

Petroleum Supply Monthly

July 1997

With Data for May 1997

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Washington, DC 20585

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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)
Winter Fuels Report (October through March)		
Wednesday 5:00 p.m. (weekly)	EPUB/WWW	All tables and highlights
Thursday by Noon (weekly)	COGIS	All tables and highlights
Propane Data (April through September)		
Second Wednesday of the month (9:00 a.m.)	EPUB/WWW	Propane Stocks
Petroleum Supply Monthly		
23rd-26th (monthly)	EPUB/WWW	Table H1 (Petroleum Supply Summary) and all Summary Statistics and Detailed Statistics Tables
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Petroleum Supply Annual	WWW	All tables and data bases
Oxygenate Data		
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)
Imports Data		
7th-10th (preliminary)	EPUB/WWW	Import data by company from the Form EIA-814, "Monthly Imports Report"
23rd-26th (final)		

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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

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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

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Motor Gasoline Outlook: 1990.....	February 1990
Timeliness and Accuracy of Petroleum Supply Data	April 1990
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Comparisons of Independent Statistics on Petroleum Supply	May 1993
Drilling Sideways.....	June 1993
The Economics of the Clean Air Act Amendments of 1990.....	July 1993
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Distillate Fuel Oil Outlook for Winter 1993-1994	October 1993
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Distillate Fuel Oil Assessment for Winter 1996-1997	November 1996
Propane Market Assessment for Winter 1996-1997	November 1996
Crosswell Seismology—A View from Aside.....	December 1996

Comparisons of Independent Petroleum Supply Statistics

by Robert G. Harper, III

Introduction

The Petroleum Supply Division (PSD) of the Energy Information Administration (EIA) collects and publishes information on petroleum supply and disposition in the United States. The information is collected through a series of surveys that make up the Petroleum Supply Reporting System (PSRS). The PSRS data are published in the *Weekly Petroleum Status Report (WPSR)*, *Petroleum Supply Monthly (PSM)*, and *Petroleum Supply Annual (PSA)*.

This article compares final petroleum data published in the *PSA* with similar petroleum data obtained from other sources. Data comparisons are presented for 1986 through 1995 for the following series: crude oil production, crude oil imports, motor gasoline supplied, distillate fuel oil supplied, and residual fuel oil supplied. Graphs were added in order to better portray the data similarities and data differences.

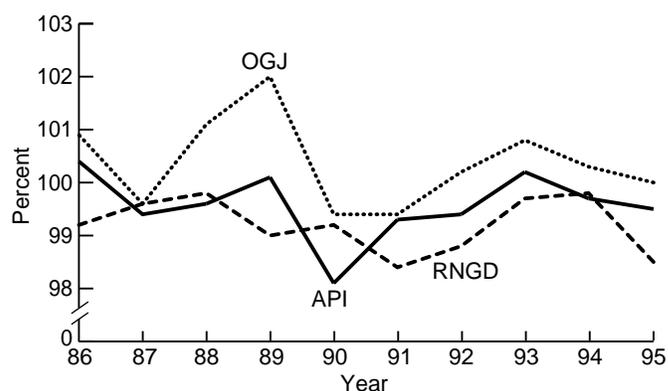
Crude Oil Production

Crude oil production statistics (including those for lease condensate) from the American Petroleum Institute (API), the *Oil and Gas Journal (OGJ)*, and EIA's Reserves and Natural Gas Division (RNGD) are compared with statistics from the *Petroleum Supply Annual (PSA)* (Table FE1/Figure FE1). Data on crude oil production published in the *PSA* are based on data collected by

State government agencies as well as the Minerals Management Service (MMS) of the U.S. Department of the Interior, which collects data on crude oil produced on Federally-owned offshore leases.

Production estimates from API are also based on data provided by State government agencies. From 1986 through 1995, API crude oil production statistics averaged within 0.58 percent of the *PSA* volumes. From 1994 to 1995, the API data difference increased

Figure FE1 A Comparison of Crude Oil Production, 1986-1995 (As a Percent of PSA)



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table FE1.

Table FE1. A Comparison of Data Series for Crude Oil Production, 1986-1995

Year	PSA		API		OGJ		RNGD	
	Million Barrels	Million Barrels	Percent of PSA	Million Barrels	Percent of PSA	Million Barrels	Percent of PSA	
1995	2,394	2,382	99.5	2,393	100.0	2,358	98.5	
1994	2,431	2,424	99.7	2,438	100.3	2,425	99.8	
1993	2,499	2,504	100.2	2,520	100.8	2,492	99.7	
1992	2,625	2,608	99.4	2,630	100.2	2,593	98.8	
1991	2,707	2,687	99.3	2,692	99.4	2,665	98.4	
1990	2,685	2,634	98.1	2,668	99.4	2,663	99.2	
1989	2,779	2,781	100.1	2,834	102.0	2,751	99.0	
1988	2,979	2,967	99.6	3,013	101.1	2,973	99.8	
1987	3,047	3,028	99.4	3,034	99.6	3,035	99.6	
1986	3,168	3,182	100.4	3,195	100.9	3,142	99.2	

Sources: *PSA*: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, 1986 through 1995, Table 2. *API*: American Petroleum Institute, *Monthly Statistical Report*, 1986 through 1995. *OGJ*: *Oil and Gas Journal*, 1986 through 1995. *RNGD*: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*, DOE/EIA-0216, Crude Oil, 1986 through 1995, Table 6; Lease Condensate, 1986 through 1989, Table 15; 1990 through 1995, Table 16.

from 0.3 percent below *PSA* numbers to 0.6 percent below *PSA* statistics.

Crude oil production estimates developed by the *Oil and Gas Journal (OGJ)* are based on data obtained from State conservation agencies and on historical State production levels. In 1994, *OGJ* statistics were 0.3 percent above *PSA* statistics, but in 1995, *OGJ* and *PSA* statistics were equal. For the 10-year period 1986 through 1995 the average absolute difference was 0.69 percent.

The RNGD publishes the *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*. These crude oil production estimates are based on data from Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." In 1995, data were received from 3,591 survey oil and gas well operators, versus 3,828 operators in 1994. The RNGD's national production estimates for the 1995 data were 1.5 percent lower than comparable *PSA* volumes versus 0.2 percent lower than 1994 *PSA* volumes. However, over the 10-year period 1986 through 1995, the RNGD and *PSA* statistics have remained in relatively close agreement with an average absolute difference of only 0.80 percent.

The comparison of these data series does not show any major discrepancies between the four independent sources. However, minor differences could be due to revisions and late reporting by State agencies, by the Minerals Management Service, and by oil and gas well operators.

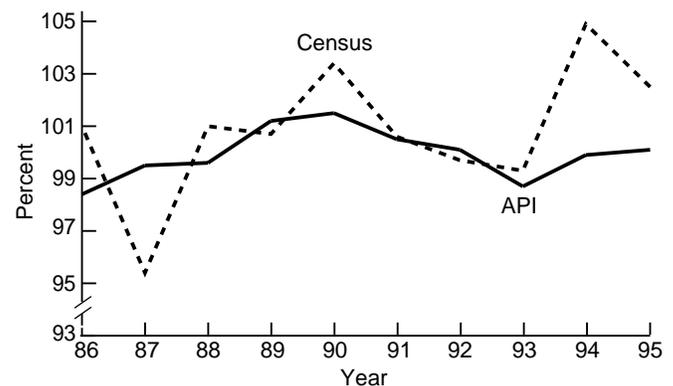
Crude Oil Imports

Data on crude oil imports are collected on survey Form EIA-814, "Monthly Imports Report." Survey respondents to the form include all companies that import crude oil or petroleum products into the United States, Puerto Rico, the Virgin Islands, and other U.S. possessions. However, for comparison purposes, statistics

on imports into Puerto Rico, the Virgin Islands, and other U.S. possessions are excluded from this analysis. Approximately 220 respondents report on the Form EIA-814. The *PSA* statistics are compared with API and the U.S. Bureau of the Census (Census) statistics for crude oil imports (Table FE2/Figure FE2).

API data on crude oil imports are collected by a port-of-entry survey. Prior to 1985, API obtained data from reports on refinery receipts of crude oil submitted on a voluntary basis. Because the survey does not include crude oil imported by the Strategic Petroleum Reserve (SPR), data from the *PSA* on volumes of crude oil imported for the SPR were added to API data for comparison purposes. (See "Information on Data Source Differences and Adjustments.") In 1993, there was a 1.3 percent the difference between API and *PSA* statistics; however, in both 1994 and 1995, the absolute difference had narrowed to 0.1 percent. Over the 10-year period 1986 through 1995, the average absolute difference was only 0.73 percent. For the seventh consecutive year, annual crude oil imports rose above the 2 billion barrel mark.

Figure FE2. A Comparison of Crude Oil Imports, 1986-1995 (As a Percent of *PSA*)



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table FE2.

Table FE2. A Comparison of Data Series for Crude Oil Imports into United States (Excluding U.S. Possessions), 1986-1995

Year	<i>PSA</i>	API ^a		Census ^b	
	Million Barrels	Million Barrels	Percent of <i>PSA</i>	Million Barrels	Percent of <i>PSA</i>
1995	2,639	2,642	100.1	2,705	102.5
1994	2,578	2,576	99.9	2,704	104.9
1993	2,477	2,445	98.7	2,459	99.3
1992	2,226	2,229	100.1	2,220	99.7
1991	2,111	2,122	100.5	2,124	100.6
1990	2,151	2,184	101.5	2,224	103.4
1989	2,133	2,158	101.2	2,147	100.7
1988	1,869	1,861	99.6	1,888	101.0
1987	1,706	1,697	99.5	1,627	95.4
1986	1,525	1,501	98.4	1,540	101.0

^aAPI statistics include *PSA* statistics for crude oil imported for the Strategic Petroleum Reserve.

^bCensus statistics are adjusted to reflect the geographic coverage and reporting period of the *PSA*.

Sources: *PSA*: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, 1986 through 1995, Table 2. API: American Petroleum Institute, *Monthly Statistical Report*. Census: Bureau of the Census, FT-246, *Annual U.S. Imports for Consumption and General Imports*, 1986 through 1995.

The Bureau of the Census obtains data on crude oil imports from the U.S. Customs Service. (See “Information on Data Source Differences and Adjustments.”) In order to import crude oil or petroleum products into the United States, either U.S. Customs Form CF-7501, “Entry Summary,” or U.S. Customs Form CF-7505, “Warehouse Withdrawal for Consumption,” must be filed. Those forms are processed, tabulated, and published in report FT-246, *Annual U.S. Imports for Consumption and General Imports*. Data on imports into Puerto Rico and other U.S. possessions are excluded from Census data. The Census data are adjusted for comparison purposes because their geographic coverage differs from that for the PSA data. In 1995, the adjusted Census data were 2.5 percent higher than the PSA annual volumes. The difference represents a 2.4 percent decrease over 1994 data, although the reason for the decrease is not readily apparent. Additional research will involve examining the differences in geographic coverage and their impact on the PSA/Census relationship.

Product Supplied

Product supplied, as reported in the PSA, is used to measure the volume of petroleum products available for domestic consumption. Those data are generated for each petroleum product by adding field production, refinery production, and imports minus (-) stock change, refinery inputs, and exports. Product supplied measures the disappearance of products from primary sources, i.e. from refineries, natural gas processing plants, blending plants, pipelines, and bulk terminals.

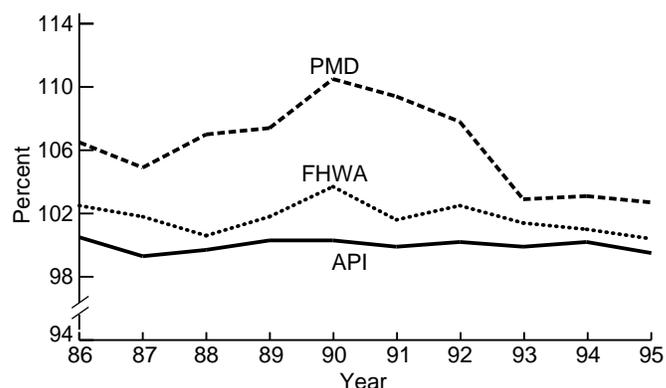
Motor Gasoline Supplied

PSA statistics on motor gasoline supplied are compared with data from the EIA’s Petroleum Marketing Division (PMD), the American Petroleum Institute (API), and the Federal Highway Administration (FHWA) (Table FE3/Figure FE3). PMD Form EIA-782C, “Monthly Report of Prime Supplier Sales of Petroleum

Products Sold for Local Consumption,” is used to monitor prime suppliers’ sales to local distributors, local retailers, or end users. The respondent universe consists of refiners and gas plant operators, importers, and resellers or retailers. Approximately 237 firms made up the EIA-782C survey frame. In 1995, the PMD volume of motor gasoline was 2.7 percent above the PSA volume. This share of PSA represents a 0.4 percent decrease from the 1994. Downstream blending is one major reason that PMD volumes for motor gasoline are higher than PSA volumes. Blending of fuel ethanol and methyl tertiary butyl ether with unfinished gasoline often occurs downstream from refineries and may have been counted in the EIA-782C data, but omitted from the PSA data until 1993. Prior to 1993, double counting on the EIA-782C survey may have also contributed. Since then, improved operating procedures have sharply reduced this problem.

API statistics on motor gasoline delivered from primary storage are published in their *Monthly Statistical Report*. The API statistics are similar in concept to EIA’s *product supplied*. The

Figure FE3. A Comparison of Motor Gas Supplied, 1986-1995 (As a Percent of PSA)



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table FE3.

Table FE3. A Comparison of Data Series for Motor Gasoline Supplied for Domestic Use, 1986-1995

Year	PSA		PMD		API		FHWA	
	Million Barrels	Million Barrels	Percent of PSA	Million Barrels	Percent of PSA	Million Barrels	Percent of PSA	
1995	2,843	2,919	102.7	2,829	99.5	2,854	100.4	
1994	2,774	2,861	103.1	2,780	100.2	2,801	101.0	
1993	2,729	2,807	102.9	2,725	99.9	2,768	101.4	
1992	2,660	2,867	107.8	2,666	100.2	2,726	102.5	
1991	2,623	2,870	109.4	2,621	99.9	2,665	101.6	
1990	2,641	2,919	110.5	2,650	100.3	2,739	103.7	
1989	2,675	2,873	107.4	2,683	100.3	2,722	101.8	
1988	2,685	2,874	107.0	2,678	99.7	2,702	100.6	
1987	2,630	2,760	104.9	2,611	99.3	2,677	101.8	
1986	2,567	2,733	106.5	2,580	100.5	2,630	102.5	

Sources: PSA: Energy Information Administration (EIA), *Petroleum Supply Annual*, DOE/EIA-0340, 1986 through 1995, Table 2. PMD: Form EIA-782C, “Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption,” *Petroleum Marketing Annual*, DOE/EIA-0487, 1986 through 1988, Table 45; 1989 through 1993, Table 47; 1994 through 1995, Table 48. API: American Petroleum Institute, *Monthly Statistical Report*, 1986 through 1995. FHWA: Federal Highway Administration, *Highway Statistics*, 1986 through 1995, Tables MF-24 and MF-21.

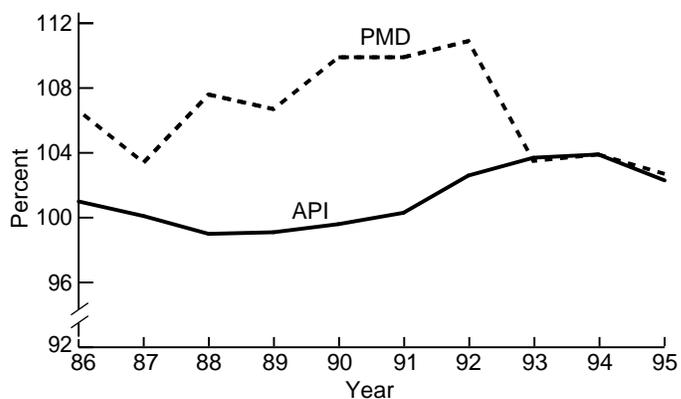
data represent *production plus imports* for motor gasoline (adjusted for net stock change) minus *exports*. Those statistics are based on an historical analysis of the industry and information provided on a voluntary basis by importers of record (licensed importers) and by operators of refineries, bulk terminals, and pipelines. For the 10-year period 1986 through 1995, API and *PSA* statistics averaged within 0.32 percent of each other.

Data from the FHWA on total gasoline usage are based on volumes of gasoline reported to State motor fuel tax agencies by wholesale distributors. The FHWA's publication "*Highway Statistics*" includes data on both highway and non-highway use of gasoline. To adjust for comparison purposes, aviation gasoline use is subtracted out of the FHWA data. FHWA statistics are consistently higher than the *PSA* statistics. In 1994, the difference between FHWA and *PSA* statistics was 1.0 percent; however, in 1995, the difference narrowed to 0.4 percent. For the 10-year period 1986 through 1995, the average absolute difference between *PSA* and FHWA data was 1.73 percent. Because the FHWA statistics are a wholesale measure, their data may more closely reflect the actual motor gasoline usage than does the EIA product supplied series.

Distillate Fuel Oil Supplied

Statistics for distillate fuel oil (including kerosene) supplied from the *PSA* are compared with EIA's PMD data on distillate fuel oil sales collected from survey Form EIA-782C "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption" and with API data on distillate fuel oil delivered from primary storage (Table FE4/Figure FE4). Data on kerosene were discontinued in API's *Monthly Statistical Report*. To adjust for this, kerosene volumes from the *PSA* were added to API data for comparison purposes. API statistics on distillate fuel oil supplied generally have been comparable to *PSA* statistics, having averaged within 1.6 percent of each other for the last ten years.

Figure FE4. A Comparison of Distillate Supplied, 1986-1995 (As a Percent of PSA)



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table FE4.

The PMD statistics for prime suppliers' sales of distillate fuel oil and kerosene sold into States for consumption have been higher than the *PSA* statistics. In 1995, there was a 2.7 percent difference between PMD and *PSA* data. This represented a 1.2 percent decrease over 1994. For the last 10 years, the average absolute difference between *PSA* and PMD data was 6.5 percent. Double reporting on the EIA-782C survey is one reason that PMD sales are higher than *PSA* product supplied for distillate fuel oil prior to 1993. Another reason is the fungible nature of petroleum products. For example, if a product produced according to kerosene-type jet fuel specifications is sold as No. 1 distillate or kerosene, then the EIA-782C total distillate volumes would be greater than those of the *PSA*.

Residual Fuel Oil Supplied

Product supplied data from the *PSA* for residual fuel oil are compared with PMD data on prime suppliers' sales of residual fuel

Table FE4. A Comparison of Data Series for Distillate Fuel Oil (including Kerosene) Supplied, 1986-1995

Year	PSA		PMD		API ^a	
	Million Barrels	Million Barrels	Million Barrels	Percent of PSA	Million Barrels	Percent of PSA
1995	1,170	1,202	1,202	102.7	1,197	102.3
1994	1,154	1,199	1,199	103.9	1,199	103.9
1993	1,128	1,167	1,167	103.5	1,170	103.7
1992	1,090	1,209	1,209	110.9	1,118	102.6
1991	1,083	1,190	1,190	109.9	1,086	100.3
1990	1,118	1,229	1,229	109.9	1,114	99.6
1989	1,183	1,262	1,262	106.7	1,172	99.1
1988	1,178	1,268	1,268	107.6	1,166	99.0
1987	1,121	1,159	1,159	103.4	1,122	100.1
1986	1,100	1,173	1,173	106.6	1,111	101.0

^aAPI statistics include *PSA* statistics for kerosene for 1986 through 1995.

Sources: *PSA*: Energy Information Administration (EIA), *Petroleum Supply Annual*, DOE/EIA-0340, 1986 through 1995, Table 2. PMD: Form EIA-782C, "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption," *Petroleum Marketing Annual*, DOE/EIA-0487, 1986 through 1988, Table 47; 1989 through 1993, Table 49; 1994 through 1995, Table 50. API: American Petroleum Institute, *Monthly Statistical Report*, 1986 through 1995.

Table FE5. A Comparison of Data Series for Residual Fuel Oil Supplied for Domestic Use, 1986-1995

Year	PSA	PMD		API	
	Million Barrels	Million Barrels	Percent of PSA	Million Barrels	Percent of PSA
1995	311	229	73.6	308	99.4
1994	373	304	81.5	354	94.9
1993	394	323	82.0	363	92.1
1992	401	387	96.5	380	94.8
1991	423	425	100.5	434	102.6
1990	449	445	99.1	452	100.7
1989	500	477	95.4	491	98.2
1988	504	475	94.2	490	97.2
1987	462	422	91.3	467	101.1
1986	518	444	85.7	508	98.1

Sources: PSA: Energy Information Administration (EIA), *Petroleum Supply Annual*, DOE/EIA-0340, 1986 through 1995, Table 2. PMD: Form EIA-782C, "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption," *Petroleum Marketing Annual*, DOE/EIA-0487, 1986 through 1988, Table 46; 1989 through 1993, Table 48; 1994 through 1995, Table 49. API: American Petroleum Institute, *Monthly Statistical Report*, 1986 through 1995.

oil and API data on residual fuel oil delivered (Table FE5/Figure FE5). The PMD statistics for residual fuel oil are historically lower than the PSA statistics. A primary reason for the difference between PMD and PSA data may be because the PMD Form EIA-782C is a sales survey, with volumes based on transfer of

ownership (equity basis), while PSA Form EIA-810 is a supply survey, with volumes reported on the basis of the amount of petroleum in custody, regardless of ownership (custody basis). Residual fuel oil imported by electric utilities for their own use may not be reported on Form EIA-782C because sellers who make

Information on Data Source Differences and Adjustments

American Petroleum Institute: In this article, API's annual statistics are totals of initial monthly values. The initial monthly estimate published by API is derived from API sources. However, later API publications reflect revisions which use EIA data. PSA statistics on crude oil include imports for the Strategic Petroleum Reserve (SPR) while API statistics do not. Therefore, the following figures for SPR were added to the API figures: none in 1995, 4.5 million barrels in 1994, 5.4 million barrels in 1993, 3.6 million barrels in 1992, none in 1991, 9.8 million barrels in 1990, 20.3 million barrels in 1989, 18.8 million barrels in 1988, 26.5 million barrels in 1987, and 17.6 million barrels in 1986. The API publishes monthly estimates of motor gasoline, distillate fuel oil, and residual fuel oil delivered from primary storage in thousand barrels per day. In 1982, the API discontinued publishing kerosene data. PSA values for kerosene supplied (20 million barrels in 1995, 18 million barrels in 1994, 18 million barrels in 1993, 15 million barrels in 1992, 17 million barrels in 1991, 16 million barrels in 1990, 31 million barrels in 1989, 35 million barrels in 1988, 35 million barrels in 1987, and 36 million barrels in 1986) were added to API distillate totals.

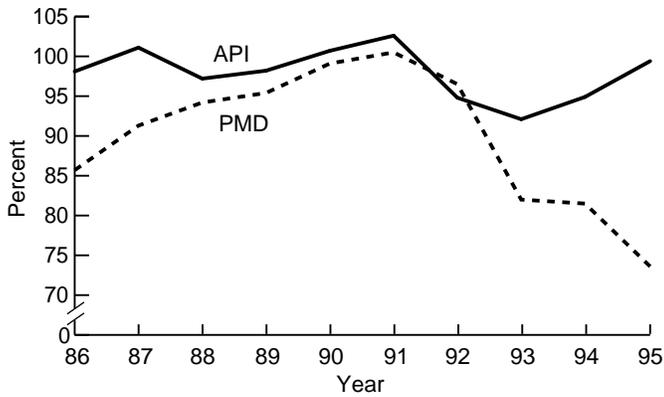
Oil and Gas Journal: The *Oil and Gas Journal* publishes weekly averages of crude oil production in thousand barrels per day. Those averages are used to produce monthly totals as follows: the average for each week is used as a daily production estimate for each of the days the week covers. For each month, the production estimates for days covered by the month are summed. The totals are converted from thousand to million barrels for this article.

Federal Highway Administration: Data on both highway and non-highway use of gasoline, excluding aviation gasoline, are from the *Highway Statistics* publication and are based on volumes of total gasoline usage.

U.S. Bureau of the Census: Since 1986, Census data have been available through the FT-246, *Annual U.S. Imports for Consumption and General Imports*. Imports into Puerto Rico and the Virgin Islands are included in the Census data but not in the PSA data. The Census excludes data on imports into the United States from Puerto Rico and the Virgin Islands.

Petroleum Marketing Division: EIA's Petroleum Marketing Division data are from the Form EIA-782C, "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption." The Form EIA-782C replaced the Form EIA-25, "Prime Suppliers' Monthly Report" in 1983. The prime supplier produces imports or transports product across State boundaries and local marketing areas and sells the product to local distributors, local retailers, or end users.

Figure FE5. A Comparison of Residual Supplied, 1986-1995 (As a Percent of PSA)



Source: Energy Information Administration, *Petroleum Supply Monthly*, Table FE5.

such sales to electric utilities are not included in the survey frame. The difference between *PSA* and *PMD* statistics had steadily declined from 14.3 percent in 1986 until 1991 when *PMD* statistics were only 0.5 percent greater than *PSA* statistics. However, in 1993, there was an 18.0 percent difference from *PSA* statistics, which was followed by 18.5 and 26.4 percent differences in 1994

and 1995, respectively. The reason for this continued decline has not been determined. For the 10-year period (1986 through 1995), the average absolute difference between *PSA* and *PMD* data was 10.1 percent. The *API* volumes of residual fuel oil supplied were close to *PSA* volumes over the same 10-year period, while the average absolute difference between *PSA* and *API* data is 3.0 percent.

Conclusion

For comparison purposes, it must be recognized that differences probably will always exist given the various data collection processes employed by the respective organizations. The makeup of the sampling frames, the inclusion or exclusion of data from related survey forms, and how survey data are compiled or aggregated, are just three of the many reasons why the data submitted by a company may differ from the survey data of other organizations. Although *PSA* statistics were in relative proximity to other sources of petroleum data, the primary focus is to keep the data differences in perspective and within as narrow a range as possible. Future efforts will involve analysis of the differences as they relate to relevant issues, problems, or situations and how the data collection process may impact or be impacted by them.

The Intricate Puzzle of Oil and Gas “Reserves Growth”

by David F. Morehouse

Developing the Nation's discovered oil and gas resources for production is a complex process that is often characterized by initial uncertainty as regards the ultimate size or productive potential of the involved reservoirs and fields. Because the geological and hydrological characteristics of the subsurface cannot — for the most part — be directly accessed, indirect techniques and procedures must be used to develop estimates of the size and recoverability of these discovered resources. While new or improved technologies that allow more accurate assessment of the involved parameters have, over time, lessened some of the risks associated with the in-field exploration and development process, significant uncertainties nevertheless remain. Estimates of proved reserves and ultimate recoveries during the early years of a field's or a reservoir's productive life span are, as a result, generally conservative.¹

Estimates of the volumes that will ultimately be produced from reservoirs and fields tend on average to increase substantially over time. Rather than the discovery of new fields, it is this phenomenon — the increase of estimates of ultimate recovery from a field or group of fields over time due to the extension of proved reservoir area(s), in-field discovery of one or more new reservoirs, and several other factors — that accounts for the majority of both current domestically-sourced oil and gas supplies and current additions to domestic proved oil and gas reserves. This phenomenon is often called “reserves growth,” a colloquial label which is not accurately descriptive of what is actually happening.² This article therefore uses the older, more accurate label “ultimate recovery appreciation” (URA) to refer to the phenomenon.

Despite its recognized importance to current domestic oil and gas supply, and its even greater apparent importance to future domestic oil and gas supply, the URA phenomenon is not well understood, and therefore cannot be reliably forecast. Knowledge of how the domestic “inventory” of oil and gas is likely to change over time is a critical input to future energy-related decisions that will be made by individuals, industries, and government policy makers. For that reason the United States Geological Survey (USGS) considers analysis of URA “arguably the most significant research problem in the field of hydrocarbon resources assessment.”³

This article begins with a background discussion of the methods used to estimate proved oil and gas reserves and ultimate recovery, which is followed by a discussion of the factors that affect the ultimate recovery estimates of a field or reservoir. Efforts starting in 1960 to analyze and project ultimate resource appreciation are then briefly discussed, as are future directions for research regarding the analysis and projection of ultimate recovery appreciation. The terms “estimated ultimate recovery” and “ultimate recovery appreciation” are used throughout the article. They are defined as follows:

- “Estimated ultimate recovery” (EUR) is the sum of the estimate of proved reserves at a specific time and cumulative production up to that time.
- “Ultimate recovery appreciation” (URA) is the generally observed increase of EUR over time.

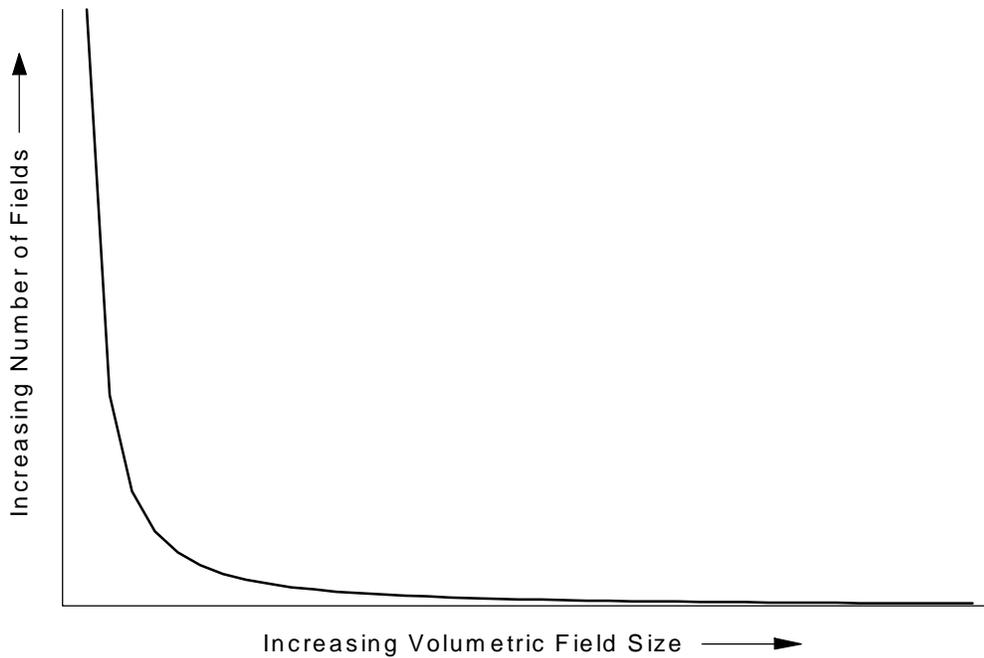
Background

A basic rule of thumb in the upstream (or producing) sector of the oil and gas industry is that the best place to find new crude oil or natural gas is near where it has already been found. That is precisely what the industry does most often, for a sound business reason: the financial risk of doing so is far lower than that associated with drilling a rank wildcat hole in a prospective, but previously unproductive, area. On the other hand, there is a definite tradeoff of reward for risk. The returns on drilling investment become ever leaner as more wells are drilled in a particular area because the natural distribution of oil and gas field volumes tends to be approximately log-geometric (or J-shaped as in Figure FE1). There are only a few large fields, whereas there are a great many small ones.⁴

Historically, the largest fields within a given prospective area (and, implicitly, the largest reservoirs within them) are discovered early-on, if for no other reason than that they are most often areally broader targets which even randomly placed boreholes would penetrate early-on. The “biggest found first” phenomenon is clearly evidenced in the oil and gas record of the United States, which is by far the most thoroughly explored oil and gas productive area on Earth. Subsequent to success of the first modern oil well drilled in 1859 in Pennsylvania, randomly sited drilling, and then drilling increasingly guided by the new and rapidly evolving scientific disciplines of petroleum geology and geophysics, quickly resulted in large domestic discoveries.

The 1930s was, in hindsight, the peak decade of U.S. crude oil discoveries, while the 1950s was the peak discovery decade for natural gas. The peak discovery year for crude oil was 1967, due entirely to discovery of the Prudhoe Bay Field on the North Slope of Alaska. Had the Prudhoe Bay Field not been discovered, the peak year of crude oil discoveries would have been 1930 when the East Texas Field was found. The peak discovery year for natural gas was 1922 when the Hugoton Field was discovered in southwestern Kansas and the adjacent portions of Oklahoma and Texas.⁵ These peak decades resulted in the discovery of fields that jointly account for about 20 percent and 14 percent of the *present* estimates of

Figure FE1. Approximately Log-Geometric Field Size Distribution



Source: Energy Information Administration, Office of Oil and Gas.

ultimate recovery for domestic crude oil and natural gas, respectively.⁶

All domestic oil and gas drilling took place onshore in the lower 48 States prior to the 1930s. As applicable technologies originated and advanced and individuals or firms became willing to shoulder a greater risk in search of a greater reward, exploration began to occur in prospective areas that were more environmentally harsh and/or more technologically difficult and, therefore, more expensive to operate in. The sequence was the shallow California offshore beginning in 1932; the shallow Gulf of Mexico in 1937; the deeper outer continental shelf waters of the Gulf of Mexico in 1947; the somewhat deeper offshore California shelf waters in the 1960s; the North Slope of Alaska in the mid-1960s; and finally the deep (over 1,000 feet) Gulf of Mexico in 1976. In each of these “virgin” areas, the early explorers found large new oil or gas fields. Yet the number of wells drilled in them in any given year pales into insignificance in relation to the number of wells drilled in far more thoroughly explored, preponderantly onshore areas in the lower 48 States.

Oil and gas wells are drilled for one of four purposes, the first three of which are considered exploratory and the last, developmental:⁷

1. *To find a new field.* These are called new field tests or wildcat wells.
2. *To find a new reservoir in a previously discovered field.* Such wells are variously called new reservoir tests, new pool wildcats, deeper pool tests or shallower pool tests.

3. *To extend the proved area of a previously discovered reservoir.* These wells are called extension tests or outpost tests.
4. *To exploit a previously discovered and delineated reservoir.* These are called development wells.

The drilling activities associated with these various purposes differ from each other with respect to both magnitude and risk.⁸

In the description of the third exploratory well type appears the word with which much of the remainder of this article is concerned: “proved.” Proved reserves of crude oil or natural gas are the *estimated* quantities which, on a particular date, geological and engineering data demonstrate with *reasonable certainty* to be recoverable in the future from known reservoirs *under existing economic and operating conditions*. As noted earlier, estimates of proved reserves tend to be conservative. It is useful to look at some of the reasons why this is the case.

“Reasonable certainty” is a crucial element in the definition of proved reserves because oil and gas reservoirs are not subject to direct visualization or to unlimited and precise measurement of their physical characteristics. The raw data used in estimating proved reserves include engineering and geological data about the reservoir rock and its fluid contents obtained via both direct and indirect measurements, such as:

- Data on the reservoir rock’s porosity (the voids or pores that exist between the mineral grains)

- Data on the reservoir rock's permeability (its capacity to conduct fluid flow through the pores) as determined from core analysis or various types of geophysical measurements taken in one or more wells
- Data on the production of fluids from a well or several wells
- Geologic maps of the areal extent, thickness, and continuity of the reservoir rock inferred from well logs and other geophysical and geological data
- Reservoir pressure and temperature data.

When a reservoir is discovered, only data from or closely related to the discovery well are available to the reserves estimator. The initially proved area of the reservoir is frequently estimated on the basis of experience within the same or a similar region. Where there is continuity of the productive formation over a wide geographic area, a relatively large proved area may be initially assigned. Conversely, a relatively small proved area may be assigned when the producing formation is of limited continuity owing to either structural or lithologic factors. When reliable geophysical and geologic data are available, a reasonable estimate of the areal extent of the reservoir can be made on the basis of a relatively small number of extension tests.⁹

More and more data become available as delineation of the reservoir's boundaries via the drilling of extension tests occurs, as development wells are drilled into the reservoir's proved area, and as flow tests are made or actual production commences. Depending on the kind and amount of available data, the estimator will select one of several methods of making a proved reserves estimate. Prior to actual production, it is common to apply either the nominal or volumetric methods. The nominal method bases the reserves estimate on a rule of thumb or an analogy to another reservoir or reservoirs believed to be similar. The more accurate volumetric method applies a rule-of-thumb or analogy-based recovery factor to an in-place volume of oil or gas estimated from the geologic and engineering data.

After production begins, estimates based on production performance data can be made using methods that are generally more accurate than those based strictly on inference from geological and engineering data. They include the production decline method and the reservoir simulation method, which are applicable to both oil and gas reservoirs; the material balance method, which is applicable to oil reservoirs; and the pressure decline method, which is applicable to gas reservoirs. Which of these is selected will depend on the data available and the reservoir's type and production mechanism.

In any case, many judgments are required of the estimator. The determination of rock and fluid properties is to some extent uncertain depending upon the measurement methods employed. The construction of the geologic maps and cross sections and the subsequent determination of the physical size of the reservoir are the major judgmental steps associated with the volumetric method. Estimates made using the material balance, reservoir simulation, and pressure decline methods rely on the estimator's judgments regarding the type of reservoir drive mechanism and the appropriate

abandonment conditions. Estimates based on the production decline method are subject to judgment in constructing the trend line, which embodies the estimator's assumptions regarding reservoir performance up to abandonment.

The phrase "under existing economic and operating conditions" is yet another important element of the proved reserves definition. Because of the speculative nature of predicting prices and costs many years into the future, proved reserves are estimated on the basis of the prices, costs, and operating practices in effect on the date of the estimate. However, the wellhead price of crude oil or natural gas has an effect on a reservoir's economic limit, i.e., on the production rate required to meet operating costs. For gas reservoirs, price affects the abandonment pressure used in calculating proved reserves. Should the price of crude oil rise far enough to trigger installation of a secondary or tertiary recovery project in a crude oil reservoir, a significant increase of its proved reserves could result. For either type of reservoir, infill drilling justified by higher prices may in some instances result in a higher recovery factor and a concomitant increase of proved reserves. One thing that is certain is that economic and operating conditions will change post-discovery and so, in concert, will the proved reserves estimates.

Without doubt, the most important word in the proved reserves definition is "estimate." Until such time as a reservoir is produced to permanent abandonment, its ultimate recovery volume will be uncertain no matter how much data have been amassed or how well they have been interpreted. Proved reserves can only be estimated, never measured. The proved reserves definitions are intended to result in reliable estimates of the "on-the-shelf inventory" portion of total oil and gas reserves from which production can confidently be expected in the future. One indication that this is indeed the case for the vast majority of U.S. proved reserves estimates is EIA's experience in auditing the estimates submitted to EIA since 1977 by domestic oil and gas well operators on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." The audits have found that most of the proved reserves estimates submitted to EIA are more than 90 percent certain to be recovered in the future and, in many cases, are more than 95 percent certain to be recovered.¹⁰

The Importance of Ultimate Recovery Appreciation

The historical record regarding ultimate recovery appreciation shows that the estimate of ultimate recovery increases over time for most reservoirs, the vast majority of fields, all regions, all countries, and the world. First publicly noted in 1960, it is a major source of both current and expected future oil and gas supplies.¹¹ In fact, achievement of URA is the principal operational objective of most oil and gas drilling, as well as most upstream industry research and development activity. EIA's proved reserves data indicate that URA is still occurring at low rates in some domestic fields that were found more than a century ago. Most significantly, from 1977 through 1995 approximately 89 percent of the additions to U.S. proved reserves of crude oil and 74 percent of the additions to U.S. proved reserves

of dry natural gas were due to URA rather than to the discovery of new oil or gas fields.

Figures FE2 and FE3 provide a comparison of the aforementioned sources of additions to U.S. proved reserves of crude oil and natural gas, expressed as the ratio of those additions from new field discoveries to those due to URA.¹² The towering 1970 peak in both figures reflects booking of proved reserves for the Prudhoe Bay Field.¹³ In no other year does the ratio exceed 0.21 for crude oil or 0.89 for natural gas; excluding the 1970 Prudhoe Bay anomaly, the average ratios over the respective periods are 0.08 for crude oil and 0.17 for natural gas. Looked at another way, 93 percent of crude oil reserves additions and 86 percent of natural gas reserves additions during the respective periods were due to URA rather than to the discovery of new fields, excluding Prudhoe Bay.

As stated at the outset, estimated ultimate recovery (EUR) on average appreciates over time. This is well-illustrated by a comparison of the 1977 and 1993 EURs of the 200 U.S. crude oil fields that had the largest 1977 proved reserves (Figure FE4). While EUR had decreased for 23 percent of them by 1993, it had increased for the other 77 percent, and many times over for 32 percent of them. These data also reflect and confirm the essential conservatism of both the definition of proved reserves and the manner in which it is applied in the United States.

The three principal estimators of U.S. oil and gas resources, the Department of the Interior's United States Geological Survey (USGS) and Minerals Management Service (MMS), and the natural gas industry-based Potential Gas Committee (PGC), include estimates of URA in their overall resource estimates. The latest USGS national assessment, based on year-end 1993 data and released in 1995, forecast URAs of 60 billion barrels of crude oil, 13.4 billion barrels of natural gas liquids, and 322 trillion cubic feet of natural gas for the onshore United States and its adjoining State jurisdiction offshore areas in the next 80 years.¹⁴ Of the mean total USGS estimate of resources beyond proved reserves, these quantities represent 65 percent of crude oil resources, 59 percent of natural gas liquids resources, and 34 percent of natural gas resources.

The PGC uses the term "probable resources" for its estimate of URA. The latest mean PGC estimate of probable gas resources, based on data at year-end 1996, was 216.2 trillion cubic feet for the United States inclusive of the Federal jurisdiction Outer Continental Shelf. This represents 20.2 percent of the mean total PGC gas resource estimate and is about 61 percent of the combined USGS and MMS estimates of gas URA.^{15 16}

The USGS, MMS, and PGC resource estimates for natural gas are developed using different data and different methods. The fact that the two principal estimates of gas URA differ by more than 100 trillion cubic feet is of less significance than the fact that in both instances URA represents a major portion of the remaining (as-yet untapped) domestic natural gas resource base.

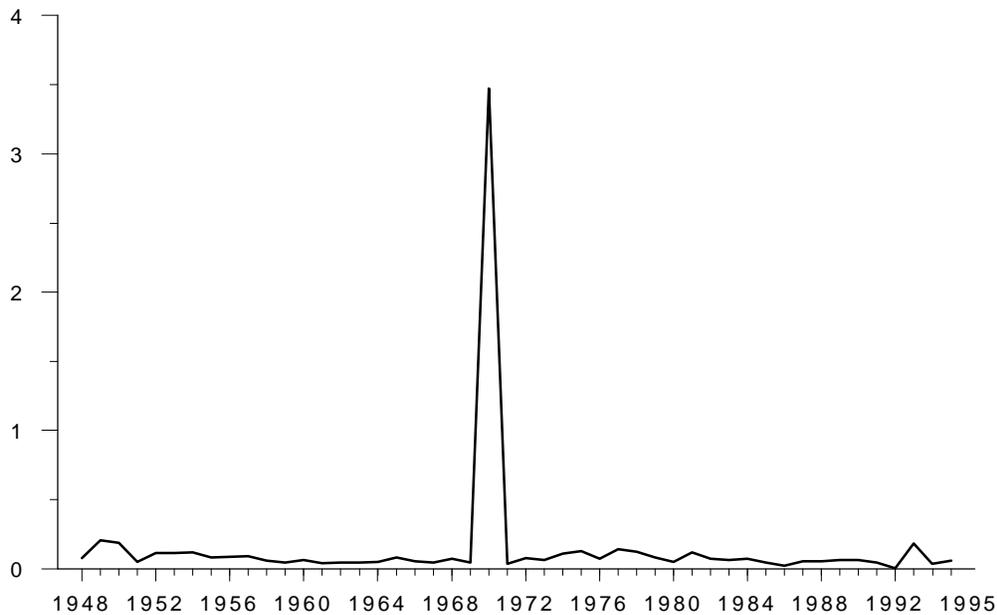
What Is Known About the URA Process

The URA phenomenon is known to be principally the result of three factors. The primary factor is lack of adequate geotechnical information at the time of field discovery. Second are "systemic factors" embodying the net effect of the industry's post-discovery field delineation, field development, and production monitoring processes, as modulated by its reserves recognition practices. Third, there are factors, such as the occurrence of technological progress, that probably have differential effects on the process from field to field depending principally on field size, on location relative to the operating environment, markets, and transportation facilities, and on specific reservoir characteristics within a field.

Put formally, it is well established that only a handful of events can cause URA to occur in a field:

1. The proved area of a reservoir in the field is increased by successful extension test drilling (or perhaps, in some cases, what is really just development drilling done by a conservative booker). These positive changes to proved reserves are recorded as *extensions* in the annual EIA reserves survey.
2. A new, economically productive reservoir is discovered in the field. These positive changes are recorded as such in the annual EIA reserves survey.
3. A production performance-based re-evaluation of the field's proved reserves is undertaken that results in a larger proved reserves estimate. These changes are recorded as *positive revisions* in the annual EIA reserves survey.¹⁷
4. The field's proved reserves estimate is increased in response to the implementation or planned implementation of some recovery factor-boosting engineering change, ranging from a favorable well recompletion to the adoption of tertiary recovery methods. These changes are also recorded as *positive revisions* in the annual EIA reserves survey.
5. The field's proved reserves estimate is increased due to one or more successful new completions within existing wells that tap a by-passed (behind-the-pipe) zone not previously booked as proved reserves. These changes are also recorded as *positive revisions* in the annual EIA reserves survey.
6. A favorable long-term change of wellhead or lease border product prices relative to production costs results in a longer-than-previously-anticipated field economic lifetime, reflected as an increase of proved reserves. These changes are also recorded as *positive revisions* in the annual EIA reserves survey.

Figure FE2. Ratio of New Field Discoveries to Ultimate Recovery Appreciation for Crude Oil, 1948-1995



Note: URA equals the sum of estimated net revisions, extensions, and new reservoir discoveries in old fields.

Sources: **Pre-1970:** American Petroleum Institute, American Gas Association, Canadian Petroleum Association, *Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada as of December 31, 1979* (Washington, DC, June 1980), Table II, p. 24, Table VII-1, p. 155, and Table VII-2, p. 116. **1970-1980 arithmetically linked as shown in:** Energy Information Administration (EIA), *Two Approaches to the Linkage of U.S. Oil and Gas Reserves Estimates*, DOE/EIA-0452 (Washington, DC, July 1984). **Post-1980:** EIA, *U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves*, 1995 Annual Report, DOE/EIA-0216(95) (Washington, DC, November 1996), Tables D1 and D3.

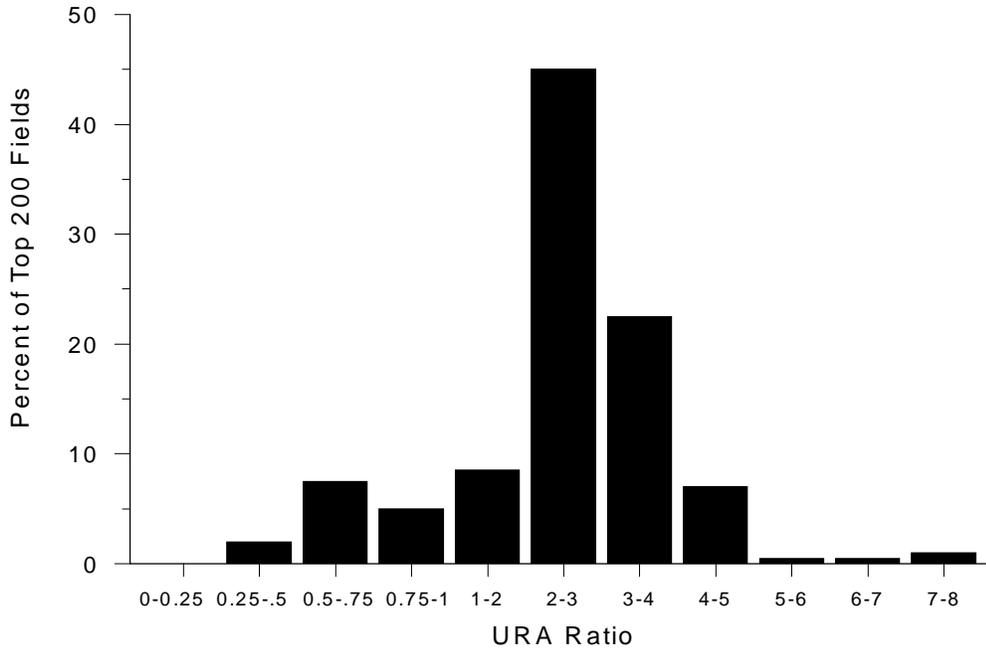
Figure FE3. Ratio of New Field Discoveries to Ultimate Recovery Appreciation for Natural Gas, 1966-1995



Note: URA equals the sum of estimated net revisions, extensions, and new reservoir discoveries in old fields.

Sources: **Pre-1970:** American Petroleum Institute, American Gas Association, Canadian Petroleum Association, *Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada as of December 31, 1979* (Washington, DC, June 1980), Table II, p. 24, Table VII-1, p. 155, and Table VII-2, p. 116. **1970-1980 arithmetically linked as shown in:** Energy Information Administration (EIA), *Two Approaches to the Linkage of U.S. Oil and Gas Reserves Estimates*, DOE/EIA-0452 (Washington, DC, July 1984). **Post-1980:** EIA, *U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves*, 1995 Annual Report, DOE/EIA-0216(95) (Washington, DC, November 1996), Tables D1 and D3.

Figure FE4. 1993 URA Ratios of the 200 U.S. Fields That Had the Largest 1977 Proved Liquid Hydrocarbon Reserves



Note: Proved liquid reserves = proved crude oil reserves + proved lease condensate reserves. URA Ratio = (1978 through 1993 liquids production plus 1993 proved liquid reserves)/1977 proved liquid reserves.

Source: Energy Information Administration, Oil and Gas Integrated Field File.

Several observations can be made about these causes of URA. Significant periods of elapsed time, ranging from months to a decade, are associated with the occurrence of all of them except cause 6. New investment is a prerequisite for the occurrence of all except causes 3 and 6. Only causes 1 and 2 (and sometimes 4 and 5) are related to drilling activity. Put conversely, at least half of the factors that can cause URA are unrelated to drilling activity.

