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Weekly Petroleum Status Report		
Wednesday 9:00 a.m. (weekly)	WWW	Table 1 (U.S. Balance Sheet) and Data Log (Table 14 plus 4-week averages)
Wednesday 5:00 p.m. 6th-12th (monthly)	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)	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.)	WWW	Propane Stocks
Petroleum Supply Monthly		
23rd-26th (monthly)	WWW	Table H1 (Petroleum Supply Summary) and all Summary Statistics and Detailed Statistics Tables
23rd-26th (monthly)	COGIS	Table H1 (Petroleum Supply Summary), and all Summary Statistics and Detailed Statistics Tables
Petroleum Supply Annual	WWW	All tables and data bases
Oxygenate Data		
15 working days after the report month	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)	WWW	Import data by company from the Form EIA-814, "Monthly Imports Report"
23rd-26th (final)		

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Preface

The *Petroleum Supply Monthly* (PSM) is one of a family of four petroleum supply publications produced by the Petroleum 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 or Major Series) - 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 biennial refinery and oxygenate capacity surveys are published in the *PSA*. The *PSA* is published approximately five months after the end of the report year.

Contents

Articles

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

Demand and Price Outlook for Phase 2 Reformulated Gasoline, 2000

Tancred Lidderdale and Aileen Bohn[1]

Congress last enacted major amendments to the Clean Air Act in 1990 (CAA90). The CAA90 (Public Law 101-549) includes programs to control acid rain and reduce damage to the stratospheric ozone layer, new standards for emissions of hazardous air pollutants, and new requirements for motor vehicles and fuels. The amendments and earlier provisions of the Clean Air Act appear to have contributed to significant improvements in air quality nationwide. For example, peak ozone concentrations have declined 30 percent between 1978 and 1997; the 1997 average ambient concentration of carbon monoxide is 60 percent lower than it was in 1978; and annual mean nitrogen dioxide concentrations have decreased in urban areas by 25 percent since 1978.[2]

The reformulated motor gasoline (RFG) provisions of CAA90 require reductions in automobile emissions of ozone-forming volatile organic compounds during the summer high-ozone season, and of toxic air pollutants and nitrogen oxides during the entire year in certain areas of the United States. Phase 2 of the RFG program will begin at refineries on December 1, 1999, and at retail outlets beginning January 1, 2000.

This article presents projections of demand and the market price premium for Phase 2 RFG in the year 2000. The projections in this article are based on forecasts in the *Short-Term Energy Outlook*, which is published monthly by the Energy Information Administration.

Demand for Phase 2 RFG is expected to represent about 34 percent of total motor gasoline demand in 2000. Demand projections are based on estimated populations of the participating ozone nonattainment areas and per capita motor gasoline demand in each area.

Refineries will have to change operating procedures, make plant modifications, and obtain new process equipment in order to meet the new emissions reduction requirements for Phase 2 RFG. The higher costs of production are expected to yield the following wholesale price premiums (in cents per gallon of gasoline) for Phase 2 RFG above the price of conventional motor gasoline:

	Southern States (EPA region 1)	Northern States (EPA region 2)
Summer (May 1 - September 15)	3.5	4.0
Winter (September 16 - April 30)	2.5	2.5

These projected price premiums may fluctuate by as much as 1 cent per gallon depending on the market price of oxygenates (e.g., fuel ethanol and MTBE).

Additional costs to store, transport, and distribute RFG are not expected as Phase 2 RFG works its way through the system replacing Phase 1 RFG. If the current trend requiring specific gasolines in limited areas continues, though, local spikes in retail prices could become more routine.

The use of oxygenates, which have a lower energy content than the motor gasoline components they displace, raises consumers' effective final costs by 0.5 to 1.5 percent as a result of reduced fuel economy (i.e., miles per gallon).

Introduction

The Clean Air Act requires that all areas of the country meet National Ambient Air Quality Standards (NAAQS), which are set by EPA at levels that are expected to be protective of human health and the environment. The Federal law requires that States do not exceed these standards. Areas that do exceed the NAAQS are required to develop and implement plans to attain them.

NAAQS have been established for 6 "criteria" air pollutants: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter, and lead. Air toxics (e.g., benzene, butadiene, formaldehyde, acetaldehyde, and polycyclic organic matter) is another set of pollutants regulated under the Clean Air Act. Ozone is the only air pollutant that is not directly emitted into the air but is the result of a reaction of volatile organic compounds and nitrogen oxides, which are both emitted by stationary and mobile sources.[3]

The U.S. petroleum refining industry has responded to 5 major new Federal rules on motor gasoline product quality in the last 10 years:

Environmental Regulations Affecting the Product Quality of U.S. Motor Gasoline

Phase 1 Summer Volatility (RVP) Regulation	June 1989
Phase 2 Summer Volatility (RVP) Regulation	May 1992
Oxygenated Gasoline	November 1992
Reformulated Gasoline Phase 1	December 1994
Reformulated Gasoline Phase 2	December 1999

[1] Tancred Lidderdale (202-586-7321; tlidderd@eia.doe.gov) is a refining industry analyst in the Energy Information Administration's Office of Energy Markets and End Use. Aileen Bohn (202-586-4255; abohn@eia.doe.gov) is an industry economist in the Energy Information Administration's Office of Oil and Gas.

[2] Environmental Protection Agency, *National Air Quality and Emissions Trends Report 1997*, 454/R-98-016 (Washington, DC, December 10, 1998).

[3] Ground-level ozone is the primary ingredient of smog and should not be confused with stratospheric ozone that is a natural layer some 6 to 20 miles above the earth and provides protection from harmful radiation.

The Phase 2 reformulated gasoline (RFG) standards consist of 2 fuel specifications (maximum benzene content and minimum oxygen content) and 3 performance standards applying to automobile emissions of volatile organic compounds (VOC) during the summer months and nitrogen oxides (NOx) and toxic air pollutants (TAP) year-round (Table 1). The emissions reduction performance standards are measured by use of a mathematical model that relates each type of emission to specific fuel components. The emissions reductions are measured relative to the average gasoline produced in 1990 (the "baseline gasoline"). The application of an emissions model provides refiners some flexibility in producing gasoline to meet the emissions reduction performance standards.

Phase 1 of the RFG program required refineries to begin production of RFG on December 1, 1994, using the *simple emissions model*, which judged emissions compliance by use of 4 gasoline variables (Reid vapor pressure, oxygen, benzene, and total aromatics). In January 1998, refiners were required to switch to the *Phase 1 complex emissions model*, which introduced 4 additional variables (sulfur, olefins, and 2 distillation limitations). Phase 2 of the RFG program begins at refineries on December 1, 1999, and at retail outlets beginning January 1, 2000. The *Phase 2 complex emissions model* uses the same variables as the Phase 1 complex emissions model. However, the estimated emissions using the Phase 2 model are different from those predicted by the Phase 1 model.

The VOC, NOx, and TAP emissions reduction performance standards under Phase 1 using the Phase 1 complex emissions model and under Phase 2 using the Phase 2 complex emissions model are not directly comparable because of the differences between the Phase 1 and Phase 2 complex emissions models. An approximate comparison is provided in Table 1, which estimates emissions of a fuel that complies with Phase 1 requirements but uses the Phase 2 complex emissions model. The comparison indicates that Phase 1 winter RFG comes very close to meeting the Phase 2 winter emissions reduction requirements for TAP and NOx. In fact, the average quality RFG produced during the 1997 - 1998 winter (December 1997 through February 1998) already met the Phase 2 RFG requirements (this is described in more detail later in this report). The difficult task facing refiners is meeting the required additional reductions in VOC and NOx during the summer months. The additional Phase 2 reduction in summer TAP emissions is small, and is also already being met by refiners.

Reformulated Gasoline Demand

Forecasting reformulated gasoline demand in the year 2000 is not difficult because we have over 4 years of history of RFG sales on which to base our forecasts. What can change, however, is the number of areas participating in the program. For example, beginning June 1, 1999, St. Louis, Missouri, will join the list of control areas requiring RFG.[4] The purpose of this demand analysis is to evaluate the conventional method for estimating RFG demand in specific control areas.

Table 1. Reformulated Gasoline Averaging Standards

	RFG Phase 1 January 1995 - December 1999			RFG Phase 2 January 2000		
	Summer Region 1	Summer Region 2	Winter	Summer Region 1	Summer Region 2	Winter
Product Quality Standards:						
Oxygen, weight % min	2.1	2.1	2.1	2.1	2.1	2.1
Benzene, volume % max	0.95	0.95	0.95	0.95	0.95	0.95
Performance Standards (using Phase 2 complex emissions model), percent reduction required:						
Toxic Air Pollutants	18.5 %	17.8 %	17.3 %	21.5 %	21.5 %	21.5 %
Volatile Organic Compounds	20.8 %	10.5 %	n.a.	29.0 %	27.4 %	n.a.
Nitrogen Oxides	1.4 %	1.6 %	1.7 %	6.8 %	6.8 %	1.5 %

n.a. - not applicable

Notes: • Region 1 (southern States) - AL, AZ, AR, CA, CO, DC, FL, GA, KS, LA, MD, MS, MO, NV, NM, NC, OK, OR, SC, TN, TX, UT, and VA. • Region 2 (northern States) - CT, DE, ID, IL, IN, IA, KY, ME, MA, MI, MN, MT, NE, NH, NJ, NY, ND, OH, PA, RI, SD, VT, WA, WV, WI, and WY. • Summer - May 1 through September 15; Winter - September 16 through April 30. • Performance standards for Phase 1 RFG are calculated by using Phase 2 complex emissions model. Average levels for olefins, E200, E300, and summer aromatics are fixed at 1990 gasoline baseline. Summer RVP for region 1 (7.1 psi) and region 2 (8.0 psi) are fixed to meet Phase 1 complex emissions model VOC emissions reductions of 36.6 percent and 17.1 for regions 1 and 2, respectively. Sulfur (300 ppm) and winter aromatics (24.3 volume percent) are fixed to meet Phase 1 complex emissions model requirements for average 16.5 percent toxics and 1.5 percent nitrogen oxides emissions reductions. These levels are comparable to the EPA's estimate of Phase 1 fuel composition in the *Final Regulatory Impact Analysis for Reformulated Gasoline* (Washington, DC, December 13, 1993), Table V-6.

Source: Code of Federal Regulations, Title 40, Part 80, "Regulation of Fuels and Fuel Additives."

[4] The St. Louis program will begin on May 1, 1999, for all persons other than retailers and wholesale purchaser-consumers (i.e., refiners, importers, and distributors). Environmental Protection Agency, *Federal Register*, Vol. 64 No. 41 (Washington, DC, March 3, 1999), pp. 10365-10371.

RFG market shares for each State (State RFG demand as a percentage of total State motor gasoline demand) are assumed to be equal to the proportion of a State's population that resides within an RFG control area.

State RFG Market Share = Each State's estimated control area population divided by the total State population

RFG demand forecasts are then based on the estimated State RFG market shares and the projected total State motor gasoline demands.

Regional RFG Market Shares = The sum of RFG demand for each State in a region, divided by the sum of each State's total gasoline demand.

RFG market shares are estimated at the State level because of significant differences in per capita demands across States. In general, States with a higher proportion of residents in metropolitan or urban areas have lower per capita gasoline demands.[5] For example, per capita demand in 1997 ranged from a low of 309 gallons per person per year in New York with 91.7 percent of its population living in metropolitan areas to 683 in Wyoming with a 29.8 percent metropolitan population.[6] Since RFG control areas are primarily metropolitan areas, estimating RFG demand at a more aggregate level will bias RFG demand estimates upwards.

In the tables that follow, the control area population of a region (2 or more States) may not equal that region's estimated RFG market share because of the differences in per capita demands across States. RFG market share for a region is based on the estimated RFG demand and total gasoline demand for each State within the region.

We can evaluate the accuracy of this RFG market share estimation methodology by comparing estimated with actual RFG market shares reported by EIA. Estimated State RFG market shares are calculated by using control area population shares and State total gasoline demand data reported by the Federal Highway Administration (FHWA), as described above. Although FHWA does not report gasoline sales by type, e.g., RFG versus conventional gasoline, State RFG market shares are available from EIA statistics. However, a State-by-State comparison is complicated because FHWA State gasoline demands do not necessarily correspond to EIA State demands.[7] Where differences do occur between FHWA and EIA State demand data, they are often offsetting between neighboring states. For example, EIA reports higher deliveries to Maine but lower sales in New Hampshire; higher in New Jersey and lower in New York; higher in California but lower in Arizona. Consequently, a comparison of estimated RFG market shares to actual market shares should be done on a regional level.

Table 2. Predicted Reformulated Gasoline Market Shares by Petroleum Administration for Defense District (PADD), Year 2000

Region	Control Area Population July 1, 1996 (thousands)	Region Population July 1, 1996 (thousands)	Predicted RFG Market Share from State Control Area Population Shares (percent)
PADD 1A - New England	11,051	13,351	79.2 %
PADD 1B - Central Atlantic.....	29,340	44,568	67.2 %
PADD 1C - Lower Atlantic	3,972	41,276	9.5 %
PADD 2 - Midwest	13,026	74,587	16.0 %
PADD 3 - Gulf Coast.....	8,280	34,691	23.0 %
PADD 4 - Rocky Mountain	0	8,373	0 %
PADD 5 - West Coast.....	34,490	48,437	67.1 %
Total U.S., 2000	**100,159**	**265,284**	**34.1 %**

Notes: • Includes St. Louis, Missouri, opt in, and Maine opt out, and State reformulated gasoline programs in northern California and Phoenix, AZ. • PADD and U.S. predicted RFG market shares do not correspond to control area population shares because of differences in per capita demands across States. Regional RFG market shares estimated from State control area population shares and State per capita gasoline demand based on 1997 State total motor gasoline demand.

Sources: State total motor gasoline demand: Federal Highway Administration, "Monthly Gasoline Reported by States," *Highway Statistics 1997*, FHWA-PL-98-020 (Washington, DC, Nov. 1, 1998), Table MF-33GA. Population: U.S. Census Bureau.

5 A simple ordinary least squares regression analysis of State per capita motor gasoline demand (gallons per person per year) against the percentage of the State's population living in nonmetropolitan areas results in the following equation (t-statistics in parentheses):

State per capita demand (1997) = 428.8 + 2.22 * State nonmetropolitan population share (July 1, 1996)
(7.57) (6.04)

6 State demands from Federal Highway Administration, "Motor Gasoline Reported by States" *Highway Statistics 1997*, FHWA-PL-98-020 (Washington, DC, Nov. 1, 1998), Table MF-33GA. Estimated State population on July 1, 1996, from U.S. Census Bureau.

7 EIA gasoline sales data are collected from a survey of about 200 "prime suppliers" — firms that produce, import, or transport petroleum products across State boundaries and local marketing areas and sell the products to local distributors, local retailers, or end users. The Federal Highway Administration collects total gasoline sales data from State fuel taxation reports, which generally represent gasoline sales at the terminal or wholesale level.

The comparison of estimated regional RFG market shares to actual RFG market shares reveals differences of less than 1.5 percent at the regional level and 0.2 percent at the national level (Table 3). Two significant corrections were made to the estimated RFG market shares in the analysis. The estimated RFG market shares for New York City and Chicago were multiplied by 0.85 to yield reasonable comparisons at the State and sub-PADD levels.

There are several possible explanations for these differences between estimated and actual State RFG market shares.

1997 estimated RFG market share larger than actual

- RFG control areas are generally metropolitan areas, which have lower per capita gasoline demands than non-metropolitan areas.
- Delivery and sale of conventional gasoline within RFG contol areas (i.e., noncompliance).
- Reported delivery of convenitonal gasoline in one State (region) was actually sold in another State (region).

1997 estimated RFG market share smaller than actual:

- A 1 to 2 percent reduction in fuel efficiency with RFG fuel means per capita demands in control areas may be larger than demands in non-control areas.
- Delivery of RFG to non-control areas (i.e., spillover).
- Reported delivery of RFG in one State (region) was actually sold in another State (region).

Oxygenate Demand

Oxygenates represent a key component of both Phase 1 and Phase 2 reformulated gasoline. The primary oxygenates include fuel ethanol, methyl tertiary butyl ether (MTBE), ethyl tertiary butyl ether (ETBE), and tertiary amyl methyl ether (TAME). Reformulated gasoline requires a minimum 2.1 percent oxygen by weight when averaging, which corresponds to approximately 6.0 volume percent ethanol, 11.5 volume percent MTBE, and 13.4 volume percent ETBE or TAME.

While EIA reports monthly data on production, imports, and stocks of individual oxygenates, there is no comparable data on the disposition of oxygenates. However, an oxygenate demand balance can be derived from EPA estimates of the oxygenate content in reformulated and oxygenated gasoline by control area. MTBE is the dominant blendstock in reformulated gasoline, and ethanol is generally the oxygenate of choice in oxygenated gasoline (Table 4). Almost all MTBE supply is used for reformulated and oxygenated gasoline blending, while only about one-half of the total ethanol supply is. Demand for ethanol in gasohol blending and MTBE as a motor gasoline octane blendstock make up the balance of the oxygenate demand.

Logistics

Reformulated gasoline is required in Dallas, Houston, and some of the urban areas in the Northeast and Midwest while a more stringent RFG is called for in California and Phoenix (Figure 1). Oxygenated gasoline is required in other parts of the Midwest and West, generally from mid-October through the end of February. New York City gets a hybrid oxygenated RFG during the winter. Adding another layer of complexity is a lower RVP gasoline that is delivered to more than 30 Air Quality Control Regions in the South from June 1 to September 15.

The proliferation of clean fuel requirements over the last decade has complicated petroleum logistics. Though the transition from

Table 3. Comparison of Estimated RFG Market Shares With Actual RFG Market Shares by Petroleum Administration for Defense District (PADD), 1997 (percent of total gasoline demand)

Region	Estimated 1997 RFG Market Share	Actual 1997 RFG Market Share
PADD 1A - New England	85.9 %	87.1 %
PADD 1B - Central Atlantic	64.2 %	62.6 %
PADD 1C - Lower Atlantic	9.5 %	9.3 %
PADD 2 - Midwest	11.8 %	11.3 %
PADD 3 - Gulf Coast	23.0 %	23.2 %
PADD 4 - Rocky Mountain	0 %	0 %
PADD 5 - West Coast	67.1 %	67.1 %
Total U.S., 1997	**32.8 %**	**32.6 %**

Notes: • Estimated RFG market shares for New York City and Chicago are corrected by multiplying control area population shares by 0.85. • Phoenix, Arizona, participation began in July 1997.

Sources: Estimated RFG market shares based on July 1, 1996, populations and total gasoline sales reported by Federal Highway Administration, "Monthly Gasoline Reported by States," *Highway Statistics 1997*, FHWA-PL-98-020 (Washington, DC, November 1, 1998), Table MF-33GA. Actual 1997 RFG market share: Energy Information Administration, "Prime Supplier Sales Volume of Motor Gasoline," *Petroleum Marketing Annual 1997*, DOE/EIA-0487(97) (Washington, DC, December 1998), Table 48.

Table 4. Oxygenate Demand in Reformulated and Oxygenated Gasoline Control Areas, 1997 (thousands of barrels per day)

Region	Estimated 1997 Gasoline Demand in Control Areas	Estimated Oxygenate Volume in Control Area Gasoline		
		MTBE	ETBE or TAME	Ethanol
Reformulated Gasoline				
PADD 1 - East Coast	1,054	128.2	9.1	1.0
PADD 2 - Midwest	270	4.0	0.0	21.8
PADD 3 - Gulf Coast	282	27.4	3.2	0.0
PADD 4 - Rocky Mountain	0	0.0	0.0	0.0
PADD 5 - West Coast	934	100.9	3.4	2.0
Subtotals	**2,674**	**259.5**	**15.7**	**24.7**
Oxygenated Gasoline				
PADD 1 - East Coast	0	0.0	0.0	0.0
PADD 2 - Midwest	79	0.0	0.0	6.7
PADD 3 - Gulf Coast	16	0.0	0.0	1.4
PADD 4 - Rocky Mountain	36	0.3	1.1	2.7
PADD 5 - West Coast	73	0.1	0.0	4.7
Subtotals	**204**	**0.5**	**1.1**	**15.5**
Oxygenated-Reformulated Gasoline				
PADD 1 - East Coast	137	4.8	0.0	0.4
PADD 5 - West Coast	10	0.1	0.0	0.7
Subtotals	**147**	**4.9**	**0.0**	**1.1**
Average 1997 Oxygenate Demand for RFG and Oxygenated Gasoline Blending		**265**	**17**	**41**
Imputed Oxygenate Demand for Conventional Gasoline (e.g., octane and gasohol)		**4**	**n.a.**	**41**
Total 1997 Oxygenate Supply		**269**	**n.a.**	**82**

n.a. - not available

Notes: • Oxygenated gasoline includes year-round State mandated program in Minneapolis, MN. • Oxygenated gasoline assumed to contain 2.7 weight percent oxygen. • Oxygenate demand for New York City (PADD 1) and Phoenix, AZ (PADD 5) oxygenated-reformulated gasoline represents volume in excess of requirements for RFG. • Total oxygenate supply includes domestic production, net imports, and stock change. Imports of RFG (161,000 barrels per day) assumed to contain 11.0 percent MTBE by volume.

Sources: Oxygenate content in RFG control area gasoline: Environmental Protection Agency, "1997 RFG Surveys Oxygenate Information" (http://www.epa.gov/orcdizux/consumer/fuels/mtbe/oxy-type.pdf). Oxygenate market shares in oxygenated gasoline control areas: Environmental Protection Agency, "State Winter Oxygenated Fuel Programs, February 1, 1999" (http://www.epa.gov/oms/regs/fuels/oxy-area.pdf). Control area gasoline demand calculated from control area population as share of State population and 1997 State gasoline demand from Federal Highway Administration, "Monthly Gasoline Reported by States," *Highway Statistics 1997*, FHWA-PL-98-020 (Washington, DC, Nov. 1, 998), Table MF-33GA. Oxygenate supply: Energy Information Administration, *Petroleum Supply Annual 1997, Volume 1*, DOE/EIA-0340(97)/1 (Washington, DC, June 1998), Tables 3, 20, 27, 30; and *Petroleum Supply Monthly*, DOE/EIA-0109 (Washington, DC, various issues), Tables D2, and D3.

Phase 1 to Phase 2 reformulated gasoline in early 2000 should not have a profound effect, additional clean fuels programs could make the system more vulnerable to local outages and price spikes.

Interstate Movements and Storage

Some parts of the country are more dependent than others on external gasoline supply sources.[8] Refineries on the East Coast, for example, provided only 29 percent of gasoline demanded in that region in 1997. Over 60 percent came from U.S. Gulf Coast refiners and the balance was imported. U.S. Gulf Coast supplies face constraints at pipeline breakout storage tanks and distribution

8 Energy Information Administration, *Petroleum Supply Annual 1997*, Volume 1, DOE/EIA-0340(97/1) (Washington, DC, June 1998), Tables 4, 6, 8, 10, 12, and 32.

terminals during the heating season. In the Midwest, 79 percent of the gasoline demanded was produced locally; 15 percent came from the U.S. Gulf Coast. Product pipelines going into the Midwest have little surplus capacity to handle extra batches of clean fuels. The pipeline companies blame the lack of expansion on poor return on investment as inflation-adjusted pipeline tariffs have declined over the last few years. U.S. Gulf Coast refiners also supplied 3 percent of West Coast demand. More U.S. Gulf Coast supply is expected in the West as the Navajo Pipeline is completed, allowing flows to southern Arizona. Imports accounted for under a percent of West Coast demand due, in part, to the stringent gasoline requirements in California.

An increasing number of gasolines and distillates of different quality grades, referred to as "product proliferation", leads to a loss in flexibility. Clean gasolines can become tainted and deemed off-spec if commingled with conventional gasoline. Therefore, pipelines must configure batches so that progressively lower grades of RFG, for example, are transported before progressively lower grades of conventional gasoline. Product interface requires downgrading gasoline from premium to regular gasoline and from RFG to conventional, and so forth. The downgrading of RFG to conventional gasoline, caused by product proliferation and the necessity of carrying multiple types of gasoline, reduces the amount of available RFG, thereby reducing the flexibility in supply.

Colonial Pipeline, operator of the U.S. Gulf Coast to New York trunk, has active product codes for 38 different grades of gasoline (including multiple vapor pressures for each grade), 7 grades of kerosene (including two for military), 16 grades of home heating oil and diesel fuel (including diesel fuel marine for the U.S. Navy and light cycle oil) and one grade of transmix (the gasoline/distillate interface that needs to be reprocessed). Of the 62 product codes, 29 are for fungible products and 33 are for products that must be shipped on a segregated basis.[9]

Furthermore, product proliferation has necessitated greater segregation at storage terminals, further complicating logistics. Terminaling facilities associated with pipelines are also faced with having to separate RFG, oxygenated, and conventional stocks at different grades and RVP levels. Storage terminals need to maintain RFG or other program gasoline supplies for a metropolitan area and conventional gasoline supplies for the surrounding area, sometimes in the same facility. In the past two winters, Colonial Pipeline Company limited nominations for shipments on its Houston-to-New York pipeline due to a problem of customers not clearing storage space for receipt of a new shipment. Handling errors were up during the same time period.[10]

Local Distribution

Based on evidence during the Phase 1 RFG program, industry faces more problems related to delivery rather than production. During Phase 1, the only situations where EPA considered suspension of RFG requirements were for distribution emergencies. EPA emergency provisions provide for a specification waiver until alternative RFG supplies can be obtained. A pipeline rupture on Colonial Pipeline's gasoline trunk just prior to the start of the RFG program caused officials to consider the delay of the start-up of the program. Barging supplies to another Colonial input point in Louisiana proved to be a viable alternative. A review of the waiver applications indicates that alternative supplies were ultimately available:

- In March 1997, flooding in the Ohio Valley prompted Ashland Oil to call EPA about the possibility of a waiver of regulations requiring reformulated gasoline in the Louisville and Covington areas of Kentucky. With help from the BP refinery in Toledo, Ohio, and the Marathon refinery in Robinson, Illinois, Ashland was able to forego a request for a waiver. Trucking proved to be a viable alternative to river supplies, though not completely free of flooding-related problems.

- In advance of losing an MTBE unit in Texas for a couple of weeks at the peak of the gasoline season in July 1997, Sun Oil called EPA about the possibility of a waiver of regulations requiring reformulated gasoline in the noncompliance areas in the Mid-Atlantic States. Sun was able to forego a formal request for a waiver after having found alternative supplies elsewhere in Texas that were barged to the Philadelphia facility.

- Facing the prospect of closing 11 gasoline stations in northern Kentucky in May 1998 due to a lack of reformulated gasoline (RFG) supplies, a jobber contacted EPA about the possibility of a waiver that would allow conventional gasoline to substitute for RFG. Ultimately, arrangements were made for the jobber to be resupplied out of a cargo received at a nearby terminal later in the day. The request for a waiver was withdrawn.

Price spikes were associated with each of these events and served as the basis for the first waiver application in March 1997. While the outage of the MTBE unit in Texas in July 1997 was resolved before local supplies and prices were impacted, the RFG cargo spot price in the New York Harbor went up, then receded by about a penny a gallon as suppliers reacted to the worsening of an already tight MTBE situation. An EIA survey picked up an 8-cent-per gallon week-to-week change in the average RFG retail price in Kentucky in connection with the May 1998 refinery problems.[11]

Phase 2 RFG Logistics

The conditions that existed for local distribution problems in Phase 1 will be carried forward into Phase 2. Other programs under consideration could effectively add more areas to the already hopscotched map of gasoline demand (Figure 1). Having to transport additional types of gasolines, interstate pipeline companies will be forced to generate more product codes and

9 Colonial Pipeline Company (http://www.colpipe.com/ab_faq.asp), February 18, 1999.
10 Discussion with Noel Giese, Colonial Pipeline Company, January 5, 1999.
11 Energy Information Administration, Form EIA-878, "Motor Gasoline Price Survey." May 4 and May 11, 1998.

downgrade more gasoline tainted by contact with other gasoline types. Local distribution terminals may have to double the number of gasolines to segregate and, to accommodate this, will form more alliances with one type of gasoline stored at one facility and another type at a different facility. A summary of the future clean gasoline initiatives that could complicate the delivery of Phase 2 gasoline follows.

Possible Opt-Ins to the RFG Program

RFG is currently being suggested for four cities in addition to St. Louis, where RFG is set to start June 1, 1999. The combined demand for these four cities—Kansas City, New Orleans, Baton Rouge, and Lafayette—is about almost 200 thousand barrels per day (Table 5). While EPA has yet to approve these programs, offered as part of the Kansas and Louisiana State implementation plans (SIPs), early assessments show that the industry has the capability to produce, move, and distribute the proposed volumes.[12] RFG could come to these four cities as early as 2000.

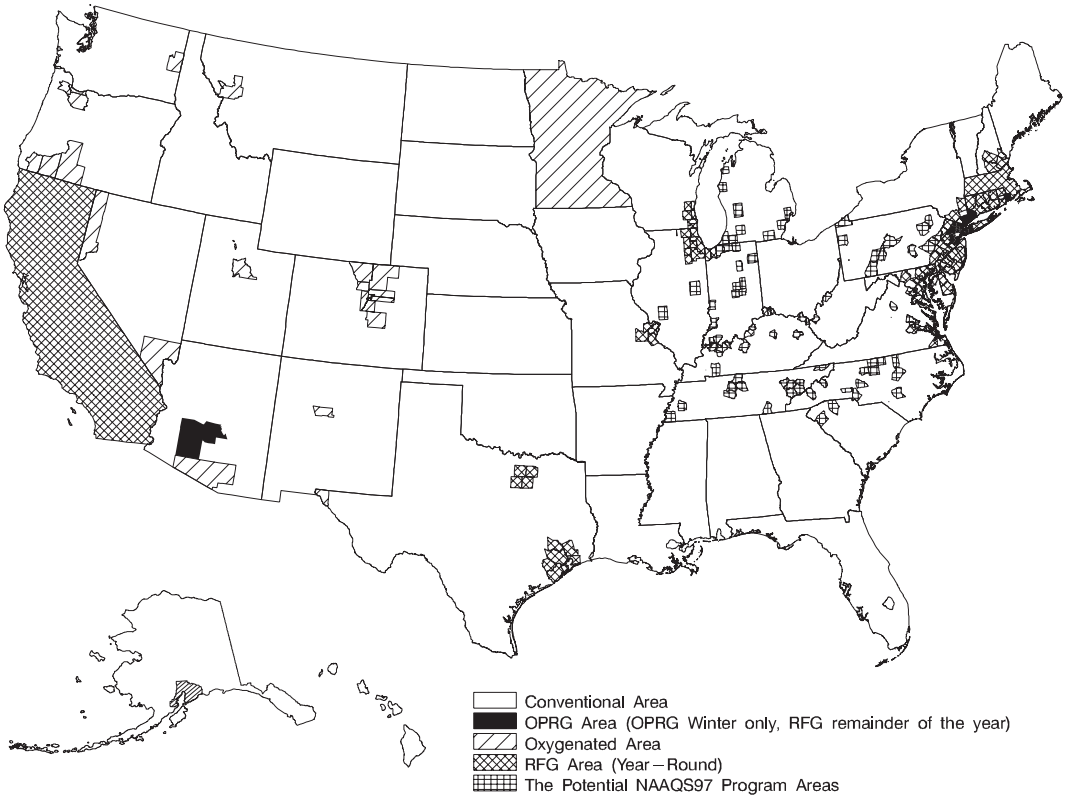
Las Vegas is reviewing the possibility of using a special clean gasoline with specifications more in line with California's. The proposal also calls for an ethanol-only 3.5 weight percent oxygenate level that could arrive as early as November 1999, potentially adding another 57 thousand barrels per day to new RFG demand.

At the same time that some areas are opting into the RFG program, a controversy over MTBE is causing areas to consider opting out. MTBE, a suspected carcinogen, is appearing in ground water supplies. Maine opted out of the RFG program in March 1999. California is planning to phase out the use of MTBE by 2002.[13] A panel of experts has been established to advise EPA on how to address concerns about the use of MTBE and other oxygenates. The panel is scheduled to report to EPA its findings by summer 1999. The recommendations will address how to ensure public health protection for both air and water.

State Low Sulfur, Low RVP Gasoline Initiatives

Lowering RVP and sulfur circumvents the comparatively more expensive requirement for oxygenates in RFG while still reducing VOC emissions. Atlanta and Birmingham have plans for a low sulfur, low RVP gasoline. As with the RFG proposals, EPA has yet to approve 160 thousand barrels per day in total low sulfur, low RVP gasoline for these cities (Table 5). In addition, the regulations requiring RFG, complete with oxygenates, in ozone noncompliance areas may have to be repealed. The proposed

Figure 1. Gasoline Formulations (Clean Air Amendments 1990 and National Ambient Air Quality Standards 1997)



Note: Does not include low RVP gasoline required in over 30 Air Quality Control Regions in OR, NV, UT, CO, KS, MO, TN, MD, and DE and States south.

Source: U.S. Environmental Protection Agency, State Environmental Offices, and Energy Information Administration estimates.

12 Energy Information Administration, "Availability of RFG Supplies," unpublished paper provided to the U.S. Environmental Protection Agency, April 10, 1998.

13 For further information, see California Energy Commission, *Supply and Cost of Alternatives to MTBE in Gasoline*, P300-98-013 (Sacramento, CA, October 1998).

Table 5. Potential Total U.S. Requirement for Gasoline by Type (thousand barrels per day)

Program	1997	2000	2004	2010
Type				
Conventional	5,301	5,063	2,847	N/A
Oxygenated	233	271	297	330
Phase 1 RFG	2,674	N/A	N/A	N/A
Phase 2 RFG	N/A	2,857	3,056	3,313
Potential RFG Opt-In Areas[1]	N/A	257	258	259
Low Sulfur, Low RVP	N/A	160	770	771
Tier 2	N/A	N/A	1,997	4,368
1997 NAAQS[2]	N/A	N/A	N/A	975
Total Gasoline Consumption	**8,220**	**8,590**	**9,220**	**10,010**

[1] As of March 31, 1999.
[2] Motor gasoline product quality requirements may not be substantially different from those of Phase 2 RFG.
N/A = not applicable.
Notes: Totals may not equal sum of components due to independent rounding.
Source: Estimated from the Federal Highway Administration, "Monthly Gasoline Reported by States," FHWA-PL-98-020 (Washington, DC, Nov. 1, 1998); Energy Information Administration, *Annual Energy Outlook*, DOE/EIA-0383(99) (Washington, DC, December 1998), Table A11; Energy Information Administration, *Petroleum Marketing Annual*, DOE/EIA-0487(98) (Washington, DC, June 1998), Table 50; U.S. Census Bureau.

gasoline has a summertime 7.0 psi RVP content and 150 ppm sulfur.

Some companies have offered to supply a low sulfur gasoline to service territories in the Eastern half of Texas while the State considers altering their SIP to require a low sulfur, low RVP fuel. Proximity to the Gulf Coast refining center and ample pipeline and storage capacity facilitates this discretionary, early move to a clean fuel. The demand for low sulfur, low RVP gasoline would start at almost 160 thousand barrels per day.

NAAQS

In July 1997, EPA finalized new attainment standards for ground-level ozone.[14] EPA is replacing the previous 1-hour ozone standard with a new 8-hour standard.[15] The new standards will have no immediate impact on energy markets; however, some impacts may be seen after 2004, when noncompliance areas are identified and control strategies are developed. Although SIPs will be unique to each State, all are likely to include strategies to reduce NOx and VOC emissions from such key sources as electric utilities, industries, and motor fuels consumption to address the tighter ozone standard.

RFG use has led to a considerable reduction in VOC and NOx emissions, which are precursors to the formation of ozone. Therefore, RFG is likely to be included in SIPs. Examination on a county-by-county basis for large, noncomplying areas that have few other ozone-reducing alternatives results in a demand estimate for 2010 of almost a million barrels per day (Table 5) when fully implemented. This further complicates logistics by possibly adding counties in 10 States, mainly those in the Midwest and the South, to the RFG program (Figure 1).

Tier 2 Gasoline

EPA is considering a proposal to lower the sulfur content of gasoline from an average 340 ppm to as low as 30 ppm, approximating the California limit. The purpose of this move is to meet Tier 2 requirements to further reduce tailpipe emissions. Both the Tier 1 and 2 designations come from the 1990 Clean Air Act Amendments.[16] The low sulfur proposal would apply to all gasoline sold in the United States and, therefore, would be more a refining than a logistics issue. The industry is countering with proposals for a slower phase-in of the standard and more regionalization, a position that complicates delivery. If enacted in stages, terminals with service areas that straddle the Mississippi River could be looking at adding Tier 2 gasoline to their product slate and would need to segregate the various grades until the remaining States were phased in. EPA is currently developing a proposal for a trading program and a phase-in for small refiners, thereby requiring the segregation of Tier 2 gasoline through to any one of a number of destinations receiving conventional gasoline. While these proposals complicate logistics in many respects, Tier 2 could make the delivery of RFG in additional counties in 10 States, a possibility under the proposed NAAQS, unnecessary.

The demand for this gasoline effectively supplants conventional gasoline demand and carries with it the requirement for low summertime RVP in southern States. If enacted in stages, Tier 2

[14] Much of the following discussion is taken from Energy Information Administration, *Annual Energy Outlook 1998*, DOE/EIA-0383(98) (Washington DC, December 1997), pp. 12-15.
[15] A National Ambient Air Quality Standard (NAAQS) for ground-level ozone has three parts: the concentration or level, the measurement period, and the "form" of the standard. The new ozone standard is set at a concentration of 0.08 ppm and the measurement period is 8 hours. Under the form adopted by EPA, areas are allowed to disregard their three worst measurements every year and average performance over three years to determine if they meet the standard.
[16] An analysis of Tier 2 supply and costs is contained in: Energy Information Administration, *Annual Energy Outlook 1999*, DOE/EIA-0383(99) (Washington DC, December 1998), pp. 29-30.

demand could start at 2.0 million barrels per day for 2004 (at a higher 150 ppm sulfur level) and be as much as 4.4 million barrels a day by 2010 (at the lower sulfur level, Table 5).

RFG Production Options

The application of the Phase 2 complex emissions model provides refiners some flexibility to meet the emissions reduction performance standards. The estimation of the Phase 2 RFG price premium depends on what fuel components will provide the most cost-effective means for reducing emissions.

Although the emissions reduction performance standards for Phase 2 RFG are based on comparison with emissions from the 1990 baseline gasoline fuel, the required emissions reductions and cost of Phase 2 RFG in this analysis are based on the emission reductions and costs incremental to those already realized in meeting the Phase 1 RFG standard.[17]

The impact of changes in the individual fuel components on TAP, NOx, and VOC emissions beyond the minimum requirements of Phase 1 are presented in graphs. This analysis indicates that RVP, sulfur, and aromatics are the fuel components that have the greatest impact on TAP, NOx, and VOC emissions and should be the primary targets of refiner Phase 2 RFG quality control.

Toxic Air Pollutants (TAP) Reduction

Phase 2 RFG requires a year-round 21.5 percent reduction in TAP emissions from the 1990 baseline gasoline. Phase 1 RFG already produces an average 18 percent reduction and only a small improvement is required to achieve the Phase 2 target (Table 1).

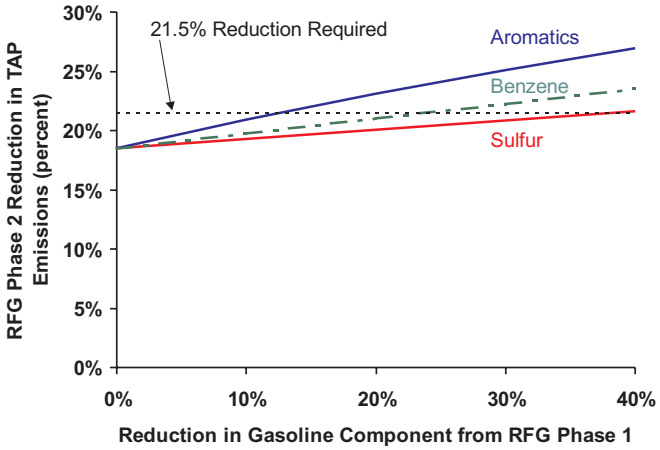
The three dominant variables in TAP emissions reduction are aromatics, benzene, and sulfur (Figure 2). Changes in RVP, olefins, E200 and E300 (not shown in graph) have only small effects on TAP. Replacing MTBE with ethanol increases TAP emissions because of the higher production of formaldehyde and acetaldehyde. The additional 3.5 percent reduction in TAP emissions (over current Phase 1 requirements) can be accomplished either by a 13 percent reduction in aromatics (from 32 to 28 volume percent), by a 24 percent reduction in benzene (from 0.95 to 0.72 volume percent), or by a 39 percent reduction in sulfur (from 312 to 190 ppm).

Nitrogen Oxides (NOx) Reduction

Phase 2 RFG requires a 6.8 percent reduction in NOx during the summer months and a winter reduction of 1.5 percent. Phase 1 RFG already produces an average 1.5 percent reduction in NOx year-round. Thus, the required summer NOx emission reduction is the performance standard of interest.

Sulfur and aromatics dominate the NOx emissions equation (Figure 3). Olefins, RVP, E200, and E300 have only small effects, and benzene has no effect on NOx emissions. The additional 5.3 percent reduction in NOx emissions (over current Phase 1 requirements) during the summer months can be accomplished either by a 52 percent reduction in sulfur (from 312 to 150 ppm) or by a 58 percent reduction in aromatics (from 32 to 13.6 volume percent).[18]

Figure 2. RFG Phase 2 TAP Reduction by Gasoline Component (Summer Region 1)

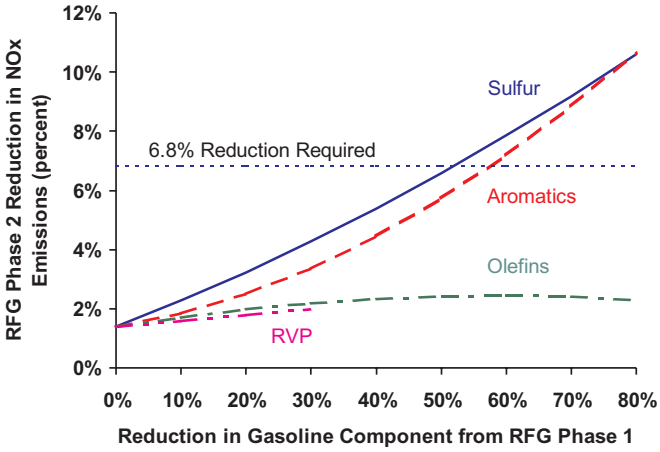


Volatile Organic Compounds (VOC) Reduction

The Phase 2 VOC emissions reduction performance standards for southern States (region 1) and northern States (region 2) are almost identical. However, the required incremental VOC emissions reduction beyond Phase 1 RFG is much greater in region 2 because Phase 1 RFG requires a much smaller reduction in VOC emissions in region 2 (Table 1).

RVP dominates the VOC emissions calculation (Figure 4). Reductions in aromatics and sulfur make small contributions to lower VOC emissions. However, reductions in RVP alone will

Figure 3. RFG Phase 2 NOx Reduction by Gasoline Component (Summer Region 1)



[17] The minimum emission reduction requirements for Phase 1 RFG were established in the Introduction of this article (Table 1). MTBE is assumed to be the blended oxygenate because it is the most commonly used and most likely represents the oxygenate used at the margin. All emissions reduction performance standards are based on averaging, i.e., refiners will choose to achieve emissions reduction targets on average rather than on each gallon of gasoline produced.

[18] The EPA originally established the NOx standard on the basis of the level of NOx control that can be cost-effectively achieved through sulfur reduction down to 138 ppm: Environmental Protection Agency, *Final Regulatory Impact Analysis for Reformulated Gasoline* (Washington, DC, December 13, 1993), p. 396.

Table 6. Reformulated Gasoline Quality Survey Results, Winter 1997-1998

	1990 Winter Baseline	Reformulated Gasoline, Winter 1997 - 1998		RFG Phase 2 Winter Requirements
		With Ethers	With Ethanol	
Product Quality:				
Oxygenate (weight %)				2.1 % min
MTBE	0	1.98	0.05	
TAME	0	0.09	0.00	
Ethanol	0	0.00	3.52	
Sulfur (ppm by weight)	338	144	193	
Aromatics (volume %)	26.4	20.1	22.4	
Benzene (volume %)	1.64	0.68	0.76	0.95 % max
Olefins (volume %)	11.9	6.6	10.2	
E200 (volume %)	50	56	n.a.	
E300 (volume %)	83	86	n.a.	
Emissions Reduction from Baseline (percent):				
TAP	0	27.7 %		21.5 % min
NOx	0	9.9 %		1.5 % min

Notes: • n.a. - not available • Winter 1997 - 1998 corresponds to December 1997 through February 1998. • Emissions reduction from baseline is calculated by using RFG Phase 2 complex emissions model

Sources: 1990 Winter Baseline and RFG Phase 2 Winter Requirements: Code of Federal Regulations, Title 40, Part 80, "Regulation of Fuels and Fuel Additives." Reformulated Gasoline, Winter 1997 - 1998: National Institute for Petroleum and Energy Research, *Motor Gasolines, Winter 1997-98* (Bartlesville, OK, August 1998), Table 5.

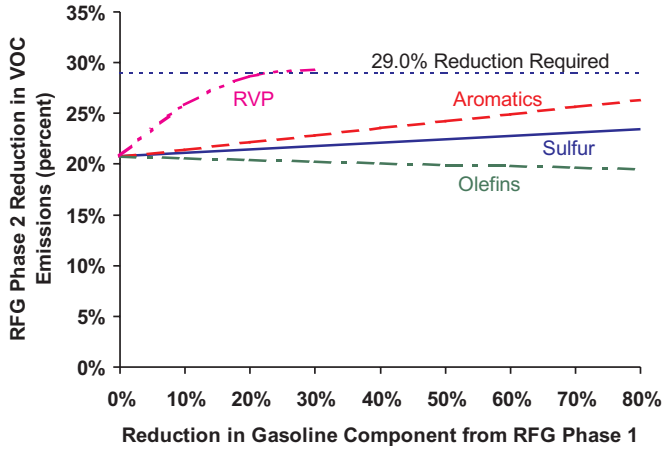
not be enough to achieve the required Phase 2 VOC reduction.[19] A reduction in RVP to 6.7 psi will reduce VOC emissions by about 24 percent in region 1, and 22 percent in region 2, well below the 29 percent and 27.4 percent required in regions 1 and 2, respectively. Reducing sulfur from 300 to 140 ppm will yield an additional reduction of 1.9 percent. Lowering aromatics from 32 to 26 volume percent adds another 1.5 percent VOC reduction. Still, this is not enough. The final necessary emissions reductions must come from increasing E200, E300, and olefins, without violating the NOx emissions reduction requirement (the TAP emissions requirement is not binding).

Summary of RFG Production Options

Sulfur, RVP, and total aromatics are the fuel components that have the greatest impact on TAP, NOx, and VOC emissions, and should be the primary targets of refiner Phase 2 RFG quality control.

Because of the required addition of oxygenates, the level of aromatics has already been reduced significantly below the 1990 baseline gasoline composition. In fact, Phase 1 RFG that is currently being produced should already meet the Phase 2 TAP emissions reduction performance standard. The addition of 11 volume percent MTBE (or 6 volume percent fuel ethanol) contributes to a reduction in aromatics in two ways. First, there is a simple dilution effect. For example, adding 11 gallons of MTBE to 89 gallons of conventional gasoline with 32 volume percent aromatics will result in a blend with 28.5 volume percent aromatics (or 30 volume percent aromatics when diluted with 6 volume percent fuel ethanol). Second, the addition of oxygenates, which are high in octane, allows refiners to reduce the conversion of low octane gasoline components to high octane aromatics in Reformers.[20] This oxygenate blending effect can be seen in Phase 1 RFG that was produced during the winter 1997-1998 (Table 6). The addition of oxygenates also increases the percentage of

Figure 4. RFG Phase 2 VOC Reduction by Gasoline Component (Summer Region 1)



[19] The EPA established the VOC standard based on the level of VOC control that can be cost-effectively achieved through RVP reduction down to 6.7 psi, in addition to VOC reduction achieved by reducing sulfur to meet the NOx standard: Environmental Protection Agency, *Final Regulatory Impact Analysis for Reformulated Gasoline* (Washington, DC, December 13, 1993), p. 396.

[20] Reformer product (reformate) contains about 66 percent aromatics and makes up about 27 percent of the total motor gasoline pool: National Petroleum Council, *U.S. Petroleum Refining*, Volume VI (Washington, DC, August 1993), pp. N242-N244. The road octane (R+M/2) of MTBE is 109, compared with an average 104.1 road octane for aromatics: Robert E. Maples, *Petroleum Refinery Process Economics* (PennWell Books: Tulsa, OK, 1993), Table 5-1.

Table 7. Reformulated Gasoline Averaging Standards

	CARB Gasoline	RFG Phase 2, January 2000		
		Summer Region 1	Summer Region 2	Winter
Product Quality Standards:				
RVP, psi max	7.0			
Oxygen, wt % min	2.0	2.1	2.1	2.1
Benzene, vol % max	0.8	0.95	0.95	0.95
Aromatics, vol % max	22.0			
Olefins, vol % max	4.0			
Sulfur, ppm	30.0			
Distillation temperatures:				
50% Distilled, degrees F max	200			
90% Distilled, degrees F max	290			
Performance Standards, percent reduction required:				
Toxic Air Pollutants	34.4 %	21.5 %	21.5 %	21.5 %
Volatile Organic Compounds	27.9 %	29.0 %	27.4 %	n.a.
Nitrogen Oxides	14.6 %	6.8 %	6.8 %	1.5 %

Notes: Performance standards for CARB gasoline are calculated by using EPA Phase 2 complex emissions model.

Sources: RFG specifications: Environmental Protection Agency, "Regulation of Fuel and Fuel Additives," Code of Federal Regulations, Title 40, Part 80. California specifications: California Air Resources Board, "The California Reformulated Gasoline Regulations," Title 13, California Code of Regulations, Sections 2250-2272 (as last amended July 2, 1996).

gasoline that boils off at temperatures below 200 and 300 degrees Fahrenheit (i.e., E200 and E300).

Costs of Reformulated Gasoline

The clean air benefits of reformulated gasoline do not come freely. Consumers are faced with two costs of reformulated gasoline. First, the price of Phase 2 reformulated gasoline at the pump is expected to be 2.5 to 4.0 cents per gallon higher than conventional (non-reformulated) gasoline, depending on the region on the country and the time of year. Compared with the cost of Phase 1 RFG, no increase is expected during the winter months and a 1.0 to 1.5 cent per gallon increase is expected during the summer months in southern and northern States, respectively.

Second, the fuel economy (miles per gallon) of Phase 2 RFG is about 1.5 to 2 percent lower than conventional gasoline because the energy (Btu) content of RFG is lower than that of conventional gasoline. This fuel economy penalty is unchanged from the fuel economy penalty realized with the use of Phase 1 RFG.

Two sources of data are available to bracket the expected wholesale market price premium for Phase 2 reformulated gasoline over conventional gasoline. First, the historical price premium for Phase 1 RFG provides a lower bound for the estimate (2.3 cents per gallon). Second, the historical price premium for California clean gasoline, which has stricter requirements for emissions reductions, should provide an upper bound for the expected price premium (4.3 cents per gallon).

Phase 1 RFG Price Premium

Before the start of the reformulated gasoline program in 1995, EIA originally projected a Phase 1 RFG price premium of 3.5 to 4 cents per gallon over conventional gasoline.[21] The price premium is due primarily to the required 2.1 percent by weight of oxygenates (equivalent to about 11.5 percent MTBE, or 6.0 percent fuel ethanol by volume), which made up 3.0 cents of the projected Phase 1 RFG price premium. The additional requirements for RVP reduction in the summer and reducing the levels of benzene and other aromatics were projected to add 0.4 cents per gallon and 0.5 cents per gallon, respectively, to the cost of reformulated gasoline.

The actual wholesale price premium for Phase 1 RFG has generally fallen in the range of 2 to 4 cents per gallon (Figure 5). The variability in the Phase 1 RFG price premium has been due to changes in the cost of oxygenates, particularly MTBE, relative to the cost of gasoline.[22] The wholesale price difference between Phase 1 RFG and conventional gasoline has averaged 2.3 cents per gallon for both U.S. Gulf Coast and New York Harbor waterborne cargoes (from January 1996 to December 1998).

21 Tancred Lidderdale, "Demand, Supply, and Price Outlook for Reformulated Motor Gasoline, 1995," *Monthly Energy Review*, DOE/EIA-0035 (94/07) (Washington, DC, July 1994), pp.1-10. Using a more rigorous refinery model, EPA estimated the national average Phase 1 RFG cost would range from 1.6 to 3.5 cents per gallon (excluding the cost of oxygenates already required in oxygenated gasoline control areas during the winter), depending on the price of oxygenates: Environmental Protection Agency, *Final Regulatory Impact Analysis for Reformulated Gasoline* (Washington, DC, December 13, 1993), p. 303.

22 The stong rrelationship between the cost of MTBE and the price premium for Phase 1 RFG is evident from the comparison of the price difference between MTBE and conventional gasoline with the price difference between RFG and conventional gasoline. This was illustrated in an earlier EIA analysis article:"Environmental Regulations and Changes in Petroleum Refining Operations" (June 1998) http://www.eia.doe.gov/emeu/steo/pub/special/enviro.html.

Figure 5. Price Difference: Reformulated Minus Conventional Regular Gasoline (cents per gallon)

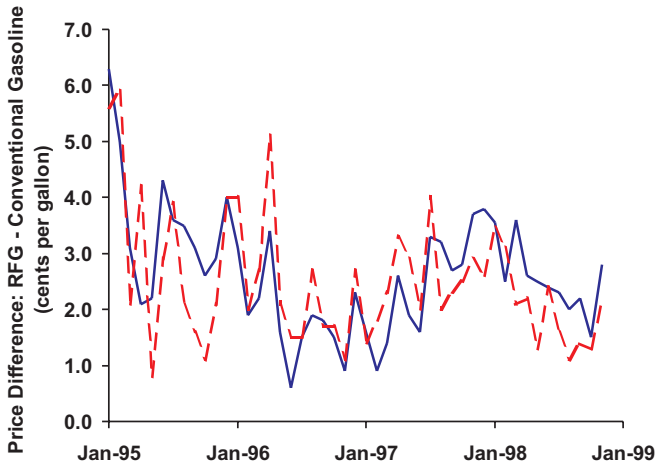
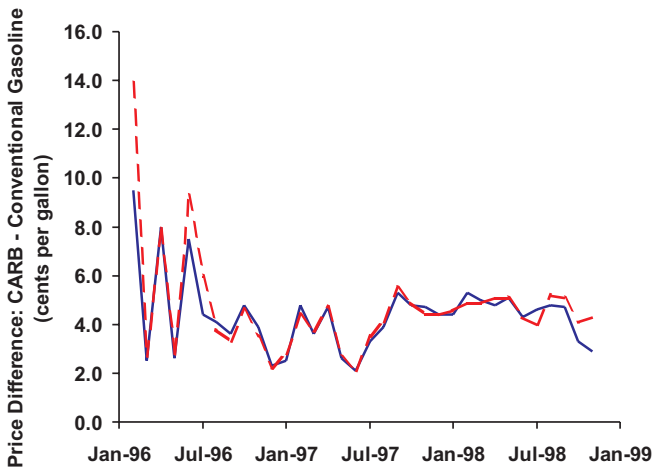


Figure 6. Price Difference: California (CARB) Clean Gasoline Minus Conventional Regular Gasoline (cents per gallon**)**



Source: DRI/McGraw-Hill, *Platt's Oilgram Price Report, Price Average Supplement* (New York, NY), various issues 1995 - 1998.

California Clean Gasoline Price Premium

California began its own clean gasoline program in early 1996. The California clean gasoline (referred to as "CARB" gasoline because the program is administered by the California Air Resources Board) has stricter gasoline quality and emissions reduction performance standards than EPA Phase 2 RFG (Table 7).

The wholesale (pipeline) price difference between CARB clean gasoline and conventional gasoline has averaged 4.2 cents per gallon in Los Angeles and 4.3 cents per gallon in San Francisco (from January 1997 to December 1998) (Figure 6).

Phase 2 RFG Price Premium

Phase 1 RFG should already meet the year-round TAP and winter NOx emissions reduction performance standards. Thus, there should be no additional price premium for Phase 2 RFG over Phase 1 RFG during the winter months. The summer VOC and NOx emissions reduction performance standards will require reductions in total aromatics, RVP, and sulfur.

