylene.....	234	0	209	1	126	(s)	78	0	73	0	75	0
Isobutane/Isobutylene.....	123	(s)	121	(s)	127	(s)	141	(s)	134	0	135	0
Oth Hydrocbns/Oxygenates..	314	(s)	311	-2	319	-1	358	1	356	-2	380	-7
Unfinished Oils.....	284	(s)	255	3	53	-1	536	-1	342	0	677	-15
Motor Gas. Blend. Comp.....	80	(s)	260	-11	184	-5	201	-22	280	-19	174	-20
Aviation Gas. Blend. Comp...	-3	(s)	-6	(s)	-3	(s)	-3	(s)	-4	0	-5	0
<b>Production.....</b>	<b>17,700</b>	<b>2</b>	<b>17,747</b>	<b>79</b>	<b>18,030</b>	<b>-45</b>	<b>18,758</b>	<b>-44</b>	<b>19,425</b>	<b>-14</b>	<b>19,785</b>	<b>-43</b>
Pentanes Plus.....	318	(s)	326	(s)	330	(s)	325	(s)	330	1	335	(s)
LPGs.....	2,022	3	2,082	2	2,225	1	2,366	-3	2,367	4	2,382	-4
Ethane/Ethylene.....	661	1	690	-2	705	-1	682	-2	663	3	668	(s)
Propane/Propylene.....	1,042	(s)	1,043	4	1,065	-3	1,114	-2	1,113	1	1,111	(s)
Normal Butane/Butylene.....	145	1	161	(s)	253	5	334	1	380	(s)	385	-1
Isobutane/Isobutylene.....	174	1	189	-1	203	(s)	235	(s)	211	(s)	218	-2
Oth Hydrocbns/Oxygenates..	247	-6	275	5	262	-1	293	-1	284	1	328	-17
Motor Gas Blend. Comp.....	18	(s)	-42	-9	39	-9	-67	-20	-54	-12	-95T-11	
Finished Motor Gasoline.....	7,308	1	7,315	40	7,322	-23	7,822	-10	8,056	-7	8,180	-16
Reformulated.....	2,172	36	2,258	3	2,238	13	2,445	2	2,477	-2	2,560	-27
Oxygenated.....	523	-1	633	-1	594	-1	535	(s)	497	-1	410T0	
Other.....	4,612	-34	4,424	37	4,490	-34	4,842	-12	5,082	14	5,210	11
Finished Aviation Gasoline....	16	(s)	14	(s)	13	1	22	(s)	26	0	20	0
Jet Fuel.....	1,489	3	1,482	29	1,484	5	1,491	2	1,516	(s)	1,588	0
Naphtha-Type Jet.....	(s)	0	(s)	0	1	0	1	0	1	0	1	0
Kerosene-Type Jet.....	1,488	3	1,482	29	1,483	5	1,490	2	1,515	(s)	1,588	0
Kerosene.....	118	(s)	84	(s)	47	(s)	38	(s)	29	(s)	36	0
Distillate Fuel Oil.....	3,119	(s)	3,089	6	3,258	-14	3,291	-11	3,525T-1	3,517	0	
Residual Fuel Oil.....	800	1	789	8	639	-1	617	(s)	618	1	727	0
Naphtha Pet. Feedstock.....	180	0	223	-1	209	0	208	0	235	0	237	0
Other Oils Pet. Feedstock.....	240	(s)	207	(s)	222	(s)	233	(s)	242	0	235	0
Special Naphthas.....	47	(s)	45	(s)	49	0	50	0	49	0	52	0
Lubricants.....	168	0	175	(s)	177	(s)	181	0	198	0	190	(s)
Waxes.....	24	0	27	0	27	0	29	0	27	0	27	0
Petroleum Coke.....	639	(s)	628	-3	665	1	709	(s)	716	(s)	702	1
Asphalt and Road Oil.....	322	0	377	1	389	-5	460	0	533	(s)	580	0
Still Gas.....	585	(s)	610	1	632	(s)	646	0	679	0	696	4
Miscellaneous Products.....	41	0	41	(s)	43	(s)	46	0	49	0	50	0
<b>Imports.....</b>	<b>9,633</b>	<b>54</b>	<b>9,475</b>	<b>31</b>	<b>9,712</b>	<b>12</b>	<b>9,934</b>	<b>99</b>	<b>10,442</b>	<b>6</b>	<b>10,357</b>	<b>62</b>
Crude Oil.....	7,393	47	7,384	11	7,665	-16	7,810	99	8,279	16	8,403	52
Pentanes Plus.....	53	1	39	1	36	1	30	0	27	0	56	0
LPGs.....	156	13	150	11	126	20	157	(s)	136	13	148T0	
Ethane/Ethylene.....	20	0	24	0	14	0	14	0	14	0	19	0
Propane/Propylene.....	121	10	105	8	84	16	99	(s)	69	13	79	0
Normal Butane/Butylene.....	10	2	11	2	11	2	23	0	28	0	21	0
Isobutane/Isobutylene.....	5	1	10	2	17	1	20	0	24	0	28	0
Oth Hydrocbns/Oxygenates..	77	0	37	0	65	0	64	0	83	0	48	10
Unfinished Oils.....	410	11	349	0	250	0	398	0	451	0	336	0
Motor Gas. Blend. Comp.....	242	0	270	-3	278	0	273	0	302	0	178	-9
Aviation Gas. Blend. Comp...	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline.....	320	0	317	7	370	0	300	0	362	0	377	10
Reformulated.....	135	0	147	3	181	0	149	0	167	7	213	10
Oxygenated.....	0	0	0	0	0	0	0	0	0	0	0	0
Other.....	184	0	171	4	189	0	151	0	196	-7	165	0
Finished Aviation Gasoline....	0	0	0	0	0	0	(s)	0	(s)	0	(s)	0
Jet Fuel.....	100	0	113	3	123	(s)	98	(s)	91	0	108	0
Naphtha-Type Jet.....	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet.....	100	0	113	3	123	(s)	98	(s)	91	0	108	0
Kerosene.....	3	0	2	0	1	0	1	0	(s)	0	(s)	0
Distillate Fuel Oil.....	293	0	246	0	245	0	256	(s)	220	0	219	0
Residual Fuel Oil.....	229	-19	253	0	239	0	260	(s)	175	0	168	0
Naphtha Pet. Feedstock.....	106	0	37	0	25	8	66	0	60	-13	63	0
Other Oils Pet. Feedstock.....	206	0	218	0	232	0	176	0	194	-10	181	0
Special Naphthas.....	10	0	10	0	8	0	10	0	7	(s)	8	0
Lubricants.....	7	0	17	0	8	0	7	1	14	(s)	8	0
Waxes.....	1	0	2	0	1	(s)	1	0	1	0	1	0
Petroleum Coke.....	2	0	2	0	1	0	0	0	1	0	2	0
Asphalt and Road Oil.....	26	0	29	0	38	0	26	0	37	0	51	0
Miscellaneous Products.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0	(s)	(s)

(s) = Less than 500 barrels per day.

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication. • Totals may not equal sum of components due to independent rounding.