- *The local quasi-physical operating environment.* This includes natural environment-related matters (e.g., deep water, Arctic conditions, etc.), the availability of necessary equipment and services, field location relative to the extant operational support and product transportation infrastructures, delays resulting from regulatory oversight and compliance, and so forth.

There are also a number of factors that can modulate the rate at which URA occurs, individually or in concert. These include:

- *The prevailing economic environment.* All else equal, and given adequate demand, the advent of a higher price/cost ratio should accelerate URA, and the converse.
- *Physical complexity of the field.* The more complex a field is either structurally or sedimentologically, the more effort and elapsed time will be needed to fully “prove it up.”
- *Technological advancement.* The advent of a new technology that increases the recovery factor, reduces recovery cost, or reduces risk should accelerate URA. The difficult analytical problem here is determining the rate and the degree of “market penetration,” particularly when the indicated “market” for a particular technology is rather local or regional in nature.
- *The risk preferences of operating firms.* These are in part reflected by their booking practices.¹⁸

While the causes of URA are well known, analysis of their impact on the actual rate of appreciation and of their interactions has been hampered by a lack of sufficiently detailed serial EUR data.

Attempts to Analyze and Project URA

The First Analysis

J.R. Arrington, a Canadian petroleum engineer, was the first to address the URA phenomenon publicly. He noted that — with proper data — statistical estimates of ultimate recovery for a reservoir and, by aggregation, for a field, could be constructed by analogy to the known past appreciation behavior of similar reservoirs. The required data were annual reservoir-by-reservoir series that allocated each year's net change to the proved reserves estimate back to the year of reservoir discovery. Using his company's proprietary reservoir data, Arrington calculated the percentage change in proved reserves experienced in each successive post-discovery year. The annual

changes were typically found to decrease as time passed, reflecting in cumulative form an asymptotic approach to the ultimately recoverable oil or gas volume(s). Arrington did not provide a mathematical equation descriptive of the process, but did provide a tabular example of how to calculate the annual appreciation ratios which reduces to:

$$RR_{(t,t+1)} = \frac{EUR_{(n,n+t+1)}}{EUR_{(n,n+t)}}$$

where,

RR is the revision ratio (appreciation factor) between successive post-discovery years

EUR is estimated ultimate recovery

t is the number of years after discovery (the revision number)

n is the discovery year to which the EUR is credited

Arrington used a visually smoothed curve through 3-year weighted averages of these ratios to approximate the path of appreciation over time.

Statistical Analyses

Two decades later followed a series of 12 publicly available studies involving the statistical estimation of URA for either the entire United States or the lower 48 States.¹⁹ These studies were most often conducted with the intent of quantifying the phenomenon in order to be able to project it within the context of some larger study of overall future oil and gas resources. They were not the principal focus, and none of them fully took into consideration the mechanics of the underlying process. Instead, each study empirically fitted a different mathematical equation to part or all of the available serial EUR data. While differently formulated, all of the equations used had in common the desired general form: rapid increase of the expected URA early-on, whether expressed as a function of time or drilling activity level or both, followed by successively lower rates of increase, such that the estimated URA asymptotically approached an upper bound.

One of the difficulties facing many of the researchers was the lack of serial field- and/or reservoir-specific EUR data. These data were unavailable outside of oil and gas well operators' proprietary files until 1990. Before then, the publicly available serial EUR data consisted of State- or State subdivision-wide estimates of the ultimate recovery of crude oil by year of discovery ranging from a pre-1920 group category through 1979 as prepared by the American Petroleum Institute (API) in the years 1966 through 1979, and like estimates for non-associated, associated-dissolved, and total natural gas as prepared by the American Gas Association (AGA). The authors of the first nine post-Arrington URA studies had no option but to rely on these data.

Most of the studies found one or more serious faults with these data, among which were:

- Appreciation rates were highly erratic in the early years, which was deemed to reflect data series “start-up problems.”
- For some unknown reason, the appreciation rates for pre-1947 fields were six times larger than for post-1947 fields.
- The assignment of discoveries to the proper year was clearly arbitrary in some instances.
- The AGA’s associated-dissolved gas EUR series was physically unreasonable relative to the corresponding API crude oil EUR series.
- All of the remaining (i.e., “good”) data still exhibited a high variance, which required statistical smoothing to render it suitable for analytical use.

Because of these data limitations, any embedded relationships to causative factors such as geology performance were both coincidental and deeply “buried.”

The two most recent URA studies have instead relied primarily or solely, respectively, on the field-by-field EUR data series contained in EIA’s Oil and Gas Integrated Field File (OGIFF), which became available in 1990. OGIFF presently provides annual EUR data for fields covering more than 90 percent of the Nation’s proved reserves from 1977 through 1995. The OGIFF EUR data are derived from confidential Form EIA-23 survey data and public State and Federal production data obtained via Petroleum Information/Dwights LLC.²⁰

The first of these studies, performed by the National Petroleum Council for natural gas URA only, spliced the pre-1977 API/AGA EUR data series to the 1977 and subsequent EIA EUR series. The volumetric discontinuity between the two series was resolved by elevating the former to match the latter in 1977. This was also the first and only study of URA which fitted an empirical function to the EUR data that depended on both elapsed post-discovery time and a measure of drilling activity. The resulting forecast of URA was much higher than predicted in any of the previous studies.

The most recent study was performed by the USGS as a part of its 1996 National Assessment of U.S. oil and gas resources located onshore and in State-jurisdiction offshore waters. It relied solely on the EIA OGIFF EUR data and used a growth function dependent only on elapsed post-discovery time. The USGS investigators found it necessary to subdivide the EUR data into two classes: a “normally behaving” fields class which covered 86 percent of the oil and gas at year-end 1990; and an “outlier” field class which accounted for the rest. Included within the “outliers” were such fields as the heavy oil fields in California that had been returned to major production levels from near-moribund status by the introduction of tertiary recovery methods in the 1970s and 1980s, and early low-permeability gas field discoveries in the Appalachian Basin that were not fully developed until special pricing and tax incentives appeared in the same period.

The USGS's growth function performed reasonably well in reproducing the URA behavior of the normally behaving class of fields over the 1997 through 1990 period (oil projection 12.0 billion barrels versus 12.2 billion barrels actual; gas projection 83.5 trillion cubic feet versus 87.9 trillion cubic feet actual). Unfortunately, the same was not true for the outlier fields. Unlike the normally behaving fields, the URA paths of these fields showed no sign of approaching an upper bound. In absence of knowledge as to how to model their behavior, fairly conservative estimates were made for the URA of this category of fields. This treatment of the outlier fields clearly left something to be desired inasmuch as, while these fields do not hold the bulk of reserves, they account for the bulk of URA activity.

A problem common to all of the empirical statistical studies of URA is that given the:

- high variance of the serial EUR data,
- loose connection to causality provided by either elapsed time or a gross measure of drilling activity, and
- aggregation of disparate geologies that accompanies use of EUR data sets inclusive of large geographic areas,

one can "drive" any number of differently formulated but similarly shaped curves through the data with little objective assurance that the results are either significantly unique or even appropriate.²¹ At the same time, many of the outlier fields, particularly those with high appreciation rates, are not being well represented.

A graphic illustration of the very broad URA data dispersion that occurs when grouping fields across geologic types and geographic areas was provided by the National Petroleum Council (NPC) and is reproduced with minor modification in Figure FE5. The NPC plotted cumulative growth rates versus time since discovery for a geologically and geographically diverse group of 97 nonassociated gas fields that had discovery dates ranging from 1928 to 1988, along with the NPC's URA predictions (based on application of its URA model to the combined API/AGA and EIA OGIF data series) for 1922, 1950, and 1970 discoveries.²²

Nonstatistical Analyses

Aside from the empirical statistical URA studies, the natural gas industry-based Potential Gas Committee (PGC) has estimated the Nation's "probable resources" of natural gas (definitionally equivalent to its estimated URA) biennially since 1964, excepting 1974.²³ The PGC estimates are developed via a subjective but straight-forward and reservoir-specific volumetric method. To estimate the probable resources associated with the additional development of an already discovered reservoir, PGC's local estimating committee members use the known productive area of the reservoir as an analog to develop a yield factor, which is then applied to an estimate of the as-yet undeveloped reservoir volume. The resulting volume is then risked via multiplication by the estimated probability of existence of the additional reservoir volume. A similar scheme is used for undiscovered probable gas resource estimates —

those involving new reservoir discoveries in a known field. The principal differences are that the estimate is additionally risked for the existence of the new reservoir's trap and the analog that is used may be drawn from another field located in the same geologic province.²⁴ The PGC's estimates of future URA are, therefore, independent of the EUR data series that all others have relied upon in investigating and projecting URA.

Overall Evaluation

In summary, much of the analytical effort to date can be characterized as a series of creative attempts to get around the high variance present in the API/AGA EUR data. The product of most of the analysis has been more-or-less arbitrary approximations of central URA tendencies lacking corresponding error measures. Evaluation of the existing body of work on URA analysis and forecasting, inclusive of the nature of the data that have supported it, suggests that:

- Caution should be exercised in placing faith in any of the existing empirically determined URA estimates, particularly in absence of an explicit associated measure of uncertainty.
- Given the apparent importance of URA to future domestic oil and gas supply, continued study of the URA phenomenon, in greater detail than in the past, is both necessary and justified.

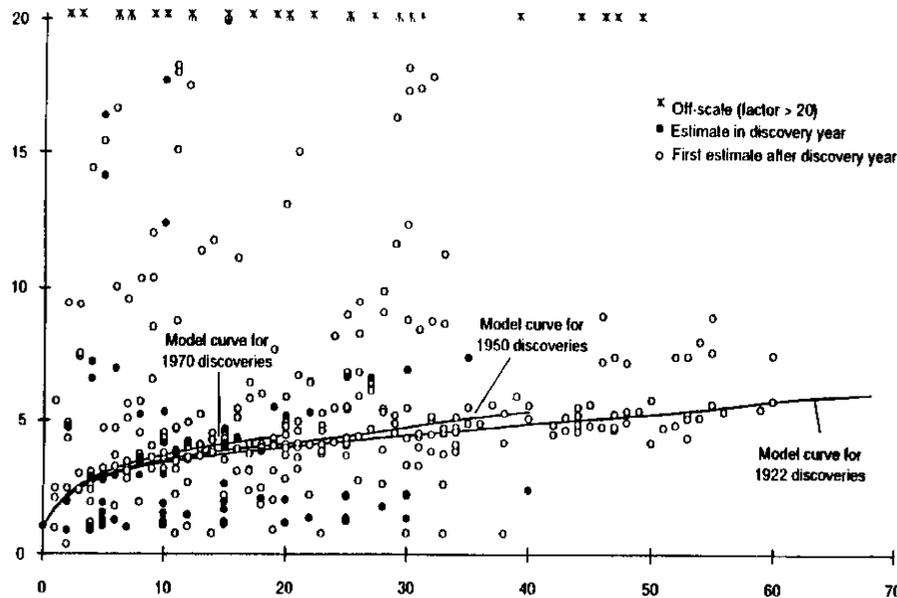
Future Directions

The appropriate direction for further study can in part be ascertained directly from the report of the first URA study. Having relied on reservoir-by-reservoir data from his own company's files, Arrington noted:

"The amount of [post-first booking] growth is a function of knowledge and size of the virgin reservoir. The greater the knowledge of a new reservoir, the more accurate will be the initial estimate. Large fields normally have greater increases percentagewise than small fields. The philosophy of the estimating group also affects the rate of revision. If a conservative policy is followed in booking unproven reserves, the future changes in [proved] reserves obviously will be higher than for a more optimistic estimating group. Regardless of the factors affecting it, growth is normal although the amount varies from area to area and with various estimating groups."

Thus, Arrington's initial work indicated that factors other than elapsed post-discovery time and/or drilling effort had significant effects on the ultimate recovery appreciation phenomenon. To improve on the former analyses, any new study of URA must seek to account for those factors. Specifically and to the maximum extent possible this will require the development of means to account separately for the effects on the URA process of economic change, technological advancement, and differential proved reserves booking practices.

Figure FE5. Observed Growth Factors and URA Model Projections for the NPC Sample Fields



Source: Energy Information Administration, Office of Oil and Gas. Derived from National Petroleum Council, "Report of the Reserves Appreciation Subgroup to the Source and Supply Task Group, 1992 National Petroleum Council Natural Gas Study" (Washington, DC, August 1992), unpublished open file text, Figure 14.

EIA and the USGS are collaborating on work to provide a more complete and better understanding of the process and factors that drive URA. EIA currently has in-progress some of the rigorous statistical groundwork required to develop a means of capturing the effect of both industry-specific and general economic conditions. A corollary requirement will be the prior separation of the available serial EUR data into homogeneously behaving units according to some criterion or set of criteria that provides a link to the known URA causative or modulatory factors. Several important questions relating to the applicability of the available data remain to be answered.

Are Field-level EUR Data Sufficient to the Task?

All of the causative factors and some of the modulatory factors operate at the level of the individual reservoir. EIA collected annual reservoir-by-reservoir estimates of proved reserves and reserves changes beginning with 1977, but was required to cease their collection in 1979 in order to reduce respondent burden. It is unclear whether EIA's field-level reserves data series will prove sufficient to allow the development of a definitive understanding of the URA phenomenon. The potentially deleterious effect of reserves estimate aggregation has been well-illustrated by the striking difference between the results of the early USGS URA studies based on the State-level API/AGA EUR data and the most recent USGS study based on regional aggregates of the EIA OGIFF field-level reserves data. The USGS's inferred reserves estimates went up 267 percent for crude oil, 335 percent for natural gas liquids, and 326 percent for natural gas. Thus, determining whether or not field-by-field reserves estimates will suffice is a crucial matter that needs to be addressed early.

Are the Available EUR Data Adequately Representative?

The available serial data bearing on domestic ultimate recovery appreciation are incomplete. EIA has complete appreciation histories for relatively few fields, and most of the Nation's significant fields are not among them. Through October 1996, 45,992 distinct oil and gas fields had been officially recognized in the United States. OGIFF contains data covering about 39,000 of them. Of those fields, only 10,109 were discovered during the life span of the API/AGA series. Only about 13,000 new field discoveries occurred during the life span of the EIA ultimate recovery estimate series. Since, as previously indicated, the largest fields are on average found early during the exploration history of any particular geographic area, the more recent the discoveries are, the smaller they tend to be. And since, as Arrington first noted, large and small fields do not appreciate similarly, a question arises as to data applicability to the older, larger fields.

Is the URA Process (or Are its Components) Time-invariant?

On a field-by-field basis only an 18-year data window on the appreciation behavior of domestic fields is available. This window records only mid- to late-stage appreciation behavior for most fields including nearly all of the most significant fields. Relative field size aside, whether the early stage appreciation behavior of the older fields is well enough approximated by the early stage appreciation behavior of the recently discovered fields for which EIA has data is unclear. Thus far, all of the statistical URA analysts have bypassed addressing this question by making the implicit assumption that

appreciation behavior is invariant over time or measure of effort, which is clearly not a satisfactory approach.

Can the Available Serial EUR Data be Adequately Parsed?

An important undertaking in the further study of URA will be the development of criteria for the categorization of domestic fields into homogeneously behaving groups which relate to identifiable characteristics such as field geologic type, field complexity, field location, field vintage, and so forth. Even if empirical methods prove to be the only applicable means of URA analysis given the available EUR data, adroit sub-setting of those data should by itself yield significant improvement over the present URA estimates.

Conclusion

The ultimate recovery appreciation phenomenon is, in effect, an intricate puzzle. It will not be a fast or easy one to put together. Nevertheless, the large — and for the most part unquantified — uncertainties associated with the currently available estimates of this key component of the remaining domestic crude oil and natural gas resource bases need to be far better understood and reduced insofar as possible. They fundamentally affect crucial projections of our Nation's future domestic oil and gas supplies. The collaborative effort now being undertaken by the EIA and the USGS is aimed at achieving these objectives.

End Notes

1. The natural “package” in which oil and gas is found is a *reservoir*, defined as a porous and permeable underground formation containing an individual and separate natural accumulation of producible hydrocarbons which is confined by impermeable rock or water barriers and is characterized by a single natural pressure system. A *field* is an area consisting of one or more reservoirs all grouped on, or related to, the same individual geological structural feature and/or stratigraphic condition. Thus, there may be two or more reservoirs in a field that are separated vertically by intervening impervious strata, or laterally by local geologic barriers, or both.
2. For a particular reservoir or field over a particular period of time it is entirely possible for the estimate of proved reserves to *decrease* as a result of production while the estimate of ultimate recovery *increases* for some reason. In such instances, the proved reserves decrease is smaller than the one which would have been booked absent the occurrence of URA.
3. United States Geological Survey, *The Importance of Reserves Growth for the Nation’s Supply of Natural Gas*, Fact Sheet FS-202-96(Washington, DC, October 1996).
4. Lawrence J. Drew, *Undiscovered Mineral and Petroleum Deposits: Assessment & Controversy*, (New York: Plenum Publishing Corporation, 1997), Chapter 3.
5. Energy Information Administration, *U.S. Oil and Gas Reserves by Year of Discovery*, DOE/EIA-0534 (Washington, DC, August 1990), p. 5.
6. Energy Information Administration, *U.S. Oil and Gas Reserves by Year of Discovery*, Table 1, pp. 6-7.
7. Ignoring miscellaneous wells such as those drilled only to ascertain subsurface stratigraphy or for production-related purposes such as the injection or reinjection of fluids.
8. In the 78 years for which overall drilling statistics are available (1918-1995), 2,803,732 holes were drilled for oil or gas in the United States, 67.4 percent of which were successful. For the 52-year period in which both overall and exploratory drilling statistics are available (1944-1995), 2,177,094 holes were drilled for oil or gas, of which 65.3 percent were successful. Just 499,819, or 22.9 percent of these holes were exploratory; of which only 109,643, or 21.9 percent were successful. About 56 percent of the exploratory holes were new field tests, of which only 13 percent were successful. Oil and gas wells do not, of course, last forever. According to the Interstate Oil and Gas Compact Commission, by year-end 1994 about 55 percent of all successful oil or gas wells drilled in the United States had been plugged and abandoned because they had reached their economically productive limit.

Source: DeGolyer & MacNaughton, *20th Century Petroleum Statistics*, 52nd Ed. (Dallas, TX, November 1996), pp. 28-29, and Interstate Oil and Gas Compact Commission, *Produce or Plug: The Dilemma Over the Nation’s Idle Oil and Gas Wells* (December 1996), p. 5.
9. There are relatively unusual situations where data from a single well will, or must, suffice. These include small reservoirs that cannot economically support production from more than one well, or a larger reservoir where such factors as its shape or high bulk permeability of the reservoir rock allow a single well to drain the reservoir efficiently. Nongeotechnical considerations, such as a legal requirement to prove the commercial viability of a lease in order to hold it beyond an impending expiration date, may also occasionally cause the booking of proved reserves based on a single well.
10. Confirming EIA’s reserves auditing experience, the Society of Petroleum Engineers and the World Petroleum Congress in March 1997 moved formally to define proved reserves as 90 percent or more assured of future recovery regardless of whether the estimate is deterministically or probabilistically constructed or stated. This decision was made after years of debate between reserves estimators who favored the established deterministic style estimates and others who favored the introduction of probabilistic reserves estimates. See: Society of Petroleum Engineers, “SPE/WPC Reserves Definitions Approved,” *Journal of Petroleum Technology* (Tulsa, OK, May 1997), pp. 527-528.
11. J.R. Arrington, “Predicting the size of crude reserves is key to evaluating exploration programs,” *The Oil and Gas Journal*, Vol. 58, No. 9 (Tulsa, OK, February 1960), pp. 130-134.
12. The figures cover the years in which both year-end proved reserves and the components of reserves change during the year have been nationally estimated: 1948-1995 for crude oil, and 1966-1995 for natural gas.

13. Most of the proved natural gas reserves of the Prudhoe Bay Field were de-booked by EIA in 1978 pending emergence of a viable market for them.
14. United States Geological Survey, *1995 National Assessment of United States Oil and Gas Resources*, Circular 1118, US Government Printing Office (Washington, DC, 1995), p. 2.
15. Potential Gas Agency, *Potential Supply of Natural Gas in the United States, Report of the Potential Gas Committee (December 31, 1996)*, Colorado School of Mines (Golden, CO, March 1997), Table 8, p. 20.
16. The Minerals Management Service has estimated ultimate recovery appreciations of 2.2 billion barrels of crude oil and 32.7 trillion cubic feet of natural gas for Federal jurisdiction Gulf of Mexico fields. Source: Minerals Management Service, *Assessment of the Undiscovered Hydrocarbon Potential of the Nation's Outer Continental Shelf*, MMS 96-0034 (Washington, DC, June 1996), Table 3, p. 18.
17. The survey also collects data on downward or negative revisions, but since these do not cause URA, they are not considered here.
18. Firms vary in their booking practices in response to their (or their investors') risk aversion preferences and in accord with their interpretations of generally accepted petroleum engineering and financial accounting standards. Some firms, particularly the smallest ones, will fully book as soon as an estimate has been made. Others will await the making of a business commitment to field development, or will "book up" in parallel to the making of business commitments to specific stages of a field's development. The most conservative firms have been known to delay reserves booking until at least some production facilities have been successfully installed. Differential booking effects may also exist that depend upon where a field is located relative to the existing production and transportation infrastructure, certain environmental considerations, and other factors. For example, onshore in the lower 48 States, booking delays can typically range from a few months to more than a year. Offshore in the Gulf of Mexico, booking delays can range up to a few years. In Arctic Alaska, the delay for crude oil booking can easily be on the order of 10 years.
19. They are:
 - J.J. Arps, M. Mortada, and A.E. Smith, "Relationship Between Proved Reserves and Exploratory Effort," *Journal of Petroleum Technology* (June 1971), pp. 671-675.
 - G. Rogge Marsh, "How much oil are we really finding?," *The Oil and Gas Journal* (April 1971), pp. 100-104.
 - Chester R. Pelto, "Forecasting Ultimate Oil Recovery," SPE Paper 4261 in *Symposium on Petroleum Economics and Evaluation*, Society of Petroleum Engineers, Dallas Section (Dallas, TX, 1973), pp. 45-52.
 - M. King Hubbert, "U.S. Energy Resources, a Review as of 1972, Part 1" in U.S. Congress, Senate, *A National Fuels and Energy Policy Study*, 93rd Cong., 2d sess., Committee on Interior and Insular Affairs Print Serial No. 93-40(92-75), pp. 111-119 and pp. 138-143.
 - D.A. White, R.W. Garrett, Jr., G.R. Marsh, R.A. Baker, and H.M. Gehman, "Assessing Regional Oil and Gas Potential" in *Methods of Estimating the Volume of Undiscovered Oil and Gas Resources*, Amer. Assn. of Petr. Geol. Studies in Geology No. 1 (Tulsa, OK, 1975), pp. 147-149.
 - R.F. Mast and Janet Dingler, "Estimates of Inferred + Indicated Reserves for the United States by States" in United States Geological Survey, *Geological Estimates of Undiscovered Recoverable Oil and Gas Resources in the United States*, Circular 725 (Washington, DC, 1975), pp. 73-78.
 - D.H. Root, "Estimation of Inferred Plus Indicated Reserves for the United States," in United States Geological Survey, *Estimates of Undiscovered Recoverable Conventional Resources of Oil and Gas in the United States*, Circular 860 (Washington, DC, 1981), pp. 81-87.
 - David H. Root, "Historical Growth of Estimates of Oil- and Gas-Field Sizes," in U.S. Department of Commerce, National Bureau of Standards, *Proceedings of a Symposium on Oil and Gas Supply Modeling, July 18-20, 1980* (Washington, DC, May 1982), pp. 350-268.
 - D.H. Root, "Inferred and Indicated Reserves," Section II. H. in *National Assessment of Undiscovered Conventional Oil and Gas Resources*, United States Geological Survey Open File Report 88-373 (an unpublished 1988 working paper), pp. 81-89.
 - National Petroleum Council, *Report of the Reserves Appreciation Subgroup of the Source and Supply Task Group, 1992 National Petroleum Council Natural Gas Study* (Washington, DC, August 1992), pp. 169, unpublished open file text.

E.D. Attanasi and D.H. Root, "The enigma of oil and gas field growth," *American Association of Petroleum Geologists Bulletin*, Vol. 78, No. 3 (Tulsa OK, 1994), pp. 321-332.

20. For detailed information about the Oil and Gas Integrated Field File see: Energy Information Administration, *U.S. Oil and Gas Reserves by Year of Discovery*, DOE/EIA-0534 (Washington, DC, August 1990).
21. For example, where GF equals cumulative appreciation factor and t equals the elapsed post-discovery years, both of the following equations, which have not been used, will fit the data just as well as any of the equations that have:

$$GF_t = a + \frac{b}{t} + \frac{c}{t^2}$$

and

$$GF_t = \frac{(a + ct)}{(1 + bt)}$$

where a, b, and c are regression coefficients.

22. National Petroleum Council, *Report of the Reserves Appreciation Subgroup of the Source and Supply Task Group, 1992 National Petroleum Council Natural Gas Study*, Figure 14, p. 63. Reproduced with permission as Figure FE5.
23. Potential Gas Agency, *Potential Supply of Natural Gas in the United States (December 31, 1996)* (Golden, CO, March 1997), 130 pp.
24. Energy Information Administration, *An Examination of Domestic Natural Gas Resource Estimates*, SR/RNGD/89-01 (Washington, DC, February 1989), p. 64.

Highlights

Spurred on by record and near record demand for finished motor gasoline, distillates and kerosene-type jet fuel, total demand for petroleum products **set a June record high**. Total demand for petroleum products (measured as product supplied) during June 1997¹ averaged 18.9 million barrels per day (Table H1). Robust economic growth during the first half of the year lead year-to-date demand **to the highest level for this time of year in over 15 years**, averaging 18.4 million barrels per day. Temperatures in the U.S. were almost 8 percent cooler than normal and about 12 percent cooler than last June.² The Federal Reserve Board's *Beige Book Summary* points to continued economic growth during the beginning of June³ as well as other June economic indicators.⁴

Other June and first-half 1997 highlights include:

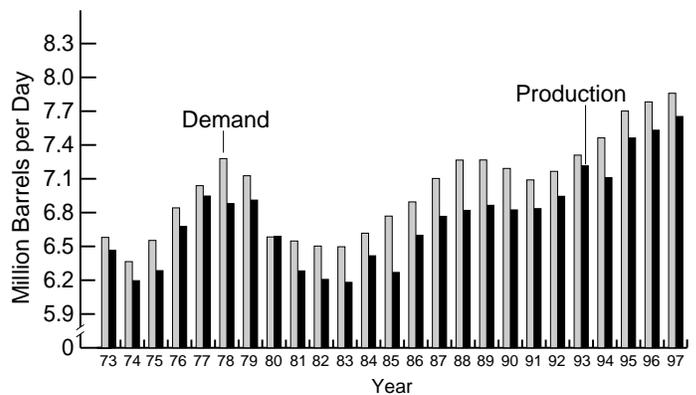
- Finished motor gasoline **production** reached **the highest level ever**, averaging 8.1 million barrels per day. Year-to-date **imports** for finished motor gasoline averaged about 8 percent below last year's level. End-of-month finished motor gasoline **stocks** totaled 161.1 million barrels, the lowest level in decades for June.
- Retail prices for conventional motor gasoline remained below last year's level and the same as prices in June 1995.
- Setting a June record high, distillate fuel oil **demand** averaged 3.4 million barrels per day. **Production** of distillate fuel oil also established a June record high, averaging 3.6 million barrels per day. Distillate fuel oil **stocks** continued to climb and totaled 116.4 million barrels by month's end.
- Residual fuel oil **production** reached its lowest level for June since 1972. Year-to-date **production** of residual fuel oil reached the lowest level in decades for the first six months, averaging 689 thousand barrels per day. **Stocks** of residual fuel oil totaled 39.1 million barrels, an increase of more than 12 percent over last June's record low.
- Again, kerosene-type jet fuel **demand** set a record high for the month averaging 1.6 million barrels per day. This was also the third highest level ever. **Production**, not far off from demand, set a record high for June averaging 1.6 million barrels per day. Setting a record for this time of year, kerosene-type jet fuel **production** during the first six months averaged 1.5 million barrels per day.
- Crude oil **production** averaged 6.4 million barrels per day, the lowest level for June since 1958. **Imports** of crude oil broke last June's record high, averaging 8.4 million barrels per day. **Stocks** of crude oil (excluding the Strategic

Petroleum Reserve) totaled 320.7 million barrels by month's end.

Motor Gasoline

Production of finished motor gasoline reached 8.1 million barrels per day, setting an all time record high. Year-to-date **production** also reached a record high, averaging 7.7 million barrels per day (Figure H1). Finished motor gasoline **demand** averaged 8.2 million barrels per day, the second highest level on record for June. **Demand** for finished motor gasoline during the first six months reached a record high, averaging 7.9 million barrels per day. **Imports** of finished motor gasoline were normal for this time of year, averaging 368 thousand barrels per day. Finished motor gasoline **exports** during the June averaged 94 thousand barrels per day, which was in the upper range for this time of year. **Exports** during the first six months averaged 104 thousand barrels per day, about the same as this time last year. End-of-month **stocks** for finished motor gasoline totaled 161.1 million barrels, the **lowest level for June in decades**. Despite the low stock levels, current production of finished motor gasoline is expected to meet U.S. demand.⁵

Figure H1. Motor Gasoline, Year-to-Date 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

Distillate fuel oil **demand** averaged 3.4 million barrels per day **setting a record high for June**. **Demand** for distillate fuel oil during the first half of the year was at its highest level since 1979, averaging 3.5 million barrels per day (Figure H2). Supporting the increased demand is the fact that U.S. intermodal rail traffic, year-to-date, is up close to 7 percent over last year.⁶ **Production**

¹ June 1997 data are monthly-from-weekly estimates based on the Energy Information Administration's Weekly Petroleum Supply Reporting System.

² National Oceanic and Atmospheric Administration, Climate Analysis Center, "Cooling Degree Day Data Monthly Summary, Monthly Data for June 1997."

³ "Federal Reserve System Beige Book Summary", The Federal Reserve Board, June 18, 1997, <http://www.bog.frb.fed.us/>

⁴ "Wholesale Prices Dropped Again in June", *The Wall Street Journal*, July 14, 1997, p. A2 & A4.

⁵ "U.S. Gasoline Declines in Face of Rising Demand", *Bloomberg Oil Buyers' Guide*, June 30, 1997, p. 10 & 11.

⁶ "North American Rail Traffic on Record Pace", Association of American Railroads, July 3, 1997, <http://www.aar.org/>

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

Category	1997			1996	January - June	
	Estimated June	May	Difference ^a	June	1997	1996
Products Supplied	18.9	18.2	0.6	18.1	18.4	18.2
Finished Motor Gasoline.....	8.2	8.1	0.1	8.1	7.9	7.8
Distillate Fuel Oil.....	3.4	3.2	0.1	3.2	3.5	3.4
Residual Fuel Oil	0.8	0.7	(s)	0.7	0.8	0.9
Jet Fuel.....	1.6	1.5	0.1	1.6	1.6	1.6
Other Petroleum Products ^b	4.9	4.6	0.3	4.5	4.7	4.5
Crude Oil Inputs	15.1	15.1	(s)	14.6	14.3	14.1
Operating Utilization Rate (%)	98.9	98.4	0.5	97.4	94.0	94.5
Imports	10.4	10.4	-0.1	9.9	9.9	9.4
Crude Oil	8.4	8.3	0.2	8.0	7.8	7.4
Strategic Petroleum Reserve	0.0	0.0	0.0	0.0	0.0	0.0
Other.....	8.4	8.3	0.2	8.0	7.8	7.4
Products	1.9	2.2	-0.2	2.0	2.1	2.0
Finished Motor Gasoline.....	0.4	0.4	(s)	0.4	0.3	0.4
Distillate Fuel Oil.....	0.2	0.2	(s)	0.2	0.2	0.2
Residual Fuel Oil	0.2	0.2	(s)	0.2	0.2	0.2
Jet Fuel.....	0.1	0.1	(s)	0.1	0.1	0.1
Other Petroleum Products ^c	1.1	1.3	-0.2	1.1	1.2	1.0
Exports	0.9	0.9	(s)	0.9	0.9	1.0
Crude Oil	0.1	(s)	0.1	0.1	0.1	0.1
Products	0.8	0.9	-0.1	0.8	0.8	0.9
Total Net Imports	9.5	9.6	-0.1	9.0	9.0	8.4
Stock Change^d	0.3	1.4	-1.0	0.9	0.3	-0.1
Crude Oil	-0.2	0.2	-0.4	0.3	0.2	(s)
Products	0.5	1.2	-0.7	0.6	0.2	-0.1
Total Stocks	1,557	1,562	-5	1,546	—	—
(million barrels)						
Crude Oil	884	890	-6	899	—	—
Strategic Petroleum Reserve.....	563	563	(s)	584	—	—
Other.....	321	327	-6	314	—	—
Products	672	671	1	648	—	—
Finished Motor Gasoline.....	161	158	3	164	—	—
Distillate Fuel Oil.....	116	108	8	102	—	—
Residual Fuel Oil	39	39	(s)	35	—	—
Jet Fuel.....	41	41	(s)	39	—	—
Other Petroleum Products ^c	314	325	-10	308	—	—

^a Difference is equal to volume for current month minus volume for previous month.

^b 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.

^c 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.

^d 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
1996												
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 ²	15,083	14,903	14,950	15,044	15,037	15,073	15,112	15,168	15,121	15,109	15,121	15,069
Idle Capacity³	251	261	236	141	145	152	138	138	138	149	138	189
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
1997												
Gross Refinery Inputs	13,804	13,486	14,174	14,454	15,197	0	0	0	0	0	0	0
Operating Refinery Capacity ²	15,167	15,205	15,233	15,229	15,449	0	0	0	0	0	0	0
Idle Capacity³	284	247	219	387	167	0						
Idle Three Months or Less	197	160	40	220	0	0	0	0	0	0	0	0
Idle More than Three Months	87	87	179	167	167	0	0	0	0	0	0	0
Operable Refinery Capacity	15,451	15,452	15,452	15,616	15,616	0	0	0	0	0	0	0
Utilization Rate (percent)												
Operating Capacity	91.0	88.7	93.0	94.9	98.4	0	0	0	0	0	0	0
Operable Capacity	89.3	87.3	91.7	92.6	97.3	0	0	0	0	0	0	0

¹Capacities are on a calendar day basis.

²Operating capacity equals the operable capacity less the total idle capacity.

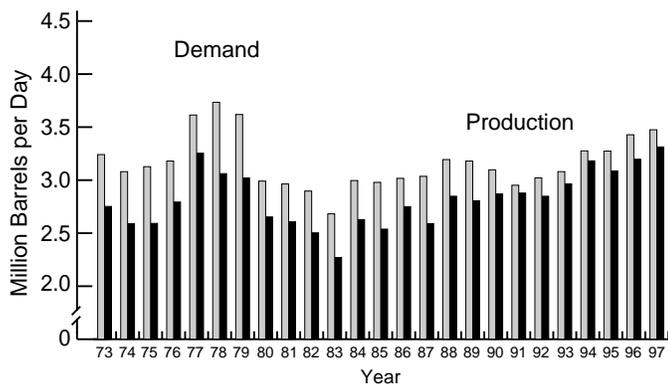
³Idle capacity is the component of operable capacity that is not in operation and not under active repair, but is capable of being placed in operation within 30 days; and capacity not in operation but is under active repair that can be completed within 90 days.

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. Distillate, Year-to-Date Comparisons, 1973-1997



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

of distillate fuel oil **set a June record high** averaging 3.6 million barrels per day, as well as a year-to-date record high of 3.3 million barrels per day. Both **imports** and **exports** of distillates were in the upper range for this time of year, averaging 193 and 155 thousand barrels per day respectively. By the end of the month, distillate fuel oil **stocks** climbed to 116.4 million barrels. Futures prices for heating fuel oil may have moved into contango for the seasonal stocking by marketers to have begun.⁷

Residual Fuel Oil

With the loss of some nuclear baseload power generation and to help meet weather-related demand, some East Coast utilities came on the market for residual fuel oil to supplement their power production.⁸

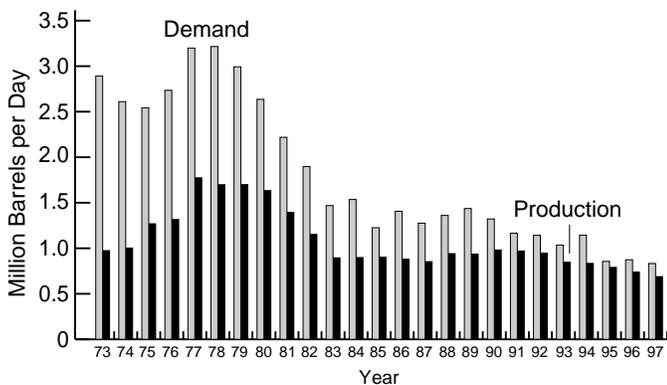
Demand for residual fuel oil was up compared to last year, averaging 780 thousand barrels per day. Production of residual fuel oil was at the lowest level for June since 1972. Residual fuel oil **production** averaged 678 thousand barrels per day. During the first half of the year, residual fuel oil **production** averaged 689 thousand barrels per day, the lowest level in over 20 years (Figure H3). Residual fuel oil **imports** were up for the month, averaging 189 thousand barrels per

⁷ "Crude Futures Contract Expires Weakly as Gasoline Leads Way Down", *The Oil Daily*, June 23, 1997, p. 2.

⁸ "U.S. Gasoline Prices Rise as Summer Demand Climbs", *Bloomberg Oil Buyers' Guide*, July 7, 1997, p. 10 & 11.

day, while **exports** were at their lowest level in over ten years averaging 112 thousand barrels per day. End-of-month **stocks** totaled 39.1 million barrels, about 4 million barrels above last June's record low.

Figure H3. Residual, Year-to-Date Comparisons, 1973-1997



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

Kerosene-Type Jet Fuel

Kerosene-type jet fuel **demand** set a June record high at 1.6 million barrels per day, which was also the third highest level on record. The latest figures for air cargo freight traffic show U.S. increases in both April and for the first half of the year.⁹ Besides the increases from the air cargo industry, during peak demand periods, some utilities along the East Coast have been using kerosene-type jet fuel to run their turbine engines in an effort to supply electricity to meet air conditioning needs.¹⁰ So far this year, **demand** for kerosene-type jet fuel has averaged 1.6 million barrels per day, a record pace (Figure H4). **For the fifth straight month in a row, production** of kerosene-type jet fuel has set a new record high, this month averaging 1.6 million barrels per day. Not surprisingly, year-to-date kerosene-type jet fuel **production** set a record high for this time of year, averaging 1.5 million barrels per day. **Imports** of kerosene-type jet fuel were normal for June, averaging 110 thousand barrels per day. Kerosene-type jet fuel **exports** averaged 25 thousand barrels per day, this was in the upper range for this time of year. **Stocks** of kerosene-type jet fuel ended the month at 41.4 million barrels, the highest level for June since 1991. This increase can be attributed to a variety of factors, a mild winter, Tosco's Trainer refinery coming back on line and Delta Airlines importing product from the Caribbean.¹¹

Propane

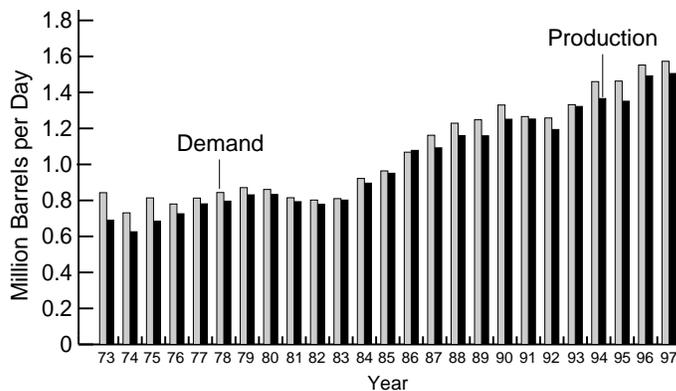
Stocks of propane rose in all regions during June compared to last month's levels. At the end of June propane **stocks** totaled 47.5 million barrels (Figure H5), a stock build of 7.4 million barrels

⁹ "Air Cargo By The Numbers", *AirCommerce*, June 30, 1997, p. 35.

¹⁰ Spot Cargo Markets - Consolidating the Gains", *Jet Fuel Intelligence*, July 7, 1997, p. 2 & 3.

¹¹ "Ample US Supplies Drive Steady-to-Lower Summer Prices", *Jet Fuel Intelligence*, June 16, 1997, p. 1 & 2.

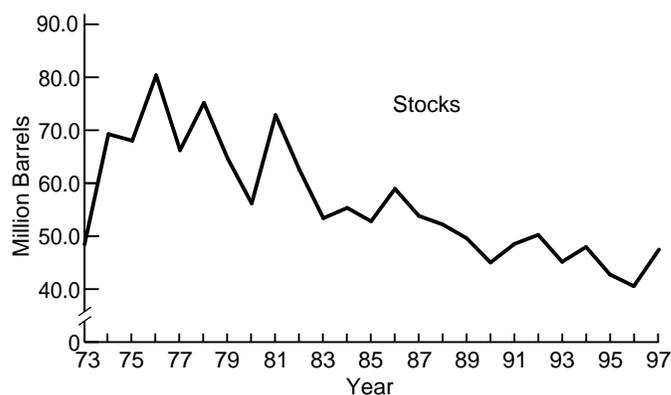
Figure H4. Kerojet, Year-to-Date Comparisons, 1973-1997



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

over last month. The continued rise of propane stocks left inventories at their highest point for this time of year since 1994, but within their normal range for June. Stocks in the Midwest rose 3.5 million barrels followed by the Gulf Coast's increase of 2.9 million barrels and the East Coast stock increase of 0.8 million barrels. Since the end of March 1997, primary stockholders have replenished 19.9 million barrels of propane to U.S. inventories, a level that is roughly average compared with stock builds over the past five years. Moreover, if inventories continue to build at normal rates for the remainder of the build season, U.S. inventories may reach 60 million barrels by the start of the 1997-98 heating season, the highest pre-heating season level since 1994.

Figure H5. Propane Stocks as of June 30, 1973-1997



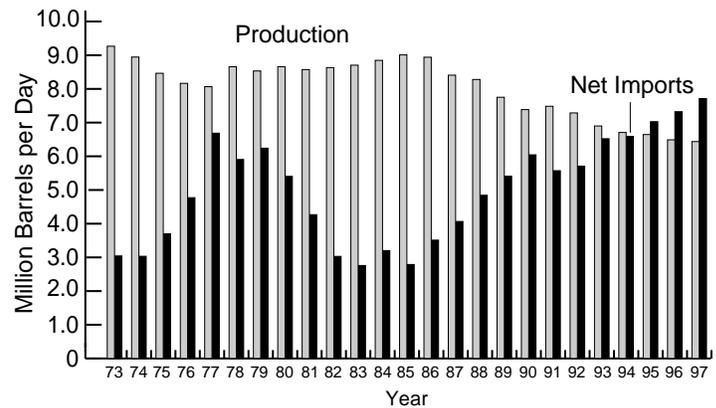
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Crude Oil

U.S. crude oil **production** dropped to 6.4 million barrels per day, the **lowest level for June since 1958**. Year-to-date crude oil production averaged 6.4 million barrels per day, the lowest average for the first half of the year since 1952. Field **production** of Alaskan crude oil averaged 1.3 million barrels per day, the **lowest level of production for any month since June 1979**. One reason behind the decline of Alaskan North Slope (ANS) crude is the stiff competition from suppliers of crude oil at cheaper prices, particularly the Latin American countries.¹² Crude oil **imports** averaged 8.4 million barrels per day, the **highest level on record**. June's crude oil imports surpassed the prior high set in August 1996, by nearly 5 percent. Crude oil imports during the first half of the year set a record high averaging 7.8 million barrels per day, **more than a 400 thousand barrel per day increase over the prior high set last year**. Exports of crude oil were normal for this time of year, averaging 102 thousand barrels per day. Year-to-date, exports of crude oil have been at their highest level since 1993, averaging 119 thousand barrels per day. Net imports, one measure of our dependence on foreign oils, **set an all time record high** at 8.3 million barrels per day (Figure H6). Year-to-date net imports set a record for this time of year at 7.7 million barrels per day, an increase of more than 5 percent over the prior high.

For the second time this year, crude oil stocks (excluding the Strategic Petroleum Reserve) dropped from the prior month's level. End-of-month crude oil **stocks** (excluding the Strategic Petroleum Reserve) totaled 320.7 million barrels, still more than 6 million barrels above last June. Crude oil **stocks** (including the Strategic Petroleum Reserve) ended the month totaling 884.1 million barrels. Despite the historically low levels of U.S. petroleum products, Congress approved another sale from the U.S. Strategic Petroleum Reserve. Congress hopes to sell \$209 million worth of the SPR in an effort to help balance the budget.¹³ Now

Figure H6. Crude Oil Production and Net Imports, Year-to-Date Comparisons, 1973 - 1997



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

part of the House Interior spending bill, the sale waits for the House-Senate conference for approval.¹⁴

Refinery Operations

Crude oil **inputs** remained strong, averaging 15.1 million barrels per day, the **highest level since December 1978**. Year-to-date crude oil inputs averaged 14.3 million barrels per day, the highest level for this time period since 1979. The estimated refinery **operable utilization rate** averaged 97.6 percent.

¹² "Global Crude Oversupply Prompts Sharp Discount On Cargoes of ANS", *The Oil Daily*, June 18, 1997, p. 3.

¹³ "SPR Is Shrinking as Its Importance Is Growing, Report Asserts", *The Oil Daily*, July 7, 1997, p. 5.

¹⁴ "House-Senate Conference to Decide SPR Sale's Fate", *The Oil Daily*, July 11, 1997, p. 3.

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

Year/Month	Field Production			Stock Change ^a		Petroleum Products Supplied	Ending Stocks ^b (Million Barrels)
	Total Domestic ^c	Crude Oil	Natural Gas Plant Liquids	Crude Oil ^d	Petroleum Products		Crude Oil ^d and Petroleum Products
1981 Average	10,230	8,572	1,609	^g 290	^g -130	16,058	1,484
1982 Average	10,252	8,649	1,550	136	-283	15,296	^g 1,430
1983 Average	10,299	8,688	1,559	^g 214	^g -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	^g 1,592
1993 Average	8,836	6,847	1,736	81	^g 70	17,237	^g 1,647
1994 Average	8,645	6,662	1,727	18	^g -2	17,718	^g 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	^E 8,487	^E 6,387	1,815	497	-717	18,560	1,503
February	^E 8,739	^E 6,514	1,900	-167	-569	18,308	1,482
March	^E 8,690	^E 6,470	1,907	529	447	17,869	1,512
April	^E 8,672	^E 6,483	1,849	208	10	18,572	1,519
May	^{RE} 8,559	^{RE} 6,401	1,832	^R 212	^R 1,172	18,244	1,562
June*	^E 8,592	^{PE} 6,376	^E 1,899	^E -163	^E 507	18,865	^E 1,557
6-Mo. Average	^E 8,621	^{PE} 6,437	^E 1,866	^E 194	^E 152	^E 18,401	--
1996 6-Mo. Average	8,582	6,489	1,783	22	-111	18,186	--
1995 6-Mo. Average	8,726	6,646	1,778	-52	-191	17,579	--

^a A negative number indicates a decrease in stocks and a positive number indicates an increase.

^b Stocks are totals as of end of period.

^c 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.

^d Includes stocks located in the Strategic Petroleum Reserve.

^e Includes crude oil for storage in the Strategic Petroleum Reserve.

^f Net Imports equal Imports minus Exports.

^g 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 ^f
	Total	Crude Oil ^e	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	^R 10,442	^R 8,279	^R 2,163	^R 876	^R 26	^R 851	^R 9,565
June*	^E 10,357	^E 8,431	^E 1,926	^E 881	^E 102	^E 779	^E 9,476
6-Mo. Average	^E 9,931	^E 7,831	^E 2,100	^E 946	^E 119	^E 827	^E 8,985
1996 6-Mo. Average	9,377	7,421	1,956	957	98	859	8,420
1995 6-Mo. Average	8,685	7,127	1,557	962	101	861	7,723

Footnotes continued.

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

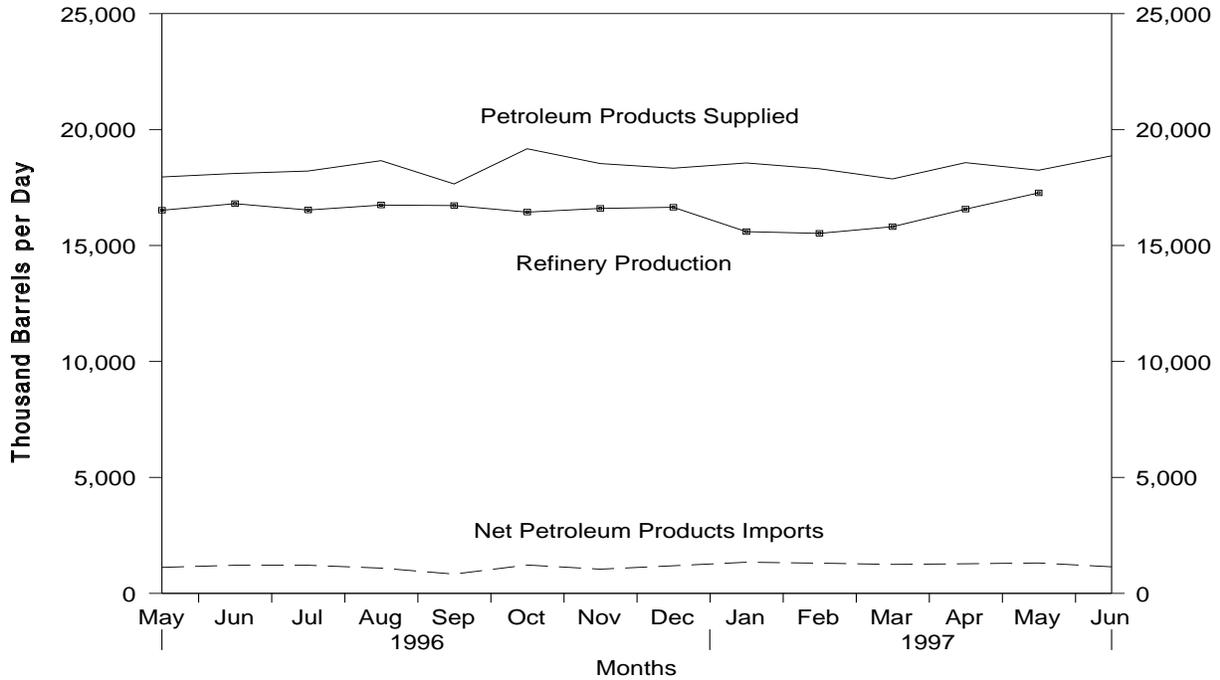
— = Not Applicable.