Aromatics Reduction. Although reducing the level of aromatics in motor gasoline significantly reduces NOx emissions, this is generally not considered a cost-effective method of control (beyond the level already achieved with the addition of oxygenates).

RVP Reduction. Lowering RVP increases the refiner's cost of producing gasoline because low-cost normal butane (C4s) must be removed from the gasoline pool. Since the start of the RFG program in 1995, the price of normal butane (at Mont Belvieu, Texas) has averaged 17 cents per gallon below the price of conventional regular gasoline (U.S. Gulf Coast waterborne cargoes) during the summer months (May through August).[23] A 1 psi reduction in RVP requires about a 2 volume percent reduction in the concentration of normal butane in gasoline.[24] Based on a simple linear blend calculation, the removal of 2 volume percent normal butane from gasoline would increase the price of gasoline by about 0.34 cents per gallon. There is an additional cost of about 0.1 cents per gallon per psi reduction for the loss of octane that butane provides the gasoline pool.[25] Thus, the cost of removing butane on the basis of a simple blending economics is about 0.44 cents per gallon per psi reduction.

A comparable estimate of the cost of RVP reduction can be obtained from the market price differential between 7.8 and 9.0 RVP gasoline. The wholesale market price premium for 7.8 RVP gasoline relative to 9.0 RVP gasoline on the U.S. Gulf Coast during the summers of 1993 through 1998 (May through August) averaged 0.52 cents per gallon, which is equivalent to a price premium of about 0.43 cents per gallon per 1 psi reduction. EPA estimated RVP reduction costs to average 0.42 cents per gallon per 1 psi.

Phase 2 RFG will require approximately a 1.3 psi reduction in RVP (from 8.0 to 6.7 psi) in northern control areas (region 2) and a 0.4 psi reduction (from 7.1 to 6.7 psi) in southern areas (region 1) from current Phase 1 RFG levels during the summer months. EIA estimates the average cost for reducing RVP from Phase 1 to Phase 2 RFG levels during the summer months to be about 0.6 cent per gallon (1.3 psi multiplied by 0.45 cent/gallon/psi reduction) in northern control areas and 0.2 cent per gallon in the southern control areas.

23 McGraw-Hill, Inc., *Platt's Oilgram Price Report, Price Average Supplement* (New York, NY), various issues 1995 - 1998.

24 "Pipeline Hydrogen Supply Provides Flexibility and Alternative Solutions to Improve Returns on Refinery Assets," *Hart's Fuel Technology and Management's Sulfur 2000* (Summer 1998), pp. 26-28; and "Low-Sulfur Specifications Cause Refiners to Look at Hydrotreating Options," *Oil & Gas Journal* (December 8, 1997), pp. 47-51.

25 "Pipeline Hydrogen Supply Provides Flexibility and Alternative Solutions to Improve Returns on Refinery Assets," *Hart's Fuel Technology and Management's Sulfur 2000* (Summer 1998), pp. 26-28; and "Low-Sulfur Specifications Cause Refiners to Look at Hydrotreating Options," *Oil & Gas Journal* (December 8, 1997), pp. 47-51.

Sulfur Reduction. Sulfur occurs naturally in crude oil. As crude oil is refined, some of the sulfur ends up in motor gasoline. The sulfur in crude oil is generally concentrated in the heavier components such as distillate and residual fuel oils. Most sulfur in motor gasoline (80 to 90 percent) comes from the conversion of the heavier components to gasoline in fluid catalytic cracking (FCC) units, which produce about one-third of the U.S. motor gasoline pool.[26] The sulfur in untreated FCC gasoline product ranges as high as 1,000 to 2,000 ppm. There are two general process options for reducing sulfur. The first option involves diversion of the heavy FCC product that is highest in sulfur to the distillate fuel oil pool. This is the lowest capital and operating cost option, but results in the downgrade of gasoline product to lower-valued fuel oil and reduces the volume of motor gasoline produced. The second option involves hydrotreating either the feed to or the product from the FCC unit. Hydrotreating to remove sulfur may have high capital and operating costs but maintains the volume of the gasoline pool.

The expected cost for removing sulfur is highly dependent on a refiner's available hydrotreating capacity and the share of total gasoline production that must be reformulated. EPA originally estimated the cost of reducing sulfur from 340 ppm down to 250 ppm to be 0.18 cent per gallon and the cost of going from 250 ppm down to 160 ppm to be 0.56 cent per gallon.[27] More recently, EPA estimated the cost for all PADD 1 and 3 refiners to reduce sulfur from 340 ppm down to 150 ppm to range from 1.1 to 1.8 cent per gallon.[28] We expect that sulfur reduction for Phase 2 RFG will cost on average 0.8 cent per gallon.

Total Incremental Phase 2 Summer RFG Production Cost. Refiners will take different paths to produce Phase 2 RFG. On average, we expect Phase 2 RFG during the summer months to be low in RVP (6.7 psi) and low in sulfur (140 ppm). In addition, the blending of oxygenates will contribute to lower aromatics (26 volume percent or less) and raise E200 (to 50 volume percent). The costs of reducing RVP and sulfur during the summer months are expected to add about 1.5 and 1.0 cents per gallon to the cost of supplying Phase 1 RFG to the northern (region 2) and southern (region 1) States, respectively. The cost to produce Phase 2 RFG during the winter months should be no greater than the current cost to produce Phase 1 RFG.

Since the wholesale price difference between Phase 1 RFG and conventional gasoline has averaged close to 2.5 cents per gallon throughout the year, we expect the wholesale price of Phase 2 RFG to average about 2.5 cents per gallon above the price of conventional gasoline during the winter. During the summer months, Phase 2 RFG is expected to average 4.0 cents per gallon above the price of conventional gasoline in northern States, and 3.5 cents per gallon above the price of conventional gasoline in southern States. This expected price premium is lower than the wholesale price difference between CARB clean gasoline and conventional gasoline in California.

Reduced Fuel Economy

The fuel economy (miles per gallon) of Phase 1 and Phase 2 RFG is about 1.5 per cent lower during the summer and 2 percent lower during the winter because the energy (Btu) content of RFG is lower than that of conventional gasoline. This corresponds to about 0.4 to 0.6 miles per gallon for a car that averages 27 miles per gallon. The decline in fuel economy is due primarily to the required use of oxygenates, which have a lower energy content than that of the conventional motor gasoline or octane blendstocks (e.g., aromatics) that the oxygenates displace. This loss is offset partially by the lower summer RVP requirement, which will reduce both evaporative emissions and the volume of butane, which is low in energy content, in motor gasoline.

Reformulated gasoline with 11.5 volume percent MTBE has a Btu value that is about 2.1 percent lower than that of conventional motor gasoline, while motor gasoline reformulated with 6 volume percent ethanol has a Btu content that is about 2.0 percent lower than that of conventional gasoline (Table 8).

The required reduction of RVP during the summer months partially offsets the decline in fuel economy due to the addition of oxygenates. Refiners reduce RVP by removing light hydrocarbons like normal butane. A 2 volume percent reduction in normal butane results in an approximately 1 psi reduction in RVP, and a 0.3 percent increase in energy content and fuel economy.[29] Some additional (unestimated) benefit is realized due to reduced fuel losses through evaporation from the gas tank and while fueling a car.

A number of on-road studies of the fuel economy effects of reformulated gasoline have been conducted that confirm the theoretical estimates of fuel economy loss based on energy content: fuel economy is reduced by 2 to 3 percent during the winter season and 1 to 2 percent during the summer season.[30]

Conclusion

As the Phase 2 RFG program goes into effect, the estimated market share for RFG should continue to represent about one-third of total U.S. gasoline demand. Refiners are expected to lower the RVP, sulfur, and aromatics content of RFG in order to meet the summer VOC and NOx reductions required under the Phase 2 RFG program. The cost of producing Phase 2 RFG is expected to represent a price premium of 2.5 to 4.0 cents per gallon over the cost of producing conventional motor gasoline, depending on the region on the country and the time of year. The price of MTBE,

26 "Pipeline Hydrogen Supply Provides Flexibility and Alternative Solutions to Improve Returns on Refinery Assets," *Hart's Fuel Technology and Management's Sulfur 2000* (Summer 1998), pp. 26-28; and "Low-Sulfur Specifications Cause Refiners to Look at Hydrotreating Options," *Oil & Gas Journal* (December 8, 1997), pp. 47-51.

27 Environmental Protection Agency, *Final Regulatory Impact Analysis* (Washington, DC, December 13, 1993), Table VI-6.

28 Environmental Protection Agency, *EPA Staff Paper on Gasoline Sulfur Issues* (Washington, DC, May 1, 1998), p. 32.

29 Based on a normal butane blending RVP of 60 psi and a heat content of 95,040 Btu per gallon.

30 White House Office of Science and Technology Policy, "Fuel Economy and Engine Performance Issues," *Interagency Assessment of Oxygenated Fuels* (Washington, DC, June 1997), Chapter 3; Lawrence Livermore National Laboratory, *Assessment of California Reformulated Gasoline Impact on Vehicle Fuel Economy*, UCRL-ID-126551 (Livermore, CA, January 1997).

Table 8. Fuel Economy Loss With Oxygenate Blending

Oxygenate	Energy Content of Oxygenate (Btu/gallon)	Volume Percent Oxygenate	Volume Percent Gasoline	Energy Content of 1 Gallon of Blend	Percent Reduction Compared to Gasoline
MTBE	93,500	11.5	88.5	111,642	2.1
Ethanol at 6 vol. %	76,000	6.0	94.0	111,720	2.0
Ethanol at 10 vol. %	76,000	10.0	90.0	110,200	3.3
TAME	100,600	13.4	86.6	112,204	1.6
ETBE	97,700	13.4	86.6	111,816	1.9

Notes: Energy content of gasoline is 114,000 Btu/gallon.

Source: Energy contents of oxygenates and gasoline are from American Petroleum Institute, *Alcohols and Ethers: A Technical Assessment of Their Applications as Fuel and Fuel Components*, Publication 4261, Second Edition (Washington, DC, December 13, 1993), p. 334.

ethanol, and other oxygenates could change the cost estimate by a penny either direction.

No changes are required to transport and distribute Phase 2 RFG, compared with Phase 1 RFG. However, the delivery of a number of different grades of gasoline to specific areas at certain times of the year has led to local supply problems and limited price spikes. Future regulations requiring the phase-in of additional localized clean fuel requirements are expected to add to the potential for localized supply disruptions.

Guide to Abbreviations and Acronyms

Btu
British thermal unit

CAA90
Clean Air Act Amendments of 1990 (Public Law 101-549)

CARB
California Air Resources Board

E200
Percent of fuel evaporated at 200 degrees Fahrenheit

E300
Percent of fuel evaporated at 300 degrees Fahrenheit

EIA
Energy Information Administration, U.S. Department of Energy

EPA
U.S. Environmental Protection Agency

ETBE
Ethyl tertiary butyl ether

FCC
Fluid catalytic cracking unit

FHWA
Federal Highway Administration

MTBE
Methyl tertiary butyl ether

NAAQS
National ambient air quality standard

NOx
Nitrogen oxide

PADD
Petroleum Administration for Defense District

ppm
Parts per million

psi
Pounds per square inch

RFG
Reformulated gasoline

RVP
Reid vapor pressure

SIP
State implementation plan

TAME
Tertiary amyl methyl ether

TAP
Toxic air pollutants

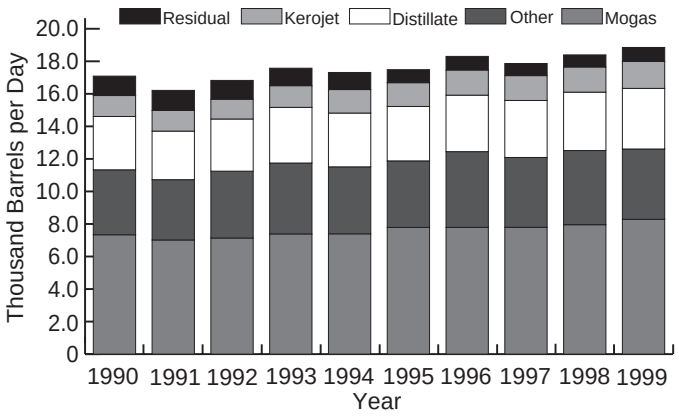
VOC
Volatile organic compound

Highlights

March 24th marked the 10-year anniversary of the Exxon Valdez running aground on Bligh Reef causing the nation's worst oil spill; an estimated **11 million gallons of crude oil leaked into Prince William Sound**. Ten years later, Exxon remains in court appealing the 1994 federal court judgement of $5.2 billion in punitive damages and the Exxon Valdez (now the SeaRiver Mediterranean) remains banned from the Sound.[1]

Economic conditions remained bright in the U.S., driving demand for petroleum to high levels. Estimates from the Census Bureau regarding monthly retail sales reflect year-to-year increases for both March and for the first quarter.[2] Total demand for refined petroleum products, measured as product supplied, reached the highest level for the month since 1979. The total demand for refined petroleum products in March 1999[3] averaged 18.9 million barrels per day (Table & Figure H1). Over the last three months, total demand for refined petroleum products has also been at a very high level, averaging 19.0 million barrels per day. On average, temperatures across the U.S. were nearly 5 percent cooler than normal and 6 percent cooler than this time last year according to data collected by the National Oceanic and Atmospheric Administration (NOAA).[4]

Figure H1. Total Demand, 1990-Current, Comparison in March for Petroleum Products



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

March 1999 and first quarter highlights include:

- **Demand** for finished motor gasoline **set a record high average not only for the month but for the first three months as well**, averaging 8.3 million barrels per day and 8.0 million barrels per day, respectively. **Production** of finished motor gasoline set both a March record high at 7.7 million barrels per day and first quarter record high at 7.8 million barrels per day. **Stocks** ended the month totaling 166.6 million barrels, the highest level to end the month since 1995.

- Distillate fuel oil **demand** reached **the highest average for this time of year since the record was set in 1978**. For the first quarter, distillate fuel oil demand has been at its highest average since 1979 at 3.7 million barrels per day. Distillate fuel oil **production** was down for both the first three months and March compared to last year. **Stocks** of 124.1 million barrels were slightly below the end of March last year.

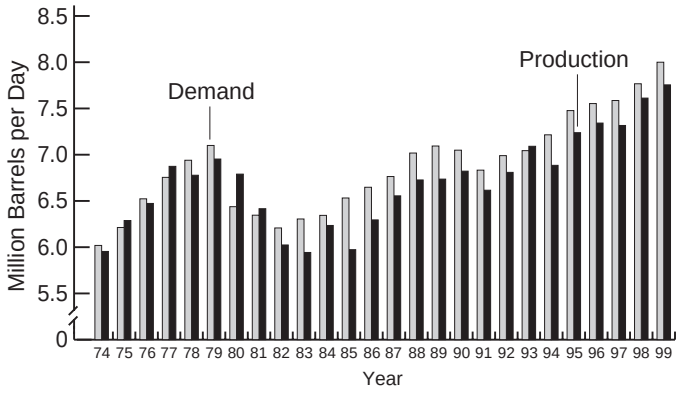
- Residual fuel oil **demand** reached the highest average for the month since 1994 at 855 thousand barrels per day. End-of-month residual fuel oil **stocks** came to 37.9 million barrels, the lowest level for March since 1996.

- **Demand** for kerosene-type jet fuel **set a record high** during March average at 1.7 million barrels per day. Year-to-date, demand for kerosene-type jet fuel is at a record pace. **Production** of kerosene-type jet fuel averaged 1.5 million barrels per day for March and 1.6 million barrels per day since the beginning of the year, **both records** for comparable periods.

- U.S. propane inventories ended the month at 36.2 million barrels, **6.3 million barrels higher than last year and the highest total for March since 1987**.

- Domestic crude oil **production** averaged 5.9 million barrels per day for the month, **the lowest level for March since 1950**. Production of Alaskan crude oil has dropped to the lowest level for March in 22 years. Year-to-date crude oil production is also down for both domestic and Alaskan crude. Crude oil **imports** set **a new March record** at 8.6 million barrels, significantly above the prior high for the month. Year-to-date imports of crude oil are up 5.6 percent from the prior record high, and net imports are up 6.6 percent. **Stocks** of crude oil, excluding the Strategic Petroleum Reserve (SPR), ended the month at 343.1 million barrels.

Figure H2. Finished Motor Gasoline, Year-to-Date March Comparisons, 1974-1999



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

[1]"10 Years Later, Case Is Hardly Closed, Exxon's PR mess still isn't cleaned up", *USA TODAY*, March 4, 1999, section 1B & 2B.
[2]"Advance Monthly Retail Sales March 1999", *Department of Commerce*, April 13, 1999, accessible via the Internet at http://www.census.gov/svsd/www/retail.html.
[3]March 1999 data are monthly-from-weekly estimates based on the Energy Information Administration's Weekly Petroleum Supply Reporting System.
[4]"Heating Degree Day Data Monthly Summary, Monthly Data for March 1999", *National Oceanic and Atmospheric Administration*, accessible via the Internet at http://nic.fb4.noaa.gov.

Table H1. Petroleum Supply Summary

(Million Barrels per Day, Except Where Noted)

Category	1999			1998	January - March	
	Estimated March	February	Difference[a]	March	1999	1998
Products Supplied	18.9	19.2	-0.4	18.4	19.0	18.3
Finished Motor Gasoline	8.3	8.1	0.2	8.0	8.0	7.8
Distillate Fuel Oil	3.7	3.6	0.1	3.6	3.7	3.6
Residual Fuel Oil	0.9	1.0	-0.1	0.7	0.9	0.8
Jet Fuel	1.7	1.7	-0.1	1.5	1.7	1.6
Other Petroleum Products[b]	4.3	4.8	-0.5	4.6	4.7	4.6
Crude Oil Inputs	14.4	14.4	(s)	14.6	14.4	14.3
Operating Utilization Rate (%)	92.0	92.3	-0.3	95.5	92.3	94.1
Imports	10.4	10.3	(s)	9.7	10.3	9.7
Crude Oil	8.6	8.4	0.2	8.0	8.4	8.0
Strategic Petroleum Reserve	0.0	0.0	0.0	0.0	0.0	0.0
Other	8.6	8.4	0.2	8.0	8.4	8.0
Products	1.8	1.9	-0.2	1.7	1.9	1.7
Finished Motor Gasoline	0.3	0.3	(s)	0.3	0.3	0.3
Distillate Fuel Oil	0.3	0.3	(s)	0.2	0.3	0.2
Residual Fuel Oil	0.2	0.2	(s)	0.2	0.2	0.2
Jet Fuel	0.1	0.2	-0.1	0.1	0.1	0.1
Other Petroleum Products[c]	0.9	1.0	-0.1	0.9	0.9	1.0
Exports	1.0	0.8	0.2	0.9	0.9	1.0
Crude Oil	0.1	0.1	(s)	0.1	0.1	0.2
Products	0.8	0.6	0.2	0.8	0.8	0.8
Total Net Imports	9.4	9.6	-0.1	8.8	9.4	8.7
Stock Change[d]	-0.3	-0.5	0.2	0.5	-0.4	0.3
Crude Oil	0.3	(s)	0.3	0.5	0.1	0.4
Products	-0.7	-0.5	-0.1	0.1	-0.5	-0.1
Total Stocks (million barrels)	1,608	1,625	-17	1,588	—	—
Crude Oil	915	897	18	900	—	—
Strategic Petroleum Reserve[e]	572	572	(s)	563	—	—
Other	343	325	18	336	—	—
Products	693	728	-35	689	—	—
Finished Motor Gasoline	167	178	-12	166	—	—
Distillate Fuel Oil	124	142	-18	124	—	—
Residual Fuel Oil	38	42	-4	41	—	—
Jet Fuel	42	45	-3	43	—	—
Other Petroleum Products[c]	322	320	2	314	—	—

[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.

[e] Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.

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

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

Source: Energy Information Administration (EIA), 1997, *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 October 1998*, Petroleum Supply Monthly.*

Table H2. U.S. Refinery Inputs, Capacities[1] and Utilization Rates: 1998-1999
(Thousand Barrels per Day, Except Where Noted)

Item	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1998												
Gross Refinery Inputs	14,655	14,340	14,851	15,170	15,305	15,651	15,704	15,806	15,041	14,241	15,089	15,168
Operating Refinery Capacity[2]	15,538	15,555	15,547	15,587	15,617	15,687	15,695	15,689	15,703	15,346	15,481	15,797
Idle Capacity[3]	167	158	184	144	144	135	135	143	129	537	449	154
Idle Three Months or Less	41	20	46	0	0	0	0	14	0	420	369	37
Idle More than Three Months	127	138	138	144	144	135	135	129	129	117	80	117
Operable Refinery Capacity	15,705	15,713	15,732	15,732	15,761	15,822	15,830	15,832	15,832	15,883	15,930	15,951
Utilization Rate (percent)												
Operating Capacity	94.3	92.2	95.5	97.3	98.0	99.8	100.1	100.7	95.8	92.8	97.5	96.0
Operable Capacity	93.3	91.3	94.4	96.4	97.1	98.9	99.2	99.8	95.0	89.7	94.7	95.1
1999												
Gross Refinery Inputs	14,762	14,719										
Operating Refinery Capacity[2]	15,953	15,955										
Idle Capacity[3]	200	227										
Idle Three Months or Less	71	98										
Idle More than Three Months	129	129										
Operable Refinery Capacity	16,153	16,181										
Utilization Rate (percent)												
Operating Capacity	92.5	92.3										
Operable Capacity	91.4	91.0										

[1]Capacities are on a calendar day basis.
[2]Operating capacity equals the operable capacity less the total idle capacity.
[3] Idle capacity is the component of operable capacity that is not in operation and not under active repair, but is capable of being placed in operation within 30 days; and capacity not in operation but is under active repair that can be completed within 90 days.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Energy Information Administration (EIA), 1997, *Petroleum Supply Annual*, Volume 2, Table 16; EIA, *Petroleum Supply Monthly,* 1998 data issue, Table 28.

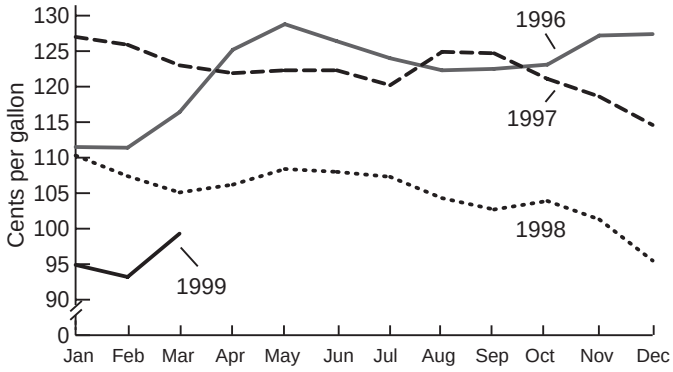
Motor Gasoline

Demand for gasoline continues to grow as drivers in the U.S. opt for less fuel efficient vehicles such as the popular sport utility vehicles (SUV's). The increasing popularity of SUV's and other less fuel efficient vehicles has caused a decline in the U.S.'s new car and light truck fleets' fuel efficiency which is not even expected to get back to the 1996 level until the year 2005.[5] **Demand** for finished motor gasoline **set a March record high** at an average of 8.3 million barrels per day. For the year, demand for finished motor gasoline has averaged 8.0 million barrels per day, **a first quarter record** (Figure H2). The retail price for conventional motor gasoline averaged $0.99 a gallon (including taxes), about six cents per gallon cheaper than this time last year (Figure H3). While retail prices for conventional motor gasoline remain below those of the last few years, prices in California have risen dramatically. California gasoline prices have increased due to several factors: OPEC's decision to rein in output, refinery problems at plants operated by Arco, Chevron, Exxon, and Tosco which supply the state with cleaner burning reformulated gasoline, and lower reformulated gasoline stocks than this time last year.[6] **Production** of finished motor gasoline has **set record highs for both the month and the first quarter** at averages of 7.7 million barrels per day and 7.8 million barrels per day, respectively. Finished motor gasoline **imports** were robust in March, at 326 thousand barrels per day. Due to the favorable price differences between the U.S. and abroad, cargoes of gasoline have been making their way to the U.S.[7] Imports of finished motor gasoline since January have averaged 320 thousand barrels per day, the highest average for this time of year since 1997.

Total **stocks** of finished motor gasoline ended the month at their highest level for this time of year since 1995 totaling 166.6 million barrels. Of that total, reformulated motor gasoline stocks in PAD District 5 ended the month at 9.6 million barrels. While the RFG total in PAD District 5 was down 12 percent from last year, stocks did end the month higher than March 1997.

[5]"Clean-Car Threat To Gasoline Stirs Oil Firms", *Petroleum Intelligence Weekly*, April 5, 1999, p. 1 & 2.
[6]"Drivers' Patience Hits Empty as Gas Prices Soar", *Los Angeles Times*, April 3, 1999, accessible via the Internet at http://www.latimes.com.
[7]"US West Coast attracts 'at least 11' gasoline cargoes over next 30 days; many from Asia", *Platt's Oilgram Price Report*, March 16, 1999, p. 1.

Figure H3. Prices for Conventional Motor Gasoline 1996-current

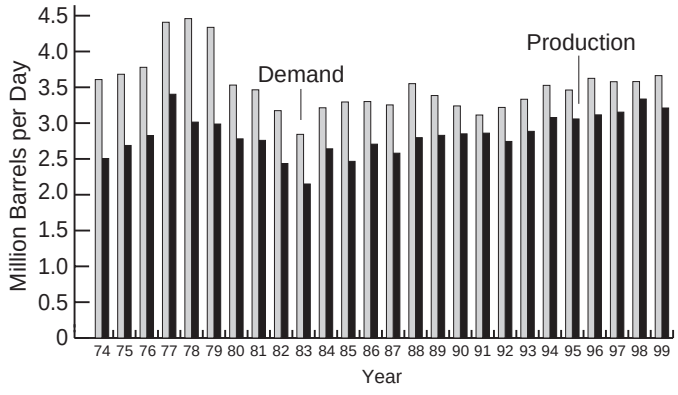


Source: Energy Information Administration, *Weekly Petroleum Status Report,* DOE/EIA-0208 (various issues).

Distillate Fuel Oil

Distillate fuel oil **demand** reached near record March levels at an average of 3.7 million barrels per day, the highest level for the month since the record was set in 1978. Over the last three months, demand for distillate has averaged a robust 3.7 million barrels per day, the highest average for a first quarter since 1979 (Figure H4). **Production** of distillates during the month declined to 3.2 million barrels per day, the lowest level for this time of year since 1996. Compared to the first quarter of 1998, distillate production is down slightly to an average of 3.2 million barrels per day. **Imports** of distillate fuel oil reached the highest level for the month in three years at 252 thousand barrels per day. So far this year, imports are averaging 268 thousand barrels per day, the highest level since 1990. End-of-month **stocks** totaled 124.1 million barrels which were only slightly below March of last year.

Figure H4. Distillate, Year-to-Date March Comparisons, 1974-1999

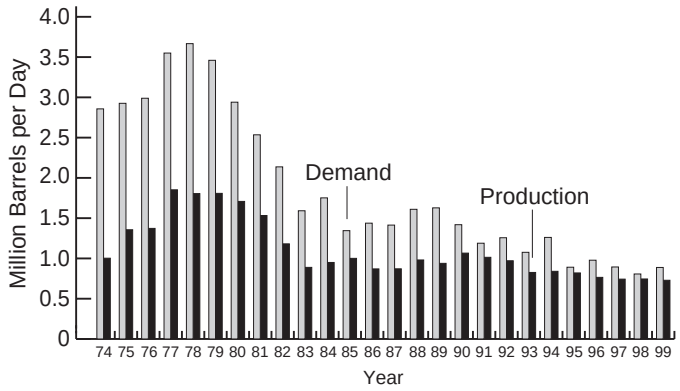


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Residual Fuel Oil

Residual fuel oil's recent turnaround continued in March. Weak petroleum prices compared to natural gas have given electric utilities incentive to burn the heavy fuel along with the deregulation of these utilities which has allowed them to operate differently thereby increasing demand.[8] **Demand** for residual fuel oil during the month averaged 855 thousand barrels per day, the highest average for the month since 1994. This year, demand for residual fuel oil is up 81 thousand barrels per day compared to last year's first quarter (Figure H5). **Production** of residual fuel oil averaged 664 thousand barrels per day during the month, a decline from last year's level. For the first three months of the year, residual fuel oil production averaged 728 thousand barrels per day. Residual fuel oil **imports** averaged 224 thousand barrels per day for the month and 213 thousand barrels per day year-to-date, both increases over this time last year. **Stocks** ended the month totaling 37.9 million barrels, the lowest March month end total since 1996.

Figure H5. Residual, Year-to-Date March Comparisons, 1974-1999



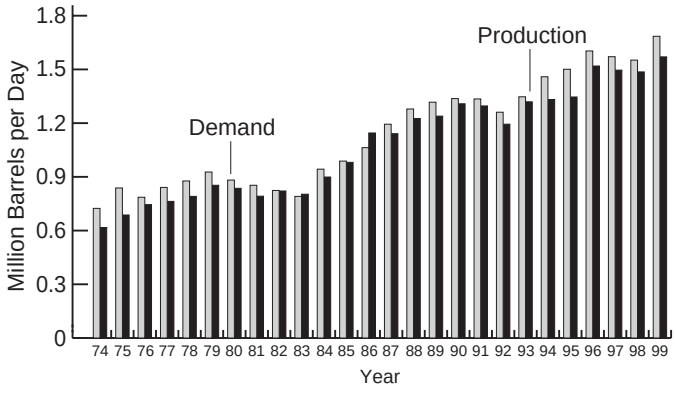
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Kerosene-Type Jet Fuel

Kerosene-type jet fuel **demand** set **a March record high** at an average of 1.7 million barrels per day. For the first quarter, demand for kerosene-type jet fuel is up 8.5 percent compared to the record for this time last year (Figure H6). Data from the Air Transport Association on domestic available seat miles (one seat flown one mile) reflect growth of nearly 2 percent for the first quarter and an increase of 3.6 percent for the month, suggesting increased fuel usage this year.[9] **Production** of kerosene-type jet fuel **set record high averages for March, as well as for the first quarter** at 1.5 million barrels per day and 1.6 million barrels per day, respectively. **Imports** of jet fuel, both kerosene and naphtha-type, were normal for this time of year at an average of 92 thousand barrels per day. Since the beginning of the year, total jet fuel imports have averaged 117 thousand barrels per day. **Stocks** of kerosene-type jet fuel ended the month totaling 42.1 million barrels, down slightly from last year's record high for the month.

[8]"Residual fuel oil: The fuel of the future", *Platt's Oilgram Price Report*, March 12, 1999, p. 10.
[9]"Preliminary Scheduled Passenger Traffic Statistics*", *Air Transport Association,* accessible via the Internet at http://www.air-transport.org/.

Figure H6. Kerojet, Year-to-Date March Comparisons, 1974-1999



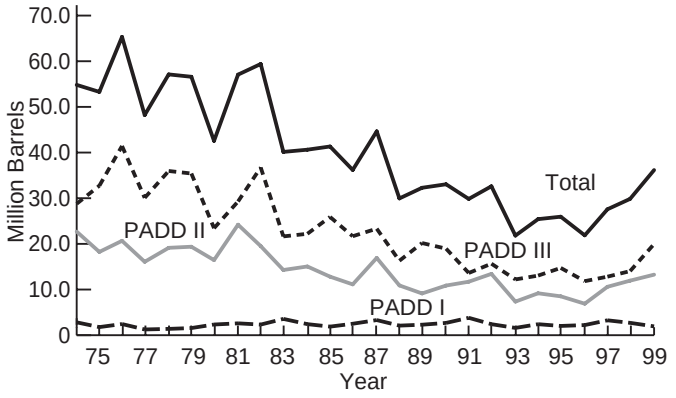
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Propane

U.S. propane inventories ended the month totaling 36.2 million barrels per day, the highest level to end the month since 1987 (Figure H7). U.S. inventories of propane ended the month well above normal for this time of year in all regions except the East Coast which ended the month slightly below normal. The Gulf Coast ended the month totaling 19.7 million barrels, a draw of 2.6 million barrels during the month. Midwest inventories declined 3.1 million barrels to end the month at 13.3 million barrels. Propane inventories along the East Coast declined 1.1 million barrels to end the month totaling 1.9 million barrels.

The record decline in March inventories can be partly attributed to the weather which was nearly 5 percent cooler than normal, particularly along the East Coast and in the Midwest regions.

Figure H7. Propane Stocks, Year-to-Year March Comparisons, 1974-1999



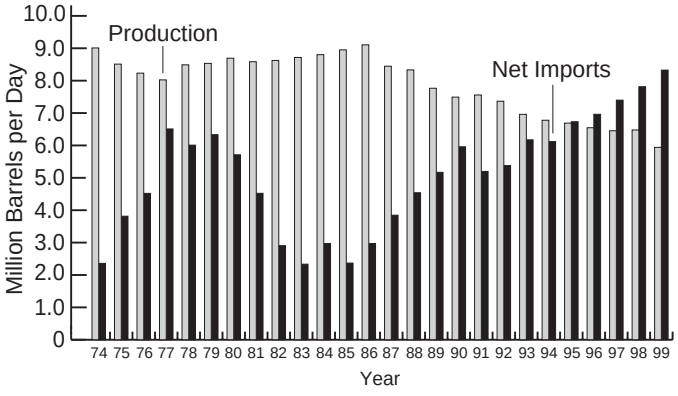
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Crude Oil

Domestic crude oil production remained below 6 million barrels per day for the fourth month in a row. Domestic crude oil **production** averaged 5.9 million barrels per day, the **lowest average for the month in 49 years**. Depressed crude oil prices have been too much to bear for some of the U.S.'s crude oil producers as filings for bankruptcies are up and crude oil wells are shut-in.[10] For the year, domestic crude oil production is down 7.9 percent compared to the first quarter last year (Figure H8). Field production in Alaska is down, dropping to an average of 1.1 million barrels per day for both March and the first quarter. **Imports** of crude oil set a record high for this time of year at an average of 8.6 million barrels per day, **an increase of 7.7 percent from the prior March high**. Year-to-date imports of crude oil set a record for the first quarter at an average of 8.4 million barrels per day, up 5.6 percent from the prior record. This year, the basket price of OPEC's seven crude oils has dropped below that of the fourth quarter in 1998, making imports very appealing.[11] One measure of reliance on foreign crude oil, net imports, set a record for the month at an average of 8.5 million barrels per day. Since the beginning of the year, net imports of crude oil have averaged 8.3 million barrels per day or an **increase of 6.6 percent from the prior first quarter record**.

Stocks of crude oil excluding the SPR ended the month totaling 343.1 million barrels, 6.7 million barrels higher than this time last year. Total crude oil stocks, including non-U.S. stocks held under foreign or commercial storage agreements, totaled 915.1 million barrels by month's end.

Figure H8. Crude Oil, Year-to-Date March Comparisons for Production and Net Imports, 1974-1999



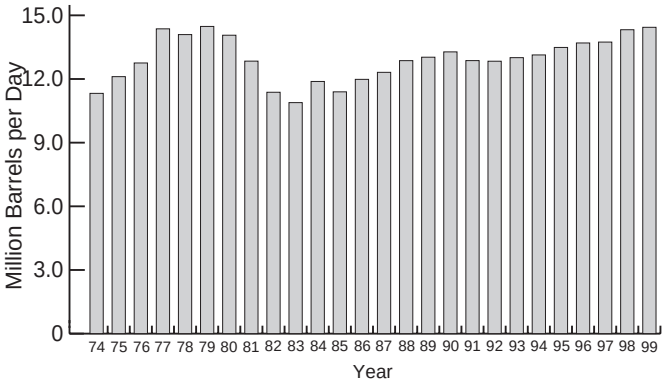
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

[10]"US Producers Go Broke On Marginal Wells", *Petroleum Intelligence Weekly*, March 15, 1999, p. 3 & 4.
[11]"OPEC weekly basket rises 90 cts/bbl", *Platt's Oilgram Price Report*, March 31, 1999, p. 9.

Refinery Operations

Crude oil **inputs** averaged 14.4 million barrels per day, about 200 thousand barrels per day below the record high for the month. Over the first three months of the year crude oil inputs have been at a near record pace averaging 14.4 million barrels per day (Figure H9). The estimated refinery **operable utilization rate** (gross input divided by operable capacity) averaged 91.2 percent versus 94.4 percent last year.

Figure H9. Year-to-Date March Comparisons for Crude Oil Inputs, 1974-1999



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

Table S1. Crude Oil and Petroleum Products Overview, 1984 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Field Production			Stock Change[a]			Ending Stocks[b] (Million Barrels)
	Total Domestic[c]	Crude Oil	Natural Gas Plant Liquids	Crude Oil[d]	Petroleum Products	Petroleum Products Supplied	Crude Oil[d] and Petroleum Products
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 Average	**8,626**	**6,560**	**1,762**	**-93**	**-153**	**17,725**	[g] **1,563**
1996 Average	**8,607**	**6,465**	**1,830**	**-124**	**-28**	**18,309**	[g] **1,507**
1997 January	8,470	6,402	1,782	462	-679	18,554	1,501
February	8,708	6,514	1,867	-122	-557	18,398	1,482
March	8,646	6,452	1,876	520	444	17,863	1,512
April	8,604	6,441	1,824	197	4	18,559	1,518
May	8,633	6,474	1,822	230	1,172	18,293	1,561
June	8,610	6,442	1,827	-199	658	18,617	1,575
July	8,608	6,409	1,821	-343	-167	19,107	1,559
August	8,535	6,347	1,831	-283	643	18,565	1,570
September	8,679	6,486	1,845	95	642	18,562	1,592
October	8,624	6,467	1,813	393	-214	19,071	1,598
November	8,565	6,459	1,728	252	-195	18,578	1,600
December	8,662	6,531	1,773	-608	-675	19,250	1,560
Average	**8,611**	**6,452**	**1,817**	**51**	**93**	**18,620**	**—**
1998 January	[E] 8,721	[E] 6,515	1,826	522	-64	18,256	1,576
February	[E] 8,670	[E] 6,449	1,870	49	-169	18,322	1,572
March	[E] 8,542	[E] 6,399	1,846	457	59	18,393	1,588
April	[E] 8,655	[E] 6,483	1,859	492	358	18,624	1,614
May	[E] 8,494	[E] 6,363	1,808	47	1,247	17,876	1,654
June	[E] 8,428	[E] 6,252	1,734	-656	642	18,818	1,654
July	[E] 8,166	[E] 6,193	1,580	200	152	19,140	1,665
August	[E] 8,285	[E] 6,193	1,713	-293	517	19,108	1,672
September	[E] 8,003	[E] 5,918	1,716	-685	49	18,837	1,653
October	[E] 8,264	[E] 6,152	1,736	788	-752	19,086	1,654
November	[E] 8,219	[E] 6,072	1,759	293	391	18,515	1,674
December	[E] 7,947	[E] 5,938	1,604	-380	-493	19,198	1,647
Average	[E] **8,364**	[E] **6,243**	**1,753**	**72**	**162**	**18,684**	**—**
1999 January	[E] 7,974	[E] 5,954	1,656	67	-321	18,850	1,639
February	[RE] 8,109	[RE] 5,984	[R] 1,722	[R] 31	[R] -521	[R] 19,240	[R] 1,625
March*	[E] *7,897*	[PE] *5,888*	[E] *1,603*	[E] *335*	[E] *-667*	[E] *18,851*	[E] *1,608*
3-Mo. Average	[E] **7,990**	[PE] **5,941**	[E] **1,658**	[E] **148**	[E] **-502**	[E] **18,972**	**—**
1998 3-Mo. Average	[E] **8,644**	[E] **6,451**	**1,847**	**353**	**-54**	**18,324**	**—**
1997 3-Mo. Average	**8,605**	**6,454**	**1,841**	**300**	**-254**	**18,267**	**—**

[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, 1984 - 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	
1984 Average	**5,437**	**3,426**	**2,011**	**722**	**181**	**541**	**4,715**
1985 Average	**5,437**	**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 Average	**8,835**	**7,230**	**1,605**	**949**	**95**	**855**	**7,886**
1996 Average	**9,478**	**7,508**	**1,971**	**981**	**110**	**871**	**8,498**
1997 January	9,763	7,492	2,271	1,038	141	897	8,725
February	9,561	7,434	2,127	1,017	229	787	8,544
March	9,833	7,754	2,079	933	136	796	8,900
April	10,114	7,987	2,127	937	92	845	9,177
May	10,818	8,653	2,165	876	26	851	9,941
June	10,736	8,759	1,978	955	57	898	9,782
July	10,008	8,178	1,830	1,012	70	942	8,996
August	10,465	8,621	1,844	1,074	110	964	9,390
September	10,537	8,840	1,697	997	122	875	9,540
October	10,792	8,927	1,865	1,066	152	914	9,726
November	9,948	8,366	1,582	934	32	901	9,014
December	9,328	7,653	1,675	1,197	131	1,066	8,130
Average	**10,162**	**8,225**	**1,936**	**1,003**	**108**	**896**	**9,158**
1998 January	9,893	8,185	1,708	1,083	231	852	8,811
February	9,577	7,770	1,807	957	197	760	8,620
March	9,694	7,989	1,705	919	99	820	8,775
April	10,398	8,523	1,874	1,029	163	866	9,369
May	10,903	8,957	1,945	1,027	144	883	9,876
June	10,702	8,725	1,977	987	63	924	9,715
July	11,151	9,309	1,842	998	104	894	10,152
August	10,829	9,143	1,686	780	51	729	10,049
September	10,288	8,392	1,896	863	34	828	9,426
October	10,531	8,457	2,073	851	87	763	9,680
November	10,574	8,821	1,752	782	60	721	9,792
December	9,983	8,262	1,721	893	90	803	9,091
Average	**10,382**	**8,550**	**1,832**	**931**	**110**	**821**	**9,452**
1999 January	10,181	8,308	1,873	896	107	788	9,285
February	R 10,336	R 8,387	R 1,949	R 756	R 119	R 636	R 9,580
March*	E *10,385*	E *8,607*	E *1,778*	E *953*	E *104*	E *849*	E *9,432*
3-Mo. Average	E **10,299**	E **8,436**	E **1,864**	E **872**	E **110**	E **762**	E **9,427**
1998 3-Mo. Average	**9,726**	**7,989**	**1,738**	**987**	**175**	**812**	**8,739**
1997 3-Mo. Average	**9,724**	**7,564**	**2,160**	**995**	**167**	**828**	**8,729**

Footnotes continued.

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

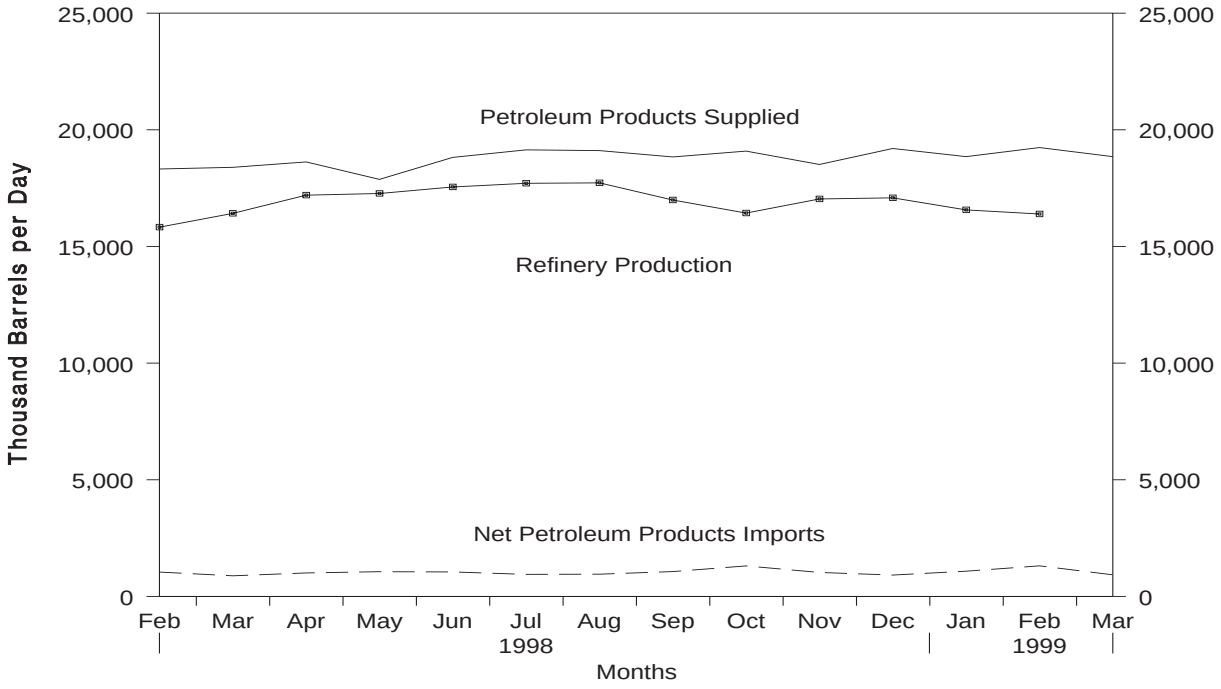
— = Not Applicable.

* 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.

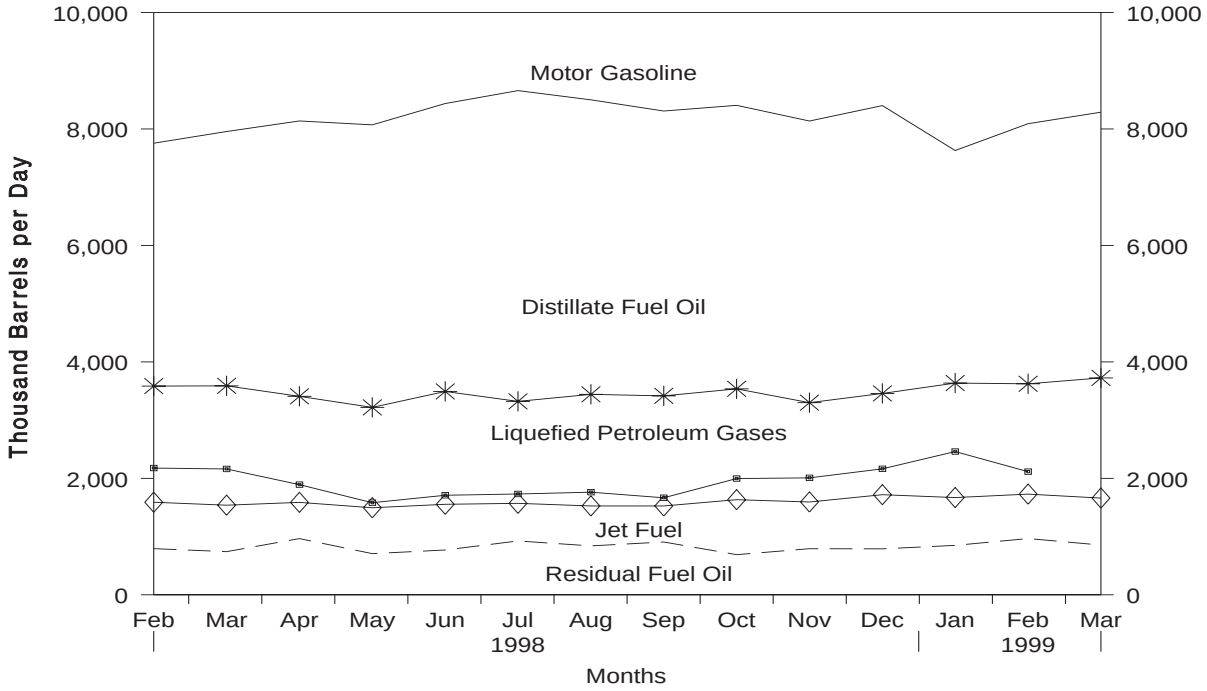
Source: See Summary Statistics Table and Figure Sources.

Figure S1. Petroleum Overview, February 1998 - Present



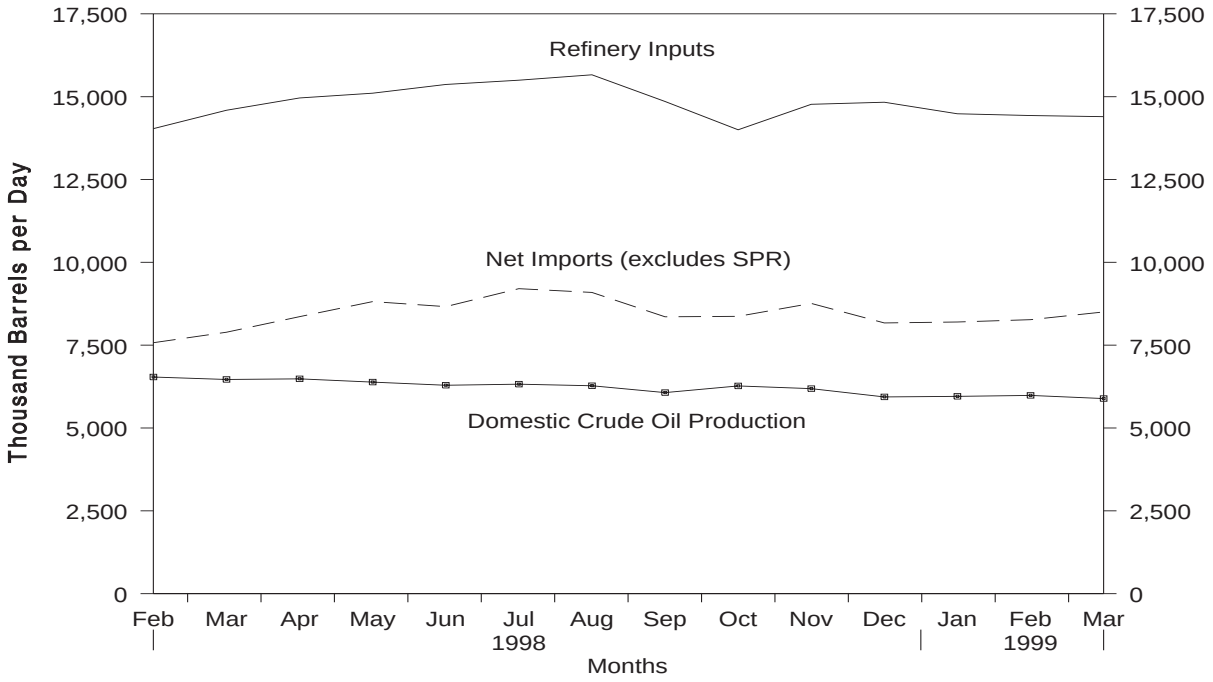
Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S1. See Summary Statistics Table and Figure Sources.

Figure S2. Petroleum Products Supplied, February 1998 - Present



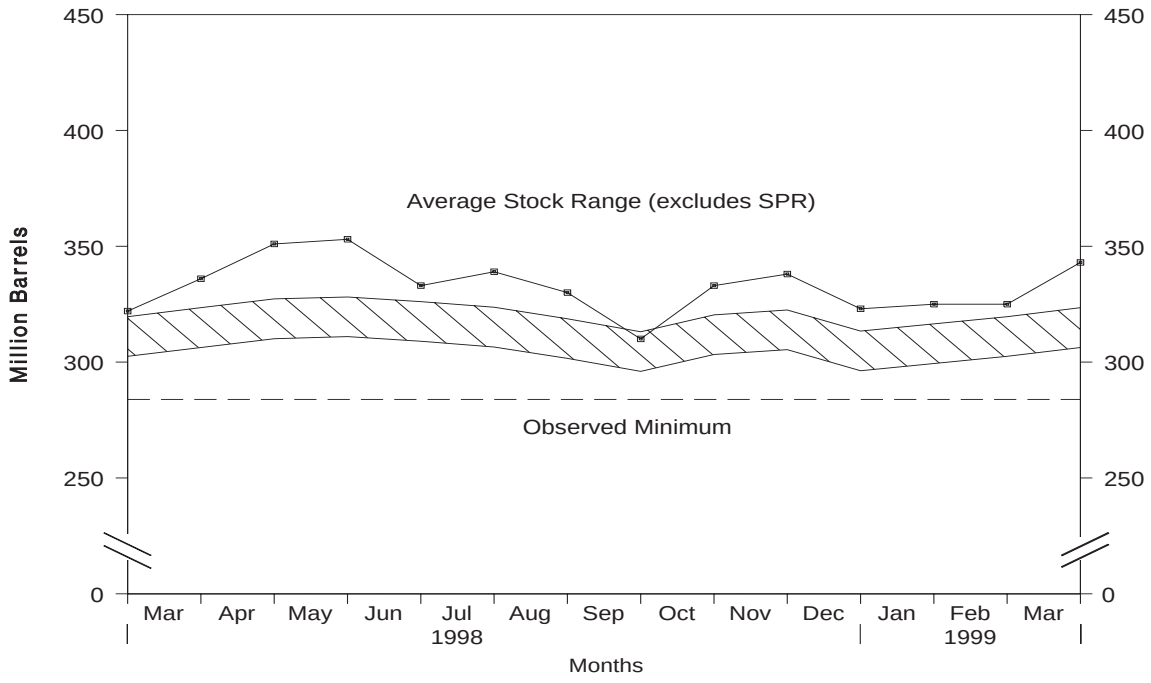
Source: Energy Information Administration, *Petroleum Supply Monthly*, Tables S4-S7, and S9. See Summary Statistics Table and Figure Sources.