**Table C1. Impact of Resubmissions on Major Series, 1997 (Continued)**

(Thousand Barrels per Day, Except Where Noted)

Product	January		February		March		April		May		June	
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference
<b>Stocks (Thousand Barrels) ....</b>	<b>1,502,691</b>	<b>-1,183</b>	<b>1,482,090</b>	<b>-31</b>	<b>1,512,841</b>	<b>-1,518,851</b>	<b>-1,197,156</b>	<b>1,754</b>	<b>-990,157</b>	<b>6,884</b>	<b>-1,714</b>	
Crude Oil (excl. SPR) .....	302,404	-1,185	297,737	-106	314,135	-926	320,367	-1,236	326,953	-1,049	321,809	-1,762
Pentanes Plus.....	5,571	-5	5,695	2	5,852	1	5,976	-1	7,420	5T7,792	-1	
LPGs.....	68,893	476	57,008	-190	63,395	10	73,743	124	88,764	-52	104,687	-35
Ethane/Ethylene .....	16,588	0	15,549	8	18,058	1	18,144	0	18,827	1	20,600	-18
Propane/Propylene.....	31,978	478	24,909	-199	27,574	-1	31,948	125	39,944	-52	47,435	-29
Normal Butane/Butylene.....	13,256	-2	10,389	0	11,668	37	16,678	1	22,006	0	28,150	-12
Isobutane/Isobutylene .....	7,071	0	6,161	1	6,095	-27	6,973	-2	7,987	-1	8,502	24
Oth Hydrocbrns/Oxygenates...	13,367	-175	13,229	36	13,287	41	13,020	-17	12,942	60	12,193	49
Unfinished Oils.....	91,018	114	95,266	214	103,166	173	100,385T	103,716	0	93,725	456	
Motor Gas. Blend. Comp.....	43,562	-58	42,246	-91	45,866	-236	45,588T	44,173	5	40,879	1	
Aviation Gas. Blend. Comp....	96	7	193	3	257	1	175	3	204	0	186	0
Finished Motor Gasoline.....	164,918	-122	161,273	438	153,838	95	151,969	-9 7	157,830	349	163,886	11
Reformulated .....	40,100	-110	37,554	149	34,417	139	37,096	268	39,448	264	42,954	208
Oxygenated .....	1,538	-16	1,495	-46	1,180	-30	1,073	-25	961T-31	737	-2	
Other.....	123,280	4	122,224	335	118,241	-14	113,800	-340	117,421	116	120,195	-195
Finished Aviation Gasoline ....	2,350	-7	2,098	0	1,911	-5	1,704	0	1,743	0T1,717	0	
Jet Fuel.....	36,333	440	37,300	249	39,264	37	39,111	515	41,137	42	43,476	38
Naphtha-Type Jet.....	220	-165	33	-3	40	0	17	0	29	0	19	0
Kerosene-Type Jet .....	36,113	605	37,267	252	39,224	37	39,094	515	41,108	42	43,457	38
Kerosene .....	5,903	-28	5,257	4	4,786	12	3,489	2	3,801	1 1	4,195	-1
Distillate Fuel Oil.....	111,305	-390	105,897	-449	101,780	-569	97,525	-334	108,427	-192	118,246	-293
Residual Fuel Oil .....	41,852	11	39,946	16	41,348	72	40,550	-2	39,195	1	39,176	0
Naphtha Pet. Feedstock .....	1,698	0	2,102	-16	2,009	0	2,137	0	1,987	0T2,826	0	
Other Oils Pet. Feedstock.....	1,740	-8	2,051	-8	2,188	-7	1,527	-7	1,672	0	1,593	0
Special Naphthas.....	1,835	-3	1,823	-1	1,836	0	1,633	0	1,759	0T1,795	0	
Lubricants .....	12,662	-22	12,588	13	12,818	1	12,371	-36	12,492	-9	12,820	-41
Waxes.....	852	0	848	0	919	0	930	73	1,045	0	1,055	0
Petroleum Coke.....	7,058	0	6,915	-5	7,246	457	8,943	0	8,315	0	7,619	0
Asphalt and Road Oil.....	24,630	-226	28,120	-140	31,664	15	32,804T	33,605	-161	32,554	-136	
Miscellaneous Products.....	1,162	-2	1,024	0	1,298	44	1,274	0	1,116	0T1,201	0	
<b>Product Supplied .....</b>	<b>18,560</b>	<b>-33</b>	<b>18,308</b>	<b>105</b>	<b>17,869</b>	<b>-12</b>	<b>18,572T-19</b>	<b>18,244</b>	<b>-4</b>	<b>18,563</b>	<b>9</b>	
Crude Oil.....	5	0	6	0	5	0	3	0	4	0	2	0
Pentanes Plus.....	208	1	188	(s)	179	1	190	0	164	(s)	208	(s)
LPGs.....	2,341	5	2,249	36	1,831	14	1,918	-7	1,773	2 3	1,746	-5
Ethane/Ethylene .....	711	1	751	-2	638	-1	694	-2	655	3	628	(s)
Normal Butane/Butylene.....	67	3	30	1	74	6	104	2	148	(s)	115	-1
Isobutane/Isobutylene .....	77	3	111	1	95	2	85	-1	69	(s)	94	-3
Unfinished Oils.....	40	-8	-57	-7	-58	2	-52	2	8	5	-8	-1
Aviation Gas. Blend. Comp....	9	(s)	2	0	1	0	6	0	3	(s)	5	0
Finished Motor Gasoline.....	7,312	-11	7,651	27	7,808	-12	8,067	-3	8,128T-21	8,260	5	
Reformulated .....	2,238	37	2,496	-3	2,520	13	2,505	-3	2,565	-14	2,656	-15
Oxygenated .....	524	-1	634	(s)	603	-2	538	0	499	(s)	417T-1	
Other.....	4,550	-47	4,521	29	4,686	-23	5,025	-1	5,064T-7	5,187	21	
Finished Aviation Gasoline ....	13	(s)	23	(s)	19	1	29	(s)	25	0	22	0
Jet Fuel.....	1,629	-15	1,537	38	1,532	12	1,573	-14	1,533T15	1,580	(s)	
Naphtha-Type Jet.....	4	-2	7	-6	1	(s)	1	0	(s)	0	1	0
Kerosene-Type Jet .....	1,625	-13	1,530	44	1,531	12	1,572	-14	1,533T15	1,579	(s)	
Kerosene .....	159	-1	109	-1	64	(s)	82	(s)	19	(s)	23	(s)
Distillate Fuel Oil.....	3,780	8	3,422	8	3,515	-10	3,523	-19	3,240	-5	3,235	3
0.05% & under.....	2,048	39	2,006	-23	2,141	-19	2,235	-30	2,316	-14	2,273	16
Greater than 0.05% .....	1,732	-31	1,416	31	1,374	8	1,288	11	924	8T962	-13	
Residual Fuel Oil .....	983	-11	972	8	744	-3	798	3	734	1	765	(s)
Naphtha Pet. Feedstock .....	288	0	245	(s)	237	7	270	0	300	-13	273	0
Other Oils Pet. Feedstock.....	436	(s)	414	(s)	449	(s)	431	(s)	432	-11	419	0
Special Naphthas.....	36	0	41	(s)	41	(s)	41	0	36	(s)	33	0
Lubricants .....	126	1	165	-1	151	(s)	176	2	187	(s)	137	1
Waxes.....	24	(s)	26	0	23	(s)	28	-2	22	2	25	0
Petroleum Coke.....	329	-10	380	-2	352	-14	350	15	362	(s)	44 3	1
Asphalt and Road Oil.....	212	7	279	-2	309	-10	445	5	540	1	655	-1
Still Gas .....	585	(s)	610	1	632	(s)	646	0	679	0	696	4
Miscellaneous Products.....	46	(s)	45	(s)	34	-1	47	1	54	0	47	(s)

(s) = Less than 500 barrels per day.

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication. • Totals may not equal sum of components due to independent rounding.