* 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.

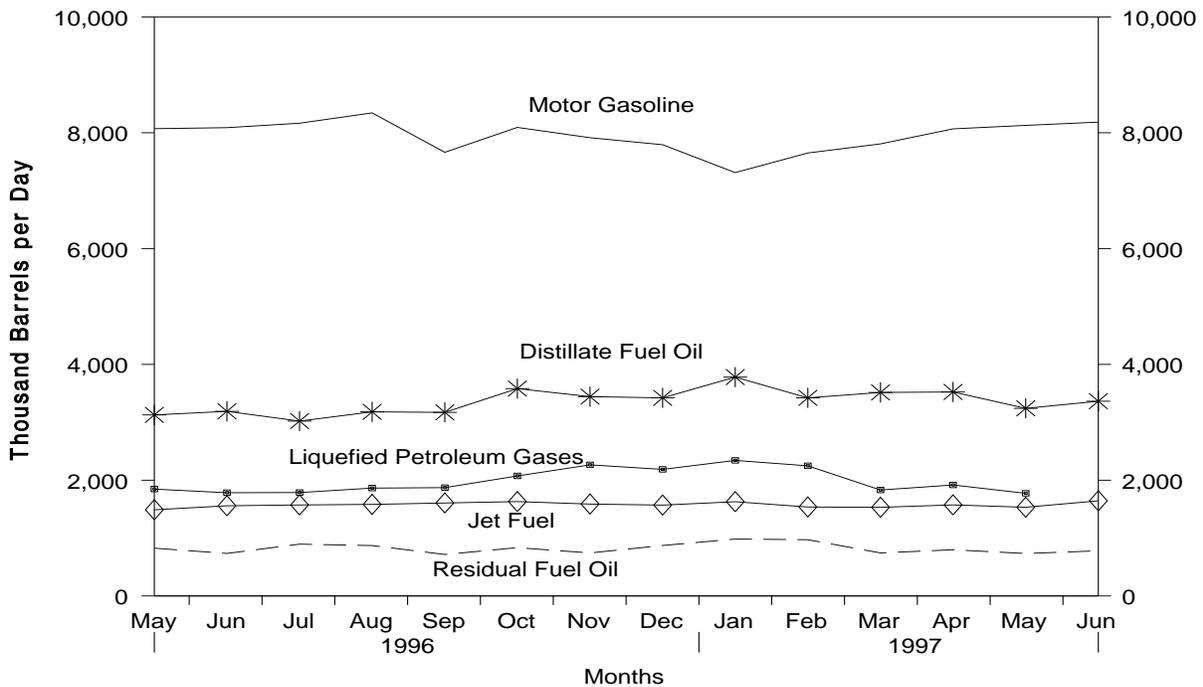
Source: See Summary Statistics Table and Figure Sources.

Figure S1. Petroleum Overview, May 1996 - Present



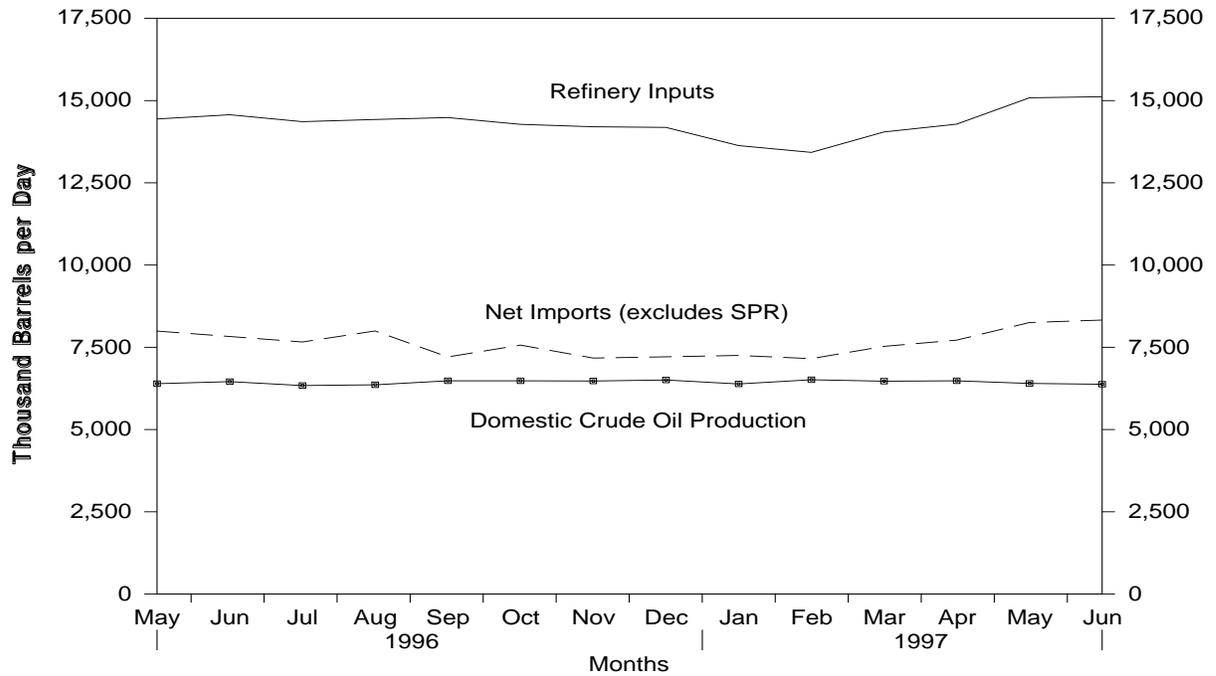
Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S1. See Summary Statistics Table and Figure Sources.

Figure S2. Petroleum Products Supplied, May 1996 - Present



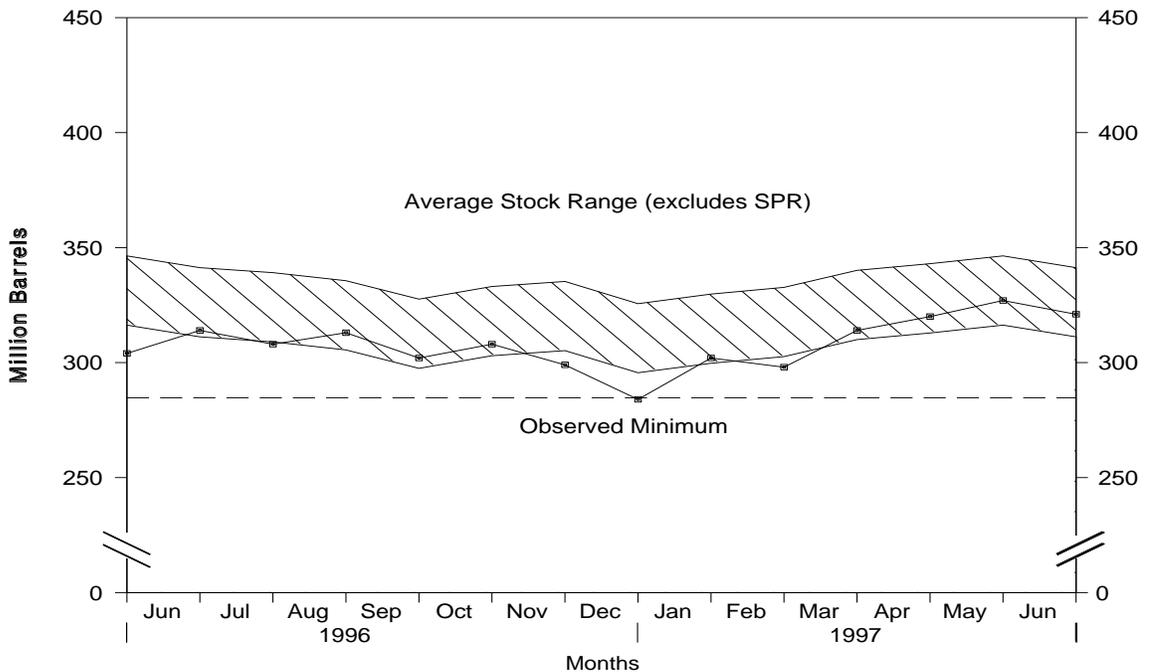
Source: Energy Information Administration, *Petroleum Supply Monthly*, Tables S4-S7, and S9. See Summary Statistics Table and Figure Sources.

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



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

Figure S4. Crude Oil Ending Stocks,¹ May 1996 - Present



¹Excludes 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 ^c	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
	Average	6,560	1,484	7,230	0	7,230	193	(s)
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
	Average	6,465	1,393	7,508	0	7,508	215	(s)
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	RE 6,401	RE 1,303	R 8,279	0	R 8,279	R 646	0
	June*	PE 6,376	PE 1,257	E 8,431	E 0	E 8,431	E 254	E 0
	6-Mo. Average	PE 6,437	PE 1,330	E 7,831	E 0	E 7,831	E 323	E 0
1996	6-Mo. Average	6,489	1,418	7,421	0	7,421	283	(s)
1995	6-Mo. Average	6,646	1,531	7,127	0	7,127	140	(s)

^a Stocks are totals as of end of period.

^b A negative number indicates a decrease in stocks and a positive number indicates an increase.

^c 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.

^d Previously published as crude used directly.

^e 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 ^a (Million Barrels)		
	Stock Change ^b		Refinery Inputs	Exports	Product Supplied	Total	SPR	Other Primary
	SPR	Other						
1981 Average	336	^e -46	12,470	228	^d 58	594	230	363
1982 Average	174	-38	11,774	236	^d 59	^e 644	294	^e 350
1983 Average	234	^e -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)	^R 212	^R 15,083	^R 26	^R 4	^R 890	563	^R 327
June*	^E (s)	^E -163	^E 15,117	^E 102	^E 5	^E 884	^E 563	^E 321
6-Mo. Average	^E -13	^E 207	^E 14,274	^E 119	^E 4	--	--	--
1996 6-Mo. Average	-39	61	14,066	98	8	--	--	--
1995 6-Mo. Average	(s)	-52	13,858	101	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 ^b		Libya	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981 Average	311	261	(s)	0	0	0	319	317
1982 Average	170	90	3	3	5	2	26	23
1983 Average	240	176	10	10	14	7	0	0
1984 Average	323	194	12	12	36	24	1	0
1985 Average	187	84	46	46	21	4	4	0
1986 Average	271	78	81	81	68	28	0	0
1987 Average	295	115	83	82	84	70	0	0
1988 Average	300	58	345	343	92	80	0	0
1989 Average	269	60	449	441	157	155	0	0
1990 Average	280	63	518	514	86	79	0	0
1991 Average	253	44	0	0	6	6	0	0
1992 Average	196	24	0	0	51	39	0	0
1993 Average	220	24	0	0	353	344	0	0
1994 Average	243	21	0	0	312	307	0	0
1995 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
Average	234	27	0	0	218	213	0	0
1996 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
Average	256	8	1	1	236	235	0	0
1997 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
5-Mo. Average	304	5	42	42	206	206	0	0
1996 5-Mo. Average	262	19	0	0	184	183	0	0
1995 5-Mo. Average	222	30	0	0	219	211	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 Arab-OPEC Sources							
	Qatar		Saudi Arabia ^b		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
5-Mo. Average	3	0	1,409	1,280	0	0	1,964	1,533
1996 5-Mo. Average	0	0	1,354	1,267	0	0	1,800	1,469
1995 5-Mo. Average	0	0	1,339	1,273	6	6	1,787	1,520

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 ^c		Gabon ^d		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	^g (s)	^g (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
	5-Mo. Average	(c)	(c)	(d)	(d)	54	42	0	0
1996	5-Mo. Average	(c)	(c)	(d)	(d)	52	43	0	0
1995	5-Mo. Average	(c)	(c)	(d)	(d)	74	55	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 ^{c,d,e}		
	Nigeria		Venezuela		Total Other OPEC ^{c,d}				
	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
	5-Mo. Average	677	665	1,702	1,286	2,433	1,993	4,397	3,526
1996	5-Mo. Average	631	611	1,634	1,256	2,317	1,910	4,118	3,379
1995	5-Mo. Average	572	564	1,446	1,123	2,092	1,742	3,878	3,262

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 ^a											
		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
	5-Mo. Average	424	419	29	25	2	0	1	0	1,467	1,101	65	65
1996	5-Mo. Average	284	277	13	13	2	0	3	0	1,405	1,047	44	44
1995	5-Mo. Average	376	365	19	19	4	0	(s)	0	1,303	1,007	48	48

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 ^a											
		Colombia		Ecuador ^c		Gabon ^d		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
	5-Mo. Average	252	250	109	109	183	183	15	0	23	1	1,355	1,316
1996	5-Mo. Average	228	221	119	113	176	176	3	0	15	11	1,228	1,195
1995	5-Mo. Average	191	179	121	121	182	182	5	0	6	4	994	955

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 ^a											
		Netherlands		Netherlands Antilles		Norway		Puerto Rico		Russia ^f		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
	5-Mo. Average	28	0	99	0	281	263	15	0	14	0	21	0
1996	5-Mo. Average	23	0	58	0	295	277	17	0	21	13	32	0
1995	5-Mo. Average	13	0	55	0	248	224	11	0	2	0	15	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 ^a										Total Imports		
	Trinidad and Tobago		United Kingdom		Virgin Islands		Other Non-OPEC		Total Non-OPEC ^{c,d}				
	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
	5-Mo. Average	65	60	253	177	308	0	439	217	5,449	4,185	9,846	7,712
1996	5-Mo. Average	79	61	397	286	340	0	365	203	5,149	3,936	9,267	7,315
1995	5-Mo. Average	67	66	437	402	277	0	259	134	4,633	3,707	8,511	6,969

^a 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.

^b Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from Saudi Arabia.

^c 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.

^d 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.

^e 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.

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

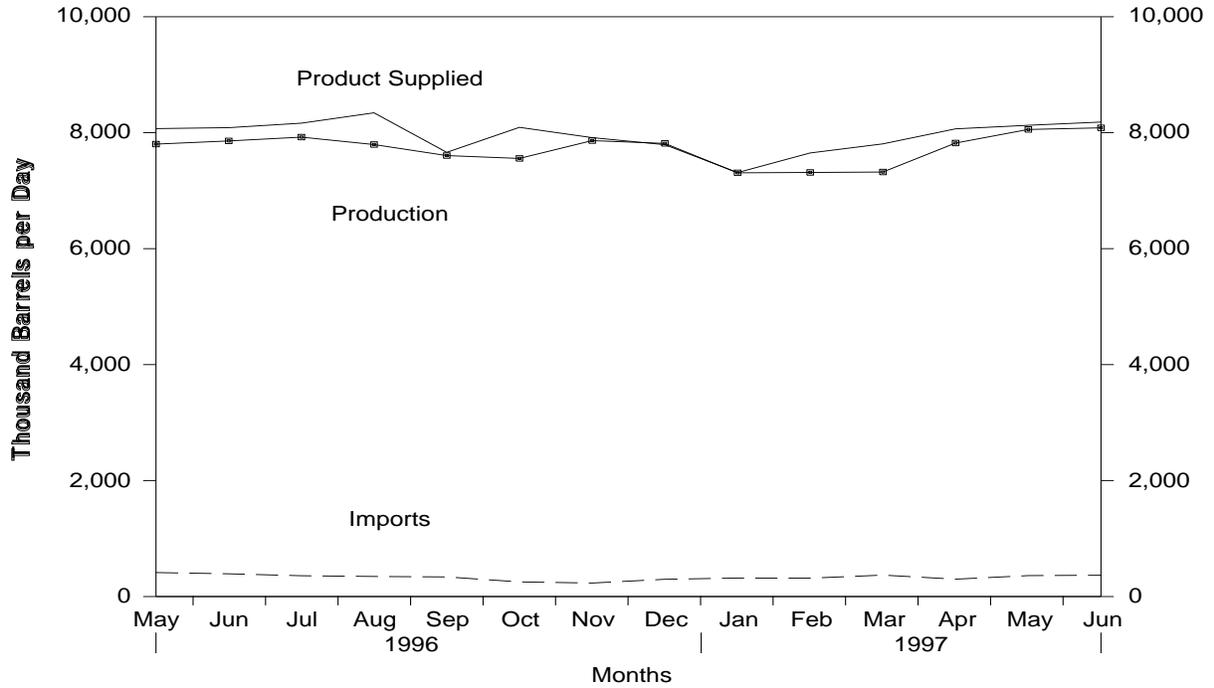
^g A small amount of Iranian crude oil entered the United States in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

(s) = Less than 500 barrels per day.

— = Not Applicable.

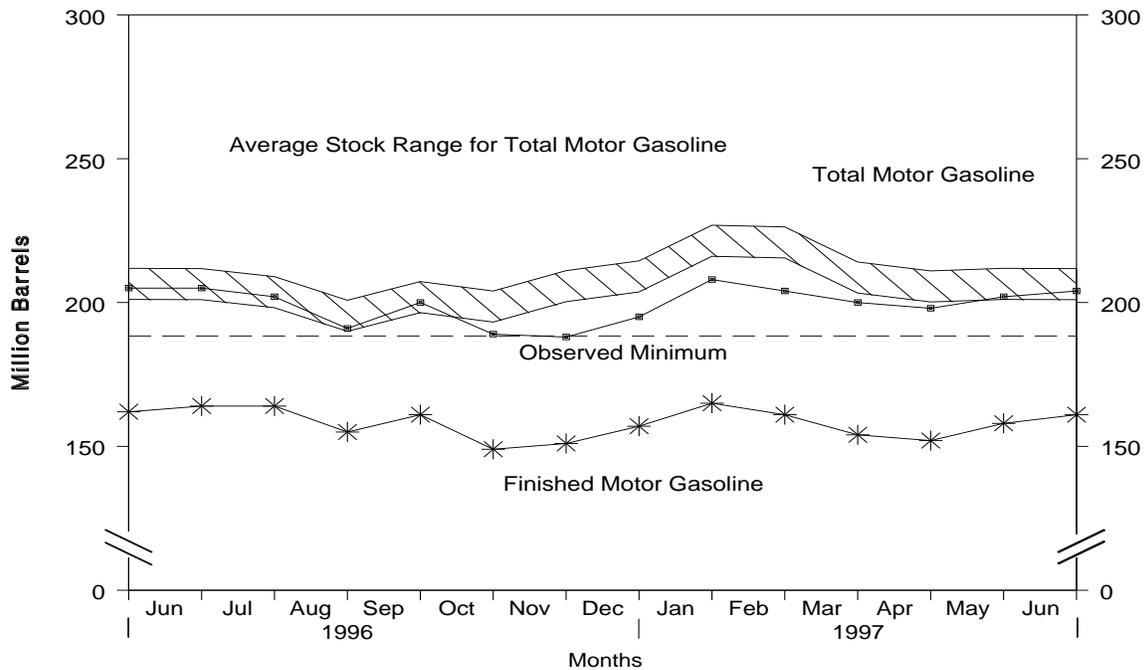
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: See Summary Statistics Table and Figure Sources.

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



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

Figure S6. Motor Gasoline Ending Stocks, May 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 188.4 million barrels, occurring in November 1996.

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 ^a (Million Barrels)		Ending Stocks (Million Barrels)
	Total Production ^b	Imports ^c	Stock Change ^{c,d}	Exports	Product Supplied ^b	Motor Gasoline		Oxygenates
						Total ^e	Finished	
1981 Average	6,405	157	^f -28	2	6,588	253	203	--
1982 Average	6,338	197	-25	20	6,539	^f 235	^f 194	--
1983 Average	6,340	247	^f -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
Average	7,588	265	-40	104	7,789	--	--	--
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
Average	7,647	336	-12	104	7,891	--	--	--
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	^R 8,056	^R 362	^R 189	^R 101	^R 8,128	^R 202	^R 158	13
June*	^E 8,084	^E 368	^E 175	^E 94	^E 8,184	^E 204	^E 161	NA
6-Mo. Average	7,653	340	31	104	7,859	--	--	--
1996 6-Mo. Average	7,531	368	14	103	7,782	--	--	--
1995 6-Mo. Average	7,462	269	-68	98	7,700	--	--	--

^a Stocks are totals as of end of period.

^b 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.

^c Beginning in 1981, excludes blending components.

^d A negative number indicates a decrease in stocks and a positive number indicates an increase.

^e Includes motor gasoline blending components but excludes stocks of oxygenates.

^f 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.

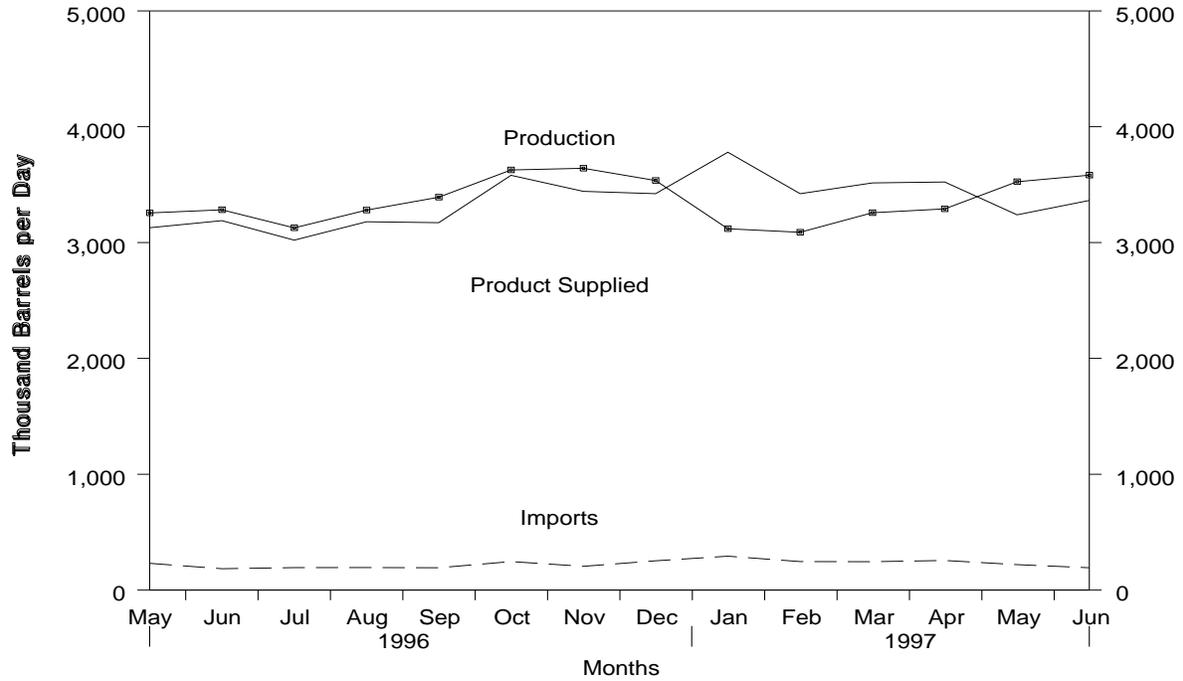
-- = Not Applicable.

* 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.

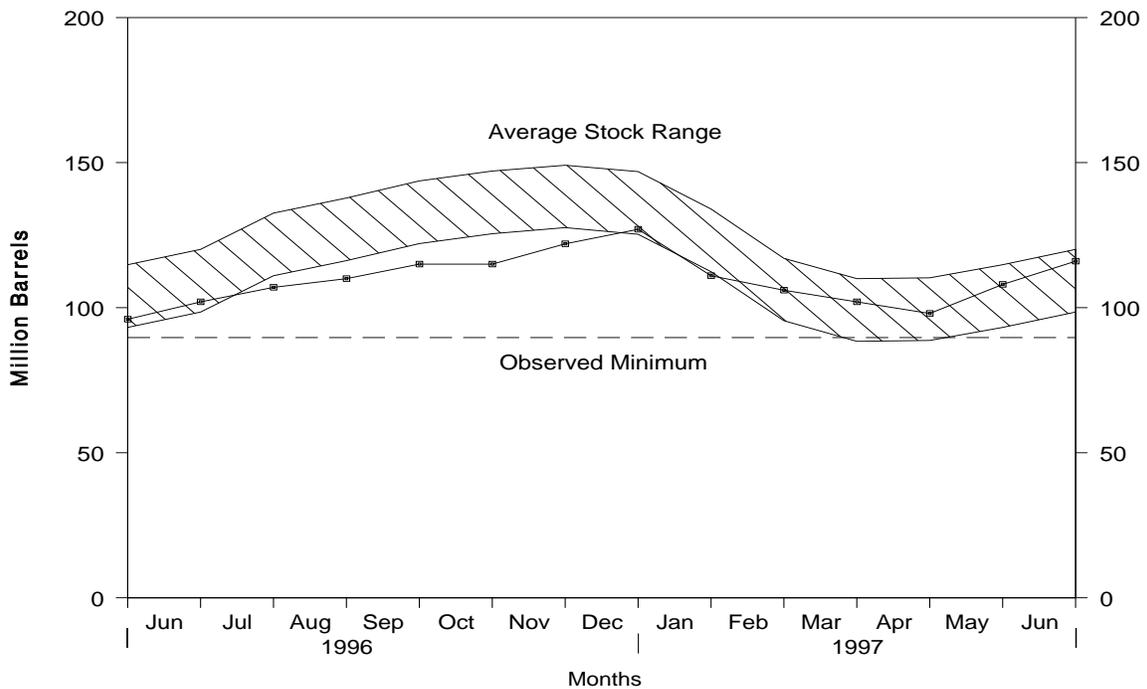
Source: See Summary Statistics Table and Figure Sources.

Figure S7. Distillate Fuel Oil Supply and Disposition, May 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, May 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 ^a		Disposition			Ending Stocks ^b (Million Barrels)		
	Total Production	Imports	Stock Change ^c	Exports	Product Supplied ^a	Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur
1981 Average	2,613	173	^d -38	5	2,829	192	--	--
1982 Average	2,606	93	-35	74	2,671	^d 179	--	--
1983 Average	2,456	174	^d -124	64	2,690	140	--	--
1984 Average	2,681	272	57	51	2,845	161	--	--
1985 Average	2,687	200	-48	67	2,868	144	--	--
1986 Average	2,798	247	31	100	2,914	155	--	--
1987 Average	2,731	255	-56	66	2,976	134	--	--
1988 Average	2,859	302	-30	69	3,122	124	--	--
1989 Average	2,899	306	-49	97	3,157	106	--	--
1990 Average	2,925	278	73	109	3,021	132	--	--
1991 Average	2,962	205	31	215	2,921	144	--	--
1992 Average	2,974	216	-8	219	2,979	141	--	--
1993 Average	3,132	184	1	274	3,041	141	64	77
1994 Average	3,205	203	12	234	3,162	145	73	73
1995 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
Average	3,155	193	-41	183	3,207	--	--	--
1996 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
Average	3,316	230	-10	190	3,365	--	--	--
1997 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	^R 3,525	^R 220	^R 352	^R 153	^R 3,240	^R 108	^R 63	45
June*	^E 3,582	^E 193	^E 257	^E 155	^E 3,364	^E 116	^E 64	^E 52
6-Mo. Average	^E 3,313	^E 242	^E -59	^E 139	^E 3,475	--	--	--
1996 6-Mo. Average	3,197	246	-157	172	3,428	--	--	--
1995 6-Mo. Average	3,087	199	-169	180	3,275	--	--	--

^a Excludes 10,000 barrels per day in 1981 and 1982 previously published as crude used directly.

^b Stocks are totals as of end of period.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase.

^d 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.

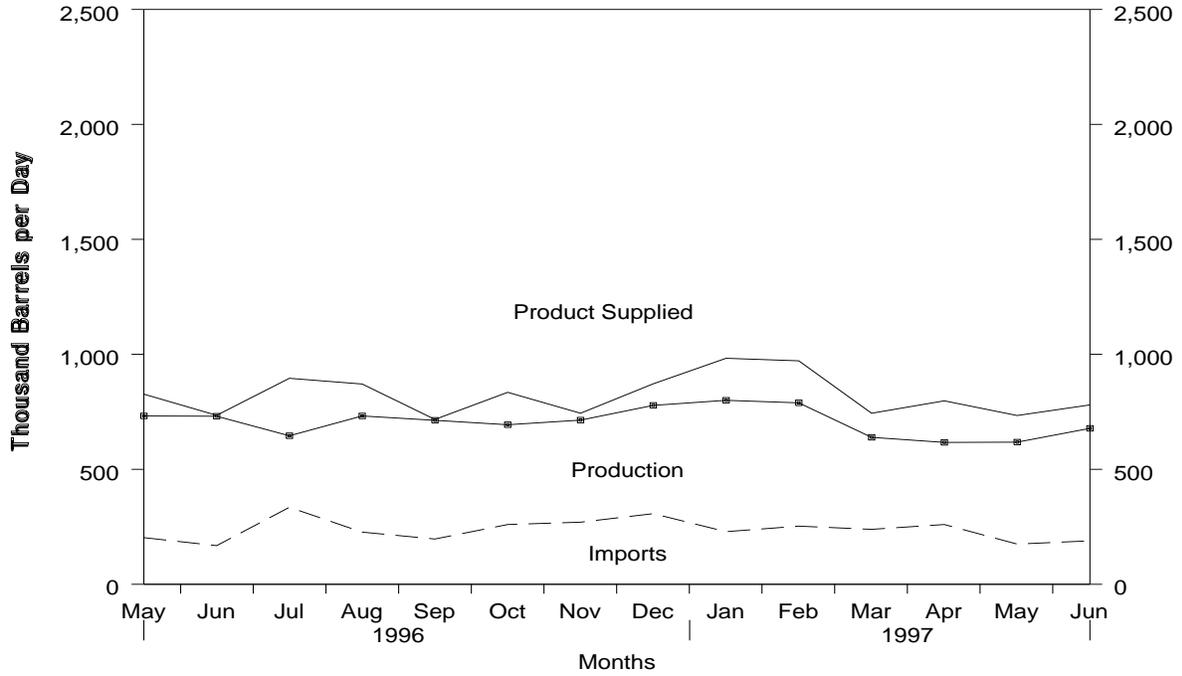
-- = Not Applicable.

* 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.

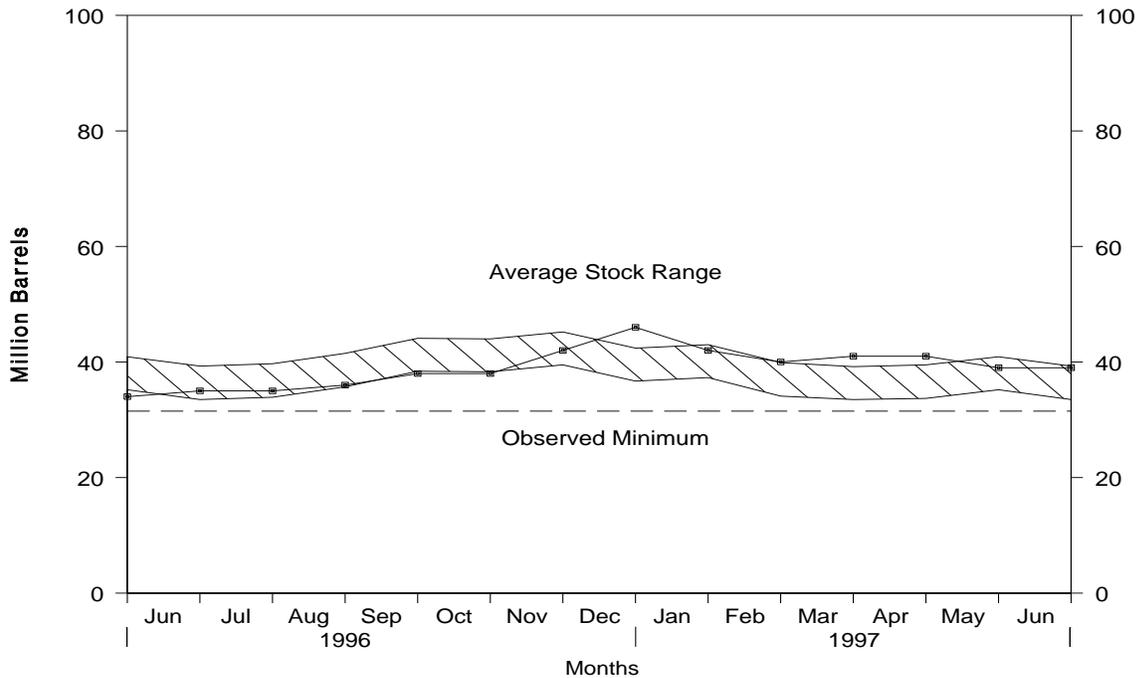
Source: See Summary Statistics Table and Figure Sources.

Figure S9. Residual Fuel Oil Supply and Disposition, May 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, May 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 ^a		Disposition			Ending Stocks ^c (Million Barrels)
	Total Production	Imports	Stock Change ^b	Exports	Product Supplied ^a	
1981 Average	1,321	800	^d -37	118	2,088	78
1982 Average	1,070	776	-32	209	1,716	^d 66
1983 Average	852	699	^d -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
Average	788	187	-13	136	852	--
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
Average	726	248	24	102	848	--
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	^R 618	^R 175	^R -44	^R 102	^R 734	^R 39
June*	^E 678	^E 189	^E -25	^E 112	^E 780	^E 39
6-Mo. Average	^E 689	^E 224	^E -40	^E 119	^E 833	--
1996 6-Mo. Average	738	230	-13	107	874	--
1995 6-Mo. Average	790	187	-33	154	856	--

^a Excludes 48,000 barrels per day in 1981 and 1982 previously published as crude used directly.

^b A negative number indicates a decrease in stocks and a positive number indicates an increase.

^c Stocks are totals as of end of period.

^d 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.

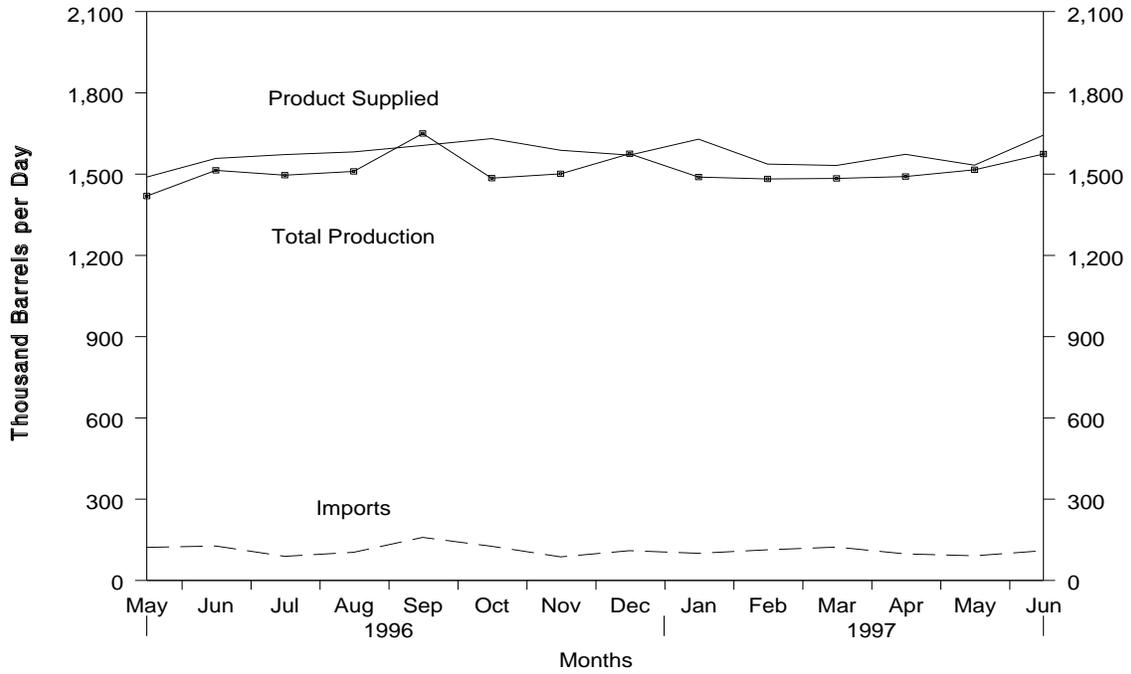
— = Not Applicable.

* 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.

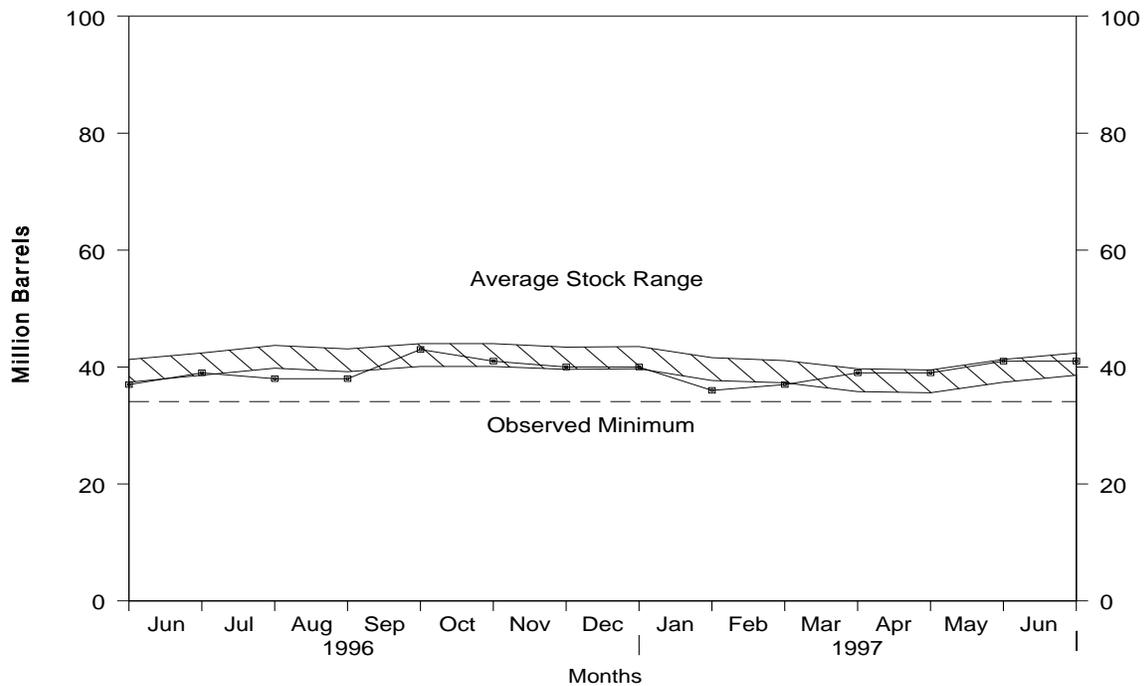
Source: See Summary Statistics Table and Figure Sources.

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



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

Figure S12. Jet Fuel Ending Stocks, May 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 ^a (Million Barrels)	
	Production		Imports	Stock Change ^b	Exports	Product Supplied		Total	Kerosene-Type
	Total	Kerosene-Type				Total	Kerosene-Type		
1981 Average	968	775	38	^c -4	2	1,007	809	41	34
1982 Average	978	778	29	-12	6	1,013	804	^c 37	^c 31
1983 Average	1,022	817	29	^c (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
Average	1,416	1,407	106	-19	26	1,514	1,497	--	--
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
Average	1,515	1,513	111	(s)	48	1,578	1,575	--	--
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	^R 1,516	^R 1,515	^R 91	^R 65	^R 9	^R 1,533	^R 1,533	41	41
June*	^E 1,574	^E 1,573	^E 110	^E 15	^E 25	^E 1,644	^E 1,644	^E 41	^E 41
6-Mo. Average	^E 1,506	^E 1,505	^E 106	^E 9	^E 28	^E 1,575	^E 1,573	--	--
1996 6-Mo. Average	1,494	1,492	109	-6	45	1,564	1,558	--	--
1995 6-Mo. Average	1,362	1,351	97	-37	18	1,479	1,463	--	--

^a Stocks are totals as of end of period.

^b A negative number indicates a decrease in stocks and a positive number indicates an increase.

^c 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.

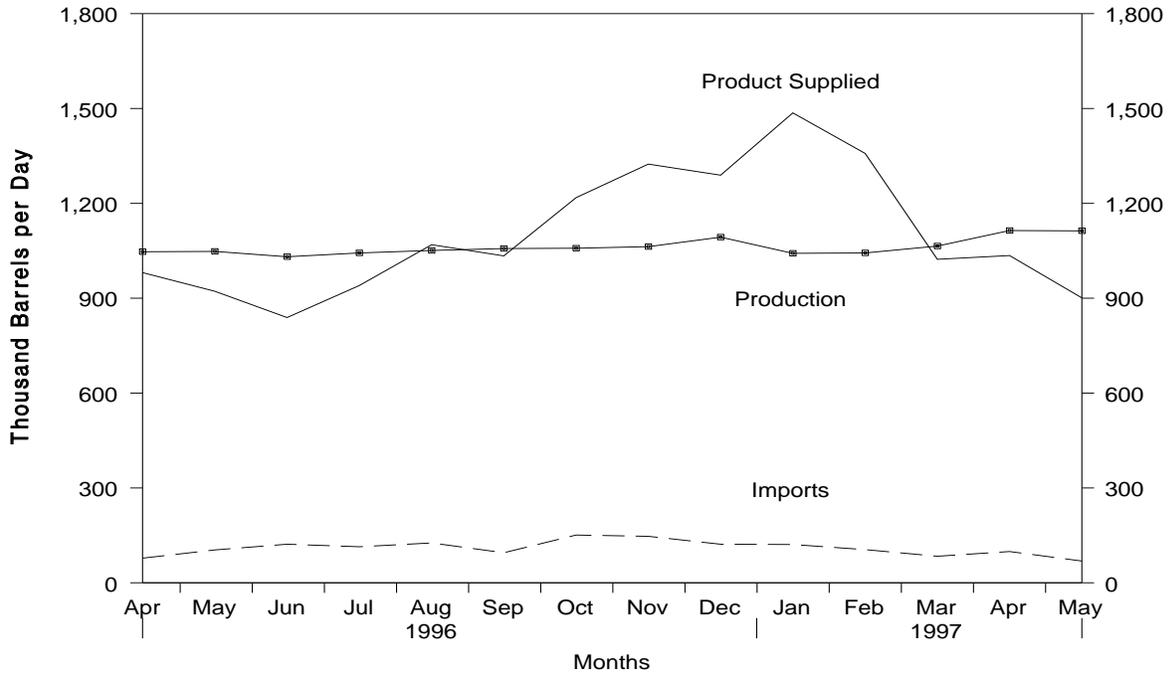
-- = Not Applicable.

* 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.

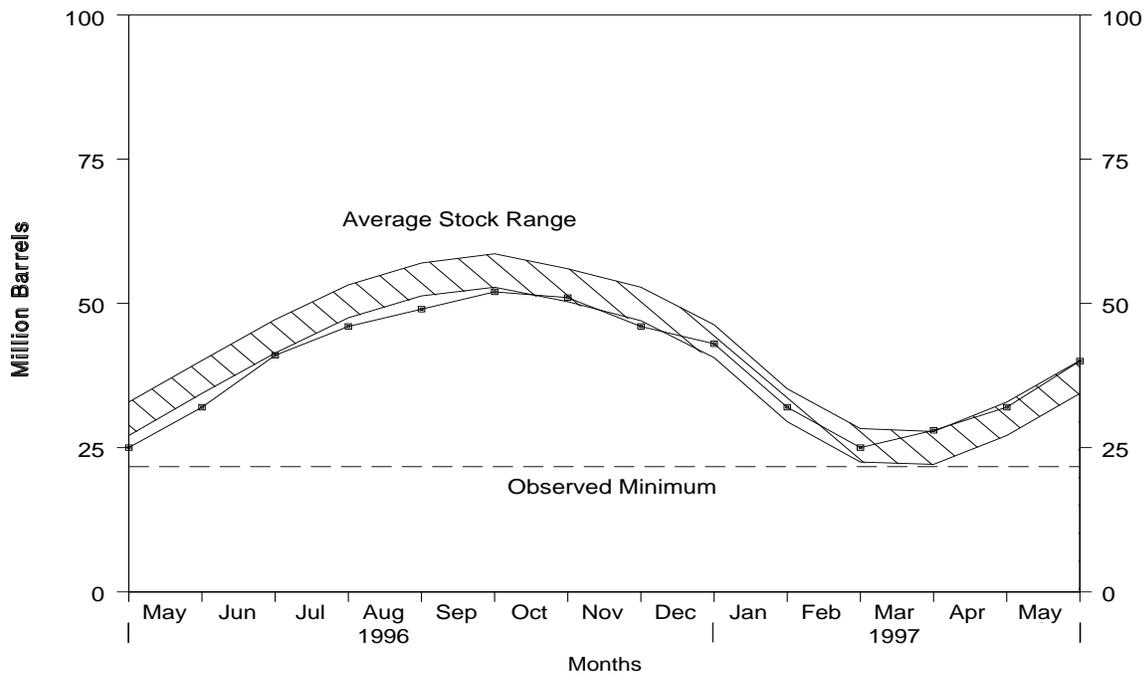
Source: See Summary Statistics Table and Figure Sources.

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



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

Figure S14. Propane/Propylene Ending Stocks, April 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 ^b (Million Barrels)
	Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	Product Supplied	
1981 Average	745	70	^c 18	5	18	773	76
1982 Average	711	63	-59	4	31	798	^c 54
1983 Average	730	44	^c -24	4	43	751	^c 48
1984 Average	806	67	^c 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
5-Mo. Average	1,076	95	-20	0	33	1,158	--
1996 5-Mo. Average	1,027	111	-73	0	29	1,182	--
1995 5-Mo. Average	1,020	94	-62	0	50	1,126	--

^a A negative number indicates a decrease in stocks and a positive number indicates an increase.

^b Stocks are totals as of end of period.

^c 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.

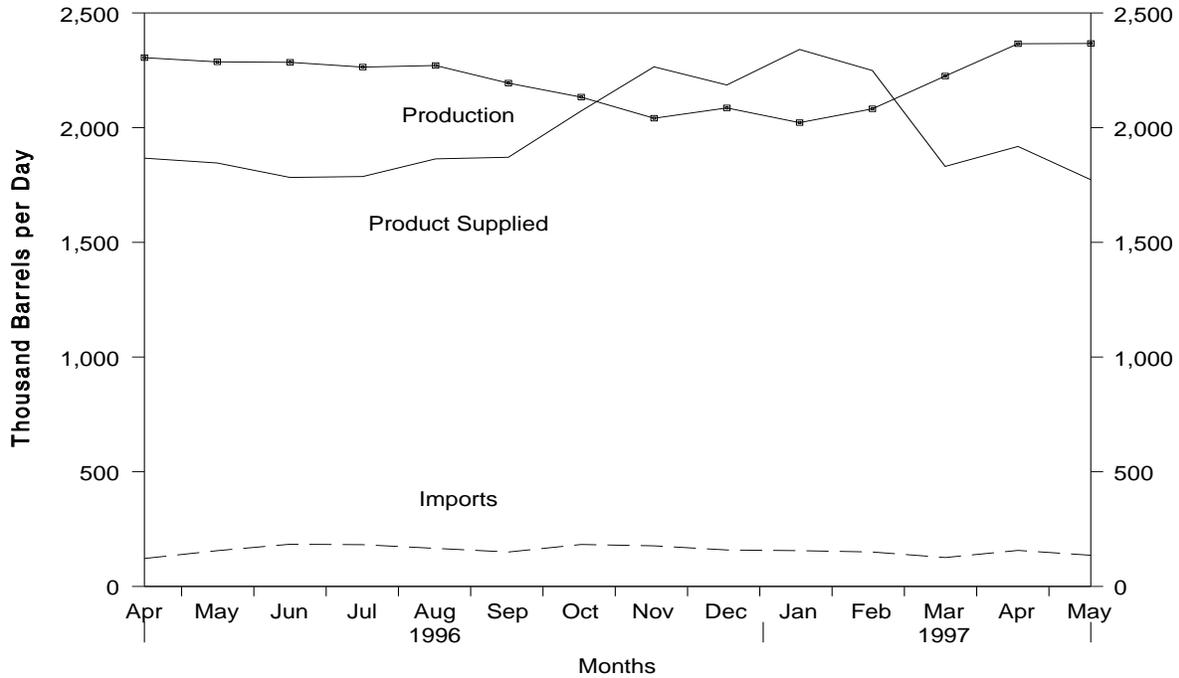
(s) = Less than 500 barrels per day.

-- = 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.