Figure S3. Crude Oil Supply and Disposition, February 1998 - Present



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

Figure S4. Crude Oil Ending Stocks,[1] February 1998 - Present



[1]Excludes stocks held in the Strategic Petroleum Reserve (SPR).
Note: The Observed Minimum for crude oil stocks in the last 36-month period was 283.9 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, 1984 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply						Disposition
	Field Production		Imports			Unaccounted for Crude Oil[a]	Crude Losses
	Total Domestic	Alaskan	Total	SPR	Other		
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 Average	**6,560**	**1,484**	**7,230**	**0**	**7,230**	**193**	**(s)**
1996 Average	**6,465**	**1,393**	**7,508**	**0**	**7,508**	**215**	**(s)**
1997 January	6,402	1,380	7,492	0	7,492	378	0
February	6,514	1,384	7,434	0	7,434	-350	0
March	6,452	1,331	7,754	0	7,754	501	0
April	6,441	1,330	7,987	0	7,987	167	0
May	6,474	1,303	8,653	0	8,653	257	0
June	6,442	1,260	8,759	0	8,759	-170	0
July	6,409	1,238	8,178	0	8,178	136	0
August	6,347	1,200	8,621	0	8,621	130	0
September	6,486	1,276	8,840	0	8,840	199	0
October	6,467	1,286	8,927	0	8,927	5	0
November	6,459	1,278	8,366	0	8,366	164	0
December	6,531	1,290	7,653	0	7,653	267	0
Average	**6,452**	**1,296**	**8,225**	**0**	**8,225**	**145**	**0**
1998 January	E 6,515	E 1,229	8,185	0	8,185	364	0
February	E 6,449	E 1,238	7,770	0	7,770	62	0
March	E 6,399	E 1,221	7,989	0	7,989	758	0
April	E 6,483	E 1,200	8,523	0	8,523	610	0
May	E 6,363	E 1,173	8,957	0	8,957	-25	0
June	E 6,252	E 1,135	8,725	0	8,725	-202	0
July	E 6,193	E 1,155	9,309	0	9,309	299	(s)
August	E 6,193	E 1,133	9,143	0	9,143	83	0
September	E 5,918	E 1,093	8,392	0	8,392	-106	0
October	E 6,152	E 1,197	8,457	0	8,457	267	(s)
November	E 6,072	E 1,168	8,821	0	8,821	230	0
December	E 5,938	E 1,160	8,262	0	8,262	341	0
Average	E **6,243**	E **1,175**	**8,550**	**0**	**8,550**	**226**	**(s)**
1999 January	E 5,954	E 1,164	8,308	0	8,308	396	0
February	RE 5,984	RE 1,104	R 8,387	0	R 8,387	R 209	R (s)
March*	PE *5,888*	PE *1,135*	E *8,607*	E *0*	E *8,607*	E *339*	E *0*
3-Mo. Average	PE **5,941**	PE **1,135**	E **8,436**	E **0**	E **8,436**	E **318**	E **(s)**
1998 3-Mo. Average	E **6,451**	E **1,229**	**7,989**	**0**	**7,989**	**382**	**0**
1997 3-Mo. Average	**6,454**	**1,364**	**7,564**	**0**	**7,564**	**194**	**0**

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 thousand 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.

c Stocks are totals as of end of period.

d Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.

e Previously published as crude used directly.

f 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, 1984 - Present (Continued)
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Disposition					Ending Stocks[c] (Million Barrels)		
	Stock Change[b]		Refinery Inputs	Exports	Product Supplied	Total	SPR[d]	Other Primary
	SPR[d]	Other						
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 Average	**(s)**	**-93**	**13,973**	**95**	**7**	**895**	**592**	**303**
1996 Average	**-71**	**-53**	**14,195**	**110**	**6**	**850**	**566**	**284**
1997 January	-75	537	13,664	141	5	864	563	301
February	(s)	-121	13,485	229	6	861	563	297
March	(s)	520	14,047	136	5	877	563	313
April	(s)	197	14,303	92	3	883	563	319
May	(s)	230	15,123	26	4	890	563	326
June	(s)	-199	15,170	57	2	884	563	320
July	(s)	-343	14,994	70	2	873	563	310
August	(s)	-283	15,271	110	(s)	864	563	301
September	(s)	95	15,308	122	(s)	867	563	304
October	(s)	393	14,854	152	0	879	563	316
November	(s)	252	14,706	32	0	887	563	324
December	(s)	-607	14,928	131	0	868	563	305
Average	**-7**	**57**	**14,662**	**108**	**2**	**—**	**—**	**—**
1998 January	(s)	522	14,313	231	0	884	563	321
February	(s)	50	14,034	197	0	886	563	322
March	0	457	14,590	99	0	900	563	336
April	0	492	14,961	163	0	915	563	351
May	(s)	47	15,104	144	0	916	563	353
June	(s)	-656	15,368	63	0	896	563	333
July	(s)	201	15,496	104	0	903	563	339
August	0	-293	15,660	51	0	894	563	330
September	0	-685	14,854	34	0	873	563	310
October	19	769	14,001	87	0	897	564	333
November	150	143	14,769	60	0	906	569	338
December	93	-473	14,832	90	0	894	571	323
Average	**22**	**50**	**14,837**	**110**	**0**	**—**	**—**	**—**
1999 January	18	49	14,483	107	0	897	572	325
February	R (s)	R 31	R 14,430	R 119	0	R 897	572	R 325
March*	E *0*	E *335*	E *14,395*	E *104*	E *0*	E *915*	E *572*	E *343*
3-Mo. Average	E **6**	E **142**	E **14,436**	E **110**	E **0**	**—**	**—**	**—**
1998 3-Mo. Average	**(s)**	**353**	**14,322**	**175**	**0**	**—**	**—**	**—**
1997 3-Mo. Average	**-26**	**326**	**13,740**	**167**	**5**	**—**	**—**	**—**

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, 1984 - 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
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	**Average**	**234**	**27**	**0**	**0**	**218**	**213**	**0**	**0**
1996	**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	84	84	204	204	0	0
	May	290	0	102	102	128	128	0	0
	June	349	0	115	115	361	361	0	0
	July	291	0	88	88	331	331	0	0
	August	261	4	(s)	(s)	229	229	0	0
	September	259	6	0	0	322	322	0	0
	October	272	3	177	177	349	349	0	0
	November	267	7	220	220	220	220	0	0
	December	208	28	240	240	188	188	0	0
	Average	**285**	**6**	**89**	**89**	**253**	**253**	**0**	**0**
1998	January	306	9	36	36	194	194	0	0
	February	295	7	0	0	283	283	0	0
	March	244	13	127	127	307	307	0	0
	April	336	0	233	233	262	262	0	0
	May	330	16	137	137	399	399	0	0
	June	362	31	270	270	275	275	0	0
	July	308	26	277	277	435	435	0	0
	August	264	10	713	713	273	273	0	0
	September	306	7	517	517	259	259	0	0
	October	289	31	647	647	230	216	0	0
	November	219	22	542	542	224	224	0	0
	December	200	31	486	486	228	228	0	0
	Average	**288**	**17**	**334**	**334**	**281**	**280**	**0**	**0**
1999	January	240	20	471	471	132	132	0	0
	February	203	0	681	681	205	205	0	0
	2-Mo. Average	**222**	**10**	**570**	**570**	**167**	**167**	**0**	**0**
1998	**2-Mo. Average**	**301**	**8**	**19**	**19**	**236**	**236**	**0**	**0**
1997	**2-Mo. Average**	**300**	**0**	**0**	**0**	**191**	**191**	**0**	**0**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1984 - 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
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 Average	**0**	**0**	**1,344**	**1,260**	**10**	**5**	**1,806**	**1,505**
1996 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	2,197	1,720
May	0	0	1,475	1,333	0	0	1,996	1,564
June	0	0	1,299	1,174	6	0	2,130	1,650
July	0	0	1,313	1,188	14	0	2,037	1,607
August	0	0	1,636	1,516	0	0	2,127	1,750
September	0	0	1,599	1,511	0	0	2,180	1,839
October	16	0	1,377	1,282	0	0	2,191	1,812
November	0	0	1,308	1,257	0	0	2,015	1,704
December	15	0	1,311	1,192	0	0	1,962	1,649
Average	**4**	**0**	**1,407**	**1,293**	**2**	**0**	**2,040**	**1,641**
1998 January	0	0	1,500	1,422	0	0	2,035	1,660
February	18	18	1,415	1,305	0	0	2,011	1,614
March	0	0	1,508	1,359	13	13	2,199	1,819
April	0	0	1,470	1,305	20	20	2,322	1,821
May	0	0	1,352	1,273	0	0	2,218	1,824
June	15	0	1,631	1,550	0	0	2,554	2,126
July	15	0	1,609	1,575	0	0	2,644	2,313
August	0	0	1,500	1,468	0	0	2,750	2,463
September	0	0	1,606	1,532	0	0	2,689	2,315
October	0	0	1,283	1,195	0	0	2,450	2,089
November	0	0	1,386	1,323	0	0	2,371	2,111
December	0	0	1,402	1,326	0	0	2,316	2,071
Average	**4**	**1**	**1,472**	**1,386**	**3**	**3**	**2,382**	**2,021**
1999 January	0	0	1,511	1,410	0	0	2,354	2,032
February	0	0	1,510	1,437	0	0	2,599	2,324
2-Mo. Average	**0**	**0**	**1,511**	**1,423**	**0**	**0**	**2,470**	**2,170**
1998 2-Mo. Average	**9**	**9**	**1,459**	**1,367**	**0**	**0**	**2,024**	**1,638**
1997 2-Mo. Average	**0**	**0**	**1,352**	**1,252**	**0**	**0**	**1,843**	**1,443**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1984 - 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
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 Average	**(c)**	**(c)**	**(d)**	**(d)**	**88**	**64**	**0**	**0**
1996 Average	**(c)**	**(c)**	**(d)**	**(d)**	**59**	**44**	**0**	**0**
1997 January	(c)	(c)	(d)	(d)	55	38	0	0
February	(c)	(c)	(d)	(d)	51	39	0	0
March	(c)	(c)	(d)	(d)	18	15	0	0
April	(c)	(c)	(d)	(d)	40	32	0	0
May	(c)	(c)	(d)	(d)	86	86	0	0
June	(c)	(c)	(d)	(d)	57	50	0	0
July	(c)	(c)	(d)	(d)	73	66	0	0
August	(c)	(c)	(d)	(d)	24	21	0	0
September	(c)	(c)	(d)	(d)	90	83	0	0
October	(c)	(c)	(d)	(d)	42	42	0	0
November	(c)	(c)	(d)	(d)	79	74	0	0
December	(c)	(c)	(d)	(d)	84	68	0	0
Average	**(c)**	**(c)**	**(d)**	**(d)**	**58**	**51**	**0**	**0**
1998 January	(c)	(c)	(d)	(d)	36	33	0	0
February	(c)	(c)	(d)	(d)	24	24	0	0
March	(c)	(c)	(d)	(d)	50	47	0	0
April	(c)	(c)	(d)	(d)	44	26	0	0
May	(c)	(c)	(d)	(d)	21	21	0	0
June	(c)	(c)	(d)	(d)	0	0	0	0
July	(c)	(c)	(d)	(d)	96	84	0	0
August	(c)	(c)	(d)	(d)	59	41	0	0
September	(c)	(c)	(d)	(d)	73	54	0	0
October	(c)	(c)	(d)	(d)	84	71	0	0
November	(c)	(c)	(d)	(d)	165	138	0	0
December	(c)	(c)	(d)	(d)	34	34	0	0
Average	**(c)**	**(c)**	**(d)**	**(d)**	**57**	**48**	**0**	**0**
1999 January	(c)	(c)	(d)	(d)	80	75	0	0
February	(c)	(c)	(d)	(d)	66	66	0	0
2-Mo. Average	**(c)**	**(c)**	**(d)**	**(d)**	**74**	**71**	**0**	**0**
1998 2-Mo. Average	**(c)**	**(c)**	**(d)**	**(d)**	**30**	**29**	**0**	**0**
1997 2-Mo. Average	**(c)**	**(c)**	**(d)**	**(d)**	**53**	**38**	**0**	**0**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1984 - 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
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 Average	**627**	**621**	**1,480**	**1,151**	**2,196**	**1,835**	**4,002**	**3,341**
1996 Average	**617**	**595**	**1,676**	**1,303**	**2,353**	**1,942**	**4,211**	**3,438**
1997 January	548	522	1,641	1,215	2,243	1,775	4,078	3,237
February	625	620	1,601	1,262	2,278	1,920	4,130	3,341
March	542	541	1,769	1,348	2,329	1,904	4,279	3,410
April	756	747	1,695	1,319	2,491	2,098	4,688	3,818
May	992	975	1,927	1,449	3,005	2,510	5,001	4,073
June	919	919	1,893	1,508	2,869	2,478	4,999	4,128
July	580	571	1,738	1,418	2,391	2,055	4,429	3,662
August	882	866	1,794	1,394	2,700	2,280	4,827	4,030
September	769	769	1,822	1,478	2,680	2,329	4,860	4,168
October	688	675	1,991	1,605	2,722	2,323	4,913	4,134
November	649	649	1,689	1,418	2,416	2,141	4,431	3,845
December	423	423	1,699	1,304	2,205	1,795	4,168	3,444
Average	**698**	**689**	**1,773**	**1,394**	**2,529**	**2,134**	**4,569**	**3,775**
1998 January	613	608	1,600	1,333	2,250	1,974	4,285	3,634
February	544	544	1,699	1,328	2,267	1,896	4,278	3,510
March	812	812	1,657	1,316	2,519	2,175	4,718	3,994
April	772	772	1,626	1,334	2,443	2,132	4,765	3,953
May	899	892	1,902	1,549	2,822	2,463	5,040	4,287
June	771	755	1,565	1,326	2,336	2,081	4,890	4,207
July	873	871	1,728	1,415	2,697	2,371	5,341	4,684
August	736	726	1,683	1,349	2,478	2,116	5,227	4,579
September	502	496	1,484	1,199	2,058	1,749	4,747	4,064
October	633	626	1,901	1,503	2,618	2,199	5,068	4,289
November	574	545	1,682	1,349	2,422	2,031	4,793	4,143
December	490	483	1,651	1,271	2,176	1,788	4,492	3,859
Average	**686**	**679**	**1,683**	**1,357**	**2,426**	**2,084**	**4,808**	**4,105**
1999 January	687	686	1,615	1,222	2,382	1,983	4,736	4,015
February	687	661	1,710	1,290	2,463	2,017	5,062	4,341
2-Mo. Average	**687**	**674**	**1,660**	**1,255**	**2,420**	**1,999**	**4,891**	**4,170**
1998 2-Mo. Average	**580**	**578**	**1,647**	**1,331**	**2,258**	**1,937**	**4,282**	**3,575**
1997 2-Mo. Average	**585**	**568**	**1,622**	**1,237**	**2,260**	**1,844**	**4,103**	**3,287**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1984 - 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
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	**Average**	**367**	**360**	**16**	**16**	**2**	**0**	**8**	**0**	**1,332**	**1,040**	**53**	**53**
1996	**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	1,571	1,162	84	84
	February	422	422	0	0	13	0	0	0	1,605	1,155	65	65
	March	467	461	37	37	0	0	4	0	1,508	1,158	120	120
	April	435	422	22	22	0	0	0	0	1,454	1,063	46	46
	May	374	369	61	44	0	0	0	0	1,571	1,203	21	21
	June	480	480	23	23	0	0	20	0	1,546	1,184	44	44
	July	416	416	77	48	0	0	21	0	1,547	1,201	0	0
	August	323	323	91	60	0	0	4	0	1,630	1,275	42	42
	September	428	428	67	27	0	0	3	0	1,577	1,250	49	43
	October	537	537	92	53	0	0	6	0	1,503	1,175	48	47
	November	480	480	23	23	0	0	2	0	1,559	1,213	22	22
	December	286	286	59	14	0	0	0	0	1,689	1,333	45	45
	Average	**427**	**425**	**48**	**31**	**1**	**0**	**5**	**0**	**1,563**	**1,198**	**49**	**48**
1998	January	427	427	5	0	0	0	6	0	1,679	1,313	36	36
	February	417	417	48	48	0	0	0	0	1,717	1,382	41	41
	March	302	302	46	30	0	0	27	0	1,460	1,132	63	63
	April	452	452	62	14	0	0	11	0	1,546	1,239	36	36
	May	503	495	82	60	3	0	28	0	1,608	1,316	70	70
	June	399	399	77	33	0	0	45	0	1,683	1,404	81	81
	July	551	551	69	48	0	0	29	0	1,624	1,338	73	73
	August	422	422	42	21	0	0	28	0	1,555	1,248	57	57
	September	461	457	77	23	0	0	22	0	1,572	1,227	20	20
	October	470	457	71	30	0	0	29	0	1,551	1,202	24	24
	November	509	505	31	31	0	0	15	0	1,446	1,199	0	0
	December	463	459	57	36	0	0	11	0	1,483	1,184	0	0
	Average	**448**	**445**	**56**	**31**	**(s)**	**0**	**21**	**0**	**1,576**	**1,264**	**42**	**42**
1999	January	389	389	0	0	0	0	2	0	1,617	1,235	(s)	0
	February	349	333	73	49	0	0	6	0	1,355	1,082	1	0
	2-Mo. Average	**370**	**362**	**35**	**23**	**0**	**0**	**4**	**0**	**1,492**	**1,162**	**(s)**	**0**
1998	**2-Mo. Average**	**422**	**422**	**25**	**23**	**0**	**0**	**3**	**0**	**1,697**	**1,346**	**39**	**39**
1997	**2-Mo. Average**	**455**	**455**	**11**	**11**	**6**	**0**	**1**	**0**	**1,587**	**1,159**	**75**	**75**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1984 - 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
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	**Average**	**219**	**207**	**97**	**96**	**229**	**229**	**5**	**0**	**8**	**6**	**1,068**	**1,027**
1996	**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	1,324	1,280
	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	255	255	73	73	203	203	26	0	33	0	1,448	1,416
	May	272	266	109	104	210	210	9	0	9	0	1,429	1,408
	June	228	228	132	132	226	226	0	0	32	24	1,401	1,382
	July	235	225	122	122	335	335	0	0	28	0	1,366	1,347
	August	250	250	128	128	203	203	2	0	23	15	1,452	1,448
	September	289	289	143	143	271	271	0	0	37	29	1,410	1,395
	October	321	321	143	143	235	235	8	0	19	19	1,526	1,500
	November	322	322	91	91	256	256	0	0	8	0	1,460	1,453
	December	350	350	66	66	288	288	5	0	7	0	1,215	1,192
	Average	**271**	**270**	**115**	**114**	**230**	**230**	**7**	**0**	**23**	**8**	**1,385**	**1,360**
1998	January	281	281	77	77	264	264	26	0	17	11	1,467	1,438
	February	243	235	103	103	244	244	6	0	64	49	1,214	1,197
	March	261	261	75	75	312	312	12	0	10	10	1,235	1,220
	April	348	348	88	81	256	256	2	0	29	13	1,473	1,444
	May	394	385	114	105	194	194	35	0	63	55	1,377	1,359
	June	340	333	75	67	110	110	18	0	14	0	1,400	1,379
	July	229	229	89	89	197	197	8	0	46	38	1,398	1,372
	August	360	357	158	158	118	118	10	0	11	4	1,153	1,139
	September	306	305	107	96	202	202	0	0	16	0	1,417	1,367
	October	356	354	130	125	115	115	18	0	9	0	1,132	1,121
	November	352	352	134	134	220	220	0	0	25	16	1,379	1,322
	December	488	479	41	38	220	220	6	0	19	10	1,367	1,301
	Average	**330**	**327**	**99**	**96**	**204**	**204**	**12**	**0**	**27**	**17**	**1,335**	**1,305**
1999	January	445	440	66	66	163	163	0	0	28	13	1,308	1,237
	February	480	458	45	45	141	141	17	0	20	0	1,278	1,231
	2-Mo. Average	**462**	**448**	**56**	**56**	**153**	**153**	**8**	**0**	**24**	**7**	**1,294**	**1,234**
1998	**2-Mo. Average**	**263**	**259**	**89**	**89**	**254**	**254**	**16**	**0**	**39**	**29**	**1,347**	**1,324**
1997	**2-Mo. Average**	**237**	**237**	**111**	**108**	**157**	**157**	**17**	**0**	**20**	**4**	**1,302**	**1,262**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1984 - 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
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	**Average**	**15**	**0**	**52**	**0**	**273**	**258**	**15**	**0**	**25**	**14**	**16**	**1**
1996	**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	33	0	60	0	204	179	16	0	19	0	36	0
	March	40	0	102	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	388	366	21	0	0	0	23	0
	June	37	0	66	0	329	318	13	0	8	0	45	0
	July	5	0	61	0	386	360	24	0	9	0	6	0
	August	15	0	65	0	321	320	20	0	32	19	41	0
	September	54	0	71	0	285	265	14	0	0	0	21	0
	October	13	0	46	0	346	312	19	0	13	6	12	0
	November	28	0	33	0	316	276	23	0	21	7	19	0
	December	1	0	54	0	275	249	10	0	0	0	5	0
	Average	**25**	**0**	**74**	**0**	**309**	**288**	**16**	**0**	**13**	**3**	**21**	**0**
1998	January	6	0	87	0	217	208	18	0	0	0	15	0
	February	18	0	85	0	169	169	21	0	12	0	13	0
	March	5	0	90	32	210	198	5	0	3	0	0	0
	April	36	0	63	0	232	232	4	0	(s)	0	9	0
	May	27	0	55	0	196	172	18	0	0	0	14	0
	June	16	0	86	0	283	252	13	0	34	34	26	0
	July	59	0	24	0	318	311	21	0	69	69	34	0
	August	11	0	41	0	287	260	23	0	(s)	0	8	0
	September	26	0	58	0	201	162	12	0	34	0	16	0
	October	49	0	84	0	199	186	20	0	15	0	4	0
	November	53	0	124	0	262	252	12	0	51	0	21	0
	December	14	0	43	0	202	199	15	0	57	0	33	0
	Average	**26**	**0**	**70**	**3**	**232**	**217**	**15**	**0**	**23**	**9**	**16**	**0**
1999	January	37	0	94	0	216	179	18	0	11	0	4	0
	February	7	0	155	0	203	157	0	0	28	0	3	0
	2-Mo. Average	**23**	**0**	**123**	**0**	**210**	**169**	**9**	**0**	**19**	**0**	**3**	**0**
1998	**2-Mo. Average**	**11**	**0**	**86**	**0**	**194**	**189**	**19**	**0**	**6**	**0**	**14**	**0**
1997	**2-Mo. Average**	**36**	**0**	**78**	**0**	**225**	**206**	**17**	**0**	**20**	**0**	**34**	**0**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1984 - Present (Continued)

(Thousand Barrels per Day)

Year/Month	Imports from Non-OPEC Sources[a]										Total Imports	
	Trinadad 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
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 Average	**70**	**62**	**383**	**341**	**278**	**0**	**302**	**181**	**4,833**	**3,889**	**8,835**	**7,230**
1996 Average	**76**	**58**	**308**	**216**	**313**	**0**	**440**	**265**	**5,267**	**4,070**	**9,478**	**7,508**
1997 January	74	55	400	333	335	0	502	210	5,685	4,255	9,763	7,492
February	69	61	236	172	341	0	380	170	5,431	4,093	9,561	7,434
March	56	55	236	161	254	0	437	206	5,554	4,344	9,833	7,754
April	69	62	159	70	321	0	401	242	5,426	4,169	10,114	7,987
May	70	66	261	181	300	0	558	341	5,817	4,579	10,818	8,653
June	55	55	372	311	300	0	380	225	5,737	4,631	10,736	8,759
July	62	54	198	165	310	0	370	243	5,579	4,515	10,008	8,178
August	41	37	268	220	319	0	368	251	5,638	4,591	10,465	8,621
September	66	58	166	110	248	0	476	364	5,677	4,672	10,537	8,840
October	58	55	154	119	301	0	479	271	5,879	4,793	10,792	8,927
November	65	57	127	87	260	0	403	236	5,517	4,521	9,948	8,366
December	53	53	135	98	314	0	304	235	5,160	4,208	9,328	7,653
Average	**61**	**56**	**226**	**169**	**300**	**0**	**422**	**250**	**5,593**	**4,450**	**10,162**	**8,225**
1998 January	58	54	232	166	283	0	408	276	5,609	4,551	9,893	8,185
February	60	60	170	89	296	0	358	224	5,299	4,260	9,577	7,770
March	53	53	95	70	334	0	376	236	4,976	3,995	9,694	7,989
April	48	48	224	154	272	0	444	254	5,633	4,570	10,398	8,523
May	61	53	233	133	292	0	494	273	5,863	4,670	10,903	8,957
June	64	56	227	125	310	0	511	245	5,812	4,518	10,702	8,725
July	79	56	96	36	360	0	436	219	5,809	4,625	11,151	9,309
August	63	53	371	295	279	0	607	435	5,602	4,564	10,829	9,143
September	38	38	142	109	277	0	538	322	5,541	4,328	10,288	8,392
October	65	57	384	278	268	0	469	220	5,462	4,169	10,531	8,457
November	38	38	373	283	266	0	471	327	5,781	4,679	10,574	8,821
December	79	72	199	119	274	0	421	286	5,492	4,403	9,983	8,262
Average	**59**	**53**	**229**	**155**	**293**	**0**	**462**	**277**	**5,574**	**4,445**	**10,382**	**8,550**
1999 January	52	34	215	167	300	0	479	370	5,445	4,292	10,181	8,308
February	48	38	243	165	289	0	534	348	5,274	4,046	10,336	8,387
2-Mo. Average	**50**	**36**	**228**	**166**	**295**	**0**	**505**	**359**	**5,364**	**4,176**	**10,254**	**8,346**
1998 2-Mo. Average	**59**	**57**	**203**	**130**	**289**	**0**	**384**	**251**	5,462	**4,413**	**9,743**	**7,988**
1997 2-Mo. Average	**71**	**58**	**322**	**256**	**337**	**0**	**444**	**191**	**5,564**	**4,178**	**9,667**	**7,465**

[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.

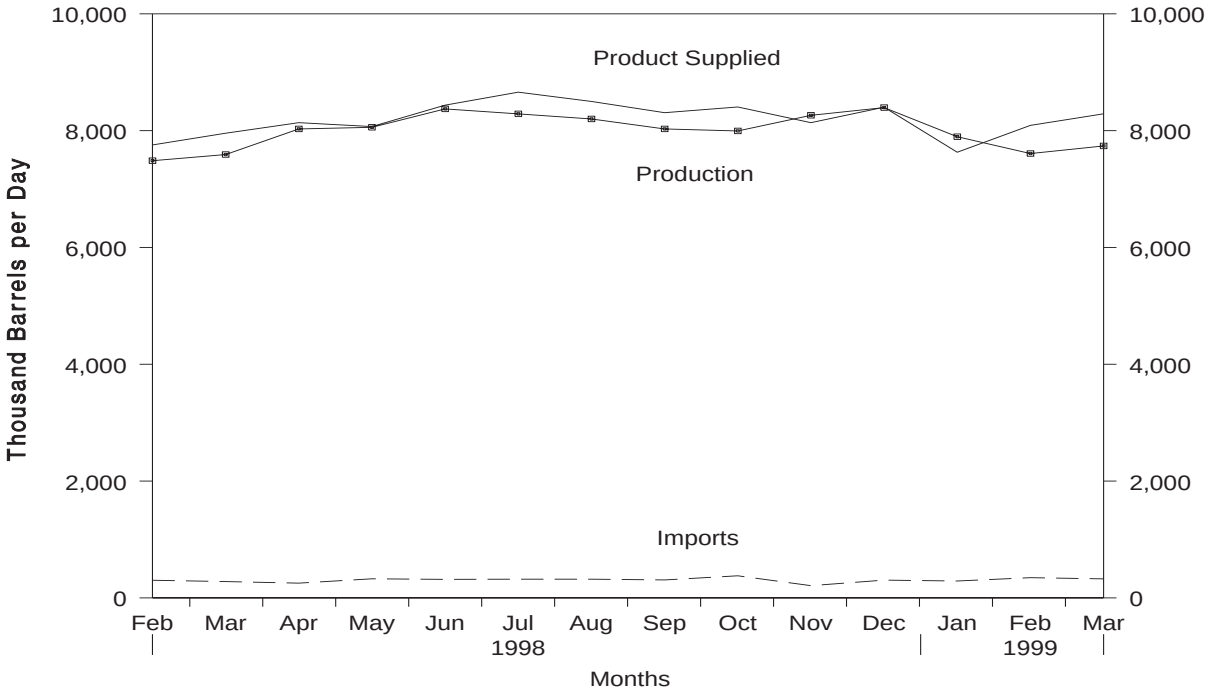
(s) = Less than 500 barrels per day.

— = 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.

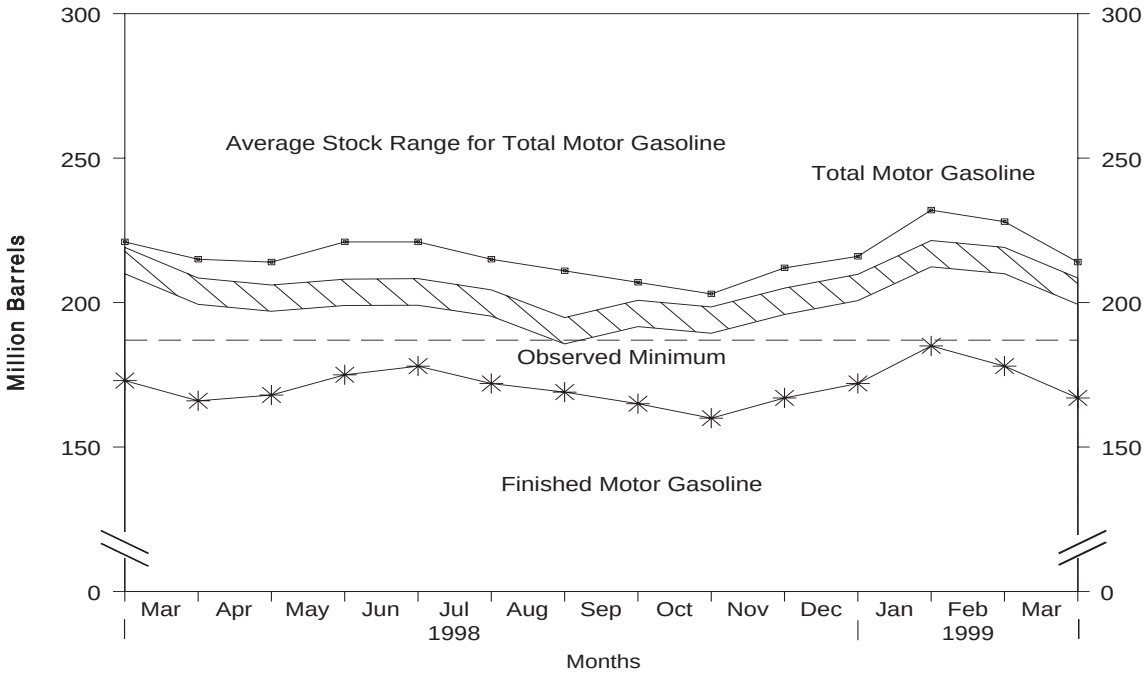
Source: See Summary Statistics Table and Figure Sources.

Figure S5. Finished Motor Gasoline Supply and Disposition, February 1998 - Present



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

Figure S6. Motor Gasoline Ending Stocks, February 1998 - Present



Note: • Total motor gasoline includes motor gasoline blending components and finished motor gasoline. • The Observed Minimum for total motor gasoline stocks in the last 36-month period was 187.0 million barrels, occurring in August 1997.

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

Table S4. Finished Motor Gasoline Supply and Disposition, 1984 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition			Ending Stocks[a] (Million Barrels)		Ending Stocks (Million Barrels)
						Motor Gasoline		
	Total Production[b]	Imports[c]	Stock Change[c,d]	Exports	Product Supplied[b]	Total[e]	Finished	Oxygenates
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 Average	**7,588**	**265**	**-40**	**104**	**7,789**	**202**	**161**	**12**
1996 Average	**7,647**	**336**	**-12**	**104**	**7,891**	**195**	**157**	**13**
1997 January	7,307	320	250	75	7,301	208	165	13
February	7,341	324	-114	111	7,668	204	162	13
March	7,302	370	-247	123	7,796	200	154	14
April	7,811	300	-70	117	8,064	197	152	13
May	8,081	362	203	101	8,139	202	158	13
June	8,186	387	189	96	8,288	204	164	12
July	7,954	291	-414	164	8,496	190	151	13
August	8,075	292	-41	175	8,233	187	150	13
September	8,158	269	275	130	8,023	198	158	13
October	8,037	291	1	186	8,141	200	158	12
November	7,999	239	122	151	7,965	203	162	12
December	8,160	265	154	206	8,065	210	166	12
Average	**7,870**	**309**	**26**	**137**	**8,017**	**—**	**—**	**—**
1998 January	7,749	265	296	128	7,590	221	175	13
February	7,485	303	-90	124	7,755	221	173	14
March	7,591	280	-205	121	7,956	215	166	13
April	8,029	253	64	81	8,137	214	168	13
May	8,057	328	212	103	8,070	221	175	13
June	8,372	317	92	159	8,437	221	178	14
July	8,287	321	-168	117	8,659	215	172	13
August	8,200	321	-119	141	8,500	211	169	13
September	8,029	308	-135	163	8,308	207	165	13
October	7,995	379	-152	121	8,405	203	160	12
November	8,263	210	248	89	8,136	212	167	13
December	8,395	305	145	153	8,401	216	172	14
Average	**8,041**	**299**	**16**	**125**	**8,199**	**—**	**—**	**—**
1999 January	7,896	289	426	130	7,630	232	185	14
February	R 7,608	R 347	R -240	R 105	R 8,091	R 228	R 178	15
March*	E *7,738*	E *326*	E *-335*	E *111*	E *8,288*	E *214*	E *167*	NA
3-Mo. Average	E **7,752**	E **320**	E **-44**	E **115**	E **8,000**	**—**	**—**	**—**
1998 3-Mo. Average	**7,613**	**282**	**3**	**124**	**7,767**	**—**	**—**	**—**
1997 3-Mo. Average	**7,316**	**338**	**-35**	**103**	**7,586**	**—**	**—**	**—**

[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.

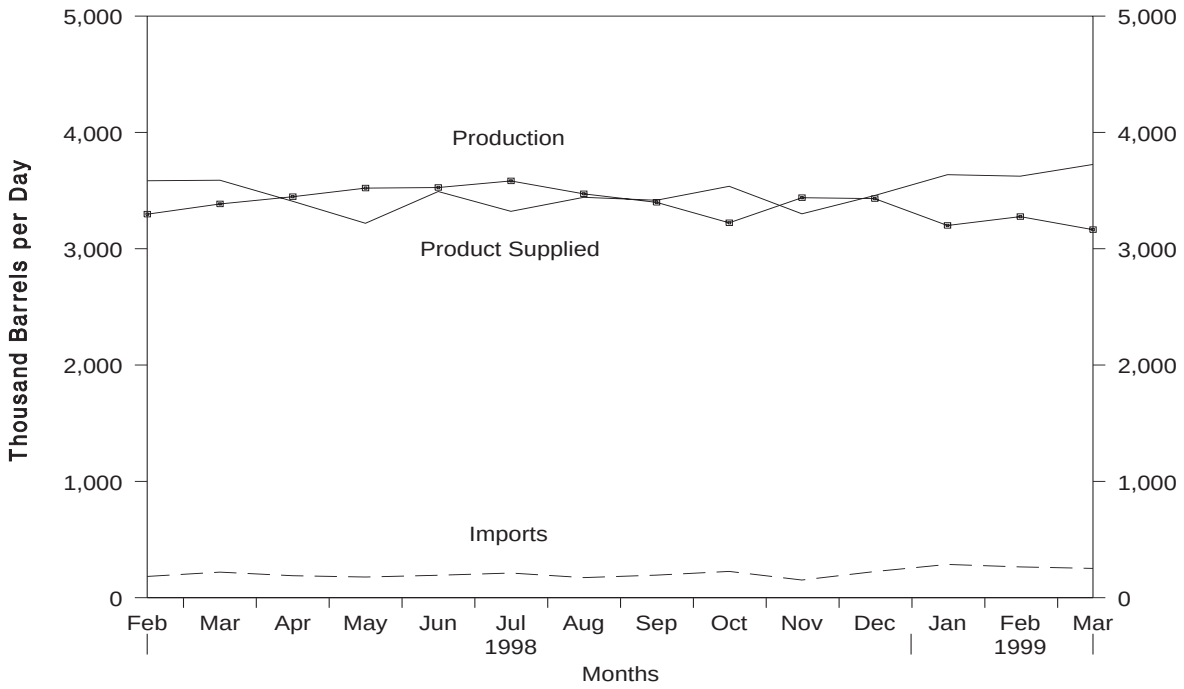
— = Not Applicable.

* 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.

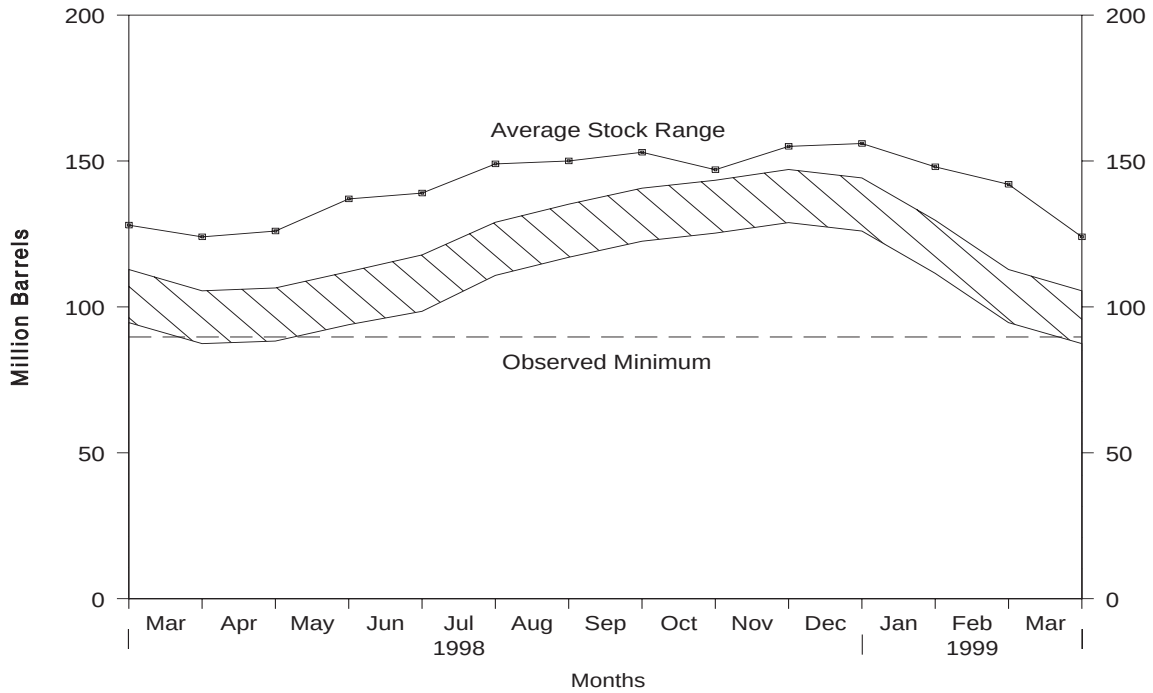
Source: See Summary Statistics Table and Figure Sources.

Figure S7. Distillate Fuel Oil Supply and Disposition, February 1998 - Present



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

Figure S8. Distillate Fuel Oil Ending Stocks, February 1998 - 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, 1984 - 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
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 Average	**3,155**	**193**	**-41**	**183**	**3,207**	**130**	**67**	**63**
1996 Average	**3,316**	**230**	**-10**	**190**	**3,365**	**127**	**68**	**58**
1997 January	3,119	293	-508	133	3,786	111	60	51
February	3,090	246	-197	107	3,427	105	56	49
March	3,244	245	-137	120	3,505	101	58	43
April	3,280	256	-134	166	3,504	97	59	39
May	3,527	220	359	153	3,235	108	63	45
June	3,523	219	326	174	3,243	118	65	53
July	3,365	223	161	151	3,275	123	64	59
August	3,439	202	320	185	3,136	133	69	64
September	3,445	210	189	160	3,306	139	69	70
October	3,480	213	-89	133	3,650	136	63	73
November	3,566	175	156	149	3,435	141	68	73
December	3,604	232	-70	192	3,714	138	68	70
Average	**3,392**	**228**	**32**	**152**	**3,435**	**—**	**—**	**—**
1998 January	3,321	187	-192	133	3,566	133	68	65
February	3,297	183	-183	79	3,585	128	65	63
March	3,385	220	-113	129	3,589	124	63	61
April	3,447	189	42	186	3,408	126	63	63
May	3,521	178	359	121	3,219	137	69	68
June	3,526	193	78	149	3,492	139	70	69
July	3,583	212	312	161	3,322	149	76	73
August	3,472	173	54	150	3,442	150	73	78
September	3,399	194	68	107	3,417	153	73	80
October	3,223	226	-163	75	3,537	147	69	79
November	3,439	152	236	54	3,300	155	73	81
December	3,431	225	53	145	3,458	156	77	79
Average	**3,421**	**195**	**47**	**124**	**3,444**	**—**	**—**	**—**
1999 January	3,200	286	-268	117	3,637	148	75	73
February	R 3,276	R 265	R -199	R 116	R 3,624	R 142	R 74	R 68
March*	E *3,164*	E *252*	E *-465*	E *156*	E *3,725*	E *124*	E *68*	E *56*
3-Mo. Average	E **3,211**	E **268**	E **-314**	E **130**	E **3,663**	**—**	**—**	**—**
1998 3-Mo. Average	**3,336**	**197**	**-162**	**115**	**3,580**	**—**	**—**	**—**
1997 3-Mo. Average	**3,153**	**262**	**-284**	**120**	**3,578**	**—**	**—**	**—**

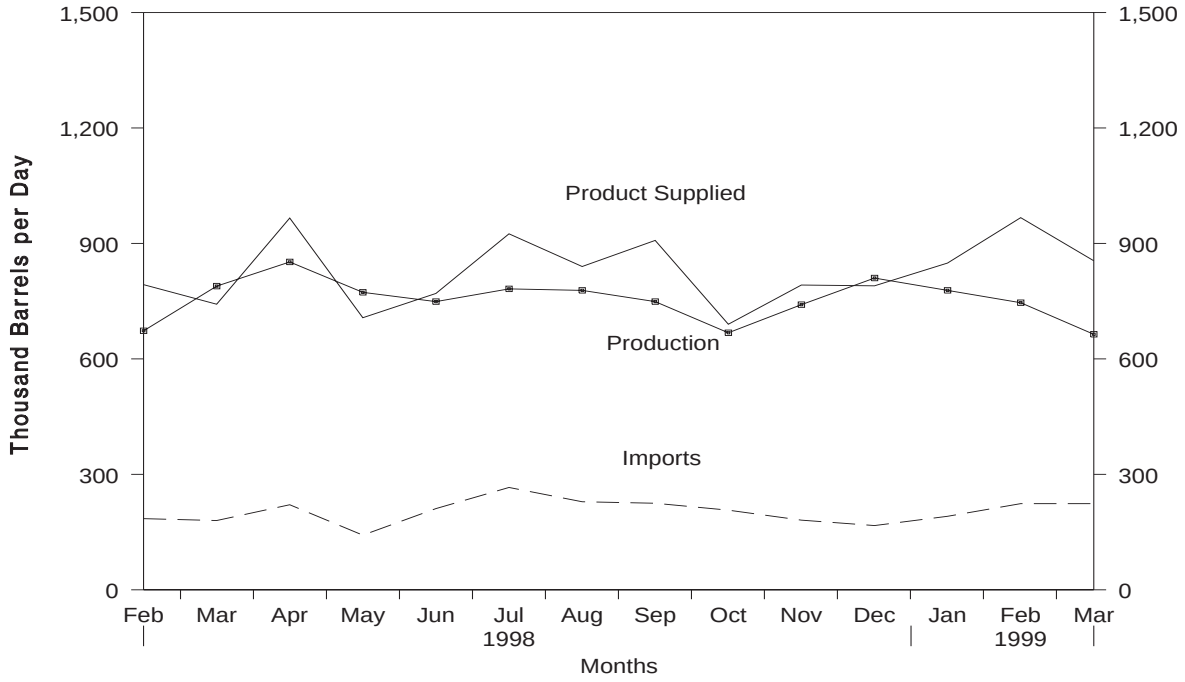
[a] Excludes 10,000 barrels per day in 1981 and 1982 previously published as crude used directly.
[b] Stocks are totals as of end of period.
[c] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[d] In January 1981 and 1983, numerous respondents were added 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.

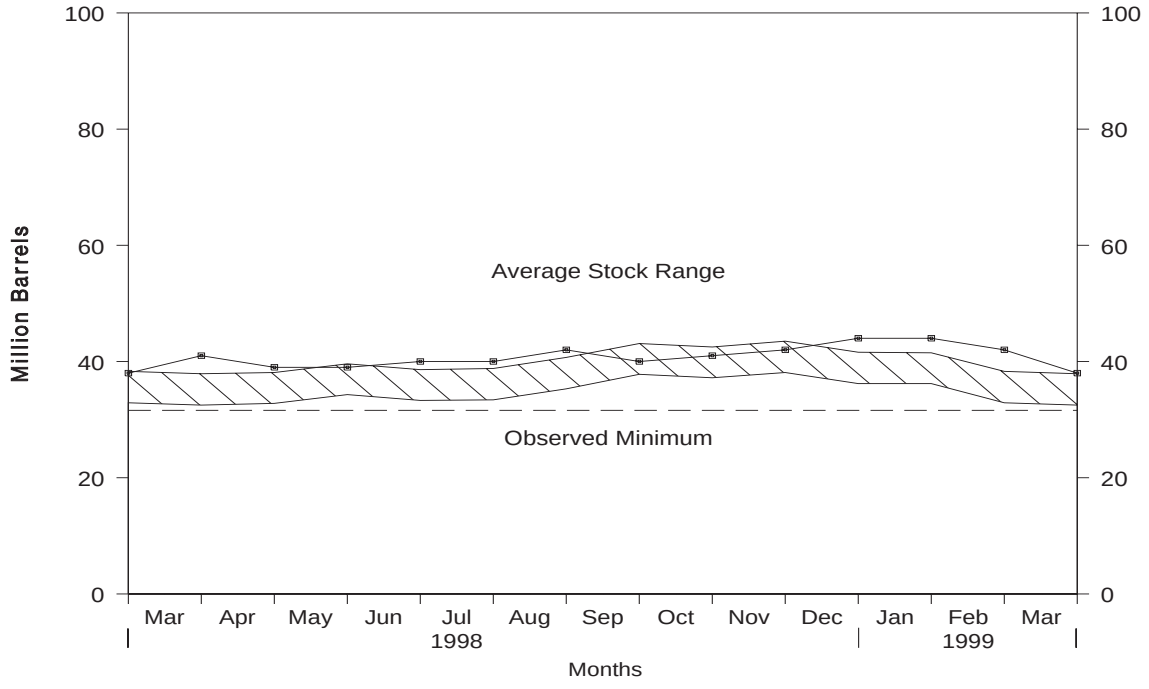
Source: See Summary Statistics Table and Figure Sources.

Figure S9. Residual Fuel Oil Supply and Disposition, February 1998 - Present



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

Figure S10. Residual Fuel Oil Ending Stocks, February 1998 - Present



Note: The Observed Minimum for residual fuel oil stocks in the last 36-month period was 31.6 million barrels, occurring in March 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, 1984 - 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]	
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 Average	**788**	**187**	**-13**	**136**	**852**	**37**
1996 Average	**726**	**248**	**24**	**102**	**848**	**46**
1997 January	801	211	-131	171	972	42
February	795	253	-66	137	977	40
March	638	239	46	89	742	41
April	617	250	-29	105	791	41
May	618	175	-44	102	736	39
June	727	168	(s)	130	765	39
July	643	177	-119	159	781	35
August	644	187	31	80	720	36
September	687	146	-54	91	797	35
October	723	158	41	133	707	36
November	789	204	61	122	809	38
December	818	167	83	120	781	40
Average	**708**	**194**	**-15**	**120**	**797**	**—**
1998 January	766	223	-25	131	884	40
February	673	185	-55	120	793	38
March	789	180	93	135	742	41
April	852	221	-60	168	966	39
May	773	142	-18	227	707	39
June	749	211	38	152	770	40
July	782	266	(s)	124	925	40
August	778	229	62	105	840	42
September	749	225	-67	133	908	40
October	668	207	47	139	690	41
November	741	181	20	110	792	42
December	810	167	78	108	790	44
Average	**762**	**203**	**10**	**138**	**817**	**—**
1999 January	778	191	-13	133	849	44
February	R 746	R 224	R -67	R 70	R 967	R 42
March*	E *664*	E *224*	E *-99*	E *132*	E *855*	E *38*
3-Mo. Average	E **728**	E **213**	E **-59**	E **113**	E **888**	**—**
1998 3-Mo. Average	**745**	**197**	**6**	**129**	**807**	**—**
1997 3-Mo. Average	**743**	**234**	**-50**	**132**	**894**	**—**

[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.

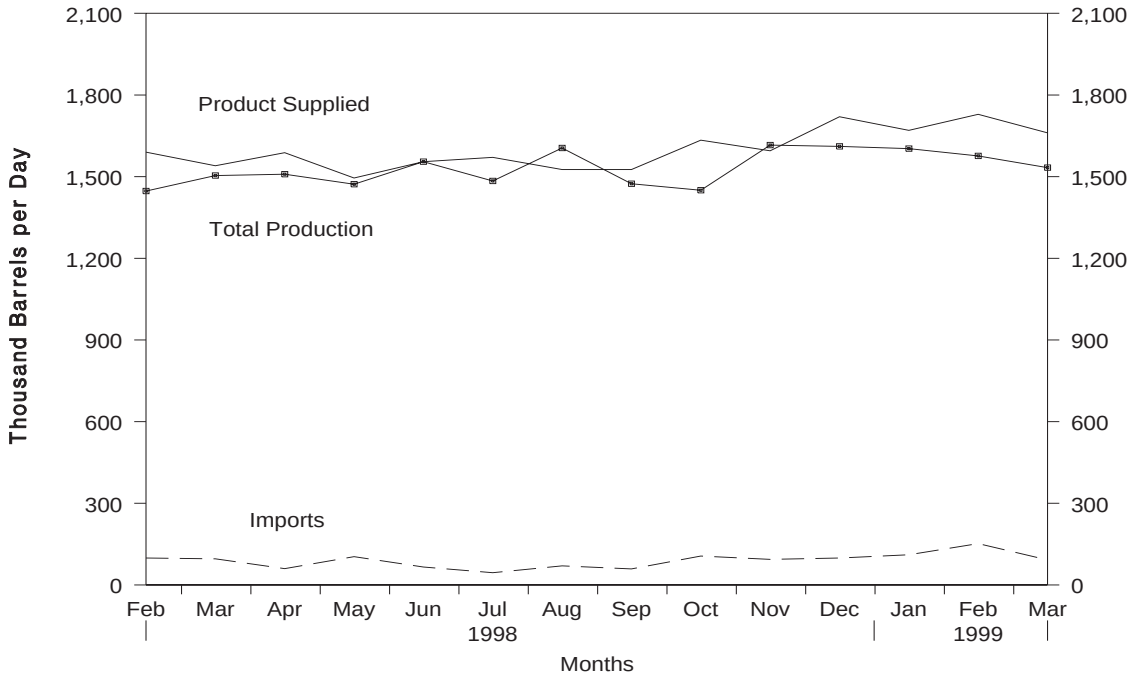
— = Not Applicable.

* 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.

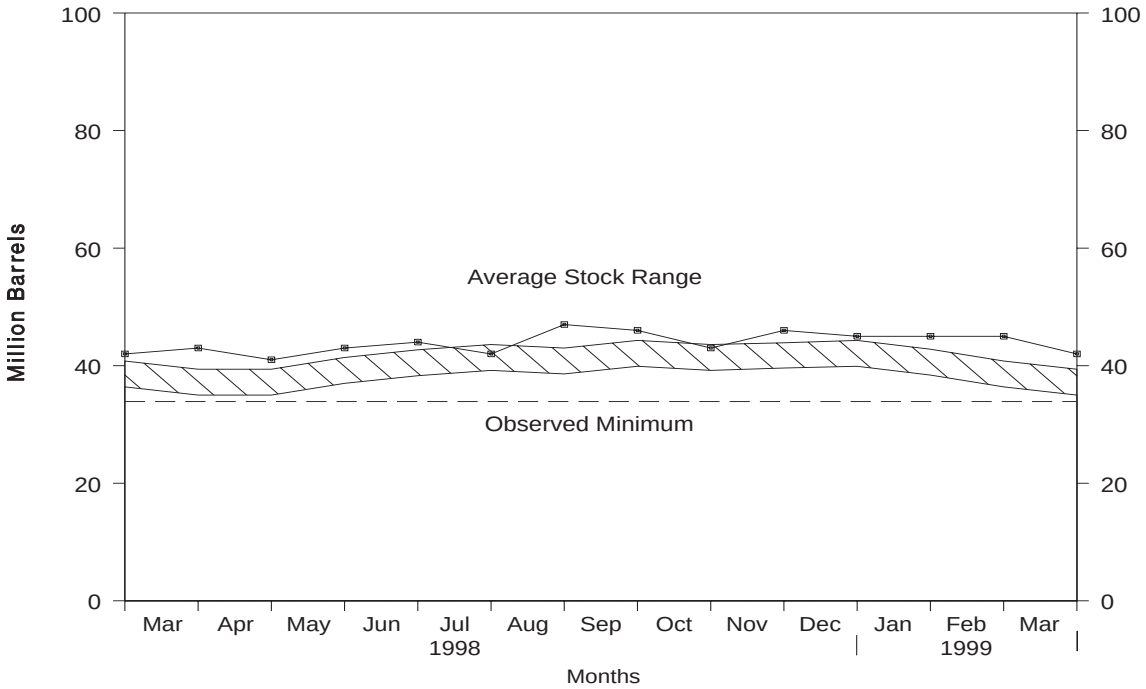
Source: See Summary Statistics Table and Figure Sources.

Figure S11. Jet Fuel Supply and Disposition, February 1998 - Present



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

Figure S12. Jet Fuel Ending Stocks, February 1998 - Present



Note: The Observed Minimum for total jet fuel stocks in the last 36-month period was 33.9 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, 1984 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply			Disposition				Ending Stocks[a] (Million Barrels)	
	Production					Product Supplied			
	Total	Kerosene-Type	Imports	Stock Change[b]	Exports	Total	Kerosene-Type	Total	Kerosene-Type
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 Average	**1,416**	**1,407**	**106**	**-19**	**26**	**1,514**	**1,497**	**40**	**39**
1996 Average	**1,515**	**1,513**	**111**	**(s)**	**48**	**1,578**	**1,575**	**40**	**40**
1997 January	1,491	1,491	100	-101	78	1,615	1,614	37	37
February	1,511	1,510	116	31	23	1,572	1,571	38	38
March	1,488	1,487	106	55	11	1,529	1,528	39	39
April	1,493	1,492	98	11	21	1,559	1,558	40	40
May	1,515	1,514	91	46	9	1,551	1,551	41	41
June	1,581	1,580	108	77	38	1,574	1,573	43	43
July	1,619	1,618	86	-14	33	1,685	1,685	43	43
August	1,580	1,579	103	7	27	1,648	1,648	43	43
September	1,593	1,592	87	78	16	1,586	1,585	46	46
October	1,581	1,580	77	19	40	1,599	1,599	46	46
November	1,609	1,608	55	8	44	1,612	1,612	46	46
December	1,588	1,588	63	-75	78	1,647	1,647	44	44
Average	**1,554**	**1,554**	**91**	**11**	**35**	**1,599**	**1,598**	**—**	**—**
1998 January	1,504	1,503	67	9	37	1,525	1,524	44	44
February	1,447	1,447	99	-70	25	1,590	1,590	42	42
March	1,504	1,503	96	24	36	1,540	1,547	43	43
April	1,509	1,508	60	-51	32	1,588	1,588	41	41
May	1,472	1,471	104	55	25	1,495	1,497	43	43
June	1,555	1,555	66	42	25	1,555	1,555	44	44
July	1,484	1,483	45	-71	28	1,571	1,573	42	42
August	1,605	1,604	70	140	8	1,526	1,527	47	47
September	1,474	1,473	59	-20	26	1,526	1,527	46	46
October	1,450	1,450	106	-100	22	1,634	1,623	43	43
November	1,616	1,616	94	90	25	1,595	1,596	46	46
December	1,611	1,611	99	-27	17	1,720	1,721	45	45
Average	**1,520**	**1,519**	**80**	**2**	**26**	**1,572**	**1,572**	**—**	**—**
1999 January	1,603	1,603	111	18	26	1,670	1,670	45	45
February	R 1,576	R 1,576	R 152	R -10	R 9	R 1,729	R 1,729	R 45	R 45
March*	E *1,533*	E *1,532*	E *92*	E *-63*	E *27*	E *1,661*	E *1,660*	E *42*	E *42*
3-Mo. Average	E **1,571**	E **1,570**	E **117**	E **-19**	E **21**	E **1,685**	E **1,685**	**—**	**—**
1998 3-Mo. Average	**1,486**	**1,486**	**87**	**-10**	**33**	**1,550**	**1,553**	**—**	**—**
1997 3-Mo. Average	**1,496**	**1,496**	**107**	**-6**	**38**	**1,572**	**1,571**	**—**	**—**

[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.

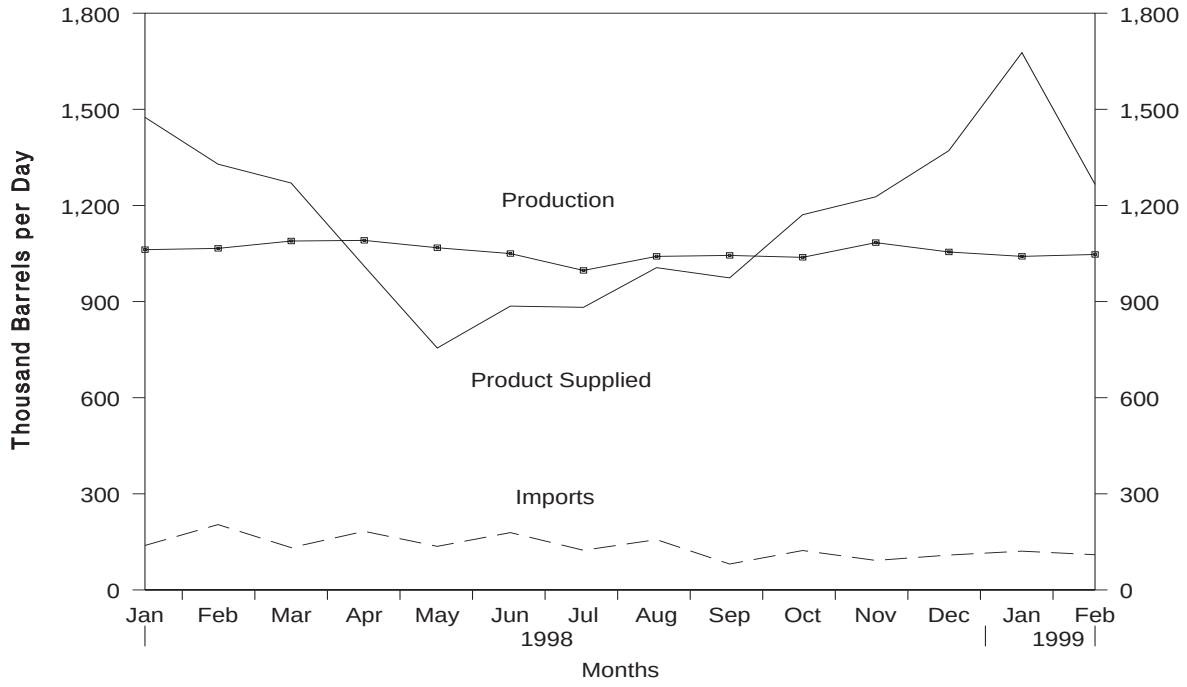
— = Not Applicable.