**Table C1. Impact of Resubmissions on Major Series, 1997 (Continued)**  
(Thousand Barrels per Day, Except Where Noted)

Product	July		August		September		October		November		December		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
<b>Inputs</b> .....	<b>16,279</b>	<b>-38</b>	<b>16,435</b>	<b>5</b>	--	--	--	--	--	--	--	--	<b>-13</b>
Crude Oil .....	14,958	-13	15,217	(s)	--	--	--	--	--	--	--	--	2
Pentanes Plus .....	169	0	175	0	--	--	--	--	--	--	--	--	(s)
LPGs.....	206	0	201	(s)	--	--	--	--	--	--	--	--T(s)	0
Ethane/Ethylene.....	0	0	0	0	--	--	--	--	--	--	--	--	(s)
Propane/Propylene .....	0	0	0	0	--	--	--	--	--	--	--	--	(s)
Normal Butane/Butylene ....	72	0	79	(s)	--	--	--	--	--	--	--	--	(s)
Isobutane/Isobutylene .....	135	0	122	0	--	--	--	--	--	--	--	--	0
Oth Hydrocbns/Oxygenates ..	335	-3	340	-1	--	--	--	--	--	--	--	--T-2	(s)
Unfinished Oils .....	468	(s)	331	9	--	--	--	--	--	--	--	--T-1	(s)
Motor Gas. Blend. Comp.....	146	-23	177	-3	--	--	--	--	--	--	--	--	-13
Aviation Gas. Blend. Comp ...	-4	0	-6	0	--	--	--	--	--	--	--	--	0
<b>Production</b> .....	<b>19,370</b>	<b>-56</b>	<b>19,500</b>	<b>4</b>	--	--	--	--	--	--	--	--	<b>-15</b>
Pentanes Plus .....	348	-2	342	(s)	--	--	--	--	--	--	--	--	(s)
LPGs.....	2,346	-3	2,352	1	--	--	--	--	--	--	--	--	(s)
Ethane/Ethylene.....	663	(s)	659	0	--	--	--	--	--	--	--	--T(s)	(s)
Propane/Propylene .....	1,085	-2	1,092	1	--	--	--	--	--	--	--	--	(s)
Normal Butane/Butylene ....	381	-1	397	(s)	--	--	--	--	--	--	--	--	1
Isobutane/Isobutylene .....	217	-1	204	(s)	--	--	--	--	--	--	--	--	(s)
Oth Hydrocbns/Oxygenates ..	329	-13	314	(s)	--	--	--	--	--	--	--	--	-4
Motor Gas Blend. Comp.....	-63	-24	-70	-3	--	--	--	--	--	--	--	--	-11
Finished Motor Gasoline .....	7,947	-4	8,048	1	--	--	--	--	--	--	--	--	-3
Reformulated.....	2,410	-27	2,500	-1	--	--	--	--	--	--	--T--	-3	(s)
Oxygenated.....	647	0	405	0	--	--	--	--	--	--	--	--	(s)
Other .....	4,889	23	5,143	2	--	--	--	--	--	--	--	--	(s)
Finished Aviation Gasoline....	21	0	25	0	--	--	--	--	--	--	--	--	(s)
Jet Fuel.....	1,620	0	1,583	-1	--	--	--	--	--	--	--	--	4
Naphtha-Type Jet.....	1	(s)	1	0	--	--	--	--	--	--	--	--	(s)
Kerosene-Type Jet.....	1,619	(s)	1,583	-1	--	--	--	--	--	--	--T--	4	(s)
Kerosene .....	52	(s)	60	(s)	--	--	--	--	--	--	--	--T(s)	(s)
Distillate Fuel Oil .....	3,362	-4	3,427	5	--	--	--	--	--	--	--	--	-2
Residual Fuel Oil .....	645	-2	643	(s)	--	--	--	--	--	--	--	--	1
Naphtha Pet. Feedstock.....	250	0	245	0	--	--	--	--	--	--	--	--	(s)
Other Oils Pet. Feedstock ....	211	0	209	0	--	--	--	--	--	--	--	--	(s)
Special Naphthas .....	55	0	59	0	--	--	--	--	--	--	--	--	(s)
Lubricants.....	184	-2	167	(s)	--	--	--	--	--	--	--	--	(s)
Waxes .....	27	(s)	29	(s)	--	--	--	--	--	--	--	--T(s)	(s)
Petroleum Coke.....	697	0	717	(s)	--	--	--	--	--	--	--	--T(s)	(s)
Asphalt and Road Oil .....	585	0	600	(s)	--	--	--	--	--	--	--	--T(s)	(s)
Still Gas .....	708	-1	697	(s)	--	--	--	--	--	--	--	--	1
Miscellaneous Products .....	46	0	52	(s)	--	--	--	--	--	--	--	--	(s)
<b>Imports</b> .....	<b>9,703</b>	<b>56</b>	<b>10,155</b>	<b>13</b>	--	--	--	--	--	--	--	--	<b>41</b>
Crude Oil .....	7,938	38	8,333	16	--	--	--	--	--	--	--	--	33
Pentanes Plus .....	18	0	18	0	--	--	--	--	--	--	--	--	(s)
LPGs.....	136	0	159	0	--	--	--	--	--	--	--	--	7
Ethane/Ethylene.....	18	0	14	0	--	--	--	--	--	--	--	--	0
Propane/Propylene .....	76	0	97	0	--	--	--	--	--	--	--	--	6
Normal Butane/Butylene ....	24	0	29	0	--	--	--	--	--	--	--	--	1
Isobutane/Isobutylene .....	18	0	20	0	--	--	--	--	--	--	--	--	1
Oth Hydrocbns/Oxygenates ..	29	10	56	-3	--	--	--	--	--	--	--	--	2
Unfinished Oils .....	369	0	340	0	--	--	--	--	--	--	--	--	1
Motor Gas. Blend. Comp.....	171	0	202	0	--	--	--	--	--	--	--	--	-1
Aviation Gas. Blend. Comp ...	0	0	0	0	--	--	--	--	--	--	--	--	0
Finished Motor Gasoline .....	259	0	292	0	--	--	--	--	--	--	--	--	2
Reformulated.....	115	0	148	0	--	--	--	--	--	--	--	--	2
Oxygenated.....	0	0	0	0	--	--	--	--	--	--	--	--	0
Other .....	143	0	144	0	--	--	--	--	--	--	--	--	(s)
Finished Aviation Gasoline....	(s)	0	(s)	0	--	--	--	--	--	--	--	--	0
Jet Fuel.....	86	0	103	0	--	--	--	--	--	--	--	--	(s)
Naphtha-Type Jet.....	0	0	0	0	--	--	--	--	--	--	--	--	0
Kerosene-Type Jet.....	86	0	103	0	--	--	--	--	--	--	--	--	(s)
Kerosene .....	(s)	0	(s)	0	--	--	--	--	--	--	--	--	0
Distillate Fuel Oil .....	223	0	202	0	--	--	--	--	--	--	--	--	(s)
Residual Fuel Oil .....	170	7	187	0	--	--	--	--	--	--	--	--	-1
Naphtha Pet. Feedstock.....	37	0	43	0	--	--	--	--	--	--	--	--	-1
Other Oils Pet. Feedstock ....	215	0	157	0	--	--	--	--	--	--	--	--	-1
Special Naphthas .....	8	0	8	0	--	--	--	--	--	--	--	--	(s)
Lubricants.....	9	0	11	0	--	--	--	--	--	--	--	--	(s)
Waxes .....	1	0	1	0	--	--	--	--	--	--	--	--	(s)
Petroleum Coke.....	0	0	0	0	--	--	--	--	--	--	--	--	0
Asphalt and Road Oil .....	34	0	42	0	--	--	--	--	--	--	--	--	0
Miscellaneous Products .....	(s)	(s)	1	(s)	--	--	--	--	--	--	--	--T(s)	0

(s) = Less than 500 barrels per day.