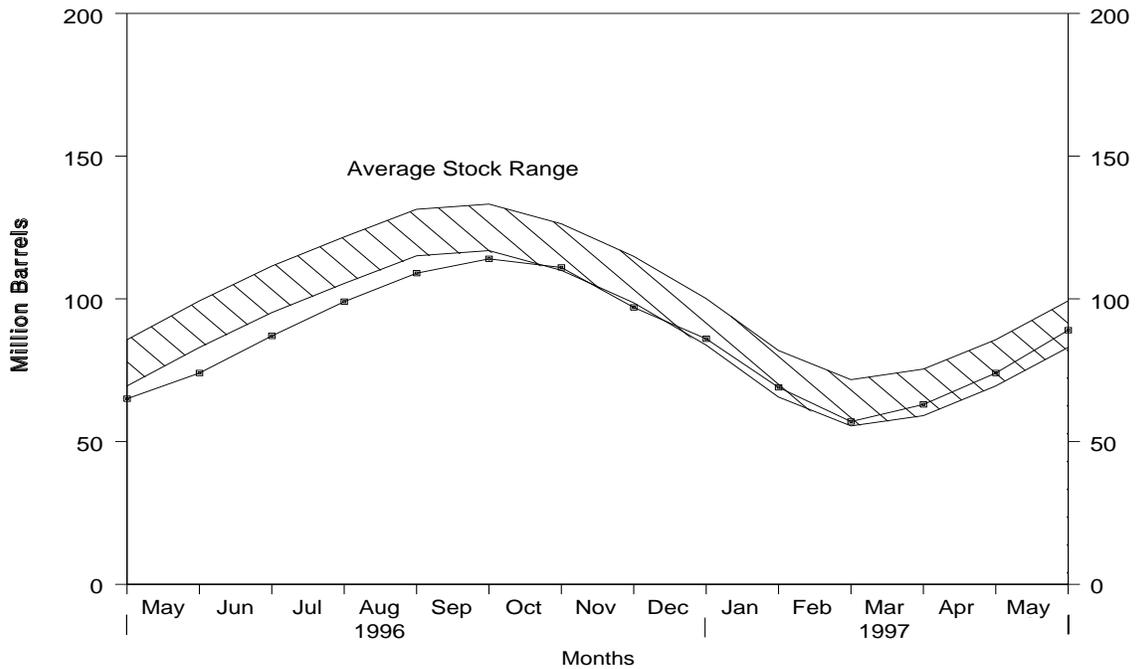
Source: See Summary Statistics Table and Figure Sources.

Figure S15. Liquefied Petroleum Gases Supply and Disposition, April 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, April 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 ^b (Million Barrels)
	Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	Product Supplied	
1981 Average	1,571	244	^c 18	289	42	1,466	135
1982 Average	1,528	226	-111	300	65	1,499	^c 94
1983 Average	1,642	190	^c -4	253	73	1,509	^c 101
1984 Average	1,697	195	^c -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
Average	2,082	146	-17	289	58	1,899	--
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
Average	2,156	166	-19	278	51	2,012	--
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
5-Mo. Average	2,214	145	18	272	51	2,019	--
1996 5-Mo. Average	2,120	158	-124	285	54	2,063	--
1995 5-Mo. Average	2,117	136	-15	268	69	1,932	--

^a A negative number indicates a decrease in stocks and a positive number indicates an increase.

^b Stocks are totals as of end of period.

^c 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 ^b (Million Barrels)
	Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	Products Supplied	
1981 Average	2,771	188	^c -42	723	197	2,081	241
1982 Average	2,475	305	-68	787	205	1,856	^c 216
1983 Average	2,437	382	^c -6	712	236	1,877	^c 217
1984 Average	2,500	503	^c -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	^c 207
1993 Average	3,035	770	-2	1,081	300	2,426	206
1994 Average	2,973	761	^c 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
Average	3,031	708	-23	958	348	2,457	--
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
Average	3,108	879	-11	1,014	376	2,608	--
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
5-Mo. Average	3,116	1,067	219	981	394	2,589	--
1996 5-Mo. Average	2,975	825	138	818	377	2,467	--
1995 5-Mo. Average	2,920	665	92	839	334	2,321	--

^a A negative number indicates a decrease in stocks and a positive number indicates an increase.

^b Stocks are totals as of end of period.

^c 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 May 1997).
- EIA, Weekly Petroleum Supply Reporting System (except domestic crude oil production) (June 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 June 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, May 1997

Commodity	Current Month		Year to Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil				
Field Production				
(1) Alaska	E 40,404	E 1,303	E 203,093	E 1,345
(2) Lower 48 States	E 158,019	E 5,097	E 770,757	E 5,104
(3) Total U.S.	E 198,423	E 6,401	E 973,850	E 6,449
Net Imports				
(4) Imports (Gross Excluding Strategic Petroleum Reserve (SPR))	256,640	8,279	1,164,469	7,712
(5) SPR Imports	0	0	0	0
(6) Exports	800	26	18,535	123
(7) Imports (Net Including SPR)	255,840	8,253	1,145,934	7,589
Other Sources				
(8) SPR Stock Change (Withdrawal (+), Addition (-))	5	(s)	2,358	16
(9) Other Stock Change (Withdrawal (+), Addition (-))	-6,586	-212	-42,293	-280
(10) Product Supplied and Losses	-131	-4	-661	-4
(11) Unaccounted for ^a	20,017	646	50,825	337
(12) Total Other Sources	13,305	429	10,229	68
(13) Crude Input to Refineries	467,568	15,083	2,130,013	14,106
(13) = (3) + (7) + (12)				
Natural Gas Liquids (NGL)				
(14) Field Production ^b	59,794	1,929	290,836	1,926
(15) Net Imports ^c	821	26	4,190	28
(16) Stock Change (Withdrawal (+), Addition (-)) ^c	-1,444	-47	-1,055	-7
(17) Total NGL Supply	59,170	1,909	293,971	1,947
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Change (Withdrawal (+), Addition (-))	-1,700	-55	-21,256	-141
(19) Net Imports	25,106	810	104,344	691
(20) Other Liquids New Supply (Field Production)	7,112	229	38,000	252
(21) Refinery Processing Gain ^a	26,614	859	121,405	804
(22) Crude Oil Product Supplied	131	4	661	4
(23) Total Other Liquids	57,263	1,847	243,154	1,610
(23) = (18) through (22)				
(24) Total Production of Products	584,001	18,839	2,667,138	17,663
(24) = (13) + (17) + (23)				
Net Imports of Refined Products				
(25) Imports (Gross)	40,321	1,301	209,346	1,386
(26) Exports	25,567	825	121,877	807
(27) Imports (Net)	14,754	476	87,469	579
(28) Total New Supply of Products	598,755	19,315	2,754,608	18,242
(28) = (24) + (27)				
(29) Refined Products Stock Change (Withdrawal (+), Addition (-))	-33,178	-1,070	10,015	66
(30) Total Petroleum Products Supplied for Domestic Use	565,577	18,244	2,764,623	18,309
(30) = (28) + (29)				
(31) Finished Motor Gasoline	251,977	8,128	1,176,967	7,794
(32) Distillate Fuel Oil	100,453	3,240	528,112	3,497
(33) Residual Fuel Oil	22,768	734	127,439	844
(34) Jet Fuel	47,523	1,533	235,725	1,561
(35) Liquefied Petroleum Gases	54,950	1,773	304,810	2,019
(36) Other ^d	87,776	2,831	390,909	2,589
(37) Crude Oil	131	4	661	4
(38) Total Products Supplied	565,577	18,244	2,764,623	18,309
(38) = (31) through (37)				
Ending Stocks, All Oils				
(39) Crude Oil (Excluding SPR)	326,953	--	326,953	--
(40) Strategic Petroleum Reserve	563,458	--	563,458	--
(41) Finished Motor Gasoline	157,830	--	157,830	--
(42) Distillate Fuel Oil	108,427	--	108,427	--
(43) Residual Fuel Oil	39,195	--	39,195	--
(44) Jet Fuel	41,137	--	41,137	--
(45) Liquefied Petroleum Gases	88,764	--	88,764	--
(46) Other ^d	235,990	--	235,990	--
(47) Total Stocks	1,561,754	--	1,561,754	--
(47) = (39) through (46)				

^a 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.

^b Includes field production of fuel ethanol and an adjustment for motor gasoline blending components.

^c Includes products in the pentanes plus category only.

^d 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,
May 1997**
(Thousand Barrels)

Commodity	Supply				Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ^c	
Crude Oil	^E 198,423	--	256,640	20,017	6,581	0	467,568	800	131	890,411
Natural Gas Liquids and LRGs	56,784	26,830	5,058	--	16,465	--	10,937	1,246	60,024	96,184
Pentanes Plus	10,230	--	842	--	1,444	--	4,533	21	5,074	7,420
Liquefied Petroleum Gases	46,554	26,830	4,216	--	15,021	--	6,404	1,225	54,950	88,764
Ethane/Ethylene	19,569	976	440	--	683	--	0	0	20,302	18,827
Propane/Propylene	16,360	18,146	2,145	--	7,996	--	0	723	27,932	39,944
Normal Butane/Butylene	4,697	7,084	875	--	5,328	--	2,249	502	4,577	22,006
Isobutane/Isobutylene	5,928	624	756	--	1,014	--	4,155	0	2,139	7,987
Other Liquids	7,112	--	25,889	--	1,700	--	30,165	783	353	161,035
Other Hydrocarbons/Oxygenates	8,799	--	2,559	--	-78	--	11,027	409	0	12,942
Unfinished Oils	--	--	13,978	--	3,131	--	10,596	0	251	103,716
Motor Gasoline Blend. Comp.	-1,687	--	9,352	--	-1,382	--	8,673	374	0	44,173
Aviation Gasoline Blend. Comp.	--	--	0	--	29	--	-131	0	102	204
Finished Petroleum Products	3,010	508,454	36,105	--	18,157	--	--	24,342	505,070	414,124
Finished Motor Gasoline	3,010	246,728	11,236	--	5,861	--	--	3,136	251,977	157,830
Reformulated	--	76,794	5,162	--	2,352	--	--	79	79,525	39,448
Oxygenated	13,230	2,171	0	--	-112	--	--	33	15,480	961
Other	-10,220	167,763	6,074	--	3,621	--	--	3,024	156,972	117,421
Finished Aviation Gasoline	--	805	4	--	39	--	--	0	770	1,743
Jet Fuel	--	47,001	2,826	--	2,026	--	--	278	47,523	41,137
Naphtha-Type	--	24	0	--	12	--	--	3	9	29
Kerosene-Type	--	46,977	2,826	--	2,014	--	--	275	47,514	41,108
Kerosene	--	910	8	--	312	--	--	5	601	3,801
Distillate Fuel Oil	--	109,281	6,816	--	10,902	--	--	4,742	100,453	108,427
0.05 percent sulfur and under	--	73,593	3,878	--	4,305	--	--	1,368	71,798	63,072
Greater than 0.05 percent sulfur	--	35,688	2,938	--	6,597	--	--	3,374	28,655	45,355
Residual Fuel Oil	--	19,146	5,433	--	-1,355	--	--	3,166	22,768	39,195
Naphtha For Petro. Feed. Use	--	7,285	1,868	--	-150	--	--	0	9,303	1,987
Other Oils For Petro. Feed. Use	--	7,507	6,018	--	145	--	--	0	13,380	1,672
Special Naphthas	--	1,526	215	--	126	--	--	506	1,109	1,759
Lubricants	--	6,151	427	--	121	--	--	650	5,807	12,492
Waxes	--	824	40	--	115	--	--	82	667	1,045
Petroleum Coke	--	22,210	41	--	-628	--	--	11,647	11,232	8,315
Asphalt and Road Oil	--	16,516	1,161	--	801	--	--	123	16,753	33,605
Still Gas	--	21,043	0	--	0	--	--	0	21,043	0
Miscellaneous Products	--	1,521	12	--	-158	--	--	7	1,684	1,116
Total	265,328	535,284	323,692	20,017	42,903	0	508,670	27,171	565,577	1,561,754

^a 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.

^b A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^c 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-May 1997
(Thousand Barrels)

Commodity	Supply				Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ^c	
Crude Oil	^E 973,850	--	1,164,469	50,825	39,935	0	2,130,013	18,535	661	890,411
Natural Gas Liquids and LRGs	280,840	102,640	27,466	--	3,714	--	65,336	9,058	332,838	96,184
Pentanes Plus	49,163	--	5,597	--	1,055	--	24,270	1,407	28,028	7,420
Liquefied Petroleum Gases	231,677	102,640	21,869	--	2,659	--	41,066	7,651	304,810	88,764
Ethane/Ethylene	99,067	3,603	2,601	--	1,308	--	0	0	103,963	18,827
Propane/Propylene	80,650	81,778	14,385	--	-2,957	--	0	4,964	174,806	39,944
Normal Butane/Butylene	23,135	15,508	2,533	--	4,015	--	21,583	2,687	12,891	22,006
Isobutane/Isobutylene	28,825	1,751	2,350	--	293	--	19,483	0	13,150	7,987
Other Liquids	38,000	--	107,297	--	21,256	--	123,916	2,953	-2,828	161,035
Other Hydrocarbons/Oxygenates	41,105	--	9,931	--	-189	--	50,080	1,145	0	12,942
Unfinished Oils	--	--	56,153	--	15,359	--	44,262	0	-3,468	103,716
Motor Gasoline Blend. Comp.	-3,105	--	41,213	--	6,136	--	30,164	1,808	0	44,173
Aviation Gasoline Blend. Comp.	--	--	0	--	-50	--	-590	0	640	204
Finished Petroleum Products	9,996	2,338,030	187,477	--	-12,674	--	--	114,226	2,433,952	414,124
Finished Motor Gasoline	9,996	1,132,762	50,498	--	354	--	--	15,935	1,176,967	157,830
Reformulated	--	350,099	23,545	--	1,523	--	--	79	372,042	39,448
Oxygenated	68,910	14,915	0	--	-626	--	--	145	84,306	961
Other	-58,914	767,748	26,953	--	-543	--	--	15,711	720,619	117,421
Finished Aviation Gasoline	--	2,743	6	--	-529	--	--	0	3,278	1,743
Jet Fuel	--	225,359	15,837	--	1,167	--	--	4,304	235,725	41,137
Naphtha-Type	--	91	0	--	-288	--	--	25	354	29
Kerosene-Type	--	225,268	15,837	--	1,455	--	--	4,279	235,371	41,108
Kerosene	--	9,510	236	--	-3,294	--	--	34	13,006	3,801
Distillate Fuel Oil	--	492,173	38,059	--	-18,428	--	--	20,548	528,112	108,427
0.05 percent sulfur and under	--	307,960	17,258	--	-5,462	--	--	5,808	324,872	63,072
Greater than 0.05 percent sulfur	--	184,213	20,801	--	-12,966	--	--	14,740	203,240	45,355
Residual Fuel Oil	--	104,318	34,839	--	-6,516	--	--	18,234	127,439	39,195
Naphtha For Petro. Feed. Use	--	31,806	8,950	--	214	--	--	0	40,542	1,987
Other Oils For Petro. Feed. Use	--	34,580	30,984	--	245	--	--	0	65,319	1,672
Special Naphthas	--	7,248	1,350	--	-136	--	--	2,840	5,894	1,759
Lubricants	--	27,192	1,564	--	-182	--	--	4,631	24,307	12,492
Waxes	--	4,022	188	--	145	--	--	381	3,684	1,045
Petroleum Coke	--	101,479	175	--	1,338	--	--	46,818	53,498	8,315
Asphalt and Road Oil	--	62,923	4,735	--	13,122	--	--	424	54,112	33,605
Still Gas	--	95,237	0	--	0	--	--	0	95,237	0
Miscellaneous Products	--	6,678	56	--	-174	--	--	77	6,831	1,116
Total	1,302,686	2,440,670	1,486,709	50,825	52,231	0	2,319,265	144,771	2,764,623	1,561,754

^a 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.

^b A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^c 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,
May 1997**
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ^c
Crude Oil	^E 6,401	--	8,279	646	212	0	15,083	26	4
Natural Gas Liquids and LRGs	1,832	865	163	--	531	--	353	40	1,936
Pentanes Plus	330	--	27	--	47	--	146	1	164
Liquefied Petroleum Gases	1,502	865	136	--	485	--	207	40	1,773
Ethane/Ethylene	631	31	14	--	22	--	0	0	655
Propane/Propylene	528	585	69	--	258	--	0	23	901
Normal Butane/Butylene	152	229	28	--	172	--	73	16	148
Isobutane/Isobutylene	191	20	24	--	33	--	134	0	69
Other Liquids	229	--	835	--	55	--	973	25	11
Other Hydrocarbons/Oxygenates	284	--	83	--	-3	--	356	13	0
Unfinished Oils	--	--	451	--	101	--	342	0	8
Motor Gasoline Blend. Comp.	-54	--	302	--	-45	--	280	12	0
Aviation Gasoline Blend. Comp.	--	--	0	--	1	--	-4	0	3
Finished Petroleum Products	97	16,402	1,165	--	586	--	--	785	16,293
Finished Motor Gasoline	97	7,959	362	--	189	--	--	101	8,128
Reformulated	--	2,477	167	--	76	--	--	3	2,565
Oxygenated	427	70	0	--	-4	--	--	1	499
Other	-330	5,412	196	--	117	--	--	98	5,064
Finished Aviation Gasoline	--	26	(s)	--	1	--	--	0	25
Jet Fuel	--	1,516	91	--	65	--	--	9	1,533
Naphtha-Type	--	1	0	--	(s)	--	--	(s)	(s)
Kerosene-Type	--	1,515	91	--	65	--	--	9	1,533
Kerosene	--	29	(s)	--	10	--	--	(s)	19
Distillate Fuel Oil	--	3,525	220	--	352	--	--	153	3,240
0.05 percent sulfur and under	--	2,374	125	--	139	--	--	44	2,316
Greater than 0.05 percent sulfur ...	--	1,151	95	--	213	--	--	109	924
Residual Fuel Oil	--	618	175	--	-44	--	--	102	734
Naphtha For Petro. Feed. Use	--	235	60	--	-5	--	--	0	300
Other Oils For Petro. Feed. Use	--	242	194	--	5	--	--	0	432
Special Naphthas	--	49	7	--	4	--	--	16	36
Lubricants	--	198	14	--	4	--	--	21	187
Waxes	--	27	1	--	4	--	--	3	22
Petroleum Coke	--	716	1	--	-20	--	--	376	362
Asphalt and Road Oil	--	533	37	--	26	--	--	4	540
Still Gas	--	679	0	--	0	--	--	0	679
Miscellaneous Products	--	49	(s)	--	-5	--	--	(s)	54
Total	8,559	17,267	10,442	646	1,384	0	16,409	876	18,244

^a 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.

^b A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^c 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-May 1997

(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ^c
Crude Oil	E 6,449	--	7,712	337	264	0	14,106	123	4
Natural Gas Liquids and LRGs	1,860	680	182	--	25	--	433	60	2,204
Pentanes Plus	326	--	37	--	7	--	161	9	186
Liquefied Petroleum Gases	1,534	680	145	--	18	--	272	51	2,019
Ethane/Ethylene	656	24	17	--	9	--	0	0	688
Propane/Propylene	534	542	95	--	-20	--	0	33	1,158
Normal Butane/Butylene	153	103	17	--	27	--	143	18	85
Isobutane/Isobutylene	191	12	16	--	2	--	129	0	87
Other Liquids	252	--	711	--	141	--	821	20	-19
Other Hydrocarbons/Oxygenates	272	--	66	--	-1	--	332	8	0
Unfinished Oils	--	--	372	--	102	--	293	0	-23
Motor Gasoline Blend. Comp.	-21	--	273	--	41	--	200	12	0
Aviation Gasoline Blend. Comp.	--	--	0	--	(s)	--	-4	0	4
Finished Petroleum Products	66	15,484	1,242	--	-84	--	--	756	16,119
Finished Motor Gasoline	66	7,502	334	--	2	--	--	106	7,794
Reformulated	--	2,319	156	--	10	--	--	1	2,464
Oxygenated	456	99	0	--	-4	--	--	1	558
Other	-390	5,084	178	--	-4	--	--	104	4,772
Finished Aviation Gasoline	--	18	(s)	--	-4	--	--	0	22
Jet Fuel	--	1,492	105	--	8	--	--	29	1,561
Naphtha-Type	--	1	0	--	-2	--	--	(s)	2
Kerosene-Type	--	1,492	105	--	10	--	--	28	1,559
Kerosene	--	63	2	--	-22	--	--	(s)	86
Distillate Fuel Oil	--	3,259	252	--	-122	--	--	136	3,497
0.05 percent sulfur and under	--	2,039	114	--	-36	--	--	38	2,151
Greater than 0.05 percent sulfur ...	--	1,220	138	--	-86	--	--	98	1,346
Residual Fuel Oil	--	691	231	--	-43	--	--	121	844
Naphtha For Petro. Feed. Use	--	211	59	--	1	--	--	0	268
Other Oils For Petro. Feed. Use	--	229	205	--	2	--	--	0	433
Special Naphthas	--	48	9	--	-1	--	--	19	39
Lubricants	--	180	10	--	-1	--	--	31	161
Waxes	--	27	1	--	1	--	--	3	24
Petroleum Coke	--	672	1	--	9	--	--	310	354
Asphalt and Road Oil	--	417	31	--	87	--	--	3	358
Still Gas	--	631	0	--	0	--	--	0	631
Miscellaneous Products	--	44	(s)	--	-1	--	--	1	45
Total	8,627	16,163	9,846	337	346	0	15,359	959	18,309

^a 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.

^b A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^c 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, May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 788	--	48,817	-1,367	-338	-700	0	48,600	0	0	14,707
Natural Gas Liquids and LRGs	733	2,110	147	--	2,308	460	--	101	146	4,591	4,842
Pentanes Plus	77	--	0	--	0	14	--	0	2	61	33
Liquefied Petroleum Gases	656	2,110	147	--	2,308	446	--	101	144	4,530	4,809
Ethane/Ethylene	253	0	0	--	0	0	--	0	0	253	1
Propane/Propylene	267	1,721	138	--	2,241	-118	--	0	85	4,400	2,975
Normal Butane/Butylene	100	434	5	--	0	288	--	0	59	192	1,398
Isobutane/Isobutylene	36	-45	4	--	67	276	--	101	0	-315	435
Other Liquids	677	--	10,967	--	326	26	--	13,747	44	-1,847	23,422
Other Hydrocarbons/Oxygenates ...	1,530	--	560	--	0	-139	--	2,229	(s)	0	2,009
Unfinished Oils	--	--	1,538	--	-10	562	--	2,918	0	-1,952	11,231
Motor Gasoline Blend. Comp.	-853	--	8,869	--	336	-405	--	8,713	44	0	10,080
Aviation Gasoline Blend. Comp.	--	--	0	--	0	8	--	-113	0	105	102
Finished Petroleum Products	933	62,218	26,709	--	86,301	13,306	--	--	1,370	161,484	121,114
Finished Motor Gasoline	933	33,160	10,761	--	50,489	5,895	--	--	8	89,440	48,241
Reformulated	--	19,720	4,859	--	9,998	868	--	--	(s)	33,709	16,205
Oxygenated	794	0	0	--	147	26	--	--	(s)	915	231
Other	139	13,440	5,902	--	40,344	5,001	--	--	8	54,816	31,805
Finished Aviation Gasoline	--	1	0	--	78	38	--	--	0	41	286
Jet Fuel	--	3,053	2,760	--	13,702	1,074	--	--	6	18,435	10,826
Naphtha-Type	--	0	0	--	0	0	--	--	3	-3	0
Kerosene-Type	--	3,053	2,760	--	13,702	1,074	--	--	3	18,438	10,826
Kerosene	--	154	8	--	71	349	--	--	2	-118	2,024
Distillate Fuel Oil	--	14,149	6,195	--	19,529	5,616	--	--	758	33,499	35,502
0.05 percent sulfur and under	--	5,434	3,601	--	13,672	1,734	--	--	5	20,968	15,508
Greater than 0.05 percent sulfur	--	8,715	2,594	--	5,857	3,882	--	--	753	12,531	19,994
Residual Fuel Oil	--	3,748	5,121	--	1,127	468	--	--	154	9,374	14,422
Petrochemical Feedstocks ^e	--	548	179	--	0	-104	--	--	0	831	461
Special Naphthas	--	64	187	--	32	19	--	--	16	248	132
Lubricants	--	553	406	--	840	-148	--	--	175	1,772	2,349
Waxes	--	167	25	--	0	34	--	--	22	136	202
Petroleum Coke	--	1,621	0	--	0	43	--	--	203	1,375	433
Asphalt and Road Oil	--	2,983	1,064	--	433	21	--	--	23	4,436	6,123
Still Gas	--	1,949	0	--	0	0	--	--	0	1,949	0
Miscellaneous Products	--	68	3	--	0	1	--	--	5	65	113
Total	3,131	64,328	86,640	-1,367	88,597	13,092	0	62,448	1,560	164,229	164,085

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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-May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 4,107	--	205,086	2,128	-1,905	1,170	0	208,246	0	0	14,707
Natural Gas Liquids and LRGs	3,832	8,237	3,956	--	15,393	-1,197	--	666	265	31,684	4,842
Pentanes Plus	397	--	0	--	0	3	--	0	14	380	33
Liquefied Petroleum Gases	3,435	8,237	3,956	--	15,393	-1,200	--	666	251	31,304	4,809
Ethane/Ethylene	1,200	0	0	--	0	0	--	0	0	1,200	1
Propane/Propylene	1,527	7,629	3,866	--	15,267	-1,903	--	0	168	30,024	2,975
Normal Butane/Butylene	529	786	46	--	9	451	--	295	84	540	1,398
Isobutane/Isobutylene	179	-178	44	--	117	252	--	371	0	-461	435
Other Liquids	3,672	--	47,038	--	2,452	5,118	--	56,468	99	-8,523	23,422
Other Hydrocarbons/Oxygenates	7,110	--	2,764	--	0	167	--	9,697	10	0	2,009
Unfinished Oils	--	--	5,385	--	-61	1,466	--	13,022	0	-9,164	11,231
Motor Gasoline Blend. Comp.	-3,437	--	38,889	--	2,513	3,576	--	34,299	90	0	10,080
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-91	--	-550	0	641	102
Finished Petroleum Products	3,851	266,919	136,115	--	404,974	-14,869	--	--	4,069	822,659	121,114
Finished Motor Gasoline	3,851	141,812	48,280	--	225,771	3,226	--	--	268	416,220	48,241
Reformulated	--	92,100	22,562	--	45,828	-1,048	--	--	(s)	161,538	16,205
Oxygenated	4,135	8	0	--	554	-127	--	--	(s)	4,823	231
Other	-284	49,704	25,718	--	179,389	4,401	--	--	268	249,858	31,805
Finished Aviation Gasoline	--	24	0	--	344	-531	--	--	0	899	286
Jet Fuel	--	12,130	14,933	--	65,473	1,209	--	--	276	91,051	10,826
Naphtha-Type	--	0	0	--	0	0	--	--	11	-11	0
Kerosene-Type	--	12,130	14,933	--	65,473	1,209	--	--	265	91,062	10,826
Kerosene	--	1,376	224	--	863	-2,509	--	--	7	4,965	2,024
Distillate Fuel Oil	--	61,892	34,247	--	100,911	-11,888	--	--	1,002	207,936	35,502
0.05 percent sulfur and under	--	18,992	15,077	--	57,303	-3,571	--	--	161	94,782	15,508
Greater than 0.05 percent sulfur ...	--	42,900	19,170	--	43,608	-8,317	--	--	841	113,154	19,994
Residual Fuel Oil	--	17,986	30,615	--	6,698	-7,358	--	--	359	62,298	14,422
Petrochemical Feedstocks ^e	--	2,278	803	--	0	80	--	--	0	3,001	461
Special Naphthas	--	275	1,000	--	303	14	--	--	60	1,504	132
Lubricants	--	2,901	1,462	--	3,218	-70	--	--	663	6,988	2,349
Waxes	--	702	110	--	0	-10	--	--	91	731	202
Petroleum Coke	--	7,573	0	--	0	-40	--	--	1,223	6,390	433
Asphalt and Road Oil	--	9,352	4,431	--	1,393	2,999	--	--	98	12,079	6,123
Still Gas	--	8,284	0	--	0	0	--	--	0	8,284	0
Miscellaneous Products	--	334	10	--	0	9	--	--	21	314	113
Total	15,462	275,156	392,195	2,128	420,914	-9,778	0	265,380	4,434	845,819	164,085

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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, May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 25	--	1,575	-44	-11	-23	0	1,568	0	0
Natural Gas Liquids and LRGs	24	68	5	--	74	15	--	3	5	148
Pentanes Plus	2	--	0	--	0	(s)	--	0	(s)	2
Liquefied Petroleum Gases	21	68	5	--	74	14	--	3	5	146
Ethane/Ethylene	8	0	0	--	0	0	--	0	0	8
Propane/Propylene	9	56	4	--	72	-4	--	0	3	142
Normal Butane/Butylene	3	14	(s)	--	0	9	--	0	2	6
Isobutane/Isobutylene	1	-1	(s)	--	2	9	--	3	0	-10
Other Liquids	22	--	354	--	11	1	--	443	1	-60
Other Hydrocarbons/Oxygenates	49	--	18	--	0	-4	--	72	(s)	0
Unfinished Oils	--	--	50	--	(s)	18	--	94	0	-63
Motor Gasoline Blend. Comp.	-28	--	286	--	11	-13	--	281	1	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	-4	0	3
Finished Petroleum Products	30	2,007	862	--	2,784	429	--	--	44	5,209
Finished Motor Gasoline	30	1,070	347	--	1,629	190	--	--	(s)	2,885
Reformulated	--	636	157	--	323	28	--	--	(s)	1,087
Oxygenated	26	0	0	--	5	1	--	--	(s)	30
Other	4	434	190	--	1,301	161	--	--	(s)	1,768
Finished Aviation Gasoline	--	(s)	0	--	3	1	--	--	0	1
Jet Fuel	--	98	89	--	442	35	--	--	(s)	595
Naphtha-Type	--	0	0	--	0	0	--	--	(s)	(s)
Kerosene-Type	--	98	89	--	442	35	--	--	(s)	595
Kerosene	--	5	(s)	--	2	11	--	--	(s)	-4
Distillate Fuel Oil	--	456	200	--	630	181	--	--	24	1,081
0.05 percent sulfur and under	--	175	116	--	441	56	--	--	(s)	676
Greater than 0.05 percent sulfur ...	--	281	84	--	189	125	--	--	24	404
Residual Fuel Oil	--	121	165	--	36	15	--	--	5	302
Petrochemical Feedstocks ^e	--	18	6	--	0	-3	--	--	0	27
Special Naphthas	--	2	6	--	1	1	--	--	1	8
Lubricants	--	18	13	--	27	-5	--	--	6	57
Waxes	--	5	1	--	0	1	--	--	1	4
Petroleum Coke	--	52	0	--	0	1	--	--	7	44
Asphalt and Road Oil	--	96	34	--	14	1	--	--	1	143
Still Gas	--	63	0	--	0	0	--	--	0	63
Miscellaneous Products	--	2	(s)	--	0	(s)	--	--	(s)	2
Total	101	2,075	2,795	-44	2,858	422	0	2,014	50	5,298

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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-May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	E 27	--	1,358	14	-13	8	0	1,379	0	0
Natural Gas Liquids and LRGs	25	55	26	--	102	-8	--	4	2	210
Pentanes Plus	3	--	0	--	0	(s)	--	0	(s)	3
Liquefied Petroleum Gases	23	55	26	--	102	-8	--	4	2	207
Ethane/Ethylene	8	0	0	--	0	0	--	0	0	8
Propane/Propylene	10	51	26	--	101	-13	--	0	1	199
Normal Butane/Butylene	4	5	(s)	--	(s)	3	--	2	1	4
Isobutane/Isobutylene	1	-1	(s)	--	1	2	--	2	0	-3
Other Liquids	24	--	312	--	16	34	--	374	1	-56
Other Hydrocarbons/Oxygenates	47	--	18	--	0	1	--	64	(s)	0
Unfinished Oils	--	--	36	--	(s)	10	--	86	0	-61
Motor Gasoline Blend. Comp.	-23	--	258	--	17	24	--	227	1	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-1	--	-4	0	4
Finished Petroleum Products	26	1,768	901	--	2,682	-98	--	--	27	5,448
Finished Motor Gasoline	26	939	320	--	1,495	21	--	--	2	2,756
Reformulated	--	610	149	--	303	-7	--	--	(s)	1,070
Oxygenated	27	(s)	0	--	4	-1	--	--	(s)	32
Other	-2	329	170	--	1,188	29	--	--	2	1,655
Finished Aviation Gasoline	--	(s)	0	--	2	-4	--	--	0	6
Jet Fuel	--	80	99	--	434	8	--	--	2	603
Naphtha-Type	--	0	0	--	0	0	--	--	(s)	(s)
Kerosene-Type	--	80	99	--	434	8	--	--	2	603
Kerosene	--	9	1	--	6	-17	--	--	(s)	33
Distillate Fuel Oil	--	410	227	--	668	-79	--	--	7	1,377
0.05 percent sulfur and under	--	126	100	--	379	-24	--	--	1	628
Greater than 0.05 percent sulfur ...	--	284	127	--	289	-55	--	--	6	749
Residual Fuel Oil	--	119	203	--	44	-49	--	--	2	413
Petrochemical Feedstocks ^e	--	15	5	--	0	1	--	--	0	20
Special Naphthas	--	2	7	--	2	(s)	--	--	(s)	10
Lubricants	--	19	10	--	21	(s)	--	--	4	46
Waxes	--	5	1	--	0	(s)	--	--	1	5
Petroleum Coke	--	50	0	--	0	(s)	--	--	8	42
Asphalt and Road Oil	--	62	29	--	9	20	--	--	1	80
Still Gas	--	55	0	--	0	0	--	--	0	55
Miscellaneous Products	--	2	(s)	--	0	(s)	--	--	(s)	2
Total	102	1,822	2,597	14	2,788	-65	0	1,757	29	5,601

^a 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.
^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.
^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.
^d 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.
^e 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, May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 17,845	--	24,118	-1,441	64,937	-1,326	0	106,785	0	0	72,547
Natural Gas Liquids and LRGs	9,369	5,373	1,735	--	-698	7,200	--	1,751	185	6,643	28,987
Pentanes Plus	1,327	--	37	--	423	726	--	636	20	405	2,421
Liquefied Petroleum Gases	8,042	5,373	1,698	--	-1,121	6,474	--	1,115	166	6,237	26,566
Ethane/Ethylene	2,768	0	6	--	-2,265	-257	--	0	0	766	2,771
Propane/Propylene	3,488	4,076	1,388	--	1,066	4,859	--	0	90	5,069	16,906
Normal Butane/Butylene	920	1,151	75	--	-360	1,444	--	180	75	87	4,645
Isobutane/Isobutylene	866	146	229	--	438	428	--	935	0	316	2,244
Other Liquids	-1,096	--	4	--	1,945	-11	--	1,471	(s)	-607	27,237
Other Hydrocarbons/Oxygenates	1,363	--	0	--	0	244	--	1,119	(s)	0	2,321
Unfinished Oils	--	--	4	--	-86	-492	--	1,017	0	-607	13,835
Motor Gasoline Blend. Comp.	-2,459	--	0	--	2,031	240	--	-668	(s)	0	11,031
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-3	--	3	0	0	50
Finished Petroleum Products	3,464	109,586	510	--	28,267	3,241	--	--	238	138,349	102,201
Finished Motor Gasoline	3,464	56,532	126	--	16,607	796	--	--	13	75,921	40,165
Reformulated	--	7,779	0	--	20	95	--	--	0	7,704	1,207
Oxygenated	10,055	1,832	0	--	-147	-89	--	--	1	11,828	628
Other	-6,590	46,921	126	--	16,734	790	--	--	12	56,389	38,330
Finished Aviation Gasoline	--	119	2	--	69	9	--	--	0	181	403
Jet Fuel	--	6,880	0	--	3,060	596	--	--	1	9,343	8,277
Naphtha-Type	--	0	0	--	0	-1	--	--	(s)	1	2
Kerosene-Type	--	6,880	0	--	3,060	597	--	--	1	9,342	8,275
Kerosene	--	103	0	--	69	-82	--	--	1	253	998
Distillate Fuel Oil	--	26,832	202	--	8,144	1,486	--	--	13	33,679	28,621
0.05 percent sulfur and under	--	18,588	158	--	6,911	365	--	--	0	25,292	19,485
Greater than 0.05 percent sulfur ...	--	8,244	44	--	1,233	1,121	--	--	13	8,387	9,136
Residual Fuel Oil	--	1,875	0	--	-257	-4	--	--	39	1,583	2,486
Petrochemical Feedstocks ^e	--	1,249	28	--	0	-94	--	--	0	1,371	104
Special Naphthas	--	438	28	--	49	28	--	--	10	477	209
Lubricants	--	833	21	--	338	138	--	--	50	1,004	1,665
Waxes	--	82	14	--	0	-4	--	--	11	89	156
Petroleum Coke	--	4,412	0	--	0	19	--	--	39	4,354	2,459
Asphalt and Road Oil	--	5,928	87	--	188	282	--	--	60	5,861	16,392
Still Gas	--	4,014	0	--	0	0	--	--	0	4,014	0
Miscellaneous Products	--	289	2	--	0	71	--	--	(s)	220	266
Total	29,583	114,959	26,367	-1,441	94,451	9,104	0	110,007	423	144,384	230,972

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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-May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 85,260	--	122,294	-2,751	294,455	9,295	0	486,938	3,024	0	72,547
Natural Gas Liquids and LRGs	46,091	20,101	9,119	--	-1,787	2,574	--	13,614	2,375	54,961	28,987
Pentanes Plus	6,235	--	71	--	2,141	497	--	3,701	1,230	3,019	2,421
Liquefied Petroleum Gases	39,856	20,101	9,048	--	-3,928	2,077	--	9,913	1,144	51,943	26,566
Ethane/Ethylene	14,431	0	49	--	-11,238	-698	--	0	0	3,940	2,771
Propane/Propylene	16,836	18,392	7,639	--	6,728	3,472	--	0	346	45,777	16,906
Normal Butane/Butylene	5,152	1,213	514	--	-608	-935	--	5,302	798	1,106	4,645
Isobutane/Isobutylene	3,437	496	846	--	1,190	238	--	4,611	0	1,120	2,244
Other Liquids	-766	--	60	--	8,602	5,220	--	6,570	5	-3,899	27,237
Other Hydrocarbons/Oxygenates	5,750	--	0	--	0	667	--	5,078	5	0	2,321
Unfinished Oils	--	--	21	--	400	2,163	--	2,159	0	-3,901	13,835
Motor Gasoline Blend. Comp.	-6,515	--	39	--	8,202	2,368	--	-643	1	0	11,031
Aviation Gasoline Blend. Comp.	--	--	0	--	0	22	--	-24	0	2	50
Finished Petroleum Products	11,753	510,888	1,930	--	116,515	2,878	--	--	1,258	636,950	102,201
Finished Motor Gasoline	11,753	269,483	403	--	66,821	-1,313	--	--	63	349,709	40,165
Reformulated	--	36,493	0	--	60	43	--	--	0	36,510	1,207
Oxygenated	52,372	9,192	0	--	-592	-316	--	--	3	61,284	628
Other	-40,619	223,798	403	--	67,353	-1,040	--	--	60	251,915	38,330
Finished Aviation Gasoline	--	457	2	--	334	-23	--	--	0	816	403
Jet Fuel	--	31,866	0	--	14,868	-448	--	--	9	47,173	8,277
Naphtha-Type	--	0	0	--	0	-35	--	--	1	34	2
Kerosene-Type	--	31,866	0	--	14,868	-413	--	--	8	47,139	8,275
Kerosene	--	3,056	0	--	38	-423	--	--	3	3,514	998
Distillate Fuel Oil	--	119,236	809	--	32,755	-3,612	--	--	249	156,163	28,621
0.05 percent sulfur and under	--	82,178	577	--	28,696	-3,112	--	--	2	114,561	19,485
Greater than 0.05 percent sulfur ...	--	37,058	232	--	4,059	-500	--	--	247	41,602	9,136
Residual Fuel Oil	--	8,962	62	--	-1,102	602	--	--	72	7,248	2,486
Petrochemical Feedstocks ^e	--	6,570	157	--	281	-109	--	--	0	7,117	104
Special Naphthas	--	1,966	136	--	231	-24	--	--	48	2,309	209
Lubricants	--	3,318	102	--	1,174	50	--	--	307	4,237	1,665
Waxes	--	400	69	--	0	-9	--	--	68	410	156
Petroleum Coke	--	20,892	0	--	0	698	--	--	341	19,853	2,459
Asphalt and Road Oil	--	24,093	167	--	1,115	7,471	--	--	96	17,808	16,392
Still Gas	--	19,163	0	--	0	0	--	--	0	19,163	0
Miscellaneous Products	--	1,426	23	--	0	18	--	--	1	1,430	266
Total	142,337	530,989	133,403	-2,751	417,785	19,967	0	507,122	6,662	688,012	230,972

^a 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.
^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.
^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.
^d 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.
^e 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, May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 576	--	778	-46	2,095	-43	0	3,445	0	0
Natural Gas Liquids and LRGs	302	173	56	--	-23	232	--	56	6	214
Pentanes Plus	43	--	1	--	14	23	--	21	1	13
Liquefied Petroleum Gases	259	173	55	--	-36	209	--	36	5	201
Ethane/Ethylene	89	0	(s)	--	-73	-8	--	0	0	25
Propane/Propylene	113	131	45	--	34	157	--	0	3	164
Normal Butane/Butylene	30	37	2	--	-12	47	--	6	2	3
Isobutane/Isobutylene	28	5	7	--	14	14	--	30	0	10
Other Liquids	-35	--	(s)	--	63	(s)	--	47	(s)	-20
Other Hydrocarbons/Oxygenates	44	--	0	--	0	8	--	36	(s)	0
Unfinished Oils	--	--	(s)	--	-3	-16	--	33	0	-20
Motor Gasoline Blend. Comp.	-79	--	0	--	66	8	--	-22	(s)	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	0
Finished Petroleum Products	112	3,535	16	--	912	105	--	--	8	4,463
Finished Motor Gasoline	112	1,824	4	--	536	26	--	--	(s)	2,449
Reformulated	--	251	0	--	1	3	--	--	0	249
Oxygenated	324	59	0	--	-5	-3	--	--	(s)	382
Other	-213	1,514	4	--	540	25	--	--	(s)	1,819
Finished Aviation Gasoline	--	4	(s)	--	2	(s)	--	--	0	6
Jet Fuel	--	222	0	--	99	19	--	--	(s)	301
Naphtha-Type	--	0	0	--	0	(s)	--	--	(s)	(s)
Kerosene-Type	--	222	0	--	99	19	--	--	(s)	301
Kerosene	--	3	0	--	2	-3	--	--	(s)	8
Distillate Fuel Oil	--	866	7	--	263	48	--	--	(s)	1,086
0.05 percent sulfur and under	--	600	5	--	223	12	--	--	0	816
Greater than 0.05 percent sulfur ...	--	266	1	--	40	36	--	--	(s)	271
Residual Fuel Oil	--	60	0	--	-8	(s)	--	--	1	51
Petrochemical Feedstocks ^e	--	40	1	--	0	-3	--	--	0	44
Special Naphthas	--	14	1	--	2	1	--	--	(s)	15
Lubricants	--	27	1	--	11	4	--	--	2	32
Waxes	--	3	(s)	--	0	(s)	--	--	(s)	3
Petroleum Coke	--	142	0	--	0	1	--	--	1	140
Asphalt and Road Oil	--	191	3	--	6	9	--	--	2	189
Still Gas	--	129	0	--	0	0	--	--	0	129
Miscellaneous Products	--	9	(s)	--	0	2	--	--	(s)	7
Total	954	3,708	851	-46	3,047	294	0	3,549	14	4,658

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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-May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 565	--	810	-18	1,950	62	0	3,225	20	0
Natural Gas Liquids and LRGs	305	133	60	--	-12	17	--	90	16	364
Pentanes Plus	41	--	(s)	--	14	3	--	25	8	20
Liquefied Petroleum Gases	264	133	60	--	-26	14	--	66	8	344
Ethane/Ethylene	96	0	(s)	--	-74	-5	--	0	0	26
Propane/Propylene	111	122	51	--	45	23	--	0	2	303
Normal Butane/Butylene	34	8	3	--	-4	-6	--	35	5	7
Isobutane/Isobutylene	23	3	6	--	8	2	--	31	0	7
Other Liquids	-5	--	(s)	--	57	35	--	44	(s)	-26
Other Hydrocarbons/Oxygenates	38	--	0	--	0	4	--	34	(s)	0
Unfinished Oils	--	--	(s)	--	3	14	--	14	0	-26
Motor Gasoline Blend. Comp.	-43	--	(s)	--	54	16	--	-4	(s)	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	78	3,383	13	--	772	19	--	--	8	4,218
Finished Motor Gasoline	78	1,785	3	--	443	-9	--	--	(s)	2,316
Reformulated	--	242	0	--	(s)	(s)	--	--	0	242
Oxygenated	347	61	0	--	-4	-2	--	--	(s)	406
Other	-269	1,482	3	--	446	-7	--	--	(s)	1,668
Finished Aviation Gasoline	--	3	(s)	--	2	(s)	--	--	0	5
Jet Fuel	--	211	0	--	98	-3	--	--	(s)	312
Naphtha-Type	--	0	0	--	0	(s)	--	--	(s)	(s)
Kerosene-Type	--	211	0	--	98	-3	--	--	(s)	312
Kerosene	--	20	0	--	(s)	-3	--	--	(s)	23
Distillate Fuel Oil	--	790	5	--	217	-24	--	--	2	1,034
0.05 percent sulfur and under	--	544	4	--	190	-21	--	--	(s)	759
Greater than 0.05 percent sulfur ..	--	245	2	--	27	-3	--	--	2	276
Residual Fuel Oil	--	59	(s)	--	-7	4	--	--	(s)	48
Petrochemical Feedstocks ^e	--	44	1	--	2	-1	--	--	0	47
Special Naphthas	--	13	1	--	2	(s)	--	--	(s)	15
Lubricants	--	22	1	--	8	(s)	--	--	2	28
Waxes	--	3	(s)	--	0	(s)	--	--	(s)	3
Petroleum Coke	--	138	0	--	0	5	--	--	2	131
Asphalt and Road Oil	--	160	1	--	7	49	--	--	1	118
Still Gas	--	127	0	--	0	0	--	--	0	127
Miscellaneous Products	--	9	(s)	--	0	(s)	--	--	(s)	9
Total	943	3,516	883	-18	2,767	132	0	3,358	44	4,556

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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, May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 99,195	--	167,655	11,821	-58,164	3,777	0	216,730	(s)	0	720,394
Natural Gas Liquids and LRGs	38,444	16,111	2,999	--	2,628	7,784	--	5,340	229	46,829	57,524
Pentanes Plus	6,047	--	805	--	30	701	--	2,190	0	3,991	4,732
Liquefied Petroleum Gases	32,397	16,111	2,194	--	2,598	7,083	--	3,150	229	42,838	52,792
Ethane/Ethylene	15,061	976	434	--	4,022	941	--	0	0	19,552	15,842
Propane/Propylene	10,825	10,531	508	--	-2,077	2,783	--	0	224	16,780	18,549
Normal Butane/Butylene	2,540	4,241	761	--	870	3,091	--	860	5	4,456	13,740
Isobutane/Isobutylene	3,971	363	491	--	-217	268	--	2,290	0	2,050	4,661
Other Liquids	4,738	--	12,091	--	-2,373	2,301	--	10,736	737	682	69,870
Other Hydrocarbons/Oxygenates	3,661	--	0	--	0	-315	--	3,569	407	0	4,272
Unfinished Oils	--	--	12,091	--	96	3,762	--	7,740	0	685	51,724
Motor Gasoline Blend. Comp.	1,077	--	0	--	-2,469	-1,168	--	-554	330	0	13,826
Aviation Gasoline Blend. Comp.	--	--	0	--	0	22	--	-19	0	-3	48
Finished Petroleum Products	-1,025	230,844	7,984	--	-119,619	1,102	--	--	15,289	101,793	122,697
Finished Motor Gasoline	-1,025	106,777	303	--	-69,954	-1,559	--	--	2,895	34,765	42,628
Reformulated	--	20,288	303	--	-10,018	852	--	--	0	9,721	9,765
Oxygenated	529	148	0	--	0	0	--	--	1	677	0
Other	-1,554	86,341	0	--	-59,936	-2,411	--	--	2,895	24,368	32,863
Finished Aviation Gasoline	--	454	0	--	-163	2	--	--	0	289	481
Jet Fuel	--	23,332	22	--	-18,026	-69	--	--	93	5,304	12,843
Naphtha-Type	--	1	0	--	0	0	--	--	0	1	0
Kerosene-Type	--	23,331	22	--	-18,026	-69	--	--	93	5,303	12,843
Kerosene	--	475	0	--	-140	23	--	--	0	312	610
Distillate Fuel Oil	--	48,989	0	--	-28,637	3,672	--	--	1,583	15,097	29,563
0.05 percent sulfur and under	--	34,257	0	--	-21,426	2,511	--	--	411	9,909	18,009
Greater than 0.05 percent sulfur ...	--	14,732	0	--	-7,211	1,161	--	--	1,172	5,188	11,554
Residual Fuel Oil	--	6,883	312	--	-870	-1,309	--	--	2,166	5,468	15,686
Petrochemical Feedstocks ^e	--	12,656	7,329	--	0	308	--	--	0	19,677	2,755
Special Naphthas	--	956	0	--	-81	72	--	--	9	794	1,369
Lubricants	--	3,946	0	--	-1,127	6	--	--	315	2,498	7,099
Waxes	--	424	1	--	0	56	--	--	33	336	434
Petroleum Coke	--	10,605	0	--	0	-578	--	--	8,180	3,003	3,435
Asphalt and Road Oil	--	4,674	10	--	-621	689	--	--	15	3,359	5,192
Still Gas	--	9,697	0	--	0	0	--	--	0	9,697	0
Miscellaneous Products	--	976	7	--	0	-211	--	--	(s)	1,194	602
Total	141,353	246,955	190,729	11,821	-177,528	14,964	0	232,806	16,256	149,304	970,485