* 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.

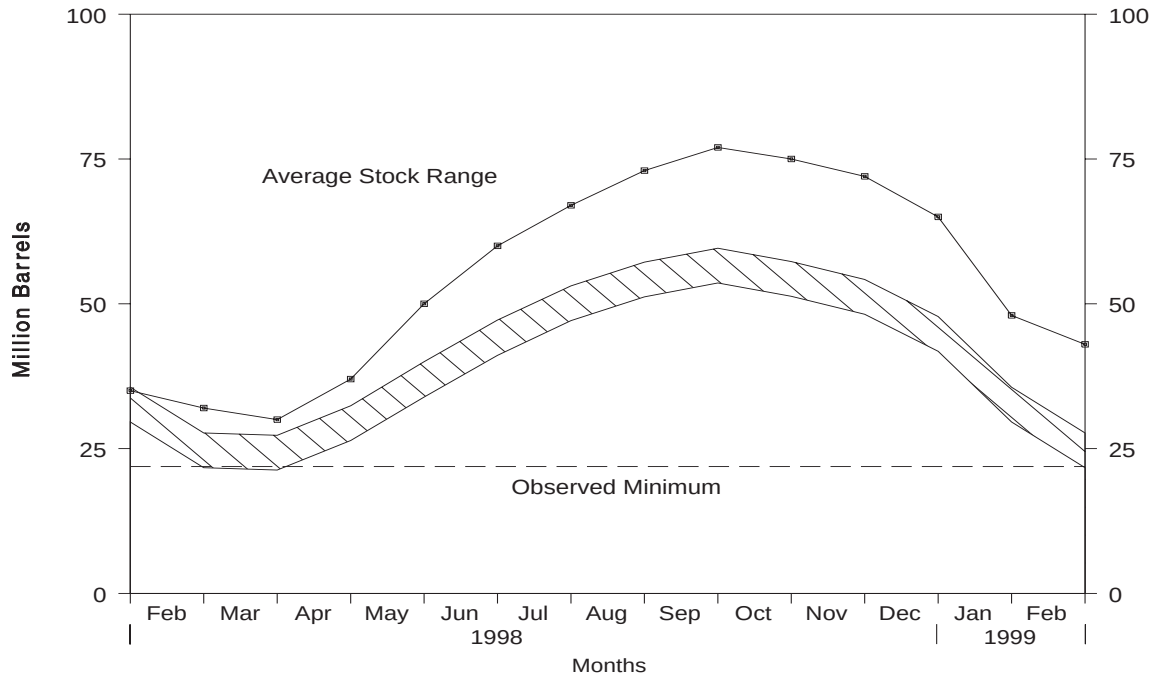
Source: See Summary Statistics Table and Figure Sources.

Figure S13. Propane/Propylene Supply and Disposition, January 1998 - Present



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

Figure S14. Propane/Propylene Ending Stocks, January 1998 - Present



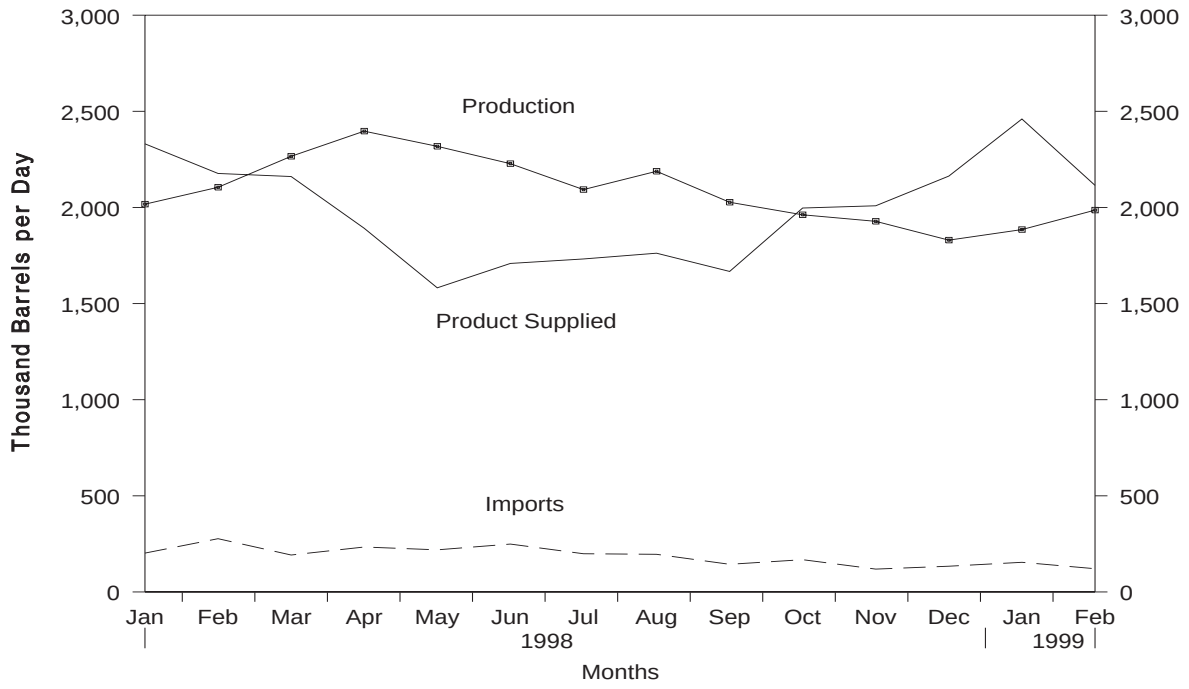
Note: The Observed Minimum for propane stocks in the last 36 month period was 21.9 million barrels, occurring in March 1996.
Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S8. See Summary Statistics Table and Figure Sources.

Table S8. Propane/Propylene Supply and Disposition, 1984 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				
	Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Product Supplied	Ending Stocks[b] (Million Barrels)
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 Average	**1,021**	**102**	**-10**	**0**	**38**	**1,096**	**43**
1996 Average	**1,044**	**119**	**(s)**	**0**	**28**	**1,136**	**43**
1997 January	1,039	149	-340	0	28	1,501	32
February	1,044	126	-276	0	42	1,404	25
March	1,059	114	92	0	40	1,041	28
April	1,112	109	150	0	32	1,039	32
May	1,114	92	252	0	23	930	40
June	1,110	88	250	0	31	916	47
July	1,083	87	231	0	24	916	55
August	1,095	108	172	0	24	1,007	60
September	1,110	89	30	0	16	1,152	61
October	1,110	122	17	0	29	1,185	61
November	1,099	114	-223	0	48	1,388	55
December	1,127	159	-342	0	53	1,576	44
Average	**1,092**	**113**	**3**	**0**	**32**	**1,170**	**—**
1998 January	1,062	139	-303	0	29	1,475	35
February	1,066	204	-87	0	28	1,329	32
March	1,089	132	-77	0	28	1,270	30
April	1,091	183	241	0	22	1,011	37
May	1,068	136	427	0	22	755	50
June	1,050	179	329	0	13	886	60
July	997	124	222	0	17	882	67
August	1,041	157	177	0	15	1,006	73
September	1,044	81	136	0	15	974	77
October	1,038	123	-45	0	35	1,171	75
November	1,084	92	-92	0	41	1,227	72
December	1,055	109	-240	0	32	1,371	65
Average	**1,057**	**138**	**57**	**0**	**25**	**1,112**	**—**
1999 January	1,041	121	-565	0	50	1,677	48
February	1,047	110	-150	0	41	1,266	43
2-Mo. Average	**1,044**	**116**	**-368**	**0**	**46**	**1,482**	**—**
1998 2-Mo. Average	**1,064**	**169**	**-201**	**0**	**29**	**1,405**	**—**
1997 2-Mo. Average	**1,042**	**138**	**-310**	**0**	**35**	**1,455**	**—**

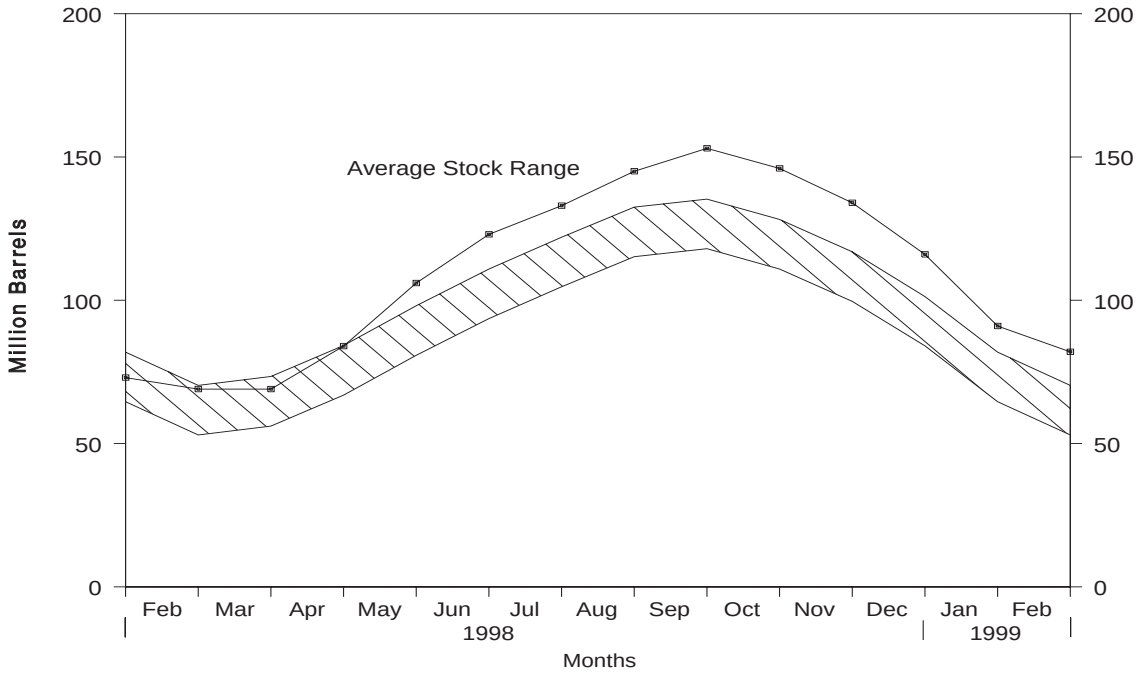
[a] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[b] Stocks are totals as of end of period.
[c] In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using 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, January 1998 - Present



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

Figure S16. Liquefied Petroleum Gases Ending Stocks, January 1998 - 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, 1984 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				
	Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Product Supplied	Ending Stocks[b] (Million Barrels)
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 Average	**2,082**	**146**	**-17**	**289**	**58**	**1,899**	**93**
1996 Average	**2,156**	**166**	**-19**	**278**	**51**	**2,012**	**86**
1997 January	2,009	193	-543	344	36	2,365	69
February	2,072	178	-450	321	78	2,301	57
March	2,210	163	214	244	62	1,854	63
April	2,355	169	349	211	41	1,923	74
May	2,364	161	481	200	40	1,804	89
June	2,369	160	534	203	43	1,748	105
July	2,331	151	433	195	56	1,798	118
August	2,348	175	408	190	37	1,888	131
September	2,196	150	54	247	29	2,017	133
October	2,074	168	-100	302	42	1,998	129
November	1,926	155	-535	345	66	2,206	113
December	2,020	205	-770	354	74	2,567	89
Average	**2,190**	**169**	**9**	**263**	**50**	**2,038**	**—**
1998 January	2,017	202	-522	356	53	2,331	73
February	2,105	277	-166	320	52	2,177	69
March	2,266	192	16	241	41	2,161	69
April	2,397	234	497	203	39	1,892	84
May	2,318	219	723	200	31	1,582	106
June	2,228	249	538	202	28	1,709	123
July	2,093	199	331	194	34	1,732	133
August	2,188	196	398	199	25	1,762	145
September	2,027	144	255	221	28	1,667	153
October	1,962	168	-224	309	49	1,997	146
November	1,928	119	-381	358	61	2,009	134
December	1,830	134	-583	317	67	2,163	116
Average	**2,113**	**194**	**74**	**260**	**42**	**1,931**	**—**
1999 January	1,885	154	-812	315	75	2,460	91
February	1,986	121	-332	258	64	2,115	82
2-Mo. Average	**1,933**	**138**	**-584**	**288**	**70**	**2,296**	**—**
1998 2-Mo. Average	**2,058**	**237**	**-353**	**339**	**53**	**2,258**	**—**
1997 2-Mo. Average	**2,039**	**186**	**-499**	**333**	**56**	**2,334**	**—**

[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, 1984 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				
	Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Products Supplied	Ending Stocks[b] (Million Barrels)
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 Average	**3,031**	**708**	[c] **-23**	**958**	**348**	**2,457**	**206**
1996 Average	**3,108**	**879**	[c] **-11**	**1,014**	**376**	**2,608**	**202**
1997 January	2,945	1,154	354	831	403	2,511	213
February	2,953	1,010	239	944	332	2,448	220
March	3,078	955	514	697	391	2,431	236
April	3,136	1,054	-122	1,203	395	2,715	232
May	3,329	1,156	127	1,089	446	2,823	236
June	3,355	936	-468	1,345	417	2,997	222
July	3,402	903	-214	1,069	380	3,069	215
August	3,426	886	-83	994	460	2,940	213
September	3,390	836	101	841	450	2,834	216
October	3,227	957	-87	915	381	2,976	213
November	3,078	754	-7	919	369	2,551	213
December	3,113	744	3	981	396	2,476	213
Average	**3,204**	**945**	**30**	**985**	**402**	**2,733**	**—**
1998 January	3,030	765	369	695	370	2,361	226
February	3,042	760	396	623	360	2,422	237
March	3,023	736	245	751	358	2,405	245
April	3,138	916	-133	1,195	360	2,634	241
May	3,263	974	-84	1,143	377	2,801	238
June	3,298	940	-146	1,118	412	2,855	234
July	3,451	799	-252	1,142	431	2,930	226
August	3,574	697	-18	951	300	3,038	225
September	3,400	967	-52	1,038	370	3,010	224
October	3,244	986	-160	1,210	357	2,823	219
November	3,199	997	178	951	382	2,683	224
December	3,017	792	-159	990	312	2,666	219
Average	**3,225**	**861**	**13**	**986**	**366**	**2,721**	**—**
1999 January	3,225	842	329	827	307	2,604	229
February	3,323	841	327	850	272	2,715	239
2-Mo. Average	**3,271**	**841**	**328**	**838**	**290**	**2,656**	**—**
1998 2-Mo. Average	**3,036**	**762**	**382**	**661**	**365**	**2,390**	**—**
1997 2-Mo. Average	**2,949**	**1,086**	**300**	**884**	**369**	**2,481**	**—**

[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 1997).
- EIA, *Petroleum Supply Monthly* (January 1994 through February 1999).
- EIA, Weekly Petroleum Supply Reporting System (except domestic crude oil production) (March 1999). 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 March 1999). 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:

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"

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, February 1999

	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 30,905	E 1,104	E 66,999	E 1,136
(2)	Lower 48 States	E 136,638	E 4,880	E 285,132	E 4,833
(3)	**Total U.S.**	**E 167,544**	**E 5,984**	**E 352,131**	**E 5,968**
	Net Imports				
(4)	Imports (Gross Excluding Strategic Petroleum Reserve (SPR))	234,842	8,387	492,385	8,346
(5)	SPR Imports	0	0	0	0
(6)	Exports	3,342	119	6,675	113
(7)	**Imports (Net Including SPR)**	**231,500**	**8,268**	**485,710**	**8,232**
	Other Sources				
(8)	SPR Stock Change (Withdrawal (+), Addition (-))	1	(s)	-545	-9
(9)	Other Stock Change (Withdrawal (+), Addition (-))	-861	-31	-2,394	-41
(10)	Product Supplied and Losses	-9	(s)	-9	(s)
(11)	Unaccounted for[a]	5,863	209	18,130	307
(12)	**Total Other Sources**	**4,994**	**178**	**15,182**	**257**
(13)	**Crude Input to Refineries** (13) = (3) + (7) + (12)	**404,037**	**14,430**	**853,024**	**14,458**
	Natural Gas Liquids (NGL)				
(14)	Field Production[b]	46,551	1,663	100,600	1,705
(15)	Net Imports[c]	1,141	41	3,470	59
(16)	Stock Change (Withdrawal (+), Addition (-))[c]	-759	-27	-656	-11
(17)	**Total NGL Supply**	**46,933**	**1,676**	**103,414**	**1,753**
	Other Liquids				
	Unfinished Oils and Gasoline Blending Components, Total				
(18)	Stock Change (Withdrawal (+), Addition (-))	-5,365	-192	-8,235	-140
(19)	Net Imports	12,167	435	28,136	477
(20)	Other Liquids New Supply(Field Production)	12,951	463	21,523	365
(21)	Refinery Processing Gain[a]	23,867	852	53,041	899
(22)	Crude Oil Product Supplied	0	0	0	0
(23)	**Total Other Liquids** (23) = (18) through (22)	**43,620**	**1,558**	**94,465**	**1,601**
(24)	**Total Production of Products** (24) = (13) + (17) + (23)	**494,590**	**17,664**	**1,050,903**	**17,812**
	Net Imports of Refined Products				
(25)	Imports (Gross)	40,186	1,435	78,296	1,327
(26)	Exports	16,754	598	39,538	670
(27)	**Imports (Net)**	**23,432**	**837**	**38,758**	**657**
(28)	**Total New Supply of Products** (28) = (24) + (27)	**518,021**	**18,501**	**1,089,661**	**18,469**
(29)	Refined Products Stock Change (Withdrawal (+), Addition (-))	20,711	740	33,419	566
(30)	**Total Petroleum Products Supplied for Domestic Use** (30) = (28) + (29)	**538,732**	**19,240**	**1,123,080**	**19,035**
(31)	Finished Motor Gasoline	226,541	8,091	463,064	7,849
(32)	Distillate Fuel Oil	101,472	3,624	214,210	3,631
(33)	Residual Fuel Oil	27,070	967	53,401	905
(34)	Jet Fuel	48,413	1,729	100,186	1,698
(35)	Liquefied Petroleum Gases	59,228	2,115	135,490	2,296
(36)	Other[d]	76,008	2,715	156,729	2,656
(37)	Crude Oil	0	0	0	0
(38)	**Total Products Supplied** (38) = (31) through (37)	**538,732**	**19,240**	**1,123,080**	**19,035**
	Ending Stocks, All Oils				
(39)	Crude Oil (Excluding SPR)	325,432	—	325,432	—
(40)	Strategic Petroleum Reserve[e]	571,950	—	571,950	—
(41)	Finished Motor Gasoline	178,425	—	178,425	—
(42)	Distillate Fuel Oil	142,302	—	142,302	—
(43)	Residual Fuel Oil	41,883	—	41,883	—
(44)	Jet Fuel	44,990	—	44,990	—
(45)	Liquefied Petroleum Gases	81,940	—	81,940	—
(46)	Other[d]	238,557	—	238,557	—
(47)	**Total Stocks** (47) = (39) through (46)	**1,625,479**	**—**	**1,625,479**	**—**

[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] Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.

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, February 1999

(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 167,544	—	234,842	5,863	860	9	404,037	3,342	0	897,382
Natural Gas Liquids and LRGs	48,206	15,439	4,541	—	-8,524	—	10,805	1,828	64,077	91,043
Pentanes Plus	8,040	—	1,167	—	759	—	3,573	26	4,849	9,103
Liquefied Petroleum Gases	40,166	15,439	3,374	—	-9,283	—	7,232	1,802	59,228	81,940
Ethane/Ethylene	16,647	781	12	—	-2,778	—	0	0	20,218	17,740
Propane/Propylene	14,195	15,132	3,081	—	-4,204	—	0	1,152	35,460	43,331
Normal Butane/Butylene	3,986	-860	95	—	-2,540	—	4,509	651	601	13,664
Isobutane/Isobutylene	5,338	386	186	—	239	—	2,723	0	2,948	7,205
Other Liquids	12,951	—	13,208	—	5,365	—	20,214	1,041	-461	157,341
Other Hydrocarbons/Oxygenates	9,878	—	1,872	—	1,212	—	9,657	881	0	15,011
Unfinished Oils	—	—	7,680	—	1,618	—	6,627	0	-565	92,624
Motor Gasoline Blend. Comp.	3,072	—	3,656	—	2,545	—	4,024	159	0	49,520
Aviation Gasoline Blend. Comp.	—	—	0	—	-10	—	-94	0	104	186
Finished Petroleum Products	-1,655	443,484	36,812	—	-11,428	—	—	14,952	475,116	479,713
Finished Motor Gasoline	-1,655	214,688	9,709	—	-6,733	—	—	2,933	226,541	178,425
Reformulated	—	66,239	6,651	—	-2,775	—	—	62	75,603	43,669
Oxygenated	14,170	2,239	0	—	-130	—	—	34	16,505	920
Other	-15,825	146,210	3,058	—	-3,828	—	—	2,837	134,433	133,836
Finished Aviation Gasoline	—	450	1	—	1	—	—	0	450	1,993
Jet Fuel	—	44,135	4,245	—	-276	—	—	243	48,413	44,990
Naphtha-Type	—	14	0	—	7	—	—	18	-11	46
Kerosene-Type	—	44,121	4,245	—	-283	—	—	225	48,424	44,944
Kerosene	—	1,714	62	—	-839	—	—	3	2,612	5,992
Distillate Fuel Oil	—	91,740	7,416	—	-5,572	—	—	3,256	101,472	142,302
0.05 percent sulfur and under	—	59,416	2,640	—	-1,262	—	—	1,574	61,744	73,968
Greater than 0.05 percent sulfur	—	32,324	4,776	—	-4,310	—	—	1,683	39,727	68,334
Residual Fuel Oil	—	20,879	6,279	—	-1,869	—	—	1,957	27,070	41,883
Naphtha For Petro. Feed. Use	—	7,531	2,638	—	477	—	—	0	9,692	2,637
Other Oils For Petro. Feed. Use	—	5,480	5,034	—	567	—	—	0	9,947	2,324
Special Naphthas	—	1,627	212	—	-99	—	—	272	1,666	2,214
Lubricants	—	4,509	95	—	-726	—	—	767	4,563	12,685
Waxes	—	704	55	—	78	—	—	99	582	990
Petroleum Coke	—	20,084	33	—	4	—	—	5,321	14,792	10,761
Asphalt and Road Oil	—	11,734	1,032	—	3,377	—	—	93	9,296	30,589
Still Gas	—	16,815	0	—	0	—	—	0	16,815	0
Miscellaneous Products	—	1,394	1	—	182	—	—	7	1,206	1,928
Total	227,045	458,923	289,403	5,863	-13,727	9	435,056	21,163	538,732	1,625,479

[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-February 1999

(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 352,131	—	492,385	18,130	2,939	9	853,024	6,675	0	897,382
Natural Gas Liquids and LRGs	99,555	31,186	11,662	—	-33,795	—	24,906	4,197	147,095	91,043
Pentanes Plus	16,698	—	3,529	—	656	—	7,907	59	11,605	9,103
Liquefied Petroleum Gases	82,857	31,186	8,133	—	-34,451	—	16,999	4,138	135,490	81,940
Ethane/Ethylene	34,170	1,622	460	—	-3,526	—	0	0	39,778	17,740
Propane/Propylene	29,310	32,276	6,844	—	-21,707	—	0	2,702	87,435	43,331
Normal Butane/Butylene	8,763	-3,505	406	—	-9,089	—	11,005	1,436	2,312	13,664
Isobutane/Isobutylene	10,614	793	423	—	-129	—	5,994	0	5,965	7,205
Other Liquids	21,523	—	30,792	—	8,235	—	41,515	2,656	-91	157,341
Other Hydrocarbons/Oxygenates	19,416	—	4,588	—	837	—	20,944	2,223	0	15,011
Unfinished Oils	—	—	17,846	—	1,711	—	16,517	0	-382	92,624
Motor Gasoline Blend. Comp.	2,107	—	8,358	—	5,762	—	4,270	433	0	49,520
Aviation Gasoline Blend. Comp.	—	—	0	—	-75	—	-216	0	291	186
Finished Petroleum Products	1,045	941,300	70,163	—	1,032	—	—	35,400	976,076	479,713
Finished Motor Gasoline	1,045	456,758	18,679	—	6,464	—	—	6,954	463,064	178,425
Reformulated	—	139,700	12,695	—	-595	—	—	79	152,911	43,669
Oxygenated	31,520	5,380	0	—	18	—	—	64	36,818	920
Other	-30,475	311,678	5,984	—	7,041	—	—	6,811	273,335	133,836
Finished Aviation Gasoline	—	1,146	1	—	167	—	—	0	980	1,993
Jet Fuel	—	93,839	7,678	—	278	—	—	1,053	100,186	44,990
Naphtha-Type	—	29	4	—	12	—	—	44	-23	46
Kerosene-Type	—	93,810	7,674	—	266	—	—	1,009	100,209	44,944
Kerosene	—	5,416	143	—	-951	—	—	9	6,501	5,992
Distillate Fuel Oil	—	190,929	16,289	—	-13,891	—	—	6,899	214,210	142,302
0.05 percent sulfur and under	—	122,115	7,497	—	-3,000	—	—	2,642	129,970	73,968
Greater than 0.05 percent sulfur	—	68,814	8,792	—	-10,891	—	—	4,256	84,241	68,334
Residual Fuel Oil	—	44,989	12,212	—	-2,270	—	—	6,070	53,401	41,883
Naphtha For Petro. Feed. Use	—	15,415	4,377	—	544	—	—	0	19,248	2,637
Other Oils For Petro. Feed. Use	—	12,468	7,639	—	257	—	—	0	19,850	2,324
Special Naphthas	—	3,431	449	—	3	—	—	376	3,501	2,214
Lubricants	—	9,832	596	—	-468	—	—	1,521	9,375	12,685
Waxes	—	1,388	88	—	-3	—	—	197	1,282	990
Petroleum Coke	—	42,396	76	—	1,561	—	—	12,095	28,816	10,761
Asphalt and Road Oil	—	23,791	1,929	—	9,238	—	—	210	16,272	30,589
Still Gas	—	36,472	0	—	0	—	—	0	36,472	0
Miscellaneous Products	—	3,030	7	—	103	—	—	14	2,920	1,928
Total	**474,254**	**972,486**	**605,002**	**18,130**	**-21,589**	**9**	**919,445**	**48,927**	**1,123,080**	**1,625,479**

[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, February 1999

(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 **5,984**	**—**	**8,387**	**209**	**31**	**(s)**	**14,430**	**119**	**0**
Natural Gas Liquids and LRGs	**1,722**	**551**	**162**	**—**	**-304**	**—**	**386**	**65**	**2,288**
Pentanes Plus	287	—	42	—	27	—	128	1	173
Liquefied Petroleum Gases	1,435	551	121	—	-332	—	258	64	2,115
Ethane/Ethylene	595	28	(s)	—	-99	—	0	0	722
Propane/Propylene	507	540	110	—	-150	—	0	41	1,266
Normal Butane/Butylene	142	-31	3	—	-91	—	161	23	21
Isobutane/Isobutylene	191	14	7	—	9	—	97	0	105
Other Liquids	**463**	**—**	**472**	**—**	**192**	**—**	**722**	**37**	**-16**
Other Hydrocarbons/Oxygenates	353	—	67	—	43	—	345	31	0
Unfinished Oils	—	—	274	—	58	—	237	0	-20
Motor Gasoline Blend. Comp.	110	—	131	—	91	—	144	6	0
Aviation Gasoline Blend. Comp.	—	—	0	—	(s)	—	-3	0	4
Finished Petroleum Products	**-59**	**15,839**	**1,315**	**—**	**-408**	**—**	**—**	**534**	**16,968**
Finished Motor Gasoline	-59	7,667	347	—	-240	—	—	105	8,091
Reformulated	—	2,366	238	—	-99	—	—	2	2,700
Oxygenated	506	80	0	—	-5	—	—	1	589
Other	-565	5,222	109	—	-137	—	—	101	4,801
Finished Aviation Gasoline	—	16	(s)	—	(s)	—	—	0	16
Jet Fuel	—	1,576	152	—	-10	—	—	9	1,729
Naphtha-Type	—	1	0	—	(s)	—	—	1	(s)
Kerosene-Type	—	1,576	152	—	-10	—	—	8	1,729
Kerosene	—	61	2	—	-30	—	—	(s)	93
Distillate Fuel Oil	—	3,276	265	—	-199	—	—	116	3,624
0.05 percent sulfur and under	—	2,122	94	—	-45	—	—	56	2,205
Greater than 0.05 percent sulfur	—	1,154	171	—	-154	—	—	60	1,419
Residual Fuel Oil	—	746	224	—	-67	—	—	70	967
Naphtha For Petro. Feed. Use	—	269	94	—	17	—	—	0	346
Other Oils For Petro. Feed. Use	—	196	180	—	20	—	—	0	355
Special Naphthas	—	58	8	—	-4	—	—	10	60
Lubricants	—	161	3	—	-26	—	—	27	163
Waxes	—	25	2	—	3	—	—	4	21
Petroleum Coke	—	717	1	—	(s)	—	—	190	528
Asphalt and Road Oil	—	419	37	—	121	—	—	3	332
Still Gas	—	601	0	—	0	—	—	0	601
Miscellaneous Products	—	50	(s)	—	7	—	—	(s)	43
Total	**8,109**	**16,390**	**10,336**	**209**	**-490**	**(s)**	**15,538**	**756**	**19,240**

[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-February 1999

(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 5,968	—	8,346	307	50	(s)	14,458	113	0
Natural Gas Liquids and LRGs	1,687	529	198	—	-573	—	422	71	2,493
Pentanes Plus	283	—	60	—	11	—	134	1	197
Liquefied Petroleum Gases	1,404	529	138	—	-584	—	288	70	2,296
Ethane/Ethylene	579	27	8	—	-60	—	0	0	674
Propane/Propylene	497	547	116	—	-368	—	0	46	1,482
Normal Butane/Butylene	149	-59	7	—	-154	—	187	24	39
Isobutane/Isobutylene	180	13	7	—	-2	—	102	0	101
Other Liquids	365	—	522	—	140	—	704	45	-2
Other Hydrocarbons/Oxygenates	329	—	78	—	14	—	355	38	0
Unfinished Oils	—	—	302	—	29	—	280	0	-6
Motor Gasoline Blend. Comp.	36	—	142	—	98	—	72	7	0
Aviation Gasoline Blend. Comp.	—	—	0	—	-1	—	-4	0	5
Finished Petroleum Products	18	15,954	1,189	—	17	—	—	600	16,544
Finished Motor Gasoline	18	7,742	317	—	110	—	—	118	7,849
Reformulated	—	2,368	215	—	-10	—	—	1	2,592
Oxygenated	534	91	0	—	(s)	—	—	1	624
Other	-517	5,283	101	—	119	—	—	115	4,633
Finished Aviation Gasoline	—	19	(s)	—	3	—	—	0	17
Jet Fuel	—	1,590	130	—	5	—	—	18	1,698
Naphtha-Type	—	(s)	(s)	—	(s)	—	—	1	(s)
Kerosene-Type	—	1,590	130	—	5	—	—	17	1,698
Kerosene	—	92	2	—	-16	—	—	(s)	110
Distillate Fuel Oil	—	3,236	276	—	-235	—	—	117	3,631
0.05 percent sulfur and under	—	2,070	127	—	-51	—	—	45	2,203
Greater than 0.05 percent sulfur	—	1,166	149	—	-185	—	—	72	1,428
Residual Fuel Oil	—	763	207	—	-38	—	—	103	905
Naphtha For Petro. Feed. Use	—	261	74	—	9	—	—	0	326
Other Oils For Petro. Feed. Use	—	211	129	—	4	—	—	0	336
Special Naphthas	—	58	8	—	(s)	—	—	6	59
Lubricants	—	167	10	—	-8	—	—	26	159
Waxes	—	24	1	—	(s)	—	—	3	22
Petroleum Coke	—	719	1	—	26	—	—	205	488
Asphalt and Road Oil	—	403	33	—	157	—	—	4	276
Still Gas	—	618	0	—	0	—	—	0	618
Miscellaneous Products	—	51	(s)	—	2	—	—	(s)	49
Total	8,038	16,483	10,254	307	-366	(s)	15,584	829	19,035

[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, February 1999

(Thousand Barrels)

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]	Ending Stocks
Crude Oil	[E] **744**	**—**	**41,256**	**1,926**	**-113**	**995**	**0**	**42,818**	**0**	**0**	**14,634**
Natural Gas Liquids and LRGs	**752**	**724**	**960**	**—**	**3,895**	**-364**	**—**	**212**	**49**	**6,434**	**4,020**
Pentanes Plus	80	—	0	—	0	14	—	0	3	63	25
Liquefied Petroleum Gases	672	724	960	—	3,895	-378	—	212	46	6,371	3,995
Ethane/Ethylene	231	0	0	—	0	0	—	0	0	231	0
Propane/Propylene	299	1,541	951	—	3,760	186	—	0	34	6,331	3,075
Normal Butane/Butylene	99	-709	9	—	50	-674	—	154	12	-43	683
Isobutane/Isobutylene	43	-108	0	—	85	110	—	58	0	-148	237
Other Liquids	**2,567**	**—**	**5,639**	**—**	**261**	**1,932**	**—**	**7,635**	**48**	**-1,148**	**23,983**
Other Hydrocarbons/Oxygenates	1,823	—	706	—	0	363	—	2,119	47	0	2,658
Unfinished Oils	—	—	1,362	—	12	61	—	2,564	0	-1,251	9,234
Motor Gasoline Blend. Comp.	744	—	3,571	—	249	1,490	—	3,073	1	0	11,958
Aviation Gasoline Blend. Comp.	—	—	0	—	0	18	—	-121	0	103	133
Finished Petroleum Products	**-503**	**52,116**	**27,210**	**—**	**76,273**	**-10,347**	**—**	**—**	**596**	**164,847**	**156,852**
Finished Motor Gasoline	-503	27,372	9,641	—	41,088	-2,488	—	—	5	80,081	53,508
Reformulated	—	16,691	6,651	—	8,508	-2,029	—	—	3	33,876	21,518
Oxygenated	2,409	50	0	—	0	-86	—	—	(s)	2,545	226
Other	-2,912	10,631	2,990	—	32,580	-373	—	—	2	43,660	31,764
Finished Aviation Gasoline	—	0	0	—	51	-57	—	—	0	108	188
Jet Fuel	—	3,164	3,169	—	13,678	863	—	—	132	19,016	11,631
Naphtha-Type	—	0	0	—	0	0	—	—	(s)	(s)	0
Kerosene-Type	—	3,164	3,169	—	13,678	863	—	—	132	19,016	11,631
Kerosene	—	294	62	—	189	-630	—	—	(s)	1,175	3,501
Distillate Fuel Oil	—	11,860	6,971	—	19,003	-6,618	—	—	60	44,392	61,369
0.05 percent sulfur and under	—	5,106	2,493	—	10,459	-2,240	—	—	6	20,292	18,862
Greater than 0.05 percent sulfur	—	6,754	4,478	—	8,544	-4,378	—	—	54	24,100	42,507
Residual Fuel Oil	—	3,375	6,279	—	1,351	-1,866	—	—	148	12,723	17,392
Petrochemical Feedstocks[e]	—	421	81	—	-37	-117	—	—	0	582	458
Special Naphthas	—	46	85	—	87	0	—	—	11	207	101
Lubricants	—	495	63	—	612	-98	—	—	119	1,149	2,406
Waxes	—	68	17	—	3	19	—	—	25	44	75
Petroleum Coke	—	1,546	0	—	0	26	—	—	87	1,433	454
Asphalt and Road Oil	—	1,801	842	—	248	616	—	—	4	2,271	5,690
Still Gas	—	1,612	0	—	0	0	—	—	0	1,612	0
Miscellaneous Products	—	62	0	—	0	3	—	—	5	54	79
Total	**3,560**	**52,840**	**75,065**	**1,926**	**80,316**	**-7,784**	**0**	**50,665**	**693**	**170,133**	**199,489**

[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-February 1999

(Thousand Barrels)

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]	Ending Stocks
Crude Oil	E **1,525**	**—**	**94,962**	**-4,230**	**-125**	**174**	**0**	**91,958**	**0**	**0**	**14,634**
Natural Gas Liquids and LRGs	**1,556**	**1,620**	**1,605**	**—**	**8,688**	**-3,149**	**—**	**402**	**67**	**16,149**	**4,020**
Pentanes Plus	165	—	0	—	0	-9	—	0	4	170	25
Liquefied Petroleum Gases	1,391	1,620	1,605	—	8,688	-3,140	—	402	63	15,979	3,995
Ethane/Ethylene	482	0	0	—	0	0	—	0	0	482	0
Propane/Propylene	613	3,255	1,587	—	8,443	-1,994	—	0	49	15,843	3,075
Normal Butane/Butylene	211	-1,426	18	—	160	-1,188	—	289	14	-152	683
Isobutane/Isobutylene	85	-209	0	—	85	42	—	113	0	-194	237
Other Liquids	**3,544**	**—**	**12,917**	**—**	**246**	**1,361**	**—**	**15,482**	**218**	**-354**	**23,983**
Other Hydrocarbons/Oxygenates	3,616	—	1,647	—	0	422	—	4,627	214	0	2,658
Unfinished Oils	—	—	3,954	—	21	-1,312	—	5,901	0	-614	9,234
Motor Gasoline Blend. Comp.	-72	—	7,316	—	225	2,291	—	5,174	4	0	11,958
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-40	—	-220	0	260	133
Finished Petroleum Products	**608**	**110,799**	**53,777**	**—**	**163,875**	**-13,784**	**—**	**—**	**1,402**	**341,441**	**156,852**
Finished Motor Gasoline	608	57,417	18,393	—	89,012	1,448	—	—	19	163,963	53,508
Reformulated	—	34,810	12,548	—	19,849	-764	—	—	14	67,957	21,518
Oxygenated	5,358	50	0	—	0	-99	—	—	1	5,506	226
Other	-4,751	22,557	5,845	—	69,163	2,311	—	—	4	90,500	31,764
Finished Aviation Gasoline	—	48	0	—	153	-72	—	—	0	273	188
Jet Fuel	—	6,260	5,526	—	29,372	710	—	—	424	40,024	11,631
Naphtha-Type	—	0	0	—	0	0	—	—	1	-1	0
Kerosene-Type	—	6,260	5,526	—	29,372	710	—	—	424	40,024	11,631
Kerosene	—	975	142	—	475	-402	—	—	3	1,991	3,501
Distillate Fuel Oil	—	26,372	15,258	—	40,142	-14,998	—	—	163	96,607	61,369
0.05 percent sulfur and under	—	9,640	7,143	—	21,310	-4,306	—	—	19	42,380	18,862
Greater than 0.05 percent sulfur	—	16,732	8,115	—	18,832	-10,692	—	—	144	54,227	42,507
Residual Fuel Oil	—	7,489	11,750	—	2,510	-2,670	—	—	366	24,053	17,392
Petrochemical Feedstocks[e]	—	806	263	—	144	44	—	—	0	1,169	458
Special Naphthas	—	100	188	—	217	2	—	—	28	475	101
Lubricants	—	982	514	—	1,494	-84	—	—	217	2,857	2,406
Waxes	—	112	36	—	3	14	—	—	49	88	75
Petroleum Coke	—	3,239	0	—	0	93	—	—	115	3,031	454
Asphalt and Road Oil	—	3,381	1,707	—	353	2,118	—	—	10	3,313	5,690
Still Gas	—	3,487	0	—	0	0	—	—	0	3,487	0
Miscellaneous Products	—	131	0	—	0	13	—	—	7	111	79
Total	**7,233**	**112,419**	**163,261**	**-4,230**	**172,684**	**-15,398**	**0**	**107,842**	**1,687**	**357,236**	**199,489**

[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, February 1999

(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**	**—**	**1,473**	**69**	**-4**	**36**	**0**	**1,529**	**0**	**0**
Natural Gas Liquids and LRGs	**27**	**26**	**34**	**—**	**139**	**-13**	**—**	**8**	**2**	**230**
Pentanes Plus	3	—	0	—	0	1	—	0	(s)	2
Liquefied Petroleum Gases	24	26	34	—	139	-14	—	8	2	228
Ethane/Ethylene	8	0	0	—	0	0	—	0	0	8
Propane/Propylene	11	55	34	—	134	7	—	0	1	226
Normal Butane/Butylene	4	-25	(s)	—	2	-24	—	6	(s)	-2
Isobutane/Isobutylene	2	-4	0	—	3	4	—	2	0	-5
Other Liquids	**92**	**—**	**201**	**—**	**9**	**69**	**—**	**273**	**2**	**-41**
Other Hydrocarbons/Oxygenates	65	—	25	—	0	13	—	76	2	0
Unfinished Oils	—	—	49	—	(s)	2	—	92	0	-45
Motor Gasoline Blend. Comp.	27	—	128	—	9	53	—	110	(s)	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	1	—	-4	0	4
Finished Petroleum Products	**-18**	**1,861**	**972**	**—**	**2,724**	**-370**	**—**	**—**	**21**	**5,887**
Finished Motor Gasoline	-18	978	344	—	1,467	-89	—	—	(s)	2,860
Reformulated	—	596	238	—	304	-72	—	—	(s)	1,210
Oxygenated	86	2	0	—	0	-3	—	—	(s)	91
Other	-104	380	107	—	1,164	-13	—	—	(s)	1,559
Finished Aviation Gasoline	—	0	0	—	2	-2	—	—	0	4
Jet Fuel	—	113	113	—	489	31	—	—	5	679
Naphtha-Type	—	0	0	—	0	0	—	—	(s)	(s)
Kerosene-Type	—	113	113	—	489	31	—	—	5	679
Kerosene	—	11	2	—	7	-23	—	—	(s)	42
Distillate Fuel Oil	—	424	249	—	679	-236	—	—	2	1,585
0.05 percent sulfur and under	—	182	89	—	374	-80	—	—	(s)	725
Greater than 0.05 percent sulfur	—	241	160	—	305	-156	—	—	2	861
Residual Fuel Oil	—	121	224	—	48	-67	—	—	5	454
Petrochemical Feedstocks[e]	—	15	3	—	-1	-4	—	—	0	21
Special Naphthas	—	2	3	—	3	0	—	—	(s)	7
Lubricants	—	18	2	—	22	-4	—	—	4	41
Waxes	—	2	1	—	(s)	1	—	—	1	2
Petroleum Coke	—	55	0	—	0	1	—	—	3	51
Asphalt and Road Oil	—	64	30	—	9	22	—	—	(s)	81
Still Gas	—	58	0	—	0	0	—	—	0	58
Miscellaneous Products	—	2	0	—	0	(s)	—	—	(s)	2
Total	**127**	**1,887**	**2,681**	**69**	**2,868**	**-278**	**0**	**1,809**	**25**	**6,076**

[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-February 1999

(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] **26**	**—**	**1,610**	**-72**	**-2**	**3**	**0**	**1,559**	**0**	**0**
Natural Gas Liquids and LRGs	**26**	**27**	**27**	**—**	**147**	**-53**	**—**	**7**	**1**	**274**
Pentanes Plus	3	—	0	—	0	(s)	—	0	(s)	3
Liquefied Petroleum Gases	24	27	27	—	147	-53	—	7	1	271
Ethane/Ethylene	8	0	0	—	0	0	—	0	0	8
Propane/Propylene	10	55	27	—	143	-34	—	0	1	269
Normal Butane/Butylene	4	-24	(s)	—	3	-20	—	5	(s)	-3
Isobutane/Isobutylene	1	-4	0	—	1	1	—	2	0	-3
Other Liquids	**60**	**—**	**219**	**—**	**4**	**23**	**—**	**262**	**4**	**-6**
Other Hydrocarbons/Oxygenates	61	—	28	—	0	7	—	78	4	0
Unfinished Oils	—	—	67	—	(s)	-22	—	100	0	-10
Motor Gasoline Blend. Comp.	-1	—	124	—	4	39	—	88	(s)	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-1	—	-4	0	4
Finished Petroleum Products	**10**	**1,878**	**911**	**—**	**2,778**	**-234**	**—**	**—**	**24**	**5,787**
Finished Motor Gasoline	10	973	312	—	1,509	25	—	—	(s)	2,779
Reformulated	—	590	213	—	336	-13	—	—	(s)	1,152
Oxygenated	91	1	0	—	0	-2	—	—	(s)	93
Other	-81	382	99	—	1,172	39	—	—	(s)	1,534
Finished Aviation Gasoline	—	1	0	—	3	-1	—	—	0	5
Jet Fuel	—	106	94	—	498	12	—	—	7	678
Naphtha-Type	—	0	0	—	0	0	—	—	(s)	(s)
Kerosene-Type	—	106	94	—	498	12	—	—	7	678
Kerosene	—	17	2	—	8	-7	—	—	(s)	34
Distillate Fuel Oil	—	447	259	—	680	-254	—	—	3	1,637
0.05 percent sulfur and under	—	163	121	—	361	-73	—	—	(s)	718
Greater than 0.05 percent sulfur	—	284	138	—	319	-181	—	—	2	919
Residual Fuel Oil	—	127	199	—	43	-45	—	—	6	408
Petrochemical Feedstocks[e]	—	14	4	—	2	1	—	—	0	20
Special Naphthas	—	2	3	—	4	(s)	—	—	(s)	8
Lubricants	—	17	9	—	25	-1	—	—	4	48
Waxes	—	2	1	—	(s)	(s)	—	—	1	1
Petroleum Coke	—	55	0	—	0	2	—	—	2	51
Asphalt and Road Oil	—	57	29	—	6	36	—	—	(s)	56
Still Gas	—	59	0	—	0	0	—	—	0	59
Miscellaneous Products	—	2	0	—	0	(s)	—	—	(s)	2
Total	**123**	**1,905**	**2,767**	**-72**	**2,927**	**-261**	**0**	**1,828**	**29**	**6,055**

[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, February 1999

(Thousand Barrels)

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]	Ending Stocks
Crude Oil	E 13,296	—	18,575	-1,190	59,345	-1,949	0	90,734	1,241	0	67,927
Natural Gas Liquids and LRGs	7,828	2,537	2,240	—	-151	-4,965	—	3,003	419	13,997	26,867
Pentanes Plus	979	—	19	—	449	-263	—	862	23	825	2,176
Liquefied Petroleum Gases	6,849	2,537	2,221	—	-600	-4,702	—	2,141	396	13,172	24,691
Ethane/Ethylene	2,630	0	12	—	-1,697	-251	—	0	0	1,196	3,789
Propane/Propylene	2,785	2,939	1,939	—	721	-3,142	—	0	81	11,445	16,318
Normal Butane/Butylene	970	-474	84	—	100	-1,166	—	1,285	315	246	3,058
Isobutane/Isobutylene	464	72	186	—	276	-143	—	856	0	285	1,526
Other Liquids	1,049	—	0	—	1,532	73	—	2,742	17	-251	27,157
Other Hydrocarbons/Oxygenates	1,126	—	0	—	0	91	—	1,018	17	0	2,219
Unfinished Oils	—	—	0	—	47	-511	—	810	0	-252	12,312
Motor Gasoline Blend. Comp.	-77	—	0	—	1,485	500	—	908	(s)	0	12,599
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-7	—	6	0	1	27
Finished Petroleum Products	899	98,409	234	—	20,683	3,017	—	—	253	116,955	118,168
Finished Motor Gasoline	899	50,984	32	—	10,771	-187	—	—	28	62,845	47,893
Reformulated	—	8,433	0	—	447	-345	—	—	1	9,224	701
Oxygenated	8,219	1,230	0	—	-12	56	—	—	0	9,381	512
Other	-7,320	41,321	32	—	10,336	102	—	—	27	44,240	46,680
Finished Aviation Gasoline	—	131	0	—	22	21	—	—	0	132	437
Jet Fuel	—	6,402	0	—	3,657	623	—	—	(s)	9,436	9,445
Naphtha-Type	—	0	0	—	0	0	—	—	(s)	(s)	0
Kerosene-Type	—	6,402	0	—	3,657	623	—	—	0	9,436	9,445
Kerosene	—	764	0	—	-19	54	—	—	1	690	1,424
Distillate Fuel Oil	—	23,863	102	—	5,700	602	—	—	9	29,054	35,170
0.05 percent sulfur and under	—	17,257	88	—	4,448	452	—	—	5	21,336	24,926
Greater than 0.05 percent sulfur	—	6,606	14	—	1,252	150	—	—	3	7,719	10,244
Residual Fuel Oil	—	1,342	0	—	-220	232	—	—	20	870	2,425
Petrochemical Feedstocks[e]	—	1,141	39	—	94	-26	—	—	0	1,300	286
Special Naphthas	—	733	18	—	212	-24	—	—	8	979	384
Lubricants	—	595	32	—	241	-49	—	—	76	841	1,603
Waxes	—	105	10	—	0	12	—	—	15	88	89
Petroleum Coke	—	4,117	0	—	0	86	—	—	34	3,997	4,356
Asphalt and Road Oil	—	4,379	0	—	225	1,683	—	—	63	2,858	14,431
Still Gas	—	3,563	0	—	0	0	—	—	0	3,563	0
Miscellaneous Products	—	290	1	—	0	-10	—	—	1	300	225
Total	23,072	100,946	21,049	-1,190	81,409	-3,824	0	96,479	1,930	130,701	240,119

[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-February 1999

(Thousand Barrels)

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]	Ending Stocks
Crude Oil	E 27,514	—	41,833	4,606	116,174	-2,966	0	191,011	2,082	0	67,927
Natural Gas Liquids and LRGs	16,172	4,967	5,528	—	2,796	-14,255	—	6,805	758	36,155	26,867
Pentanes Plus	2,023	—	76	—	1,401	-286	—	1,794	55	1,937	2,176
Liquefied Petroleum Gases	14,149	4,967	5,452	—	1,395	-13,969	—	5,011	704	34,217	24,691
Ethane/Ethylene	5,436	0	26	—	-2,794	-1,055	—	0	0	3,723	3,789
Propane/Propylene	5,751	6,172	4,668	—	3,467	-10,677	—	0	136	30,599	16,318
Normal Butane/Butylene	2,079	-1,355	335	—	123	-2,027	—	3,286	568	-645	3,058
Isobutane/Isobutylene	883	150	423	—	599	-210	—	1,725	0	540	1,526
Other Liquids	1,177	—	0	—	3,823	2,004	—	3,794	35	-833	27,157
Other Hydrocarbons/Oxygenates	2,259	—	0	—	0	99	—	2,125	35	0	2,219
Unfinished Oils	—	—	0	—	57	387	—	504	0	-834	12,312
Motor Gasoline Blend. Comp.	-1,082	—	0	—	3,766	1,505	—	1,179	(s)	0	12,599
Aviation Gasoline Blend. Comp.	—	—	0	—	0	13	—	-14	0	1	27
Finished Petroleum Products	2,910	206,498	581	—	44,558	12,698	—	—	475	241,374	118,168
Finished Motor Gasoline	2,910	107,643	82	—	25,982	5,530	—	—	52	131,035	47,893
Reformulated	—	17,869	0	—	893	-208	—	—	1	18,969	701
Oxygenated	18,282	2,543	0	—	-39	93	—	—	0	20,693	512
Other	-15,372	87,231	82	—	25,128	5,645	—	—	51	91,373	46,680
Finished Aviation Gasoline	—	246	0	—	79	-73	—	—	0	398	437
Jet Fuel	—	13,074	4	—	6,558	-157	—	—	1	19,792	9,445
Naphtha-Type	—	0	4	—	0	0	—	—	1	3	0
Kerosene-Type	—	13,074	0	—	6,558	-157	—	—	0	19,789	9,445
Kerosene	—	2,389	1	—	136	213	—	—	2	2,311	1,424
Distillate Fuel Oil	—	48,734	276	—	11,146	1,730	—	—	17	58,409	35,170
0.05 percent sulfur and under	—	35,249	232	—	8,676	1,053	—	—	12	43,092	24,926
Greater than 0.05 percent sulfur	—	13,485	44	—	2,470	677	—	—	5	15,317	10,244
Residual Fuel Oil	—	2,901	0	—	-546	90	—	—	20	2,245	2,425
Petrochemical Feedstocks[e]	—	2,434	74	—	175	52	—	—	0	2,631	286
Special Naphthas	—	1,433	67	—	262	-57	—	—	15	1,804	384
Lubricants	—	1,237	58	—	319	18	—	—	141	1,455	1,603
Waxes	—	211	18	—	0	10	—	—	34	185	89
Petroleum Coke	—	8,631	0	—	0	600	—	—	70	7,961	4,356
Asphalt and Road Oil	—	9,444	0	—	447	4,792	—	—	122	4,977	14,431
Still Gas	—	7,539	0	—	0	0	—	—	0	7,539	0
Miscellaneous Products	—	582	1	—	0	-50	—	—	1	632	225
Total	47,773	211,465	47,942	4,606	167,351	-2,519	0	201,610	3,351	276,696	240,119

[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, February 1999

(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 475	—	663	-43	2,119	-70	0	3,241	44	0
Natural Gas Liquids and LRGs	280	91	80	—	-5	-177	—	107	15	500
Pentanes Plus	35	—	1	—	16	-9	—	31	1	29
Liquefied Petroleum Gases	245	91	79	—	-21	-168	—	76	14	470
Ethane/Ethylene	94	0	(s)	—	-61	-9	—	0	0	43
Propane/Propylene	99	105	69	—	26	-112	—	0	3	409
Normal Butane/Butylene	35	-17	3	—	4	-42	—	46	11	9
Isobutane/Isobutylene	17	3	7	—	10	-5	—	31	0	10
Other Liquids	37	—	0	—	55	3	—	98	1	-9
Other Hydrocarbons/Oxygenates	40	—	0	—	0	3	—	36	1	0
Unfinished Oils	—	—	0	—	2	-18	—	29	0	-9
Motor Gasoline Blend. Comp.	-3	—	0	—	53	18	—	32	(s)	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	(s)	0	(s)
Finished Petroleum Products	32	3,515	8	—	739	108	—	—	9	4,177
Finished Motor Gasoline	32	1,821	1	—	385	-7	—	—	1	2,244
Reformulated	—	301	0	—	16	-12	—	—	(s)	329
Oxygenated	294	44	0	—	(s)	2	—	—	0	335
Other	-261	1,476	1	—	369	4	—	—	1	1,580
Finished Aviation Gasoline	—	5	0	—	1	1	—	—	0	5
Jet Fuel	—	229	0	—	131	22	—	—	(s)	337
Naphtha-Type	—	0	0	—	0	0	—	—	(s)	(s)
Kerosene-Type	—	229	0	—	131	22	—	—	0	337
Kerosene	—	27	0	—	-1	2	—	—	(s)	25
Distillate Fuel Oil	—	852	4	—	204	22	—	—	(s)	1,038
0.05 percent sulfur and under	—	616	3	—	159	16	—	—	(s)	762
Greater than 0.05 percent sulfur	—	236	1	—	45	5	—	—	(s)	276
Residual Fuel Oil	—	48	0	—	-8	8	—	—	1	31
Petrochemical Feedstocks[e]	—	41	1	—	3	-1	—	—	0	46
Special Naphthas	—	26	1	—	8	-1	—	—	(s)	35
Lubricants	—	21	1	—	9	-2	—	—	3	30
Waxes	—	4	(s)	—	0	(s)	—	—	1	3
Petroleum Coke	—	147	0	—	0	3	—	—	1	143
Asphalt and Road Oil	—	156	0	—	8	60	—	—	2	102
Still Gas	—	127	0	—	0	0	—	—	0	127
Miscellaneous Products	—	10	(s)	—	0	(s)	—	—	(s)	11
Total	824	3,605	752	-43	2,907	-137	0	3,446	69	4,668