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication. • Totals may not equal sum of components due to independent rounding.

**Table C1. Impact of Resubmissions on Major Series, 1997 (Continued)**  
(Thousand Barrels per Day, Except Where Noted)

Product	July		August		September		October		November		December		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
<b>Stocks (Thousand Barrels) ....</b>	<b>1,558,587</b>	<b>822</b>	<b>1,569,607</b>	<b>494</b>	--	--	--	--	--	--	--	--	<b>-573</b>
Crude Oil (excl. SPR) .....	309,450	143	300,821	-153	--	--	--	--	--	--	--	--	-784
Pentanes Plus.....	8,209	0	8,048	1	--	--	--	--	--	--	--	--	(s)
LPGs.....	118,020	-35	130,652	-30	--	--	--	--	--	--T--	--	34	
Ethane/Ethylene .....	21,408	-1	22,058	-1	--	--	--	--	--	--	--	--	-1
Propane/Propylene.....	54,586	-30	59,918	-23	--	--	--	--	--	--	--	--	34
Normal Butane/Butylene ....	32,846	1	39,186	-1	--	--	--	--	--	--	--T--	3	
Isobutane/Isobutylene .....	9,180	-5	9,490	-5	--	--	--	--	--	--	--	--	-2
Oth Hydrocbns/Oxygenates ..	12,543	38	12,897	-19	--	--	--	--	--	--	--	--	2
Unfinished Oils .....	91,559	83	92,215	231	--	--	--	--	--	--	--	--	177
Motor Gas. Blend. Comp .....	39,339	-27	37,592	-24	--	--	--	--	--	--	--	--	-79
Aviation Gas. Blend. Comp ...	128	0	124	0	--	--	--	--	--	--	--	--	2
Finished Motor Gasoline.....	150,578	472	149,644	-28	--	--	--	--	--	--T--	--	140	
Reformulated.....	39,263	-35	38,051	-46	--	--	--	--	--	--	--	--	105
Oxygenated .....	824	-2	791	0	--	--	--	--	--	--	--	--	-19
Other.....	110,491	509	110,802	18	--	--	--	--	--	--	--	--	54
Finished Aviation Gasoline ...	1,635	-4	1,438	0	--	--	--	--	--	--	--	--	-2
Jet Fuel.....	42,435	278	42,293	626	--	--	--	--	--	--	--	--	278
Naphtha-Type Jet.....	23	0	30	0	--	--	--	--	--	--	--	--	-2 1
Kerosene-Type Jet.....	42,412	278	42,263	626	--	--	--	--	--	--	--	--	299
Kerosene .....	5,334	-7	5,923	-1	--	--	--	--	--	--	--	--	-1
Distillate Fuel Oil.....	123,005	39	132,920	40	--	--	--	--	--	--	--	--	-269
Residual Fuel Oil .....	35,474	-6	36,420	1	--	--	--	--	--	--	--T--	12	
Naphtha Pet. Feedstock .....	2,702	0	2,873	0	--	--	--	--	--	--	--	--	-2
Other Oils Pet. Feedstock ....	1,716	0	1,495	0	--	--	--	--	--	--	--	--	-4
Special Naphthas .....	1,899	-3	1,922	0	--	--	--	--	--	--	--	--	-1
Lubricants .....	12,856	-158	12,459	-159	--	--	--	--	--	--T--	--	-51	
Waxes.....	1,072	-15	1,164	-10	--	--	--	--	--	--	--	--	6
Petroleum Coke.....	8,097	0	8,590	2	--	--	--	--	--	--	--	--	57
Asphalt and Road Oil.....	27,969	24	25,337	17	--	--	--	--	--	--	--	--	-92
Miscellaneous Products.....	1,116	0	1,331	0	--	--	--	--	--	--	--	--	5
<b>Product Supplied .....</b>	<b>19,065</b>	<b>-33</b>	<b>18,506</b>	<b>-2</b>	--	--	--	--	<b>--T--</b>	--	--	<b>(s)</b>	
Crude Oil.....	2	0	(s)	0	--	--	--	--	--	--	--	--	0
Pentanes Plus.....	183	-2	182	(s)	--	--	--	--	--	--	--	--	(s)
LPGs.....	1,789	-3	1,866	1	--	--	--	--	--	--	--	--	8
Ethane/Ethylene .....	655	-1	652	0	--	--	--	--	--	--	--	--	(s)
Normal Butane/Butylene ....	149	-1	129	1	--	--	--	--	--	--	--	--	1
Isobutane/Isobutylene .....	79	(s)	92	(s)	--	--	--	--	--	--	--T(s)	--	
Unfinished Oils .....	-28	12	-12	-13	--	--	--	--	--	--	--	--	-1
Aviation Gas. Blend. Comp ...	5	0	6	0	--	--	--	--	--	--	--	--	0
Finished Motor Gasoline.....	8,471	-19	8,195	17	--	--	--	--	--	--	--T--	-3	
Reformulated.....	2,645	-19	2,687	-1	--	--	--	--	--	--	--T--	(s)	
Oxygenated .....	644	0	406	(s)	--	--	--	--	--	--	--	--T(s)	
Other.....	5,183	(s)	5,103	18	--	--	--	--	--	--	--T--	-2	
Finished Aviation Gasoline ...	24	(s)	31	(s)	--	--	--	--	--	--	--	--T(s)	
Jet Fuel.....	1,707	-8	1,664	-13	--	--	--	--	--	--	--T--	2	
Naphtha-Type Jet.....	1	(s)	(s)	0	--	--	--	--	--	--	--	--	-1
Kerosene-Type Jet.....	1,706	-8	1,663	-13	--	--	--	--	--	--	--T--	3	
Kerosene .....	15	(s)	40	(s)	--	--	--	--	--	--	--	--T(s)	
Distillate Fuel Oil.....	3,279	-15	3,124	5	--	--	--	--	--	--	--	--	-3
0.05% & under.....	2,267	-20	2,162	5	--	--	--	--	--	--	--	--	-5
Greater than 0.05% .....	1,012	6	962	1	--	--	--	--	--	--	--	--T2	
Residual Fuel Oil .....	776	5	719	(s)	--	--	--	--	--	--	--	--T(s)	
Naphtha Pet. Feedstock .....	291	0	283	0	--	--	--	--	--	--	--	--	-1
Other Oils Pet. Feedstock ....	422	0	373	0	--	--	--	--	--	--	--	--	-1
Special Naphthas .....	45	(s)	37	(s)	--	--	--	--	--	--	--	--T(s)	
Lubricants .....	169	2	169	1	--	--	--	--	--	--	--	--	1
Waxes.....	24	(s)	24	(s)	--	--	--	--	--	--	--	--T(s)	
Petroleum Coke.....	386	0	343	(s)	--	--	--	--	--	--	--	--T-1	
Asphalt and Road Oil.....	748	-5	719	(s)	--	--	--	--	--	--	--	--	-1
Still Gas .....	708	-1	697	(s)	--	--	--	--	--	--	--	--	1
Miscellaneous Products.....	49	(s)	46	(s)	--	--	--	--	--	--	--	--T(s)	

(s) = Less than 500 barrels per day.

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication. • Totals may not equal sum of components due to independent rounding.