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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-May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 484,860	--	768,206	32,334	-265,283	20,079	0	1,000,038	(s)	0	720,394
Natural Gas Liquids and LRGs	187,914	62,289	12,892	--	7,163	2,670	--	31,362	3,487	232,739	57,524
Pentanes Plus	28,490	--	5,417	--	-72	530	--	11,632	161	21,512	4,732
Liquefied Petroleum Gases	159,424	62,289	7,475	--	7,235	2,140	--	19,730	3,326	211,227	52,792
Ethane/Ethylene	74,751	3,603	2,552	--	21,572	2,013	--	0	0	100,465	15,842
Propane/Propylene	53,068	47,284	2,007	--	-17,001	-4,165	--	0	3,072	86,451	18,549
Normal Butane/Butylene	11,353	10,323	1,608	--	2,683	4,617	--	8,738	254	12,358	13,740
Isobutane/Isobutylene	20,252	1,079	1,308	--	-19	-325	--	10,992	0	11,953	4,661
Other Liquids	21,541	--	47,681	--	-10,980	8,914	--	42,605	2,844	3,879	69,870
Other Hydrocarbons/Oxygenates	15,915	--	158	--	0	-886	--	15,832	1,127	0	4,272
Unfinished Oils	--	--	47,294	--	-339	9,464	--	33,609	0	3,882	51,724
Motor Gasoline Blend. Comp.	5,627	--	229	--	-10,641	310	--	-6,813	1,718	0	13,826
Aviation Gasoline Blend. Comp.	--	--	0	--	0	26	--	-23	0	-3	48
Finished Petroleum Products	-5,351	1,074,552	43,531	--	-546,169	-2,515	--	72,579	496,499	122,697	
Finished Motor Gasoline	-5,351	491,817	1,297	--	-306,175	-2,024	--	14,269	169,343	42,628	
Reformulated	--	89,285	983	--	-46,683	1,085	--	0	42,500	9,765	
Oxygenated	2,756	926	0	--	0	-1	--	1	3,683	0	
Other	-8,108	401,606	314	--	-259,492	-3,108	--	14,268	123,160	32,863	
Finished Aviation Gasoline	--	1,632	0	--	-731	47	--	0	854	481	
Jet Fuel	--	113,522	100	--	-87,314	-250	--	1,951	24,607	12,843	
Naphtha-Type	--	3	0	--	0	0	--	(s)	3	0	
Kerosene-Type	--	113,519	100	--	-87,314	-250	--	1,951	24,604	12,843	
Kerosene	--	4,166	0	--	-848	-301	--	3	3,616	610	
Distillate Fuel Oil	--	225,853	0	--	-137,694	-1,881	--	10,432	79,608	29,563	
0.05 percent sulfur and under	--	141,982	0	--	-88,907	2,564	--	2,961	47,550	18,009	
Greater than 0.05 percent sulfur ...	--	83,871	0	--	-48,787	-4,445	--	7,470	32,059	11,554	
Residual Fuel Oil	--	43,058	3,313	--	-5,596	437	--	12,172	28,166	15,686	
Petrochemical Feedstocks ^e	--	55,857	38,456	--	-281	434	--	0	93,598	2,755	
Special Naphthas	--	4,572	207	--	-534	-129	--	203	4,171	1,369	
Lubricants	--	17,595	0	--	-4,488	26	--	3,159	9,922	7,099	
Waxes	--	2,009	6	--	0	46	--	143	1,826	434	
Petroleum Coke	--	48,433	0	--	0	236	--	30,128	18,069	3,435	
Asphalt and Road Oil	--	17,853	137	--	-2,508	979	--	119	14,384	5,192	
Still Gas	--	44,025	0	--	0	0	--	0	44,025	0	
Miscellaneous Products	--	4,160	15	--	0	-135	--	1	4,309	602	
Total	688,965	1,136,841	872,310	32,334	-815,269	29,148	0	1,074,005	78,911	733,116	970,485

^a 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.
^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.
^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.
^d 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.
^e 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, May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 3,200	--	5,408	381	-1,876	122	0	6,991	(s)	0
Natural Gas Liquids and LRGs	1,240	520	97	--	85	251	--	172	7	1,511
Pentanes Plus	195	--	26	--	1	23	--	71	0	129
Liquefied Petroleum Gases	1,045	520	71	--	84	228	--	102	7	1,382
Ethane/Ethylene	486	31	14	--	130	30	--	0	0	631
Propane/Propylene	349	340	16	--	-67	90	--	0	7	541
Normal Butane/Butylene	82	137	25	--	28	100	--	28	(s)	144
Isobutane/Isobutylene	128	12	16	--	-7	9	--	74	0	66
Other Liquids	153	--	390	--	-77	74	--	346	24	22
Other Hydrocarbons/Oxygenates	118	--	0	--	0	-10	--	115	13	0
Unfinished Oils	--	--	390	--	3	121	--	250	0	22
Motor Gasoline Blend. Comp.	35	--	0	--	-80	-38	--	-18	11	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	1	--	-1	0	(s)
Finished Petroleum Products	-33	7,447	258	--	-3,859	36	--	--	493	3,284
Finished Motor Gasoline	-33	3,444	10	--	-2,257	-50	--	--	93	1,121
Reformulated	--	654	10	--	-323	27	--	--	0	314
Oxygenated	17	5	0	--	0	0	--	--	(s)	22
Other	-50	2,785	0	--	-1,933	-78	--	--	93	786
Finished Aviation Gasoline	--	15	0	--	-5	(s)	--	--	0	9
Jet Fuel	--	753	1	--	-581	-2	--	--	3	171
Naphtha-Type	--	(s)	0	--	0	0	--	--	0	(s)
Kerosene-Type	--	753	1	--	-581	-2	--	--	3	171
Kerosene	--	15	0	--	-5	1	--	--	0	10
Distillate Fuel Oil	--	1,580	0	--	-924	118	--	--	51	487
0.05 percent sulfur and under	--	1,105	0	--	-691	81	--	--	13	320
Greater than 0.05 percent sulfur ...	--	475	0	--	-233	37	--	--	38	167
Residual Fuel Oil	--	222	10	--	-28	-42	--	--	70	176
Petrochemical Feedstocks ^e	--	408	236	--	0	10	--	--	0	635
Special Naphthas	--	31	0	--	-3	2	--	--	(s)	26
Lubricants	--	127	0	--	-36	(s)	--	--	10	81
Waxes	--	14	(s)	--	0	2	--	--	1	11
Petroleum Coke	--	342	0	--	0	-19	--	--	264	97
Asphalt and Road Oil	--	151	(s)	--	-20	22	--	--	(s)	108
Still Gas	--	313	0	--	0	0	--	--	0	313
Miscellaneous Products	--	31	(s)	--	0	-7	--	--	(s)	39
Total	4,560	7,966	6,153	381	-5,727	483	0	7,510	524	4,816

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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-May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 3,211	--	5,087	214	-1,757	133	0	6,623	(s)	0
Natural Gas Liquids and LRGs	1,244	413	85	--	47	18	--	208	23	1,541
Pentanes Plus	189	--	36	--	(s)	4	--	77	1	142
Liquefied Petroleum Gases	1,056	413	50	--	48	14	--	131	22	1,399
Ethane/Ethylene	495	24	17	--	143	13	--	0	0	665
Propane/Propylene	351	313	13	--	-113	-28	--	0	20	573
Normal Butane/Butylene	75	68	11	--	18	31	--	58	2	82
Isobutane/Isobutylene	134	7	9	--	(s)	-2	--	73	0	79
Other Liquids	143	--	316	--	-73	59	--	282	19	26
Other Hydrocarbons/Oxygenates	105	--	1	--	0	-6	--	105	7	0
Unfinished Oils	--	--	313	--	-2	63	--	223	0	26
Motor Gasoline Blend. Comp.	37	--	2	--	-70	2	--	-45	11	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	-35	7,116	288	--	-3,617	-17	--	--	481	3,288
Finished Motor Gasoline	-35	3,257	9	--	-2,028	-13	--	--	94	1,121
Reformulated	--	591	7	--	-309	7	--	--	0	281
Oxygenated	18	6	0	--	0	(s)	--	--	(s)	24
Other	-54	2,660	2	--	-1,718	-21	--	--	94	816
Finished Aviation Gasoline	--	11	0	--	-5	(s)	--	--	0	6
Jet Fuel	--	752	1	--	-578	-2	--	--	13	163
Naphtha-Type	--	(s)	0	--	0	0	--	--	(s)	(s)
Kerosene-Type	--	752	1	--	-578	-2	--	--	13	163
Kerosene	--	28	0	--	-6	-2	--	--	(s)	24
Distillate Fuel Oil	--	1,496	0	--	-912	-12	--	--	69	527
0.05 percent sulfur and under	--	940	0	--	-589	17	--	--	20	315
Greater than 0.05 percent sulfur ...	--	555	0	--	-323	-29	--	--	49	212
Residual Fuel Oil	--	285	22	--	-37	3	--	--	81	187
Petrochemical Feedstocks ^e	--	370	255	--	-2	3	--	--	0	620
Special Naphthas	--	30	1	--	-4	-1	--	--	1	28
Lubricants	--	117	0	--	-30	(s)	--	--	21	66
Waxes	--	13	(s)	--	0	(s)	--	--	1	12
Petroleum Coke	--	321	0	--	0	2	--	--	200	120
Asphalt and Road Oil	--	118	1	--	-17	6	--	--	1	95
Still Gas	--	292	0	--	0	0	--	--	0	292
Miscellaneous Products	--	28	(s)	--	0	-1	--	--	(s)	29
Total	4,563	7,529	5,777	214	-5,399	193	0	7,113	523	4,855

^a 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.
^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.
^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.
^d 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.
^e 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, May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 11,276	--	3,139	4,241	-3,258	458	0	14,940	0	0	13,705
Natural Gas Liquids and LRGs	4,569	320	176	--	-4,238	83	--	294	2	448	1,300
Pentanes Plus	782	--	0	--	-453	7	--	17	0	305	208
Liquefied Petroleum Gases	3,787	320	176	--	-3,785	76	--	277	2	143	1,092
Ethane/Ethylene	1,486	0	0	--	-1,757	-1	--	0	0	-270	213
Propane/Propylene	1,439	300	110	--	-1,230	60	--	0	2	557	392
Normal Butane/Butylene	542	55	34	--	-510	15	--	140	(s)	-34	320
Isobutane/Isobutylene	320	-35	32	--	-288	2	--	137	0	-110	167
Other Liquids	156	--	0	--	0	-281	--	565	0	-128	4,346
Other Hydrocarbons/Oxygenates	-35	--	0	--	0	-73	--	38	0	0	220
Unfinished Oils	--	--	0	--	0	-203	--	331	0	-128	2,662
Motor Gasoline Blend. Comp.	191	--	0	--	0	-5	--	196	0	0	1,464
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products	-151	15,919	345	--	1,871	-219	--	--	14	18,188	11,337
Finished Motor Gasoline	-151	7,652	26	--	285	-501	--	--	(s)	8,313	4,039
Reformulated	--	0	0	--	0	0	--	--	0	0	0
Oxygenated	397	188	0	--	0	-49	--	--	0	634	102
Other	-548	7,464	26	--	285	-452	--	--	(s)	7,679	3,937
Finished Aviation Gasoline	--	17	2	--	16	-10	--	--	0	45	28
Jet Fuel	--	679	0	--	958	4	--	--	0	1,633	891
Naphtha-Type	--	0	0	--	0	8	--	--	0	-8	8
Kerosene-Type	--	679	0	--	958	-4	--	--	0	1,641	883
Kerosene	--	48	0	--	0	9	--	--	(s)	39	95
Distillate Fuel Oil	--	4,678	317	--	612	453	--	--	0	5,154	2,558
0.05 percent sulfur and under	--	3,817	69	--	602	384	--	--	0	4,104	2,108
Greater than 0.05 percent sulfur ...	--	861	248	--	10	69	--	--	0	1,050	450
Residual Fuel Oil	--	372	0	--	0	-42	--	--	1	413	542
Petrochemical Feedstocks ^e	--	22	0	--	0	1	--	--	0	21	1
Special Naphthas	--	0	0	--	0	0	--	--	(s)	(s)	1
Lubricants	--	0	0	--	0	0	--	--	7	-7	0
Waxes	--	97	0	--	0	-2	--	--	3	96	11
Petroleum Coke	--	467	0	--	0	7	--	--	1	459	193
Asphalt and Road Oil	--	1,244	0	--	0	-139	--	--	2	1,381	2,964
Still Gas	--	583	0	--	0	0	--	--	0	583	0
Miscellaneous Products	--	60	0	--	0	1	--	--	0	59	14
Total	15,849	16,239	3,660	4,241	-5,625	41	0	15,799	16	18,509	30,688

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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-May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 54,547	--	16,580	10,400	-10,021	2,687	0	68,819	1	0	13,705
Natural Gas Liquids and LRGs	24,078	947	1,424	--	-20,769	89	--	1,942	2	3,647	1,300
Pentanes Plus	3,830	--	109	--	-2,069	39	--	380	0	1,451	208
Liquefied Petroleum Gases	20,248	947	1,315	--	-18,700	50	--	1,562	2	2,196	1,092
Ethane/Ethylene	8,679	0	0	--	-10,334	-7	--	0	0	-1,648	213
Propane/Propylene	7,390	1,413	866	--	-4,994	-11	--	0	2	4,684	392
Normal Butane/Butylene	2,693	-269	365	--	-2,084	43	--	957	(s)	-295	320
Isobutane/Isobutylene	1,486	-197	84	--	-1,288	25	--	605	0	-545	167
Other Liquids	1,144	--	0	--	0	107	--	1,563	0	-526	4,346
Other Hydrocarbons/Oxygenates	395	--	0	--	0	34	--	361	0	0	220
Unfinished Oils	--	--	0	--	0	947	--	-421	0	-526	2,662
Motor Gasoline Blend. Comp.	749	--	0	--	0	-874	--	1,623	0	0	1,464
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products	-542	73,318	1,608	--	7,577	85	--	--	73	81,803	11,337
Finished Motor Gasoline	-542	36,793	119	--	696	-587	--	--	10	37,643	4,039
Reformulated	--	0	0	--	0	0	--	--	0	0	0
Oxygenated	2,067	3,132	0	--	38	-178	--	--	8	5,407	102
Other	-2,610	33,661	119	--	658	-409	--	--	2	32,236	3,937
Finished Aviation Gasoline	--	59	3	--	53	4	--	--	0	111	28
Jet Fuel	--	4,101	0	--	5,177	88	--	--	0	9,190	891
Naphtha-Type	--	0	0	--	0	-17	--	--	0	17	8
Kerosene-Type	--	4,101	0	--	5,177	105	--	--	0	9,173	883
Kerosene	--	356	0	--	-53	-30	--	--	(s)	333	95
Distillate Fuel Oil	--	19,882	1,486	--	1,704	-377	--	--	(s)	23,449	2,558
0.05 percent sulfur and under	--	15,846	273	--	1,690	-356	--	--	0	18,165	2,108
Greater than 0.05 percent sulfur ...	--	4,036	1,213	--	14	-21	--	--	(s)	5,284	450
Residual Fuel Oil	--	1,938	0	--	0	75	--	--	1	1,862	542
Petrochemical Feedstocks ^e	--	106	0	--	0	1	--	--	0	105	1
Special Naphthas	--	0	0	--	0	0	--	--	2	-2	1
Lubricants	--	0	0	--	0	0	--	--	28	-28	0
Waxes	--	464	0	--	0	11	--	--	23	430	11
Petroleum Coke	--	2,018	0	--	0	7	--	--	1	2,010	193
Asphalt and Road Oil	--	4,694	0	--	0	898	--	--	8	3,788	2,964
Still Gas	--	2,642	0	--	0	0	--	--	0	2,642	0
Miscellaneous Products	--	265	0	--	0	-5	--	--	0	270	14
Total	79,227	74,265	19,612	10,400	-23,213	2,968	0	72,324	76	84,924	30,688

^a 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.
^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.
^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.
^d 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.
^e 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, May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 364	--	101	137	-105	15	0	482	0	0
Natural Gas Liquids and LRGs	147	10	6	--	-137	3	--	9	(s)	14
Pentanes Plus	25	--	0	--	-15	(s)	--	1	0	10
Liquefied Petroleum Gases	122	10	6	--	-122	2	--	9	(s)	5
Ethane/Ethylene	48	0	0	--	-57	(s)	--	0	0	-9
Propane/Propylene	46	10	4	--	-40	2	--	0	(s)	18
Normal Butane/Butylene	17	2	1	--	-16	(s)	--	5	(s)	-1
Isobutane/Isobutylene	10	-1	1	--	-9	(s)	--	4	0	-4
Other Liquids	5	--	0	--	0	-9	--	18	0	-4
Other Hydrocarbons/Oxygenates	-1	--	0	--	0	-2	--	1	0	0
Unfinished Oils	--	--	0	--	0	-7	--	11	0	-4
Motor Gasoline Blend. Comp.	6	--	0	--	0	(s)	--	6	0	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	-5	514	11	--	60	-7	--	--	(s)	587
Finished Motor Gasoline	-5	247	1	--	9	-16	--	--	(s)	268
Reformulated	--	0	0	--	0	0	--	--	0	0
Oxygenated	13	6	0	--	0	-2	--	--	0	20
Other	-18	241	1	--	9	-15	--	--	(s)	248
Finished Aviation Gasoline	--	1	(s)	--	1	(s)	--	--	0	1
Jet Fuel	--	22	0	--	31	(s)	--	--	0	53
Naphtha-Type	--	0	0	--	0	(s)	--	--	0	(s)
Kerosene-Type	--	22	0	--	31	(s)	--	--	0	53
Kerosene	--	2	0	--	0	(s)	--	--	(s)	1
Distillate Fuel Oil	--	151	10	--	20	15	--	--	0	166
0.05 percent sulfur and under	--	123	2	--	19	12	--	--	0	132
Greater than 0.05 percent sulfur ...	--	28	8	--	(s)	2	--	--	0	34
Residual Fuel Oil	--	12	0	--	0	-1	--	--	(s)	13
Petrochemical Feedstocks ^e	--	1	0	--	0	(s)	--	--	0	1
Special Naphthas	--	0	0	--	0	0	--	--	(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	0	--	0	-4	--	--	(s)	45
Still Gas	--	19	0	--	0	0	--	--	0	19
Miscellaneous Products	--	2	0	--	0	(s)	--	--	0	2
Total	511	524	118	137	-181	1	0	510	1	597

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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-May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 361	--	110	69	-66	18	0	456	(s)	0
Natural Gas Liquids and LRGs	159	6	9	--	-138	1	--	13	(s)	24
Pentanes Plus	25	--	1	--	-14	(s)	--	3	0	10
Liquefied Petroleum Gases	134	6	9	--	-124	(s)	--	10	(s)	15
Ethane/Ethylene	57	0	0	--	-68	(s)	--	0	0	-11
Propane/Propylene	49	9	6	--	-33	(s)	--	0	(s)	31
Normal Butane/Butylene	18	-2	2	--	-14	(s)	--	6	(s)	-2
Isobutane/Isobutylene	10	-1	1	--	-9	(s)	--	4	0	-4
Other Liquids	8	--	0	--	0	1	--	10	0	-3
Other Hydrocarbons/Oxygenates	3	--	0	--	0	(s)	--	2	0	0
Unfinished Oils	--	--	0	--	0	6	--	-3	0	-3
Motor Gasoline Blend. Comp.	5	--	0	--	0	-6	--	11	0	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	-4	486	11	--	50	1	--	--	(s)	542
Finished Motor Gasoline	-4	244	1	--	5	-4	--	--	(s)	249
Reformulated	--	0	0	--	0	0	--	--	0	0
Oxygenated	14	21	0	--	(s)	-1	--	--	(s)	36
Other	-17	223	1	--	4	-3	--	--	(s)	213
Finished Aviation Gasoline	--	(s)	(s)	--	(s)	(s)	--	--	0	1
Jet Fuel	--	27	0	--	34	1	--	--	0	61
Naphtha-Type	--	0	0	--	0	(s)	--	--	0	(s)
Kerosene-Type	--	27	0	--	34	1	--	--	0	61
Kerosene	--	2	0	--	(s)	(s)	--	--	(s)	2
Distillate Fuel Oil	--	132	10	--	11	-2	--	--	(s)	155
0.05 percent sulfur and under	--	105	2	--	11	-2	--	--	0	120
Greater than 0.05 percent sulfur ...	--	27	8	--	(s)	(s)	--	--	(s)	35
Residual Fuel Oil	--	13	0	--	0	(s)	--	--	(s)	12
Petrochemical Feedstocks ^e	--	1	0	--	0	(s)	--	--	0	1
Special Naphthas	--	0	0	--	0	0	--	--	(s)	(s)
Lubricants	--	0	0	--	0	0	--	--	(s)	(s)
Waxes	--	3	0	--	0	(s)	--	--	(s)	3
Petroleum Coke	--	13	0	--	0	(s)	--	--	(s)	13
Asphalt and Road Oil	--	31	0	--	0	6	--	--	(s)	25
Still Gas	--	17	0	--	0	0	--	--	0	17
Miscellaneous Products	--	2	0	--	0	(s)	--	--	0	2
Total	525	492	130	69	-154	20	0	479	1	562

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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, May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 69,318	--	12,911	6,764	-3,177	4,372	0	80,513	800	131	69,058
Natural Gas Liquids and LRGs	3,669	2,916	1	--	0	938	--	3,451	684	1,513	3,531
Pentanes Plus	1,997	--	0	--	0	-4	--	1,690	0	311	26
Liquefied Petroleum Gases	1,672	2,916	1	--	0	942	--	1,761	684	1,202	3,505
Ethane/Ethylene	1	0	0	--	0	0	--	0	0	1	0
Propane/Propylene	341	1,518	1	--	0	412	--	0	321	1,127	1,122
Normal Butane/Butylene	595	1,203	0	--	0	490	--	1,069	363	-124	1,903
Isobutane/Isobutylene	735	195	0	--	0	40	--	692	0	198	480
Other Liquids	2,636	--	2,827	--	102	-335	--	3,646	1	2,253	36,160
Other Hydrocarbons/Oxygenates	2,279	--	1,999	--	0	205	--	4,072	1	0	4,120
Unfinished Oils	--	--	345	--	0	-498	--	-1,410	0	2,253	24,264
Motor Gasoline Blend. Comp.	357	--	483	--	102	-44	--	986	0	0	7,772
Aviation Gasoline Blend. Comp.	--	--	0	--	0	2	--	-2	0	0	4
Finished Petroleum Products	-211	89,887	557	--	3,180	727	--	--	7,431	85,255	56,775
Finished Motor Gasoline	-211	42,607	20	--	2,573	1,230	--	--	220	43,538	22,757
Reformulated	--	29,007	0	--	0	537	--	--	79	28,391	12,271
Oxygenated	1,455	3	0	--	0	0	--	--	32	1,427	0
Other	-1,667	13,597	20	--	2,573	693	--	--	110	13,721	10,486
Finished Aviation Gasoline	--	214	0	--	0	0	--	--	0	214	545
Jet Fuel	--	13,057	44	--	306	421	--	--	177	12,809	8,300
Naphtha-Type	--	23	0	--	0	5	--	--	(s)	18	19
Kerosene-Type	--	13,034	44	--	306	416	--	--	177	12,791	8,281
Kerosene	--	130	0	--	0	13	--	--	2	115	74
Distillate Fuel Oil	--	14,633	102	--	352	-325	--	--	2,388	13,024	12,183
0.05 percent sulfur and under	--	11,497	50	--	241	-689	--	--	953	11,524	7,962
Greater than 0.05 percent sulfur ...	--	3,136	52	--	111	364	--	--	1,436	1,499	4,221
Residual Fuel Oil	--	6,268	0	--	0	-468	--	--	806	5,930	6,059
Petrochemical Feedstocks ^e	--	317	350	--	0	-116	--	--	0	783	338
Special Naphthas	--	68	0	--	0	7	--	--	470	-409	48
Lubricants	--	819	0	--	-51	125	--	--	103	540	1,379
Waxes	--	54	0	--	0	31	--	--	13	10	242
Petroleum Coke	--	5,105	41	--	0	-119	--	--	3,225	2,040	1,795
Asphalt and Road Oil	--	1,687	0	--	0	-52	--	--	23	1,716	2,934
Still Gas	--	4,800	0	--	0	0	--	--	0	4,800	0
Miscellaneous Products	--	128	0	--	0	-20	--	--	2	146	121
Total	75,412	92,803	16,296	6,764	105	5,702	0	87,610	8,916	89,151	165,524

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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-May 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d	
Crude Oil	^E 345,076	--	52,303	8,714	-17,246	6,704	0	365,972	15,510	661	69,058
Natural Gas Liquids and LRGs	18,925	11,066	75	--	0	-422	--	17,752	2,929	9,807	3,531
Pentanes Plus	10,211	--	0	--	0	-14	--	8,557	1	1,667	26
Liquefied Petroleum Gases	8,714	11,066	75	--	0	-408	--	9,195	2,928	8,140	3,505
Ethane/Ethylene	6	0	0	--	0	0	--	0	0	6	0
Propane/Propylene	1,829	7,060	7	--	0	-350	--	0	1,377	7,869	1,122
Normal Butane/Butylene	3,408	3,455	0	--	0	-161	--	6,291	1,551	-818	1,903
Isobutane/Isobutylene	3,471	551	68	--	0	103	--	2,904	0	1,083	480
Other Liquids	12,408	--	12,518	--	-74	1,897	--	16,710	4	6,241	36,160
Other Hydrocarbons/Oxygenates	11,936	--	7,009	--	0	-171	--	19,112	4	0	4,120
Unfinished Oils	--	--	3,453	--	0	1,319	--	-4,107	0	6,241	24,264
Motor Gasoline Blend. Comp.	472	--	2,056	--	-74	756	--	1,698	(s)	0	7,772
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-7	--	7	0	0	4
Finished Petroleum Products	286	412,353	4,293	--	17,103	1,747	--	--	36,246	396,042	56,775
Finished Motor Gasoline	286	192,857	399	--	12,887	1,052	--	--	1,325	204,052	22,757
Reformulated	--	132,221	0	--	795	1,443	--	--	79	131,494	12,271
Oxygenated	7,580	1,657	0	--	0	-4	--	--	132	9,109	0
Other	-7,294	58,979	399	--	12,092	-387	--	--	1,113	63,449	10,486
Finished Aviation Gasoline	--	571	1	--	0	-26	--	--	0	598	545
Jet Fuel	--	63,740	804	--	1,796	568	--	--	2,068	63,704	8,300
Naphtha-Type	--	88	0	--	0	-236	--	--	13	311	19
Kerosene-Type	--	63,652	804	--	1,796	804	--	--	2,055	63,393	8,281
Kerosene	--	566	12	--	0	-31	--	--	20	579	74
Distillate Fuel Oil	--	65,310	1,517	--	2,324	-670	--	--	8,866	60,955	12,183
0.05 percent sulfur and under	--	48,962	1,331	--	1,218	-987	--	--	2,684	49,814	7,962
Greater than 0.05 percent sulfur ...	--	16,348	186	--	1,106	317	--	--	6,181	11,142	4,221
Residual Fuel Oil	--	32,374	849	--	0	-272	--	--	5,630	27,865	6,059
Petrochemical Feedstocks ^e	--	1,575	518	--	0	53	--	--	0	2,040	338
Special Naphthas	--	435	7	--	0	3	--	--	2,528	-2,089	48
Lubricants	--	3,378	0	--	96	-188	--	--	474	3,188	1,379
Waxes	--	447	3	--	0	107	--	--	56	287	242
Petroleum Coke	--	22,563	175	--	0	437	--	--	15,125	7,177	1,795
Asphalt and Road Oil	--	6,931	0	--	0	775	--	--	103	6,053	2,934
Still Gas	--	21,123	0	--	0	0	--	--	0	21,123	0
Miscellaneous Products	--	493	8	--	0	-61	--	--	53	509	121
Total	376,695	423,419	69,189	8,714	-217	9,926	0	400,434	54,689	412,751	165,524

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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, May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 2,236	--	416	218	-102	141	0	2,597	26	4
Natural Gas Liquids and LRGs	118	94	(s)	--	0	30	--	111	22	49
Pentanes Plus	64	--	0	--	0	(s)	--	55	0	10
Liquefied Petroleum Gases	54	94	(s)	--	0	30	--	57	22	39
Ethane/Ethylene	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene	11	49	(s)	--	0	13	--	0	10	36
Normal Butane/Butylene	19	39	0	--	0	16	--	34	12	-4
Isobutane/Isobutylene	24	6	0	--	0	1	--	22	0	6
Other Liquids	85	--	91	--	3	-11	--	118	(s)	73
Other Hydrocarbons/Oxygenates	74	--	64	--	0	7	--	131	(s)	0
Unfinished Oils	--	--	11	--	0	-16	--	-45	0	73
Motor Gasoline Blend. Comp.	12	--	16	--	3	-1	--	32	0	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	0
Finished Petroleum Products	-7	2,900	18	--	103	23	--	--	240	2,750
Finished Motor Gasoline	-7	1,374	1	--	83	40	--	--	7	1,404
Reformulated	--	936	0	--	0	17	--	--	3	916
Oxygenated	47	(s)	0	--	0	0	--	--	1	46
Other	-54	439	1	--	83	22	--	--	4	443
Finished Aviation Gasoline	--	7	0	--	0	0	--	--	0	7
Jet Fuel	--	421	1	--	10	14	--	--	6	413
Naphtha-Type	--	1	0	--	0	(s)	--	--	(s)	1
Kerosene-Type	--	420	1	--	10	13	--	--	6	413
Kerosene	--	4	0	--	0	(s)	--	--	(s)	4
Distillate Fuel Oil	--	472	3	--	11	-10	--	--	77	420
0.05 percent sulfur and under	--	371	2	--	8	-22	--	--	31	372
Greater than 0.05 percent sulfur ...	--	101	2	--	4	12	--	--	46	48
Residual Fuel Oil	--	202	0	--	0	-15	--	--	26	191
Petrochemical Feedstocks ^e	--	10	11	--	0	-4	--	--	0	25
Special Naphthas	--	2	0	--	0	(s)	--	--	15	-13
Lubricants	--	26	0	--	-2	4	--	--	3	17
Waxes	--	2	0	--	0	1	--	--	(s)	(s)
Petroleum Coke	--	165	1	--	0	-4	--	--	104	66
Asphalt and Road Oil	--	54	0	--	0	-2	--	--	1	55
Still Gas	--	155	0	--	0	0	--	--	0	155
Miscellaneous Products	--	4	0	--	0	-1	--	--	(s)	5
Total	2,433	2,994	526	218	3	184	0	2,826	288	2,876

^a 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.
^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.
^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.
^d 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.
^e 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-May 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry ^a	Unaccounted For Crude Oil ^b	Net Receipts	Stock Change ^c	Crude Losses	Refinery Inputs	Exports	Products Supplied ^d
Crude Oil	^E 2,285	--	346	58	-114	44	0	2,424	103	4
Natural Gas Liquids and LRGs	125	73	(s)	--	0	-3	--	118	19	65
Pentanes Plus	68	--	0	--	0	(s)	--	57	(s)	11
Liquefied Petroleum Gases	58	73	(s)	--	0	-3	--	61	19	54
Ethane/Ethylene	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene	12	47	(s)	--	0	-2	--	0	9	52
Normal Butane/Butylene	23	23	0	--	0	-1	--	42	10	-5
Isobutane/Isobutylene	23	4	(s)	--	0	1	--	19	0	7
Other Liquids	82	--	83	--	(s)	13	--	111	(s)	41
Other Hydrocarbons/Oxygenates	79	--	46	--	0	-1	--	127	(s)	0
Unfinished Oils	--	--	23	--	0	9	--	-27	0	41
Motor Gasoline Blend. Comp.	3	--	14	--	(s)	5	--	11	(s)	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	0
Finished Petroleum Products	2	2,731	28	--	113	12	--	--	240	2,623
Finished Motor Gasoline	2	1,277	3	--	85	7	--	--	9	1,351
Reformulated	--	876	0	--	5	10	--	--	1	871
Oxygenated	50	11	0	--	0	(s)	--	--	1	60
Other	-48	391	3	--	80	-3	--	--	7	420
Finished Aviation Gasoline	--	4	(s)	--	0	(s)	--	--	0	4
Jet Fuel	--	422	5	--	12	4	--	--	14	422
Naphtha-Type	--	1	0	--	0	-2	--	--	(s)	2
Kerosene-Type	--	422	5	--	12	5	--	--	14	420
Kerosene	--	4	(s)	--	0	(s)	--	--	(s)	4
Distillate Fuel Oil	--	433	10	--	15	-4	--	--	59	404
0.05 percent sulfur and under	--	324	9	--	8	-7	--	--	18	330
Greater than 0.05 percent sulfur ...	--	108	1	--	7	2	--	--	41	74
Residual Fuel Oil	--	214	6	--	0	-2	--	--	37	185
Petrochemical Feedstocks ^e	--	10	3	--	0	(s)	--	--	0	14
Special Naphthas	--	3	(s)	--	0	(s)	--	--	17	-14
Lubricants	--	22	0	--	1	-1	--	--	3	21
Waxes	--	3	(s)	--	0	1	--	--	(s)	2
Petroleum Coke	--	149	1	--	0	3	--	--	100	48
Asphalt and Road Oil	--	46	0	--	0	5	--	--	1	40
Still Gas	--	140	0	--	0	0	--	--	0	140
Miscellaneous Products	--	3	(s)	--	0	(s)	--	--	(s)	3
Total	2,495	2,804	458	58	-1	66	0	2,652	362	2,733

^a 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.

^b Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

^d 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.

^e 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	March 1997		January-March 1997	
	Total	Daily Average	Total	Daily Average
PAD District I	E 833	E 27	E 2,500	E 28
Florida	543	18	1,606	18
New York	E 27	E 1	E 83	E 1
Pennsylvania	E 134	E 4	E 390	E 4
Virginia	1	(s)	2	(s)
West Virginia	E 127	E 4	E 386	E 4
Adjustment ^a	(s)	(s)	32	(s)
PAD District II	E 17,436	E 562	E 50,445	E 561
Illinois	1,305	42	3,815	42
Indiana	200	6	567	6
Kansas	E 3,648	E 118	E 10,472	E 116
Kentucky	255	8	669	7
Michigan	E 837	E 27	E 2,499	E 28
Missouri	10	(s)	29	(s)
Nebraska	284	9	830	9
North Dakota	2,862	92	8,242	92
Ohio	E 698	E 23	E 2,133	E 24
Oklahoma	7,481	241	20,980	233
South Dakota	114	4	315	3
Tennessee	31	1	91	1
Adjustment ^a	-290	-9	-196	-2
PAD District III	E 100,577	E 3,244	E 287,974	E 3,200
Alabama	1,298	42	E 3,801	E 42
Arkansas	E 644	E 21	E 1,868	E 21
Louisiana ^b	E 11,302	E 365	E 32,604	E 362
Mississippi	1,695	55	4,873	54
New Mexico	E 5,391	E 174	E 15,417	E 171
Texas ^b	45,671	1,473	132,269	1,470
Federal Offshore PAD District III	E 34,100	E 1,100	E 95,980	E 1,066
Adjustment ^a	477	15	1,161	13
PAD District IV	E 11,246	E 363	E 32,480	E 361
Colorado	E 2,112	E 68	E 5,981	E 66
Montana	E 1,297	E 42	E 3,805	E 42
Utah	1,615	52	4,736	53
Wyoming	5,919	191	16,779	186
Adjustment ^a	303	10	1,178	13
PAD District V	E 70,471	E 2,273	E 207,540	E 2,306
Alaska ^b	E 41,262	E 1,331	E 122,775	E 1,364
South Alaska	1,103	36	3,285	36
North Slope	40,159	1,295	119,490	1,328
Adjustment for Alaska ^a	0	0	(s)	(s)
Arizona	6	(s)	19	(s)
California ^b	22,095	713	65,419	727
Nevada	88	3	247	3
Federal Offshore PAD District V	4,770	154	13,824	154
Adjustment excluding Alaska ^a	2,250	73	5,257	58
U.S. Total^b	E 200,563	E 6,470	E 580,940	E 6,455

^a 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*.

^b Includes the following current month offshore production (thousand barrels): Alaska: State - 7,785; California: State -1,787; Louisiana: State - E1,844; Texas: State - 79; U.S. Total, including Federal offshore - E50,365.

(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, May 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
Net Production							
Natural Gas Liquids	143	590	733	535	340	8,494	9,369
Pentanes Plus	14	63	77	76	90	1,161	1,327
Liquefied Petroleum Gases	129	527	656	459	250	7,333	8,042
Ethane	52	201	253	115	0	2,653	2,768
Propane	45	222	267	217	157	3,114	3,488
Normal Butane	32	68	100	69	93	758	920
Isobutane	0	36	36	58	0	808	866
Stocks							
Natural Gas Liquids	8	34	42	99	43	1,754	1,896
Pentanes Plus	0	8	8	13	20	269	302
Liquefied Petroleum Gases	8	26	34	86	23	1,485	1,594
Ethane	0	0	0	17	0	224	241
Propane	4	20	24	37	15	794	846
Normal Butane	4	3	7	14	8	336	358
Isobutane	0	3	3	18	0	131	149

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	
Net Production									
Natural Gas Liquids	18,507	3,803	8,982	660	6,492	38,444	4,569	3,669	56,784
Pentanes Plus	3,033	552	1,521	202	739	6,047	782	1,997	10,230
Liquefied Petroleum Gases	15,474	3,251	7,461	458	5,753	32,397	3,787	1,672	46,554
Ethane	6,958	1,821	3,173	94	3,015	15,061	1,486	1	19,569
Propane	5,349	906	2,588	193	1,789	10,825	1,439	341	16,360
Normal Butane	2,191	-1,235	835	115	634	2,540	542	595	4,697
Isobutane	976	1,759	865	56	315	3,971	320	735	5,928
Stocks									
Natural Gas Liquids	183	704	777	151	105	1,920	306	114	4,278
Pentanes Plus	76	131	209	22	20	458	131	17	916
Liquefied Petroleum Gases	107	573	568	129	85	1,462	175	97	3,362
Ethane	8	290	0	96	0	394	3	0	638
Propane	65	133	376	24	66	664	104	80	1,718
Normal Butane	27	87	64	6	12	196	51	8	620
Isobutane	7	63	128	3	7	208	17	9	386

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,
May 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.	
Crude Oil	45,614	2,986	48,600	72,378	12,527	21,880	106,785
Natural Gas Liquids	101	0	101	898	169	684	1,751
Pentanes Plus	0	0	0	120	71	445	636
Liquefied Petroleum Gases	101	0	101	778	98	239	1,115
Ethane	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0
Normal Butane	0	0	0	94	0	86	180
Isobutane	101	0	101	684	98	153	935
Other Liquids	13,627	120	13,747	1,658	607	-794	1,471
Other Hydrocarbons/Hydrogen/Oxygenates	2,227	2	2,229	792	215	112	1,119
Other Hydrocarbons/Hydrogen	0	0	0	44	0	36	80
Oxygenates	W	W	2,229	748	215	76	1,039
Fuel Ethanol	W	W	W	W	W	W	840
Methanol	W	W	W	W	W	W	W
MTBE	W	W	2,178	W	W	W	W
Other Oxygenates ^a	W	W	W	W	W	W	W
Unfinished Oils (net)	2,788	130	2,918	2,134	14	-1,131	1,017
Motor Gasoline Blend. Comp. (net)	8,725	-12	8,713	-1,271	378	225	-668
Aviation Gasoline Blend. Comp. (net)	-113	0	-113	3	0	0	3
Total Input to Refineries	59,342	3,106	62,448	74,934	13,303	21,770	110,007
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	1,434	96	1,530	2,375	404	709	3,488
Operable Capacity (daily average)	1,545	97	1,642	2,339	413	692	3,444
Operable Utilization Rate (percent) ^{b,c}	92.8	99.1	93.2	101.6	97.8	102.3	101.3
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Cracking	627	19	646	851	121	197	1,169
Catalytic Hydrocracking	37	4	41	139	0	5	144
Delayed and Fluid Coking	90	0	90	185	64	70	318
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.99	0.94	0.98	1.15	2.02	0.71	1.16
API Gravity, Weighted Average (degrees)	32.22	34.88	32.38	32.91	30.15	35.54	33.13
Operable Capacity (daily average)	1,545	97	1,642	2,339	413	692	3,444
Operating	1,465	97	1,562	2,339	413	692	3,444
Idle	80	0	80	0	0	0	0
Alaskan Crude Oil Receipts	0	0	0	253	0	0	253

See footnotes at end of table.

**Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts,
May 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	
Crude Oil	18,709	106,641	82,789	5,689	2,902	216,730	14,940	80,513	467,568
Natural Gas Liquids	757	2,603	1,516	209	255	5,340	294	3,451	10,937
Pentanes Plus	365	1,169	335	175	146	2,190	17	1,690	4,533
Liquefied Petroleum Gases	392	1,434	1,181	34	109	3,150	277	1,761	6,404
Ethane	0	0	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0	0	0
Normal Butane	304	311	245	0	0	860	140	1,069	2,249
Isobutane	88	1,123	936	34	109	2,290	137	692	4,155
Other Liquids	236	7,402	3,182	-76	-8	10,736	565	3,646	30,165
Other Hydrocarbons/Hydrogen/Oxygenates	128	2,418	991	0	32	3,569	38	4,072	11,027
Other Hydrocarbons/Hydrogen	94	440	551	0	0	1,085	5	803	1,973
Oxygenates	34	1,978	440	W	W	2,484	33	3,269	9,054
Fuel Ethanol	W	W	W	W	W	W	W	W	878
Methanol	W	W	W	W	W	W	W	W	34
MTBE	W	1,922	W	W	W	2,363	W	3,132	7,865
Other Oxygenates ^a	W	W	W	W	W	W	W	W	277
Unfinished Oils (net)	101	5,763	1,855	20	1	7,740	331	-1,410	10,596
Motor Gasoline Blend. Comp. (net)	6	-779	356	-96	-41	-554	196	986	8,673
Aviation Gasoline Blend. Comp. (net)	1	0	-20	0	0	-19	0	-2	-131
Total Input to Refineries	19,702	116,646	87,487	5,822	3,149	232,806	15,799	87,610	508,670
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	604	3,406	2,704	175	94	6,983	485	2,711	15,197
Operable Capacity (daily average)	621	3,422	2,739	201	95	7,078	520	2,932	15,616
Operable Utilization Rate (percent) ^{b,c}	97.3	99.5	98.7	87.2	99.0	98.7	93.2	92.5	97.3
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Cracking	183	1,318	964	26	28	2,518	155	762	5,250
Catalytic Hydrocracking	37	255	218	0	0	510	4	395	1,095
Delayed and Fluid Coking	5	394	407	9	0	814	39	477	1,739
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.64	1.42	1.39	1.62	0.58	1.34	1.36	1.33	1.26
API Gravity, Weighted Average (degrees)	37.88	30.56	29.50	31.22	39.17	30.91	33.36	25.93	30.73
Operable Capacity (daily average)	621	3,422	2,739	201	95	7,078	520	2,932	15,616
Operating	621	3,395	2,739	201	95	7,051	520	2,872	15,449
Idle	0	27	0	0	0	27	0	60	167
Alaskan Crude Oil Receipts	0	0	0	0	0	0	0	41,685	41,938

^a 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).

^b Represents gross input divided by operable calendar day capacity.

^c 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,
May 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	2,023	87	2,110	4,058	509	806	5,373
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	1,678	43	1,721	3,067	347	662	4,076
Propane	W	W	W	2,287	W	W	3,066
Propylene	W	W	W	780	W	W	1,010
Normal Butane/Butylene	387	47	434	837	128	186	1,151
Normal Butane	W	W	W	W	W	W	W
Butylene	W	W	W	W	W	W	W
Isobutane/Isobutylene	-42	-3	-45	154	34	-42	146
Isobutane	W	W	W	W	W	W	W
Isobutylene	W	W	W	W	W	W	W
Finished Motor Gasoline	32,048	1,112	33,160	38,908	6,800	10,824	56,532
Reformulated	19,720	0	19,720	6,819	960	0	7,779
Oxygenated	0	0	0	603	1,208	21	1,832
Other	12,328	1,112	13,440	31,486	4,632	10,803	46,921
Finished Aviation Gasoline	1	0	1	62	38	19	119
Jet Fuel	3,016	37	3,053	4,839	979	1,062	6,880
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	3,016	37	3,053	4,839	979	1,062	6,880
Commercial	3,016	26	3,042	4,629	886	908	6,423
Military	0	11	11	210	93	154	457
Kerosene	76	78	154	22	-2	83	103
Distillate Fuel Oil	13,419	730	14,149	16,885	3,278	6,669	26,832
0.05 percent sulfur and under	4,786	648	5,434	11,593	2,497	4,498	18,588
Greater than 0.05 percent sulfur	8,633	82	8,715	5,292	781	2,171	8,244
Residual Fuel Oil	3,670	78	3,748	1,339	460	76	1,875
Less than 0.31 percent sulfur	1,330	40	1,370	5	0	0	5
0.31 to 1.00 percent sulfur	1,890	38	1,928	316	0	0	316
Greater than 1.00 percent sulfur	450	0	450	1,018	460	76	1,554
Naphtha for Petrochemical Feedstock Use	548	0	548	404	0	28	432
Other Oils for Petrochemical Feedstock Use	0	0	0	754	0	63	817
Special Naphthas	36	28	64	368	0	70	438
Lubricants	337	216	553	569	0	264	833
Naphthenic	0	0	0	0	0	0	0
Paraffinic	337	216	553	569	0	264	833
Waxes	0	167	167	43	0	39	82
Petroleum Coke	1,595	26	1,621	2,755	823	834	4,412
Marketable	629	0	629	1,594	648	623	2,865
Catalyst	966	26	992	1,161	175	211	1,547
Asphalt and Road Oil	2,558	425	2,983	4,488	699	741	5,928
Still Gas	1,842	107	1,949	2,823	444	747	4,014
Miscellaneous Products	25	43	68	175	61	53	289
Fuel Use	0	0	0	0	0	0	0
Nonfuel Use	25	43	68	175	61	53	289
Total	61,194	3,134	64,328	78,492	14,089	22,378	114,959
Processing Gain(-) or Loss(+) ^a	-1,852	-28	-1,880	-3,558	-786	-608	-4,952

See footnotes at end of table.

Table 29. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, May 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	926	9,556	5,437	87	105	16,111	320	2,916	26,830
Ethane/Ethylene	41	776	159	0	0	976	0	0	976
Ethane	W	W	W	W	W	W	W	W	782
Ethylene	W	W	W	W	W	W	W	W	194
Propane/Propylene	599	5,970	3,807	93	62	10,531	300	1,518	18,146
Propane	W	2,739	3,108	W	W	6,337	W	W	12,426
Propylene	W	3,231	699	W	W	4,194	W	W	5,720
Normal Butane/Butylene	334	2,536	1,310	21	40	4,241	55	1,203	7,084
Normal Butane	W	W	W	W	W	W	W	W	6,872
Butylene	W	W	W	W	W	W	W	W	212
Isobutane/Isobutylene	-48	274	161	-27	3	363	-35	195	624
Isobutane	W	W	W	W	W	W	W	W	499
Isobutylene	W	W	W	W	W	W	W	W	125
Finished Motor Gasoline	10,189	53,148	40,150	1,545	1,745	106,777	7,652	42,607	246,728
Reformulated	781	15,460	4,047	0	0	20,288	0	29,007	76,794
Oxygenated	0	0	27	0	121	148	188	3	2,171
Other	9,408	37,688	36,076	1,545	1,624	86,341	7,464	13,597	167,763
Finished Aviation Gasoline	133	185	136	0	0	454	17	214	805
Jet Fuel	1,771	10,044	10,940	334	243	23,332	679	13,057	47,001
Naphtha-Type	1	0	0	0	0	1	0	23	24
Kerosene-Type	1,770	10,044	10,940	334	243	23,331	679	13,034	46,977
Commercial	1,315	9,068	10,118	247	0	20,748	540	11,273	42,026
Military	455	976	822	87	243	2,583	139	1,761	4,951
Kerosene	5	350	92	26	2	475	48	130	910
Distillate Fuel Oil	4,845	23,126	18,900	1,355	763	48,989	4,678	14,633	109,281
0.05 percent sulfur and under	3,523	18,381	10,936	653	764	34,257	3,817	11,497	73,593
Greater than 0.05 percent sulfur	1,322	4,745	7,964	702	-1	14,732	861	3,136	35,688
Residual Fuel Oil	266	4,235	2,153	207	22	6,883	372	6,268	19,146
Less than 0.31 percent sulfur	107	3	336	0	0	446	85	193	2,099
0.31 to 1.00 percent sulfur	87	1,054	696	182	22	2,041	69	1,636	5,990
Greater than 1.00 percent sulfur	72	3,178	1,121	25	0	4,396	218	4,439	11,057
Naphtha for Petrochemical Feedstock Use	94	5,156	928	0	2	6,180	0	125	7,285
Other Oils for Petrochemical Feedstock Use	179	3,602	2,695	0	0	6,476	22	192	7,507
Special Naphthas	88	579	132	157	0	956	0	68	1,526
Lubricants	W	1,894	W	W	W	3,946	0	819	6,151
Naphthenic	W	414	W	W	W	986	0	300	1,286
Paraffinic	W	1,480	W	W	W	2,960	0	519	4,865
Waxes	5	220	111	88	0	424	97	54	824
Petroleum Coke	319	5,660	4,544	67	15	10,605	467	5,105	22,210
Marketable	37	3,763	3,369	46	0	7,215	270	3,906	14,885
Catalyst	282	1,897	1,175	21	15	3,390	197	1,199	7,325
Asphalt and Road Oil	585	1,282	1,525	1,135	147	4,674	1,244	1,687	16,516
Still Gas	811	5,148	3,462	186	90	9,697	583	4,800	21,043
Miscellaneous Products	71	455	450	0	0	976	60	128	1,521
Fuel Use	21	0	165	0	0	186	0	-54	132
Nonfuel Use	50	455	285	0	0	790	60	182	1,389
Total	20,338	124,640	92,971	5,872	3,134	246,955	16,239	92,803	535,284
Processing Gain(-) or Loss(+) ^a	-636	-7,994	-5,484	-50	15	-14,149	-440	-5,193	-26,614

^a 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, May 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
Crude Oil	13,407	510	13,917	7,724	1,643	2,479	11,846
Petroleum Products	48,052	2,774	50,826	38,251	9,677	12,945	60,873
Pentanes Plus	0	0	0	4	214	193	411
Liquefied Petroleum Gases	1,852	18	1,870	2,213	433	942	3,588
Ethane/Ethylene	0	0	0	2	0	0	2
Propane/Propylene	552	10	562	1,359	38	418	1,815
Normal Butane/Butylene	937	5	942	531	292	313	1,136
Isobutane/Isobutylene	363	3	366	321	103	211	635
Other Hydrocarbons/Hydrogen/Oxygenates	1,742	3	1,745	345	168	59	572
Other Hydrocarbons/Hydrogen	0	0	0	15	0	0	15
Oxygenates	W	W	1,745	330	168	59	557
Fuel Ethanol	W	W	W	W	W	W	359
Methanol	W	W	W	W	W	W	W
MTBE	W	W	1,301	W	W	W	W
Other Oxygenates ^a	W	W	W	W	W	W	W
Unfinished Oils	10,563	668	11,231	9,344	510	3,981	13,835
Naphthas and Lighter	2,104	153	2,257	2,129	149	1,118	3,396
Kerosene and Light Gas Oils	2,418	5	2,423	1,796	74	373	2,243
Heavy Gas Oils	4,370	387	4,757	3,208	272	1,514	4,994
Residuum	1,671	123	1,794	2,211	15	976	3,202
Motor Gasoline Blending Components	9,928	61	9,989	6,793	1,111	1,010	8,914
Aviation Gasoline Blending Components	102	0	102	50	0	0	50
Finished Motor Gasoline	8,217	178	8,395	4,911	1,312	1,711	7,934
Reformulated	4,423	0	4,423	254	31	0	285
Oxygenated	0	0	0	116	226	0	342
Other	3,794	178	3,972	4,541	1,055	1,711	7,307
Finished Aviation Gasoline	64	0	64	32	56	55	143
Jet Fuel	1,653	22	1,675	2,199	309	572	3,080
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	1,653	22	1,675	2,199	309	572	3,080
Kerosene	133	70	203	131	92	231	454
Distillate Fuel Oil	6,838	204	7,042	4,557	1,299	2,209	8,065
0.05 percent sulfur and under	1,712	188	1,900	2,482	790	1,058	4,330
Greater than 0.05 percent sulfur	5,126	16	5,142	2,075	509	1,151	3,735
Residual Fuel Oil	3,499	55	3,554	1,087	414	86	1,587
Less than 0.31 percent sulfur	913	33	946	13	0	0	13
0.31 to 1.00 percent sulfur	1,622	22	1,644	185	0	1	186
Greater than 1.00 percent sulfur	964	0	964	889	414	85	1,388
Naphtha for Petrochemical Feedstock Use	461	0	461	94	0	6	100
Other Oils for Petrochemical Feedstock Use	0	0	0	4	0	0	4
Special Naphthas	78	29	107	173	0	36	209
Lubricants	518	469	987	928	0	0	928
Waxes	0	202	202	121	0	35	156
Petroleum Coke (Marketable)	433	0	433	603	1,572	284	2,459
Asphalt and Road Oil	1,966	733	2,699	4,549	2,159	1,510	8,218
Miscellaneous Products	5	62	67	113	28	25	166
Total Stocks, All Oils	61,459	3,284	64,743	45,975	11,320	15,424	72,719

See footnotes at end of table.