[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-February 1999

(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 466	—	709	78	1,969	-50	0	3,237	35	0
Natural Gas Liquids and LRGs	274	84	94	—	47	-242	—	115	13	613
Pentanes Plus	34	—	1	—	24	-5	—	30	1	33
Liquefied Petroleum Gases	240	84	92	—	24	-237	—	85	12	580
Ethane/Ethylene	92	0	(s)	—	-47	-18	—	0	0	63
Propane/Propylene	97	105	79	—	59	-181	—	0	2	519
Normal Butane/Butylene	35	-23	6	—	2	-34	—	56	10	-11
Isobutane/Isobutylene	15	3	7	—	10	-4	—	29	0	9
Other Liquids	20	—	0	—	65	34	—	64	1	-14
Other Hydrocarbons/Oxygenates	38	—	0	—	0	2	—	36	1	0
Unfinished Oils	—	—	0	—	1	7	—	9	0	-14
Motor Gasoline Blend. Comp.	-18	—	0	—	64	26	—	20	(s)	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	(s)	0	(s)
Finished Petroleum Products	49	3,500	10	—	755	215	—	—	8	4,091
Finished Motor Gasoline	49	1,824	1	—	440	94	—	—	1	2,221
Reformulated	—	303	0	—	15	-4	—	—	(s)	322
Oxygenated	310	43	0	—	-1	2	—	—	0	351
Other	-261	1,478	1	—	426	96	—	—	1	1,549
Finished Aviation Gasoline	—	4	0	—	1	-1	—	—	0	7
Jet Fuel	—	222	(s)	—	111	-3	—	—	(s)	335
Naphtha-Type	—	0	(s)	—	0	0	—	—	(s)	(s)
Kerosene-Type	—	222	0	—	111	-3	—	—	0	335
Kerosene	—	40	(s)	—	2	4	—	—	(s)	39
Distillate Fuel Oil	—	826	5	—	189	29	—	—	(s)	990
0.05 percent sulfur and under	—	597	4	—	147	18	—	—	(s)	730
Greater than 0.05 percent sulfur	—	229	1	—	42	11	—	—	(s)	260
Residual Fuel Oil	—	49	0	—	-9	2	—	—	(s)	38
Petrochemical Feedstocks[e]	—	41	1	—	3	1	—	—	0	45
Special Naphthas	—	24	1	—	4	-1	—	—	(s)	31
Lubricants	—	21	1	—	5	(s)	—	—	2	25
Waxes	—	4	(s)	—	0	(s)	—	—	1	3
Petroleum Coke	—	146	0	—	0	10	—	—	1	135
Asphalt and Road Oil	—	160	0	—	8	81	—	—	2	84
Still Gas	—	128	0	—	0	0	—	—	0	128
Miscellaneous Products	—	10	(s)	—	0	-1	—	—	(s)	11
Total	810	3,584	813	78	2,836	-43	0	3,417	57	4,690

[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, February 1999

(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 88,436	—	156,305	7,580	-54,683	5,417	9	192,212	0	0	745,176
Natural Gas Liquids and LRGs	33,605	10,736	1,022	—	-596	-2,968	—	4,865	1,125	41,745	55,800
Pentanes Plus	4,970	—	1,022	—	-59	1,016	—	1,497	0	3,420	6,649
Liquefied Petroleum Gases	28,635	10,736	0	—	-537	-3,984	—	3,368	1,125	38,325	49,151
Ethane/Ethylene	12,985	781	0	—	2,891	-2,530	—	0	0	19,187	13,740
Propane/Propylene	9,521	9,349	0	—	-3,488	-864	—	0	914	15,332	22,239
Normal Butane/Butylene	1,893	339	0	—	194	-728	—	2,004	211	939	8,377
Isobutane/Isobutylene	4,236	267	0	—	-134	138	—	1,364	0	2,867	4,795
Other Liquids	4,357	—	4,761	—	-2,038	850	—	4,741	873	616	68,852
Other Hydrocarbons/Oxygenates	3,491	—	0	—	0	-195	—	2,972	714	0	6,215
Unfinished Oils	—	—	4,761	—	-59	123	—	3,963	0	616	47,199
Motor Gasoline Blend. Comp.	866	—	0	—	-1,979	933	—	-2,205	159	0	15,414
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-11	—	11	0	0	24
Finished Petroleum Products	-809	204,184	7,856	—	-102,473	-1,019	—	—	8,783	100,994	135,780
Finished Motor Gasoline	-809	93,667	0	—	-54,839	-1,283	—	—	2,737	36,565	50,684
Reformulated	—	16,756	0	—	-8,955	754	—	—	0	7,047	10,462
Oxygenated	567	76	0	—	0	87	—	—	(s)	556	88
Other	-1,376	76,835	0	—	-45,884	-2,124	—	—	2,737	28,962	40,134
Finished Aviation Gasoline	—	291	0	—	-73	71	—	—	0	147	674
Jet Fuel	—	22,724	2	—	-18,761	-523	—	—	49	4,439	14,131
Naphtha-Type	—	1	0	—	0	1	—	—	18	-18	1
Kerosene-Type	—	22,723	2	—	-18,761	-524	—	—	31	4,457	14,130
Kerosene	—	452	0	—	-165	-298	—	—	0	585	755
Distillate Fuel Oil	—	40,161	0	—	-25,777	707	—	—	1,526	12,151	30,518
0.05 percent sulfur and under	—	24,512	0	—	-15,881	606	—	—	964	7,061	18,595
Greater than 0.05 percent sulfur	—	15,649	0	—	-9,896	101	—	—	561	5,091	11,923
Residual Fuel Oil	—	10,263	0	—	-1,131	-506	—	—	785	8,853	15,645
Petrochemical Feedstocks[e]	—	11,201	7,552	—	-57	1,228	—	—	0	17,468	3,911
Special Naphthas	—	794	109	—	-299	-78	—	—	12	670	1,668
Lubricants	—	2,908	0	—	-895	-522	—	—	469	2,066	7,291
Waxes	—	310	3	—	-3	-38	—	—	40	308	431
Petroleum Coke	—	9,781	0	—	0	-366	—	—	3,155	6,992	3,491
Asphalt and Road Oil	—	3,155	190	—	-473	388	—	—	8	2,476	5,156
Still Gas	—	7,591	0	—	0	0	—	—	0	7,591	0
Miscellaneous Products	—	886	0	—	0	201	—	—	1	684	1,425
Total	125,588	214,920	169,944	7,580	-159,790	2,280	9	201,818	10,780	143,355	1,005,608

[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-February 1999

(Thousand Barrels)

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]	Ending Stocks
Crude Oil	E 184,393	—	317,797	13,665	-107,195	5,786	9	402,861	3	0	745,176
Natural Gas Liquids and LRGs	68,748	21,652	3,707	—	-4,958	-15,030	—	11,205	2,925	90,049	55,800
Pentanes Plus	10,179	—	3,164	—	-558	969	—	3,401	0	8,415	6,649
Liquefied Petroleum Gases	58,569	21,652	543	—	-4,400	-15,999	—	7,804	2,925	81,634	49,151
Ethane/Ethylene	26,364	1,622	434	—	5,349	-2,472	—	0	0	36,241	13,740
Propane/Propylene	19,566	19,767	109	—	-9,930	-8,139	—	0	2,247	35,404	22,239
Normal Butane/Butylene	4,286	-357	0	—	387	-5,340	—	4,778	678	4,200	8,377
Isobutane/Isobutylene	8,353	620	0	—	-206	-48	—	3,026	0	5,789	4,795
Other Liquids	8,656	—	12,219	—	-4,314	3,998	—	10,873	2,239	-549	68,852
Other Hydrocarbons/Oxygenates	8,586	—	0	—	0	745	—	6,031	1,810	0	6,215
Unfinished Oils	—	—	11,262	—	-78	1,535	—	10,228	0	-579	47,199
Motor Gasoline Blend. Comp.	70	—	957	—	-4,236	1,746	—	-5,384	429	0	15,414
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-28	—	-2	0	30	24
Finished Petroleum Products	56	432,879	12,489	—	-218,832	723	—	—	21,583	204,286	135,780
Finished Motor Gasoline	56	198,842	0	—	-120,814	-232	—	—	6,378	71,938	50,684
Reformulated	—	34,708	0	—	-20,504	1,185	—	—	0	13,019	10,462
Oxygenated	1,261	156	0	—	0	87	—	—	(s)	1,330	88
Other	-1,205	163,978	0	—	-100,310	-1,504	—	—	6,378	57,589	40,134
Finished Aviation Gasoline	—	749	0	—	-247	324	—	—	0	178	674
Jet Fuel	—	48,827	2	—	-38,859	20	—	—	351	9,599	14,131
Naphtha-Type	—	1	0	—	0	0	—	—	43	-42	1
Kerosene-Type	—	48,826	2	—	-38,859	20	—	—	309	9,640	14,130
Kerosene	—	1,582	0	—	-579	-818	—	—	(s)	1,821	755
Distillate Fuel Oil	—	83,013	0	—	-52,965	-772	—	—	2,912	27,908	30,518
0.05 percent sulfur and under	—	51,216	0	—	-31,479	-65	—	—	1,223	18,579	18,595
Greater than 0.05 percent sulfur	—	31,797	0	—	-21,486	-707	—	—	1,689	9,329	11,923
Residual Fuel Oil	—	21,591	356	—	-1,964	316	—	—	3,310	16,357	15,645
Petrochemical Feedstocks[e]	—	24,028	11,679	—	-319	756	—	—	0	34,632	3,911
Special Naphthas	—	1,756	194	—	-479	46	—	—	35	1,390	1,668
Lubricants	—	6,409	24	—	-1,803	-395	—	—	969	4,056	7,291
Waxes	—	652	6	—	-3	-126	—	—	73	708	431
Petroleum Coke	—	20,709	0	—	0	448	—	—	7,507	12,754	3,491
Asphalt and Road Oil	—	6,110	222	—	-800	1,008	—	—	43	4,481	5,156
Still Gas	—	16,644	0	—	0	0	—	—	0	16,644	0
Miscellaneous Products	—	1,967	6	—	0	148	—	—	3	1,822	1,425
Total	261,853	454,531	346,212	13,665	-335,299	-4,523	9	424,939	26,751	293,786	1,005,608

[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, February 1999

(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] **3,158**	**—**	**5,582**	**271**	**-1,953**	**193**	**(s)**	**6,865**	**0**	**0**
Natural Gas Liquids and LRGs	**1,200**	**383**	**37**	**—**	**-21**	**-106**	**—**	**174**	**40**	**1,491**
Pentanes Plus	178	—	37	—	-2	36	—	53	0	122
Liquefied Petroleum Gases	1,023	383	0	—	-19	-142	—	120	40	1,369
Ethane/Ethylene	464	28	0	—	103	-90	—	0	0	685
Propane/Propylene	340	334	0	—	-125	-31	—	0	33	548
Normal Butane/Butylene	68	12	0	—	7	-26	—	72	8	34
Isobutane/Isobutylene	151	10	0	—	-5	5	—	49	0	102
Other Liquids	**156**	**—**	**170**	**—**	**-73**	**30**	**—**	**169**	**31**	**22**
Other Hydrocarbons/Oxygenates	125	—	0	—	0	-7	—	106	26	0
Unfinished Oils	—	—	170	—	-2	4	—	142	0	22
Motor Gasoline Blend. Comp.	31	—	0	—	-71	33	—	-79	6	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	(s)	0	0
Finished Petroleum Products	**-29**	**7,292**	**281**	**—**	**-3,660**	**-36**	**—**	**—**	**314**	**3,607**
Finished Motor Gasoline	-29	3,345	0	—	-1,959	-46	—	—	98	1,306
Reformulated	—	598	0	—	-320	27	—	—	0	252
Oxygenated	20	3	0	—	0	3	—	—	(s)	20
Other	-49	2,744	0	—	-1,639	-76	—	—	98	1,034
Finished Aviation Gasoline	—	10	0	—	-3	3	—	—	0	5
Jet Fuel	—	812	(s)	—	-670	-19	—	—	2	159
Naphtha-Type	—	(s)	0	—	0	(s)	—	—	1	-1
Kerosene-Type	—	812	(s)	—	-670	-19	—	—	1	159
Kerosene	—	16	0	—	-6	-11	—	—	0	21
Distillate Fuel Oil	—	1,434	0	—	-921	25	—	—	54	434
0.05 percent sulfur and under	—	875	0	—	-567	22	—	—	34	252
Greater than 0.05 percent sulfur	—	559	0	—	-353	4	—	—	20	182
Residual Fuel Oil	—	367	0	—	-40	-18	—	—	28	316
Petrochemical Feedstocks[e]	—	400	270	—	-2	44	—	—	0	624
Special Naphthas	—	28	4	—	-11	-3	—	—	(s)	24
Lubricants	—	104	0	—	-32	-19	—	—	17	74
Waxes	—	11	(s)	—	(s)	-1	—	—	1	11
Petroleum Coke	—	349	0	—	0	-13	—	—	113	250
Asphalt and Road Oil	—	113	7	—	-17	14	—	—	(s)	88
Still Gas	—	271	0	—	0	0	—	—	0	271
Miscellaneous Products	—	32	0	—	0	7	—	—	(s)	24
Total	**4,485**	**7,676**	**6,069**	**271**	**-5,707**	**81**	**(s)**	**7,208**	**385**	**5,120**

[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-February 1999

(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 **3,125**	**—**	**5,386**	**232**	**-1,817**	**98**	**(s)**	**6,828**	**(s)**	**0**
Natural Gas Liquids and LRGs	**1,165**	**367**	**63**	**—**	**-84**	**-255**	**—**	**190**	**50**	**1,526**
Pentanes Plus	173	—	54	—	-9	16	—	58	0	143
Liquefied Petroleum Gases	993	367	9	—	-75	-271	—	132	50	1,384
Ethane/Ethylene	447	27	7	—	91	-42	—	0	0	614
Propane/Propylene	332	335	2	—	-168	-138	—	0	38	600
Normal Butane/Butylene	73	-6	0	—	7	-91	—	81	11	71
Isobutane/Isobutylene	142	11	0	—	-3	-1	—	51	0	98
Other Liquids	**147**	**—**	**207**	**—**	**-73**	**68**	**—**	**184**	**38**	**-9**
Other Hydrocarbons/Oxygenates	146	—	0	—	0	13	—	102	31	0
Unfinished Oils	—	—	191	—	-1	26	—	173	0	-10
Motor Gasoline Blend. Comp.	1	—	16	—	-72	30	—	-91	7	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	(s)	0	1
Finished Petroleum Products	**1**	**7,337**	**212**	**—**	**-3,709**	**12**	**—**	**—**	**366**	**3,462**
Finished Motor Gasoline	1	3,370	0	—	-2,048	-4	—	—	108	1,219
Reformulated	—	588	0	—	-348	20	—	—	0	221
Oxygenated	21	3	0	—	0	1	—	—	(s)	23
Other	-20	2,779	0	—	-1,700	-25	—	—	108	976
Finished Aviation Gasoline	—	13	0	—	-4	5	—	—	0	3
Jet Fuel	—	828	(s)	—	-659	(s)	—	—	6	163
Naphtha-Type	—	(s)	0	—	0	0	—	—	1	-1
Kerosene-Type	—	828	(s)	—	-659	(s)	—	—	5	163
Kerosene	—	27	0	—	-10	-14	—	—	(s)	31
Distillate Fuel Oil	—	1,407	0	—	-898	-13	—	—	49	473
0.05 percent sulfur and under	—	868	0	—	-534	-1	—	—	21	315
Greater than 0.05 percent sulfur	—	539	0	—	-364	-12	—	—	29	158
Residual Fuel Oil	—	366	6	—	-33	5	—	—	56	277
Petrochemical Feedstocks[e]	—	407	198	—	-5	13	—	—	0	587
Special Naphthas	—	30	3	—	-8	1	—	—	1	24
Lubricants	—	109	(s)	—	-31	-7	—	—	16	69
Waxes	—	11	(s)	—	(s)	-2	—	—	1	12
Petroleum Coke	—	351	0	—	0	8	—	—	127	216
Asphalt and Road Oil	—	104	4	—	-14	17	—	—	1	76
Still Gas	—	282	0	—	0	0	—	—	0	282
Miscellaneous Products	—	33	(s)	—	0	3	—	—	(s)	31
Total	**4,438**	**7,704**	**5,868**	**232**	**-5,683**	**-77**	**(s)**	**7,202**	**453**	**4,979**

[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, February 1999

(Thousand Barrels)

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]	Ending Stocks
Crude Oil	E 9,079	—	5,234	2,173	-2,772	199	0	13,515	0	0	11,038
Natural Gas Liquids and LRGs	3,594	62	317	—	-3,148	-2	—	468	2	357	1,373
Pentanes Plus	713	—	126	—	-390	-5	—	219	0	235	215
Liquefied Petroleum Gases	2,881	62	191	—	-2,758	3	—	249	2	122	1,158
Ethane/Ethylene	798	0	0	—	-1,194	3	—	0	0	-399	211
Propane/Propylene	1,259	219	189	—	-993	-36	—	0	2	708	409
Normal Butane/Butylene	545	-120	2	—	-344	32	—	142	(s)	-91	345
Isobutane/Isobutylene	279	-37	0	—	-227	4	—	107	0	-96	193
Other Liquids	196	—	0	—	0	46	—	277	14	-141	5,398
Other Hydrocarbons/Oxygenates	152	—	0	—	0	56	—	82	14	0	356
Unfinished Oils	—	—	0	—	0	212	—	-71	0	-141	2,874
Motor Gasoline Blend. Comp.	44	—	0	—	0	-222	—	266	0	0	2,168
Aviation Gasoline Blend. Comp.	—	—	0	—	0	0	—	0	0	0	0
Finished Petroleum Products	55	14,470	141	—	1,389	98	—	—	14	15,943	12,698
Finished Motor Gasoline	55	7,059	4	—	139	-36	—	—	4	7,289	5,454
Reformulated	—	0	0	—	0	0	—	—	0	0	0
Oxygenated	992	319	0	—	12	-188	—	—	4	1,507	88
Other	-937	6,740	4	—	127	152	—	—	(s)	5,782	5,366
Finished Aviation Gasoline	—	3	1	—	0	-7	—	—	0	11	30
Jet Fuel	—	731	0	—	979	-151	—	—	0	1,861	711
Naphtha-Type	—	0	0	—	0	0	—	—	0	0	0
Kerosene-Type	—	731	0	—	979	-151	—	—	0	1,861	711
Kerosene	—	101	0	—	-5	16	—	—	0	80	139
Distillate Fuel Oil	—	3,886	136	—	276	11	—	—	0	4,287	3,191
0.05 percent sulfur and under	—	3,195	59	—	276	68	—	—	0	3,462	2,817
Greater than 0.05 percent sulfur	—	691	77	—	0	-57	—	—	0	825	374
Residual Fuel Oil	—	365	0	—	0	-21	—	—	0	386	409
Petrochemical Feedstocks[e]	—	15	0	—	0	0	—	—	0	15	0
Special Naphthas	—	0	0	—	0	0	—	—	(s)	(s)	0
Lubricants	—	0	0	—	0	0	—	—	6	-6	0
Waxes	—	81	0	—	0	7	—	—	2	72	45
Petroleum Coke	—	507	0	—	0	44	—	—	0	463	300
Asphalt and Road Oil	—	1,099	0	—	0	244	—	—	1	854	2,407
Still Gas	—	567	0	—	0	0	—	—	0	567	0
Miscellaneous Products	—	56	0	—	0	-9	—	—	0	65	12
Total	12,924	14,532	5,692	2,173	-4,531	341	0	14,260	29	16,159	30,507

[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-February 1999

(Thousand Barrels)

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]	Ending Stocks
Crude Oil	E 18,920	—	10,968	2,364	-5,350	-1,360	0	28,262	0	0	11,038
Natural Gas Liquids and LRGs	7,847	154	815	—	-6,526	-40	—	1,167	5	1,158	1,373
Pentanes Plus	1,544	—	289	—	-843	3	—	487	0	500	215
Liquefied Petroleum Gases	6,303	154	526	—	-5,683	-43	—	680	5	658	1,158
Ethane/Ethylene	1,881	0	0	—	-2,555	1	—	0	0	-675	211
Propane/Propylene	2,675	498	473	—	-1,980	-78	—	0	5	1,739	409
Normal Butane/Butylene	1,158	-293	53	—	-670	30	—	441	(s)	-223	345
Isobutane/Isobutylene	589	-51	0	—	-478	4	—	239	0	-183	193
Other Liquids	604	—	0	—	0	425	—	392	33	-246	5,398
Other Hydrocarbons/Oxygenates	361	—	0	—	0	93	—	235	33	0	356
Unfinished Oils	—	—	0	—	0	226	—	20	0	-246	2,874
Motor Gasoline Blend. Comp.	243	—	0	—	0	106	—	137	0	0	2,168
Aviation Gasoline Blend. Comp.	—	—	0	—	0	0	—	0	0	0	0
Finished Petroleum Products	-22	30,673	316	—	2,437	1,437	—	—	35	31,931	12,698
Finished Motor Gasoline	-22	15,270	10	—	14	772	—	—	4	14,496	5,454
Reformulated	—	0	0	—	0	0	—	—	0	0	0
Oxygenated	2,206	1,527	0	—	39	-65	—	—	4	3,834	88
Other	-2,229	13,743	10	—	-25	837	—	—	(s)	10,662	5,366
Finished Aviation Gasoline	—	12	1	—	15	-5	—	—	0	33	30
Jet Fuel	—	1,648	0	—	2,026	-84	—	—	0	3,758	711
Naphtha-Type	—	0	0	—	0	0	—	—	0	0	0
Kerosene-Type	—	1,648	0	—	2,026	-84	—	—	0	3,758	711
Kerosene	—	242	0	—	-32	9	—	—	0	201	139
Distillate Fuel Oil	—	7,944	305	—	414	138	—	—	0	8,525	3,191
0.05 percent sulfur and under	—	6,574	122	—	419	279	—	—	0	6,836	2,817
Greater than 0.05 percent sulfur	—	1,370	183	—	-5	-141	—	—	0	1,689	374
Residual Fuel Oil	—	708	0	—	0	-58	—	—	0	766	409
Petrochemical Feedstocks[e]	—	33	0	—	0	0	—	—	0	33	0
Special Naphthas	—	0	0	—	0	0	—	—	1	-1	0
Lubricants	—	0	0	—	0	0	—	—	18	-18	0
Waxes	—	190	0	—	0	-3	—	—	10	183	45
Petroleum Coke	—	1,072	0	—	0	72	—	—	0	1,000	300
Asphalt and Road Oil	—	2,197	0	—	0	604	—	—	3	1,590	2,407
Still Gas	—	1,242	0	—	0	0	—	—	0	1,242	0
Miscellaneous Products	—	115	0	—	0	-8	—	—	0	123	12
Total	27,348	30,827	12,099	2,364	-9,439	462	0	29,821	73	32,844	30,507

[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, February 1999

(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 324	—	187	78	-99	7	0	483	0	0
Natural Gas Liquids and LRGs	128	2	11	—	-112	(s)	—	17	(s)	13
Pentanes Plus	25	—	5	—	-14	(s)	—	8	0	8
Liquefied Petroleum Gases	103	2	7	—	-99	(s)	—	9	(s)	4
Ethane/Ethylene	29	0	0	—	-43	(s)	—	0	0	-14
Propane/Propylene	45	8	7	—	-35	-1	—	0	(s)	25
Normal Butane/Butylene	19	-4	(s)	—	-12	1	—	5	(s)	-3
Isobutane/Isobutylene	10	-1	0	—	-8	(s)	—	4	0	-3
Other Liquids	7	—	0	—	0	2	—	10	(s)	-5
Other Hydrocarbons/Oxygenates	5	—	0	—	0	2	—	3	(s)	0
Unfinished Oils	—	—	0	—	0	8	—	-3	0	-5
Motor Gasoline Blend. Comp.	2	—	0	—	0	-8	—	10	0	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	0	—	0	0	0
Finished Petroleum Products	2	517	5	—	50	4	—	—	1	569
Finished Motor Gasoline	2	252	(s)	—	5	-1	—	—	(s)	260
Reformulated	—	0	0	—	0	0	—	—	0	0
Oxygenated	35	11	0	—	(s)	-7	—	—	(s)	54
Other	-33	241	(s)	—	5	5	—	—	(s)	207
Finished Aviation Gasoline	—	(s)	(s)	—	0	(s)	—	—	0	(s)
Jet Fuel	—	26	0	—	35	-5	—	—	0	66
Naphtha-Type	—	0	0	—	0	0	—	—	0	0
Kerosene-Type	—	26	0	—	35	-5	—	—	0	66
Kerosene	—	4	0	—	(s)	1	—	—	0	3
Distillate Fuel Oil	—	139	5	—	10	(s)	—	—	0	153
0.05 percent sulfur and under	—	114	2	—	10	2	—	—	0	124
Greater than 0.05 percent sulfur	—	25	3	—	0	-2	—	—	0	29
Residual Fuel Oil	—	13	0	—	0	-1	—	—	0	14
Petrochemical Feedstocks[e]	—	1	0	—	0	0	—	—	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	—	18	0	—	0	2	—	—	0	17
Asphalt and Road Oil	—	39	0	—	0	9	—	—	(s)	30
Still Gas	—	20	0	—	0	0	—	—	0	20
Miscellaneous Products	—	2	0	—	0	(s)	—	—	0	2
Total	462	519	203	78	-162	12	0	509	1	577

[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-February 1999

(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] **321**	**—**	**186**	**40**	**-91**	**-23**	**0**	**479**	**0**	**0**
Natural Gas Liquids and LRGs	**133**	**3**	**14**	**—**	**-111**	**-1**	**—**	**20**	**(s)**	**20**
Pentanes Plus	26	—	5	—	-14	(s)	—	8	0	8
Liquefied Petroleum Gases	107	3	9	—	-96	-1	—	12	(s)	11
Ethane/Ethylene	32	0	0	—	-43	(s)	—	0	0	-11
Propane/Propylene	45	8	8	—	-34	-1	—	0	(s)	29
Normal Butane/Butylene	20	-5	1	—	-11	1	—	7	(s)	-4
Isobutane/Isobutylene	10	-1	0	—	-8	(s)	—	4	0	-3
Other Liquids	**10**	**—**	**0**	**—**	**0**	**7**	**—**	**7**	**1**	**-4**
Other Hydrocarbons/Oxygenates	6	—	0	—	0	2	—	4	1	0
Unfinished Oils	—	—	0	—	0	4	—	(s)	0	-4
Motor Gasoline Blend. Comp.	4	—	0	—	0	2	—	2	0	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	0	—	0	0	0
Finished Petroleum Products	**(s)**	**520**	**5**	**—**	**41**	**24**	**—**	**—**	**1**	**541**
Finished Motor Gasoline	(s)	259	(s)	—	(s)	13	—	—	(s)	246
Reformulated	—	0	0	—	0	0	—	—	0	0
Oxygenated	37	26	0	—	1	-1	—	—	(s)	65
Other	-38	233	(s)	—	(s)	14	—	—	(s)	181
Finished Aviation Gasoline	—	(s)	(s)	—	(s)	(s)	—	—	0	1
Jet Fuel	—	28	0	—	34	-1	—	—	0	64
Naphtha-Type	—	0	0	—	0	0	—	—	0	0
Kerosene-Type	—	28	0	—	34	-1	—	—	0	64
Kerosene	—	4	0	—	-1	(s)	—	—	0	3
Distillate Fuel Oil	—	135	5	—	7	2	—	—	0	144
0.05 percent sulfur and under	—	111	2	—	7	5	—	—	0	116
Greater than 0.05 percent sulfur	—	23	3	—	(s)	-2	—	—	0	29
Residual Fuel Oil	—	12	0	—	0	-1	—	—	0	13
Petrochemical Feedstocks[e]	—	1	0	—	0	0	—	—	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	—	18	0	—	0	1	—	—	0	17
Asphalt and Road Oil	—	37	0	—	0	10	—	—	(s)	27
Still Gas	—	21	0	—	0	0	—	—	0	21
Miscellaneous Products	—	2	0	—	0	(s)	—	—	0	2
Total	**464**	**522**	**205**	**40**	**-160**	**8**	**0**	**505**	**1**	**557**

[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, February 1999

(Thousand Barrels)

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]	Ending Stocks
Crude Oil	E 55,989	—	13,472	-4,626	-1,777	-3,802	0	64,758	2,102	0	58,607
Natural Gas Liquids and LRGs	2,427	1,380	2	—	0	-225	—	2,257	234	1,543	2,983
Pentanes Plus	1,298	—	0	—	0	-3	—	995	(s)	306	38
Liquefied Petroleum Gases	1,129	1,380	2	—	0	-222	—	1,262	234	1,237	2,945
Ethane/Ethylene	3	0	0	—	0	0	—	0	0	3	0
Propane/Propylene	331	1,084	2	—	0	-348	—	0	122	1,643	1,290
Normal Butane/Butylene	479	104	0	—	0	-4	—	924	112	-449	1,201
Isobutane/Isobutylene	316	192	0	—	0	130	—	338	0	40	454
Other Liquids	4,782	—	2,808	—	245	2,464	—	4,819	89	463	31,951
Other Hydrocarbons/Oxygenates	3,286	—	1,166	—	0	897	—	3,466	89	0	3,563
Unfinished Oils	—	—	1,557	—	0	1,733	—	-639	0	463	21,005
Motor Gasoline Blend. Comp.	1,496	—	85	—	245	-156	—	1,982	(s)	0	7,381
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-10	—	10	0	0	2
Finished Petroleum Products	-1,298	74,305	1,371	—	4,128	-3,177	—	—	5,306	76,377	56,215
Finished Motor Gasoline	-1,298	35,606	32	—	2,841	-2,739	—	—	159	39,761	20,886
Reformulated	—	24,359	0	—	0	-1,155	—	—	58	25,456	10,988
Oxygenated	1,984	564	0	—	0	1	—	—	30	2,517	6
Other	-3,282	10,683	32	—	2,841	-1,585	—	—	71	11,789	9,892
Finished Aviation Gasoline	—	25	0	—	0	-27	—	—	0	52	664
Jet Fuel	—	11,114	1,074	—	447	-1,088	—	—	62	13,661	9,072
Naphtha-Type	—	13	0	—	0	6	—	—	0	7	45
Kerosene-Type	—	11,101	1,074	—	447	-1,094	—	—	62	13,654	9,027
Kerosene	—	103	0	—	0	19	—	—	2	82	173
Distillate Fuel Oil	—	11,970	207	—	798	-274	—	—	1,662	11,587	12,054
0.05 percent sulfur and under	—	9,346	0	—	698	-148	—	—	598	9,594	8,768
Greater than 0.05 percent sulfur	—	2,624	207	—	100	-126	—	—	1,064	1,993	3,286
Residual Fuel Oil	—	5,534	0	—	0	292	—	—	1,004	4,238	6,012
Petrochemical Feedstocks[e]	—	233	0	—	0	-41	—	—	0	274	306
Special Naphthas	—	54	0	—	0	3	—	—	240	-189	61
Lubricants	—	511	0	—	42	-57	—	—	97	513	1,385
Waxes	—	140	25	—	0	78	—	—	17	70	350
Petroleum Coke	—	4,133	33	—	0	214	—	—	2,046	1,906	2,160
Asphalt and Road Oil	—	1,300	0	—	0	446	—	—	17	837	2,905
Still Gas	—	3,482	0	—	0	0	—	—	0	3,482	0
Miscellaneous Products	—	100	0	—	0	-3	—	—	1	102	187
Total	61,900	75,685	17,653	-4,626	2,596	-4,740	0	71,834	7,731	78,383	149,756

[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-February 1999

(Thousand Barrels)

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]	Ending Stocks
Crude Oil	E 119,779	—	26,825	1,726	-3,504	1,305	0	138,932	4,589	0	58,607
Natural Gas Liquids and LRGs	5,232	2,793	7	—	0	-1,321	—	5,327	442	3,584	2,983
Pentanes Plus	2,787	—	0	—	0	-21	—	2,225	(s)	583	38
Liquefied Petroleum Gases	2,445	2,793	7	—	0	-1,300	—	3,102	441	3,002	2,945
Ethane/Ethylene	7	0	0	—	0	0	—	0	0	7	0
Propane/Propylene	705	2,584	7	—	0	-819	—	0	265	3,850	1,290
Normal Butane/Butylene	1,029	-74	0	—	0	-564	—	2,211	176	-868	1,201
Isobutane/Isobutylene	704	283	0	—	0	83	—	891	0	13	454
Other Liquids	7,542	—	5,656	—	245	447	—	10,974	131	1,891	31,951
Other Hydrocarbons/Oxygenates	4,594	—	2,941	—	0	-522	—	7,926	131	0	3,563
Unfinished Oils	—	—	2,630	—	0	875	—	-136	0	1,891	21,005
Motor Gasoline Blend. Comp.	2,948	—	85	—	245	114	—	3,164	(s)	0	7,381
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-20	—	20	0	0	2
Finished Petroleum Products	-2,507	160,451	3,000	—	7,962	-42	—	—	11,904	157,044	56,215
Finished Motor Gasoline	-2,507	77,586	194	—	5,806	-1,054	—	—	501	81,633	20,886
Reformulated	—	52,313	147	—	-238	-808	—	—	64	52,966	10,988
Oxygenated	4,413	1,104	0	—	0	2	—	—	59	5,456	6
Other	-6,920	24,169	47	—	6,044	-248	—	—	378	23,211	9,892
Finished Aviation Gasoline	—	91	0	—	0	-7	—	—	0	98	664
Jet Fuel	—	24,030	2,146	—	903	-211	—	—	277	27,013	9,072
Naphtha-Type	—	28	0	—	0	12	—	—	0	16	45
Kerosene-Type	—	24,002	2,146	—	903	-223	—	—	277	26,997	9,027
Kerosene	—	228	0	—	0	47	—	—	4	177	173
Distillate Fuel Oil	—	24,866	450	—	1,263	11	—	—	3,806	22,762	12,054
0.05 percent sulfur and under	—	19,436	0	—	1,074	39	—	—	1,388	19,083	8,768
Greater than 0.05 percent sulfur	—	5,430	450	—	189	-28	—	—	2,418	3,679	3,286
Residual Fuel Oil	—	12,300	106	—	0	52	—	—	2,373	9,981	6,012
Petrochemical Feedstocks[e]	—	582	0	—	0	-51	—	—	0	633	306
Special Naphthas	—	142	0	—	0	12	—	—	297	-167	61
Lubricants	—	1,204	0	—	-10	-7	—	—	176	1,025	1,385
Waxes	—	223	28	—	0	102	—	—	31	118	350
Petroleum Coke	—	8,745	76	—	0	348	—	—	4,403	4,070	2,160
Asphalt and Road Oil	—	2,659	0	—	0	716	—	—	33	1,910	2,905
Still Gas	—	7,560	0	—	0	0	—	—	0	7,560	0
Miscellaneous Products	—	235	0	—	0	0	—	—	3	232	187
Total	130,047	163,244	35,488	1,726	4,703	389	0	155,233	17,066	162,519	149,756

[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, February 1999

(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 2,000	—	481	-165	-63	-136	0	2,313	75	0
Natural Gas Liquids and LRGs	87	49	(s)	—	0	-8	—	81	8	55
Pentanes Plus	46	—	0	—	0	(s)	—	36	(s)	11
Liquefied Petroleum Gases	40	49	(s)	—	0	-8	—	45	8	44
Ethane/Ethylene	(s)	0	0	—	0	0	—	0	0	(s)
Propane/Propylene	12	39	(s)	—	0	-12	—	0	4	59
Normal Butane/Butylene	17	4	0	—	0	(s)	—	33	4	-16
Isobutane/Isobutylene	11	7	0	—	0	5	—	12	0	1
Other Liquids	171	—	100	—	9	88	—	172	3	17
Other Hydrocarbons/Oxygenates	117	—	42	—	0	32	—	124	3	0
Unfinished Oils	—	—	56	—	0	62	—	-23	0	17
Motor Gasoline Blend. Comp.	53	—	3	—	9	-6	—	71	(s)	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	(s)	0	0
Finished Petroleum Products	-46	2,654	49	—	147	-113	—	—	189	2,728
Finished Motor Gasoline	-46	1,272	1	—	101	-98	—	—	6	1,420
Reformulated	—	870	0	—	0	-41	—	—	2	909
Oxygenated	71	20	0	—	0	(s)	—	—	1	90
Other	-117	382	1	—	101	-57	—	—	3	421
Finished Aviation Gasoline	—	1	0	—	0	-1	—	—	0	2
Jet Fuel	—	397	38	—	16	-39	—	—	2	488
Naphtha-Type	—	(s)	0	—	0	(s)	—	—	0	(s)
Kerosene-Type	—	396	38	—	16	-39	—	—	2	488
Kerosene	—	4	0	—	0	1	—	—	(s)	3
Distillate Fuel Oil	—	428	7	—	29	-10	—	—	59	414
0.05 percent sulfur and under	—	334	0	—	25	-5	—	—	21	343
Greater than 0.05 percent sulfur	—	94	7	—	4	-5	—	—	38	71
Residual Fuel Oil	—	198	0	—	0	10	—	—	36	151
Petrochemical Feedstocks[e]	—	8	0	—	0	-1	—	—	0	10
Special Naphthas	—	2	0	—	0	(s)	—	—	9	-7
Lubricants	—	18	0	—	2	-2	—	—	3	18
Waxes	—	5	1	—	0	3	—	—	1	3
Petroleum Coke	—	148	1	—	0	8	—	—	73	68
Asphalt and Road Oil	—	46	0	—	0	16	—	—	1	30
Still Gas	—	124	0	—	0	0	—	—	0	124
Miscellaneous Products	—	4	0	—	0	(s)	—	—	(s)	4
Total	2,211	2,703	630	-165	93	-169	0	2,566	276	2,799

[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-February 1999

(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 2,030	—	455	29	-59	22	0	2,355	78	0
Natural Gas Liquids and LRGs	89	47	(s)	—	0	-22	—	90	7	61
Pentanes Plus	47	—	0	—	0	(s)	—	38	(s)	10
Liquefied Petroleum Gases	41	47	(s)	—	0	-22	—	53	7	51
Ethane/Ethylene	(s)	0	0	—	0	0	—	0	0	(s)
Propane/Propylene	12	44	(s)	—	0	-14	—	0	4	65
Normal Butane/Butylene	17	-1	0	—	0	-10	—	37	3	-15
Isobutane/Isobutylene	12	5	0	—	0	1	—	15	0	(s)
Other Liquids	128	—	96	—	4	8	—	186	2	32
Other Hydrocarbons/Oxygenates	78	—	50	—	0	-9	—	134	2	0
Unfinished Oils	—	—	45	—	0	15	—	-2	0	32
Motor Gasoline Blend. Comp.	50	—	1	—	4	2	—	54	(s)	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	(s)	0	0
Finished Petroleum Products	-42	2,720	51	—	135	-1	—	—	202	2,662
Finished Motor Gasoline	-42	1,315	3	—	98	-18	—	—	8	1,384
Reformulated	—	887	2	—	-4	-14	—	—	1	898
Oxygenated	75	19	0	—	0	(s)	—	—	1	92
Other	-117	410	1	—	102	-4	—	—	6	393
Finished Aviation Gasoline	—	2	0	—	0	(s)	—	—	0	2
Jet Fuel	—	407	36	—	15	-4	—	—	5	458
Naphtha-Type	—	(s)	0	—	0	(s)	—	—	0	(s)
Kerosene-Type	—	407	36	—	15	-4	—	—	5	458
Kerosene	—	4	0	—	0	1	—	—	(s)	3
Distillate Fuel Oil	—	421	8	—	21	(s)	—	—	65	386
0.05 percent sulfur and under	—	329	0	—	18	1	—	—	24	323
Greater than 0.05 percent sulfur	—	92	8	—	3	(s)	—	—	41	62
Residual Fuel Oil	—	208	2	—	0	1	—	—	40	169
Petrochemical Feedstocks[e]	—	10	0	—	0	-1	—	—	0	11
Special Naphthas	—	2	0	—	0	(s)	—	—	5	-3
Lubricants	—	20	0	—	(s)	(s)	—	—	3	17
Waxes	—	4	(s)	—	0	2	—	—	1	2
Petroleum Coke	—	148	1	—	0	6	—	—	75	69
Asphalt and Road Oil	—	45	0	—	0	12	—	—	1	32
Still Gas	—	128	0	—	0	0	—	—	0	128
Miscellaneous Products	—	4	0	—	0	0	—	—	(s)	4
Total	2,204	2,767	601	29	80	7	0	2,631	289	2,755

[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	December 1998		January-December 1998	
	Total	Daily Average	Total	Daily Average
PAD District I	E **800**	E **26**	E **9,700**	E **27**
Florida	554	18	6,093	17
New York	E 16	E 1	E 192	E 1
Pennsylvania	E 158	E 5	E 1,978	E 5
Virginia	E (s)	E (s)	E 6	E (s)
West Virginia	E 113	E 4	E 1,470	E 4
Adjustment[a]	-40	-1	-40	(s)
PAD District II	E **14,440**	E **466**	E **187,946**	E **515**
Illinois	1,103	36	E 13,714	E 38
Indiana	161	5	2,210	6
Kansas	E 2,500	E 81	E 33,569	E 92
Kentucky	223	7	E 3,084	E 8
Michigan	E 629	E 20	E 8,641	E 24
Missouri	E 7	E (s)	E 94	(s)
Nebraska	231	7	E 3,260	E 9
North Dakota	2,896	93	E 35,552	E 97
Ohio	E 527	E 17	E 8,509	E 23
Oklahoma	5,850	189	77,616	213
South Dakota	94	3	1,206	3
Tennessee	20	1	E 292	E 1
Adjustment[a]	199	6	199	1
PAD District III	E **96,174**	E **3,102**	E **1,202,602**	E **3,295**
Alabama	1,001	32	E 12,397	E 34
Arkansas	585	19	E 8,074	E 22
Louisiana[b]	11,008	355	E 134,733	E 369
Mississippi	1,534	49	20,706	57
New Mexico	E 5,137	E 166	E 66,417	E 182
Texas[b]	39,105	1,261	504,160	1,381
Federal Offshore PAD District III	E 37,913	E 1,223	E 456,224	E 1,250
Adjustment[a]	-109	-4	-109	(s)
PAD District IV	E **10,019**	E **323**	E **120,482**	E **330**
Colorado	1,837	59	E 22,303	E 61
Montana	E 1,374	E 44	E 16,350	E 45
Utah	1,521	49	E 19,119	E 52
Wyoming	5,079	164	E 62,503	E 171
Adjustment[a]	207	7	207	1
PAD District V	E **62,657**	E **2,021**	E **757,916**	E **2,076**
Alaska[b]	35,956	1,160	428,851	1,175
South Alaska	987	32	11,802	32
North Slope	34,969	1,128	417,049	1,143
Adjustment for Alaska[a]	0	0	0	0
Arizona	6	(s)	78	(s)
California[b]	23,712	765	282,555	774
Nevada	63	2	799	2
Federal Offshore PAD District V	3,769	122	46,482	127
Adjustment excluding Alaska[a]	-849	-27	-849	-2
U.S. Total[b]	E **184,090**	E **5,938**	E **2,278,645**	E **6,243**

[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 - 6,722; California: State -1,714; Louisiana: State - E1,061; Texas: State - 44; U.S. Total, including Federal offshore - E51,223.

(s) = Less than 500 barrels or less than 500 barrels per day.
E = Estimated.
RE = Revised Estimate.
NA = Not Available.
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, February 1999

(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	**126**	**626**	**752**	**459**	**315**	**7,054**	**7,828**
Pentanes Plus	12	68	80	86	70	823	979
Liquefied Petroleum Gases	114	558	672	373	245	6,231	6,849
Ethane	47	184	231	122	0	2,508	2,630
Propane	43	256	299	145	155	2,485	2,785
Normal Butane	24	75	99	60	90	820	970
Isobutane	0	43	43	46	0	418	464
	Stocks						
Natural Gas Liquids	**9**	**32**	**41**	**87**	**63**	**1,539**	**1,689**
Pentanes Plus	0	2	2	10	12	418	440
Liquefied Petroleum Gases	9	30	39	77	51	1,121	1,249
Ethane	0	0	0	17	0	154	171
Propane	5	22	27	33	32	776	841
Normal Butane	4	4	8	12	19	140	171
Isobutane	0	4	4	15	0	51	66

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	**16,514**	**3,704**	**7,520**	**435**	**5,432**	**33,605**	**3,594**	**2,427**	**48,206**
Pentanes Plus	2,560	437	1,222	166	585	4,970	713	1,298	8,040
Liquefied Petroleum Gases	13,954	3,267	6,298	269	4,847	28,635	2,881	1,129	40,166
Ethane	6,441	1,478	2,607	23	2,436	12,985	798	3	16,647
Propane	4,739	850	2,229	120	1,583	9,521	1,259	331	14,195
Normal Butane	1,902	-1,423	783	82	549	1,893	545	479	3,986
Isobutane	872	2,362	679	44	279	4,236	279	316	5,338
	Stocks								
Natural Gas Liquids	**187**	**4,363**	**1,329**	**52**	**73**	**6,004**	**330**	**128**	**8,192**
Pentanes Plus	70	629	324	7	8	1,038	132	19	1,631
Liquefied Petroleum Gases	117	3,734	1,005	45	65	4,966	198	109	6,561
Ethane	8	1,560	9	18	0	1,595	3	0	1,769
Propane	76	1,078	248	15	45	1,462	105	79	2,514
Normal Butane	24	696	377	10	10	1,117	72	20	1,388
Isobutane	9	400	371	2	10	792	18	10	890

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, February 1999

(Thousand Barrels, Except Where Noted)

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	**40,291**	**2,527**	**42,818**	**61,224**	**10,804**	**18,706**	**90,734**
Natural Gas Liquids	**212**	**0**	**212**	**1,760**	**222**	**1,021**	**3,003**
Pentanes Plus	0	0	0	203	126	533	862
Liquefied Petroleum Gases	212	0	212	1,557	96	488	2,141
Ethane	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0
Normal Butane	154	0	154	916	58	311	1,285
Isobutane	58	0	58	641	38	177	856
Other Liquids	**7,615**	**20**	**7,635**	**2,742**	**823**	**-823**	**2,742**
Other Hydrocarbons/Hydrogen/Oxygenates	2,119	0	2,119	757	186	75	1,018
Other Hydrocarbons/Hydrogen	0	0	0	33	0	28	61
Oxygenates	W	W	2,119	724	186	47	957
Fuel Ethanol	W	W	W	W	W	W	872
Methanol	W	W	W	W	W	W	W
MTBE	W	W	2,022	W	W	W	W
Other Oxygenates[a]	W	W	W	W	W	W	W
Unfinished Oils (net)	2,551	13	2,564	1,456	60	-706	810
Motor Gasoline Blend. Comp. (net)	3,066	7	3,073	523	577	-192	908
Aviation Gasoline Blend. Comp. (net)	-121	0	-121	6	0	0	6
Total Input to Refineries	**48,118**	**2,547**	**50,665**	**65,726**	**11,849**	**18,904**	**96,479**
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	1,455	90	1,545	2,232	385	664	3,282
Operable Capacity (daily average)	1,574	103	1,677	2,465	421	721	3,607
Operable Utilization Rate (percent)[b,c]	92.4	88.0	92.1	90.6	91.6	92.1	91.0
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Cracking	650	16	666	770	123	179	1,071
Catalytic Hydrocracking	39	0	39	113	0	4	117
Delayed and Fluid Coking	85	0	85	207	55	76	337
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	1.02	1.14	1.02	1.12	2.30	0.80	1.20
API Gravity, Weighted Average (degrees)	32.56	34.24	32.66	33.60	29.04	35.58	33.46
Operable Capacity (daily average)	**1,574**	**103**	**1,677**	**2,465**	**421**	**721**	**3,607**
Operating	1,494	100	1,594	2,465	421	721	3,607
Idle	80	3	83	0	0	0	0
Alaskan Crude Oil Receipts	**0**	**0**	**0**	**102**	**0**	**0**	**102**

See footnotes at end of table.

Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, February 1999 (Continued)

(Thousand Barrels, Except Where Noted)

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	**15,819**	**91,096**	**77,364**	**5,390**	**2,543**	**192,212**	**13,515**	**64,758**	**404,037**
Natural Gas Liquids	**1,000**	**2,201**	**1,272**	**176**	**216**	**4,865**	**468**	**2,257**	**10,805**
Pentanes Plus	498	687	57	143	112	1,497	219	995	3,573
Liquefied Petroleum Gases	502	1,514	1,215	33	104	3,368	249	1,262	7,232
Ethane	0	0	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0	0	0
Normal Butane	482	738	783	0	1	2,004	142	924	4,509
Isobutane	20	776	432	33	103	1,364	107	338	2,723
Other Liquids	**-262**	**5,824**	**-656**	**-72**	**-93**	**4,741**	**277**	**4,819**	**20,214**
Other Hydrocarbons/Hydrogen/Oxygenates	127	1,981	850	0	14	2,972	82	3,466	9,657
Other Hydrocarbons/Hydrogen	115	412	408	0	0	935	2	709	1,707
Oxygenates	12	1,569	442	W	W	2,037	80	2,757	7,950
Fuel Ethanol	W	W	W	W	W	W	W	W	1,104
Methanol	W	W	W	W	W	W	W	W	62
MTBE	W	1,487	W	W	W	1,880	W	2,580	6,561
Other Oxygenates[a]	W	W	W	W	W	W	W	W	223
Unfinished Oils (net)	80	5,848	-1,962	-61	58	3,963	-71	-639	6,627
Motor Gasoline Blend. Comp. (net)	-475	-2,005	451	-11	-165	-2,205	266	1,982	4,024
Aviation Gasoline Blend. Comp. (net)	6	0	5	0	0	11	0	10	-94
Total Input to Refineries	**16,557**	**99,121**	**77,980**	**5,494**	**2,666**	**201,818**	**14,260**	**71,834**	**435,056**
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	567	3,233	2,781	181	91	6,852	503	2,538	14,719
Operable Capacity (daily average)	568	3,625	2,937	202	95	7,426	530	2,942	16,181
Operable Utilization Rate (percent)[b,c]	99.7	89.2	94.7	89.6	96.0	92.3	94.9	86.2	91.0
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Cracking	201	1,250	845	26	28	2,349	154	587	4,828
Catalytic Hydrocracking	50	220	184	0	0	455	4	385	999
Delayed and Fluid Coking	3	372	426	12	0	812	40	448	1,722
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.80	1.58	1.44	1.77	0.51	1.45	1.37	1.20	1.30
API Gravity, Weighted Average (degrees)	38.64	31.42	31.70	30.50	39.12	32.19	33.70	25.39	31.46
Operable Capacity (daily average)	**568**	**3,625**	**2,937**	**202**	**95**	**7,426**	**530**	**2,942**	**16,181**
Operating	568	3,598	2,842	202	95	7,304	530	2,920	15,955
Idle	0	27	95	0	0	122	0	22	227
Alaskan Crude Oil Receipts	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**28,464**	**28,566**

[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, February 1999

(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
Liquefied Refinery Gases	707	17	724	1,995	162	380	2,537
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	1,513	28	1,541	2,165	272	502	2,939
Propane	W	W	W	1,744	W	W	2,377
Propylene	W	W	W	421	W	W	562
Normal Butane/Butylene	-700	-9	-709	-236	-101	-137	-474
Normal Butane	W	W	W	W	W	W	W
Butylene	W	W	W	W	W	W	W
Isobutane/Isobutylene	-106	-2	-108	66	-9	15	72
Isobutane	W	W	W	W	W	W	W
Isobutylene	W	W	W	W	W	W	W
Finished Motor Gasoline	26,396	976	27,372	34,660	6,478	9,846	50,984
Reformulated	16,691	0	16,691	7,138	1,295	0	8,433
Oxygenated	50	0	50	0	1,150	80	1,230
Other	9,655	976	10,631	27,522	4,033	9,766	41,321
Finished Aviation Gasoline	0	0	0	50	37	44	131
Jet Fuel	3,101	63	3,164	4,361	900	1,141	6,402
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	3,101	63	3,164	4,361	900	1,141	6,402
Commercial	3,101	44	3,145	4,178	830	1,018	6,026
Military	0	19	19	183	70	123	376
Kerosene	224	70	294	612	102	50	764
Distillate Fuel Oil	11,250	610	11,860	15,740	2,625	5,498	23,863
0.05 percent sulfur and under	4,602	504	5,106	11,399	1,700	4,158	17,257
Greater than 0.05 percent sulfur	6,648	106	6,754	4,341	925	1,340	6,606
Residual Fuel Oil	3,334	41	3,375	1,078	176	88	1,342
Less than 0.31 percent sulfur	946	21	967	0	0	0	0
0.31 to 1.00 percent sulfur	2,184	20	2,204	265	0	0	265
Greater than 1.00 percent sulfur	204	0	204	813	176	88	1,077
Naphtha for Petrochemical Feedstock Use	421	0	421	557	0	0	557
Other Oils for Petrochemical Feedstock Use	0	0	0	525	0	59	584
Special Naphthas	26	20	46	638	0	95	733
Lubricants	322	173	495	344	0	251	595
Naphthenic	0	0	0	0	0	0	0
Paraffinic	322	173	495	344	0	251	595
Waxes	0	68	68	63	0	42	105
Petroleum Coke	1,524	22	1,546	2,591	751	775	4,117
Marketable	663	0	663	1,623	472	593	2,688
Catalyst	861	22	883	968	279	182	1,429
Asphalt and Road Oil	1,366	435	1,801	2,833	1,010	536	4,379
Still Gas	1,550	62	1,612	2,498	382	683	3,563
Miscellaneous Products	33	29	62	188	62	40	290
Fuel Use	0	0	0	0	0	0	0
Nonfuel Use	33	29	62	188	62	40	290
Total	**50,254**	**2,586**	**52,840**	**68,733**	**12,685**	**19,528**	**100,946**
Processing Gain(-) or Loss(+)[a]	-2,136	-39	-2,175	-3,007	-836	-624	-4,467

See footnotes at end of table.