# EIA-819M

## Monthly Oxygenate Telephone Report

The EIA-819M, "Monthly Oxygenate Telephone Report," provides production data and preliminary stock data for fuel ethanol and methyl tertiary butyl ether (MTBE) in the United States and major U.S. geographic regions. Data are collected from a sample of respondents reporting on the Monthly Petroleum Supply Reporting System surveys and from the universe of oxygenate producers. Refer to Appendix B, Explanatory Note 2 for further detail. Final data on stocks of fuel ethanol and MTBE are presented in the Detailed Statistics section. The quantity of oxygenates blended into motor gasoline previously published in this appendix is now presented in Appendix B, Table B2.

**Table D1. U.S. Summary, November 1997**

Products	November 1997		October 1997		Year-to-Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
<b>Fuel Ethanol</b>						
Production.....	2,927	98	2,708	87	27,381	82
Stocks .....	3,005	--	2,605	--	--	--
<b>MTBE</b>						
Production.....	6,341	211	6,376	206	65,518	196
Stocks .....	7,528	--	7,029	--	--	--

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

**Table D2. Monthly Fuel Ethanol Production and Stocks by Petroleum Administration  
for Defense Districts (PADD)**  
(Thousand Barrels per Day, Except Where Noted)

District/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Total U.S.</b>												
<b>Production</b>												
1996	87	74	75	66	46	39	39	49	53	78	77	77
1997	80	82	86	77	86	73	74	80	80	87	98	
<b>Stocks (thous. bbls.)</b>												
1996	1,806	1,415	1,264	1,293	1,037	947	942	1,002	1,239	1,625	1,641	1,896
1997	2,169	2,139	2,291	2,302	2,764	3,065	2,696	3,036	3,109	2,605	3,005	
<hr/>												
<b>East Coast (PADD I)</b>												
<b>Production</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>Stocks (thous. bbls.)</b>												
1996	172	123	24	7	7	7	9	8	8	21	15	27
1997	19	15	24	37	95	349	55	392	119	109	255	
<hr/>												
<b>Midwest (PADD II)</b>												
<b>Production</b>												
1996	86	73	74	66	46	38	38	48	52	77	76	77
1997	79	81	85	76	85	72	73	79	79	87	97	
<b>Stocks (thous. bbls.)</b>												
1996	947	748	845	810	678	681	623	666	686	1,096	1,164	1,337
1997	1,397	1,613	1,839	1,758	2,042	1,961	1,844	1,942	2,002	1,533	1,627	
<hr/>												
<b>Gulf Coast (PADD III)</b>												
<b>Production</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>Stocks (thous. bbls.)</b>												
1996	166	183	129	239	117	84	84	73	81	48	45	126
1997	265	138	151	212	354	391	436	350	462	266	531	
<hr/>												
<b>Rocky Mountain (PADD IV)</b>												
<b>Production</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>Stocks (thous. bbls.)</b>												
1996	97	66	49	50	40	41	37	41	55	83	78	66
1997	110	95	83	66	68	72	69	87	156	129	129	
<hr/>												
<b>West Coast (PADD V)</b>												
<b>Production</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>Stocks (thous. bbls.)</b>												
1996	425	295	216	186	195	134	189	214	409	377	338	339
1997	378	278	194	228	204	293	291	265	370	569	464	

W=Withheld to avoid disclosure of individual company data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

**Table D3. Monthly Methyl Tertiary Butyl Ether (MTBE) Production and Stocks by Petroleum Administration for Defense Districts (PADD)**  
(Thousand Barrels per Day, Except Where Noted)

District/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Total U.S.</b>												
<b>Production</b>												
1996	173	172	182	183	194	202	197	179	186	187	183	184
1997	161	192	182	186	192	209	201	217	200	206	211	
<b>Stocks (thous. bbls.)</b>												
1996	9,050	9,148	9,313	9,061	9,148	9,323	9,156	9,352	8,361	8,773	8,812	9,769
1997	9,659	9,607	9,039	8,934	8,621	7,151	7,380	8,637	7,800	7,029	7,528	
<b>East Coast (PADD I)</b>												
<b>Production</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>Stocks (thous. bbls.)</b>												
1996	1,214	1,411	1,285	1,579	1,592	1,245	1,230	1,317	1,289	1,191	1,541	1,400
1997	1,895	1,839	2,154	1,463	1,235	1,094	907	1,447	1,536	1,551	1,325	
<b>Midwest (PADD II)</b>												
<b>Production</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>Stocks (thous. bbls.)</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>Gulf Coast (PADD III)</b>												
<b>Production</b>												
1996	154	150	163	160	172	183	174	158	164	169	162	161
1997	138	171	163	165	168	183	175	191	172	183	181	
<b>Stocks (thous. bbls.)</b>												
1996	3,600	4,224	4,332	4,093	4,416	4,543	4,353	3,507	3,434	3,106	3,665	4,122
1997	3,545	4,223	3,887	3,413	3,008	2,559	3,027	4,205	3,147	3,097	3,100	
<b>Rocky Mountain (PADD IV)</b>												
<b>Production</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>Stocks (thous. bbls.)</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>West Coast (PADD V)</b>												
<b>Production</b>												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W	W	W	W	W	W	
<b>Stocks (thous. bbls.)</b>												
1996	3,999	3,316	3,394	3,172	2,926	3,243	3,319	4,270	3,345	4,154	3,299	3,935
1997	3,868	3,277	2,673	3,808	4,084	3,278	3,174	2,789	2,851	2,142	2,840	

W=Withheld to avoid disclosure of individual company data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

**Table D4. Monthly Methyl Tertiary Butyl Ether (MTBE) Production by Merchant and Captive Plants**  
(Thousand Barrels per Day, Except Where Noted)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Total U.S.</b>												
1992	98	94	89	79	90	90	101	91	104	118	128	125
1993	115	114	112	138	132	126	155	142	157	146	148	144
1994	123	140	129	140	139	115	154	166	160	164	150	144
1995	149	144	121	168	169	182	181	171	163	167	174	171
1996	173	172	182	183	194	202	197	179	186	187	183	184
1997	161	192	182	186	192	209	201	217	200	206	211	
<b>Merchant Plants</b>												
1992	65	62	58	48	55	53	63	53	61	76	81	77
1993	63	66	67	87	75	70	89	79	87	76	81	75
1994	63	76	66	73	72	50	73	89	90	81	84	69
1995	76	68	61	86	85	91	90	88	79	90	97	92
1996	94	92	93	95	109	123	111	96	101	98	94	87
1997	72	106	<sup>R</sup> 99	<sup>R</sup> 92	<sup>R</sup> 93	<sup>R</sup> 104	<sup>R</sup> 106	<sup>R</sup> 113	<sup>R</sup> 94	108	109	
<b>Captive Plants</b>												
1992	33	32	31	31	35	37	38	38	43	42	47	48
1993	52	48	45	50	57	55	67	62	70	70	67	69
1994	60	64	63	67	67	65	81	78	70	83	66	75
1995	73	76	60	83	84	91	91	83	84	76	78	79
1996	79	80	89	89	84	79	85	83	85	89	89	97
1997	89	86	<sup>R</sup> 83	<sup>R</sup> 94	<sup>R</sup> 99	<sup>R</sup> 105	<sup>R</sup> 95	<sup>R</sup> 104	<sup>R</sup> 106	98	102	

R = Revised data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

# Definitions of Petroleum Products and Other Terms

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group;  $\text{CH}_3\text{-(CH}_2\text{)}_n\text{-OH}$  (e.g., methanol, ethanol, and tertiary butyl alcohol).

**Alkylate.** The product of an alkylation reaction. It usually refers to the high octane product from alkylation units. This alkylate is used in blending high octane gasoline.