**Table 30. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts,
May 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	
Crude Oil	1,037	26,885	18,943	1,000	384	48,249	2,489	26,888	103,389
Petroleum Products	10,454	73,373	49,973	4,741	1,620	140,161	11,752	67,143	330,755
Pentanes Plus	123	140	39	8	22	332	6	0	749
Liquefied Petroleum Gases	1,807	3,906	3,828	106	47	9,694	391	1,217	16,760
Ethane/Ethylene	139	972	0	0	0	1,111	0	0	1,113
Propane/Propylene	769	1,372	933	7	4	3,085	88	155	5,705
Normal Butane/Butylene	606	1,022	2,306	80	23	4,037	193	630	6,938
Isobutane/Isobutylene	293	540	589	19	20	1,461	110	432	3,004
Other Hydrocarbons/Hydrogen/Oxygenates	67	1,304	754	10	21	2,156	107	2,947	7,527
Other Hydrocarbons/Hydrogen	0	0	1	0	0	1	0	5	21
Oxygenates	67	1,304	753	W	W	2,155	107	2,942	7,506
Fuel Ethanol	W	W	W	W	W	W	W	W	550
Methanol	W	W	W	W	W	W	W	W	694
MTBE	W	980	W	W	W	1,671	W	2,924	6,075
Other Oxygenates ^a	W	W	W	W	W	W	W	W	187
Unfinished Oils	2,684	27,917	19,662	952	509	51,724	2,662	24,264	103,716
Naphthas and Lighter	974	6,391	3,888	225	278	11,756	626	3,032	21,067
Kerosene and Light Gas Oils	332	3,829	2,783	166	85	7,195	355	6,121	18,337
Heavy Gas Oils	824	12,067	8,778	523	146	22,338	1,090	12,528	45,707
Residuum	554	5,630	4,213	38	0	10,435	591	2,583	18,605
Motor Gasoline Blending Components	943	6,625	4,272	158	315	12,313	1,464	7,694	40,374
Aviation Gasoline Blending Components	2	0	46	0	0	48	0	4	204
Finished Motor Gasoline	1,720	9,777	5,408	240	122	17,267	1,848	9,942	45,386
Reformulated	181	3,410	629	0	0	4,220	0	6,109	15,037
Oxygenated	0	0	0	0	0	0	1	0	343
Other	1,539	6,367	4,779	240	122	13,047	1,847	3,833	30,006
Finished Aviation Gasoline	45	182	194	0	0	421	28	293	949
Jet Fuel	542	3,281	2,710	129	75	6,737	414	4,256	16,162
Naphtha-Type	0	0	0	0	0	0	0	19	19
Kerosene-Type	542	3,281	2,710	129	75	6,737	414	4,237	16,143
Kerosene	24	325	120	34	12	515	87	57	1,316
Distillate Fuel Oil	1,057	9,739	4,284	435	156	15,671	1,496	6,253	38,527
0.05 percent sulfur and under	519	4,813	2,019	238	93	7,682	1,146	4,310	19,368
Greater than 0.05 percent sulfur	538	4,926	2,265	197	63	7,989	350	1,943	19,159
Residual Fuel Oil	184	2,617	2,262	173	17	5,253	542	4,351	15,287
Less than 0.31 percent sulfur	59	1	48	0	0	108	18	777	1,862
0.31 to 1.00 percent sulfur	25	437	725	115	17	1,319	426	874	4,449
Greater than 1.00 percent sulfur	100	2,179	1,489	58	0	3,826	98	2,700	8,976
Naphtha for Petrochemical Feedstock Use	19	825	391	0	28	1,263	0	163	1,987
Other Oils for Petrochemical Feedstock Use	95	1,027	370	0	0	1,492	1	175	1,672
Special Naphthas	76	877	64	110	0	1,127	1	48	1,492
Lubricants	13	2,615	2,377	837	0	5,842	0	917	8,674
Waxes	6	212	184	32	0	434	11	242	1,045
Petroleum Coke (Marketable)	0	1,262	2,173	0	0	3,435	193	1,795	8,315
Asphalt and Road Oil	1,018	593	749	1,517	296	4,173	2,500	2,423	20,013
Miscellaneous Products	29	149	86	0	0	264	1	102	600
Total Stocks, All Oils	11,491	100,258	68,916	5,741	2,004	188,410	14,241	94,031	434,144

^a 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,^a
May 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	4.2	2.8	4.1	5.4	4.1	3.9	5.0
Finished Motor Gasoline ^b	43.4	36.0	42.9	51.7	48.1	47.2	50.4
Finished Aviation Gasoline ^c	0.2	0.0	0.2	0.1	0.3	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	6.2	1.2	5.9	6.5	7.8	5.1	6.4
Kerosene	0.2	2.5	0.3	0.0	0.0	0.4	0.1
Distillate Fuel Oil	27.7	23.4	27.5	22.7	26.1	32.1	24.9
Residual Fuel Oil	7.6	2.5	7.3	1.8	3.7	0.4	1.7
Naphtha for Petrochemical Feedstock Use	1.1	0.0	1.1	0.5	0.0	0.1	0.4
Other Oils for Petrochemical Feedstock Use	0.0	0.0	0.0	1.0	0.0	0.3	0.8
Special Naphthas	0.1	0.9	0.1	0.5	0.0	0.3	0.4
Lubricants	0.7	6.9	1.1	0.8	0.0	1.3	0.8
Waxes	0.0	5.4	0.3	0.1	0.0	0.2	0.1
Petroleum Coke	3.3	0.8	3.1	3.7	6.6	4.0	4.1
Asphalt and Road Oil	5.3	13.6	5.8	6.0	5.6	3.6	5.5
Still Gas	3.8	3.4	3.8	3.8	3.5	3.6	3.7
Miscellaneous Products	0.1	1.4	0.1	0.2	0.5	0.3	0.3
Processing Gain(-) or Loss(+) ^d	-3.8	-0.9	-3.6	-4.8	-6.3	-2.9	-4.6

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	4.9	8.5	6.4	1.5	3.6	7.2	2.1	3.7	5.6
Finished Motor Gasoline ^b	49.4	43.5	44.1	25.1	51.6	43.8	46.7	43.1	45.2
Finished Aviation Gasoline ^c	0.7	0.2	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	9.4	8.9	12.9	5.9	8.4	10.4	4.4	16.5	9.8
Kerosene	0.0	0.3	0.1	0.5	0.1	0.2	0.3	0.2	0.2
Distillate Fuel Oil	25.8	20.6	22.3	23.7	26.3	21.8	30.6	18.5	22.9
Residual Fuel Oil	1.4	3.8	2.5	3.6	0.8	3.1	2.4	7.9	4.0
Naphtha for Petrochemical Feedstock Use	0.5	4.6	1.1	0.0	0.1	2.8	0.0	0.2	1.5
Other Oils for Petrochemical Feedstock Use	1.0	3.2	3.2	0.0	0.0	2.9	0.1	0.2	1.6
Special Naphthas	0.5	0.5	0.2	2.8	0.0	0.4	0.0	0.1	0.3
Lubricants	0.3	1.7	1.6	12.0	0.0	1.8	0.0	1.0	1.3
Waxes	0.0	0.2	0.1	1.5	0.0	0.2	0.6	0.1	0.2
Petroleum Coke	1.7	5.0	5.4	1.2	0.5	4.7	3.1	6.5	4.6
Asphalt and Road Oil	3.1	1.1	1.8	19.9	5.1	2.1	8.1	2.1	3.5
Still Gas	4.3	4.6	4.1	3.3	3.1	4.3	3.8	6.1	4.4
Miscellaneous Products	0.4	0.4	0.5	0.0	0.0	0.4	0.4	0.2	0.3
Processing Gain(-) or Loss(+) ^d	-3.4	-7.1	-6.5	-0.9	0.5	-6.3	-2.9	-6.6	-5.6

^a Based on crude oil input and net reruns of unfinished oils.
^b 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.
^c Based on finished aviation gasoline output minus net input of aviation gasoline blending components.
^d 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, May 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
PAD District I	1,288	489	3,344	5,121
Delaware	0	0	339	339
Florida	305	0	283	588
Georgia	0	0	170	170
Maine	33	0	235	268
Massachusetts	0	320	0	320
New Jersey	695	0	1,308	2,003
New York	255	2	86	343
North Carolina	0	0	293	293
Pennsylvania	0	166	115	281
South Carolina	0	0	311	311
Vermont	0	1	1	2
Virginia	0	0	203	203
PAD District III	0	0	312	312
Mississippi	0	0	312	312
U.S. Total	1,288	489	3,656	5,433

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

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

Commodity	Petroleum Administration for Defense Districts						U.S. Total	Daily Average
	I	II	III	IV	V			
Crude Oil^{a,b}	48,817	43,869	147,904	3,139	12,911	256,640	8,279	
Natural Gas Liquids	147	1,735	2,999	176	1	5,058	163	
Pentanes Plus	0	37	805	0	0	842	27	
Liquefied Petroleum Gases	147	1,698	2,194	176	1	4,216	136	
Ethane	0	0	434	0	0	434	14	
Ethylene	0	6	0	0	0	6	(s)	
Propane	138	1,225	508	110	1	1,982	64	
Propylene	0	163	0	0	0	163	5	
Normal Butane	5	75	761	34	0	875	28	
Butylene	0	0	0	0	0	0	0	
Isobutane	4	229	491	32	0	756	24	
Isobutylene	0	0	0	0	0	0	0	
Other Liquids	10,967	4	12,091	0	2,827	25,889	835	
Other Hydrocarbons/Hydrogen/Oxygenates	560	0	0	0	1,999	2,559	83	
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0	
Oxygenates	560	0	0	0	1,999	2,559	83	
Fuel Ethanol	0	0	0	0	0	0	0	
MTBE	560	0	0	0	1,999	2,559	83	
Other Oxygenates ^c	0	0	0	0	0	0	0	
Unfinished Oils ^a	1,538	4	12,091	0	345	13,978	451	
Naphthas and Lighter	391	4	2,327	0	0	2,722	88	
Kerosene and Light Gas Oils	0	0	0	0	0	0	0	
Heavy Gas Oils	1,027	0	5,528	0	0	6,555	211	
Residuum	120	0	4,236	0	345	4,701	152	
Motor Gasoline Blending Components	8,869	0	0	0	483	9,352	302	
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	
Finished Petroleum Products	26,709	510	7,984	345	557	36,105	1,165	
Finished Motor Gasoline	10,761	126	303	26	20	11,236	362	
Reformulated	4,859	0	303	0	0	5,162	167	
Oxygenated	0	0	0	0	0	0	0	
Other	5,902	126	0	26	20	6,074	196	
Finished Aviation Gasoline	0	2	0	2	0	4	(s)	
Jet Fuel	2,760	0	22	0	44	2,826	91	
Naphtha-Type	0	0	0	0	0	0	0	
Kerosene-Type	2,760	0	22	0	44	2,826	91	
Bonded Aircraft Fuel	1,531	0	0	0	3	1,534	49	
Other	1,229	0	22	0	41	1,292	42	
Kerosene	8	0	0	0	0	8	(s)	
Distillate Fuel Oil	6,195	202	0	317	102	6,816	220	
Bonded Ship Bunkers	0	0	0	3	52	55	2	
0.05 percent sulfur and under	0	0	0	3	0	3	(s)	
Greater than 0.05 percent sulfur	0	0	0	0	52	52	2	
Other	6,195	202	0	314	50	6,761	218	
0.05 percent sulfur and under	3,601	158	0	66	50	3,875	125	
Greater than 0.05 percent sulfur	2,594	44	0	248	0	2,886	93	
Residual Fuel Oil	5,121	0	312	0	0	5,433	175	
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	5,121	0	312	0	0	5,433	175	
Less than 0.31 percent sulfur	1,288	0	0	0	0	1,288	42	
0.31 to 1.00 percent sulfur	489	0	0	0	0	489	16	
Greater than 1.00 percent sulfur	3,344	0	312	0	0	3,656	118	
Naphtha for Petrochemical Feedstock Use	179	28	1,661	0	0	1,868	60	
Other Oils for Petrochemical Feedstock Use	0	0	5,668	0	350	6,018	194	
Special Naphthas	187	28	0	0	0	215	7	
Lubricants	406	21	0	0	0	427	14	
Waxes	25	14	1	0	0	40	1	
Petroleum Coke	0	0	0	0	41	41	1	
Asphalt and Road Oil	1,064	87	10	0	0	1,161	37	
Miscellaneous Products	3	2	7	0	0	12	(s)	
Total	86,640	46,118	170,978	3,660	16,296	323,692	10,442	

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c 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-May 1997
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil^{a,b}	205,086	225,115	665,385	16,580	52,303	1,164,469	7,712
Natural Gas Liquids	3,956	9,119	12,892	1,424	75	27,466	182
Pentanes Plus	0	71	5,417	109	0	5,597	37
Liquefied Petroleum Gases	3,956	9,048	7,475	1,315	75	21,869	145
Ethane	0	0	2,552	0	0	2,552	17
Ethylene	0	49	0	0	0	49	(s)
Propane	3,866	6,672	2,007	866	7	13,418	89
Propylene	0	967	0	0	0	967	6
Normal Butane	46	514	1,608	365	0	2,533	17
Butylene	0	0	0	0	0	0	0
Isobutane	44	846	1,308	84	68	2,350	16
Isobutylene	0	0	0	0	0	0	0
Other Liquids	47,038	60	47,681	0	12,518	107,297	711
Other Hydrocarbons/Hydrogen/Oxygenates	2,764	0	158	0	7,009	9,931	66
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0
Oxygenates	2,764	0	158	0	7,009	9,931	66
Fuel Ethanol	0	0	0	0	47	47	(s)
MTBE	2,764	0	0	0	6,962	9,726	64
Other Oxygenates ^c	0	0	158	0	0	158	1
Unfinished Oils ^a	5,385	21	47,294	0	3,453	56,153	372
Naphthas and Lighter	956	21	8,705	0	405	10,087	67
Kerosene and Light Gas Oils	0	0	0	0	0	0	0
Heavy Gas Oils	4,309	0	20,350	0	206	24,865	165
Residuum	120	0	18,239	0	2,842	21,201	140
Motor Gasoline Blending Components	38,889	39	229	0	2,056	41,213	273
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	136,115	1,930	43,531	1,608	4,293	187,477	1,242
Finished Motor Gasoline	48,280	403	1,297	119	399	50,498	334
Reformulated	22,562	0	983	0	0	23,545	156
Oxygenated	0	0	0	0	0	0	0
Other	25,718	403	314	119	399	26,953	178
Finished Aviation Gasoline	0	2	0	3	1	6	(s)
Jet Fuel	14,933	0	100	0	804	15,837	105
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	14,933	0	100	0	804	15,837	105
Bonded Aircraft Fuel	9,518	0	0	0	149	9,667	64
Other	5,415	0	100	0	655	6,170	41
Kerosene	224	0	0	0	12	236	2
Distillate Fuel Oil	34,247	809	0	1,486	1,517	38,059	252
Bonded Ship Bunkers	0	0	0	5	185	190	1
0.05 percent sulfur and under	0	0	0	5	0	5	(s)
Greater than 0.05 percent sulfur	0	0	0	0	185	185	1
Other	34,247	809	0	1,481	1,332	37,869	251
0.05 percent sulfur and under	15,077	577	0	268	1,331	17,253	114
Greater than 0.05 percent sulfur	19,170	232	0	1,213	1	20,616	137
Residual Fuel Oil	30,615	62	3,313	0	849	34,839	231
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	30,615	62	3,313	0	849	34,839	231
Less than 0.31 percent sulfur	7,534	62	0	0	684	8,280	55
0.31 to 1.00 percent sulfur	5,169	0	813	0	0	5,982	40
Greater than 1.00 percent sulfur	17,912	0	2,500	0	165	20,577	136
Naphtha for Petrochemical Feedstock Use	803	157	7,954	0	36	8,950	59
Other Oils for Petrochemical Feedstock Use	0	0	30,502	0	482	30,984	205
Special Naphthas	1,000	136	207	0	7	1,350	9
Lubricants	1,462	102	0	0	0	1,564	10
Waxes	110	69	6	0	3	188	1
Petroleum Coke	0	0	0	0	175	175	1
Asphalt and Road Oil	4,431	167	137	0	0	4,735	31
Miscellaneous Products	10	23	15	0	8	56	(s)
Total	392,195	236,224	769,489	19,612	69,189	1,486,709	9,846

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c 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,^a
May 1997
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphtas
Arab OPEC	48,473	1,252	3,854	147	783	0	0	934	0	0
Algeria	0	1,252	2,053	0	0	0	0	622	0	0
Iraq	3,174	0	0	0	0	0	0	0	0	0
Kuwait	3,978	0	0	0	0	0	0	0	0	0
Saudi Arabia	41,321	0	1,801	147	783	0	0	312	0	0
Other OPEC	74,823	399	3,860	2,402	1,351	1,228	1,486	2,674	0	0
Indonesia	2,670	0	0	0	0	0	0	0	0	0
Nigeria	29,261	0	0	227	0	0	0	307	0	0
Venezuela	42,892	399	3,860	2,175	1,351	1,228	1,486	2,367	0	0
Non OPEC	133,344	2,565	6,264	6,803	9,102	1,598	5,330	1,825	8	215
Angola	9,505	0	172	0	0	0	0	0	0	0
Argentina	1,184	0	0	0	0	0	0	0	0	0
Australia	1,363	0	0	0	0	0	0	0	0	0
Belgium	0	0	1,346	969	0	0	0	0	0	0
Benin	193	0	0	0	0	0	0	0	0	0
Canada	33,122	2,565	601	95	2,741	83	2,789	733	8	215
China, People's Republic of	660	0	0	0	0	0	0	0	0	0
Colombia	8,756	0	161	0	0	0	0	0	0	0
Congo (Brazzaville)	2,875	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) ^e	1,049	0	0	0	0	0	0	0	0	0
Ecuador	3,230	0	140	0	0	0	0	0	0	0
Egypt	1,809	0	0	0	0	0	0	0	0	0
France	0	0	0	776	278	0	0	0	0	0
Gabon	5,511	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	373	200	0	0	0	21	0	0
Guatemala	663	0	0	0	0	0	0	0	0	0
Italy	0	0	0	281	0	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	0	0	0	0	0	0
Malaysia	0	0	241	0	0	0	50	0	0	0
Mexico	43,635	0	0	0	0	22	0	0	0	0
Netherlands	0	0	0	278	0	0	0	0	0	0
Netherlands Antilles	0	0	1,779	0	776	762	0	0	0	0
Norway	10,191	0	20	120	540	0	0	0	0	0
Oman	240	0	0	0	0	0	0	0	0	0
Peru	1,077	0	100	0	0	0	0	0	0	0
Portugal	0	0	0	559	303	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Singapore	0	0	104	0	0	0	0	0	0	0
Spain	0	0	200	0	0	0	0	238	0	0
Trinidad and Tobago	2,035	0	0	0	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0	0	0	0	0
United Kingdom	5,609	0	0	2,045	432	0	0	0	0	0
Virgin Islands	0	0	1,027	195	4,032	731	2,491	833	0	0
Other	637	0	0	1,285	0	0	0	0	0	0
Total	256,640	4,216	13,978	9,352	11,236	2,826	6,816	5,433	8	215
Persian Gulf ^d	48,473	0	1,801	147	783	0	0	312	0	0

See footnotes at end of table.

**Table 35. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,^a
May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	0	4,258	0	0	2,178	13,406	61,879	1,564	432	1,996
Algeria	0	4,258	0	0	805	8,990	8,990	0	290	290
Iraq	0	0	0	0	0	0	3,174	102	0	102
Kuwait	0	0	0	0	0	0	3,978	128	0	128
Saudi Arabia	0	0	0	0	1,373	4,416	45,737	1,333	142	1,475
Other OPEC	869	630	0	311	457	15,667	90,490	2,414	505	2,919
Indonesia	0	0	0	0	0	0	2,670	86	0	86
Nigeria	0	0	0	0	0	534	29,795	944	17	961
Venezuela	869	630	0	311	457	15,133	58,025	1,384	488	1,872
Non OPEC	999	1,130	427	850	863	37,979	171,323	4,301	1,225	5,527
Angola	0	0	0	0	0	172	9,677	307	6	312
Argentina	0	0	0	0	0	0	1,184	38	0	38
Australia	0	543	0	0	0	543	1,906	44	18	61
Belgium	44	0	0	0	0	2,359	2,359	0	76	76
Benin	0	0	0	0	0	0	193	6	0	6
Canada	109	29	44	380	608	11,000	44,122	1,068	355	1,423
China, People's Republic of	0	0	0	0	0	0	660	21	0	21
Colombia	0	0	0	0	0	161	8,917	282	5	288
Congo (Brazzaville)	0	0	0	0	0	0	2,875	93	0	93
Congo (Kinshasa) ^d	0	0	0	0	0	0	1,049	34	0	34
Ecuador	0	0	0	0	0	140	3,370	104	5	109
Egypt	0	0	0	0	0	0	1,809	58	0	58
France	0	0	0	0	0	1,054	1,054	0	34	34
Gabon	0	0	0	0	0	0	5,511	178	0	178
Germany, FR	0	0	0	0	6	600	600	0	19	19
Guatemala	0	0	0	0	0	0	663	21	0	21
Italy	0	0	0	0	0	281	281	0	9	9
Japan	4	0	0	0	8	12	12	0	(s)	(s)
Korea, Republic of	0	0	0	0	42	42	42	0	1	1
Malaysia	0	0	0	0	0	291	291	0	9	9
Mexico	333	313	0	0	0	668	44,303	1,408	22	1,429
Netherlands	0	0	0	0	132	410	410	0	13	13
Netherlands Antilles	0	110	0	181	0	3,608	3,608	0	116	116
Norway	0	0	0	0	0	680	10,871	329	22	351
Oman	0	0	0	0	0	0	240	8	0	8
Peru	0	0	0	0	0	100	1,177	35	3	38
Portugal	0	0	0	0	0	862	862	0	28	28
Puerto Rico	268	0	383	0	0	651	651	0	21	21
Singapore	0	0	0	0	59	163	163	0	5	5
Spain	0	0	0	289	0	727	727	0	23	23
Trinidad and Tobago	0	135	0	0	0	135	2,170	66	4	70
Tunisia	241	0	0	0	0	241	241	0	8	8
United Kingdom	0	0	0	0	0	2,477	8,086	181	80	261
Virgin Islands	0	0	0	0	0	9,309	9,309	0	300	300
Other	0	0	0	0	8	1,293	1,930	21	42	62
Total	1,868	6,018	427	1,161	3,498	67,052	323,692	8,279	2,163	10,442
Persian Gulf^e	0	0	0	0	1,373	4,416	52,889	1,564	142	1,706

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e 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,^a
May 1997
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphtas
Arab OPEC	3,577	0	0	147	783	0	0	622	0	0
Algeria	0	0	0	0	0	0	0	622	0	0
Saudi Arabia	3,577	0	0	147	783	0	0	0	0	0
Other OPEC	17,143	0	120	2,402	1,351	1,187	1,486	2,674	0	0
Nigeria	11,415	0	0	227	0	0	0	307	0	0
Venezuela	5,728	0	120	2,175	1,351	1,187	1,486	2,367	0	0
Non OPEC	28,097	147	1,418	6,320	8,627	1,573	4,709	1,825	8	187
Angola	6,981	0	0	0	0	0	0	0	0	0
Argentina	429	0	0	0	0	0	0	0	0	0
Belgium	0	0	391	969	0	0	0	0	0	0
Canada	2,307	147	0	95	2,569	80	2,218	733	8	187
Colombia	2,683	0	0	0	0	0	0	0	0	0
Congo (Brazzaville)	984	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) ^d	1,049	0	0	0	0	0	0	0	0	0
Ecuador	376	0	0	0	0	0	0	0	0	0
Egypt	1,809	0	0	0	0	0	0	0	0	0
France	0	0	0	776	278	0	0	0	0	0
Gabon	2,191	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	200	0	0	0	21	0	0
Italy	0	0	0	281	0	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Mexico	2,077	0	0	0	0	0	0	0	0	0
Netherlands	0	0	0	278	0	0	0	0	0	0
Netherlands Antilles	0	0	0	0	776	762	0	0	0	0
Norway	4,656	0	0	120	540	0	0	0	0	0
Portugal	0	0	0	559	0	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	238	0	0
United Kingdom	2,555	0	0	2,045	432	0	0	0	0	0
Virgin Islands	0	0	1,027	195	4,032	731	2,491	833	0	0
Other	0	0	0	802	0	0	0	0	0	0
Total	48,817	147	1,538	8,869	10,761	2,760	6,195	5,121	8	187
Persian Gulf^e	3,577	0	0	147	783	0	0	0	0	0

See footnotes at end of table.

**Table 36. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,^a
May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	0	0	0	0	200	1,752	5,329	115	57	172
Algeria	0	0	0	0	0	622	622	0	20	20
Saudi Arabia	0	0	0	0	200	1,130	4,707	115	36	152
Other OPEC	0	0	0	301	228	9,749	26,892	553	314	867
Nigeria	0	0	0	0	0	534	11,949	368	17	385
Venezuela	0	0	0	301	228	9,215	14,943	185	297	482
Non OPEC	179	0	406	763	160	26,322	54,419	906	849	1,755
Angola	0	0	0	0	0	0	6,981	225	0	225
Argentina	0	0	0	0	0	0	429	14	0	14
Belgium	0	0	0	0	0	1,360	1,360	0	44	44
Canada	8	0	23	293	15	6,376	8,683	74	206	280
Colombia	0	0	0	0	0	0	2,683	87	0	87
Congo (Brazzaville)	0	0	0	0	0	0	984	32	0	32
Congo (Kinshasa) ^d	0	0	0	0	0	0	1,049	34	0	34
Ecuador	0	0	0	0	0	0	376	12	0	12
Egypt	0	0	0	0	0	0	1,809	58	0	58
France	0	0	0	0	0	1,054	1,054	0	34	34
Gabon	0	0	0	0	0	0	2,191	71	0	71
Germany, FR	0	0	0	0	5	226	226	0	7	7
Italy	0	0	0	0	0	281	281	0	9	9
Japan	0	0	0	0	1	1	1	0	(s)	(s)
Mexico	0	0	0	0	0	0	2,077	67	0	67
Netherlands	0	0	0	0	132	410	410	0	13	13
Netherlands Antilles	0	0	0	181	0	1,719	1,719	0	55	55
Norway	0	0	0	0	0	660	5,316	150	21	171
Portugal	0	0	0	0	0	559	559	0	18	18
Puerto Rico	171	0	383	0	0	554	554	0	18	18
Spain	0	0	0	289	0	527	527	0	17	17
United Kingdom	0	0	0	0	0	2,477	5,032	82	80	162
Virgin Islands	0	0	0	0	0	9,309	9,309	0	300	300
Other	0	0	0	0	7	809	809	0	26	26
Total	179	0	406	1,064	588	37,823	86,640	1,575	1,220	2,795
Persian Gulf^e	0	0	0	0	200	1,130	4,707	115	36	152

^a 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.
^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.
^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.
^d Formerly Zaire.
^e 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,^a
May 1997
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	3,992	0	0	0	0	0	0	0	0	0
Kuwait	1,285	0	0	0	0	0	0	0	0	0
Saudi Arabia	2,707	0	0	0	0	0	0	0	0	0
Other OPEC	8,039	0	0	0	0	0	0	0	0	0
Nigeria	2,205	0	0	0	0	0	0	0	0	0
Venezuela	5,834	0	0	0	0	0	0	0	0	0
Non OPEC	31,838	1,698	4	0	126	0	202	0	0	28
Canada	24,118	1,698	4	0	126	0	202	0	0	28
Colombia	1,633	0	0	0	0	0	0	0	0	0
Ecuador	1,412	0	0	0	0	0	0	0	0	0
Mexico	2,652	0	0	0	0	0	0	0	0	0
Norway	1,016	0	0	0	0	0	0	0	0	0
United Kingdom	1,007	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total	43,869	1,698	4	0	126	0	202	0	0	28
Persian Gulf^e	3,992	0	0	0	0	0	0	0	0	0

See footnotes at end of table.

**Table 37. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin,^a
May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	0	0	0	0	0	0	3,992	129	0	129
Kuwait	0	0	0	0	0	0	1,285	41	0	41
Saudi Arabia	0	0	0	0	0	0	2,707	87	0	87
Other OPEC	0	0	0	0	0	0	8,039	259	0	259
Nigeria	0	0	0	0	0	0	2,205	71	0	71
Venezuela	0	0	0	0	0	0	5,834	188	0	188
Non OPEC	28	0	21	87	55	2,249	34,087	1,027	73	1,100
Canada	28	0	21	87	54	2,248	26,366	778	73	851
Colombia	0	0	0	0	0	0	1,633	53	0	53
Ecuador	0	0	0	0	0	0	1,412	46	0	46
Mexico	0	0	0	0	0	0	2,652	86	0	86
Norway	0	0	0	0	0	0	1,016	33	0	33
United Kingdom	0	0	0	0	0	0	1,007	32	0	32
Other	0	0	0	0	1	1	1	0	(s)	(s)
Total	28	0	21	87	55	2,249	46,118	1,415	73	1,488
Persian Gulf^e	0	0	0	0	0	0	3,992	129	0	129

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e 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,^a
May 1997
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	38,275	1,252	3,854	0	0	0	0	312	0	0
Algeria	0	1,252	2,053	0	0	0	0	0	0	0
Iraq	2,060	0	0	0	0	0	0	0	0	0
Kuwait	1,679	0	0	0	0	0	0	0	0	0
Saudi Arabia	34,536	0	1,801	0	0	0	0	312	0	0
Other OPEC	46,435	399	3,740	0	0	0	0	0	0	0
Nigeria	15,641	0	0	0	0	0	0	0	0	0
Venezuela	30,794	399	3,740	0	0	0	0	0	0	0
Non OPEC	63,194	543	4,497	0	303	22	0	0	0	0
Angola	2,524	0	172	0	0	0	0	0	0	0
Argentina	755	0	0	0	0	0	0	0	0	0
Australia	0	0	0	0	0	0	0	0	0	0
Belgium	0	0	955	0	0	0	0	0	0	0
Benin	193	0	0	0	0	0	0	0	0	0
Canada	0	543	597	0	0	0	0	0	0	0
China, People's Republic of	660	0	0	0	0	0	0	0	0	0
Colombia	3,606	0	161	0	0	0	0	0	0	0
Congo (Brazzaville)	1,891	0	0	0	0	0	0	0	0	0
Ecuador	1,442	0	140	0	0	0	0	0	0	0
Gabon	3,320	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	373	0	0	0	0	0	0	0
Guatemala	663	0	0	0	0	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Mexico	38,906	0	0	0	0	22	0	0	0	0
Netherlands Antilles	0	0	1,779	0	0	0	0	0	0	0
Norway	4,519	0	20	0	0	0	0	0	0	0
Peru	357	0	100	0	0	0	0	0	0	0
Portugal	0	0	0	0	303	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Spain	0	0	200	0	0	0	0	0	0	0
Trinidad and Tobago	2,035	0	0	0	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0	0	0	0	0
United Kingdom	2,047	0	0	0	0	0	0	0	0	0
Other	276	0	0	0	0	0	0	0	0	0
Total	147,904	2,194	12,091	0	303	22	0	312	0	0
Persian Gulf^e	38,275	0	1,801	0	0	0	0	312	0	0

See footnotes at end of table.

**Table 38. PAD District III—Imports of Crude Oil and Petroleum Products by Country of Origin,^a
May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	0	4,258	0	0	805	10,481	48,756	1,235	338	1,573
Algeria	0	4,258	0	0	805	8,368	8,368	0	270	270
Iraq	0	0	0	0	0	0	2,060	66	0	66
Kuwait	0	0	0	0	0	0	1,679	54	0	54
Saudi Arabia	0	0	0	0	0	2,113	36,649	1,114	68	1,182
Other OPEC	869	309	0	10	0	5,327	51,762	1,498	172	1,670
Nigeria	0	0	0	0	0	0	15,641	505	0	505
Venezuela	869	309	0	10	0	5,327	36,121	993	172	1,165
Non OPEC	792	1,101	0	0	8	7,266	70,460	2,039	234	2,273
Angola	0	0	0	0	0	172	2,696	81	6	87
Argentina	0	0	0	0	0	0	755	24	0	24
Australia	0	543	0	0	0	543	543	0	18	18
Belgium	44	0	0	0	0	999	999	0	32	32
Benin	0	0	0	0	0	0	193	6	0	6
Canada	73	0	0	0	0	1,213	1,213	0	39	39
China, People's Republic of	0	0	0	0	0	0	660	21	0	21
Colombia	0	0	0	0	0	161	3,767	116	5	122
Congo (Brazzaville)	0	0	0	0	0	0	1,891	61	0	61
Ecuador	0	0	0	0	0	140	1,582	47	5	51
Gabon	0	0	0	0	0	0	3,320	107	0	107
Germany, FR	0	0	0	0	1	374	374	0	12	12
Guatemala	0	0	0	0	0	0	663	21	0	21
Japan	4	0	0	0	7	11	11	0	(s)	(s)
Mexico	333	313	0	0	0	668	39,574	1,255	22	1,277
Netherlands Antilles	0	110	0	0	0	1,889	1,889	0	61	61
Norway	0	0	0	0	0	20	4,539	146	1	146
Peru	0	0	0	0	0	100	457	12	3	15
Portugal	0	0	0	0	0	303	303	0	10	10
Puerto Rico	97	0	0	0	0	97	97	0	3	3
Spain	0	0	0	0	0	200	200	0	6	6
Trinidad and Tobago	0	135	0	0	0	135	2,170	66	4	70
Tunisia	241	0	0	0	0	241	241	0	8	8
United Kingdom	0	0	0	0	0	0	2,047	66	0	66
Other	0	0	0	0	0	0	276	9	0	9
Total	1,661	5,668	0	10	813	23,074	170,978	4,771	744	5,515
Persian Gulf^e	0	0	0	0	0	2,113	40,388	1,235	68	1,303

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e 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,^a
May 1997
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
PAD District IV										
Non OPEC	3,139	176	0	0	26	0	317	0	0	0
Canada	3,139	176	0	0	26	0	317	0	0	0
Total	3,139	176	0	0	26	0	317	0	0	0
PAD District V										
Arab OPEC	2,629	0	0	0	0	0	0	0	0	0
Iraq	1,114	0	0	0	0	0	0	0	0	0
Kuwait	1,014	0	0	0	0	0	0	0	0	0
Saudi Arabia	501	0	0	0	0	0	0	0	0	0
Other OPEC	3,206	0	0	0	0	41	0	0	0	0
Indonesia	2,670	0	0	0	0	0	0	0	0	0
Venezuela	536	0	0	0	0	41	0	0	0	0
Non OPEC	7,076	1	345	483	20	3	102	0	0	0
Australia	1,363	0	0	0	0	0	0	0	0	0
Canada	3,558	1	0	0	20	3	52	0	0	0
Colombia	834	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	0	0	0	0	0	0
Malaysia	0	0	241	0	0	0	50	0	0	0
Oman	240	0	0	0	0	0	0	0	0	0
Peru	720	0	0	0	0	0	0	0	0	0
Singapore	0	0	104	0	0	0	0	0	0	0
Other	361	0	0	483	0	0	0	0	0	0
Total	12,911	1	345	483	20	44	102	0	0	0
Persian Gulf^e	2,629	0	0	0	0	0	0	0	0	0

See footnotes at end of table.

**Table 39. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin,^a
May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
PAD District IV										
Non OPEC	0	0	0	0	2	521	3,660	101	17	118
Canada	0	0	0	0	2	521	3,660	101	17	118
Total	0	0	0	0	2	521	3,660	101	17	118
PAD District V										
Arab OPEC	0	0	0	0	1,173	1,173	3,802	85	38	123
Iraq	0	0	0	0	0	0	1,114	36	0	36
Kuwait	0	0	0	0	0	0	1,014	33	0	33
Saudi Arabia	0	0	0	0	1,173	1,173	1,674	16	38	54
Other OPEC	0	321	0	0	229	591	3,797	103	19	122
Indonesia	0	0	0	0	0	0	2,670	86	0	86
Venezuela	0	321	0	0	229	591	1,127	17	19	36
Non OPEC	0	29	0	0	638	1,621	8,697	228	52	281
Australia	0	0	0	0	0	0	1,363	44	0	44
Canada	0	29	0	0	537	642	4,200	115	21	135
Colombia	0	0	0	0	0	0	834	27	0	27
Korea, Republic of	0	0	0	0	42	42	42	0	1	1
Malaysia	0	0	0	0	0	291	291	0	9	9
Oman	0	0	0	0	0	0	240	8	0	8
Peru	0	0	0	0	0	0	720	23	0	23
Singapore	0	0	0	0	59	163	163	0	5	5
Other	0	0	0	0	0	483	844	12	16	27
Total	0	350	0	0	2,040	3,385	16,296	416	109	526
Persian Gulf^e	0	0	0	0	1,173	1,173	3,802	85	38	123

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e 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,^a January-May 1997
(Thousand Barrels)

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	231,447	4,192	14,478	635	3,858	0	381	6,982	0	0
Algeria	696	4,192	5,986	222	0	0	381	4,518	0	0
Iraq	6,326	0	0	0	0	0	0	0	0	0
Kuwait	31,146	0	0	0	0	0	0	0	0	0
Qatar	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	193,279	0	8,492	413	3,858	0	0	2,464	0	0
Other OPEC	301,015	1,619	15,056	7,961	6,430	7,056	8,839	12,809	0	0
Indonesia	6,348	0	623	0	0	0	0	1,178	0	0
Nigeria	100,409	0	737	515	0	0	0	565	0	0
Venezuela	194,258	1,619	13,696	7,446	6,430	7,056	8,839	11,066	0	0
Non OPEC	632,007	16,058	26,619	32,617	40,210	8,781	28,839	15,048	236	1,350
Angola	63,303	0	349	0	0	0	0	0	0	0
Argentina	6,339	0	0	0	0	0	0	116	0	0
Australia	3,810	0	0	0	0	0	0	0	0	0
Bahama Islands	0	0	350	0	0	0	0	0	0	0
Belgium	0	0	2,324	2,280	592	0	0	344	0	0
Benin	193	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0	0	77	0	66
Cameroon	0	0	0	0	0	0	0	313	0	0
Canada	166,235	15,042	1,218	1,222	12,856	517	14,479	3,819	236	1,284
China, People's Republic of	9,775	0	0	10	0	0	0	0	0	0
Colombia	37,760	0	161	0	0	0	0	135	0	0
Congo (Brazzaville)	5,798	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) ^d	2,813	0	0	0	0	0	0	0	0	0
Ecuador	16,399	0	140	0	0	0	0	172	0	0
Egypt	5,727	0	100	0	0	0	0	0	0	0
France	0	0	814	2,905	1,274	0	0	0	0	0
Gabon	27,593	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	903	354	190	0	0	364	0	0
Guatemala	2,428	0	0	0	0	0	0	0	0	0
Italy	0	0	51	1,663	521	0	0	0	0	0
Ivory Coast	0	0	157	0	0	0	0	120	0	0
Japan	0	0	0	75	0	0	0	0	0	0
Korea, Republic of	0	0	365	0	0	127	0	0	0	0
Malaysia	208	0	887	0	0	0	106	386	0	0
Mexico	198,750	197	0	1,414	0	100	0	0	0	0
Netherlands	0	0	803	1,712	273	0	0	201	0	0
Netherlands Antilles	0	0	6,513	652	1,012	3,909	0	580	0	0
Norway	39,692	819	661	120	1,211	0	0	0	0	0
Oman	240	0	1,460	0	0	0	0	0	0	0
Panama	0	0	0	0	0	0	0	135	0	0
Peru	2,498	0	260	0	141	0	0	0	0	0
Portugal	0	0	0	559	1,297	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Romania	0	0	514	2,369	61	0	0	0	0	0
Russia	0	0	439	1,374	0	0	330	25	0	0
Singapore	0	0	2,192	0	0	0	0	0	0	0
Spain	0	0	1,454	999	178	0	0	238	0	0
Sweden	0	0	296	730	309	0	0	324	0	0
Trinidad and Tobago	9,015	0	0	677	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0	0	198	0	0
United Kingdom	26,760	0	138	8,138	2,464	0	0	697	0	0
Virgin Islands	0	0	3,795	893	17,337	4,128	13,843	6,464	0	0
Yemen	0	0	0	0	0	0	0	304	0	0
Other	6,671	0	275	4,471	494	0	81	36	0	0
Total	1,164,469	21,869	56,153	41,213	50,498	15,837	38,059	34,839	236	1,350
Persian Gulf^e	230,751	0	8,492	413	3,858	0	0	2,464	0	0

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,^a January-May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	1,815	23,068	0	0	9,663	65,072	296,519	1,533	431	1,964
Algeria	1,815	22,607	0	0	5,417	45,138	45,834	5	299	304
Iraq	0	0	0	0	0	0	6,326	42	0	42
Kuwait	0	0	0	0	0	0	31,146	206	0	206
Qatar	0	461	0	0	0	461	461	0	3	3
Saudi Arabia	0	0	0	0	4,246	19,473	212,752	1,280	129	1,409
Other OPEC	1,754	630	0	2,332	1,855	66,341	367,356	1,993	439	2,433
Indonesia	0	0	0	0	0	1,801	8,149	42	12	54
Nigeria	0	0	0	0	0	1,817	102,226	665	12	677
Venezuela	1,754	630	0	2,332	1,855	62,723	256,981	1,286	415	1,702
Non OPEC	5,381	7,286	1,564	2,403	4,435	190,827	822,834	4,185	1,264	5,449
Angola	376	0	0	0	0	725	64,028	419	5	424
Argentina	211	0	0	0	0	327	6,666	42	2	44
Australia	0	543	0	0	0	543	4,353	25	4	29
Bahama Islands	0	0	0	0	0	350	350	0	2	2
Belgium	236	0	0	0	0	5,776	5,776	0	38	38
Benin	0	0	0	0	0	0	193	1	0	1
Brazil	0	0	0	0	0	143	143	0	1	1
Cameroon	0	0	0	0	0	313	313	0	2	2
Canada	523	161	283	1,009	2,578	55,227	221,462	1,101	366	1,467
China, People's Republic of	0	0	0	0	0	10	9,785	65	(s)	65
Colombia	0	0	0	0	0	296	38,056	250	2	252
Congo (Brazzaville)	0	0	0	0	0	0	5,798	38	0	38
Congo (Kinshasa) ^d	0	0	0	0	0	0	2,813	19	0	19
Ecuador	0	0	0	0	0	312	16,711	109	2	111
Egypt	255	228	0	0	0	583	6,310	38	4	42
France	0	0	0	0	675	5,668	5,668	0	38	38
Gabon	0	0	0	0	0	0	27,593	183	0	183
Germany, FR	302	0	0	0	29	2,142	2,142	0	14	14
Guatemala	0	0	0	0	0	0	2,428	16	0	16
Italy	0	0	0	0	0	2,235	2,235	0	15	15
Ivory Coast	0	0	0	0	0	277	277	0	2	2
Japan	16	0	0	0	24	115	115	0	1	1
Korea, Republic of	78	0	0	0	108	678	678	0	4	4
Malaysia	0	1,872	0	0	53	3,304	3,512	1	22	23
Mexico	1,196	2,032	0	924	3	5,866	204,616	1,316	39	1,355
Netherlands	556	0	0	0	750	4,295	4,295	0	28	28
Netherlands Antilles	415	1,612	0	181	0	14,874	14,874	0	99	99
Norway	0	0	0	0	0	2,811	42,503	263	19	281
Oman	0	0	0	0	0	1,460	1,700	2	10	11
Panama	0	0	0	0	0	135	135	0	1	1
Peru	0	0	0	0	0	401	2,899	17	3	19
Portugal	0	0	0	0	0	1,856	1,856	0	12	12
Puerto Rico	954	0	1,281	0	0	2,235	2,235	0	15	15
Romania	0	0	0	0	0	2,944	2,944	0	19	19
Russia	0	0	0	0	0	2,168	2,168	0	14	14
Singapore	0	0	0	0	139	2,331	2,331	0	15	15
Spain	22	0	0	289	0	3,180	3,180	0	21	21
Sweden	0	0	0	0	0	1,659	1,659	0	11	11
Trinidad and Tobago	0	135	0	0	0	812	9,827	60	5	65
Tunisia	241	0	0	0	0	439	439	0	3	3
United Kingdom	0	0	0	0	0	11,437	38,197	177	76	253
Virgin Islands	0	0	0	0	0	46,460	46,460	0	308	308
Yemen	0	0	0	0	0	304	304	0	2	2
Other	0	703	0	0	76	6,136	12,807	44	41	85
Total	8,950	30,984	1,564	4,735	15,953	322,240	1,486,709	7,712	2,134	9,846
Persian Gulf^e	0	461	0	0	4,246	19,934	250,685	1,528	132	1,660

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e 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,^a
January-May 1997
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	22,110	1,473	0	635	3,858	0	381	4,518	0	0
Algeria	0	1,473	0	222	0	0	381	4,518	0	0
Kuwait	243	0	0	0	0	0	0	0	0	0
Saudi Arabia	21,867	0	0	413	3,858	0	0	0	0	0
Other OPEC	61,674	251	120	7,732	6,430	7,011	8,839	12,346	0	0
Indonesia	0	0	0	0	0	0	0	880	0	0
Nigeria	33,986	0	0	441	0	0	0	565	0	0
Venezuela	27,688	251	120	7,291	6,430	7,011	8,839	10,901	0	0
Non OPEC	121,302	2,232	5,265	30,522	37,992	7,922	25,027	13,751	224	1,000
Angola	36,381	0	0	0	0	0	0	0	0	0
Argentina	857	0	0	0	0	0	0	116	0	0
Belgium	0	0	391	2,280	592	0	0	344	0	0
Brazil	0	0	0	0	0	0	0	77	0	0
Cameroon	0	0	0	0	0	0	0	122	0	0
Canada	9,365	1,413	75	1,183	12,224	504	11,537	3,757	224	1,000
China, People's Republic of	1,842	0	0	0	0	0	0	0	0	0
Colombia	6,980	0	0	0	0	0	0	135	0	0
Congo (Brazzaville)	3,001	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) ^d	1,791	0	0	0	0	0	0	0	0	0
Ecuador	2,940	0	0	0	0	0	0	172	0	0
Egypt	4,590	0	0	0	0	0	0	0	0	0
France	0	0	0	2,905	1,274	0	0	0	0	0
Gabon	15,307	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	354	190	0	0	364	0	0
Italy	0	0	51	1,663	521	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Mexico	3,810	0	0	1,414	0	0	0	0	0	0
Netherlands	0	0	0	1,600	273	0	0	201	0	0
Netherlands Antilles	0	0	0	652	1,012	3,909	0	580	0	0
Norway	25,212	819	0	120	1,211	0	0	0	0	0
Panama	0	0	0	0	0	0	0	135	0	0
Peru	0	0	0	0	141	0	0	0	0	0
Portugal	0	0	0	559	0	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Romania	0	0	514	2,369	61	0	0	0	0	0
Russia	0	0	439	1,374	0	0	330	25	0	0
Spain	0	0	0	999	178	0	0	238	0	0
Sweden	0	0	0	730	309	0	0	324	0	0
Trinidad and Tobago	0	0	0	677	0	0	0	0	0	0
United Kingdom	8,879	0	0	8,138	2,464	0	0	697	0	0
Virgin Islands	0	0	3,795	893	17,048	3,509	13,079	6,464	0	0
Other	347	0	0	2,612	494	0	81	0	0	0
Total	205,086	3,956	5,385	38,889	48,280	14,933	34,247	30,615	224	1,000
Persian Gulf^e	22,110	0	0	413	3,858	0	0	0	0	0