Table 29. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, February 1999 (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	523	6,623	3,505	31	54	10,736	62	1,380	15,439
Ethane/Ethylene	19	613	149	0	0	781	0	0	781
Ethane	W	W	W	W	W	W	W	W	624
Ethylene	W	W	W	W	W	W	W	W	157
Propane/Propylene	617	5,204	3,397	79	52	9,349	219	1,084	15,132
Propane	W	2,454	2,312	W	W	5,256	W	W	9,873
Propylene	W	2,750	1,085	W	W	4,093	W	W	5,259
Normal Butane/Butylene	49	448	-130	-30	2	339	-120	104	-860
Normal Butane	W	W	W	W	W	W	W	W	-953
Butylene	W	W	W	W	W	W	W	W	93
Isobutane/Isobutylene	-162	358	89	-18	0	267	-37	192	386
Isobutane	W	W	W	W	W	W	W	W	322
Isobutylene	W	W	W	W	W	W	W	W	64
Finished Motor Gasoline	9,372	46,272	34,954	1,543	1,526	93,667	7,059	35,606	214,688
Reformulated	582	13,317	2,857	0	0	16,756	0	24,359	66,239
Oxygenated	0	0	20	0	56	76	319	564	2,239
Other	8,790	32,955	32,077	1,543	1,470	76,835	6,740	10,683	146,210
Finished Aviation Gasoline	62	125	104	0	0	291	3	25	450
Jet Fuel	1,276	10,505	10,484	257	202	22,724	731	11,114	44,135
Naphtha-Type	1	0	0	0	0	1	0	13	14
Kerosene-Type	1,275	10,505	10,484	257	202	22,723	731	11,101	44,121
Commercial	1,087	9,407	10,192	199	0	20,885	648	10,585	41,289
Military	188	1,098	292	58	202	1,838	83	516	2,832
Kerosene	5	548	-156	55	0	452	101	103	1,714
Distillate Fuel Oil	3,828	18,577	15,842	1,255	659	40,161	3,886	11,970	91,740
0.05 percent sulfur and under	3,071	13,430	6,783	573	655	24,512	3,195	9,346	59,416
Greater than 0.05 percent sulfur	757	5,147	9,059	682	4	15,649	691	2,624	32,324
Residual Fuel Oil	403	5,206	4,430	214	10	10,263	365	5,534	20,879
Less than 0.31 percent sulfur	189	0	295	0	0	484	97	110	1,658
0.31 to 1.00 percent sulfur	155	519	746	188	10	1,618	104	924	5,115
Greater than 1.00 percent sulfur	59	4,687	3,389	26	0	8,161	164	4,500	14,106
Naphtha for Petrochemical Feedstock Use	104	5,362	933	0	-3	6,396	0	157	7,531
Other Oils for Petrochemical Feedstock Use	129	2,614	2,062	0	0	4,805	15	76	5,480
Special Naphthas	98	456	99	141	0	794	0	54	1,627
Lubricants	W	1,274	W	W	W	2,908	0	511	4,509
Naphthenic	W	139	W	W	W	665	0	247	912
Paraffinic	W	1,135	W	W	W	2,243	0	264	3,597
Waxes	0	134	107	69	0	310	81	140	704
Petroleum Coke	268	5,095	4,313	73	32	9,781	507	4,133	20,084
Marketable	14	3,346	3,408	55	0	6,823	295	3,182	13,651
Catalyst	254	1,749	905	18	32	2,958	212	951	6,433
Asphalt and Road Oil	398	817	722	1,082	136	3,155	1,099	1,300	11,734
Still Gas	718	3,568	3,070	161	74	7,591	567	3,482	16,815
Miscellaneous Products	52	469	365	0	0	886	56	100	1,394
Fuel Use	0	0	93	0	0	93	0	-55	38
Nonfuel Use	52	469	272	0	0	793	56	155	1,356
Total	**17,281**	**107,645**	**81,768**	**5,536**	**2,690**	**214,920**	**14,532**	**75,685**	**458,923**
Processing Gain(-) or Loss(+)[a]	-724	-8,524	-3,788	-42	-24	-13,102	-272	-3,851	-23,867

[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, February 1999

(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	**13,303**	**295**	**13,598**	**9,206**	**1,458**	**2,993**	**13,657**
Petroleum Products	**55,926**	**2,350**	**58,276**	**39,788**	**10,752**	**13,919**	**64,459**
Pentanes Plus	0	0	0	5	51	262	318
Liquefied Petroleum Gases	909	8	917	1,640	214	739	2,593
Ethane/Ethylene	0	0	0	2	0	0	2
Propane/Propylene	298	4	302	966	34	237	1,237
Normal Butane/Butylene	441	0	441	441	132	346	919
Isobutane/Isobutylene	170	4	174	231	48	156	435
Other Hydrocarbons/Hydrogen/Oxygenates	2,283	6	2,289	589	85	11	685
Other Hydrocarbons/Hydrogen	0	0	0	21	0	0	21
Oxygenates	W	W	2,289	568	85	11	664
Fuel Ethanol	W	W	W	W	W	W	457
Methanol	W	W	W	W	W	W	W
MTBE	W	W	1,816	W	W	W	W
Other Oxygenates [a]	W	W	W	W	W	W	W
Unfinished Oils	8,736	498	9,234	7,929	502	3,881	12,312
Naphthas and Lighter	1,927	178	2,105	2,333	145	1,199	3,677
Kerosene and Light Gas Oils	2,097	3	2,100	1,111	60	275	1,446
Heavy Gas Oils	3,109	292	3,401	2,661	293	1,459	4,413
Residuum	1,603	25	1,628	1,824	4	948	2,776
Motor Gasoline Blending Components	9,578	12	9,590	7,355	1,056	1,357	9,768
Aviation Gasoline Blending Components	133	0	133	27	0	0	27
Finished Motor Gasoline	10,346	328	10,674	6,487	1,525	3,426	11,438
Reformulated	6,872	0	6,872	353	0	0	353
Oxygenated	0	11	11	0	284	80	364
Other	3,474	317	3,791	6,134	1,241	3,346	10,721
Finished Aviation Gasoline	52	0	52	38	45	54	137
Jet Fuel	1,651	26	1,677	2,309	160	511	2,980
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	1,651	26	1,677	2,309	160	511	2,980
Kerosene	191	51	242	365	100	80	545
Distillate Fuel Oil	13,014	216	13,230	5,947	1,380	1,966	9,293
0.05 percent sulfur and under	2,779	196	2,975	3,536	746	1,389	5,671
Greater then 0.05 percent sulfur	10,235	20	10,255	2,411	634	577	3,622
Residual Fuel Oil	6,052	26	6,078	1,393	195	103	1,691
Less than 0.31 percent sulfur	966	23	989	0	0	0	0
0.31 to 1.00 percent sulfur	3,620	3	3,623	385	0	1	386
Greater than 1.00 percent sulfur	1,466	0	1,466	1,008	195	102	1,305
Naphtha for Petrochemical Feedstock Use	458	0	458	242	0	1	243
Other Oils for Petrochemical Feedstock Use	0	0	0	43	0	0	43
Special Naphthas	60	13	73	340	0	33	373
Lubricants	589	310	899	509	0	0	509
Waxes	0	75	75	47	0	42	89
Petroleum Coke (Marketable)	454	0	454	848	3,219	289	4,356
Asphalt and Road Oil	1,414	736	2,150	3,587	2,207	1,139	6,933
Miscellaneous Products	6	45	51	88	13	25	126
Total Stocks, All Oils	**69,229**	**2,645**	**71,874**	**48,994**	**12,210**	**16,912**	**78,116**

See footnotes at end of table.

Table 30. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, February 1999 (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	**917**	**32,423**	**21,651**	**1,141**	**405**	**56,537**	**2,233**	**20,913**	**106,938**
Petroleum Products	**10,164**	**72,331**	**50,214**	**5,115**	**1,494**	**139,318**	**13,443**	**62,754**	**338,250**
Pentanes Plus	81	90	6	11	20	208	16	0	542
Liquefied Petroleum Gases	1,796	2,755	2,386	33	31	7,001	423	1,206	12,140
Ethane/Ethylene	108	316	0	0	0	424	0	0	426
Propane/Propylene	971	1,037	475	8	5	2,496	92	172	4,299
Normal Butane/Butylene	431	898	1,109	4	8	2,450	196	604	4,610
Isobutane/Isobutylene	286	504	802	21	18	1,631	135	430	2,805
Other Hydrocarbons/Hydrogen/Oxygenates	25	1,577	770	17	10	2,399	71	2,243	7,687
Other Hydrocarbons/Hydrogen	0	0	1	0	0	1	0	6	28
Oxygenates	25	1,577	769	W	W	2,398	71	2,237	7,659
Fuel Ethanol	W	W	W	W	W	W	W	W	634
Methanol	W	W	W	W	W	W	W	W	854
MTBE	W	1,144	W	W	W	1,858	W	2,176	6,047
Other Oxygenates [a]	W	W	W	W	W	W	W	W	124
Unfinished Oils	2,468	25,412	17,909	1,034	376	47,199	2,874	21,005	92,624
Naphthas and Lighter	806	7,259	3,834	278	151	12,328	573	3,496	22,179
Kerosene and Light Gas Oils	443	4,070	3,421	206	85	8,225	435	5,031	17,237
Heavy Gas Oils	580	9,807	7,145	526	140	18,198	1,395	9,887	37,294
Residuum	639	4,276	3,509	24	0	8,448	471	2,591	15,914
Motor Gasoline Blending Components	1,337	6,865	5,148	113	493	13,956	2,168	7,141	42,623
Aviation Gasoline Blending Components	12	0	12	0	0	24	0	2	186
Finished Motor Gasoline	1,632	11,734	5,984	279	162	19,791	2,972	9,894	54,769
Reformulated	167	3,797	385	0	0	4,349	0	5,755	17,329
Oxygenated	0	0	0	0	0	0	0	0	375
Other	1,465	7,937	5,599	279	162	15,442	2,972	4,139	37,065
Finished Aviation Gasoline	78	365	178	0	0	621	25	171	1,006
Jet Fuel	403	3,988	2,706	133	30	7,260	321	4,259	16,497
Naphtha-Type	1	0	0	0	0	1	0	41	42
Kerosene-Type	402	3,988	2,706	133	30	7,259	321	4,218	16,455
Kerosene	29	329	123	34	5	520	139	76	1,522
Distillate Fuel Oil	759	7,649	4,775	766	171	14,120	1,632	6,081	44,356
0.05 percent sulfur and under	581	4,648	2,007	328	121	7,685	1,393	4,326	22,050
Greater then 0.05 percent sulfur	178	3,001	2,768	438	50	6,435	239	1,755	22,306
Residual Fuel Oil	276	3,061	2,948	201	8	6,494	409	4,404	19,076
Less than 0.31 percent sulfur	82	10	11	0	0	103	32	618	1,742
0.31 to 1.00 percent sulfur	4	297	249	139	8	697	235	786	5,727
Greater than 1.00 percent sulfur	190	2,754	2,688	62	0	5,694	142	3,000	11,607
Naphtha for Petrochemical Feedstock Use	31	1,400	364	0	7	1,802	0	134	2,637
Other Oils for Petrochemical Feedstock Use	82	1,623	404	0	0	2,109	0	172	2,324
Special Naphthas	80	1,142	31	145	0	1,398	0	51	1,895
Lubricants	23	2,603	2,307	932	0	5,865	0	978	8,251
Waxes	0	179	220	32	0	431	45	350	990
Petroleum Coke (Marketable)	0	687	2,804	0	0	3,491	300	2,160	10,761
Asphalt and Road Oil	1,013	644	581	1,385	181	3,804	2,047	2,249	17,183
Miscellaneous Products	39	228	558	0	0	825	1	178	1,181
Total Stocks, All Oils	**11,081**	**104,754**	**71,865**	**6,256**	**1,899**	**195,855**	**15,676**	**83,667**	**445,188**

[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] February 1999

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Liquefied Refinery Gases	1.7	0.7	1.6	3.2	1.5	2.1	2.8
Finished Motor Gasoline[b]	49.0	38.1	48.4	50.4	50.6	49.7	50.3
Finished Aviation Gasoline[c]	0.3	0.0	0.3	0.1	0.3	0.2	0.1
Naphtha-Type Jet Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel	7.2	2.5	7.0	7.0	8.3	6.3	7.0
Kerosene	0.5	2.8	0.6	1.0	0.9	0.3	0.8
Distillate Fuel Oil	26.3	24.0	26.1	25.1	24.2	30.5	26.1
Residual Fuel Oil	7.8	1.6	7.4	1.7	1.6	0.5	1.5
Naphtha for Petrochemical Feedstock Use	1.0	0.0	0.9	0.9	0.0	0.0	0.6
Other Oils for Petrochemical Feedstock Use	0.0	0.0	0.0	0.8	0.0	0.3	0.6
Special Naphthas	0.1	0.8	0.1	1.0	0.0	0.5	0.8
Lubricants	0.8	6.8	1.1	0.5	0.0	1.4	0.6
Waxes	0.0	2.7	0.1	0.1	0.0	0.2	0.1
Petroleum Coke	3.6	0.9	3.4	4.1	6.9	4.3	4.5
Asphalt and Road Oil	3.2	17.1	4.0	4.5	9.3	3.0	4.8
Still Gas	3.6	2.4	3.6	4.0	3.5	3.8	3.9
Miscellaneous Products	0.1	1.1	0.1	0.3	0.6	0.2	0.3
Processing Gain(-) or Loss(+)[d]	-5.0	-1.5	-4.8	-4.8	-7.7	-3.5	-4.9

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	3.3	6.8	4.6	0.6	2.1	5.5	0.5	2.2	3.8
Finished Motor Gasoline[b]	54.8	45.5	42.9	25.9	56.2	44.9	46.4	43.5	46.3
Finished Aviation Gasoline[c]	0.4	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1
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	8.0	10.8	13.9	4.8	7.8	11.6	5.4	17.3	10.7
Kerosene	0.0	0.6	-0.2	1.0	0.0	0.2	0.8	0.2	0.4
Distillate Fuel Oil	24.1	19.2	21.0	23.6	25.3	20.5	28.9	18.7	22.3
Residual Fuel Oil	2.5	5.4	5.9	4.0	0.4	5.2	2.7	8.6	5.1
Naphtha for Petrochemical Feedstock Use	0.7	5.5	1.2	0.0	-0.1	3.3	0.0	0.2	1.8
Other Oils for Petrochemical Feedstock Use	0.8	2.7	2.7	0.0	0.0	2.4	0.1	0.1	1.3
Special Naphthas	0.6	0.5	0.1	2.6	0.0	0.4	0.0	0.1	0.4
Lubricants	0.3	1.3	1.2	12.3	0.0	1.5	0.0	0.8	1.1
Waxes	0.0	0.1	0.1	1.3	0.0	0.2	0.6	0.2	0.2
Petroleum Coke	1.7	5.3	5.7	1.4	1.2	5.0	3.8	6.4	4.9
Asphalt and Road Oil	2.5	0.8	1.0	20.3	5.2	1.6	8.2	2.0	2.9
Still Gas	4.5	3.7	4.1	3.0	2.8	3.9	4.2	5.4	4.1
Miscellaneous Products	0.3	0.5	0.5	0.0	0.0	0.5	0.4	0.2	0.3
Processing Gain(-) or Loss(+)[d]	-4.6	-8.8	-5.0	-0.8	-0.9	-6.7	-2.0	-6.0	-5.8

[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, February 1999

(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	**1,775**	**1,080**	**3,424**	**6,279**
Delaware	0	0	162	162
Florida	711	255	1,252	2,218
Maryland	0	100	34	134
Massachusetts	25	0	0	25
New Hampshire	0	0	217	217
New Jersey	684	395	721	1,800
New York	355	246	98	699
North Carolina	0	0	273	273
Pennsylvania	0	0	250	250
South Carolina	0	0	204	204
Vermont	0	4	12	16
Virginia	0	80	201	281
U.S. Total	**1,775**	**1,080**	**3,424**	**6,279**

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

Table 33. Imports of Crude Oil and Petroleum Products by PAD District, February 1999

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil[a,b]	**41,256**	**47,355**	**127,949**	**4,810**	**13,472**	**234,842**	**8,387**
Natural Gas Liquids	**960**	**2,240**	**1,022**	**317**	**2**	**4,541**	**162**
Pentanes Plus	0	19	1,022	126	0	1,167	42
Liquefied Petroleum Gases	960	2,221	0	191	2	3,374	121
Ethane	0	0	0	0	0	0	0
Ethylene	0	12	0	0	0	12	(s)
Propane	951	1,710	0	189	2	2,852	102
Propylene	0	229	0	0	0	229	8
Normal Butane	9	84	0	2	0	95	3
Butylene	0	0	0	0	0	0	0
Isobutane	0	186	0	0	0	186	7
Isobutylene	0	0	0	0	0	0	0
Other Liquids	**5,639**	**0**	**4,761**	**0**	**2,808**	**13,208**	**472**
Other Hydrocarbons/Hydrogen/Oxygenates	706	0	0	0	1,166	1,872	67
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0
Oxygenates	706	0	0	0	1,166	1,872	67
Fuel Ethanol	0	0	0	0	6	6	(s)
MTBE	706	0	0	0	1,160	1,866	67
Other Oxygenates[c]	0	0	0	0	0	0	0
Unfinished Oils[a]	1,362	0	4,761	0	1,557	7,680	274
Naphthas and Lighter	0	0	799	0	0	799	29
Kerosene and Light Gas Oils	0	0	262	0	0	262	9
Heavy Gas Oils	900	0	2,799	0	40	3,739	134
Residuum	462	0	901	0	1,517	2,880	103
Motor Gasoline Blending Components	3,571	0	0	0	85	3,656	131
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	**27,210**	**234**	**7,856**	**141**	**1,371**	**36,812**	**1,315**
Finished Motor Gasoline	9,641	32	0	4	32	9,709	347
Reformulated	6,651	0	0	0	0	6,651	238
Oxygenated	0	0	0	0	0	0	0
Other	2,990	32	0	4	32	3,058	109
Finished Aviation Gasoline	0	0	0	1	0	1	(s)
Jet Fuel	3,169	0	2	0	1,074	4,245	152
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	3,169	0	2	0	1,074	4,245	152
Bonded Aircraft Fuel	1,961	0	0	0	520	2,481	89
Other	1,208	0	2	0	554	1,764	63
Kerosene	62	0	0	0	0	62	2
Distillate Fuel Oil	6,971	102	0	136	207	7,416	265
Bonded Ship Bunkers	0	2	0	0	5	7	(s)
0.05 percent sulfur and under	0	2	0	0	0	2	(s)
Greater than 0.05 percent sulfur	0	0	0	0	5	5	(s)
Other	6,971	100	0	136	202	7,409	265
0.05 percent sulfur and under	2,493	86	0	59	0	2,638	94
Greater than 0.05 percent sulfur	4,478	14	0	77	202	4,771	170
Residual Fuel Oil	6,279	0	0	0	0	6,279	224
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	6,279	0	0	0	0	6,279	224
Less than 0.31 percent sulfur	1,775	0	0	0	0	1,775	63
0.31 to 1.00 percent sulfur	1,080	0	0	0	0	1,080	39
Greater than 1.00 percent sulfur	3,424	0	0	0	0	3,424	122
Naphtha for Petrochemical Feedstock Use	81	39	2,518	0	0	2,638	94
Other Oils for Petrochemical Feedstock Use	0	0	5,034	0	0	5,034	180
Special Naphthas	85	18	109	0	0	212	8
Lubricants	63	32	0	0	0	95	3
Waxes	17	10	3	0	25	55	2
Petroleum Coke	0	0	0	0	33	33	1
Asphalt and Road Oil	842	0	190	0	0	1,032	37
Miscellaneous Products	0	1	0	0	0	1	(s)
Total	**75,065**	**49,829**	**141,588**	**5,268**	**17,653**	**289,403**	**10,336**

[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-February 1999

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil[a,b]	**94,962**	**88,893**	**272,032**	**9,673**	**26,825**	**492,385**	**8,346**
Natural Gas Liquids	**1,605**	**5,528**	**3,707**	**815**	**7**	**11,662**	**198**
Pentanes Plus	0	76	3,164	289	0	3,529	60
Liquefied Petroleum Gases	1,605	5,452	543	526	7	8,133	138
Ethane	0	0	434	0	0	434	7
Ethylene	0	26	0	0	0	26	(s)
Propane	1,587	4,209	109	473	7	6,385	108
Propylene	0	459	0	0	0	459	8
Normal Butane	18	335	0	53	0	406	7
Butylene	0	0	0	0	0	0	0
Isobutane	0	423	0	0	0	423	7
Isobutylene	0	0	0	0	0	0	0
Other Liquids	**12,917**	**0**	**12,219**	**0**	**5,656**	**30,792**	**522**
Other Hydrocarbons/Hydrogen/Oxygenates	1,647	0	0	0	2,941	4,588	78
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0
Oxygenates	1,647	0	0	0	2,941	4,588	78
Fuel Ethanol	0	0	0	0	11	11	(s)
MTBE	1,647	0	0	0	2,930	4,577	78
Other Oxygenates[c]	0	0	0	0	0	0	0
Unfinished Oils[a]	3,954	0	11,262	0	2,630	17,846	302
Naphthas and Lighter	244	0	2,160	0	0	2,404	41
Kerosene and Light Gas Oils	0	0	1,300	0	55	1,355	23
Heavy Gas Oils	2,951	0	6,341	0	40	9,332	158
Residuum	759	0	1,461	0	2,535	4,755	81
Motor Gasoline Blending Components	7,316	0	957	0	85	8,358	142
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	**53,777**	**581**	**12,489**	**316**	**3,000**	**70,163**	**1,189**
Finished Motor Gasoline	18,393	82	0	10	194	18,679	317
Reformulated	12,548	0	0	0	147	12,695	215
Oxygenated	0	0	0	0	0	0	0
Other	5,845	82	0	10	47	5,984	101
Finished Aviation Gasoline	0	0	0	1	0	1	(s)
Jet Fuel	5,526	4	2	0	2,146	7,678	130
Naphtha-Type	0	4	0	0	0	4	(s)
Kerosene-Type	5,526	0	2	0	2,146	7,674	130
Bonded Aircraft Fuel	3,206	0	0	0	1,399	4,605	78
Other	2,320	0	2	0	747	3,069	52
Kerosene	142	1	0	0	0	143	2
Distillate Fuel Oil	15,258	276	0	305	450	16,289	276
Bonded Ship Bunkers	0	3	0	0	69	72	1
0.05 percent sulfur and under	0	3	0	0	0	3	(s)
Greater than 0.05 percent sulfur	0	0	0	0	69	69	1
Other	15,258	273	0	305	381	16,217	275
0.05 percent sulfur and under	7,143	229	0	122	0	7,494	127
Greater than 0.05 percent sulfur	8,115	44	0	183	381	8,723	148
Residual Fuel Oil	11,750	0	356	0	106	12,212	207
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	11,750	0	356	0	106	12,212	207
Less than 0.31 percent sulfur	2,240	0	0	0	106	2,346	40
0.31 to 1.00 percent sulfur	3,047	0	0	0	0	3,047	52
Greater than 1.00 percent sulfur	6,463	0	356	0	0	6,819	116
Naphtha for Petrochemical Feedstock Use	263	74	4,040	0	0	4,377	74
Other Oils for Petrochemical Feedstock Use	0	0	7,639	0	0	7,639	129
Special Naphthas	188	67	194	0	0	449	8
Lubricants	514	58	24	0	0	596	10
Waxes	36	18	6	0	28	88	1
Petroleum Coke	0	0	0	0	76	76	1
Asphalt and Road Oil	1,707	0	222	0	0	1,929	33
Miscellaneous Products	0	1	6	0	0	7	(s)
Total	**163,261**	**95,002**	**300,447**	**10,804**	**35,488**	**605,002**	**10,254**

[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] February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**65,059**	**0**	**183**	**0**	**983**	**0**	**225**	**1,679**	**0**	**0**
Algeria	0	0	183	0	0	0	0	1,679	0	0
Iraq	19,062	0	0	0	0	0	0	0	0	0
Kuwait	5,750	0	0	0	0	0	0	0	0	0
Saudi Arabia	40,247	0	0	0	983	0	225	0	0	0
Other OPEC	**56,485**	**0**	**1,880**	**1,034**	**2,920**	**1,351**	**2,053**	**1,803**	**0**	**0**
Indonesia	1,837	0	22	0	0	0	0	0	0	0
Nigeria	18,516	0	718	0	0	0	0	0	0	0
Venezuela	36,132	0	1,140	1,034	2,920	1,351	2,053	1,803	0	0
Non OPEC	**113,298**	**3,374**	**5,617**	**2,622**	**5,806**	**2,894**	**5,138**	**2,797**	**62**	**212**
Angola	9,322	0	0	0	0	230	0	0	0	0
Argentina	4,124	0	382	0	0	0	0	0	0	0
Australia	1,370	0	0	0	0	0	0	0	0	0
Belgium	0	0	885	0	8	0	176	109	0	0
Brazil	0	0	0	0	0	0	0	100	0	72
Brunei	1,403	0	0	0	0	0	0	0	0	0
Canada	30,285	2,650	136	138	1,134	149	1,597	706	62	140
China, People's Republic of	0	0	0	0	0	0	0	0	0	0
Colombia	12,826	0	0	0	0	98	0	296	0	0
Congo (Brazzaville)	1,226	0	0	0	0	0	0	0	0	0
Ecuador	1,260	0	0	0	0	0	0	0	0	0
Egypt	746	0	0	0	0	0	0	0	0	0
France	0	0	259	123	289	0	0	0	0	0
Gabon	3,948	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0	0	0
Guatemala	697	0	262	0	0	0	0	0	0	0
Ireland	0	0	293	0	0	0	0	0	0	0
Italy	0	0	0	0	316	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	30	0	0	0	0	0	0
Malaysia	0	0	557	0	0	0	0	0	0	0
Mexico	34,460	0	212	0	0	2	0	0	0	0
Netherlands	0	0	0	0	65	0	0	0	0	0
Netherlands Antilles	0	0	1,798	0	0	981	0	946	0	0
Norway	4,405	376	354	0	0	0	0	0	0	0
Peru	1,090	0	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	251	0	0	0	0	0
Russia	0	0	0	792	0	0	0	0	0	0
Singapore	0	0	204	55	0	322	202	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	1,073	0	0	0	0	0	0	260	0	0
United Kingdom	4,615	348	25	1,371	443	0	0	0	0	0
Virgin Islands	0	0	0	49	3,300	1,112	3,163	380	0	0
Other	448	0	250	64	0	0	0	0	0	0
Total	**234,842**	**3,374**	**7,680**	**3,656**	**9,709**	**4,245**	**7,416**	**6,279**	**62**	**212**
Persian Gulf[e]	**65,059**	**0**	**0**	**0**	**983**	**0**	**225**	**0**	**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] February 1999 (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	**248**	**2,555**	**0**	**0**	**1,850**	**7,723**	**72,782**	**2,324**	**276**	**2,599**
Algeria	248	2,555	0	0	1,022	5,687	5,687	0	203	203
Iraq	0	0	0	0	0	0	19,062	681	0	681
Kuwait	0	0	0	0	0	0	5,750	205	0	205
Saudi Arabia	0	0	0	0	828	2,036	42,283	1,437	73	1,510
Other OPEC	**700**	**0**	**0**	**733**	**0**	**12,474**	**68,959**	**2,017**	**446**	**2,463**
Indonesia	0	0	0	0	0	22	1,859	66	1	66
Nigeria	0	0	0	0	0	718	19,234	661	26	687
Venezuela	700	0	0	733	0	11,734	47,866	1,290	419	1,710
Non OPEC	**1,690**	**2,479**	**95**	**299**	**1,279**	**34,364**	**147,662**	**4,046**	**1,227**	**5,274**
Angola	0	225	0	0	0	455	9,777	333	16	349
Argentina	0	0	0	0	0	382	4,506	147	14	161
Australia	0	680	0	0	0	680	2,050	49	24	73
Belgium	0	0	0	0	0	1,178	1,178	0	42	42
Brazil	0	0	0	0	0	172	172	0	6	6
Brunei	0	0	0	0	0	0	1,403	50	0	50
Canada	120	0	95	109	605	7,641	37,926	1,082	273	1,355
China, People's Republic of	0	0	0	0	24	24	24	0	1	1
Colombia	213	0	0	0	0	607	13,433	458	22	480
Congo (Brazzaville)	0	0	0	0	0	0	1,226	44	0	44
Ecuador	0	0	0	0	0	0	1,260	45	0	45
Egypt	0	0	0	0	0	0	746	27	0	27
France	0	0	0	0	289	960	960	0	34	34
Gabon	0	0	0	0	0	0	3,948	141	0	141
Germany, FR	0	0	0	0	5	5	5	0	(s)	(s)
Greece	329	0	0	0	0	329	329	0	12	12
Guatemala	0	0	0	0	0	262	959	25	9	34
Ireland	0	0	0	0	0	293	293	0	10	10
Italy	151	0	0	0	0	467	467	0	17	17
Japan	0	0	0	0	1	1	1	0	(s)	(s)
Korea, Republic of	0	0	0	0	134	164	164	0	6	6
Malaysia	0	0	0	0	0	557	557	0	20	20
Mexico	595	405	0	106	1	1,321	35,781	1,231	47	1,278
Netherlands	0	0	0	0	120	185	185	0	7	7
Netherlands Antilles	282	331	0	0	0	4,338	4,338	0	155	155
Norway	0	560	0	0	0	1,290	5,695	157	46	203
Peru	0	0	0	0	0	0	1,090	39	0	39
Portugal	0	0	0	0	0	251	251	0	9	9
Russia	0	0	0	0	0	792	792	0	28	28
Singapore	0	0	0	0	0	783	783	0	28	28
Spain	0	0	0	84	0	84	84	0	3	3
Trinidad and Tobago	0	0	0	0	0	260	1,333	38	9	48
United Kingdom	0	0	0	0	0	2,187	6,802	165	78	243
Virgin Islands	0	0	0	0	91	8,095	8,095	0	289	289
Other	0	278	0	0	9	601	1,049	16	21	37
Total	**2,638**	**5,034**	**95**	**1,032**	**3,129**	**54,561**	**289,403**	**8,387**	**1,949**	**10,336**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**828**	**2,036**	**67,095**	**2,324**	**73**	**2,396**

[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] February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**3,828**	**0**	**0**	**0**	**983**	**0**	**225**	**1,679**	**0**	**0**
Algeria	0	0	0	0	0	0	0	1,679	0	0
Saudi Arabia	3,828	0	0	0	983	0	225	0	0	0
Other OPEC	**12,806**	**0**	**235**	**1,034**	**2,920**	**601**	**2,053**	**1,803**	**0**	**0**
Nigeria	4,838	0	0	0	0	0	0	0	0	0
Venezuela	7,968	0	235	1,034	2,920	601	2,053	1,803	0	0
Non OPEC	**24,622**	**960**	**1,127**	**2,537**	**5,738**	**2,568**	**4,693**	**2,797**	**62**	**85**
Angola	5,036	0	0	0	0	230	0	0	0	0
Argentina	0	0	382	0	0	0	0	0	0	0
Belgium	0	0	258	0	8	0	176	109	0	0
Brazil	0	0	0	0	0	0	0	100	0	35
Canada	4,674	236	0	138	1,066	147	1,354	706	62	50
Colombia	5,104	0	0	0	0	98	0	296	0	0
Congo (Brazzaville)	307	0	0	0	0	0	0	0	0	0
Ecuador	720	0	0	0	0	0	0	0	0	0
Egypt	746	0	0	0	0	0	0	0	0	0
France	0	0	0	123	289	0	0	0	0	0
Gabon	3,948	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	0	0	0	0	0	0	0
Ireland	0	0	293	0	0	0	0	0	0	0
Italy	0	0	0	0	316	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Mexico	221	0	169	0	0	0	0	0	0	0
Netherlands	0	0	0	0	65	0	0	0	0	0
Netherlands Antilles	0	0	0	0	0	981	0	946	0	0
Norway	3,866	376	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	251	0	0	0	0	0
Russia	0	0	0	792	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	260	0	0
United Kingdom	0	348	25	1,371	443	0	0	0	0	0
Virgin Islands	0	0	0	49	3,300	1,112	3,163	380	0	0
Other	0	0	0	64	0	0	0	0	0	0
Total	**41,256**	**960**	**1,362**	**3,571**	**9,641**	**3,169**	**6,971**	**6,279**	**62**	**85**
Persian Gulf[e]	**3,828**	**0**	**0**	**0**	**983**	**0**	**225**	**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] February 1999 (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**	**206**	**3,093**	**6,921**	**137**	**110**	**247**
Algeria	0	0	0	0	0	1,679	1,679	0	60	60
Saudi Arabia	0	0	0	0	206	1,414	5,242	137	51	187
Other OPEC	**0**	**0**	**0**	**733**	**0**	**9,379**	**22,185**	**457**	**335**	**792**
Nigeria	0	0	0	0	0	0	4,838	173	0	173
Venezuela	0	0	0	733	0	9,379	17,347	285	335	620
Non OPEC	**81**	**0**	**63**	**109**	**517**	**21,337**	**45,959**	**879**	**762**	**1,641**
Angola	0	0	0	0	0	230	5,266	180	8	188
Argentina	0	0	0	0	0	382	382	0	14	14
Belgium	0	0	0	0	0	551	551	0	20	20
Brazil	0	0	0	0	0	135	135	0	5	5
Canada	81	0	63	109	7	4,019	8,693	167	144	310
Colombia	0	0	0	0	0	394	5,498	182	14	196
Congo (Brazzaville)	0	0	0	0	0	0	307	11	0	11
Ecuador	0	0	0	0	0	0	720	26	0	26
Egypt	0	0	0	0	0	0	746	27	0	27
France	0	0	0	0	289	701	701	0	25	25
Gabon	0	0	0	0	0	0	3,948	141	0	141
Germany, FR	0	0	0	0	5	5	5	0	(s)	(s)
Ireland	0	0	0	0	0	293	293	0	10	10
Italy	0	0	0	0	0	316	316	0	11	11
Japan	0	0	0	0	1	1	1	0	(s)	(s)
Mexico	0	0	0	0	0	169	390	8	6	14
Netherlands	0	0	0	0	120	185	185	0	7	7
Netherlands Antilles	0	0	0	0	0	1,927	1,927	0	69	69
Norway	0	0	0	0	0	376	4,242	138	13	152
Portugal	0	0	0	0	0	251	251	0	9	9
Russia	0	0	0	0	0	792	792	0	28	28
Trinidad and Tobago	0	0	0	0	0	260	260	0	9	9
United Kingdom	0	0	0	0	0	2,187	2,187	0	78	78
Virgin Islands	0	0	0	0	91	8,095	8,095	0	289	289
Other	0	0	0	0	4	68	68	0	2	2
Total	**81**	**0**	**63**	**842**	**723**	**33,809**	**75,065**	**1,473**	**1,207**	**2,681**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**206**	**1,414**	**5,242**	**137**	**51**	**187**

[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] February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**9,529**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Iraq	2,606	0	0	0	0	0	0	0	0	0
Kuwait	539	0	0	0	0	0	0	0	0	0
Saudi Arabia	6,384	0	0	0	0	0	0	0	0	0
Other OPEC	**10,949**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Nigeria	5,325	0	0	0	0	0	0	0	0	0
Venezuela	5,624	0	0	0	0	0	0	0	0	0
Non OPEC	**26,877**	**2,221**	**0**	**0**	**32**	**0**	**102**	**0**	**0**	**18**
Angola	1,806	0	0	0	0	0	0	0	0	0
Canada	19,546	2,221	0	0	32	0	102	0	0	18
Colombia	3,157	0	0	0	0	0	0	0	0	0
Mexico	2,368	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total	**47,355**	**2,221**	**0**	**0**	**32**	**0**	**102**	**0**	**0**	**18**
Persian Gulf[e]	**9,529**	**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] February 1999 (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**	**9,529**	**340**	**0**	**340**
Iraq	0	0	0	0	0	0	2,606	93	0	93
Kuwait	0	0	0	0	0	0	539	19	0	19
Saudi Arabia	0	0	0	0	0	0	6,384	228	0	228
Other OPEC	**0**	**0**	**0**	**0**	**0**	**0**	**10,949**	**391**	**0**	**391**
Nigeria	0	0	0	0	0	0	5,325	190	0	190
Venezuela	0	0	0	0	0	0	5,624	201	0	201
Non OPEC	**39**	**0**	**32**	**0**	**30**	**2,474**	**29,351**	**960**	**88**	**1,048**
Angola	0	0	0	0	0	0	1,806	65	0	65
Canada	39	0	32	0	28	2,472	22,018	698	88	786
Colombia	0	0	0	0	0	0	3,157	113	0	113
Mexico	0	0	0	0	0	0	2,368	85	0	85
Other	0	0	0	0	2	2	2	0	(s)	(s)
Total	**39**	**0**	**32**	**0**	**30**	**2,474**	**49,829**	**1,691**	**88**	**1,780**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**0**	**0**	**9,529**	**340**	**0**	**340**

[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] February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**46,846**	**0**	**183**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Algeria	0	0	183	0	0	0	0	0	0	0
Iraq	12,929	0	0	0	0	0	0	0	0	0
Kuwait	4,460	0	0	0	0	0	0	0	0	0
Saudi Arabia	29,457	0	0	0	0	0	0	0	0	0
Other OPEC	**30,893**	**0**	**1,623**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Nigeria	8,353	0	718	0	0	0	0	0	0	0
Venezuela	22,540	0	905	0	0	0	0	0	0	0
Non OPEC	**50,210**	**0**	**2,955**	**0**	**0**	**2**	**0**	**0**	**0**	**109**
Angola	2,480	0	0	0	0	0	0	0	0	0
Argentina	2,544	0	0	0	0	0	0	0	0	0
Australia	0	0	0	0	0	0	0	0	0	0
Belgium	0	0	627	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0	0	0	0	37
Brunei	1,403	0	0	0	0	0	0	0	0	0
Canada	0	0	71	0	0	0	0	0	0	72
Colombia	4,565	0	0	0	0	0	0	0	0	0
Congo (Brazzaville)	919	0	0	0	0	0	0	0	0	0
France	0	0	259	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0	0	0
Guatemala	697	0	262	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0	0
Mexico	30,577	0	43	0	0	2	0	0	0	0
Netherlands Antilles	0	0	1,089	0	0	0	0	0	0	0
Norway	539	0	354	0	0	0	0	0	0	0
Peru	350	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	1,073	0	0	0	0	0	0	0	0	0
United Kingdom	4,615	0	0	0	0	0	0	0	0	0
Other	448	0	250	0	0	0	0	0	0	0
Total	**127,949**	**0**	**4,761**	**0**	**0**	**2**	**0**	**0**	**0**	**109**
Persian Gulf[e]	**46,846**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**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] February 1999 (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	**248**	**2,555**	**0**	**0**	**1,022**	**4,008**	**50,854**	**1,673**	**143**	**1,816**
Algeria	248	2,555	0	0	1,022	4,008	4,008	0	143	143
Iraq	0	0	0	0	0	0	12,929	462	0	462
Kuwait	0	0	0	0	0	0	4,460	159	0	159
Saudi Arabia	0	0	0	0	0	0	29,457	1,052	0	1,052
Other OPEC	**700**	**0**	**0**	**0**	**0**	**2,323**	**33,216**	**1,103**	**83**	**1,186**
Nigeria	0	0	0	0	0	718	9,071	298	26	324
Venezuela	700	0	0	0	0	1,605	24,145	805	57	862
Non OPEC	**1,570**	**2,479**	**0**	**190**	**3**	**7,308**	**57,518**	**1,793**	**261**	**2,054**
Angola	0	225	0	0	0	225	2,705	89	8	97
Argentina	0	0	0	0	0	0	2,544	91	0	91
Australia	0	680	0	0	0	680	680	0	24	24
Belgium	0	0	0	0	0	627	627	0	22	22
Brazil	0	0	0	0	0	37	37	0	1	1
Brunei	0	0	0	0	0	0	1,403	50	0	50
Canada	0	0	0	0	0	143	143	0	5	5
Colombia	213	0	0	0	0	213	4,778	163	8	171
Congo (Brazzaville)	0	0	0	0	0	0	919	33	0	33
France	0	0	0	0	0	259	259	0	9	9
Greece	329	0	0	0	0	329	329	0	12	12
Guatemala	0	0	0	0	0	262	959	25	9	34
Italy	151	0	0	0	0	151	151	0	5	5
Mexico	595	405	0	106	0	1,151	31,728	1,092	41	1,133
Netherlands Antilles	282	331	0	0	0	1,702	1,702	0	61	61
Norway	0	560	0	0	0	914	1,453	19	33	52
Peru	0	0	0	0	0	0	350	13	0	13
Spain	0	0	0	84	0	84	84	0	3	3
Trinidad and Tobago	0	0	0	0	0	0	1,073	38	0	38
United Kingdom	0	0	0	0	0	0	4,615	165	0	165
Other	0	278	0	0	3	531	979	16	19	35
Total	**2,518**	**5,034**	**0**	**190**	**1,025**	**13,639**	**141,588**	**4,570**	**487**	**5,057**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**0**	**0**	**46,846**	**1,673**	**0**	**1,673**

[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] February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
					PAD District IV					
Non OPEC	**4,810**	**191**	**0**	**0**	**4**	**0**	**136**	**0**	**0**	**0**
Canada	4,263	191	0	0	4	0	136	0	0	0
Mexico	547	0	0	0	0	0	0	0	0	0
Total	**4,810**	**191**	**0**	**0**	**4**	**0**	**136**	**0**	**0**	**0**
					PAD District V					
Arab OPEC	**4,856**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Iraq	3,527	0	0	0	0	0	0	0	0	0
Kuwait	751	0	0	0	0	0	0	0	0	0
Saudi Arabia	578	0	0	0	0	0	0	0	0	0
Other OPEC	**1,837**	**0**	**22**	**0**	**0**	**750**	**0**	**0**	**0**	**0**
Indonesia	1,837	0	22	0	0	0	0	0	0	0
Venezuela	0	0	0	0	0	750	0	0	0	0
Non OPEC	**6,779**	**2**	**1,535**	**85**	**32**	**324**	**207**	**0**	**0**	**0**
Argentina	1,580	0	0	0	0	0	0	0	0	0
Australia	1,370	0	0	0	0	0	0	0	0	0
Canada	1,802	2	65	0	32	2	5	0	0	0
China, People's Republic of	0	0	0	0	0	0	0	0	0	0
Ecuador	540	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	30	0	0	0	0	0	0
Malaysia	0	0	557	0	0	0	0	0	0	0
Mexico	747	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	709	0	0	0	0	0	0	0
Peru	740	0	0	0	0	0	0	0	0	0
Singapore	0	0	204	55	0	322	202	0	0	0
Total	**13,472**	**2**	**1,557**	**85**	**32**	**1,074**	**207**	**0**	**0**	**0**
Persian Gulf[e]	**4,856**	**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] February 1999 (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**	**127**	**458**	**5,268**	**172**	**16**	**188**
Canada	0	0	0	0	127	458	4,721	152	16	169
Mexico	0	0	0	0	0	0	547	20	0	20
Total	**0**	**0**	**0**	**0**	**127**	**458**	**5,268**	**172**	**16**	**188**
PAD District V										
Arab OPEC	**0**	**0**	**0**	**0**	**622**	**622**	**5,478**	**173**	**22**	**196**
Iraq	0	0	0	0	0	0	3,527	126	0	126
Kuwait	0	0	0	0	0	0	751	27	0	27
Saudi Arabia	0	0	0	0	622	622	1,200	21	22	43
Other OPEC	**0**	**0**	**0**	**0**	**0**	**772**	**2,609**	**66**	**28**	**93**
Indonesia	0	0	0	0	0	22	1,859	66	1	66
Venezuela	0	0	0	0	0	750	750	0	27	27
Non OPEC	**0**	**0**	**0**	**0**	**602**	**2,787**	**9,566**	**242**	**100**	**342**
Argentina	0	0	0	0	0	0	1,580	56	0	56
Australia	0	0	0	0	0	0	1,370	49	0	49
Canada	0	0	0	0	443	549	2,351	64	20	84
China, People's Republic of	0	0	0	0	24	24	24	0	1	1
Ecuador	0	0	0	0	0	0	540	19	0	19
Korea, Republic of	0	0	0	0	134	164	164	0	6	6
Malaysia	0	0	0	0	0	557	557	0	20	20
Mexico	0	0	0	0	1	1	748	27	(s)	27
Netherlands Antilles	0	0	0	0	0	709	709	0	25	25
Peru	0	0	0	0	0	0	740	26	0	26
Singapore	0	0	0	0	0	783	783	0	28	28
Total	**0**	**0**	**0**	**0**	**1,224**	**4,181**	**17,653**	**481**	**149**	**630**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**622**	**622**	**5,478**	**173**	**22**	**196**

[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-February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**128,056**	**0**	**1,549**	**0**	**2,235**	**489**	**403**	**2,331**	**0**	**0**
Algeria	614	0	1,549	0	0	0	0	2,331	0	0
Iraq	33,655	0	0	0	0	0	0	0	0	0
Kuwait	9,835	0	0	0	0	0	0	0	0	0
Saudi Arabia	83,952	0	0	0	2,235	489	403	0	0	0
Other OPEC	**117,964**	**20**	**3,807**	**3,252**	**5,170**	**1,812**	**4,613**	**3,383**	**0**	**0**
Indonesia	4,160	0	71	0	0	0	0	106	0	0
Nigeria	39,784	20	718	0	0	0	0	0	0	0
Venezuela	74,020	0	3,018	3,252	5,170	1,812	4,613	3,277	0	0
Non OPEC	**246,365**	**8,113**	**12,490**	**5,106**	**11,274**	**5,377**	**11,273**	**6,498**	**143**	**449**
Angola	21,381	0	0	0	0	230	0	0	0	0
Argentina	7,841	0	382	255	0	0	0	0	0	0
Australia	1,370	0	0	0	0	0	0	0	0	0
Belgium	0	0	1,697	0	8	0	176	109	0	0
Benin	202	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0	0	100	0	124
Brunei	2,006	0	0	0	0	0	0	0	0	0
Canada	68,578	7,128	311	138	2,923	257	4,791	1,067	143	325
China, People's Republic of	0	0	0	0	0	0	0	0	0	0
Colombia	26,457	0	74	0	0	98	0	396	0	0
Congo (Brazzaville)	4,784	0	0	0	0	0	0	0	0	0
Ecuador	3,295	0	0	0	0	0	0	0	0	0
Egypt	746	0	0	0	0	0	0	0	0	0
France	0	0	896	166	289	0	0	0	0	0
Gabon	9,005	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	156	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0	0	0
Guatemala	1,357	0	262	0	0	0	0	0	0	0
Ireland	0	0	293	0	0	0	0	0	0	0
Italy	0	0	0	0	316	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	30	0	0	0	0	0	0
Malaysia	392	0	1,046	0	0	0	0	0	0	0
Mexico	72,804	0	1,075	270	0	233	0	356	0	0
Netherlands	0	0	787	0	65	0	0	356	0	0
Netherlands Antilles	0	0	3,386	0	0	1,665	0	1,486	0	0
Norway	9,957	637	783	0	7	0	0	0	0	0
Peru	1,979	0	0	0	0	0	0	0	0	0
Portugal	0	0	0	257	251	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Russia	0	0	0	1,032	0	48	44	0	0	0
Singapore	0	0	307	55	0	622	202	0	0	0
Spain	0	0	110	0	0	0	0	0	0	0
Trinidad and Tobago	2,141	0	0	0	0	0	0	806	0	0
United Kingdom	9,794	348	322	2,438	579	0	0	0	0	0
Virgin Islands	0	0	120	192	6,836	2,224	6,060	1,822	0	0
Other	2,276	0	483	273	0	0	0	0	0	0
Total	**492,385**	**8,133**	**17,846**	**8,358**	**18,679**	**7,678**	**16,289**	**12,212**	**143**	**449**
Persian Gulf[e]	**127,442**	**0**	**0**	**0**	**2,235**	**489**	**403**	**0**	**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-February 1999 (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	**748**	**4,716**	**0**	**0**	**5,219**	**17,690**	**145,746**	**2,170**	**300**	**2,470**
Algeria	748	4,716	0	0	3,164	12,508	13,122	10	212	222
Iraq	0	0	0	0	0	0	33,655	570	0	570
Kuwait	0	0	0	0	0	0	9,835	167	0	167
Saudi Arabia	0	0	0	0	2,055	5,182	89,134	1,423	88	1,511
Other OPEC	**1,057**	**0**	**0**	**1,293**	**431**	**24,838**	**142,802**	**1,999**	**421**	**2,420**
Indonesia	0	0	0	0	0	177	4,337	71	3	74
Nigeria	0	0	0	0	0	738	40,522	674	13	687
Venezuela	1,057	0	0	1,293	431	23,923	97,943	1,255	405	1,660
Non OPEC	**2,572**	**2,923**	**596**	**636**	**2,639**	**70,089**	**316,454**	**4,176**	**1,188**	**5,364**
Angola	0	225	0	0	0	455	21,836	362	8	370
Argentina	0	0	0	0	0	637	8,478	133	11	144
Australia	0	680	0	0	0	680	2,050	23	12	35
Belgium	0	0	0	0	0	1,990	1,990	0	34	34
Benin	0	0	0	0	0	0	202	3	0	3
Brazil	13	0	0	0	1	238	238	0	4	4
Brunei	0	0	0	0	0	0	2,006	34	0	34
Canada	302	0	182	291	1,613	19,471	88,049	1,162	330	1,492
China, People's Republic of	0	0	0	0	25	25	25	0	(s)	(s)
Colombia	213	0	0	0	0	781	27,238	448	13	462
Congo (Brazzaville)	0	0	0	0	0	0	4,784	81	0	81
Ecuador	0	0	0	0	0	0	3,295	56	0	56
Egypt	0	0	0	0	0	0	746	13	0	13
France	0	0	0	0	533	1,884	1,884	0	32	32
Gabon	0	0	0	0	0	0	9,005	153	0	153
Germany, FR	0	0	0	0	9	165	165	0	3	3
Greece	329	0	0	0	0	329	329	0	6	6
Guatemala	0	0	0	0	0	262	1,619	23	4	27
Ireland	0	0	0	0	0	293	293	0	5	5
Italy	151	0	0	0	0	467	467	0	8	8
Japan	16	0	0	0	12	28	28	0	(s)	(s)
Korea, Republic of	0	0	24	0	219	273	273	0	5	5
Malaysia	0	0	0	0	0	1,046	1,438	7	18	24
Mexico	921	405	0	261	3	3,524	76,328	1,234	60	1,294
Netherlands	0	0	0	0	120	1,328	1,328	0	23	23
Netherlands Antilles	392	331	0	0	0	7,260	7,260	0	123	123
Norway	0	1,004	0	0	0	2,431	12,388	169	41	210
Peru	0	0	0	0	0	0	1,979	34	0	34
Portugal	0	0	0	0	0	508	508	0	9	9
Puerto Rico	170	0	390	0	0	560	560	0	9	9
Russia	0	0	0	0	0	1,124	1,124	0	19	19
Singapore	0	0	0	0	0	1,186	1,186	0	20	20
Spain	0	0	0	84	0	194	194	0	3	3
Trinidad and Tobago	0	0	0	0	0	806	2,947	36	14	50
United Kingdom	0	0	0	0	0	3,687	13,481	166	62	228
Virgin Islands	65	0	0	0	91	17,410	17,410	0	295	295
Other	0	278	0	0	13	1,047	3,323	39	18	56
Total	**4,377**	**7,639**	**596**	**1,929**	**8,289**	**112,617**	**605,002**	**8,346**	**1,909**	**10,254**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**2,055**	**5,182**	**132,624**	**2,160**	**88**	**2,248**

[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-February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**8,823**	**0**	**0**	**0**	**2,235**	**0**	**403**	**2,331**	**0**	**0**
Algeria	0	0	0	0	0	0	0	2,331	0	0
Saudi Arabia	8,823	0	0	0	2,235	0	403	0	0	0
Other OPEC	**28,412**	**20**	**707**	**2,295**	**5,170**	**1,062**	**4,613**	**3,277**	**0**	**0**
Nigeria	14,162	20	0	0	0	0	0	0	0	0
Venezuela	14,250	0	707	2,295	5,170	1,062	4,613	3,277	0	0
Non OPEC	**57,727**	**1,585**	**3,247**	**5,021**	**10,988**	**4,464**	**10,242**	**6,142**	**142**	**188**
Angola	13,911	0	0	0	0	230	0	0	0	0
Argentina	0	0	382	255	0	0	0	0	0	0
Belgium	0	0	258	0	8	0	176	109	0	0
Brazil	0	0	0	0	0	0	0	100	0	87
Canada	11,316	600	0	138	2,784	247	4,185	1,067	142	101
China, People's Republic of	0	0	0	0	0	0	0	0	0	0
Colombia	9,369	0	0	0	0	98	0	396	0	0
Congo (Brazzaville)	1,635	0	0	0	0	0	0	0	0	0
Ecuador	1,079	0	0	0	0	0	0	0	0	0
Egypt	746	0	0	0	0	0	0	0	0	0
France	0	0	380	166	289	0	0	0	0	0
Gabon	9,005	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	156	0	0	0	0	0	0	0
Ireland	0	0	293	0	0	0	0	0	0	0
Italy	0	0	0	0	316	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Mexico	1,220	0	169	270	0	0	0	0	0	0
Netherlands	0	0	494	0	65	0	0	356	0	0
Netherlands Antilles	0	0	330	0	0	1,665	0	1,486	0	0
Norway	8,870	637	0	0	7	0	0	0	0	0
Portugal	0	0	0	257	251	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Russia	0	0	0	1,032	0	0	0	0	0	0
Spain	0	0	110	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	806	0	0
United Kingdom	576	348	322	2,438	579	0	0	0	0	0
Virgin Islands	0	0	120	192	6,689	2,224	5,881	1,822	0	0
Other	0	0	233	273	0	0	0	0	0	0
Total	**94,962**	**1,605**	**3,954**	**7,316**	**18,393**	**5,526**	**15,258**	**11,750**	**142**	**188**
Persian Gulf[e]	**8,823**	**0**	**0**	**0**	**2,235**	**0**	**403**	**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-February 1999 (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**	**472**	**5,441**	**14,264**	**150**	**92**	**242**
Algeria	0	0	0	0	0	2,331	2,331	0	40	40
Saudi Arabia	0	0	0	0	472	3,110	11,933	150	53	202
Other OPEC	**0**	**0**	**0**	**1,261**	**431**	**18,836**	**47,248**	**482**	**319**	**801**
Nigeria	0	0	0	0	0	20	14,182	240	(s)	240
Venezuela	0	0	0	1,261	431	18,816	33,066	242	319	560
Non OPEC	**263**	**0**	**514**	**446**	**780**	**44,022**	**101,749**	**978**	**746**	**1,725**
Angola	0	0	0	0	0	230	14,141	236	4	240
Argentina	0	0	0	0	0	637	637	0	11	11
Belgium	0	0	0	0	0	551	551	0	9	9
Brazil	0	0	0	0	1	188	188	0	3	3
Canada	84	0	124	291	14	9,777	21,093	192	166	358
China, People's Republic of	0	0	0	0	1	1	1	0	(s)	(s)
Colombia	0	0	0	0	0	494	9,863	159	8	167
Congo (Brazzaville)	0	0	0	0	0	0	1,635	28	0	28
Ecuador	0	0	0	0	0	0	1,079	18	0	18
Egypt	0	0	0	0	0	0	746	13	0	13
France	0	0	0	0	533	1,368	1,368	0	23	23
Gabon	0	0	0	0	0	0	9,005	153	0	153
Germany, FR	0	0	0	0	9	165	165	0	3	3
Ireland	0	0	0	0	0	293	293	0	5	5
Italy	0	0	0	0	0	316	316	0	5	5
Japan	9	0	0	0	5	14	14	0	(s)	(s)
Mexico	0	0	0	155	0	594	1,814	21	10	31
Netherlands	0	0	0	0	120	1,035	1,035	0	18	18
Netherlands Antilles	0	0	0	0	0	3,481	3,481	0	59	59
Norway	0	0	0	0	0	644	9,514	150	11	161
Portugal	0	0	0	0	0	508	508	0	9	9
Puerto Rico	170	0	390	0	0	560	560	0	9	9
Russia	0	0	0	0	0	1,032	1,032	0	17	17
Spain	0	0	0	0	0	110	110	0	2	2
Trinidad and Tobago	0	0	0	0	0	806	806	0	14	14
United Kingdom	0	0	0	0	0	3,687	4,263	10	62	72
Virgin Islands	0	0	0	0	91	17,019	17,019	0	288	288
Other	0	0	0	0	6	512	512	0	9	9
Total	**263**	**0**	**514**	**1,707**	**1,683**	**68,299**	**163,261**	**1,610**	**1,158**	**2,767**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**472**	**3,110**	**11,933**	**150**	**53**	**202**

[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-February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**17,751**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Iraq	4,440	0	0	0	0	0	0	0	0	0
Kuwait	1,103	0	0	0	0	0	0	0	0	0
Saudi Arabia	12,208	0	0	0	0	0	0	0	0	0
Other OPEC	**15,518**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Nigeria	7,201	0	0	0	0	0	0	0	0	0
Venezuela	8,317	0	0	0	0	0	0	0	0	0
Non OPEC	**55,624**	**5,452**	**0**	**0**	**82**	**4**	**276**	**0**	**1**	**67**
Angola	2,406	0	0	0	0	0	0	0	0	0
Canada	43,675	5,452	0	0	82	4	276	0	1	67
Colombia	4,124	0	0	0	0	0	0	0	0	0
Congo (Brazzaville)	349	0	0	0	0	0	0	0	0	0
Ecuador	357	0	0	0	0	0	0	0	0	0
Mexico	4,115	0	0	0	0	0	0	0	0	0
United Kingdom	598	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total	**88,893**	**5,452**	**0**	**0**	**82**	**4**	**276**	**0**	**1**	**67**
Persian Gulf[e]	**17,751**	**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-February 1999 (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**	**17,751**	**301**	**0**	**301**
Iraq	0	0	0	0	0	0	4,440	75	0	75
Kuwait	0	0	0	0	0	0	1,103	19	0	19
Saudi Arabia	0	0	0	0	0	0	12,208	207	0	207
Other OPEC	**0**	**0**	**0**	**0**	**0**	**0**	**15,518**	**263**	**0**	**263**
Nigeria	0	0	0	0	0	0	7,201	122	0	122
Venezuela	0	0	0	0	0	0	8,317	141	0	141
Non OPEC	**74**	**0**	**58**	**0**	**95**	**6,109**	**61,733**	**943**	**104**	**1,046**
Angola	0	0	0	0	0	0	2,406	41	0	41
Canada	74	0	58	0	93	6,107	49,782	740	104	844
Colombia	0	0	0	0	0	0	4,124	70	0	70
Congo (Brazzaville)	0	0	0	0	0	0	349	6	0	6
Ecuador	0	0	0	0	0	0	357	6	0	6
Mexico	0	0	0	0	0	0	4,115	70	0	70
United Kingdom	0	0	0	0	0	0	598	10	0	10
Other	0	0	0	0	2	2	2	0	(s)	(s)
Total	**74**	**0**	**58**	**0**	**95**	**6,109**	**95,002**	**1,507**	**104**	**1,610**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**0**	**0**	**17,751**	**301**	**0**	**301**