**Alkylation.** A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

**API Gravity.** An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Degrees API} = \frac{141.5}{\text{sp.gr.}_{60^\circ\text{F}/60^\circ\text{F}}} - 131.5$$

**The higher the API gravity, the lighter the compound. Light crudes generally exceed 38 degrees API and heavy crudes are commonly labeled as all crudes with an API gravity of 22 degrees or below. Intermediate crudes fall in the range of 22 degrees to 38 degrees API gravity.**

**Aromatics.** Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

**Asphalt.** A dark-brown-to-black cement-like material containing bitumens as the predominant constituent obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels per short ton.

**ASTM.** The acronym for the American Society for Testing and Materials.

**Atmospheric Crude Oil Distillation.** The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600° to 750° F (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

**Aviation Gasoline (Finished).** All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

**Aviation Gasoline Blending Components.** Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as other hydrocarbons, hydrogen, and oxygenates.

**Barrel.** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, still gas and wax to barrels are given in the definitions of these products.

**Barrels Per Calendar Day.** The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations:

the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;

the types and grades of inputs to be processed;

the types and grades of products expected to be manufactured;

the environmental constraints associated with refinery operations;

the reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and

**Shaded areas in the definitions represent changes introduced in November 1995.**

the reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

**Barrels Per Stream Day.** The amount a unit can process running at full capacity under optimal crude oil and product slate conditions.

**Benzene (C<sub>6</sub>H<sub>6</sub>).** An aromatic hydrocarbon present in small proportion in some crude oils and made commercially from petroleum by the catalytic reforming of naphthenes in petroleum naphtha. Also made from coal in the manufacture of coke. Used as a solvent, in manufacturing detergents, synthetic fibers, and petrochemicals and as a component of high-octane gasoline.

**Blending Components.** See Motor or Aviation Gasoline Blending Components.

**Blending Plant.** A facility which has no refining capability but is either capable of producing finished motor gasoline through mechanical blending or blends oxygenates with motor gasoline.

**Bonded Petroleum Imports.** Petroleum imported and entered into Customs bonded storage. These imports are not included in the import statistics until they are: (1) withdrawn from storage free of duty for use as fuel for vessels and aircraft engaged in international trade; or (2) withdrawn from storage with duty paid for domestic use.

**BTX.** The acronym for the commercial petroleum aromatics benzene, toluene, and xylene. See individual categories for definitions.

**Bulk Station.** A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of less than 50,000 barrels and receives its petroleum products by tank car or truck.

**Bulk Terminal.** A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of 50,000 barrels or more and/or receives petroleum products by tanker, barge, or pipeline.

**Butane (C<sub>4</sub>H<sub>10</sub>).** A normally gaseous straight-chain or branch-chain hydrocarbon extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

**Isobutane (C<sub>4</sub>H<sub>10</sub>).** A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

**Normal Butane (C<sub>4</sub>H<sub>10</sub>).** A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

**Butylene (C<sub>4</sub>H<sub>8</sub>).** An olefinic hydrocarbon recovered from refinery processes.

**Captive Refinery Oxygenate Plants.** Oxygenate production facilities located within or adjacent to a refinery complex.

**Catalytic Cracking.** The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

**Fresh Feeds.** Crude oil or petroleum distillates which are being fed to processing units for the first time.

**Recycled Feeds.** Feeds that are continuously fed back for additional processing.

**Catalytic Hydrocracking.** A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel, and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

**Catalytic Hydrotreating.** A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

**Catalytic Reforming.** A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

**Low Pressure.** A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

**High Pressure.** A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

**Charge Capacity.** The input (feed) capacity of the refinery processing facilities.

**Coal.** A black or brownish-black solid combustible substance formed by the partial decomposition of vegetable matter without access to air. The rank of coal, which includes anthracite, bituminous coal, subbituminous coal, and lignite, is based on fixed carbon, volatile matter, and heating value. Coal rank indicates the progressive alteration, or coalification, from lignite to anthracite. Lignite contains approximately 9 to 17 million BTU per ton. The heat contents of subbituminous and bituminous coal range from 16 to 24 million BTU per ton, and from 19 to 30 million BTU per ton, respectively. Anthracite contains approximately 22 to 28 million BTU per ton.

**Commercial Kerosene-Type Jet Fuel.** See **Kerosene-Type Jet Fuel.**

**Crude Oil (Including Lease Condensate).** A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

**Domestic.** Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 USC 1331.

**Foreign.** Crude oil produced outside the United States. Imported Athabasca hydrocarbons (tar sands from Canada) are included.

**Crude Oil, Refinery Receipts.** Receipts of domestic and foreign crude oil at a refinery. Includes all crude oil in transit except crude oil in transit by pipeline. Foreign crude oil is reported as a receipt only after entry through customs. Crude oil of foreign origin held in bonded storage is excluded.

**Crude Oil Losses.** Represents the volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc. as opposed to refinery processing losses.

**Crude Oil Production.** The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

**Crude Oil Qualities.** Refers to two properties of crude oil, the sulfur content and API gravity, which affect processing complexity and product characteristics.

**Delayed Coking.** A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

**Disposition.** The components of petroleum disposition are stock change, crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

**Distillate Fuel Oil.** A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels. **Distillate fuel oil is reported in the following sulfur categories: 0.05% sulfur and under, for use in on-highway diesel engines which could be described as meeting EPA regulations; and greater than 0.05% sulfur, for use in all other distillate applications.**

**No. 1 Distillate.** A petroleum distillate which meets the specifications for No. 1 heating or fuel oil as defined in ASTM D 396 and/or the specifications for No. 1 diesel fuel as defined in ASTM Specification D 975 with distillation temperatures of 420° F at the 10-percent recovery point and 550° F at the 90-percent recovery point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100° F.

**No. 2 Distillate.** A petroleum distillate which meets the specifications for No. 2 heating or fuel oil as defined in

ASTM D 396 and/or the specifications for No. 2 diesel fuel as defined in ASTM Specification D 975 with distillation temperatures of 540° and 640° F at the 90-percent recovery point, and kinematic viscosities between 2.0 and 4.3 centistokes at 100° F.

**No. 4 Fuel Oil.** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; with minimum and maximum kinematic viscosities between 5.8 and 26.4 centistokes at 100° F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

**Electricity (Purchased).** Electricity purchased for refinery operations that is not produced within the refinery complex.

**Ending Stocks.** Primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

**ETBE (Ethyl tertiary butyl ether) (CH<sub>3</sub>)<sub>3</sub>COC<sub>2</sub>H<sub>5</sub>.** An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

**Ethane (C<sub>2</sub>H<sub>6</sub>).** A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

**Ether.** A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

**Ethylene (C<sub>2</sub>H<sub>4</sub>).** An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**Exports.** Shipments of crude oil and petroleum products from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

**Field Production.** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, new supply of other hydrocarbons/oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.

**Flexicoking.** A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

**Fluid Coking.** A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

**Fresh Feed Input.** Represents input of material (crude oil, unfinished oils, natural gas liquids, other hydrocarbons and oxygenates or finished products) to processing units at a refinery that is being processed (input) into a particular unit for the first time.

Examples:

- (1) Unfinished oils coming out of a crude oil distillation unit which are input into a catalytic cracking unit are considered fresh feed to the catalytic cracking unit.
- (2) Unfinished oils coming out of a catalytic cracking unit being looped back into the same catalytic cracking unit to be reprocessed are not considered fresh feed.

**Fuel Ethanol (C<sub>2</sub>H<sub>5</sub>OH).** An anhydrous denatured aliphatic alcohol intended for gasoline blending as described in Oxygenates definition.

**Fuels Solvent Deasphalting.** A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

**Gas Oil.** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

**Gasohol.** A blend of finished motor gasoline and alcohol (generally ethanol but sometimes methanol), limited to 10 percent by volume of alcohol.