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,^a January-May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	0	0	0	0	670	11,535	33,645	146	76	223
Algeria	0	0	0	0	0	6,594	6,594	0	44	44
Kuwait	0	0	0	0	0	0	243	2	0	2
Saudi Arabia	0	0	0	0	670	4,941	26,808	145	33	178
Other OPEC	0	0	0	2,195	940	45,864	107,538	408	304	712
Indonesia	0	0	0	0	0	880	880	0	6	6
Nigeria	0	0	0	0	0	1,006	34,992	225	7	232
Venezuela	0	0	0	2,195	940	43,978	71,666	183	291	475
Non OPEC	803	0	1,462	2,236	1,274	129,710	251,012	803	859	1,662
Angola	0	0	0	0	0	0	36,381	241	0	241
Argentina	0	0	0	0	0	116	973	6	1	6
Belgium	0	0	0	0	0	3,607	3,607	0	24	24
Brazil	0	0	0	0	0	77	77	0	1	1
Cameroon	0	0	0	0	0	122	122	0	1	1
Canada	40	0	181	842	60	33,040	42,405	62	219	281
China, People's Republic of	0	0	0	0	0	0	1,842	12	0	12
Colombia	0	0	0	0	0	135	7,115	46	1	47
Congo (Brazzaville)	0	0	0	0	0	0	3,001	20	0	20
Congo (Kinshasa) ^d	0	0	0	0	0	0	1,791	12	0	12
Ecuador	0	0	0	0	0	172	3,112	19	1	21
Egypt	0	0	0	0	0	0	4,590	30	0	30
France	0	0	0	0	517	4,696	4,696	0	31	31
Gabon	0	0	0	0	0	0	15,307	101	0	101
Germany, FR	0	0	0	0	26	934	934	0	6	6
Italy	0	0	0	0	0	2,235	2,235	0	15	15
Japan	4	0	0	0	9	13	13	0	(s)	(s)
Mexico	0	0	0	924	0	2,338	6,148	25	15	41
Netherlands	0	0	0	0	637	2,711	2,711	0	18	18
Netherlands Antilles	0	0	0	181	0	6,334	6,334	0	42	42
Norway	0	0	0	0	0	2,150	27,362	167	14	181
Panama	0	0	0	0	0	135	135	0	1	1
Peru	0	0	0	0	0	141	141	0	1	1
Portugal	0	0	0	0	0	559	559	0	4	4
Puerto Rico	759	0	1,281	0	0	2,040	2,040	0	14	14
Romania	0	0	0	0	0	2,944	2,944	0	19	19
Russia	0	0	0	0	0	2,168	2,168	0	14	14
Spain	0	0	0	289	0	1,704	1,704	0	11	11
Sweden	0	0	0	0	0	1,363	1,363	0	9	9
Trinidad and Tobago	0	0	0	0	0	677	677	0	4	4
United Kingdom	0	0	0	0	0	11,299	20,178	59	75	134
Virgin Islands	0	0	0	0	0	44,788	44,788	0	297	297
Other	0	0	0	0	25	3,212	3,559	2	21	24
Total	803	0	1,462	4,431	2,884	187,109	392,195	1,358	1,239	2,597
Persian Gulf^e	0	0	0	0	670	4,941	27,051	146	33	179

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e 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,^a
January-May 1997
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	19,182	0	0	0	0	0	0	0	0	0
Iraq	449	0	0	0	0	0	0	0	0	0
Kuwait	7,816	0	0	0	0	0	0	0	0	0
Saudi Arabia	10,917	0	0	0	0	0	0	0	0	0
Other OPEC	41,480	0	0	0	0	0	0	0	0	0
Nigeria	14,739	0	0	0	0	0	0	0	0	0
Venezuela	26,741	0	0	0	0	0	0	0	0	0
Non OPEC	164,453	9,048	21	39	403	0	809	62	0	136
Angola	7,633	0	0	0	0	0	0	0	0	0
Canada	123,081	9,048	21	39	403	0	809	62	0	136
Colombia	8,546	0	0	0	0	0	0	0	0	0
Congo (Brazzaville)	422	0	0	0	0	0	0	0	0	0
Ecuador	1,772	0	0	0	0	0	0	0	0	0
Mexico	17,237	0	0	0	0	0	0	0	0	0
Norway	2,590	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	280	0	0	0	0	0	0	0	0	0
United Kingdom	2,892	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total	225,115	9,048	21	39	403	0	809	62	0	136
Persian Gulf^e	19,182	0	0	0	0	0	0	0	0	0

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,^a
January-May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	0	0	0	0	0	0	19,182	127	0	127
Iraq	0	0	0	0	0	0	449	3	0	3
Kuwait	0	0	0	0	0	0	7,816	52	0	52
Saudi Arabia	0	0	0	0	0	0	10,917	72	0	72
Other OPEC	0	0	0	0	0	0	41,480	275	0	275
Nigeria	0	0	0	0	0	0	14,739	98	0	98
Venezuela	0	0	0	0	0	0	26,741	177	0	177
Non OPEC	157	0	102	167	165	11,109	175,562	1,089	74	1,163
Angola	0	0	0	0	0	0	7,633	51	0	51
Canada	157	0	102	167	164	11,108	134,189	815	74	889
Colombia	0	0	0	0	0	0	8,546	57	0	57
Congo (Brazzaville)	0	0	0	0	0	0	422	3	0	3
Ecuador	0	0	0	0	0	0	1,772	12	0	12
Mexico	0	0	0	0	0	0	17,237	114	0	114
Norway	0	0	0	0	0	0	2,590	17	0	17
Trinidad and Tobago	0	0	0	0	0	0	280	2	0	2
United Kingdom	0	0	0	0	0	0	2,892	19	0	19
Other	0	0	0	0	1	1	1	0	(s)	(s)
Total	157	0	102	167	165	11,109	236,224	1,491	74	1,564
Persian Gulf^e	0	0	0	0	0	0	19,182	127	0	127

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e 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,^a
January-May 1997
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	186,148	2,719	14,478	0	0	0	0	2,464	0	0
Algeria	696	2,719	5,986	0	0	0	0	0	0	0
Iraq	3,680	0	0	0	0	0	0	0	0	0
Kuwait	21,778	0	0	0	0	0	0	0	0	0
Qatar	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	159,994	0	8,492	0	0	0	0	2,464	0	0
Other OPEC	188,908	1,368	14,782	229	0	0	0	0	0	0
Indonesia	0	0	528	0	0	0	0	0	0	0
Nigeria	51,684	0	737	74	0	0	0	0	0	0
Venezuela	137,224	1,368	13,517	155	0	0	0	0	0	0
Non OPEC	290,329	3,388	18,034	0	1,297	100	0	849	0	207
Angola	19,289	0	349	0	0	0	0	0	0	0
Argentina	4,803	0	0	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	1,933	0	0	0	0	0	0	0
Benin	193	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0	0	0	0	66
Cameroon	0	0	0	0	0	0	0	191	0	0
Canada	482	3,191	1,122	0	0	0	0	0	0	141
China, People's Republic of	2,037	0	0	0	0	0	0	0	0	0
Colombia	20,595	0	161	0	0	0	0	0	0	0
Congo (Brazzaville)	2,375	0	0	0	0	0	0	0	0	0
Congo (Kinshasa) ^d	1,022	0	0	0	0	0	0	0	0	0
Ecuador	7,272	0	140	0	0	0	0	0	0	0
Egypt	1,137	0	100	0	0	0	0	0	0	0
France	0	0	814	0	0	0	0	0	0	0
Gabon	12,286	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	903	0	0	0	0	0	0	0
Guatemala	2,428	0	0	0	0	0	0	0	0	0
Ivory Coast	0	0	157	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	0	0	0	0	0	0	0	0	0	0
Mexico	177,703	197	0	0	0	100	0	0	0	0
Netherlands	0	0	803	0	0	0	0	0	0	0
Netherlands Antilles	0	0	6,167	0	0	0	0	0	0	0
Norway	11,890	0	661	0	0	0	0	0	0	0
Oman	0	0	1,460	0	0	0	0	0	0	0
Peru	1,778	0	260	0	0	0	0	0	0	0
Portugal	0	0	0	0	1,297	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Singapore	0	0	408	0	0	0	0	0	0	0
Spain	0	0	1,172	0	0	0	0	0	0	0
Sweden	0	0	296	0	0	0	0	0	0	0
Trinidad and Tobago	8,735	0	0	0	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0	0	198	0	0
United Kingdom	14,989	0	138	0	0	0	0	0	0	0
Yemen	0	0	0	0	0	0	0	304	0	0
Other	1,315	0	275	0	0	0	0	36	0	0
Total	665,385	7,475	47,294	229	1,297	100	0	3,313	0	207
Persian Gulf^e	185,452	0	8,492	0	0	0	0	2,464	0	0

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,^a
January-May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	1,815	23,068	0	0	5,417	49,961	236,109	1,233	331	1,564
Algeria	1,815	22,607	0	0	5,417	38,544	39,240	5	255	260
Iraq	0	0	0	0	0	0	3,680	24	0	24
Kuwait	0	0	0	0	0	0	21,778	144	0	144
Qatar	0	461	0	0	0	461	461	0	3	3
Saudi Arabia	0	0	0	0	0	10,956	170,950	1,060	73	1,132
Other OPEC	1,754	309	0	137	0	18,579	207,487	1,251	123	1,374
Indonesia	0	0	0	0	0	528	528	0	3	3
Nigeria	0	0	0	0	0	811	52,495	342	5	348
Venezuela	1,754	309	0	137	0	17,240	154,464	909	114	1,023
Non OPEC	4,385	7,125	0	0	179	35,564	325,893	1,923	236	2,158
Angola	376	0	0	0	0	725	20,014	128	5	133
Argentina	211	0	0	0	0	211	5,014	32	1	33
Australia	0	543	0	0	0	543	543	0	4	4
Bahama Islands	0	0	0	0	0	350	350	0	2	2
Belgium	236	0	0	0	0	2,169	2,169	0	14	14
Benin	0	0	0	0	0	0	193	1	0	1
Brazil	0	0	0	0	0	66	66	0	(s)	(s)
Cameroon	0	0	0	0	0	191	191	0	1	1
Canada	326	0	0	0	0	4,780	5,262	3	32	35
China, People's Republic of	0	0	0	0	0	0	2,037	13	0	13
Colombia	0	0	0	0	0	161	20,756	136	1	137
Congo (Brazzaville)	0	0	0	0	0	0	2,375	16	0	16
Congo (Kinshasa) ^d	0	0	0	0	0	0	1,022	7	0	7
Ecuador	0	0	0	0	0	140	7,412	48	1	49
Egypt	255	228	0	0	0	583	1,720	8	4	11
France	0	0	0	0	158	972	972	0	6	6
Gabon	0	0	0	0	0	0	12,286	81	0	81
Germany, FR	302	0	0	0	3	1,208	1,208	0	8	8
Guatemala	0	0	0	0	0	0	2,428	16	0	16
Ivory Coast	0	0	0	0	0	277	277	0	2	2
Japan	12	0	0	0	15	27	27	0	(s)	(s)
Korea, Republic of	42	0	0	0	0	407	407	0	3	3
Malaysia	0	1,872	0	0	0	1,872	1,872	0	12	12
Mexico	1,196	2,032	0	0	0	3,525	181,228	1,177	23	1,200
Netherlands	556	0	0	0	0	1,359	1,359	0	9	9
Netherlands Antilles	415	1,612	0	0	0	8,194	8,194	0	54	54
Norway	0	0	0	0	0	661	12,551	79	4	83
Oman	0	0	0	0	0	1,460	1,460	0	10	10
Peru	0	0	0	0	0	260	2,038	12	2	13
Portugal	0	0	0	0	0	1,297	1,297	0	9	9
Puerto Rico	195	0	0	0	0	195	195	0	1	1
Singapore	0	0	0	0	0	408	408	0	3	3
Spain	22	0	0	0	0	1,194	1,194	0	8	8
Sweden	0	0	0	0	0	296	296	0	2	2
Trinidad and Tobago	0	135	0	0	0	135	8,870	58	1	59
Tunisia	241	0	0	0	0	439	439	0	3	3
United Kingdom	0	0	0	0	0	138	15,127	99	1	100
Yemen	0	0	0	0	0	304	304	0	2	2
Other	0	703	0	0	3	1,017	2,332	9	7	15
Total	7,954	30,502	0	137	5,596	104,104	769,489	4,407	689	5,096
Persian Gulf ^e	0	461	0	0	0	11,417	196,869	1,228	76	1,304

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e 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,^a January-May 1997
(Thousand Barrels)

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
PAD District IV										
Non OPEC	16,580	1,315	0	0	119	0	1,486	0	0	0
Canada	16,580	1,315	0	0	119	0	1,486	0	0	0
Total	16,580	1,315	0	0	119	0	1,486	0	0	0
PAD District V										
Arab OPEC	4,007	0	0	0	0	0	0	0	0	0
Iraq	2,197	0	0	0	0	0	0	0	0	0
Kuwait	1,309	0	0	0	0	0	0	0	0	0
Saudi Arabia	501	0	0	0	0	0	0	0	0	0
Other OPEC	8,953	0	154	0	0	45	0	463	0	0
Indonesia	6,348	0	95	0	0	0	0	298	0	0
Venezuela	2,605	0	59	0	0	45	0	165	0	0
Non OPEC	39,343	75	3,299	2,056	399	759	1,517	386	12	7
Argentina	679	0	0	0	0	0	0	0	0	0
Australia	3,810	0	0	0	0	0	0	0	0	0
Canada	16,727	75	0	0	110	13	647	0	12	7
China, People's Republic of	5,896	0	0	10	0	0	0	0	0	0
Colombia	1,639	0	0	0	0	0	0	0	0	0
Ecuador	4,415	0	0	0	0	0	0	0	0	0
Japan	0	0	0	75	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	0	127	0	0	0	0
Malaysia	208	0	887	0	0	0	106	386	0	0
Mexico	0	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	0	0	0	0	0
Oman	240	0	0	0	0	0	0	0	0	0
Peru	720	0	0	0	0	0	0	0	0	0
Singapore	0	0	1,784	0	0	0	0	0	0	0
Spain	0	0	282	0	0	0	0	0	0	0
Virgin Islands	0	0	0	0	289	619	764	0	0	0
Other	5,009	0	0	1,859	0	0	0	0	0	0
Total	52,303	75	3,453	2,056	399	804	1,517	849	12	7
Persian Gulf^e	4,007	0	0	0	0	0	0	0	0	0

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,^a January-May 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 ^c	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
PAD District IV										
Non OPEC	0	0	0	0	112	3,032	19,612	110	20	130
Canada	0	0	0	0	112	3,032	19,612	110	20	130
Total	0	0	0	0	112	3,032	19,612	110	20	130
PAD District V										
Arab OPEC	0	0	0	0	3,576	3,576	7,583	27	24	50
Iraq	0	0	0	0	0	0	2,197	15	0	15
Kuwait	0	0	0	0	0	0	1,309	9	0	9
Saudi Arabia	0	0	0	0	3,576	3,576	4,077	3	24	27
Other OPEC	0	321	0	0	915	1,898	10,851	59	13	72
Indonesia	0	0	0	0	0	393	6,741	42	3	45
Venezuela	0	321	0	0	915	1,505	4,110	17	10	27
Non OPEC	36	161	0	0	2,705	11,412	50,755	261	76	336
Argentina	0	0	0	0	0	0	679	4	0	4
Australia	0	0	0	0	0	0	3,810	25	0	25
Canada	0	161	0	0	2,242	3,267	19,994	111	22	132
China, People's Republic of	0	0	0	0	0	10	5,906	39	(s)	39
Colombia	0	0	0	0	0	0	1,639	11	0	11
Ecuador	0	0	0	0	0	0	4,415	29	0	29
Japan	0	0	0	0	0	75	75	0	(s)	(s)
Korea, Republic of	36	0	0	0	108	271	271	0	2	2
Malaysia	0	0	0	0	53	1,432	1,640	1	9	11
Mexico	0	0	0	0	3	3	3	0	(s)	(s)
Netherlands	0	0	0	0	113	225	225	0	1	1
Netherlands Antilles	0	0	0	0	0	346	346	0	2	2
Oman	0	0	0	0	0	0	240	2	0	2
Peru	0	0	0	0	0	0	720	5	0	5
Singapore	0	0	0	0	139	1,923	1,923	0	13	13
Spain	0	0	0	0	0	282	282	0	2	2
Virgin Islands	0	0	0	0	0	1,672	1,672	0	11	11
Other	0	0	0	0	47	1,906	6,915	33	13	46
Total	36	482	0	0	7,196	16,886	69,189	346	112	458
Persian Gulf^e	0	0	0	0	3,576	3,576	7,583	27	24	50

^a 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.

^b Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^c Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

^d Formerly Zaire.

^e 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,
May 1997
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts						U.S. Total	Daily Average
	I	II	III	IV	V			
Crude Oil^a	0	0	(s)	0	800	800	26	
Natural Gas Liquids	146	185	229	2	684	1,246	40	
Pentanes Plus	2	20	0	0	0	21	1	
Liquefied Petroleum Gases	144	166	229	2	684	1,225	40	
Ethane/Ethylene	0	0	0	0	0	0	0	
Propane/Propylene	85	90	224	2	321	723	23	
Normal Butane/Butylene	59	75	5	(s)	363	502	16	
Isobutane/Isobutylene	0	0	0	0	0	0	0	
Other Liquids	44	(s)	737	0	1	783	25	
Other Hydrocarbons/Oxygenates	(s)	(s)	407	0	1	409	13	
Motor Gasoline Blend. Comp.	44	(s)	330	0	0	374	12	
Finished Petroleum Products	1,370	238	15,289	14	7,431	24,342	785	
Finished Motor Gasoline	8	13	2,895	(s)	220	3,136	101	
Naphtha-Type Jet Fuel	3	(s)	0	0	(s)	3	(s)	
Kerosene-Type Jet Fuel	3	1	93	0	177	275	9	
Kerosene	2	1	0	(s)	2	5	(s)	
Distillate Fuel Oil	758	13	1,583	0	2,388	4,742	153	
Residual Fuel Oil	154	39	2,166	1	806	3,166	102	
Special Naphthas	16	10	9	(s)	470	506	16	
Lubricants	175	50	315	7	103	650	21	
Waxes	22	11	33	3	13	82	3	
Petroleum Coke	203	39	8,180	1	3,225	11,647	376	
Asphalt and Road Oil	23	60	15	2	23	123	4	
Miscellaneous Products	5	(s)	(s)	0	2	7	(s)	
Total	1,560	423	16,256	16	8,916	27,171	876	

^a 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-May 1997
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil^a	0	3,024	(s)	1	15,510	18,535	123
Natural Gas Liquids	265	2,375	3,487	2	2,929	9,058	60
Pentanes Plus	14	1,230	161	0	1	1,407	9
Liquefied Petroleum Gases	251	1,144	3,326	2	2,928	7,651	51
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	168	346	3,072	2	1,377	4,964	33
Normal Butane/Butylene	84	798	254	(s)	1,551	2,687	18
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	99	5	2,844	0	4	2,953	20
Other Hydrocarbons/Oxygenates	10	5	1,127	0	4	1,145	8
Motor Gasoline Blend. Comp.	90	1	1,718	0	(s)	1,808	12
Finished Petroleum Products	4,069	1,258	72,579	73	36,246	114,226	756
Finished Motor Gasoline	268	63	14,269	10	1,325	15,935	106
Naphtha-Type Jet Fuel	11	1	(s)	0	13	25	(s)
Kerosene-Type Jet Fuel	265	8	1,951	0	2,055	4,279	28
Kerosene	7	3	3	(s)	20	34	(s)
Distillate Fuel Oil	1,002	249	10,432	(s)	8,866	20,548	136
Residual Fuel Oil	359	72	12,172	1	5,630	18,234	121
Special Naphthas	60	48	203	2	2,528	2,840	19
Lubricants	663	307	3,159	28	474	4,631	31
Waxes	91	68	143	23	56	381	3
Petroleum Coke	1,223	341	30,128	1	15,125	46,818	310
Asphalt and Road Oil	98	96	119	8	103	424	3
Miscellaneous Products	21	1	1	0	53	77	1
Total	4,434	6,662	78,911	76	54,689	144,771	959

^a 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, May 1997
(Thousand Barrels)

Destination	Crude Oil ^a	Pentanes Plus	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Kerosene	Distillate Fuel Oil	Residual Fuel Oil
Argentina	0	0	0	0	0	0	1	0
Australia	0	0	2	0	0	0	2	0
Bahama Islands	0	0	8	0	3	0	50	81
Belgium & Luxembourg	0	0	0	1	0	0	1	0
Brazil	0	0	0	0	0	0	273	0
Canada	(s)	21	194	128	182	2	842	332
Chile	0	0	0	98	0	0	422	0
China, People's Republic of	0	0	131	0	0	2	730	147
China, Taiwan	0	0	(s)	0	0	0	6	1
Colombia	0	0	1	685	0	(s)	(s)	0
Costa Rica	0	0	0	0	0	0	0	0
Denmark	0	0	0	0	0	0	2	0
Dominican Republic	0	1	59	0	0	0	(s)	0
Ecuador	0	0	0	0	0	0	8	0
Egypt	0	0	0	0	0	0	0	0
El Salvador	0	0	42	65	0	0	18	0
Finland	0	0	0	0	0	0	0	0
France	0	0	0	0	0	0	(s)	8
French Pacific Islands	0	0	0	0	0	0	43	0
Germany, FR	0	0	0	(s)	0	0	0	0
Greece	0	0	0	0	0	0	0	0
Guatemala	0	0	0	119	27	0	106	0
Guinea	0	0	0	0	0	0	0	0
Honduras	0	0	0	93	36	0	183	0
Hong Kong	0	0	0	0	0	(s)	3	0
India	0	0	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0	1	0
Ireland	0	0	0	0	0	0	0	0
Israel	0	0	1	0	0	0	0	0
Italy	0	0	2	0	0	0	0	0
Jamaica	0	0	30	0	0	0	1	1,434
Japan	0	0	0	80	0	0	6	45
Korea, Republic of	800	0	0	0	0	1	244	0
Malaysia	0	0	0	0	0	0	3	0
Mexico	(s)	0	714	1,798	0	0	156	861
Netherlands	0	0	0	0	0	0	1	0
Netherlands Antilles	0	0	0	0	0	0	208	0
New Zealand	0	0	0	0	(s)	0	0	0
Nigeria	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	(s)
Panama	0	0	26	0	0	0	(s)	170
Peru	0	0	0	0	0	0	(s)	0
Philippines	0	0	0	0	0	0	142	0
Poland	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	0
Puerto Rico	0	0	0	(s)	0	0	86	0
Russia	0	0	0	0	0	0	4	0
Saudi Arabia	0	0	1	0	0	0	0	0
Singapore	0	0	(s)	0	0	0	1,060	85
South Africa	0	0	0	0	0	0	(s)	0
Spain	0	0	0	0	0	0	1	0
Suriname	0	0	0	0	0	0	0	0
Sweden	0	0	0	1	0	0	2	0
Switzerland	0	0	0	0	0	0	1	0
Thailand	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	1	0	0	0	0
Turkey	0	0	0	0	0	0	0	0
United Arab Emirates	0	0	(s)	0	0	0	1	0
United Kingdom	0	0	2	0	0	(s)	(s)	0
Uruguay	0	0	0	0	0	0	0	0
Venezuela	0	0	0	0	0	0	42	0
Virgin Islands	0	0	0	0	0	0	0	0
Yugoslavia	0	0	0	0	0	0	0	0
Other	0	0	12	69	30	0	94	0
Total	800	21	1,225	3,136	278	5	4,742	3,166

See footnotes at end of table.

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

Destination	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products ^b	Crude Oil and Products	
							Total	Daily Average
Argentina	0	4	1	2	(s)	(s)	8	(s)
Australia	0	6	1	630	(s)	(s)	640	21
Bahama Islands	0	2	0	0	1	0	145	5
Belgium & Luxembourg	(s)	10	(s)	312	(s)	1	324	10
Brazil	0	32	1	157	(s)	(s)	463	15
Canada	17	130	32	224	84	2	2,190	71
Chile	0	7	(s)	(s)	0	0	527	17
China, People's Republic of	6	1	(s)	0	0	0	1,018	33
China, Taiwan	(s)	20	(s)	4	(s)	(s)	33	1
Colombia	0	27	1	1	0	1	716	23
Costa Rica	1	6	(s)	0	0	(s)	7	(s)
Denmark	0	(s)	0	175	0	0	177	6
Dominican Republic	(s)	12	(s)	0	0	0	72	2
Ecuador	(s)	4	(s)	0	0	(s)	13	(s)
Egypt	0	(s)	(s)	0	0	0	1	(s)
El Salvador	1	3	0	0	0	(s)	129	4
Finland	0	(s)	0	0	(s)	(s)	1	(s)
France	0	1	1	368	(s)	0	378	12
French Pacific Islands	(s)	(s)	0	0	0	0	44	1
Germany, FR	(s)	2	15	26	3	(s)	47	2
Greece	0	2	0	496	0	(s)	498	16
Guatemala	1	10	(s)	0	0	0	263	8
Guinea	0	1	0	0	0	0	1	(s)
Honduras	0	5	(s)	0	0	0	317	10
Hong Kong	(s)	8	1	0	(s)	(s)	12	(s)
India	0	25	(s)	(s)	2	0	28	1
Indonesia	(s)	1	0	1	1	0	4	(s)
Ireland	0	(s)	0	134	0	(s)	135	4
Israel	0	2	0	0	0	0	3	(s)
Italy	0	2	(s)	1,639	(s)	(s)	1,643	53
Jamaica	(s)	17	(s)	0	0	19	1,501	48
Japan	462	20	6	1,565	2	1	2,188	71
Korea, Republic of	(s)	8	1	263	1	1	1,318	43
Malaysia	(s)	2	(s)	3	(s)	(s)	9	(s)
Mexico	8	113	16	169	16	293	4,143	134
Netherlands	(s)	3	(s)	1,061	(s)	(s)	1,067	34
Netherlands Antilles	0	1	0	0	(s)	0	209	7
New Zealand	(s)	1	(s)	0	0	0	1	(s)
Nigeria	0	47	0	0	0	0	47	2
Norway	0	(s)	(s)	227	0	0	228	7
Panama	0	3	(s)	0	0	0	200	6
Peru	0	4	(s)	0	0	0	5	(s)
Philippines	(s)	3	1	(s)	0	(s)	145	5
Poland	0	(s)	0	0	0	0	(s)	(s)
Portugal	0	(s)	0	0	0	0	(s)	(s)
Puerto Rico	7	16	(s)	0	0	105	215	7
Russia	0	4	0	0	0	0	8	(s)
Saudi Arabia	0	1	0	42	0	0	44	1
Singapore	0	9	(s)	0	1	(s)	1,155	37
South Africa	(s)	17	(s)	77	0	0	94	3
Spain	0	2	(s)	1,891	(s)	0	1,895	61
Suriname	0	1	0	0	0	0	1	(s)
Sweden	0	1	(s)	48	0	0	53	2
Switzerland	0	(s)	0	0	0	0	1	(s)
Thailand	0	13	(s)	6	1	(s)	19	1
Trinidad and Tobago	(s)	1	0	0	0	(s)	2	(s)
Turkey	0	11	(s)	835	0	0	846	27
United Arab Emirates	0	(s)	0	80	(s)	0	82	3
United Kingdom	0	5	1	363	2	(s)	373	12
Uruguay	0	2	(s)	0	0	(s)	2	(s)
Venezuela	(s)	2	1	317	5	321	687	22
Virgin Islands	0	0	0	0	0	43	43	1
Yugoslavia	0	(s)	0	0	0	0	(s)	(s)
Other	2	15	(s)	530	2	(s)	755	24
Total	506	650	82	11,647	123	790	27,171	876

^a 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.

^b 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-May 1997**
(Thousand Barrels)

Destination	Crude Oil ^a	Pentanes Plus	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Kerosene	Distillate Fuel Oil	Residual Fuel Oil
Argentina	0	0	1	0	(s)	0	4	0
Australia	0	0	8	2	0	1	8	0
Bahama Islands	0	(s)	63	118	31	(s)	611	237
Bahrain	0	0	0	0	0	0	(s)	0
Belgium & Luxembourg	0	0	3	1	0	0	3	399
Brazil	0	0	(s)	0	331	0	908	0
Cameroon	0	0	0	1	0	0	0	0
Canada	3,025	1,237	1,306	908	1,602	15	1,707	2,036
Chile	0	0	104	758	46	0	1,253	5
China, People's Republic of	3,379	0	131	0	0	2	2,206	352
China, Taiwan	1,281	0	(s)	0	0	(s)	291	60
Colombia	0	0	102	1,683	1	(s)	1	0
Costa Rica	0	0	0	115	0	0	21	1
Denmark	0	0	0	0	0	0	3	0
Dominican Republic	0	5	172	88	0	0	91	85
Ecuador	0	0	0	(s)	0	0	165	0
Egypt	0	0	0	0	0	0	(s)	0
El Salvador	0	1	182	260	0	0	290	115
Finland	0	0	0	0	0	0	(s)	0
France	0	0	0	0	0	0	1	8
French Pacific Islands	0	(s)	0	0	0	0	161	0
Germany, FR	0	0	0	(s)	0	0	5	0
Ghana	0	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	2	0
Guatemala	0	0	3	588	74	0	362	337
Guinea	0	0	0	0	(s)	0	(s)	0
Honduras	0	0	13	370	101	0	638	370
Hong Kong	0	(s)	0	0	0	(s)	118	29
India	0	0	0	0	0	0	419	0
Indonesia	0	0	0	0	0	3	2	0
Ireland	0	0	0	0	0	0	(s)	0
Israel	0	0	1	0	771	0	200	0
Italy	0	0	3	(s)	0	0	2	272
Jamaica	0	0	107	0	35	0	1	3,918
Japan	0	0	231	155	886	0	508	304
Korea, Republic of	6,889	0	779	(s)	190	5	1,345	311
Malaysia	0	0	0	0	0	0	6	0
Mexico	6	0	4,345	10,192	(s)	8	2,292	3,003
Netherlands	0	0	0	0	0	0	563	398
Netherlands Antilles	0	0	0	0	0	0	664	618
New Zealand	0	0	0	169	(s)	0	(s)	(s)
Nigeria	0	0	0	0	0	0	1	0
Norway	0	0	1	0	0	0	(s)	(s)
Panama	0	161	42	41	0	0	444	2,272
Peru	0	0	0	110	165	0	4	0
Philippines	0	0	0	0	0	0	384	0
Poland	0	0	0	0	0	0	(s)	0
Portugal	0	0	0	0	0	0	0	0
Puerto Rico	0	0	1	64	(s)	0	345	9
Russia	0	0	0	47	0	0	430	0
Saudi Arabia	0	0	2	0	0	0	6	0
Singapore	0	0	(s)	0	0	0	2,624	1,994
South Africa	0	0	0	0	0	0	(s)	0
Spain	0	0	(s)	0	0	0	172	(s)
Suriname	0	0	0	0	0	0	0	0
Sweden	0	1	0	1	0	0	4	0
Switzerland	0	0	0	0	0	0	1	0
Thailand	0	0	0	0	0	0	3	(s)
Trinidad and Tobago	0	0	1	1	0	0	3	(s)
Turkey	0	0	0	0	0	0	393	0
United Arab Emirates	0	0	(s)	0	0	0	345	0
United Kingdom	0	0	9	2	3	(s)	4	35
Uruguay	0	0	0	0	(s)	0	0	0
Venezuela	0	0	0	0	0	0	315	0
Virgin Islands	3,892	0	0	0	0	0	0	0
Yugoslavia	0	0	0	0	0	0	0	2
Other	63	1	43	262	67	0	216	1,062
Total	18,535	1,407	7,651	15,935	4,304	34	20,548	18,234

See footnotes at end of table.

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

Destination	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products ^b	Crude Oil and Products	
							Total	Daily Average
Argentina	3	22	3	6	1	1	41	(s)
Australia	(s)	44	3	1,601	3	(s)	1,669	11
Bahama Islands	0	12	0	0	11	0	1,083	7
Bahrain	0	(s)	0	196	0	0	197	1
Belgium & Luxembourg	1	52	2	3,033	1	2	3,497	23
Brazil	14	58	2	609	7	(s)	1,930	13
Cameroon	0	(s)	0	50	0	0	50	(s)
Canada	78	675	153	1,781	186	18	14,726	98
Chile	2	105	1	212	(s)	(s)	2,486	16
China, People's Republic of	6	46	2	0	1	(s)	6,126	41
China, Taiwan	3	118	1	11	(s)	(s)	1,766	12
Colombia	1	75	3	4	2	3	1,876	12
Costa Rica	6	181	1	0	0	(s)	327	2
Denmark	0	(s)	1	473	(s)	0	478	3
Dominican Republic	4	63	1	31	(s)	(s)	540	4
Ecuador	(s)	225	(s)	0	(s)	50	440	3
Egypt	0	3	(s)	0	1	0	4	(s)
El Salvador	3	17	(s)	0	0	1	870	6
Finland	0	1	0	0	(s)	(s)	2	(s)
France	1	15	9	1,699	4	(s)	1,738	12
French Pacific Islands	(s)	1	0	0	0	0	162	1
Germany, FR	(s)	21	21	415	30	2	494	3
Ghana	0	1	0	276	0	0	278	2
Greece	0	8	(s)	963	0	(s)	973	6
Guatemala	10	38	4	0	0	10	1,426	9
Guinea	0	5	0	0	0	0	6	(s)
Honduras	3	34	1	0	(s)	(s)	1,531	10
Hong Kong	1	33	3	0	1	(s)	185	1
India	0	373	2	2	14	1	811	5
Indonesia	(s)	7	(s)	55	1	1	69	(s)
Ireland	0	1	1	286	0	3	291	2
Israel	(s)	19	0	658	(s)	(s)	1,650	11
Italy	0	29	3	5,770	1	(s)	6,081	40
Jamaica	6	30	1	83	0	38	4,220	28
Japan	2,521	140	22	7,752	8	8	12,534	83
Korea, Republic of	1	28	5	686	3	2	10,243	68
Malaysia	(s)	17	1	3	(s)	1	27	(s)
Mexico	35	661	116	967	74	1,493	23,192	154
Netherlands	2	16	1	3,192	6	3	4,181	28
Netherlands Antilles	0	185	(s)	0	(s)	0	1,467	10
New Zealand	(s)	9	(s)	244	0	0	423	3
Nigeria	0	90	0	0	1	0	92	1
Norway	0	2	(s)	579	0	0	582	4
Panama	0	26	(s)	(s)	0	0	2,986	20
Peru	1	14	1	(s)	0	(s)	294	2
Philippines	(s)	13	2	5	0	(s)	405	3
Poland	0	1	0	0	0	0	1	(s)
Portugal	0	1	(s)	391	0	0	392	3
Puerto Rico	117	55	2	0	0	169	761	5
Russia	0	31	0	0	0	0	507	3
Saudi Arabia	0	6	(s)	90	0	(s)	104	1
Singapore	0	252	1	1	1	1	4,875	32
South Africa	(s)	74	(s)	424	1	(s)	500	3
Spain	0	143	2	7,051	1	0	7,369	49
Suriname	0	1	0	0	0	0	1	(s)
Sweden	0	5	1	436	0	0	447	3
Switzerland	9	1	(s)	0	0	(s)	11	(s)
Thailand	2	36	1	6	3	3	54	(s)
Trinidad and Tobago	3	225	0	(s)	(s)	(s)	234	2
Turkey	0	40	(s)	2,425	(s)	0	2,859	19
United Arab Emirates	1	15	(s)	241	(s)	(s)	602	4
United Kingdom	(s)	30	4	1,420	24	1	1,531	10
Uruguay	0	6	(s)	0	(s)	(s)	6	(s)
Venezuela	3	19	2	955	29	1,128	2,451	16
Virgin Islands	0	(s)	0	0	0	87	3,979	26
Yugoslavia	0	1	(s)	26	0	0	30	(s)
Other	3	176	1	1,709	6	1	3,609	24
Total	2,840	4,631	381	46,818	424	3,029	144,771	959

^a 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.

^b 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, May 1997
(Thousand Barrels per Day)

Country	Crude Oil ^a	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products ^b	Total Products	Total Crude Oil and Products
Arab OPEC	1,564	40	25	0	(s)	30	-4	(s)	337	428	1,992
Algeria	0	40	0	0	0	20	0	(s)	230	290	290
Iraq	102	0	0	0	0	0	0	0	0	0	102
Kuwait	128	0	0	0	0	0	0	(s)	(s)	(s)	128
Qatar	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Saudi Arabia	1,333	(s)	25	0	0	10	-1	(s)	107	141	1,474
United Arab Emirates	0	(s)	0	0	(s)	0	-3	(s)	(s)	-3	-3
Other OPEC	2,414	13	44	40	47	86	-10	-2	265	482	2,895
Indonesia	86	0	0	0	(s)	0	(s)	(s)	(s)	(s)	86
Nigeria	944	0	0	0	0	10	0	-2	7	16	960
Venezuela	1,384	13	44	40	47	76	-10	(s)	257	466	1,850
Non OPEC	4,276	43	192	43	20	-43	-360	-5	513	402	4,678
Angola	307	0	0	0	0	0	0	(s)	6	6	312
Argentina	38	0	0	0	(s)	0	(s)	(s)	(s)	(s)	38
Australia	44	(s)	0	0	(s)	0	-20	(s)	17	-3	41
Bahama Islands	0	(s)	0	(s)	-2	-3	0	(s)	(s)	-5	-5
Belgium & Luxembourg	0	0	(s)	0	(s)	0	-10	(s)	76	66	66
Benin	6	0	0	0	0	0	0	0	0	0	6
Brazil	0	0	0	0	-9	0	-5	-1	(s)	-15	-15
Canada	1,068	76	84	-3	63	13	-6	-3	60	284	1,353
China, People's Republic of	21	-4	0	0	-24	-5	0	(s)	(s)	-33	-12
China, Taiwan	0	(s)	0	0	(s)	(s)	(s)	-1	(s)	-1	-1
Colombia	282	(s)	-22	0	(s)	0	(s)	-1	5	-18	265
Congo (Brazzaville)	93	0	0	0	0	0	0	0	0	0	93
Congo (Kinshasa) ^c	34	0	0	0	0	0	0	0	0	0	34
Ecuador	104	0	0	0	(s)	0	0	(s)	5	4	108
Egypt	58	0	0	0	0	0	0	(s)	(s)	(s)	58
France	0	0	9	0	(s)	(s)	-12	(s)	25	22	22
Gabon	178	0	0	0	0	0	0	0	0	0	178
Germany, FR	0	0	(s)	0	0	1	-1	(s)	18	18	18
Greece	0	0	0	0	0	0	-16	(s)	(s)	-16	-16
Guatemala	21	0	-4	-1	-3	0	0	(s)	(s)	-8	13
India	0	0	0	0	0	0	0	(s)	-1	(s)	-1
Italy	0	(s)	0	0	0	0	-53	(s)	9	-44	-44
Jamaica	0	-1	0	0	(s)	-46	0	-1	-1	-48	-48
Japan	0	0	-3	0	(s)	-1	-50	-1	-15	-70	-70
Korea, Republic of	-26	0	0	0	-8	0	-8	(s)	1	-15	-41
Malaysia	0	0	0	0	2	0	0	(s)	8	9	9
Mexico	1,408	-23	-58	1	-5	-28	-5	-4	10	-112	1,295
Netherlands	0	0	0	0	(s)	0	-34	(s)	13	-21	-21
Netherlands Antilles	0	0	25	25	-7	0	0	(s)	67	110	110
Norway	329	0	17	0	0	(s)	-7	(s)	5	15	343
Oman	8	0	0	0	0	0	0	(s)	0	(s)	8
Panama	0	-1	0	0	(s)	-5	0	(s)	(s)	-6	-6
Peru	35	0	0	0	(s)	0	0	(s)	3	3	38
Puerto Rico	0	0	(s)	0	-3	0	0	12	5	14	14
Romania	0	0	0	0	0	0	-1	0	0	-1	-1
Russia	0	0	0	0	(s)	0	0	(s)	0	(s)	(s)
Syria	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Spain	0	0	0	0	(s)	8	-61	(s)	16	-38	-38
Sweden	0	0	(s)	0	(s)	0	-2	(s)	(s)	-2	-2
Thailand	0	0	0	0	0	0	0	(s)	(s)	(s)	-1
Trinidad and Tobago	66	0	(s)	0	0	0	0	(s)	4	4	70
Turkey	0	0	0	0	0	0	-27	(s)	(s)	-27	-27
United Kingdom	181	(s)	14	0	(s)	0	-12	(s)	66	68	249
Virgin Islands	0	0	130	24	80	27	0	0	38	299	299
Other	21	-4	-1	-2	-63	-3	-28	-3	72	-32	-11
Total	8,253	96	261	82	67	73	-374	-7	1,114	1,312	9,565
Persian Gulf^d	1,564	(s)	25	0	(s)	10	-4	(s)	107	138	1,702

^a Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^b 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.

^c Formerly Zaire.

^d 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-May 1997
(Thousand Barrels per Day)

Country	Crude Oil ^a	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products ^b	Total Products	Total Crude Oil and Products
Arab OPEC	1,533	28	26	0	(s)	46	-2	(s)	329	426	1,959
Algeria	5	28	0	0	3	30	0	(s)	239	299	304
Iraq	42	0	0	0	0	0	0	0	0	0	42
Kuwait	206	(s)	0	0	0	0	0	(s)	(s)	(s)	206
Qatar	0	0	0	0	0	0	0	(s)	3	3	3
Saudi Arabia	1,280	(s)	26	0	(s)	16	-1	(s)	87	128	1,408
United Arab Emirates	0	(s)	0	0	-2	0	-2	(s)	(s)	-4	-4
Other OPEC	1,993	11	43	47	56	85	-7	-1	188	422	2,416
Indonesia	42	0	0	0	(s)	8	(s)	(s)	4	11	54
Nigeria	665	0	0	0	(s)	4	0	-1	8	11	676
Venezuela	1,286	11	43	47	56	73	-6	(s)	176	399	1,686
Non OPEC	4,063	56	161	30	59	-21	-300	-19	485	450	4,513
Angola	419	0	0	0	0	0	0	(s)	5	5	424
Argentina	42	(s)	0	(s)	(s)	1	(s)	(s)	1	2	44
Australia	25	(s)	(s)	0	(s)	0	-11	(s)	4	-7	18
Bahama Islands	0	(s)	-1	(s)	-4	-2	0	(s)	2	-5	-5
Belgium & Luxembourg	0	(s)	4	0	(s)	(s)	-20	(s)	32	15	15
Benin	1	0	0	0	0	0	0	0	0	0	1
Brazil	0	(s)	0	-2	-6	1	-4	(s)	(s)	-12	-12
Brunei	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Cameroon	0	0	(s)	0	0	2	(s)	(s)	0	2	2
Canada	1,081	91	79	-7	85	12	-11	-3	42	288	1,369
China, People's Republic of	42	-1	0	0	-15	-2	0	(s)	(s)	-18	24
China, Taiwan	-8	(s)	0	0	-2	(s)	(s)	-1	(s)	-3	-12
Colombia	250	-1	-11	(s)	(s)	1	(s)	(s)	1	-10	240
Congo (Brazzaville)	38	0	0	0	0	0	0	0	0	0	38
Congo (Kinshasa) ^c	19	0	0	0	0	0	0	(s)	0	(s)	19
Ecuador	109	0	(s)	0	-1	1	0	-1	1	-1	108
Egypt	38	0	0	0	(s)	0	0	(s)	4	4	42
France	0	0	8	0	(s)	(s)	-11	(s)	29	26	26
Gabon	183	0	0	0	0	0	0	0	0	0	183
Germany, FR	0	0	1	0	(s)	2	-3	(s)	10	11	11
Greece	0	0	0	0	(s)	0	-6	(s)	(s)	-6	-6
Guatemala	16	(s)	-4	(s)	-2	-2	0	(s)	(s)	-9	7
India	0	0	0	0	-3	0	(s)	-2	(s)	-5	-5
Italy	0	(s)	3	0	(s)	-2	-38	(s)	11	-25	-25
Jamaica	0	-1	0	(s)	(s)	-26	-1	(s)	(s)	-28	-28
Japan	0	-2	-1	-6	-3	-2	-51	-1	-16	-82	-82
Korea, Republic of	-46	-5	(s)	(s)	-9	-2	-5	(s)	4	-18	-63
Malaysia	1	0	0	0	1	3	(s)	(s)	19	22	23
Mexico	1,316	-27	-67	1	-15	-20	-6	-4	25	-115	1,201
Netherlands	0	0	2	0	-4	-1	-21	(s)	25	1	1
Netherlands Antilles	0	0	7	26	-4	(s)	0	-1	62	89	89
Norway	263	5	8	0	(s)	(s)	-4	(s)	5	15	278
Oman	2	0	0	0	0	0	0	(s)	10	10	11
Panama	0	(s)	(s)	0	-3	-14	(s)	(s)	-1	-19	-19
Peru	17	0	(s)	-1	(s)	0	(s)	(s)	2	1	17
Puerto Rico	0	(s)	(s)	(s)	-2	(s)	0	8	4	10	10
Romania	0	0	(s)	0	0	-3	-3	(s)	19	14	14
Russia	0	0	(s)	0	-1	(s)	0	(s)	12	11	11
Syria	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Spain	0	(s)	1	0	-1	2	-47	-1	18	-28	-28
Sweden	0	0	2	0	(s)	2	-3	(s)	7	8	8
Thailand	0	0	0	0	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Trinidad and Tobago	60	(s)	(s)	0	(s)	(s)	(s)	(s)	-1	5	64
Turkey	0	0	0	0	-3	0	-16	(s)	(s)	-19	-19
United Kingdom	177	(s)	16	(s)	(s)	4	-9	(s)	55	66	243
Virgin Islands	-26	0	115	27	92	43	0	(s)	30	307	281
Yemen	0	0	0	0	0	2	0	0	0	2	2
Other	44	-3	-2	-7	-39	-19	-30	-7	58	-48	-5
Total	7,589	94	229	76	116	110	-309	-20	1,002	1,298	8,887
Persian Gulf ^d	1,528	(s)	26	0	-2	16	-3	(s)	90	126	1,654

^a Includes crude oil imported for storage in the Strategic Petroleum Reserve.

^b 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.

^c Formerly Zaire.

^d 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,
May 1997
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Crude Oil	14,707	72,547	720,394	13,705	69,058	890,411
Refinery	13,917	11,846	48,249	2,489	26,888	103,389
Tank Farms and Pipelines	770	59,664	94,368	10,385	32,176	197,363
Leases	20	1,037	14,319	831	774	16,981
Strategic Petroleum Reserve	0	0	563,458	0	0	563,458
Alaskan In Transit	0	0	0	0	9,220	9,220
Total Stocks, All Oils (excluding Crude Oil)	149,378	158,425	250,091	16,983	96,466	671,343
Refinery	50,826	60,873	140,161	11,752	67,143	330,755
Bulk Terminal	70,410	59,125	63,803	2,348	21,867	217,553
Pipeline	28,100	36,531	44,207	2,577	7,342	118,757
Natural Gas Processing Plant	42	1,896	1,920	306	114	4,278
Pentanes Plus	33	2,421	4,732	208	26	7,420
Refinery	0	411	332	6	0	749
Bulk Terminal	25	1,081	2,559	3	9	3,677
Pipeline	0	627	1,383	68	0	2,078
Natural Gas Processing Plant	8	302	458	131	17	916
Liquefied Petroleum Gases	4,809	26,566	52,792	1,092	3,505	88,764
Refinery	1,870	3,588	9,694	391	1,217	16,760
Bulk Terminal	1,714	14,146	29,169	61	2,191	47,281
Pipeline	1,191	7,238	12,467	465	0	21,361
Natural Gas Processing Plant	34	1,594	1,462	175	97	3,362
Ethane/Ethylene	1	2,771	15,842	213	0	18,827
Refinery	0	2	1,111	0	0	1,113
Bulk Terminal	1	969	11,172	0	0	12,142
Pipeline	0	1,559	3,165	210	0	4,934
Natural Gas Processing Plant	0	241	394	3	0	638
Propane/Propylene	2,975	16,906	18,549	392	1,122	39,944
Refinery	562	1,815	3,085	88	155	5,705
Bulk Terminal	1,264	10,728	8,834	59	887	21,772
Pipeline	1,125	3,517	5,966	141	0	10,749
Natural Gas Processing Plant	24	846	664	104	80	1,718
Normal Butane/Butylene	1,398	4,645	13,740	320	1,903	22,006
Refinery	942	1,136	4,037	193	630	6,938
Bulk Terminal	449	1,816	6,809	2	1,265	10,341
Pipeline	0	1,335	2,698	74	0	4,107
Natural Gas Processing Plant	7	358	196	51	8	620
Isobutane/Isobutylene	435	2,244	4,661	167	480	7,987
Refinery	366	635	1,461	110	432	3,004
Bulk Terminal	0	633	2,354	0	39	3,026
Pipeline	66	827	638	40	0	1,571
Natural Gas Processing Plant	3	149	208	17	9	386
Other Hydrocarbons/Hydrogen/Oxygenates	2,009	2,321	4,272	220	4,120	12,942
Refinery	1,745	572	2,156	107	2,947	7,527
Bulk Terminal	264	1,682	1,888	106	673	4,613
Pipeline	0	67	228	7	500	802
Other Hydrocarbons/Hydrogen	0	15	1	0	5	21
Refinery	0	15	1	0	5	21
Fuel Ethanol	174	2,041	386	110	244	2,955
Refinery	W	359	W	W	W	550
Bulk Terminal ^a	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
ETBE	W	W	W	W	W	W
Refinery	W	W	W	W	W	W
Bulk Terminal	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Methanol	W	W	W	W	W	694
Refinery	W	W	W	W	W	694

See footnotes at end of table.