[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-February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**95,824**	**0**	**1,549**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Algeria	614	0	1,549	0	0	0	0	0	0	0
Iraq	25,285	0	0	0	0	0	0	0	0	0
Kuwait	7,582	0	0	0	0	0	0	0	0	0
Saudi Arabia	62,343	0	0	0	0	0	0	0	0	0
Other OPEC	**69,874**	**0**	**3,029**	**957**	**0**	**0**	**0**	**0**	**0**	**0**
Nigeria	18,421	0	718	0	0	0	0	0	0	0
Venezuela	51,453	0	2,311	957	0	0	0	0	0	0
Non OPEC	**106,334**	**543**	**6,684**	**0**	**0**	**2**	**0**	**356**	**0**	**194**
Angola	5,064	0	0	0	0	0	0	0	0	0
Argentina	3,791	0	0	0	0	0	0	0	0	0
Australia	0	0	0	0	0	0	0	0	0	0
Belgium	0	0	1,439	0	0	0	0	0	0	0
Benin	202	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0	0	0	0	37
Brunei	1,403	0	0	0	0	0	0	0	0	0
Canada	0	543	166	0	0	0	0	0	0	157
Colombia	12,964	0	74	0	0	0	0	0	0	0
Congo (Brazzaville)	2,800	0	0	0	0	0	0	0	0	0
Ecuador	357	0	0	0	0	0	0	0	0	0
France	0	0	516	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0	0	0
Guatemala	1,357	0	262	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	0	0	0	0	0	0
Mexico	65,397	0	906	0	0	2	0	356	0	0
Netherlands	0	0	293	0	0	0	0	0	0	0
Netherlands Antilles	0	0	1,995	0	0	0	0	0	0	0
Norway	1,087	0	783	0	0	0	0	0	0	0
Peru	703	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	2,141	0	0	0	0	0	0	0	0	0
United Kingdom	8,620	0	0	0	0	0	0	0	0	0
Virgin Islands	0	0	0	0	0	0	0	0	0	0
Other	448	0	250	0	0	0	0	0	0	0
Total	**272,032**	**543**	**11,262**	**957**	**0**	**2**	**0**	**356**	**0**	**194**
Persian Gulf[e]	**95,210**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**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-February 1999 (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	**748**	**4,716**	**0**	**0**	**3,164**	**10,177**	**106,001**	**1,624**	**172**	**1,797**
Algeria	748	4,716	0	0	3,164	10,177	10,791	10	172	183
Iraq	0	0	0	0	0	0	25,285	429	0	429
Kuwait	0	0	0	0	0	0	7,582	129	0	129
Saudi Arabia	0	0	0	0	0	0	62,343	1,057	0	1,057
Other OPEC	**1,057**	**0**	**0**	**32**	**0**	**5,075**	**74,949**	**1,184**	**86**	**1,270**
Nigeria	0	0	0	0	0	718	19,139	312	12	324
Venezuela	1,057	0	0	32	0	4,357	55,810	872	74	946
Non OPEC	**2,235**	**2,923**	**24**	**190**	**12**	**13,163**	**119,497**	**1,802**	**223**	**2,025**
Angola	0	225	0	0	0	225	5,289	86	4	90
Argentina	0	0	0	0	0	0	3,791	64	0	64
Australia	0	680	0	0	0	680	680	0	12	12
Belgium	0	0	0	0	0	1,439	1,439	0	24	24
Benin	0	0	0	0	0	0	202	3	0	3
Brazil	13	0	0	0	0	50	50	0	1	1
Brunei	0	0	0	0	0	0	1,403	24	0	24
Canada	144	0	0	0	0	1,010	1,010	0	17	17
Colombia	213	0	0	0	0	287	13,251	220	5	225
Congo (Brazzaville)	0	0	0	0	0	0	2,800	47	0	47
Ecuador	0	0	0	0	0	0	357	6	0	6
France	0	0	0	0	0	516	516	0	9	9
Greece	329	0	0	0	0	329	329	0	6	6
Guatemala	0	0	0	0	0	262	1,619	23	4	27
Italy	151	0	0	0	0	151	151	0	3	3
Japan	7	0	0	0	6	13	13	0	(s)	(s)
Korea, Republic of	0	0	24	0	1	25	25	0	(s)	(s)
Mexico	921	405	0	106	0	2,696	68,093	1,108	46	1,154
Netherlands	0	0	0	0	0	293	293	0	5	5
Netherlands Antilles	392	331	0	0	0	2,718	2,718	0	46	46
Norway	0	1,004	0	0	0	1,787	2,874	18	30	49
Peru	0	0	0	0	0	0	703	12	0	12
Spain	0	0	0	84	0	84	84	0	1	1
Trinidad and Tobago	0	0	0	0	0	0	2,141	36	0	36
United Kingdom	0	0	0	0	0	0	8,620	146	0	146
Virgin Islands	65	0	0	0	0	65	65	0	1	1
Other	0	278	0	0	5	533	981	8	9	17
Total	**4,040**	**7,639**	**24**	**222**	**3,176**	**28,415**	**300,447**	**4,611**	**482**	**5,092**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**0**	**0**	**95,210**	**1,614**	**0**	**1,614**

[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-February 1999

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
PAD District IV										
Non OPEC	**9,673**	**526**	**0**	**0**	**10**	**0**	**305**	**0**	**0**	**0**
Canada	9,126	526	0	0	10	0	305	0	0	0
Mexico	547	0	0	0	0	0	0	0	0	0
Total	**9,673**	**526**	**0**	**0**	**10**	**0**	**305**	**0**	**0**	**0**
PAD District V										
Arab OPEC	**5,658**	**0**	**0**	**0**	**0**	**489**	**0**	**0**	**0**	**0**
Iraq	3,930	0	0	0	0	0	0	0	0	0
Kuwait	1,150	0	0	0	0	0	0	0	0	0
Saudi Arabia	578	0	0	0	0	489	0	0	0	0
Other OPEC	**4,160**	**0**	**71**	**0**	**0**	**750**	**0**	**106**	**0**	**0**
Indonesia	4,160	0	71	0	0	0	0	106	0	0
Venezuela	0	0	0	0	0	750	0	0	0	0
Non OPEC	**17,007**	**7**	**2,559**	**85**	**194**	**907**	**450**	**0**	**0**	**0**
Argentina	4,050	0	0	0	0	0	0	0	0	0
Australia	1,370	0	0	0	0	0	0	0	0	0
Brunei	603	0	0	0	0	0	0	0	0	0
Canada	4,461	7	145	0	47	6	25	0	0	0
China, People's Republic of	0	0	0	0	0	0	0	0	0	0
Ecuador	1,502	0	0	0	0	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	30	0	0	0	0	0	0
Malaysia	392	0	1,046	0	0	0	0	0	0	0
Mexico	1,525	0	0	0	0	231	0	0	0	0
Netherlands Antilles	0	0	1,061	0	0	0	0	0	0	0
Peru	1,276	0	0	0	0	0	0	0	0	0
Russia	0	0	0	0	0	48	44	0	0	0
Singapore	0	0	307	55	0	622	202	0	0	0
Virgin Islands	0	0	0	0	147	0	179	0	0	0
Other	1,828	0	0	0	0	0	0	0	0	0
Total	**26,825**	**7**	**2,630**	**85**	**194**	**2,146**	**450**	**106**	**0**	**0**
Persian Gulf[e]	**5,658**	**0**	**0**	**0**	**0**	**489**	**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-February 1999 (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**	**290**	**1,131**	**10,804**	**164**	**19**	**183**
Canada	0	0	0	0	290	1,131	10,257	155	19	174
Mexico	0	0	0	0	0	0	547	9	0	9
Total	**0**	**0**	**0**	**0**	**290**	**1,131**	**10,804**	**164**	**19**	**183**
PAD District V										
Arab OPEC	**0**	**0**	**0**	**0**	**1,583**	**2,072**	**7,730**	**96**	**35**	**131**
Iraq	0	0	0	0	0	0	3,930	67	0	67
Kuwait	0	0	0	0	0	0	1,150	19	0	19
Saudi Arabia	0	0	0	0	1,583	2,072	2,650	10	35	45
Other OPEC	**0**	**0**	**0**	**0**	**0**	**927**	**5,087**	**71**	**16**	**86**
Indonesia	0	0	0	0	0	177	4,337	71	3	74
Venezuela	0	0	0	0	0	750	750	0	13	13
Non OPEC	**0**	**0**	**0**	**0**	**1,462**	**5,664**	**22,671**	**288**	**96**	**384**
Argentina	0	0	0	0	0	0	4,050	69	0	69
Australia	0	0	0	0	0	0	1,370	23	0	23
Brunei	0	0	0	0	0	0	603	10	0	10
Canada	0	0	0	0	1,216	1,446	5,907	76	25	100
China, People's Republic of	0	0	0	0	24	24	24	0	(s)	(s)
Ecuador	0	0	0	0	0	0	1,502	25	0	25
Japan	0	0	0	0	1	1	1	0	(s)	(s)
Korea, Republic of	0	0	0	0	218	248	248	0	4	4
Malaysia	0	0	0	0	0	1,046	1,438	7	18	24
Mexico	0	0	0	0	3	234	1,759	26	4	30
Netherlands Antilles	0	0	0	0	0	1,061	1,061	0	18	18
Peru	0	0	0	0	0	0	1,276	22	0	22
Russia	0	0	0	0	0	92	92	0	2	2
Singapore	0	0	0	0	0	1,186	1,186	0	20	20
Virgin Islands	0	0	0	0	0	326	326	0	6	6
Other	0	0	0	0	0	0	1,828	31	0	31
Total	**0**	**0**	**0**	**0**	**3,045**	**8,663**	**35,488**	**455**	**147**	**601**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**1,583**	**2,072**	**7,730**	**96**	**35**	**131**

[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, February 1999

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil[a]	**0**	**1,241**	**0**	**0**	**2,102**	**3,342**	**119**
Natural Gas Liquids	**49**	**419**	**1,125**	**2**	**234**	**1,828**	**65**
Pentanes Plus	3	23	0	0	(s)	26	1
Liquefied Petroleum Gases	46	396	1,125	2	234	1,802	64
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	34	81	914	2	122	1,152	41
Normal Butane/Butylene	12	315	211	(s)	112	651	23
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	**48**	**17**	**873**	**14**	**89**	**1,041**	**37**
Other Hydrocarbons/Oxygenates	47	17	714	14	89	881	31
Motor Gasoline Blend. Comp.	1	(s)	159	0	(s)	159	6
Finished Petroleum Products	**596**	**253**	**8,783**	**14**	**5,306**	**14,952**	**534**
Finished Motor Gasoline	5	28	2,737	4	159	2,933	105
Naphtha-Type Jet Fuel	(s)	(s)	18	0	0	18	1
Kerosene-Type Jet Fuel	132	0	31	0	62	225	8
Kerosene	(s)	1	0	0	2	3	(s)
Distillate Fuel Oil	60	9	1,526	0	1,662	3,256	116
Residual Fuel Oil	148	20	785	0	1,004	1,957	70
Special Naphthas	11	8	12	(s)	240	272	10
Lubricants	119	76	469	6	97	767	27
Waxes	25	15	40	2	17	99	4
Petroleum Coke	87	34	3,155	0	2,046	5,321	190
Asphalt and Road Oil	4	63	8	1	17	93	3
Miscellaneous Products	5	1	1	0	1	7	(s)
Total	**693**	**1,930**	**10,780**	**29**	**7,731**	**21,163**	**756**

[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-February 1999

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil[a]	**0**	**2,082**	**3**	**0**	**4,589**	**6,675**	**113**
Natural Gas Liquids	**67**	**758**	**2,925**	**5**	**442**	**4,197**	**71**
Pentanes Plus	4	55	0	0	(s)	59	1
Liquefied Petroleum Gases	63	704	2,925	5	441	4,138	70
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	49	136	2,247	5	265	2,702	46
Normal Butane/Butylene	14	568	678	(s)	176	1,436	24
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	**218**	**35**	**2,239**	**33**	**131**	**2,656**	**45**
Other Hydrocarbons/Oxygenates	214	35	1,810	33	131	2,223	38
Motor Gasoline Blend. Comp.	4	(s)	429	0	(s)	433	7
Finished Petroleum Products	**1,402**	**475**	**21,583**	**35**	**11,904**	**35,400**	**600**
Finished Motor Gasoline	19	52	6,378	4	501	6,954	118
Naphtha-Type Jet Fuel	1	1	43	0	0	44	1
Kerosene-Type Jet Fuel	424	0	309	0	277	1,009	17
Kerosene	3	2	(s)	0	4	9	(s)
Distillate Fuel Oil	163	17	2,912	0	3,806	6,899	117
Residual Fuel Oil	366	20	3,310	0	2,373	6,070	103
Special Naphthas	28	15	35	1	297	376	6
Lubricants	217	141	969	18	176	1,521	26
Waxes	49	34	73	10	31	197	3
Petroleum Coke	115	70	7,507	0	4,403	12,095	205
Asphalt and Road Oil	10	122	43	3	33	210	4
Miscellaneous Products	7	1	3	0	3	14	(s)
Total	**1,687**	**3,351**	**26,751**	**73**	**17,066**	**48,927**	**829**

[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, February 1999

(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	1	0	0	16	0
Australia	0	0	(s)	1	0	0	0	0
Bahama Islands	0	0	18	1	(s)	0	360	1
Bahrain	0	0	0	0	0	0	0	0
Belgium & Luxembourg	0	0	0	0	0	0	1	(s)
Brazil	0	0	0	0	0	0	251	0
Canada	1,241	25	398	89	193	1	70	285
Chile	0	0	0	315	0	0	(s)	0
China, People's Republic of	0	0	0	0	0	0	402	77
China, Taiwan	0	0	0	(s)	0	(s)	325	12
Colombia	0	0	0	0	0	0	0	0
Costa Rica	0	0	0	0	0	0	1	0
Denmark	0	0	0	0	0	0	(s)	0
Dominican Republic	0	0	92	0	0	0	51	(s)
Ecuador	0	0	0	0	0	0	1	0
Egypt	0	0	0	0	0	0	0	0
El Salvador	0	0	0	0	0	0	0	0
Finland	0	0	0	0	0	0	2	0
France	0	0	0	0	0	0	(s)	0
French Pacific Islands	0	0	0	0	0	0	29	0
Germany, FR	0	0	29	0	0	0	0	(s)
Ghana	0	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0
Guatemala	0	0	(s)	85	5	0	32	0
Guinea	0	0	0	0	0	0	0	0
Honduras	0	0	0	0	10	0	26	0
Hong Kong	0	(s)	0	0	0	0	2	0
India	0	0	0	0	0	0	0	(s)
Indonesia	0	0	0	0	0	0	0	0
Ireland	0	0	0	0	0	0	0	0
Israel	0	0	1	0	0	0	2	0
Italy	0	0	0	0	0	0	1	0
Jamaica	0	0	0	(s)	0	0	37	645
Japan	500	0	138	(s)	0	1	8	133
Korea, Republic of	1,602	0	(s)	0	0	0	9	0
Malaysia	0	1	(s)	0	0	0	0	0
Mexico	0	0	1,073	2,364	25	1	844	713
Netherlands	0	0	0	0	0	0	0	(s)
Netherlands Antilles	0	0	0	0	0	0	(s)	0
New Zealand	0	0	0	0	0	0	(s)	0
Nigeria	0	0	0	0	0	0	0	0
Norway	0	0	23	0	0	0	0	0
Panama	0	0	0	0	0	0	270	0
Peru	0	0	0	0	0	0	1	0
Philippines	0	0	(s)	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	0
Puerto Rico	0	0	0	(s)	0	(s)	1	(s)
Russia	0	0	0	56	0	0	0	0
Saudi Arabia	0	0	0	0	0	0	0	0
Singapore	0	0	0	0	0	0	443	86
South Africa	0	0	0	0	0	0	1	0
Spain	0	0	0	0	0	0	3	0
Suriname	0	0	0	0	0	0	0	0
Sweden	0	0	0	0	0	0	0	0
Switzerland	0	0	0	0	0	0	(s)	0
Thailand	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	1	0
Turkey	0	0	0	0	0	0	(s)	0
United Arab Emirates	0	0	0	0	0	0	0	3
United Kingdom	0	0	12	(s)	(s)	0	1	0
Uruguay	0	0	0	0	0	0	0	0
Venezuela	0	0	0	0	0	0	1	0
Virgin Islands	0	0	0	0	0	0	0	0
Yugoslavia	0	0	0	0	0	0	0	0
Other	0	0	17	20	10	0	65	0
Total	**3,342**	**26**	**1,802**	**2,933**	**243**	**3**	**3,256**	**1,957**

See footnotes at end of table.

Table 47. Exports of Crude Oil and Petroleum Products by Destination, February 1999 (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	(s)	6	1	(s)	0	0	24	1
Australia	0	2	(s)	1	(s)	(s)	6	(s)
Bahama Islands	0	2	0	0	0	0	381	14
Bahrain	0	(s)	0	0	0	0	(s)	(s)
Belgium & Luxembourg	0	9	(s)	347	(s)	48	406	14
Brazil	(s)	12	(s)	453	(s)	4	720	26
Canada	11	153	49	440	68	54	3,075	110
Chile	(s)	13	1	303	0	0	632	23
China, People's Republic of	1	2	(s)	0	0	0	482	17
China, Taiwan	(s)	25	1	12	(s)	(s)	376	13
Colombia	0	3	1	0	1	(s)	5	(s)
Costa Rica	1	23	1	0	0	(s)	26	1
Denmark	0	(s)	0	0	0	(s)	(s)	(s)
Dominican Republic	(s)	11	(s)	0	0	0	155	6
Ecuador	0	1	0	0	0	0	2	(s)
Egypt	0	2	0	0	0	0	2	(s)
El Salvador	0	4	(s)	0	0	0	4	(s)
Finland	0	(s)	0	0	0	0	2	(s)
France	0	1	2	16	(s)	4	22	1
French Pacific Islands	0	(s)	0	0	0	0	29	1
Germany, FR	(s)	3	5	13	2	(s)	53	2
Ghana	0	1	0	57	0	0	58	2
Greece	0	1	(s)	0	0	0	1	(s)
Guatemala	1	8	(s)	0	0	12	143	5
Guinea	0	(s)	0	0	0	0	(s)	(s)
Honduras	2	6	(s)	0	0	0	43	2
Hong Kong	(s)	3	1	0	(s)	0	6	(s)
India	0	1	(s)	165	(s)	3	170	6
Indonesia	0	1	(s)	0	0	0	1	(s)
Ireland	0	(s)	0	0	0	0	(s)	(s)
Israel	0	3	0	0	0	0	6	(s)
Italy	0	(s)	(s)	300	(s)	1	303	11
Jamaica	0	9	(s)	0	0	15	705	25
Japan	210	9	2	939	1	44	1,984	71
Korea, Republic of	29	2	(s)	200	(s)	46	1,889	67
Malaysia	0	1	(s)	5	(s)	(s)	8	(s)
Mexico	2	130	31	198	17	453	5,851	209
Netherlands	(s)	2	(s)	550	(s)	29	581	21
Netherlands Antilles	0	182	0	0	0	0	182	7
New Zealand	0	1	0	0	0	0	2	(s)
Nigeria	0	1	0	0	0	0	1	(s)
Norway	0	(s)	(s)	82	0	0	105	4
Panama	0	15	(s)	(s)	0	0	285	10
Peru	0	1	(s)	(s)	0	0	2	(s)
Philippines	(s)	2	(s)	121	(s)	0	123	4
Portugal	(s)	(s)	0	0	0	(s)	(s)	(s)
Puerto Rico	5	11	(s)	0	(s)	(s)	18	1
Russia	0	1	0	0	0	0	57	2
Saudi Arabia	0	2	0	(s)	0	0	2	(s)
Singapore	0	26	(s)	0	(s)	(s)	556	20
South Africa	0	7	(s)	67	(s)	(s)	75	3
Spain	0	(s)	(s)	309	(s)	(s)	314	11
Suriname	0	1	0	0	0	0	1	(s)
Sweden	0	1	(s)	8	0	0	9	(s)
Switzerland	0	0	0	0	0	(s)	(s)	(s)
Thailand	1	2	(s)	0	0	(s)	3	(s)
Trinidad and Tobago	2	(s)	0	0	0	(s)	3	(s)
Turkey	0	33	(s)	283	0	0	317	11
United Arab Emirates	0	(s)	0	80	0	0	84	3
United Kingdom	1	2	(s)	61	1	(s)	79	3
Uruguay	0	1	(s)	(s)	0	0	1	(s)
Venezuela	(s)	9	(s)	105	1	334	448	16
Virgin Islands	0	(s)	0	0	0	0	(s)	(s)
Yugoslavia	0	(s)	0	0	0	0	(s)	(s)
Other	6	20	0	205	(s)	(s)	344	12
Total	**272**	**767**	**99**	**5,321**	**93**	**1,048**	**21,163**	**756**

[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-February 1999

(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	177	0	0	16	0
Australia	0	0	(s)	1	0	0	1	0
Bahama Islands	0	0	26	34	1	0	607	75
Bahrain	0	0	0	0	0	0	0	0
Belgium & Luxembourg	0	0	0	0	0	0	2	(s)
Brazil	0	0	0	0	0	0	251	0
Cameroon	0	0	0	0	0	0	0	0
Canada	2,082	57	734	175	701	4	309	541
Chile	0	0	1	315	0	0	14	3
China, People's Republic of	1,290	0	0	0	0	0	405	77
China, Taiwan	0	0	(s)	1	0	(s)	989	12
Colombia	0	0	1	210	0	0	(s)	0
Costa Rica	0	0	(s)	240	0	0	2	154
Denmark	0	0	0	0	0	0	(s)	0
Dominican Republic	0	0	202	0	0	0	59	96
Ecuador	0	0	167	0	0	0	1	0
Egypt	0	0	0	0	0	0	0	0
El Salvador	0	0	0	0	0	0	84	0
Finland	0	0	0	0	0	0	2	0
France	0	0	0	0	0	0	(s)	0
French Pacific Islands	0	0	0	0	0	0	30	0
Germany, FR	0	0	29	0	0	0	2	(s)
Ghana	0	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0
Guatemala	0	0	(s)	176	9	0	217	0
Guinea	0	0	0	0	0	0	(s)	0
Honduras	0	(s)	0	0	10	0	86	0
Hong Kong	0	(s)	0	0	0	1	2	0
India	0	0	0	0	0	0	4	(s)
Indonesia	0	0	0	0	0	0	(s)	0
Ireland	0	0	0	0	0	0	(s)	0
Israel	0	0	1	0	257	0	251	0
Italy	0	0	184	0	0	0	1	0
Jamaica	0	0	10	(s)	0	0	38	1,138
Japan	900	0	138	(s)	0	1	14	133
Korea, Republic of	2,399	0	(s)	0	0	0	11	16
Malaysia	0	1	(s)	0	0	0	2	0
Mexico	3	0	2,001	5,088	65	1	1,522	1,435
Netherlands	0	0	0	0	0	0	1	686
Netherlands Antilles	0	0	0	0	(s)	0	1	247
New Zealand	0	0	0	0	0	0	(s)	0
Nigeria	0	0	0	0	0	0	235	0
Norway	0	0	23	0	0	0	0	0
Panama	0	0	(s)	50	0	0	270	443
Peru	0	0	206	0	0	1	1	0
Philippines	0	0	(s)	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	0
Puerto Rico	0	0	0	399	0	(s)	1	(s)
Russia	0	0	(s)	56	0	0	1	0
Saudi Arabia	0	0	0	0	0	0	0	0
Singapore	0	0	0	0	0	0	1,385	1,010
South Africa	0	0	0	0	(s)	0	1	0
Spain	0	0	(s)	0	0	0	3	0
Suriname	0	0	0	0	0	0	0	0
Sweden	0	0	0	1	0	0	1	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	0	0	0	1	0
Turkey	0	0	373	0	0	0	(s)	0
United Arab Emirates	0	0	0	0	0	0	(s)	3
United Kingdom	0	0	16	1	(s)	0	3	0
Uruguay	0	0	0	0	0	0	0	0
Venezuela	0	0	(s)	0	0	0	1	0
Virgin Islands	0	0	0	0	(s)	0	0	0
Yugoslavia	0	0	0	0	0	0	0	0
Other	0	0	25	30	10	1	71	0
Total	**6,675**	**59**	**4,138**	**6,954**	**1,053**	**9**	**6,899**	**6,070**

See footnotes at end of table.

Table 48. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-February 1999 (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	(s)	9	1	(s)	(s)	0	202	3
Australia	(s)	4	(s)	610	1	(s)	618	10
Bahama Islands	0	5	0	0	(s)	(s)	748	13
Bahrain	0	(s)	0	0	0	0	(s)	(s)
Belgium & Luxembourg	(s)	16	1	468	(s)	138	626	11
Brazil	4	14	1	975	7	13	1,265	21
Cameroon	0	0	0	44	0	0	44	1
Canada	18	284	103	857	132	245	6,240	106
Chile	(s)	20	1	484	0	0	838	14
China, People's Republic of	1	5	1	0	0	(s)	1,778	30
China, Taiwan	2	45	1	32	1	(s)	1,083	18
Colombia	2	13	1	71	1	(s)	299	5
Costa Rica	1	36	2	0	0	(s)	435	7
Denmark	0	(s)	0	151	0	(s)	152	3
Dominican Republic	(s)	20	(s)	0	(s)	0	378	6
Ecuador	0	8	0	0	0	0	176	3
Egypt	0	4	0	0	1	0	5	(s)
El Salvador	0	11	(s)	0	0	0	95	2
Finland	0	(s)	0	0	0	0	2	(s)
France	0	2	4	271	2	4	283	5
French Pacific Islands	(s)	(s)	0	0	0	0	30	1
Germany, FR	1	4	6	48	12	1	103	2
Ghana	0	1	0	84	0	0	84	1
Greece	0	2	(s)	0	0	0	2	(s)
Guatemala	5	20	1	0	0	23	451	8
Guinea	0	3	0	0	0	0	3	(s)
Honduras	3	15	(s)	0	0	0	115	2
Hong Kong	(s)	6	2	0	(s)	(s)	11	(s)
India	0	14	(s)	167	1	3	190	3
Indonesia	0	2	(s)	1	0	33	35	1
Ireland	0	(s)	0	0	0	(s)	1	(s)
Israel	0	4	0	303	0	0	815	14
Italy	(s)	29	(s)	755	1	21	991	17
Jamaica	4	12	(s)	0	0	42	1,244	21
Japan	268	44	5	1,777	2	72	3,354	57
Korea, Republic of	29	6	1	201	1	59	2,723	46
Malaysia	(s)	2	(s)	5	1	(s)	11	(s)
Mexico	4	258	56	395	32	1,172	12,032	204
Netherlands	2	4	(s)	948	1	33	1,676	28
Netherlands Antilles	0	365	0	0	0	0	613	10
New Zealand	0	2	(s)	99	(s)	0	102	2
Nigeria	0	2	0	0	0	0	237	4
Norway	0	(s)	(s)	107	0	(s)	130	2
Panama	0	22	(s)	(s)	0	0	786	13
Peru	0	3	(s)	(s)	0	0	211	4
Philippines	1	4	(s)	121	(s)	0	127	2
Portugal	(s)	(s)	0	0	0	(s)	(s)	(s)
Puerto Rico	16	30	(s)	0	(s)	1	449	8
Russia	0	3	0	0	0	0	59	1
Saudi Arabia	0	3	0	47	0	0	50	1
Singapore	0	36	(s)	0	(s)	(s)	2,432	41
South Africa	0	18	(s)	168	(s)	(s)	188	3
Spain	0	1	(s)	1,590	1	(s)	1,595	27
Suriname	0	2	0	0	0	0	2	(s)
Sweden	0	1	(s)	8	0	0	11	(s)
Switzerland	0	(s)	1	0	0	(s)	2	(s)
Thailand	1	9	(s)	226	0	1	236	4
Trinidad and Tobago	2	1	0	1	0	(s)	5	(s)
Turkey	0	34	(s)	283	0	3	694	12
United Arab Emirates	(s)	15	0	161	(s)	0	179	3
United Kingdom	2	4	1	91	9	(s)	127	2
Uruguay	0	1	(s)	(s)	0	0	2	(s)
Venezuela	(s)	12	7	206	3	563	791	13
Virgin Islands	0	(s)	0	0	0	0	(s)	(s)
Yugoslavia	0	(s)	0	0	0	0	(s)	(s)
Other	8	32	(s)	342	1	240	760	13
Total	**376**	**1,521**	**197**	**12,095**	**210**	**2,671**	**48,927**	**829**

[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, February 1999

(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	**2,324**	**(s)**	**35**	**0**	**8**	**60**	**-3**	**(s)**	**173**	**273**	**2,596**
Algeria	0	0	0	0	0	60	0	0	143	203	203
Iraq	681	0	0	0	0	0	0	0	0	0	681
Kuwait	205	(s)	0	0	0	0	0	(s)	0	(s)	205
Saudi Arabia	1,437	0	35	0	8	0	(s)	(s)	30	73	1,510
United Arab Emirates	0	0	0	0	0	(s)	-3	(s)	0	-3	-3
Other OPEC	**2,017**	**0**	**104**	**48**	**73**	**64**	**-4**	**(s)**	**143**	**429**	**2,447**
Indonesia	66	0	0	0	0	0	0	(s)	1	1	66
Nigeria	661	0	0	0	0	0	0	(s)	26	26	687
Venezuela	1,290	0	104	48	73	64	-4	(s)	117	403	1,693
Non OPEC	**3,927**	**56**	**103**	**95**	**67**	**30**	**-182**	**-24**	**465**	**610**	**4,537**
Angola	333	0	0	8	0	0	0	0	8	16	349
Argentina	147	0	(s)	0	-1	0	(s)	(s)	14	13	160
Australia	49	(s)	(s)	0	0	0	(s)	(s)	24	24	73
Bahama Islands	0	-1	(s)	(s)	-13	(s)	0	(s)	0	-14	-14
Belgium & Luxembourg	0	0	(s)	0	6	4	-12	(s)	30	28	28
Brazil	0	0	0	0	-9	4	-16	(s)	2	-20	-20
Brunei	50	0	0	0	0	0	0	0	0	0	50
Canada	1,037	80	37	-2	55	15	-15	-2	38	207	1,245
China, People's Republic of	0	0	0	0	-14	-3	0	(s)	1	-16	-16
China, Taiwan	0	0	(s)	0	-12	(s)	(s)	-1	(s)	-13	-13
Colombia	458	0	0	4	0	11	0	(s)	8	22	480
Congo (Brazzaville)	44	0	0	0	0	0	0	0	0	0	44
Ecuador	45	0	0	0	(s)	0	0	(s)	0	(s)	45
Egypt	27	0	0	0	0	0	0	(s)	0	(s)	27
France	0	0	10	0	(s)	0	-1	(s)	24	33	33
Gabon	141	0	0	0	0	0	0	0	0	0	141
Germany, FR	0	-1	0	0	0	(s)	(s)	(s)	(s)	-2	-2
Greece	0	0	0	0	0	0	0	(s)	12	12	12
Guatemala	25	(s)	-3	(s)	-1	0	0	(s)	9	4	29
India	0	0	0	0	0	(s)	-6	(s)	(s)	-6	-6
Italy	0	0	11	0	(s)	0	-11	(s)	5	6	6
Jamaica	0	0	(s)	0	-1	-23	0	(s)	-1	-25	-25
Japan	-18	-5	(s)	0	(s)	-5	-34	(s)	-9	-53	-71
Korea, Republic of	-57	(s)	0	0	(s)	0	-7	(s)	3	-4	-62
Malaysia	0	(s)	0	0	0	0	(s)	(s)	20	20	20
Mexico	1,231	-38	-84	-1	-30	-25	-7	-5	29	-162	1,069
Netherlands	0	0	2	0	0	(s)	-20	(s)	3	-14	-14
Netherlands Antilles	0	0	0	35	(s)	34	0	-7	86	148	148
Norway	157	13	0	0	0	0	-3	(s)	33	42	200
Oman	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Panama	0	0	0	0	-10	0	(s)	-1	(s)	-10	-10
Peru	39	0	0	0	(s)	0	(s)	(s)	(s)	(s)	39
Puerto Rico	0	0	(s)	0	(s)	(s)	0	(s)	(s)	-1	-1
Russia	0	0	-2	0	0	0	0	(s)	28	26	26
Syria	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Spain	0	0	0	0	(s)	0	-11	(s)	3	-8	-8
Sweden	0	0	0	0	0	0	(s)	(s)	(s)	(s)	(s)
Thailand	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Trinidad and Tobago	38	0	0	0	(s)	9	0	(s)	(s)	9	47
Turkey	0	0	0	0	(s)	0	-10	-1	(s)	-11	-11
United Kingdom	165	12	16	(s)	(s)	0	-2	(s)	50	75	240
Virgin Islands	0	0	118	40	113	14	0	(s)	5	289	289
Other	16	-4	-3	11	-15	-3	-27	-4	41	-5	11
Total	**8,268**	**56**	**242**	**143**	**149**	**154**	**-189**	**-24**	**781**	**1,312**	**9,580**
Persian Gulf[d]	**2,324**	**(s)**	**35**	**0**	**8**	**(s)**	**-3**	**(s)**	**30**	**70**	**2,393**

[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-February 1999

(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	**2,170**	**(s)**	**38**	**8**	**7**	**39**	**-4**	**(s)**	**207**	**296**	**2,466**
Algeria	10	0	0	0	0	40	0	0	172	212	222
Iraq	570	0	0	0	0	0	0	0	0	0	570
Kuwait	167	(s)	0	0	0	0	0	(s)	(s)	(s)	167
Qatar	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Saudi Arabia	1,423	0	38	8	7	0	-1	(s)	35	87	1,510
United Arab Emirates	0	0	0	0	(s)	(s)	-3	(s)	(s)	-3	-3
Other OPEC	**1,999**	**(s)**	**88**	**31**	**74**	**57**	**-3**	**(s)**	**157**	**403**	**2,402**
Indonesia	71	0	0	0	(s)	2	(s)	(s)	1	2	73
Nigeria	674	(s)	0	0	-4	0	0	(s)	12	8	683
Venezuela	1,255	(s)	88	31	78	56	-3	(s)	144	392	1,647
Non OPEC	**4,063**	**67**	**73**	**73**	**78**	**7**	**-197**	**-15**	**406**	**494**	**4,556**
Angola	362	0	0	4	0	0	0	(s)	4	8	370
Argentina	133	0	-3	0	(s)	0	(s)	(s)	11	7	140
Australia	23	(s)	(s)	0	(s)	0	-10	(s)	11	1	24
Bahama Islands	0	(s)	-1	(s)	-10	-1	0	(s)	(s)	-13	-13
Belgium & Luxembourg	0	0	(s)	0	3	2	-8	(s)	26	23	23
Benin	3	0	0	0	0	0	0	0	0	0	3
Brazil	0	0	0	0	-4	2	-17	(s)	2	-17	-17
Brunei	34	0	0	0	0	0	0	0	0	0	34
Cameroon	0	0	0	0	0	0	-1	0	0	-1	-1
Canada	1,127	108	47	-8	76	9	-13	-2	42	260	1,387
China, People's Republic of	-22	0	0	0	-7	-1	0	(s)	(s)	-8	-30
China, Taiwan	0	(s)	(s)	0	-17	(s)	-1	-1	(s)	-18	-18
Colombia	448	(s)	-4	2	(s)	7	-1	(s)	5	8	457
Congo (Brazzaville)	81	0	0	0	0	0	0	0	0	0	81
Congo (Kinshasa)[c]	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Ecuador	56	-3	0	0	(s)	0	0	(s)	0	-3	53
Egypt	13	0	0	0	0	0	0	(s)	(s)	(s)	13
France	0	0	5	0	(s)	0	-5	(s)	27	27	27
Gabon	153	0	0	0	0	0	0	0	0	0	153
Germany, FR	0	(s)	0	0	(s)	(s)	-1	(s)	2	1	1
Greece	0	0	0	0	0	0	0	(s)	6	6	6
Guatemala	23	(s)	-3	(s)	-4	0	0	(s)	4	-3	20
India	0	0	0	0	(s)	(s)	-3	(s)	(s)	-3	-3
Italy	0	-3	5	0	(s)	0	-13	(s)	2	-9	-9
Jamaica	0	(s)	(s)	0	-1	-19	0	(s)	-1	-21	-21
Japan	-15	-2	(s)	0	(s)	-2	-30	-1	-5	-41	-56
Korea, Republic of	-41	(s)	0	0	(s)	(s)	-3	(s)	3	-1	-42
Malaysia	7	(s)	0	0	(s)	0	(s)	(s)	18	18	24
Mexico	1,234	-34	-86	3	-26	-18	-7	-4	28	-144	1,090
Netherlands	0	0	1	0	(s)	-6	-16	(s)	15	-6	-6
Netherlands Antilles	0	0	0	28	(s)	21	0	-6	70	113	113
Norway	169	10	(s)	0	0	0	-2	(s)	30	39	208
Oman	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Panama	0	(s)	-1	0	-5	-8	(s)	(s)	(s)	-13	-13
Peru	34	-3	0	0	(s)	0	(s)	(s)	(s)	-4	30
Puerto Rico	0	0	-7	0	(s)	(s)	0	6	3	2	2
Romania	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Russia	0	(s)	-1	1	1	0	0	(s)	17	18	18
Syria	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Spain	0	(s)	0	0	(s)	0	-27	(s)	3	-24	-24
Sweden	0	0	(s)	0	(s)	0	(s)	(s)	(s)	(s)	(s)
Thailand	0	0	0	0	0	0	-4	(s)	(s)	-4	-4
Trinidad and Tobago	36	0	0	0	(s)	14	(s)	(s)	(s)	14	50
Turkey	0	-6	0	0	(s)	0	-5	-1	(s)	-12	-12
United Kingdom	166	6	10	(s)	(s)	0	-2	(s)	47	60	226
Virgin Islands	0	0	116	38	103	31	0	(s)	8	295	295
Other	39	-4	-6	6	-30	-21	-30	-4	29	-60	-21
Total	**8,232**	**68**	**199**	**112**	**159**	**104**	**-204**	**-16**	**770**	**1,193**	**9,425**
Persian Gulf[d]	**2,160**	**(s)**	**38**	**8**	**7**	**(s)**	**-4**	**(s)**	**35**	**84**	**2,244**

[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, February 1999

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Crude Oil	**14,634**	**67,927**	**745,176**	**11,038**	**58,607**	**897,382**
Refinery	13,598	13,657	56,537	2,233	20,913	106,938
Tank Farms and Pipelines	1,015	53,372	103,118	8,012	31,245	196,762
Leases	21	898	13,571	793	790	16,073
Strategic Petroleum Reserve[a]	0	0	571,950	0	0	571,950
Alaskan In Transit	0	0	0	0	5,659	5,659
Total Stocks, All Oils (excluding Crude Oil)	**184,855**	**172,192**	**260,432**	**19,469**	**91,149**	**728,097**
Refinery	58,276	64,459	139,318	13,443	62,754	338,250
Bulk Terminal	99,272	65,753	69,928	2,674	21,169	258,796
Pipeline	27,266	40,291	45,182	3,022	7,098	122,859
Natural Gas Processing Plant	41	1,689	6,004	330	128	8,192
Pentanes Plus	**25**	**2,176**	**6,649**	**215**	**38**	**9,103**
Refinery	0	318	208	16	0	542
Bulk Terminal	23	1,053	3,882	1	19	4,978
Pipeline	0	365	1,521	66	0	1,952
Natural Gas Processing Plant	2	440	1,038	132	19	1,631
Liquefied Petroleum Gases	**3,995**	**24,691**	**49,151**	**1,158**	**2,945**	**81,940**
Refinery	917	2,593	7,001	423	1,206	12,140
Bulk Terminal	1,341	13,326	27,626	70	1,630	43,993
Pipeline	1,698	7,523	9,558	467	0	19,246
Natural Gas Processing Plant	39	1,249	4,966	198	109	6,561
Ethane/Ethylene	**0**	**3,789**	**13,740**	**211**	**0**	**17,740**
Refinery	0	2	424	0	0	426
Bulk Terminal	0	1,804	8,607	0	0	10,411
Pipeline	0	1,812	3,114	208	0	5,134
Natural Gas Processing Plant	0	171	1,595	3	0	1,769
Propane/Propylene	**3,075**	**16,318**	**22,239**	**409**	**1,290**	**43,331**
Refinery	302	1,237	2,496	92	172	4,299
Bulk Terminal	1,107	9,957	13,540	66	1,039	25,709
Pipeline	1,639	4,283	4,741	146	0	10,809
Natural Gas Processing Plant	27	841	1,462	105	79	2,514
Normal Butane/Butylene	**683**	**3,058**	**8,377**	**345**	**1,201**	**13,664**
Refinery	441	919	2,450	196	604	4,610
Bulk Terminal	234	1,032	3,789	4	577	5,636
Pipeline	0	936	1,021	73	0	2,030
Natural Gas Processing Plant	8	171	1,117	72	20	1,388
Isobutane/Isobutylene	**237**	**1,526**	**4,795**	**193**	**454**	**7,205**
Refinery	174	435	1,631	135	430	2,805
Bulk Terminal	0	533	1,690	0	14	2,237
Pipeline	59	492	682	40	0	1,273
Natural Gas Processing Plant	4	66	792	18	10	890
Other Hydrocarbons/Hydrogen/Oxygenates	**2,658**	**2,219**	**6,215**	**356**	**3,563**	**15,011**
Refinery	2,289	685	2,399	71	2,243	7,687
Bulk Terminal	369	1,507	3,539	277	426	6,118
Pipeline	0	27	277	8	894	1,206
Other Hydrocarbons/Hydrogen	**0**	**21**	**1**	**0**	**6**	**28**
Refinery	0	21	1	0	6	28
Fuel Ethanol	**192**	**1,964**	**802**	**90**	**492**	**3,540**
Refinery	W	457	W	W	W	634
Bulk Terminal[b]	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[b]	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Methanol	**W**	**W**	**W**	**W**	**W**	**854**
Refinery	W	W	W	W	W	854

See footnotes at end of table.

Table 51. Stocks of Crude Oil and Petroleum Products by PAD District, February 1999 (Continued)

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
MTBE	**2,048**	**W**	**4,674**	**W**	**3,060**	**10,243**
Refinery	1,816	W	1,858	W	2,176	6,047
Bulk Terminal [b]	W	W	2,539	W	25	3,033
Pipeline	W	W	277	W	859	1,163
Other Oxygenates [c]	**W**	**W**	**W**	**W**	**W**	**W**
Refinery	W	W	W	W	W	W
Bulk Terminal [b]	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Unfinished Oils	**9,234**	**12,312**	**47,199**	**2,874**	**21,005**	**92,624**
Refinery						
Naphthas and Lighter	2,105	3,677	12,328	573	3,496	22,179
Kerosene and Light Gas Oils	2,100	1,446	8,225	435	5,031	17,237
Heavy Gas Oils	3,401	4,413	18,198	1,395	9,887	37,294
Residuum	1,628	2,776	8,448	471	2,591	15,914
Motor Gasoline Blending Components	**11,958**	**12,599**	**15,414**	**2,168**	**7,381**	**49,520**
Refinery	9,590	9,768	13,956	2,168	7,141	42,623
Bulk Terminal	2,291	1,334	1,139	0	142	4,906
Pipeline	77	1,497	319	0	98	1,991
Aviation Gasoline Blending Components	**133**	**27**	**24**	**0**	**2**	**186**
Refinery	133	27	24	0	2	186
Finished Motor Gasoline	**53,508**	**47,893**	**50,684**	**5,454**	**20,886**	**178,425**
Refinery	10,674	11,438	19,791	2,972	9,894	54,769
Bulk Terminal	29,645	20,674	12,499	1,027	8,483	72,328
Pipeline	13,189	15,781	18,394	1,455	2,509	51,328
Reformulated	**21,518**	**701**	**10,462**	**0**	**10,988**	**43,669**
Refinery	6,872	353	4,349	0	5,755	17,329
Bulk Terminal	11,696	275	1,892	0	3,926	17,789
Pipeline	2,950	73	4,221	0	1,307	8,551
Oxygenated	**226**	**512**	**88**	**88**	**6**	**920**
Refinery	11	364	0	0	0	375
Bulk Terminal	215	148	0	88	6	457
Pipeline	0	0	88	0	0	88
Other	**31,764**	**46,680**	**40,134**	**5,366**	**9,892**	**133,836**
Refinery	3,791	10,721	15,442	2,972	4,139	37,065
Bulk Terminal	17,734	20,251	10,607	939	4,551	54,082
Pipeline	10,239	15,708	14,085	1,455	1,202	42,689
Finished Aviation Gasoline	**188**	**437**	**674**	**30**	**664**	**1,993**
Refinery	52	137	621	25	171	1,006
Bulk Terminal	136	300	46	5	493	980
Pipeline	0	0	7	0	0	7
Naphtha-Type Jet Fuel	**0**	**0**	**1**	**0**	**45**	**46**
Refinery	0	0	1	0	41	42
Bulk Terminal	0	0	0	0	4	4
Pipeline	0	0	0	0	0	0
Kerosene-Type Jet Fuel	**11,631**	**9,445**	**14,130**	**711**	**9,027**	**44,944**
Refinery	1,677	2,980	7,259	321	4,218	16,455
Bulk Terminal	4,259	2,464	1,501	275	2,751	11,250
Pipeline	5,695	4,001	5,370	115	2,058	17,239

See footnotes at end of table.

Table 51. Stocks of Crude Oil and Petroleum Products by PAD District, February 1999 (Continued)

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Kerosene	**3,501**	**1,424**	**755**	**139**	**173**	**5,992**
Refinery	242	545	520	139	76	1,522
Bulk Terminal	3,028	833	161	0	84	4,106
Pipeline	231	46	74	0	13	364
Distillate Fuel Oil	**61,369**	**35,170**	**30,518**	**3,191**	**12,054**	**142,302**
Refinery	13,230	9,293	14,120	1,632	6,081	44,356
Bulk Terminal	41,763	14,827	6,751	654	4,555	68,550
Pipeline	6,376	11,050	9,647	905	1,418	29,396
0.05 Percent Sulfur and Under	**18,862**	**24,926**	**18,595**	**2,817**	**8,768**	**73,968**
Refinery	2,975	5,671	7,685	1,393	4,326	22,050
Bulk Terminal	13,387	10,718	4,604	572	3,079	32,360
Pipeline	2,500	8,537	6,306	852	1,363	19,558
Greater than 0.05 Percent Sulfur	**42,507**	**10,244**	**11,923**	**374**	**3,286**	**68,334**
Refinery	10,255	3,622	6,435	239	1,755	22,306
Bulk Terminal	28,376	4,109	2,147	82	1,476	36,190
Pipeline	3,876	2,513	3,341	53	55	9,838
Residual Fuel Oil[d]	**17,392**	**2,425**	**15,645**	**409**	**6,012**	**41,883**
Refinery	6,078	1,691	6,494	409	4,404	19,076
Bulk Terminal	11,314	734	9,151	0	1,500	22,699
Pipeline	0	0	0	0	108	108
Less than 0.31% Sulfur	**3,788**	**232**	**232**	**32**	**733**	**5,017**
Refinery	989	0	103	32	618	1,742
Bulk Terminal	2,799	232	129	0	115	3,275
0.31 to 1.00% Sulfur	**7,406**	**535**	**4,713**	**235**	**1,451**	**14,340**
Refinery	3,623	386	697	235	786	5,727
Bulk Terminal	3,783	149	4,016	0	665	8,613
Greater than 1.00% Sulfur	**6,198**	**1,658**	**10,700**	**142**	**3,720**	**22,418**
Refinery	1,466	1,305	5,694	142	3,000	11,607
Bulk Terminal	4,732	353	5,006	0	720	10,811
Naphtha for Petrochemical Feedstock Use	**458**	**243**	**1,802**	**0**	**134**	**2,637**
Refinery	458	243	1,802	0	134	2,637
Other Oils for Petrochemical Feedstock Use	**0**	**43**	**2,109**	**0**	**172**	**2,324**
Refinery	0	43	2,109	0	172	2,324
Special Naphthas	**101**	**384**	**1,668**	**0**	**61**	**2,214**
Refinery	73	373	1,398	0	51	1,895
Bulk Terminal	28	11	270	0	10	319
Lubricants	**2,406**	**1,603**	**7,291**	**0**	**1,385**	**12,685**
Refinery	899	509	5,865	0	978	8,251
Bulk Terminal	1,507	1,094	1,426	0	407	4,434
Waxes	**75**	**89**	**431**	**45**	**350**	**990**
Refinery	75	89	431	45	350	990
Petroleum Coke	**454**	**4,356**	**3,491**	**300**	**2,160**	**10,761**
Refinery	454	4,356	3,491	300	2,160	10,761
Asphalt and Road Oil	**5,690**	**14,431**	**5,156**	**2,407**	**2,905**	**30,589**
Refinery	2,150	6,933	3,804	2,047	2,249	17,183
Bulk Terminal	3,540	7,498	1,352	360	656	13,406
Miscellaneous Products	**79**	**225**	**1,425**	**12**	**187**	**1,928**
Refinery	51	126	825	1	178	1,181
Bulk Terminal	28	98	585	5	9	725
Pipeline	0	1	15	6	0	22
Total Stocks, All Oils	**199,489**	**240,119**	**1,005,608**	**30,507**	**149,756**	**1,625,479**

[a] Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.
[b] Includes stocks held by merchant producers.
[c] 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).
[d] 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, February 1999

(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	**40,319**	**18,568**	**226**	**21,525**	**3,270**	**54,993**	**16,362**	**38,631**	**17,392**	**1,436**
Connecticut	950	950	0	0	88	7,178	770	6,408	68	W
Delaware, D.C., Maryland	2,159	1,727	0	432	139	3,438	687	2,751	2,529	W
Florida	5,655	0	0	5,655	103	2,311	1,538	773	1,143	62
Georgia	1,823	16	0	1,807	40	1,724	1,065	659	252	W
Maine, New Hampshire, Vermont	1,652	1,012	0	640	409	2,444	664	1,780	693	W
Massachusetts	1,450	1,450	0	0	315	5,202	470	4,732	463	W
New Jersey	10,256	8,308	137	1,811	574	13,706	3,999	9,707	5,181	W
New York	3,888	1,355	78	2,455	489	5,758	1,425	4,333	3,539	W
North Carolina	2,438	31	0	2,407	225	1,797	987	810	416	W
Pennsylvania	5,440	1,661	0	3,779	629	6,324	2,526	3,798	1,908	W
Rhode Island	616	616	0	0	W	1,576	182	1,394	W	W
South Carolina	1,302	13	0	1,289	101	813	560	253	W	W
Virginia	2,474	1,429	0	1,045	134	2,596	1,385	1,211	478	W
West Virginia	216	0	11	205	W	126	104	22	W	W
PAD District II	**32,112**	**628**	**512**	**30,972**	**1,378**	**24,120**	**16,389**	**7,731**	**2,425**	**12,035**
Illinois	3,600	93	0	3,507	273	4,068	2,665	1,403	959	514
Indiana	5,570	253	8	5,309	349	3,905	2,331	1,574	316	W
Iowa	1,367	0	0	1,367	W	1,487	1,241	246	W	W
Kansas, Nebraska	4,439	0	0	4,439	6	2,351	1,923	428	44	7,203
Kentucky	1,146	223	0	923	17	897	311	586	W	W
Michigan	2,729	0	0	2,729	140	1,863	1,458	405	75	2,253
Minnesota	1,903	0	284	1,619	W	1,591	1,220	371	114	W
Missouri	1,473	0	0	1,473	W	786	653	133	W	W
North Dakota, South Dakota	633	0	1	632	W	886	583	303	W	W
Ohio	3,764	3	0	3,761	332	2,032	1,402	630	192	W
Oklahoma	2,097	0	82	2,015	W	1,152	836	316	171	454
Tennessee	2,096	0	137	1,959	72	1,564	757	807	246	W
Wisconsin	1,295	56	0	1,239	W	1,538	1,009	529	61	W
PAD District III	**32,290**	**6,241**	**0**	**26,049**	**681**	**20,871**	**12,289**	**8,582**	**15,645**	**17,498**
Alabama	1,441	21	0	1,420	66	1,092	688	404	240	67
Arkansas	808	0	0	808	W	786	383	403	W	W
Louisiana	6,263	385	0	5,878	136	4,811	2,033	2,778	7,499	1,382
Mississippi	2,850	0	0	2,850	27	1,332	775	557	W	2,605
New Mexico	387	0	0	387	W	239	183	56	8	W
Texas	20,541	5,835	0	14,706	447	12,611	8,227	4,384	7,610	13,351
PAD District IV	**3,999**	**0**	**88**	**3,911**	**139**	**2,286**	**1,965**	**321**	**409**	**263**
Colorado	870	0	88	782	W	415	349	66	W	W
Idaho	367	0	0	367	W	210	131	79	W	W
Montana	1,224	0	0	1,224	W	702	702	0	70	24
Utah	684	0	0	684	W	463	323	140	71	118
Wyoming	854	0	0	854	W	496	460	36	W	70
PAD District V	**18,377**	**9,681**	**6**	**8,690**	**160**	**10,636**	**7,405**	**3,231**	**5,904**	**1,290**
Alaska	640	0	0	640	W	642	53	589	W	W
Arizona	885	115	2	768	W	565	515	50	W	W
California	10,907	9,566	0	1,341	149	6,049	5,111	938	3,067	282
Hawaii	926	0	0	926	W	516	123	393	W	W
Nevada	155	0	3	152	W	176	153	23	W	W
Oregon	1,191	0	1	1,190	W	654	533	121	190	W
Washington	3,673	0	0	3,673	W	2,034	917	1,117	1,186	186
U.S. Total	**127,097**	**35,118**	**832**	**91,147**	**5,628**	**112,906**	**54,410**	**58,496**	**41,775**	**32,522**

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, February 1999

(Thousand Barrels)

Commodity	From I to			From II to				From III to	
	II	III	V	I	III	IV	V	I	II
Crude Oil	**0**	**352**	**0**	**239**	**996**	**541**	**0**	**0**	**58,523**
Petroleum Products	**7,746**	**17**	**0**	**2,568**	**5,950**	**2,763**	**0**	**85,624**	**23,558**
Pentanes Plus	0	0	0	0	139	0	0	0	432
Liquefied Petroleum Gases	0	0	0	1,184	3,954	96	0	2,711	3,332
Unfinished Oils	15	0	0	27	0	0	0	0	59
Motor Gasoline Blending Components	32	10	0	0	0	0	0	291	1,453
Finished Motor Gasoline	4,808	0	0	659	1,160	955	0	45,237	8,390
Reformulated	10	0	0	19	570	0	0	8,499	1,026
Oxygenated	0	0	0	0	0	12	0	0	0
Other	4,798	0	0	640	590	943	0	36,738	7,364
Finished Aviation Gasoline	0	0	0	0	0	0	0	51	22
Jet Fuel	325	0	0	30	0	1,101	0	13,973	4,423
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	325	0	0	30	0	1,101	0	13,973	4,423
Kerosene	0	0	0	76	0	0	0	113	52
Distillate Fuel Oil	2,529	0	0	480	498	611	0	21,052	4,569
0.05 percent sulfur and under	2,002	0	0	249	460	611	0	12,212	3,575
Greater than 0.05 percent sulfur	527	0	0	231	38	0	0	8,840	994
Residual Fuel Oil	0	0	0	45	175	0	0	1,306	0
Petrochemical Feedstocks[a]	37	0	0	0	0	0	0	0	57
Special Naphthas	0	7	0	0	0	0	0	94	212
Lubricants	0	0	0	67	24	0	0	545	332
Waxes	0	0	0	0	0	0	0	3	0
Asphalt and Road Oil	0	0	0	0	0	0	0	248	225
Miscellaneous Products	0	0	0	0	0	0	0	0	0
Total	**7,746**	**369**	**0**	**2,807**	**6,946**	**3,304**	**0**	**85,624**	**82,081**

Commodity	From III to		From IV to			From V to			
	IV	V	II	III	V	I	II	III	IV
Crude Oil	**0**	**0**	**2,598**	**715**	**0**	**0**	**0**	**1,777**	**0**
Petroleum Products	**278**	**3,400**	**2,041**	**1,786**	**973**	**0**	**0**	**0**	**0**
Pentanes Plus	0	0	156	234	0	0	0	0	0
Liquefied Petroleum Gases	0	0	1,302	1,552	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	245	0	0	0	0	0	0	0
Finished Motor Gasoline	181	2,191	347	0	650	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	181	2,191	347	0	650	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	0
Jet Fuel	46	319	40	0	128	0	0	0	0
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	46	319	40	0	128	0	0	0	0
Kerosene	0	0	5	0	0	0	0	0	0
Distillate Fuel Oil	51	603	191	0	195	0	0	0	0
0.05 percent sulfur and under	51	503	191	0	195	0	0	0	0
Greater than 0.05 percent sulfur	0	100	0	0	0	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	42	0	0	0	0	0	0	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	**278**	**3,400**	**4,639**	**2,501**	**973**	**0**	**0**	**1,777**	**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, February 1999