**Gasoline Blending Components.** Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate,

reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

**Gross Input to Atmospheric Crude Oil Distillation Units.** Total input to atmospheric crude oil distillation units. Includes all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

**Heavy Gas Oil.** Petroleum distillates with an approximate boiling range from 651° to 1000° F.

**Hydrogen.** The lightest of all gases, occurring chiefly in combination with oxygen in water; exists also in acids, bases, alcohols, petroleum, and other hydrocarbons.

**Idle Capacity.** The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

**Imported Crude Oil Burned As Fuel.** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

**Imports.** Receipts of crude oil and petroleum products into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

**Isobutane.** See **Butane**.

**Isobutylene (C<sub>4</sub>H<sub>8</sub>).** An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**Isohexane (C<sub>6</sub>H<sub>14</sub>).** A saturated branch-chain hydrocarbon. It is a colorless liquid that boils at a temperature of 156.2° F.

**Isomerization.** A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane (C<sub>4</sub>), an alkylation process feedstock, and normal pentane and hexane into isopentane (C<sub>5</sub>) and isohexane (C<sub>6</sub>), high-octane gasoline components.

**Isopentane.** See **Natural Gasoline and Isopentane**.

**Kerosene.** A petroleum distillate that has a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a

minimum flash point of 100° F. Included are the two grades designated in ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

**Kerosene-Type Jet Fuel.** A quality kerosene product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. The fuel is designated in ASTM Specification D1655 and Military Specifications MIL-T-5624R and MIL-T-83133D (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type used primarily for turbojet and turboprop aircraft engines.

**Commercial.** Kerosene-type jet fuel intended for use in commercial aircraft.

**Military.** Kerosene-type jet fuel intended for use in military aircraft.

**Lease Condensate.** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

**Light Gas Oils.** Liquid petroleum distillates heavier than naphtha, with an approximate boiling range from 401° F to 650° F.

**Liquefied Petroleum Gases (LPG).** Ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

**Liquefied Refinery Gases (LRG).** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. Excludes still gas.

**Lubricants.** A substance used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products, or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Do not include byproducts of lubricating oil refining such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Reporting categories include:

**Paraffinic.** Includes all grades of bright stock and neutrals with a Viscosity Index > 75.

**Naphthenic.** Includes all lubricating oil base stocks with a Viscosity Index < 75.

**Note:** The criterion for categorizing the lubricants is based solely on the Viscosity Index of the stocks and is independent of crude sources and type of processing used to produce the oils.

**Exceptions:** Lubricating oil base stocks that have been historically classified as naphthenic or paraffinic by a refiner may continue to be so categorized irrespective of the Viscosity Index criterion.

Example:

- (1) Unextracted paraffinic oils that would not meet the Viscosity Index test.

**Merchant Oxygenate Plants.** Oxygenate production facilities that are not associated with a petroleum refinery. Production from these facilities is sold under contract or on the spot market to refiners or other gasoline blenders.

**Methanol (CH<sub>3</sub>OH).** A light, volatile alcohol intended for gasoline blending as described in Oxygenate definition.

**Middle Distillates.** A general classification of refined petroleum products that includes distillate fuel oil and kerosene.

**Military Kerosene-Type Jet Fuel.** See **Kerosene-Type Jet Fuel.**

**Miscellaneous Products.** Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils).

**Motor Gasoline (Finished).** A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that has been blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as given in ASTM Specification D-4814 or Federal Specification VV-G-1690C, includes a range in distillation temperatures from 122 degrees to 158 degrees F at the 10-percent recovery point and from 365 degrees to 374 degrees F at the 90-percent recovery point. "Motor gasoline" includes reformulated gasoline, oxygenated gasoline, and other finished gasoline. Blendstock is excluded until blending has been completed.

**Reformulated Gasoline.** Gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211K of the Clean Air Act. Includes oxygenated fuels program reformulated gasoline (OPRG). Excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

**Oxygenated Gasoline.** Gasoline formulated for use in motor vehicles that has an oxygen content of 1.8 percent or higher, by weight. Includes gasohol. Excludes reformulated gasoline, oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB).

**OPRG. "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control period.**

**Other Finished or Conventional Gasoline.** Motor gasoline not included in the oxygenated or reformulated gasoline categories. Excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

**Motor Gasoline Blending.** Mechanical mixing of motor gasoline blending components and oxygenates to produce finished motor gasoline. Mechanical mixing of finished motor gasoline with motor gasoline blending components or oxygenates which results in increased volumes of finished motor gasoline, and/or changes in the classification of finished motor gasoline (e.g., other finished motor gasoline mixed with MTBE to produce oxygenated motor gasoline), is considered motor gasoline blending.

**Motor Gasoline Blending Components.** Naphthas which will be used for blending or compounding into finished motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) and includes reformulated gasoline blendstock for oxygenate blending (RBOB). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as individual components and included in the total for other hydrocarbons, hydrogens, and oxygenates.

**MTBE (Methyl tertiary butyl ether) (CH<sub>3</sub>)<sub>3</sub>COCH<sub>3</sub>.** An ether intended for gasoline blending as described in Oxygenate definition.

**Naphtha.** A generic term applied to a petroleum fraction with an approximate boiling range between 122° and 400° F.

**Naphtha Less Than 401° F.** See **Petrochemical Feedstocks.**

**Naphtha-Type Jet Fuel.** A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290° F at the 20-percent recovery point and 470° F at the 90-percent point, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

**Natural Gas.** A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

**Natural Gas Field Facility.** A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

**Natural Gas Plant Liquids.** Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: ethane, propane, normal butane, isobutane, and pentanes plus.

**Natural Gas Processing Plant.** A facility designed (1) to achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities, and (2) to control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

**Natural Gasoline and Isopentane.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C<sub>5</sub>H<sub>12</sub>), obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Net Receipts.** The difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge.

**Normal Butane.** See **Butane**.

**OPEC.** The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current

members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. The Neutral Zone between Kuwait and Saudi Arabia is considered part of OPEC.

**Prior to January 1, 1993, Ecuador was a member of OPEC. Prior to January 1995, Gabon was a member of OPEC.**

**OPRG.** "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control area during an oxygenated fuels program control period.

**Operable Capacity.** The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

**Operating Capacity.** The component of operable capacity that is in operation at the beginning of the period.

**Operable Utilization Rate.** Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operable refining capacity of the units.

**Operating Utilization Rate.** Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operating refining capacity of the units.

**Other Finished.** See **Motor Gasoline (Finished)**.

**Other Hydrocarbons.** Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

**Other Oils Equal To or Greater Than 401° F.** See **Petrochemical Feedstocks**.

**Other Oxygenates.** Other aliphatic alcohols and aliphatic ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

**Oxygenated Gasoline.** See **Motor Gasoline (Finished)**.

**Oxygenates.** Any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. Through a series of waivers and interpretive rules, the Environmental Protection Agency (EPA) has determined the allowable limits for oxygenates in

unleaded gasoline. The “Substantially Similar” Interpretive Rules (56 FR (February 11, 1991)) allows blends of aliphatic alcohols other than methanol and aliphatic ethers, provided the oxygen content does not exceed 2.7 percent by weight. The “Substantially Similar” Interpretive Rules also provides for blends of methanol up to 0.3 percent by volume exclusive of other oxygenates, and butanol or alcohols of a higher molecular weight up to 2.75 percent by weight. Individual waivers pertaining to the use of oxygenates in unleaded gasoline have been issued by the EPA. They include:

**Fuel Ethanol.** Blends of up to 10 percent by volume anhydrous ethanol (200 proof) (commonly referred to as the “gasohol waiver”).