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

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
MTBE	1,443	W	3,300	W	3,863	8,938
Refinery	1,301	W	1,671	W	2,924	6,075
Bulk Terminal	W	W	1,401	W	447	2,076
Pipeline	W	W	228	W	492	787
Other Oxygenates^b	W	W	W	W	W	W
Refinery	W	W	W	W	W	W
Bulk Terminal	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Unfinished Oils	11,231	13,835	51,724	2,662	24,264	103,716
Refinery						
Naphthas and Lighter	2,257	3,396	11,756	626	3,032	21,067
Kerosene and Light Gas Oils	2,423	2,243	7,195	355	6,121	18,337
Heavy Gas Oils	4,757	4,994	22,338	1,090	12,528	45,707
Residuum	1,794	3,202	10,435	591	2,583	18,605
Motor Gasoline Blending Components	10,080	11,031	13,826	1,464	7,772	44,173
Refinery	9,989	8,914	12,313	1,464	7,694	40,374
Bulk Terminal	91	620	859	0	12	1,582
Pipeline	0	1,497	654	0	66	2,217
Aviation Gasoline Blending Components	102	50	48	0	4	204
Refinery	102	50	48	0	4	204
Finished Motor Gasoline	48,241	40,165	42,628	4,039	22,757	157,830
Refinery	8,395	7,934	17,267	1,848	9,942	45,386
Bulk Terminal	24,982	17,775	9,279	851	9,104	61,991
Pipeline	14,864	14,456	16,082	1,340	3,711	50,453
Reformulated	16,205	1,207	9,765	0	12,271	39,448
Refinery	4,423	285	4,220	0	6,109	15,037
Bulk Terminal	9,008	735	1,963	0	4,367	16,073
Pipeline	2,774	187	3,582	0	1,795	8,338
Oxygenated	231	628	0	102	0	961
Refinery	0	342	0	1	0	343
Bulk Terminal	135	286	0	101	0	522
Pipeline	96	0	0	0	0	96
Other	31,805	38,330	32,863	3,937	10,486	117,421
Refinery	3,972	7,307	13,047	1,847	3,833	30,006
Bulk Terminal	15,839	16,754	7,316	750	4,737	45,396
Pipeline	11,994	14,269	12,500	1,340	1,916	42,019
Finished Aviation Gasoline	286	403	481	28	545	1,743
Refinery	64	143	421	28	293	949
Bulk Terminal	222	233	60	0	252	767
Pipeline	0	27	0	0	0	27
Naphtha-Type Jet Fuel	0	2	0	8	19	29
Refinery	0	0	0	0	19	19
Bulk Terminal	0	0	0	0	0	0
Pipeline	0	2	0	8	0	10
Kerosene-Type Jet Fuel	10,826	8,275	12,843	883	8,281	41,108
Refinery	1,675	3,080	6,737	414	4,237	16,143
Bulk Terminal	3,910	2,211	1,396	303	2,721	10,541
Pipeline	5,241	2,984	4,710	166	1,323	14,424

See footnotes at end of table.

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

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Kerosene	2,024	998	610	95	74	3,801
Refinery	203	454	515	87	57	1,316
Bulk Terminal	1,769	437	24	0	12	2,242
Pipeline	52	107	71	8	5	243
Distillate Fuel Oil	35,502	28,621	29,563	2,558	12,183	108,427
Refinery	7,042	8,065	15,671	1,496	6,253	38,527
Bulk Terminal	21,708	11,036	5,298	556	4,321	42,919
Pipeline	6,752	9,520	8,594	506	1,609	26,981
0.05 Percent Sulfur and Under	15,508	19,485	18,009	2,108	7,962	63,072
Refinery	1,900	4,330	7,682	1,146	4,310	19,368
Bulk Terminal	9,598	8,245	3,719	503	2,729	24,794
Pipeline	4,010	6,910	6,608	459	923	18,910
Greater than 0.05 Percent Sulfur	19,994	9,136	11,554	450	4,221	45,355
Refinery	5,142	3,735	7,989	350	1,943	19,159
Bulk Terminal	12,110	2,791	1,579	53	1,592	18,125
Pipeline	2,742	2,610	1,986	47	686	8,071
Residual Fuel Oil^c	14,422	2,486	15,686	542	6,059	39,195
Refinery	3,554	1,587	5,253	542	4,351	15,287
Bulk Terminal	10,868	899	10,433	0	1,580	23,780
Pipeline	0	0	0	0	128	128
Less than 0.31% Sulfur	3,758	152	257	18	822	5,007
Refinery	946	13	108	18	777	1,862
Bulk Terminal	2,812	139	149	0	45	3,145
0.31 to 1.00% Sulfur	5,628	573	6,283	426	1,041	13,951
Refinery	1,644	186	1,319	426	874	4,449
Bulk Terminal	3,984	387	4,964	0	167	9,502
Greater than 1.00% Sulfur	5,036	1,761	9,146	98	4,068	20,109
Refinery	964	1,388	3,826	98	2,700	8,976
Bulk Terminal	4,072	373	5,320	0	1,368	11,133
Naphtha for Petrochemical Feedstock Use	461	100	1,263	0	163	1,987
Refinery	461	100	1,263	0	163	1,987
Other Oils for Petrochemical Feedstock Use	0	4	1,492	1	175	1,672
Refinery	0	4	1,492	1	175	1,672
Special Naphthas	132	209	1,369	1	48	1,759
Refinery	107	209	1,127	1	48	1,492
Bulk Terminal	25	0	242	0	0	267
Lubricants	2,349	1,665	7,099	0	1,379	12,492
Refinery	987	928	5,842	0	917	8,674
Bulk Terminal	1,362	737	1,257	0	462	3,818
Waxes	202	156	434	11	242	1,045
Refinery	202	156	434	11	242	1,045
Petroleum Coke	433	2,459	3,435	193	1,795	8,315
Refinery	433	2,459	3,435	193	1,795	8,315
Asphalt and Road Oil	6,123	16,392	5,192	2,964	2,934	33,605
Refinery	2,699	8,218	4,173	2,500	2,423	20,013
Bulk Terminal	3,424	8,174	1,019	464	511	13,592
Miscellaneous Products	113	266	602	14	121	1,116
Refinery	67	166	264	1	102	600
Bulk Terminal	46	94	320	4	19	483
Pipeline	0	6	18	9	0	33
Total Stocks, All Oils	164,085	230,972	970,485	30,688	165,524	1,561,754

^a Includes stocks held by producers.

^b 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).

^c 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, May 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		
PAD District I	33,377	13,431	135	19,811	1,972	28,750	11,498	17,252	14,422	1,850
Connecticut	1,397	1,397	0	0	76	1,882	380	1,502	55	W
Delaware, D.C., Maryland	1,686	1,390	0	296	62	1,937	893	1,044	2,246	W
Florida	5,162	0	0	5,162	88	2,017	1,303	714	721	62
Georgia	1,886	0	0	1,886	45	1,166	825	341	225	W
Maine, New Hampshire, Vermont	854	274	0	580	343	1,846	643	1,203	426	W
Massachusetts	1,518	1,518	0	0	80	1,410	229	1,181	940	W
New Jersey	6,466	4,549	2	1,915	279	6,011	1,606	4,405	6,132	W
New York	2,747	1,000	104	1,643	231	3,095	998	2,097	1,286	W
North Carolina	2,515	0	0	2,515	217	1,718	1,005	713	360	W
Pennsylvania	4,985	1,500	29	3,456	357	4,405	1,914	2,491	814	W
Rhode Island	681	681	0	0	W	566	184	382	W	W
South Carolina	1,244	0	0	1,244	117	748	453	295	W	W
Virginia	2,012	1,122	0	890	71	1,799	924	875	506	W
West Virginia	224	0	0	224	W	150	141	9	W	W
PAD District II	25,709	1,020	628	24,061	891	19,101	12,575	6,526	2,486	13,389
Illinois	3,489	290	141	3,058	42	3,278	2,335	943	772	562
Indiana	2,653	139	7	2,507	135	2,264	1,184	1,080	147	W
Iowa	1,049	0	0	1,049	W	1,154	991	163	W	W
Kansas, Nebraska	2,358	0	0	2,358	12	2,068	1,232	836	14	8,807
Kentucky	1,416	254	116	1,046	41	992	596	396	W	W
Michigan	3,112	0	0	3,112	130	1,192	864	328	86	1,664
Minnesota	1,406	0	226	1,180	W	1,360	1,128	232	354	W
Missouri	1,235	0	0	1,235	W	678	567	111	W	W
North Dakota, South Dakota	440	0	1	439	W	462	200	262	W	W
Ohio	3,604	63	30	3,511	168	2,119	1,238	881	252	W
Oklahoma	1,912	0	2	1,910	W	1,514	966	548	283	509
Tennessee	1,575	0	61	1,514	46	927	651	276	314	W
Wisconsin	1,460	274	44	1,142	W	1,093	623	470	70	W
PAD District III	26,546	6,183	0	20,363	539	20,969	11,401	9,568	15,686	12,583
Alabama	1,133	0	0	1,133	54	730	389	341	264	59
Arkansas	953	0	0	953	W	451	269	182	W	W
Louisiana	5,384	629	0	4,755	123	4,376	2,098	2,278	8,396	2,193
Mississippi	2,239	0	0	2,239	1	1,310	719	591	W	2,449
New Mexico	375	0	0	375	W	231	168	63	17	W
Texas	16,462	5,554	0	10,908	349	13,871	7,758	6,113	6,577	7,782
PAD District IV	2,699	0	102	2,597	87	2,052	1,649	403	542	251
Colorado	531	0	102	429	W	330	286	44	W	W
Idaho	282	0	0	282	W	208	158	50	W	W
Montana	907	0	0	907	W	616	616	0	58	24
Utah	557	0	0	557	W	460	207	253	65	125
Wyoming	422	0	0	422	W	438	382	56	W	63
PAD District V	19,046	10,476	0	8,570	69	10,574	7,039	3,535	5,931	1,122
Alaska	467	0	0	467	W	933	70	863	W	W
Arizona	997	0	0	997	W	271	219	52	W	W
California	12,142	10,476	0	1,666	57	5,713	4,756	957	3,735	327
Hawaii	794	0	0	794	W	500	141	359	W	W
Nevada	187	0	0	187	W	163	155	8	W	W
Oregon	1,583	0	0	1,583	W	966	721	245	212	W
Washington	2,876	0	0	2,876	W	2,028	977	1,051	949	275
U.S. Total	107,377	31,110	865	75,402	3,558	81,446	44,162	37,284	39,067	29,195

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, May 1997
(Thousand Barrels)

Commodity	From I to			From II to				From III to	
	II	III	V	I	III	IV	V	I	II
Crude Oil	88	441	0	191	1,100	775	0	0	63,792
Petroleum Products	9,079	27	0	2,644	6,997	3,019	0	95,397	30,719
Pentanes Plus	0	0	0	0	333	1	0	0	569
Liquefied Petroleum Gases	0	0	0	636	5,247	34	0	1,672	3,280
Unfinished Oils	26	0	0	16	96	0	0	0	0
Motor Gasoline Blending Components	9	9	0	0	0	0	0	354	2,022
Finished Motor Gasoline	6,037	0	0	1,008	811	1,190	0	55,518	13,182
Reformulated	0	0	0	0	637	0	0	9,998	657
Oxygenated	15	0	0	162	0	0	0	0	0
Other	6,022	0	0	846	174	1,190	0	45,520	12,525
Finished Aviation Gasoline	0	0	0	0	0	16	0	78	85
Jet Fuel	217	0	0	108	0	919	0	13,811	3,870
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	217	0	0	108	0	919	0	13,811	3,870
Kerosene	0	0	0	0	0	0	0	71	69
Distillate Fuel Oil	2,781	0	0	584	172	859	0	21,726	6,703
0.05 percent sulfur and under	2,212	0	0	250	149	844	0	15,634	5,667
Greater than 0.05 percent sulfur	569	0	0	334	23	15	0	6,092	1,036
Residual Fuel Oil	0	0	0	31	328	0	0	1,096	102
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	0	32	49
Lubricants	9	18	0	46	10	0	0	821	385
Waxes	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	215	0	0	0	218	403
Miscellaneous Products	0	0	0	0	0	0	0	0	0
Total	9,167	468	0	2,835	8,097	3,794	0	95,397	94,511

Commodity	From III to		From IV to			From V to			
	IV	V	II	III	V	I	II	III	IV
Crude Oil	0	0	3,123	910	0	0	0	3,177	0
Petroleum Products	499	2,487	2,376	2,569	940	0	0	145	0
Pentanes Plus	0	0	188	266	0	0	0	0	0
Liquefied Petroleum Gases	0	0	1,516	2,303	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	102	0	0	0	0	0	0	0
Finished Motor Gasoline	365	1,700	397	0	873	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	365	1,700	397	0	873	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	0
Jet Fuel	91	348	0	0	52	0	0	94	0
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	91	348	0	0	52	0	0	94	0
Kerosene	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	43	337	275	0	15	0	0	0	0
0.05 percent sulfur and under	43	231	275	0	10	0	0	0	0
Greater than 0.05 percent sulfur	0	106	0	0	5	0	0	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	0	0	0
Lubricants	0	0	0	0	0	0	0	51	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
Total	499	2,487	5,499	3,479	940	0	0	3,322	0

^a 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,
May 1997**
(Thousand Barrels)

Commodity	From I to		From II to			From III to	
	II	III	I	III	IV	I	II
Crude Oil	0	441	0	1,100	775	0	63,792
Petroleum Products	9,020	0	915	6,475	3,019	69,922	26,640
Pentanes Plus	0	0	0	333	1	0	569
Liquefied Petroleum Gases	0	0	636	5,247	34	1,481	3,280
Motor Gasoline Blending Components	0	0	0	0	0	0	1,961
Finished Motor Gasoline	6,022	0	132	811	1,190	40,196	10,947
Reformulated	0	0	0	637	0	9,717	637
Oxygenated	0	0	0	0	0	0	0
Other	6,022	0	132	174	1,190	30,479	10,310
Finished Aviation Gasoline	0	0	0	0	16	0	75
Jet Fuel	217	0	38	0	919	10,847	3,782
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	217	0	38	0	919	10,847	3,782
Kerosene	0	0	0	0	0	36	69
Distillate Fuel Oil	2,781	0	109	84	859	17,362	5,957
0.05 percent sulfur and under	2,212	0	36	61	844	12,588	5,261
Greater than 0.05 percent sulfur	569	0	73	23	15	4,774	696
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	9,020	441	915	7,575	3,794	69,922	90,432

Commodity	From III to		From IV to			From V to	
	IV	V	II	III	V	III	IV
Crude Oil	0	0	3,123	910	0	3,177	0
Petroleum Products	499	2,385	2,376	2,569	940	0	0
Pentanes Plus	0	0	188	266	0	0	0
Liquefied Petroleum Gases	0	0	1,516	2,303	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0
Finished Motor Gasoline	365	1,700	397	0	873	0	0
Reformulated	0	0	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	365	1,700	397	0	873	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0
Jet Fuel	91	348	0	0	52	0	0
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	91	348	0	0	52	0	0
Kerosene	0	0	0	0	0	0	0
Distillate Fuel Oil	43	337	275	0	15	0	0
0.05 percent sulfur and under	43	231	275	0	10	0	0
Greater than 0.05 percent sulfur	0	106	0	0	5	0	0
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	499	2,385	5,499	3,479	940	3,177	0

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, May 1997
(Thousand Barrels)

Commodity	From I to			From II to			From III to	
	II	III	V	I	III	V	I	New England
Crude Oil	88	0	0	191	0	0	0	0
Petroleum Products	59	27	0	1,729	522	0	25,475	247
Liquefied Petroleum Gases	0	0	0	0	0	0	191	0
Unfinished Oils	26	0	0	16	96	0	0	0
Motor Gasoline Blending Components	9	9	0	0	0	0	354	0
Finished Motor Gasoline	15	0	0	876	0	0	15,322	0
Reformulated	0	0	0	0	0	0	281	0
Oxygenated	15	0	0	162	0	0	0	0
Other	0	0	0	714	0	0	15,041	0
Finished Aviation Gasoline	0	0	0	0	0	0	78	0
Jet Fuel	0	0	0	70	0	0	2,964	0
Naphtha-Type	0	0	0	0	0	0	0	0
Kerosene-Type	0	0	0	70	0	0	2,964	0
Kerosene	0	0	0	0	0	0	35	0
Distillate Fuel Oil	0	0	0	475	88	0	4,364	247
0.05 percent sulfur and under	0	0	0	214	88	0	3,046	0
Greater than 0.05 percent sulfur	0	0	0	261	0	0	1,318	247
Residual Fuel Oil	0	0	0	31	328	0	1,096	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	31	328	0	1,096	0
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	32	0
Lubricants	9	18	0	46	10	0	821	0
Waxes	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	215	0	0	218	0
Miscellaneous Products	0	0	0	0	0	0	0	0
Total	147	27	0	1,920	522	0	25,475	247

Commodity	From III to				From V to		
	Central Atlantic	Lower Atlantic	II	V	I	II	III
Crude Oil	0	0	0	0	0	0	0
Petroleum Products	1,606	23,622	4,079	102	0	0	145
Liquefied Petroleum Gases	0	191	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0
Motor Gasoline Blending Components	339	15	61	102	0	0	0
Finished Motor Gasoline	734	14,588	2,235	0	0	0	0
Reformulated	281	0	20	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	453	14,588	2,215	0	0	0	0
Finished Aviation Gasoline	20	58	10	0	0	0	0
Jet Fuel	0	2,964	88	0	0	0	94
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	0	2,964	88	0	0	0	94
Kerosene	0	35	0	0	0	0	0
Distillate Fuel Oil	113	4,004	746	0	0	0	0
0.05 percent sulfur and under	0	3,046	406	0	0	0	0
Greater than 0.05 percent sulfur	113	958	340	0	0	0	0
Residual Fuel Oil	0	1,096	102	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	93	0	0	0	0
Greater than 1.00 percent sulfur	0	1,096	9	0	0	0	0
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0
Special Naphthas	0	32	49	0	0	0	0
Lubricants	400	421	385	0	0	0	51
Waxes	0	0	0	0	0	0	0
Asphalt and Road Oil	0	218	403	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	1,606	23,622	4,079	102	0	0	145

^a 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, May 1997
(Thousand Barrels)

Commodity	PAD District I			PAD District II		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	191	529	-338	67,003	2,066	64,937
Petroleum Products	98,041	9,106	88,935	42,174	12,660	29,514
Pentanes Plus	0	0	0	757	334	423
Liquefied Petroleum Gases	2,308	0	2,308	4,796	5,917	-1,121
Ethane/Ethylene	0	0	0	823	3,088	-2,265
Propane/Propylene	2,241	0	2,241	2,849	1,783	1,066
Normal Butane/Butylene	0	0	0	441	801	-360
Isobutane/Isobutylene	67	0	67	683	245	438
Unfinished Oils	16	26	-10	26	112	-86
Motor Gasoline Blending Components	354	18	336	2,031	0	2,031
Finished Motor Gasoline	56,526	6,037	50,489	19,616	3,009	16,607
Reformulated	9,998	0	9,998	657	637	20
Oxygenated	162	15	147	15	162	-147
Other	46,366	6,022	40,344	18,944	2,210	16,734
Finished Aviation Gasoline	78	0	78	85	16	69
Jet Fuel	13,919	217	13,702	4,087	1,027	3,060
Naphtha-Type	0	0	0	0	0	0
Kerosene-Type	13,919	217	13,702	4,087	1,027	3,060
Kerosene	71	0	71	69	0	69
Distillate Fuel Oil	22,310	2,781	19,529	9,759	1,615	8,144
0.05 percent sulfur and under	15,884	2,212	13,672	8,154	1,243	6,911
Greater than 0.05 percent sulfur	6,426	569	5,857	1,605	372	1,233
Residual Fuel Oil	1,127	0	1,127	102	359	-257
Petrochemical Feedstocks ^a	0	0	0	0	0	0
Special Naphthas	32	0	32	49	0	49
Lubricants	867	27	840	394	56	338
Waxes	0	0	0	0	0	0
Asphalt and Road Oil	433	0	433	403	215	188
Miscellaneous Products	0	0	0	0	0	0
Total	98,232	9,635	88,597	109,177	14,726	94,451

Commodity	PAD District III			PAD District IV			PAD District V		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	5,628	63,792	-58,164	775	4,033	-3,258	0	3,177	-3,177
Petroleum Products	9,738	129,102	-119,364	3,518	5,885	-2,367	3,427	145	3,282
Pentanes Plus	599	569	30	1	454	-453	0	0	0
Liquefied Petroleum Gases	7,550	4,952	2,598	34	3,819	-3,785	0	0	0
Ethane/Ethylene	4,252	230	4,022	0	1,757	-1,757	0	0	0
Propane/Propylene	1,836	3,913	-2,077	33	1,263	-1,230	0	0	0
Normal Butane/Butylene	1,099	229	870	1	511	-510	0	0	0
Isobutane/Isobutylene	363	580	-217	0	288	-288	0	0	0
Unfinished Oils	96	0	96	0	0	0	0	0	0
Motor Gasoline Blending Components	9	2,478	-2,469	0	0	0	102	0	102
Finished Motor Gasoline	811	70,765	-69,954	1,555	1,270	285	2,573	0	2,573
Reformulated	637	10,655	-10,018	0	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0	0	0
Other	174	60,110	-59,936	1,555	1,270	285	2,573	0	2,573
Finished Aviation Gasoline	0	163	-163	16	0	16	0	0	0
Jet Fuel	94	18,120	-18,026	1,010	52	958	400	94	306
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	94	18,120	-18,026	1,010	52	958	400	94	306
Kerosene	0	140	-140	0	0	0	0	0	0
Distillate Fuel Oil	172	28,809	-28,637	902	290	612	352	0	352
0.05 percent sulfur and under	149	21,575	-21,426	887	285	602	241	0	241
Greater than 0.05 percent sulfur	23	7,234	-7,211	15	5	10	111	0	111
Residual Fuel Oil	328	1,198	-870	0	0	0	0	0	0
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0	0	0
Special Naphthas	0	81	-81	0	0	0	0	0	0
Lubricants	79	1,206	-1,127	0	0	0	0	51	-51
Waxes	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	621	-621	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0	0	0
Total	15,366	192,894	-177,528	4,293	9,918	-5,625	3,427	3,322	105

^a 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."

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.

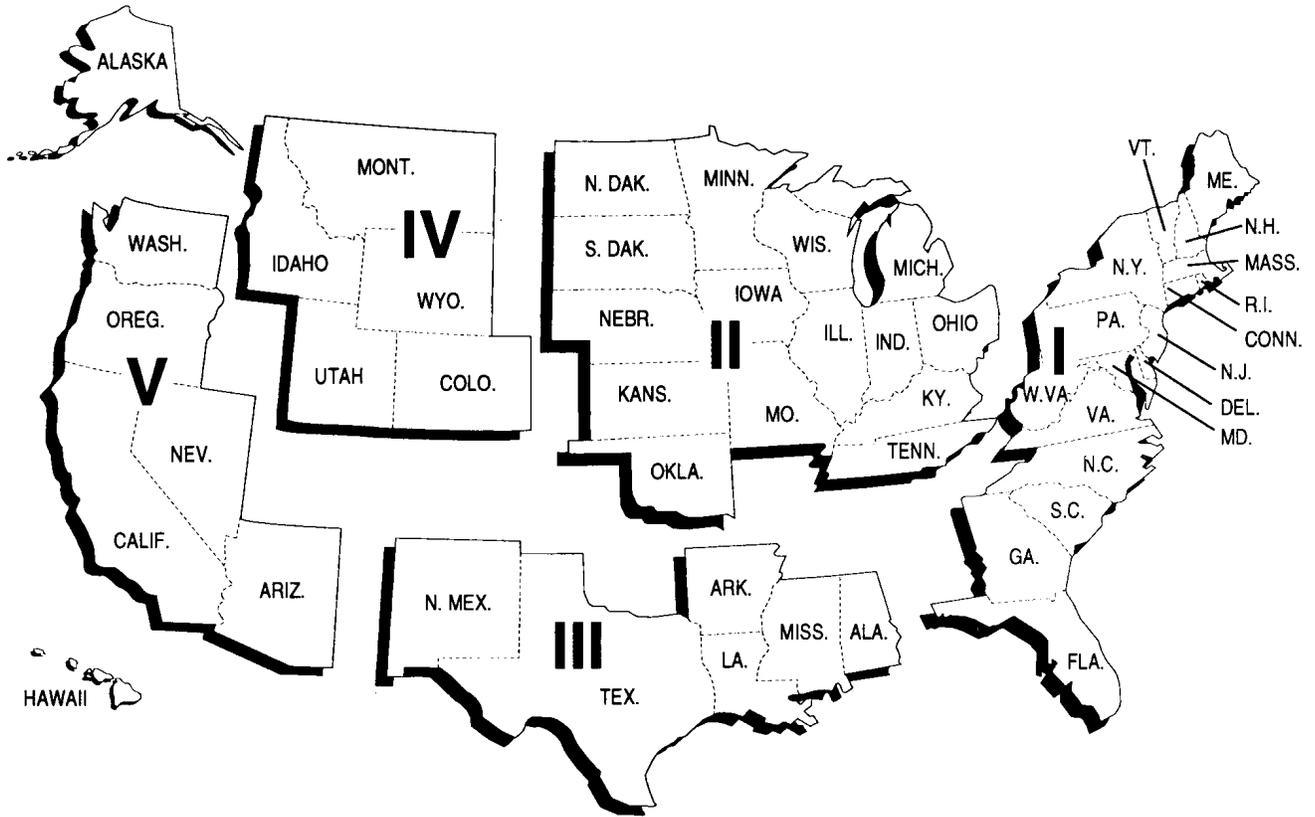
PAD District IV

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

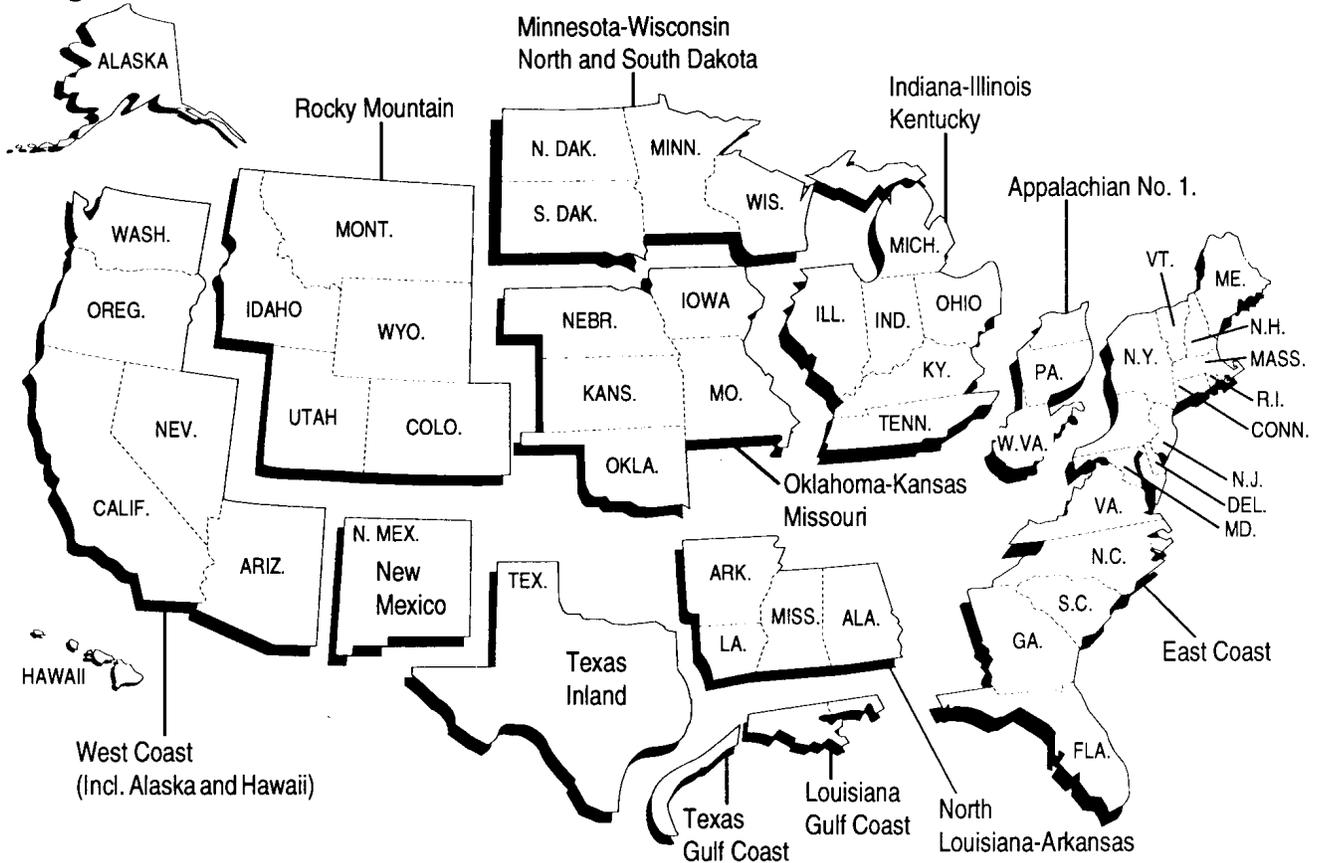
PAD District V

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-819A	"Annual Oxygenate Capacity Report"
EIA-820	"Annual 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 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, "Timeliness and Accuracy of Petroleum Supply Data." The last article was published in the August 1993 issue and evaluated the accuracy of the data for 1992 compared with previous years.

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect preliminary data on production, imports, 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-819A, “Annual Oxygenate Capacity Report,” is used to collect data on current and projected production capacity of oxygenates and annual production and end-of-year inventories of fuel ethanol. The results of this survey are published in the Oxygenate Capacity section of the *PSA*, Volume 1.

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 240 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 330 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 160 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 720 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; (3) operators of bulk terminals, bulk stations, blending plants, and other nonrefinery facilities that store and/or blend oxygenates; and (4) importers of oxygenates (importer of record) located in or importing oxygenates into the 50 States and the District of Columbia. Approximately 100 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, oxygenate stocks, and oxygenate imports) during 1993. 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, ship-

ments, 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, stocks, and imports 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 correspond-

ing *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, liquefied 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 imputation 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.

Table B1. U.S. Crude Oil^a Production Estimates and Reported States^b Data by Month
(Thousand Barrels per Day)

Date of Data Availability	Month of Production																	
	1-96	2-96	3-96	4-96	5-96	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
Reported State Data																		
3-14-96	1455	0																
4-14-96	3340	1501	0															
5-14-96	3992	3464	1469	0														
6-14-96	5818	4754	3443	1472	0													
7-14-96	5821	5878	4808	3344	1355	0												
8-14-96	5917	5968	5969	4925	3311	1550	0											
9-14-96	6117	6157	5683	5534	4643	1879	1451	0										
10-14-96	6121	6163	5753	5805	5685	4767	1781	1425	0									
11-14-96	6121	6164	5954	5811	5699	5759	3177	1823	1497	0								
12-14-96	6125	6166	5956	5843	5766	5800	4641	4533	1915	1421	0							
1-14-97	6458	6524	6329	5843	5793	5830	4853	4544	4628	3272	1568	0						
2-14-97	6468	6458	6524	6329	5842	5798	5859	5738	5718	4744	4604	1889	0					
3-14-97	6468	6457	6524	6329	5843	5799	5860	5741	5717	4815	4678	4599	1904	0				
4-14-97	6458	6519	6325	5841	5798	5859	5741	5722	5830	4773	4685	4511	1811	1408	0			
5-14-97	6468	6455	6518	6325	6229	6167	6226	5742	5751	5861	5782	4817	4807	4472	1802	0		
6-14-97	6518	6582	6365	6318	6228	6286	6169	6203	5931	5855	5908	4871	4673	4490	1764	1344	0	
7-14-97	6516	6581	6390	6296	6229	6285	6165	6205	5934	5861	5924	5837	4677	4712	4436	1759	1415	0
Producing States Without Reported Monthly Production																		
7-14-97	1	1	2	2	2	2	9	9	12	20	28	33	33	33	33	33	33	33
Production Estimates																		
Estimate																		
Original ^e	6460	6505	6463	6364	6321	6474	6401	6434	6494	6503	6531	6509	6495	6494	6431	6437	6429	6376
Interim ^f	6495	6550	6516	6479	6443	6502	6383	6389	6504	6490	6465	6448	6387	6514	6470	6483	6401	
Form EIA-182																		
Initial	6118	6170	6166	6024	5964	6040	5791	5908	5959	5985	6121	5941	5837	5951	5879	5955	5937	
Revised....	6110	6193	6171	6018	5928	5997	5841	5878	5956	6002	5971	5970	5856	5855	5991	5957		
Final ^g	6495	6577	6571	6444	6394	6458	6338	6360	6482	6481	6476	6506						

^a Includes lease condensate.

^b Includes Federal offshore areas, Gulf of Mexico (PADD III) and Pacific (PADD V), as two separate reporting entities.

^c 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.

^d 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.

^e Original estimates are weighted averages based on the weekly estimates published in the *Weekly Petroleum Status Report*.

^f Interim estimates were made 44 days after the end of the production month.

^g Published in the *Petroleum Supply Annual* 1994, DOE/EIA 0340(94)/2.

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 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 differ-

ence 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 mix-

ture. 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 components 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

**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
1994													
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
1995													
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
1996													
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
1997													
Fuel Ethanol Adj.	39	50	51	46	43								
Motor Gas Blending....	-18	42	-39	67	54								
Product Supplied	7,312	7,651	7,808	8,067	8,128								

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 (Table3, 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).

(0.05% sulfur and under, and greater than 0.05% sulfur).

as the sulfur categories of 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

Table C1. Impact of Resubmissions on Major Series, 1997
(Thousand Barrels per Day, Except Where Noted)

Product	January		February		March		April		May		June		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
Inputs.....	14,839	1	14,742	48	15,018	-17	--	--	--	--	--	--	9
Crude Oil.....	13,632	4	13,425	50	14,047	-21	--	--	--	--	--	--	10
Pentanes Plus	175	0	167	0	166	(s)	--	--	--	--	--	--	(s)
LPGs.....	356	(s)	330	1	252	(s)	--	--	--	--	--	--	(s)
Ethane/Ethylene	0	0	0	0	0	0	--	--	--	--	--	--	0
Propane/Propylene.....	0	0	0	0	0	0	--	--	--	--	--	--	0
Normal Butane/Butylene	234	0	209	1	126	(s)	--	--	--	--	--	--	(s)
Isobutane/Isobutylene	123	(s)	121	(s)	127	(s)	--	--	--	--	--	--	(s)
Oth Hydrocbns/Oxygenates ..	314	(s)	311	-2	319	(s)	--	--	--	--	--	--	(s)
Unfinished Oils.....	284	(s)	255	3	53	-1	--	--	--	--	--	--	1
Motor Gas. Blend. Comp.....	80	-2	260	-5	184	5	--	--	--	--	--	--	-1
Aviation Gas. Blend. Comp ...	-3	(s)	-6	(s)	-3	(s)	--	--	--	--	--	--	(s)
Production	17,700	-2	17,747	91	18,030	-29	--	--	--	--	--	--	18
Pentanes Plus	318	(s)	326	1	330	1	--	--	--	--	--	--	(s)
LPGs.....	2,022	1	2,082	6	2,225	5	--	--	--	--	--	--	4
Ethane/Ethylene	661	(s)	690	(s)	705	(s)	--	--	--	--	--	--	(s)
Propane/Propylene.....	1,042	(s)	1,043	6	1,065	-1	--	--	--	--	--	--	2
Normal Butane/Butylene	145	1	161	(s)	253	6	--	--	--	--	--	--	2
Isobutane/Isobutylene	174	(s)	189	-1	203	(s)	--	--	--	--	--	--	(s)
Oth Hydrocbns/Oxygenates ..	247	-5	275	5	262	(s)	--	--	--	--	--	--	(s)
Motor Gas Blend. Comp.....	18	-2	-42	2	39	(s)	--	--	--	--	--	--	(s)
Finished Motor Gasoline.....	7,308	(s)	7,315	36	7,322	-21	--	--	--	--	--	--	4
Reformulated	2,172	34	2,258	10	2,238	23	--	--	--	--	--	--	23
Oxygenated	523	-1	633	-1	594	-1	--	--	--	--	--	--	-1
Other	4,612	-32	4,424	27	4,490	-43	--	--	--	--	--	--	-18
Finished Aviation Gasoline	16	(s)	14	(s)	13	1	--	--	--	--	--	--	(s)
Jet Fuel.....	1,489	3	1,482	29	1,484	5	--	--	--	--	--	--	11
Naphtha-Type Jet.....	(s)	0	(s)	0	1	0	--	--	--	--	--	--	0
Kerosene-Type Jet.....	1,488	3	1,482	29	1,483	5	--	--	--	--	--	--	11
Kerosene	118	(s)	84	(s)	47	(s)	--	--	--	--	--	--	(s)
Distillate Fuel Oil.....	3,119	(s)	3,089	6	3,258	-14	--	--	--	--	--	--	-3
Residual Fuel Oil	800	1	789	8	639	-1	--	--	--	--	--	--	2
Naphtha Pet. Feedstock	180	0	223	-1	209	0	--	--	--	--	--	--	(s)
Other Oils Pet. Feedstock	240	(s)	207	(s)	222	(s)	--	--	--	--	--	--	(s)
Special Naphthas	47	(s)	45	(s)	49	0	--	--	--	--	--	--	(s)
Lubricants	168	0	175	(s)	177	(s)	--	--	--	--	--	--	(s)
Waxes.....	24	0	27	0	27	0	--	--	--	--	--	--	0
Petroleum Coke.....	639	(s)	628	-3	665	1	--	--	--	--	--	--	-1
Asphalt and Road Oil.....	322	0	377	1	389	-5	--	--	--	--	--	--	-1
Still Gas	585	(s)	610	1	632	(s)	--	--	--	--	--	--	(s)
Miscellaneous Products.....	41	0	41	(s)	43	(s)	--	--	--	--	--	--	(s)
Imports	9,633	159	9,475	110	9,712	86	--	--	--	--	--	--	118
Crude Oil.....	7,393	81	7,384	11	7,665	6	--	--	--	--	--	--	33
Pentanes Plus	53	1	39	1	36	1	--	--	--	--	--	--	1
LPGs.....	156	13	150	11	126	20	--	--	--	--	--	--	15
Ethane/Ethylene	20	0	24	0	14	0	--	--	--	--	--	--	0
Propane/Propylene.....	121	10	105	8	84	16	--	--	--	--	--	--	11
Normal Butane/Butylene	10	2	11	2	11	2	--	--	--	--	--	--	2
Isobutane/Isobutylene	5	1	10	2	17	1	--	--	--	--	--	--	1
Oth Hydrocbns/Oxygenates ..	77	0	37	0	65	0	--	--	--	--	--	--	0
Unfinished Oils.....	410	82	349	89	250	59	--	--	--	--	--	--	76
Motor Gas. Blend. Comp.....	242	0	270	-3	278	0	--	--	--	--	--	--	-1
Aviation Gas. Blend. Comp ...	0	0	0	0	0	0	--	--	--	--	--	--	0
Finished Motor Gasoline.....	320	0	317	0	370	0	--	--	--	--	--	--	0
Reformulated	135	0	147	0	181	0	--	--	--	--	--	--	0
Oxygenated	0	0	0	0	0	0	--	--	--	--	--	--	0
Other	184	0	171	0	189	0	--	--	--	--	--	--	0
Finished Aviation Gasoline	0	0	0	0	0	0	--	--	--	--	--	--	0
Jet Fuel.....	100	0	113	(s)	123	(s)	--	--	--	--	--	--	(s)
Naphtha-Type Jet.....	0	0	0	0	0	0	--	--	--	--	--	--	0
Kerosene-Type Jet.....	100	0	113	(s)	123	(s)	--	--	--	--	--	--	(s)
Kerosene	3	0	2	0	1	0	--	--	--	--	--	--	0
Distillate Fuel Oil.....	293	0	246	0	245	0	--	--	--	--	--	--	0
Residual Fuel Oil	229	-18	253	0	239	0	--	--	--	--	--	--	-6
Naphtha Pet. Feedstock	106	0	37	0	25	0	--	--	--	--	--	--	0
Other Oils Pet. Feedstock	206	0	218	0	232	0	--	--	--	--	--	--	0
Special Naphthas	10	0	10	0	8	0	--	--	--	--	--	--	0
Lubricants	7	0	17	0	8	0	--	--	--	--	--	--	0
Waxes.....	1	0	2	0	1	(s)	--	--	--	--	--	--	(s)
Petroleum Coke.....	2	0	2	0	1	0	--	--	--	--	--	--	0
Asphalt and Road Oil.....	26	0	29	0	38	0	--	--	--	--	--	--	0
Miscellaneous Products.....	(s)	0	(s)	0	(s)	0	--	--	--	--	--	--	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
(Thousand Barrels per Day, Except Where Noted)

Product	January		February		March		April		May		June		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
Stocks (Thousand Barrels)....	1,502,691	604	1,482,090	1,228	1,512,331	818	--	--	--	--	--	--	883
Crude Oil (excl. SPR)	302,404	163	297,737	693	314,135	-144	--	--	--	--	--	--	237
Pentanes Plus.....	5,571	-4	5,695	3	5,852	32	--	--	--	--	--	--	10
LPGs.....	68,893	507	57,008	-159	63,395	334	--	--	--	--	--	--	227
Ethane/Ethylene	16,588	0	15,549	8	18,058	187	--	--	--	--	--	--	65
Propane/Propylene.....	31,978	498	24,909	-179	27,574	105	--	--	--	--	--	--	141
Normal Butane/Butylene.....	13,256	5	10,389	7	11,668	57	--	--	--	--	--	--	23
Isobutane/Isobutylene	7,071	4	6,161	5	6,095	-15	--	--	--	--	--	--	-2
Oth Hydrocbns/Oxygenates..	13,367	-151	13,229	37	13,287	28	--	--	--	--	--	--	-29
Unfinished Oils.....	91,018	114	95,266	214	103,166	200	--	--	--	--	--	--	176
Motor Gas. Blend. Comp.....	43,562	-43	42,246	65	45,866	-93	--	--	--	--	--	--	-24
Aviation Gas. Blend. Comp...	96	7	193	3	257	1	--	--	--	--	--	--	4
Finished Motor Gasoline.....	164,918	56	161,273	347	153,838	-52	--	--	--	--	--	--	117
Reformulated.....	40,100	155	37,554	72	34,417	-18	--	--	--	--	--	--	70
Oxygenated	1,538	0	1,495	0	1,180	26	--	--	--	--	--	--	9
Other.....	123,280	-99	122,224	275	118,241	-60	--	--	--	--	--	--	39
Finished Aviation Gasoline ...	2,350	-7	2,098	0	1,911	-5	--	--	--	--	--	--	-4
Jet Fuel	36,333	95	37,300	211	39,264	72	--	--	--	--	--	--	126
Naphtha-Type Jet.....	220	-165	33	-3	40	0	--	--	--	--	--	--	-56
Kerosene-Type Jet.....	36,113	260	37,267	214	39,224	72	--	--	--	--	--	--	182
Kerosene	5,903	-29	5,257	2	4,786	-2	--	--	--	--	--	--	-10
Distillate Fuel Oil.....	111,305	-27	105,897	-176	101,780	-295	--	--	--	--	--	--	-166
Residual Fuel Oil.....	41,852	11	39,946	16	41,348	72	--	--	--	--	--	--	33
Naphtha Pet. Feedstock	1,698	0	2,102	-16	2,009	0	--	--	--	--	--	--	-5
Other Oils Pet. Feedstock....	1,740	-8	2,051	-8	2,188	-7	--	--	--	--	--	--	-8
Special Naphthas.....	1,835	-3	1,823	-1	1,836	0	--	--	--	--	--	--	-1
Lubricants	12,662	0	12,588	-2	12,818	12	--	--	--	--	--	--	3
Waxes.....	852	0	848	0	919	0	--	--	--	--	--	--	0
Petroleum Coke.....	7,058	0	6,915	-5	7,246	457	--	--	--	--	--	--	151
Asphalt and Road Oil.....	24,630	-75	28,120	4	31,664	164	--	--	--	--	--	--	31
Miscellaneous Products.....	1,162	-2	1,024	0	1,298	44	--	--	--	--	--	--	14
Product Supplied.....	18,560	23	18,308	188	17,869	32	--	--	--	--	--	--	78
Crude Oil.....	5	0	6	0	5	0	--	--	--	--	--	--	0
Pentanes Plus.....	208	1	188	1	179	1	--	--	--	--	--	--	1
LPGs.....	2,341	2	2,249	40	1,831	9	--	--	--	--	--	--	16
Ethane/Ethylene	711	(s)	751	(s)	638	-6	--	--	--	--	--	--	-2
Propane/Propylene.....	1,486	-3	1,358	38	1,023	6	--	--	--	--	--	--	13
Normal Butane/Butylene.....	67	3	30	2	74	6	--	--	--	--	--	--	4
Isobutane/Isobutylene	77	1	111	(s)	95	2	--	--	--	--	--	--	1
Unfinished Oils.....	40	63	-57	82	-58	60	--	--	--	--	--	--	68
Aviation Gas. Blend. Comp...	9	(s)	2	0	1	0	--	--	--	--	--	--	(s)
Finished Motor Gasoline.....	7,312	-17	7,651	25	7,808	-8	--	--	--	--	--	--	-1
Reformulated.....	2,238	26	2,496	13	2,520	26	--	--	--	--	--	--	22
Oxygenated	524	-1	634	-1	603	-2	--	--	--	--	--	--	-1
Other.....	4,550	-42	4,521	13	4,686	-32	--	--	--	--	--	--	-21
Finished Aviation Gasoline ...	13	(s)	23	(s)	19	1	--	--	--	--	--	--	(s)
Jet Fuel	1,629	-4	1,537	24	1,532	9	--	--	--	--	--	--	10
Naphtha-Type Jet.....	4	-2	7	-6	1	(s)	--	--	--	--	--	--	-3
Kerosene-Type Jet.....	1,625	-2	1,530	30	1,531	9	--	--	--	--	--	--	12
Kerosene	159	-1	109	-1	64	(s)	--	--	--	--	--	--	-1
Distillate Fuel Oil.....	3,780	-3	3,422	11	3,515	-10	--	--	--	--	--	--	-1
0.05% & under.....	2,048	29	2,006	-3	2,141	-9	--	--	--	--	--	--	6
Greater than 0.05%	1,732	-32	1,416	14	1,374	-2	--	--	--	--	--	--	-7
Residual Fuel Oil.....	983	-11	972	8	744	-3	--	--	--	--	--	--	-2
Naphtha Pet. Feedstock	288	0	245	(s)	237	-1	--	--	--	--	--	--	(s)
Other Oils Pet. Feedstock....	436	(s)	414	(s)	449	(s)	--	--	--	--	--	--	(s)
Special Naphthas.....	36	0	41	(s)	41	(s)	--	--	--	--	--	--	0
Lubricants	126	0	165	(s)	151	-1	--	--	--	--	--	--	(s)
Waxes.....	24	(s)	26	0	23	(s)	--	--	--	--	--	--	(s)
Petroleum Coke.....	329	-10	380	-2	352	-14	--	--	--	--	--	--	-9
Asphalt and Road Oil.....	212	2	279	-2	309	-10	--	--	--	--	--	--	-3
Still Gas.....	585	(s)	610	1	632	(s)	--	--	--	--	--	--	(s)
Miscellaneous Products.....	46	(s)	45	(s)	34	-1	--	--	--	--	--	--	(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, June 1997

Products	June 1997		May 1997		Year-to-Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Fuel Ethanol						
Production.....	2,181	73	2,663	86	14,579	81
Stocks	3,065	--	2,764	--	--	--
MTBE						
Production.....	6,262	209	6,026	194	33,887	187
Stocks	7,151	--	8,621	--	--	--

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
Total U.S.												
Production												
1996	87	74	75	66	46	39	39	49	53	78	77	77
1997	80	82	86	77	86	73						
Stocks (thous. bbls.)												
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						
East Coast (PADD I)												
Production												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
Stocks (thous. bbls.)												
1996	172	123	24	7	7	7	9	8	8	21	15	27
1997	19	15	24	37	95	349						
Midwest (PADD II)												
Production												
1996	86	73	74	66	46	38	38	48	52	77	76	77
1997	79	81	85	76	85	72						
Stocks (thous. bbls.)												
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						
Gulf Coast (PADD III)												
Production												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
Stocks (thous. bbls.)												
1996	166	183	129	239	117	84	84	73	81	48	45	126
1997	265	138	151	212	354	391						
Rocky Mountain (PADD IV)												
Production												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
Stocks (thous. bbls.)												
1996	97	66	49	50	40	41	37	41	55	83	78	66
1997	110	95	83	66	68	72						
West Coast (PADD V)												
Production												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
Stocks (thous. bbls.)												
1996	425	295	216	186	195	134	189	214	409	377	338	339
1997	378	278	194	228	204	293						

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
Total U.S.												
Production												
1996	173	172	182	183	194	202	197	179	186	187	183	184
1997	161	192	182	186	194	209						
Stocks (thous. bbls.)												
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						
<hr/>												
East Coast (PADD I)												
Production												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
Stocks (thous. bbls.)												
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						
<hr/>												
Midwest (PADD II)												
Production												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
Stocks (thous. bbls.)												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
<hr/>												
Gulf Coast (PADD III)												
Production												
1996	154	150	163	160	172	183	174	158	164	169	162	161
1997	138	171	163	165	170	183						
Stocks (thous. bbls.)												
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						
<hr/>												
Rocky Mountain (PADD IV)												
Production												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
Stocks (thous. bbls.)												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
<hr/>												
West Coast (PADD V)												
Production												
1996	W	W	W	W	W	W	W	W	W	W	W	W
1997	W	W	W	W	W	W						
Stocks (thous. bbls.)												
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						

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
Total U.S.												
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	194	209						
Merchant Plants												
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	84	80	81	88						
Captive Plants												
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	98	107	113	120						

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 (C₆H₆). 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 (C₄H₁₀). 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 (C₄H₁₀). 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 (C₄H₁₀). 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 (C₄H₈). 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) (CH₃)₃COC₂H₅. An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

Ethane (C₂H₆). 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 (C₂H₄). 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 (C₂H₅OH). 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, reformat, 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 (C₄H₈). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isohexane (C₆H₁₄). 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 (C₄), an alkylation process feedstock, and normal pentane and hexane into isopentane (C₅) and isohexane (C₆), 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 (CH₃OH). 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, reformat, 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) (CH₃)₃COCH₃. 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, (C₅H₁₂), 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 (C₃H₈). 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 (C₃H₆). 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.