**Methanol.** Blends of methanol and gasoline-grade tertiary butyl alcohol (GTBA) such that the total oxygen content does not exceed 3.5 percent by weight and the ratio of methanol to GTBA is less than or equal to 1. It is also specified that this blended fuel must meet ASTM volatility specifications (commonly referred to as the “ARCO” waiver).

Blends of up to 5.0 percent by volume methanol with a minimum of 2.5 percent by volume cosolvent alcohols having a carbon number of 4 or less (i.e., ethanol, propanol, butanol, and/or GTBA). The total oxygen must not exceed 3.7 percent by weight, and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity specifications (commonly referred to as the “DuPont” waiver).

**MTBE (Methyl tertiary butyl ether).** Blends up to 15.0 percent by volume MTBE which must meet the ASTM D4814 specifications. Blenders must take precautions that the blends are not used as base gasolines for other oxygenated blends (commonly referred to as the “Sun” waiver).

**Pentanes Plus.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

**Persian Gulf.** The countries that comprise the Persian Gulf are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

**Petrochemical Feedstocks.** Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are “Naphtha Less Than 401° F” and “Other Oils Equal To or Greater Than 401° F.”

**Naphtha Less Than 401° F.** A naphtha with a boiling range of less than 401° F that is intended for use as a petrochemical feedstock.

**Other Oils Equal To or Greater Than 401° F.** Oils with a boiling range equal to or greater than 401° F that are intended for use as a petrochemical feedstock.

**Petroleum Administration for Defense (PAD) Districts.** Geographic aggregations of the 50 States and the District of Columbia into five districts by the Petroleum Administration for Defense in 1950. These districts were originally defined during World War II for purposes of administering oil allocation.

**Petroleum Coke.** A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels per short ton.

**Marketable Coke.** Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This “green” coke may be sold as is or further purified by calcining.

**Catalyst Coke.** In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Pipeline (Petroleum).** Crude oil and product pipelines used to transport crude oil and petroleum products respectively, (including interstate, intrastate, and intracompany pipelines) within the 50 States and the District of Columbia.

**Plant Condensate.** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

**Processing Gain.** The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into

products which, in total, have a lower specific gravity than the crude oil processed.

**Processing Loss.** The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed.

**Product Supplied, Crude Oil.** Crude oil burned on leases and by pipelines as fuel.

**Production Capacity.** The maximum amount of product that can be produced from processing facilities.

**Products Supplied.** Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts when calculated on a PAD District basis), minus stock change, minus crude oil losses, minus refinery inputs, minus exports.

**Propane (C<sub>3</sub>H<sub>8</sub>).** A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

**Propylene (C<sub>3</sub>H<sub>6</sub>).** An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**RBOB.** “Reformulated Gasoline Blendstock for Oxygenate Blending” is a motor gasoline blending component which, when blended with a specified type and percentage of oxygenate, meets the definition of reformulated gasoline.

**Refinery.** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and oxygenates.

**Refinery Input, Crude Oil.** Total crude oil (domestic plus foreign) input to crude oil distillation units and other refinery processing units (cokers, etc.).

**Refinery Input, Total.** The raw materials and intermediate materials processed at refineries to produce finished petroleum products. They include crude oil, products of natural gas processing plants, unfinished oils, other hydrocarbons and oxygenates, motor gasoline and

aviation gasoline blending components and finished petroleum products.

**Refinery Production.** Petroleum products produced at a refinery or blending plant. Published production of these products equals refinery production minus refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. Refinery production of unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input.

**Refinery Yield.** Refinery yield (expressed as a percentage) represents the percent of finished product produced from input of crude oil and net input of unfinished oils. It is calculated by dividing the sum of crude oil and net unfinished input into the individual net production of finished products. Before calculating the yield for finished motor gasoline, the input of natural gas liquids, other hydrocarbons and oxygenates, and net input of motor gasoline blending components must be subtracted from the net production of finished motor gasoline. Before calculating the yield for finished aviation gasoline, input of aviation gasoline blending components must be subtracted from the net production of finished aviation gasoline.

**Reformulated Gasoline.** See **Motor Gasoline (Finished).**

**Residual Fuel Oil.** The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specification D396. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; No. 6, which includes Bunker C fuel oil, and is used for commercial and industrial heating, electricity generation and to power ships.

**Residuum.** Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000° F.

**Road Oil.** Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

**Shell Storage Capacity.** The design capacity of a petroleum storage tank which is always greater than or equal to working storage capacity.

**Special Naphthas.** All finished products within the naphtha boiling range that are used as paint thinners,

cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

**Steam (Purchased).** Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

**Still Gas (Refinery Gas).** Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6 million BTU's per fuel oil equivalent barrel.

**Stock Change.** The difference between stocks at the beginning of the month and stocks at the end of the month. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

**Strategic Petroleum Reserve (SPR).** Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

**Sulfur.** A yellowish nonmetallic element, sometimes known as "brimstone".

**Supply.** The components of petroleum supply are field production, refinery production, imports, and net receipts when calculated on a PAD District basis.

**TAME (Tertiary amyl methyl ether)  $(CH_3)_2(C_2H_5)COCH_3$ .** An oxygenate blend stock formed by the catalytic etherification of isoamylene with methanol.

**Tank Farm.** An installation used by gathering and trunk pipeline companies, crude oil producers, and terminal operators (except refineries) to store crude oil.

**Tanker and Barge.** Vessels that transport crude oil or petroleum products. Data are reported for movements between PAD Districts; from a PAD District to the Panama Canal; or from the Panama Canal to a PAD District.

**TBA (Tertiary butyl alcohol)  $(CH_3)_3COH$ .** An alcohol primarily used as a chemical feedstock, a solvent or feedstock for isobutylene production for MTBE; produced as a co-product of propylene oxide production or by direct hydration of isobutylene.

**Thermal Cracking.** A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

**Toluene  $(C_6H_5CH_3)$ .** Colorless liquid of the aromatic group of petroleum hydrocarbons, made by the catalytic reforming of petroleum naphthas containing methyl cyclohexane. A high-octane gasoline-blending agent, solvent, and chemical intermediate, base for TNT.

**Unaccounted for Crude Oil.** Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

**Unfinished Oils.** Includes all oils requiring further processing, except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum. See individual categories for definition.

**Unfractionated Streams.** Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

**United States.** The United States is defined as the 50 States and the District of Columbia.

**Vacuum Distillation.** Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

**Visbreaking.** A thermal cracking process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

**Wax.** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

**Microcrystalline Wax.** Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics: penetration at 77° F (D1321)-60 maximum; viscosity at 210° F in Saybolt Universal Seconds (SUS); (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum; oil content (D721)-5 percent minimum.

**Crystalline-Fully Refined Wax.** A light-colored paraffin wax having the following characteristics: viscosity at 210° F (D88)-59.9 SUS (10.18 centistokes) maximum; oil content (D721)-0.5 percent maximum; other +20 color, Saybolt minimum.

**Crystalline-Other Wax.** A paraffin wax having the following characteristics: viscosity at 210° F (D88)-59.9 SUS (10.18 centistokes) maximum; oil content (D721)-0.51 percent minimum to 15 percent maximum.

**Working Storage Capacity.** The difference in volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

**Xylene ( $C_6H_4(CH_3)_2$ ).** Colorless liquid of the aromatic group of hydrocarbons made the catalytic reforming of certain naphthenic petroleum fractions. Used as high-octane motor and aviation gasoline blending agents, solvents, chemical intermediates. Isomers are metaxylene, orthoxylene, paraxylene.