(Thousand Barrels)

Commodity	From I to		From II to			From III to	
	II	III	I	III	IV	I	II
Crude Oil	**0**	**352**	**155**	**996**	**541**	**0**	**58,523**
Petroleum Products	**7,642**	**0**	**1,211**	**5,232**	**2,763**	**63,963**	**20,474**
Pentanes Plus	0	0	0	139	0	0	432
Liquefied Petroleum Gases	0	0	1,184	3,954	96	2,403	3,332
Motor Gasoline Blending Components	0	0	0	0	0	138	1,442
Finished Motor Gasoline	4,808	0	11	961	955	33,537	7,049
Reformulated	10	0	0	570	0	8,474	570
Oxygenated	0	0	0	0	12	0	0
Other	4,798	0	11	391	943	25,063	6,479
Finished Aviation Gasoline	0	0	0	0	0	0	22
Jet Fuel	325	0	7	0	1,101	10,933	4,383
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	325	0	7	0	1,101	10,933	4,383
Kerosene	0	0	0	0	0	88	52
Distillate Fuel Oil	2,509	0	9	178	611	16,864	3,762
0.05 percent sulfur and under	2,002	0	9	140	611	9,665	3,343
Greater than 0.05 percent sulfur	507	0	0	38	0	7,199	419
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	**7,642**	**352**	**1,366**	**6,228**	**3,304**	**63,963**	**78,997**

Commodity	From III to		From IV to			From V to	
	IV	V	II	III	V	III	IV
Crude Oil	**0**	**0**	**2,598**	**715**	**0**	**1,777**	**0**
Petroleum Products	**278**	**2,476**	**2,041**	**1,786**	**973**	**0**	**0**
Pentanes Plus	0	0	156	234	0	0	0
Liquefied Petroleum Gases	0	0	1,302	1,552	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0
Finished Motor Gasoline	181	1,759	347	0	650	0	0
Reformulated	0	0	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	181	1,759	347	0	650	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0
Jet Fuel	46	319	40	0	128	0	0
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	46	319	40	0	128	0	0
Kerosene	0	0	5	0	0	0	0
Distillate Fuel Oil	51	398	191	0	195	0	0
0.05 percent sulfur and under	51	298	191	0	195	0	0
Greater than 0.05 percent sulfur	0	100	0	0	0	0	0
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	**278**	**2,476**	**4,639**	**2,501**	**973**	**1,777**	**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, February 1999

(Thousand Barrels)

Commodity	From I to			From II to			From III to	
	II	III	V	I	III	V	I	New England
Crude Oil	**0**	**0**	**0**	**84**	**0**	**0**	**0**	**0**
Petroleum Products	**104**	**17**	**0**	**1,357**	**718**	**0**	**21,661**	**198**
Liquefied Petroleum Gases	0	0	0	0	0	0	308	0
Unfinished Oils	15	0	0	27	0	0	0	0
Motor Gasoline Blending Components	32	10	0	0	0	0	153	0
Finished Motor Gasoline	0	0	0	648	199	0	11,700	0
Reformulated	0	0	0	19	0	0	25	0
Oxygenated	0	0	0	0	0	0	0	0
Other	0	0	0	629	199	0	11,675	0
Finished Aviation Gasoline	0	0	0	0	0	0	51	0
Jet Fuel	0	0	0	23	0	0	3,040	0
Naphtha-Type	0	0	0	0	0	0	0	0
Kerosene-Type	0	0	0	23	0	0	3,040	0
Kerosene	0	0	0	76	0	0	25	0
Distillate Fuel Oil	20	0	0	471	320	0	4,188	198
0.05 percent sulfur and under	0	0	0	240	320	0	2,547	0
Greater then 0.05 percent sulfur	20	0	0	231	0	0	1,641	198
Residual Fuel Oil	0	0	0	45	175	0	1,306	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	45	175	0	1,306	0
Petrochemical Feedstocks[a]	37	0	0	0	0	0	0	0
Special Naphthas	0	7	0	0	0	0	94	0
Lubricants	0	0	0	67	24	0	545	0
Waxes	0	0	0	0	0	0	3	0
Asphalt and Road Oil	0	0	0	0	0	0	248	0
Miscellaneous Products	0	0	0	0	0	0	0	0
Total	**104**	**17**	**0**	**1,441**	**718**	**0**	**21,661**	**198**

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	**1,071**	**20,392**	**3,084**	**924**	**0**	**0**	**0**
Liquefied Petroleum Gases	0	308	0	0	0	0	0
Unfinished Oils	0	0	59	0	0	0	0
Motor Gasoline Blending Components	134	19	11	245	0	0	0
Finished Motor Gasoline	203	11,497	1,341	432	0	0	0
Reformulated	0	25	456	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	203	11,472	885	432	0	0	0
Finished Aviation Gasoline	10	41	0	0	0	0	0
Jet Fuel	45	2,995	40	0	0	0	0
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	45	2,995	40	0	0	0	0
Kerosene	0	25	0	0	0	0	0
Distillate Fuel Oil	375	3,615	807	205	0	0	0
0.05 percent sulfur and under	88	2,459	232	205	0	0	0
Greater then 0.05 percent sulfur	287	1,156	575	0	0	0	0
Residual Fuel Oil	0	1,306	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	1,306	0	0	0	0	0
Petrochemical Feedstocks[a]	0	0	57	0	0	0	0
Special Naphthas	17	77	212	0	0	0	0
Lubricants	284	261	332	42	0	0	0
Waxes	3	0	0	0	0	0	0
Asphalt and Road Oil	0	248	225	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	**1,071**	**20,392**	**3,084**	**924**	**0**	**0**	**0**

[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, February 1999

(Thousand Barrels)

Commodity	PAD District I			PAD District II		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	**239**	**352**	**-113**	**61,121**	**1,776**	**59,345**
Petroleum Products	**88,192**	**7,763**	**80,429**	**33,345**	**11,281**	**22,064**
Pentanes Plus	0	0	0	588	139	449
Liquefied Petroleum Gases	3,895	0	3,895	4,634	5,234	-600
Ethane/Ethylene	0	0	0	616	2,313	-1,697
Propane/Propylene	3,760	0	3,760	3,111	2,390	721
Normal Butane/Butylene	50	0	50	487	387	100
Isobutane/Isobutylene	85	0	85	420	144	276
Unfinished Oils	27	15	12	74	27	47
Motor Gasoline Blending Components	291	42	249	1,485	0	1,485
Finished Motor Gasoline	45,896	4,808	41,088	13,545	2,774	10,771
Reformulated	8,518	10	8,508	1,036	589	447
Oxygenated	0	0	0	0	12	-12
Other	37,378	4,798	32,580	12,509	2,173	10,336
Finished Aviation Gasoline	51	0	51	22	0	22
Jet Fuel	14,003	325	13,678	4,788	1,131	3,657
Naphtha-Type	0	0	0	0	0	0
Kerosene-Type	14,003	325	13,678	4,788	1,131	3,657
Kerosene	189	0	189	57	76	-19
Distillate Fuel Oil	21,532	2,529	19,003	7,289	1,589	5,700
0.05 percent sulfur and under	12,461	2,002	10,459	5,768	1,320	4,448
Greater than 0.05 percent sulfur	9,071	527	8,544	1,521	269	1,252
Residual Fuel Oil	1,351	0	1,351	0	220	-220
Petrochemical Feedstocks[a]	0	37	-37	94	0	94
Special Naphthas	94	7	87	212	0	212
Lubricants	612	0	612	332	91	241
Waxes	3	0	3	0	0	0
Asphalt and Road Oil	248	0	248	225	0	225
Miscellaneous Products	0	0	0	0	0	0
Total	**88,431**	**8,115**	**80,316**	**94,466**	**13,057**	**81,409**

Commodity	PAD District III			PAD District IV			PAD District V		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	**3,840**	**58,523**	**-54,683**	**541**	**3,313**	**-2,772**	**0**	**1,777**	**-1,777**
Petroleum Products	**7,753**	**112,860**	**-105,107**	**3,041**	**4,800**	**-1,759**	**4,373**	**0**	**4,373**
Pentanes Plus	373	432	-59	0	390	-390	0	0	0
Liquefied Petroleum Gases	5,506	6,043	-537	96	2,854	-2,758	0	0	0
Ethane/Ethylene	3,060	169	2,891	0	1,194	-1,194	0	0	0
Propane/Propylene	1,714	5,202	-3,488	94	1,087	-993	0	0	0
Normal Butane/Butylene	525	331	194	2	346	-344	0	0	0
Isobutane/Isobutylene	207	341	-134	0	227	-227	0	0	0
Unfinished Oils	0	59	-59	0	0	0	0	0	0
Motor Gasoline Blending Components	10	1,989	-1,979	0	0	0	245	0	245
Finished Motor Gasoline	1,160	55,999	-54,839	1,136	997	139	2,841	0	2,841
Reformulated	570	9,525	-8,955	0	0	0	0	0	0
Oxygenated	0	0	0	12	0	12	0	0	0
Other	590	46,474	-45,884	1,124	997	127	2,841	0	2,841
Finished Aviation Gasoline	0	73	-73	0	0	0	0	0	0
Jet Fuel	0	18,761	-18,761	1,147	168	979	447	0	447
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	0	18,761	-18,761	1,147	168	979	447	0	447
Kerosene	0	165	-165	0	5	-5	0	0	0
Distillate Fuel Oil	498	26,275	-25,777	662	386	276	798	0	798
0.05 percent sulfur and under	460	16,341	-15,881	662	386	276	698	0	698
Greater than 0.05 percent sulfur	38	9,934	-9,896	0	0	0	100	0	100
Residual Fuel Oil	175	1,306	-1,131	0	0	0	0	0	0
Petrochemical Feedstocks[a]	0	57	-57	0	0	0	0	0	0
Special Naphthas	7	306	-299	0	0	0	0	0	0
Lubricants	24	919	-895	0	0	0	42	0	42
Waxes	0	3	-3	0	0	0	0	0	0
Asphalt and Road Oil	0	473	-473	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0	0	0
Total	**11,593**	**171,383**	**-159,790**	**3,582**	**8,113**	**-4,531**	**4,373**	**1,777**	**2,596**

[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."

Appendix A

District Descriptions and Maps

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

PAD District I

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

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

Sub-PAD District I

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

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

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

PAD District II

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

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

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

PAD District III

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

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

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

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

New Mexico: The State of New Mexico.

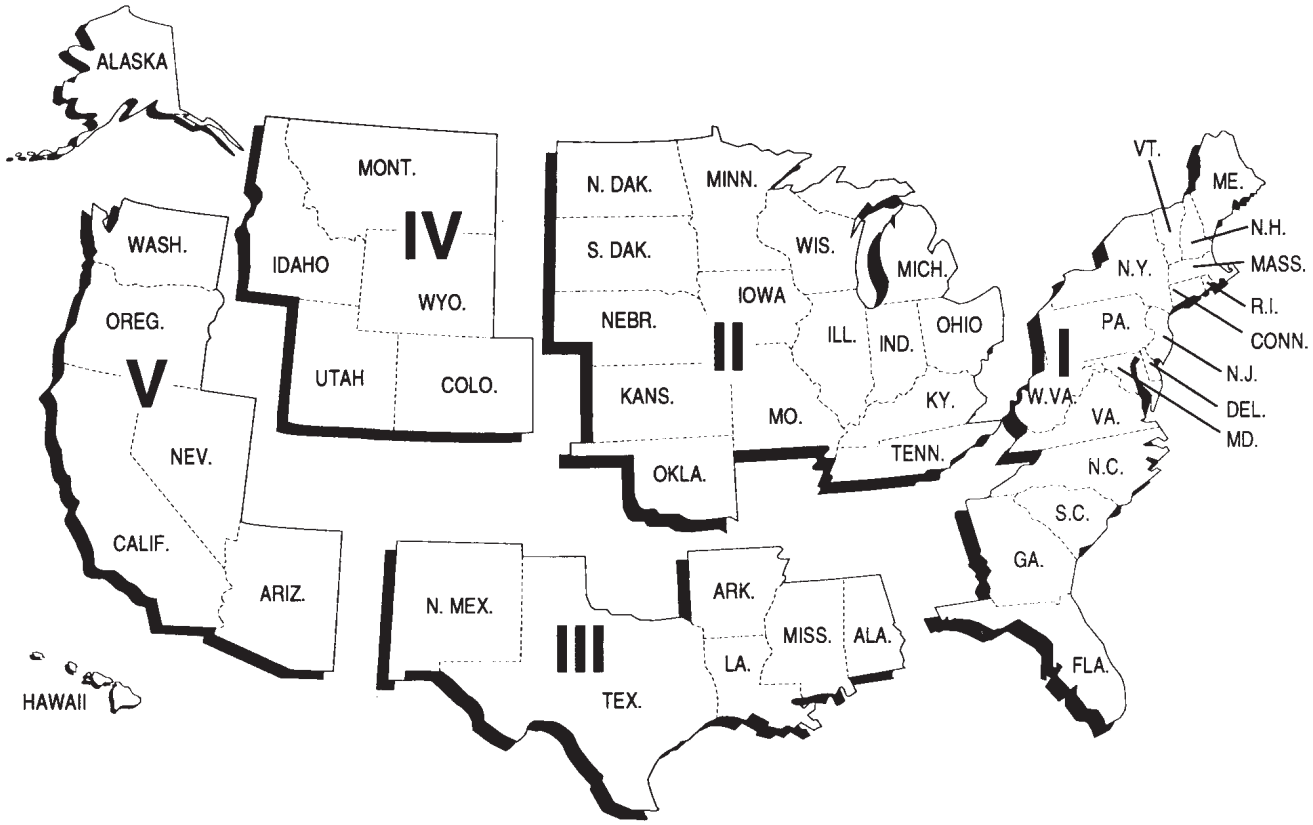
PAD District IV

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

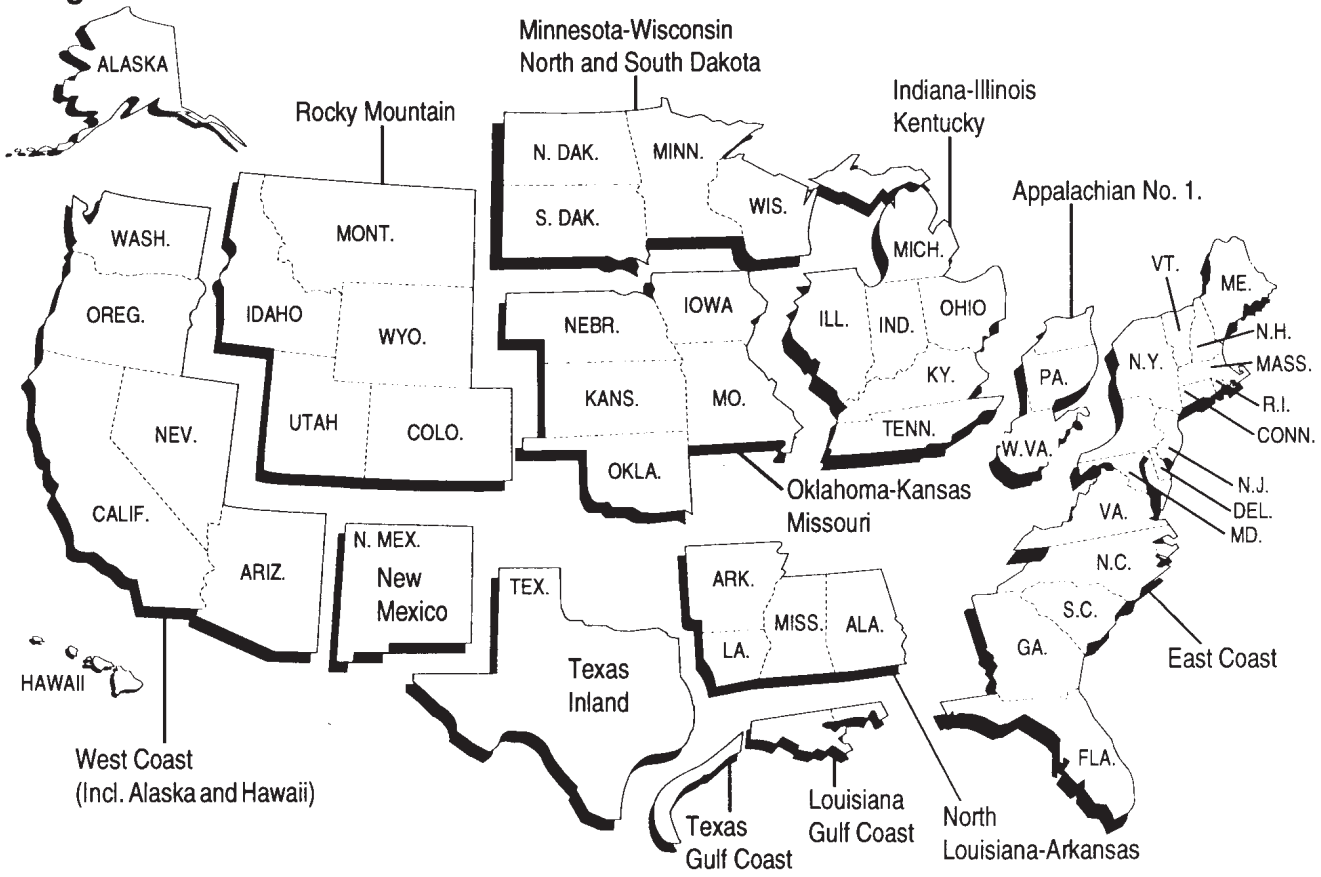
PAD District V

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

Petroleum Administration for Defense (PAD) Districts



Refining Districts



Appendix B

Explanatory Notes

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

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

Note 1. Petroleum Supply Reporting System

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

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

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

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

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

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

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

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

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

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

Note 2. Monthly Petroleum Supply Reporting System

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

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

Respondent Frame

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

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

Form EIA-812, "Monthly Product Pipeline Report" - All product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 80 respondents report on the Form EIA-812.

Form EIA-813**, "**Monthly Crude Oil Report" - All companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. Approximately 175 respondents report on the Form EIA-813.

Form EIA-814, "Monthly Imports Report" - All companies, including subsidiary or affiliated companies, that import crude oil or petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia and must be reported. A report is required only if there has been an import during the month unless the importer has been selected as part of a sample to report every month regardless of activity. Approximately 220 respondents report on the Form EIA-814.

Form EIA-816, "Monthly Natural Gas Liquids Report" -Operators of all facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator). Approximately 585 respondents report on the Form EIA-816.

Form EIA-817, "Monthly Tanker and Barge Movement Report" -All companies that have custody of crude oil or petroleum products transported by tanker or barge between Petroleum Administration for Defense (PAD) Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker or barge. Also, companies which lease

vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 40 respondents report on the Form EIA-817.

Form EIA-819M, "Monthly Oxygenate Telephone Report" - The sample of companies that report on the EIA-819M are selected from the universe of companies that report on the MPSRS surveys and from the universe of oxygenate producers. The universe consists of (1) operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations); (2) operators of petroleum refineries; and (3) operators of bulk terminals, bulk stations, blending plants, and other nonrefinery facilities that store and/or blend oxygenate. Approximately 85 respondents report on the Form EIA-819M.

Sampling

The sampling procedure used for the survey Form EIA-819M is the cut-off method and is performed using software developed by EIA's Office of Statistical Standards. In the cut-off method, companies are ranked from largest to smallest on the basis of quantities reported (oxygenate production and oxygenate stocks.) Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers approximately 90 percent of the total for each oxygenate item and supply type by geographic region (PAD Districts I through V) for which data may be published.

Description of Survey Forms

The Form EIA-810, "Monthly Refinery Report," is used to collect data on refinery input and capacity, sulfur content and API gravity of crude oil, and data on supply (beginning stocks, receipts, and production) and disposition (inputs, shipments, fuel use and losses, and ending stocks) of crude oil and refined products.

The Form EIA-811, "Monthly Bulk Terminal Report," is used to collect data on end-of-month stock levels of finished petroleum products by State in the custody of the bulk terminal company or merchant oxygenate plant regardless of ownership. Leased tankage at other facilities is excluded. All domestic and foreign stocks held at bulk terminals and in-transit thereto, except those in-transit by pipeline are included. Petroleum products in-transit by pipeline are reported by pipeline operators on Form EIA-812, "Monthly Product Pipeline Report."

The Form EIA-812, "Monthly Product Pipeline Report," is used to collect data on end-of-month stock levels and movements of petroleum products transported by pipeline. Intermediate movements for pipeline systems operating in more than two PAD Districts are included.

The Form EIA-813, "Monthly Crude Oil Report," is used to collect data on end-of-month stocks of crude oil held at pipeline and tank farms (associated with the pipelines) and terminals operated by the reporting company. Also, crude oil consumed by pipelines and on leases as pump fuel, boiler fuel, etc., is reported. Data are reported on a PAD District basis.

Total Alaskan crude oil stocks in-transit by water (including stocks held at transshipment terminals between Alaska and the continental United States) to the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands are also reported by the transporting company having custody of the stocks.

Inter-PAD District movements of crude oil by pipeline are collected by the shipping and receiving PAD District. Intermediate movements for pipeline systems operating in more than two PAD Districts are not included.

The Form EIA-814, "Monthly Imports Report," is used to collect data on imports of crude oil and petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands, and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands, and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia.

The type of commodity, port of entry, country of origin, quantity (thousand barrels), sulfur percent by weight, API gravity, and name and location of the processing or storage facility are reported. Sulfur percent by weight is requested for crude oil, crude oil burned as fuel, and residual fuel oil only. API gravity is requested for crude oil only. The name and location of the processing or storage facility is requested for crude oil, unfinished oils, other hydrocarbons/hydrogen/oxygenates and blending components only.

The Form EIA-816, "Monthly Natural Gas Liquids Report," is used to collect data on the operations of natural gas processing plants and fractionators. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and plant fuel use and losses during the month are collected from operators of natural gas processing plants. End-of-month stocks are collected from fractionators.

The Form EIA-817, "Monthly Tanker and Barge Movement Report," is used to collect data on the movements of crude oil and petroleum products between PAD Districts. Data are reported by shipping and receiving PAD District and sub-PAD District. Shipments to and from the Panama Canal are also included if the shipment was delivered to the Canal.

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect data on production and stocks

of oxygenates. Data on end-of-month stocks are reported on a custody basis regardless of ownership. Data are reported on a PAD District basis.

Collection Methods

Except for the EIA-819M, survey forms for the MPSRS can be submitted by mail, facsimile, or electronic transmission. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month. Data collection for the 819M begins on the seventh working day of each month. Data are solicited by telephone or transmitted to the EIA by facsimile. Receipt of the reports are monitored using an automated respondent mailing list. Telephone follow-up calls are made to nonrespondents prior to the publication deadline.

Response Rate

The response rate is generally 98 to 100 percent. Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

Data Imputation

Imputation is performed for companies that fail to file Forms EIA-810 through 813, 816, and 819M. For such companies, previous monthly values are used for current values.

On the EIA-819M, data are aggregated for each geographic region. Estimation factors, which are derived from the previous year's data, are then applied to each cell to generate published estimates.

Data for nonrespondents on the Forms EIA-814 and 817 are not imputed because these data series, by respondent, are highly variable.

Confidentiality

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the EIA to provide company-specific data to the Department of Justice, or to any Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

The information contained on Forms EIA-810 through 813, 816, 817, and 819M are kept confidential and not disclosed to the public to the extent that they satisfy the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. 552, the Department of Energy (DOE) regulations, 10 C.F.R. 1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. 1905. The information contained on Form EIA-814 are not considered confidential and historically has not been treated as such.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in this determination, respondents should demonstrate to the DOE that, for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed. Company specific data are also provided to other DOE offices for the purpose of examining operations in the context of emergency response planning and actual emergencies.

The data collected on Forms EIA-810 through 814, 816, and 817 appear in EIA publications such as *Petroleum Supply Monthly* (PSM), *Monthly Energy Review*, *Petroleum Supply Annual* (PSA), and the *Annual Energy Review.*

Data on the breakdown between liquefied refinery gases and olefins, and lubricants is suppressed on *PSM* Table 29, "Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts" and the corresponding *PSA* table to avoid disclosure of company identifiable data.

Statistics representing data aggregated from less than three companies or aggregated data representing 60 percent or more of a single company's data are suppressed on the PSM and corresponding PSA tables listed below. In addition, complementary suppression is performed to avoid any residual disclosure.

- Table 28, "Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts," (inputs of oxygenates)
- Table 30, "Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts," (stocks of oxygenates)
- Table 51, "Stocks of Crude Oil and Petroleum Products by PAD District," (stocks of oxygenates)
- Table 52, "Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products," (all products)
- Table D2, "Monthly Fuel Ethanol Production and Stocks by PAD Districts," and
- Table D3, "Monthly MTBE Production and Stocks by PAD Districts."

With the exception of the tables listed above, the tables in the *PSM* (and corresponding PSA tables) are not subject to statistical nondisclosure procedures. Thus, there may be some table cells which are based on data from only one or two respondents, or which are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable user of the data to make inferences about the data reported by a specific respondent.

Note 3. Technical Notes for Detailed Statistics Tables

The detailed statistics tables in the *Petroleum Supply Monthly* (PSM) provide complete supply and demand information for the current year. The tables are organized to locate National and Petroleum Administration for Defense (PAD) District summary data at the front followed by tables on crude oil and petroleum product production, import/export data, stocks information, and lastly, data on crude oil and petroleum product movements. To assist in the interpretation of these tables, the following technical notes are provided. Column and row headings are defined in the Glossary.

Supply

Field Production - Field production is the sum of crude oil production, natural gas plant liquids production, other liquids production, and finished petroleum products production.

Crude oil production is an estimate based on data received from State conservation agencies and the Mineral Management Service of the U.S. Department of the Interior. Refer to Explanatory Note 4 for further details.

Field production of natural gas plant liquids is reported on Form EIA-816 and published on a net basis (i.e., production minus inputs) in this column.

Other liquids field production is calculated by forcing the product supplied to be zero; thereby backing into field production.

Field production of finished petroleum products is calculated by (1) adding the amount of fuel ethanol that has been blended into finished motor gasoline, and (2) plus (+) or minus (-) the field production of motor gasoline blending components. Refer to Explanatory Note 8 for a further discussion of this calculation.

Negative field production of motor gasoline blending components represents an understatement for finished motor gasoline.

Negative field production of other finished motor gasoline represents an overstatement of other finished motor gasoline and an understatement of oxygenated motor gasoline.

Refinery Production - Published production of these products equal refinery production minus refinery input. Refinery production of other hydrocarbons, hydrogen and oxygenates, unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input. Negative refinery production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

Unaccounted for Crude Oil - This column is a balancing item for crude oil. This data element represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production and imports. Crude oil disposition is the sum of stock change, losses, refinery inputs, exports, and products supplied. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems). A negative result indicates that more crude oil was reported to have been supplied to refiners and exporters than they reported to have used.

Disposition

Stock Change - This column is calculated as the difference between the Ending Stocks column of this table and the Ending Stocks column of this table in the prior month's publication. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

Crude Losses - The volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc., as opposed to refining processing losses or gains.

Refinery Inputs - Refinery inputs of crude oil and intermediate materials (unfinished oils, gasoline blending components, other hydrocarbons and oxygenates, lique-

fied petroleum gases, and pentanes plus) that are processed at refineries to produce finished petroleum products.

Crude oil inputs represents total crude oil (domestic and foreign) input to atmospheric crude oil distillation units and other refinery processing units (i.e., catalytic cracking units, cokers).

Inputs of natural gas liquids are natural gas liquids received from natural gas plants for blending and processing. Published inputs of natural gas liquids are reported on a gross basis.

Inputs of unfinished oils, motor and aviation gasoline blending components, and other hydrocarbons and oxygenates are published on a net basis (i.e., refinery input minus refinery production).

Inputs of finished petroleum products are published on a net basis (i.e., refinery production minus refinery inputs) and displayed under the refinery production column.

Exports - Exports include crude oil shipments from the 50 States to Puerto Rico, and the Virgin Islands.

Products Supplied - Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts on a PAD District basis), minus stock change, minus crude losses, minus refinery inputs, minus exports.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production not having been reported, e.g., streams returned to refineries from petrochemical plants.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel. Prior to January 1983, crude oil burned on leases and by pipelines as fuel were reported as either distillate or residual fuel oil and were included in product supplied for these products.

Yields

The refinery yield of finished motor gasoline is calculated by subtracting the inputs of pentanes plus, liquefied petroleum gases, other hydrocarbons/oxygenates and motor gasoline blending components from the production of finished motor gasoline before dividing by the sum of crude oil input and unfinished oils input (net).

The refinery yield of finished aviation gasoline is calculated by subtracting the inputs of aviation gasoline blending components from the production of finished aviation gasoline before dividing by the sum of crude oil input and unfinished oils input (net).

Refinery yields for all products (except finished motor gasoline and finished aviation gasoline) are calculated by dividing the production for each product by the sum of crude oil input and unfinished oils input (net) reported in the U.S. total.

Stocks

Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers.

Movements

Movements of crude oil by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate, and intracompany pipelines). Intermediate movements for crude oil pipeline systems operating in more than two PAD Districts are not included.

Movements of petroleum products by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate and intracompany pipelines). Intermediate movements for product pipeline systems operating in more than two PAD Districts are included. For example, a shipment originating in PAD District 3, passing through PAD District 2 to PAD District 1, is reported as a movement from PAD District 3 to PAD District 2 and also from PAD District 2 to PAD District 1.

Waterborne movements of crude oil and petroleum products between PAD Districts include all shipments of crude oil or petroleum products for which the transporter has custody at the time of shipment. Custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker and barge.

Note 4. Domestic Crude Oil Production

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

Currently, all except four crude oil producing States (Michigan, New York, Ohio, and Pennsylvania) report production on a monthly basis. These four States report crude oil production on an annual basis. Estimates of monthly crude oil production for these four States are made by the EIA using data reported on Form EIA-182,

"Domestic Crude Oil First Purchase Report." After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Minerals Management Service, and the California Department of Conservation. The final estimate is published in the *Petroleum Supply Annual* (PSA).

Table 26 of this publication provides estimates of crude oil production in the latest month for which most State production data are available. There is a time lag of approximately 4 months between the end of the production month and the time when most monthly State crude oil production data become available.

In order to present more timely crude oil production estimates, the EIA prepares a weekly crude oil production estimate, which is used in the *Weekly Petroleum Status Report* (WPSR). 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 *WPSR*. 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* (PSM) reflect both government and nongovernment exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

(1) Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.

(2) Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the U.S. Bureau of the Census. Exporters are required to file export documents with U.S. Customs officials (Customs Form 7525).

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 6. Quality Control and Data Revision

Quality Control

The Energy Information Administration (EIA) monitors the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. Through a tracking system, the EIA provides insight into the activities of primary operators and distributors in the petroleum industry. The tracking system, known as the Petroleum Supply Reporting System (PSRS), consists of production,

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																	
	10-97	11-97	12-97	1-98	2-98	3-98	4-98	5-98	6-98	7-98	8-98	9-98	10-98	11-98	12-98	1-99	2-99	3-99
	Reported State Data																	
12-14-97	1669	0																
1-14-98	1708	1440	0															
2-14-98	4249	1733	1340	0														
3-14-98	4582	4489	1812	1289	0													
4-14-98	5656	4597	4453	1743	1246	0												
5-14-98	5901	5890	4757	4470	1702	1235	0											
6-14-98	6071	6127	5927	4662	4254	1638	1213	0										
7-14-98	6071	6082	5993	5793	4527	4242	1644	1222	0									
8-14-98	6447	6464	6387	5886	4532	4439	4002	1593	1184	0								
9-14-98	6459	6476	6413	5956	5775	5633	5488	4910	1529	1159	0							
10-14-98	6460	6478	6414	5958	5777	5660	5491	5181	4028	1512	1136	0						
11-14-98	6464	6478	6416	5957	5775	5683	5595	5439	5331	4005	1309	1108	0					
12-14-98	6464	6478	6416	5957	5775	5687	5669	5489	5404	4044	3731	1331	1236	0				
1-14-99	6464	6478	6416	6319	5775	5687	5668	5512	5453	5383	3954	3858	1361	1171	0			
2-14-99	6464	6478	6415	6362	5816	5754	5762	5686	5568	5507	5481	4073	4077	1475	1171	0		
3-14-99	6464	6478	6415	6362	5959	5755	5797	5686	5602	5531	5550	4159	4078	4047	1460	1167	0	
4-14-99	6464	6478	6415	6215	6027	5971	6031	5915	5831	5783	5768	5243	5512	4361	4159	1380	1107	0
	Producing States Without Reported Monthly Production																	
4-14-99	1	1	1	5	5	6	6	6	6	6	6	8	8	10	11	27	31	33

	Month of Production																	
	10-97	11-97	12-97	1-98	2-98	3-98	4-98	5-98	6-98	7-98	8-98	9-98	10-98	11-98	12-98	1-99	2-99	3-99
	Production Estimates																	
Estimate																		
Original[e]	6393	6404	6457	6389	6407	6406	6412	6375	6333	6349	6331	6299	6396	6399	6403	5950	5862	5888
Interim[f]	6435	6450	6475	6438	6538	6465	6484	6384	6290	6322	6276	6069	6270	6189	5938	5954	5984	
Revised	6435	6450	6475	6515	6449	6399	6483	6363	6252	6193	6193	5918	6152	6072				
Form EIA-182																		
Initial	5887	5848	5823	5765	5894	5763	5858	5690	5550	5516	5418	5184	5306	5070	5192	5119	5327	
Revised	5834	5841	5765	5880	5910	5770	5852	5716	5550	5519	5417	5157	5217	5234	5151	5254		
Final[g]	6467	6459	6531															

[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 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. Includes EIA prorated monthly production in 1997 (annual average of 52 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 1996 after their annual reports were received. These data are first reported as of 5-16-97. Michigan, New York, and Ohio are counted as having monthly reported data in 1997 after their annual reports were received.
[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* 1997, DOE/EIA 0340(97)/2.

inputs, imports, inventories, movements, and other petroleum-related data collected on weekly, monthly, and annual surveys.

Survey forms are periodically reviewed for completeness, meaningfulness, and clarity. Modifications are made, when needed, to maintain efficient measure of the intended data items and to track product movement accurately throughout the industry. Through this process, the EIA can maintain consistency among forms, minimize respondent burden, and eliminate ambiguity.

Sampling and Nonsampling Errors

There are two types of errors usually associated with data produced from a survey: nonsampling errors and sampling errors. Because the estimates for the monthly surveys 810 through 813, 816, and 817 are based on a complete census of the frame, there is no sampling error in the data presented. The data, however, are subject to nonsampling errors. Nonsampling errors, sometimes referred to as biases, are those which can arise from a number of sources: (1) the inability to obtain data from all companies in the frame or sample (nonresponse and the method used to account for nonresponses, (2) definitional difficulties and/or improperly worded questions which lead to different interpretations. (3) mistakes in recording or coding the data obtained from respondents, and (4) other errors of collection, response, coverage, and estimation.

Response rates on the monthly surveys are very high. In general, response rates average above 95 percent for the weekly survey and above 98 percent for monthly surveys. Whenever survey responses are not received in time to be included in published statistics, the data are imputed. Although imputing for missing data may not eliminate the total error associated with nonresponse, it can serve to reduce the error. The data reported in the previous month are used as imputed values for missing data for all surveys except the Forms EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movement Report." There is no imputation procedure for these surveys because these data series, by respondent, are highly variable.

Response error is the major factor affecting the accuracy of PSRS data. Response, or reporting error, is the difference between the true value and the value reported on a survey form. Response error can occur for any number of reasons. For example, figures may be entered incorrectly when written on forms by the respondent, or errors may result from the misunderstanding of survey form instructions or definitions. Response error can also occur from the use of preliminary data when final data are not available. This can result in differences between published preliminary and final data. To help detect and minimize probable reporting errors, automated editing procedures are used to check current data for consistency with past data, as well as for internal consistency (e.g., totals equal to the sums of the parts), and to flag those data elements that fail edit criteria.

Errors can also be introduced during data processing. For example, while creating computer data files, key errors can occur in transcribing or coding the data; or information can be entered into the wrong cell. Using well designed edit criteria which examine orders of magnitude, cell position, and historical reporting patterns, many of these errors can be identified and corrected.

Monthly data are compared to weekly data on a regular basis. Discrepancies betweenly 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 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 Division (PD) 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 PD periodically conducts a comprehensive frames investigation. These investigations result in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Note 8. Practical Limitations of Data Collection Efforts

Crude Oil Lease Stock Adjustment

End-of-month crude oil stocks held on leases are reported on the EIA-813, "Monthly Crude Oil Report." However, only those companies that store 1,000 barrels or more of crude oil are required to submit a report. Previous frames analysis has shown that crude oil stocks held on leases reported to the EIA are consistently lower than the lease stocks reported to individual states.

Up until 1983, monthly state government data on lease stocks were substituted for EIA data wherever possible in order to rectify the understatement of lease crude oil stocks. State data were available from three states — Texas, New Mexico, and Montana. To calculate the "lease adjustment," a comparison between EIA reported data and the state government data was made and the difference added to the EIA data for the respective states.

In 1983, the EIA modified the Form EIA-813 to eliminate state data on crude oil stocks and began collecting crude oil stock data by Petroleum Administration for Defense (PAD) District. With this change, the "lease adjustment" could no longer be calculated on a state basis and was changed to a PAD District level.

Trans Alaskan Pipeline System Adjustment

Beginning with the January 1989 data, adjustments are made to refinery inputs and product supplied of natural gas liquids (NGLs) and refinery inputs of crude oil to account for refiner misreporting. Substantial volumes of NGLs are produced at natural gas processing plants in Alaska and injected into the crude oil moving in the Trans Alaska Pipeline System (TAPS). Refiners receiving any crude oil commingled with NGLs are instructed to report the NGL portion of that stream separately from the crude oil portion. This has not been done for Alaskan crude oil because refiners are unable to identify these volumes for accounting purposes. As a result, the NGL production in Alaska has been credited directly toward product supplied and also toward product supplied from refinery production when the refiner processes the crude oil-NGL mixture. In addition, the reporting of the commingled stream as crude oil by the refiner has overstated crude oil inputs and resulted in an increase in unaccounted for crude oil equal to the volume of NGL in the crude oil.

To offset this reporting error, an adjustment is made to refinery input in all PAD Districts receiving Alaskan crude oil. The adjustment reduces the crude oil inputs and increases the NGL inputs by an equal amount. Each PAD District adjustment is a portion of the known Alaskan-NGL production that is proportional to the PAD District's share of Alaskan crude oil received at all refineries in the United States. The greatest impact occurs in PAD District V for butane and pentanes plus.

The reporting problem which began in 1987 grew as injections on NGLs into the TAPS increased. Data for 1988 was revised in the *Petroleum Supply Annual* to account for the adjustment.

Finished Motor Gasoline Product Supplied Adjustment

Beginning with the reporting of January 1993 data, adjustments were made to the product supplied series for finished motor gasoline. It was recognized that motor gasoline statistics published by the EIA through 1992 were underreported because the reporting system was not collecting all fuel ethanol and motor gasoline blending components being blended downstream from the refinery. The EIA was able to quantify these volumes and make corrective adjustments for 1992 in 1993 (refer to Table B2).

Fuel Ethanol Adjustment

Prior to 1993, an estimated 60 to 70 thousand barrels per day of fuel ethanol were added to motor gasoline to produce gasohol but were not included in the EIA finished motor gasoline production data. In 1992, the EIA attempted to collect these data from downstream fuel ethanol motor gasoline blenders but found that this effort was impractical and the results were inaccurate.

Beginning in January 1993, an estimate for the missing fuel ethanol blended into motor gasoline was calculated. This estimate was calculated as production (from the EIA-819M, "Monthly Oxygenate Telephone Report"), plus imports (from the EIA-814, "Monthly Imports Report"), minus inputs at refineries (from the EIA-810, "Monthly Refinery Report"), plus or minus stock change (from the EIA-819M survey). This estimate for the amount of fuel ethanol blended into motor gasoline was added to Table 1 for Natural Gas Liquids Field Production (line 14) and in the Field Production column for finished motor gasoline in Tables 2 through 25 published in the *PSM*.

An estimate for the total amount of gasohol produced with the ethanol is given as 10 times the estimated fuel ethanol blended (this assumes a 10 percent ethanol blend). This amount is added to the column labeled field production of "oxygenated gasoline" and subtracted from the field production of "other" finished gasoline. The PAD District level detail was obtained by allocating the national level estimates according to the percent of gasohol sales from the U.S. Department of Transportation, Federal Highway Administration, *Monthly Motor Fuel Reported by States*, 1994.

Motor Gasoline Blending Component Adjustment

Prior to 1993, the EIA published a "product supplied" for motor gasoline blending components. Since these 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 (0.05% sulfur and under, and greater than 0.05% sulfur).

- Product supplied is now calculated for reformulated, oxygenated, and other finished motor gasoline as well as the sulfur categories of distillate fuel oil (0.05% sulfur and under, and greater than 0.05% sulfur).

Table B2. Finished Motor Gasoline Product Supplied Adjustment, 1994 - Present (Thousand Barrels per Day)

Item/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
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	48	38	59	37	47	69	50	61	50
Motor Gas Blending	-20	61	-27	87	73	113	89	95	115	107	165	80	78
Product Supplied.....	7,301	7,668	7,796	8,064	8,139	8,288	8,496	8,233	8,023	8,141	7,965	8,065	8,017
1998													
Fuel Ethanol Adj.....	60	50	54	50	37	44	43	53	57	71	55	75	54
Motor Gas Blending	123	76	128	105	89	237	143	80	134	110	176	231	136
Product Supplied.....	7,590	7,755	7,956	8,137	8,070	8,437	8,659	8,500	8,308	8,405	8,136	8,401	8,199
1999													
Fuel Ethanol Adj.....	56	51											
Motor Gas Blending	31	-110											
Product Supplied.....	7,630	8,091											

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

Source: • Fuel Ethanol Adjustment — 1994 -1997, Energy Information Administration (EIA), *Petroleum Supply Annual* (PSA), Volumes I and II (Table3, Motor gasoline field production minus motor gasoline blending component field production); 1998 —, EIA, *Petroleum Supply Monthly* (PSM), (Table 4). • Motor Gasoline Blending Component Adjustment — 1994 - 1997, EIA, *PSA*, Volumes I and II (Table 3; Motor gasoline blending component field adjustment) 1997 —, EIA, *PSM* (Table 4).

Table C1. Impact of Resubmissions on Major Series, 1998

(Thousand Barrels per Day, Except Where Noted)

Product	January		February		March		April		May		June	
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference
Inputs	**15,363**	**-2**	**14,977**	**7**	**15,582**	**56**	**16,359**	**128**	**16,447**	**162**	**16,688**	**144**
Crude Oil	14,313	7	14,034	-12	14,590	49	14,961	124	15,104	216	15,368	117
Pentanes Plus	156	-18	151	-17	149	(s)	158	2	153	1	160	10
LPGs	356	-16	320	-17	241	-12	203	-10	200	-7	202	-9
Ethane/Ethylene	0	0	0	0	0	0	0	0	0	0	0	0
Propane/Propylene	0	0	0	0	0	0	0	0	0	0	0	0
Normal Butane/Butylene	247	-13	197	-12	121	-8	79	-9	74	-8	73	-7
Isobutane/Isobutylene	109	-3	123	-4	120	-5	124	-1	126	1	130	-2
Oth Hydrocbns/Oxygenates	339	-1	331	-5	332	-5	373	-9	378	-5	367	-1
Unfinished Oils	291	2	197	-23	307	17	483	15	469	-15	450	39
Motor Gas. Blend. Comp	-89	24	-50	81	-34	6	185	5	146	-28	143	-11
Aviation Gas. Blend. Comp	-1	0	-6	0	-3	0	-4	0	-4	0	-2	0
Production	**18,387**	**15**	**18,050**	**-36**	**18,559**	**87**	**19,371**	**169**	**19,403**	**284**	**19,728**	**166**
Pentanes Plus	319	-17	322	-16	303	(s)	314	1	321	3	321	1
LPGs	2,017	-17	2,105	-17	2,266	-4	2,397	17	2,318	40	2,228	13
Ethane/Ethylene	655	5	675	6	710	3	710	4	675	12	622	6
Propane/Propylene	1,062	-2	1,066	-13	1,089	-3	1,091	20	1,068	25	1,050	7
Normal Butane/Butylene	108	-18	168	-4	280	-3	371	1	384	10	336	3
Isobutane/Isobutylene	191	-3	195	-6	188	-1	225	-8	192	-8	220	-3
Oth Hydrocbns/Oxygenates	320	(s)	300	-3	242	-3	263	-3	286	18	398	-4
Motor Gas Blend. Comp	-123	39	-76	37	-128	11	-105	-34	-89	-53	-237	-9
Finished Motor Gasoline	7,749	-5	7,485	-9	7,591	48	8,029	116	8,057	167	8,372	103
Reformulated	2,359	22	2,311	17	2,314	40	2,526	32	2,600	17	2,630	-25
Oxygenated	710	59	582	46	613	61	567	51	436	56	504	63
Other	4,680	-86	4,592	-72	4,664	-53	4,936	33	5,020	94	5,237	65
Finished Aviation Gasoline	13	-1	13	(s)	22	-3	26	-3	21	(s)	22	(s)
Jet Fuel	1,504	9	1,447	-4	1,504	(s)	1,509	15	1,472	23	1,555	-1
Naphtha-Type Jet	1	0	(s)	0	1	0	(s)	(s)	1	0	(s)	0
Kerosene-Type Jet	1,503	9	1,447	-4	1,503	(s)	1,508	15	1,471	23	1,555	-1
Kerosene	102	-3	77	(s)	72	2	45	-5	70	-10	50	8
Distillate Fuel Oil	3,321	2	3,297	-17	3,385	12	3,447	21	3,521	39	3,526	-5
Residual Fuel Oil	766	-2	673	-1	789	1	852	5	773	-7	749	-10
Naphtha Pet. Feedstock	239	1	236	-2	233	1	227	6	226	8	235	8
Other Oils Pet. Feedstock	212	(s)	214	0	225	(s)	233	(s)	210	1	238	4
Special Naphthas	55	-2	63	(s)	70	-1	61	(s)	73	-2	77	-1
Lubricants	168	2	162	1	180	1	185	-1	191	-1	192	-2
Waxes	23	-2	26	-2	23	1	22	2	26	-1	24	-2
Petroleum Coke	675	11	677	5	710	14	728	16	703	25	695	21
Asphalt and Road Oil	357	-4	376	-8	393	(s)	439	5	493	23	538	20
Still Gas	617	-2	603	-5	630	1	647	9	678	6	695	16
Miscellaneous Products	53	5	48	5	49	4	54	5	54	5	52	5
Imports	**9,893**	**233**	**9,577**	**414**	**9,694**	**340**	**10,398**	**707**	**10,903**	**201**	**10,702**	**225**
Crude Oil	8,185	154	7,770	275	7,989	134	8,523	462	8,957	30	8,725	70
Pentanes Plus	38	0	19	0	21	0	22	0	39	0	21	0
LPGs	202	-2	277	(s)	192	0	234	(s)	219	0	249	0
Ethane/Ethylene	18	0	18	0	26	0	14	0	14	0	14	0
Propane/Propylene	139	-2	204	(s)	132	0	183	(s)	136	0	179	0
Normal Butane/Butylene	28	0	31	0	18	0	21	0	41	0	37	0
Isobutane/Isobutylene	17	0	24	0	15	0	16	0	27	0	20	0
Oth Hydrocbns/Oxygenates	51	0	37	2	86	1	101	0	82	0	31	(s)
Unfinished Oils	289	8	261	11	286	74	259	24	309	19	298	13
Motor Gas.Blend.Comp	124	3	150	20	105	15	213	39	248	21	316	15
Aviation Gas. Blend. Comp	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	265	-6	303	13	280	1	253	41	328	14	317	1
Reformulated	155	5	196	9	161	1	114	28	166	37	138	19
Oxygenated	0	0	0	0	0	0	0	0	0	0	0	0
Other	110	-11	108	4	119	0	140	12	163	-23	179	-17
Finished Aviation Gasoline	(s)	0	0	0	(s)	0	(s)	0	(s)	0	(s)	0
Jet Fuel	67	19	99	28	96	48	60	46	104	47	66	49
Naphtha-Type Jet	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet	67	19	99	28	96	48	60	46	104	47	66	49
Kerosene	3	0	2	0	1	0	(s)	0	(s)	0	(s)	0
Distillate Fuel Oil	187	7	183	30	220	17	189	20	178	7	193	10
Residual Fuel Oil	223	44	185	33	180	51	221	70	142	63	211	66
Naphtha Pet. Feedstock	39	5	96	2	61	-2	58	6	73	0	36	0
Other Oils Pet. Feedstock	188	0	145	0	147	0	227	0	155	0	192	0
Special Naphthas	7	0	6	0	4	0	8	0	15	0	3	0
Lubricants	13	0	8	0	2	0	5	0	12	0	9	0
Waxes	1	1	2	(s)	2	(s)	1	1	1	(s)	1	(s)
Petroleum Coke	1	0	1	0	1	0	2	0	1	0	0	0
Asphalt and Road Oil	9	0	32	0	20	0	19	0	37	(s)	33	1
Miscellaneous Products	(s)	0	(s)	0	(s)	0	(s)	0	1	0	1	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, 1998 (Continued)

(Thousand Barrels per Day, Except Where Noted)

Product	January		February		March		April		May		June	
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference
Stocks (Thousand Barrels)	**1,575,800**	**-6,030**	**1,572,461**	**-3,856**	**1,588,467**	**-1,520**	**1,613,989**	**85**	**1,654,113**	**-2,130**	**1,653,682**	**-2,980**
Crude Oil (excl. SPR)	320,862	-4,108	322,250	-4,445	336,430	-1,946	351,200	-51	352,664	-1,789	332,980	-704
Pentanes Plus	6,631	221	7,178	62	6,728	210	6,441	247	6,908	156	7,566	121
LPGs	73,318	-386	68,657	866	69,140	-54	84,047	835	106,473	907	122,602	1,169
Ethane/Ethylene	17,192	0	16,506	-9	16,585	-57	18,546	-16	20,869	-9	21,421	-9
Propane/Propylene	34,671	-249	32,228	560	29,855	-118	37,091	192	50,322	233	60,192	442
Normal Butane/Butylene	12,954	-128	11,656	282	13,803	115	19,550	665	26,111	824	31,725	747
Isobutane/Isobutylene	8,501	-9	8,267	33	8,897	6	8,860	-6	9,171	-141	9,264	-11
Oth Hydrocbns/Oxygenates	13,435	68	13,603	200	13,510	317	13,237	488	12,931	417	13,623	322
Unfinished Oils	93,194	-654	98,064	-229	101,875	-484	100,671	-1,126	98,772	-916	99,527	-1,220
Motor Gas. Blend. Comp	45,747	448	48,589	-232	48,637	395	45,966	382	46,099	263	43,768	764
Aviation Gas. Blend. Comp	149	0	150	0	110	0	119	0	182	0	182	0
Finished Motor Gasoline	175,287	-981	172,760	356	166,394	422	168,323	-146	174,908	-1,010	177,680	-382
Reformulated	44,414	-802	44,749	257	42,913	285	44,227	-307	47,829	-131	48,799	-2
Oxygenated	1,127	3	827	3	865	0	650	1	755	3	1,290	-14
Other	129,746	-182	127,184	96	122,616	137	123,446	160	126,324	-882	127,591	-366
Finished Aviation Gasoline	1,774	5	1,504	-20	1,622	-120	1,738	-111	1,710	-30	1,493	-7
Jet Fuel	44,203	-82	42,250	155	42,992	139	41,456	-17	43,166	-53	44,416	-267
Naphtha-Type Jet	34	0	32	0	49	-1	50	-1	53	0	47	-1
Kerosene-Type Jet	44,169	-82	42,218	155	42,943	140	41,406	-16	43,113	-53	44,369	-266
Kerosene	6,209	34	5,602	13	4,697	7	4,637	65	4,907	-56	4,863	-61
Distillate Fuel Oil	133,059	-262	127,929	-286	124,425	120	125,681	-368	136,799	-474	139,133	-2,803
Residual Fuel Oil	39,650	35	38,113	86	40,990	-345	39,187	36	38,615	200	39,760	-51
Naphtha Pet. Feedstock	1,898	25	2,181	31	1,868	40	1,716	94	2,738	90	2,458	163
Other Oils Pet. Feedstock	1,865	7	2,251	9	1,589	-2	2,193	-1	1,634	37	2,310	22
Special Naphthas	2,005	-34	2,093	-36	2,174	-68	1,938	1	2,022	-27	1,862	14
Lubricants	12,801	15	12,169	37	11,928	34	11,079	2	11,478	13	11,417	115
Waxes	989	-199	1,026	-217	906	-86	858	8	985	-7	942	-12
Petroleum Coke	11,246	23	10,882	25	12,051	37	12,623	-57	11,977	242	11,198	204
Asphalt and Road Oil	26,501	-260	30,135	-280	35,210	-148	35,909	-238	34,068	-59	30,799	-406
Miscellaneous Products	1,547	55	1,649	49	1,765	12	1,544	42	1,649	-34	1,674	39
Product Supplied	**18,256**	**105**	**18,322**	**-6**	**18,393**	**292**	**18,624**	**420**	**17,876**	**499**	**18,818**	**358**
Crude Oil	0	0	0	0	0	0	0	0	0	0	0	0
Pentanes Plus	157	-6	158	7	188	-5	173	-3	171	6	147	-8
LPGs	2,331	10	2,177	-45	2,161	38	1,892	-2	1,582	45	1,709	13
Ethane/Ethylene	729	5	718	7	733	5	659	3	614	12	618	6
Propane/Propylene	1,475	4	1,329	-42	1,270	18	1,011	10	755	24	886	(s)
Normal Butane/Butylene	40	-1	25	-6	95	10	104	-9	130	13	98	13
Isobutane/Isobutylene	88	1	104	-3	62	5	118	-7	83	-4	107	-6
Unfinished Oils	-120	2	-109	19	-144	65	-184	30	-99	27	-178	-15
Aviation Gas. Blend. Comp	1	0	5	0	4	0	3	0	2	0	2	0
Finished Motor Gasoline	7,590	28	7,755	-44	7,956	47	8,137	175	8,070	209	8,437	83
Reformulated	2,453	65	2,495	-12	2,535	40	2,595	80	2,650	48	2,735	-10
Oxygenated	707	59	592	46	612	61	574	51	431	56	480	63
Other	4,430	-97	4,667	-78	4,810	-54	4,967	44	4,990	104	5,221	30
Finished Aviation Gasoline	9	(s)	22	1	18	(s)	22	-3	22	-3	29	-1
Jet Fuel	1,525	34	1,590	16	1,540	49	1,588	66	1,495	71	1,555	56
Naphtha-Type Jet	(s)	(s)	(s)	0	-7	(s)	(s)	(s)	-1	(s)	(s)	(s)
Kerosene-Type Jet	1,524	34	1,590	16	1,547	49	1,588	66	1,497	71	1,555	56
Kerosene	138	-3	101	1	102	3	45	-7	61	-6	51	8
Distillate Fuel Oil	3,566	(s)	3,585	13	3,589	16	3,408	57	3,219	49	3,492	82
0.05% & under	2,082	-20	2,214	-3	2,255	-17	2,276	37	2,185	27	2,331	95
Greater than 0.05%	1,485	20	1,371	17	1,334	33	1,132	20	1,035	22	1,161	-13
Residual Fuel Oil	884	43	793	30	742	66	966	62	707	50	770	65
Naphtha Pet. Feedstock	275	5	322	-1	303	-2	291	10	266	8	280	5
Other Oils Pet. Feedstock	411	(s)	345	(s)	394	(s)	440	(s)	383	-1	407	5
Special Naphthas	53	-4	34	0	61	(s)	63	-3	77	-1	58	-3
Lubricants	170	-9	169	(s)	165	1	192	(s)	167	-1	176	-6
Waxes	22	(s)	24	-1	26	-3	22	-1	21	(s)	23	-2
Petroleum Coke	343	8	429	5	366	14	432	19	416	16	458	23
Asphalt and Road Oil	218	-3	275	-7	245	-4	428	8	585	17	654	33
Still Gas	617	-2	603	-5	630	1	647	9	678	6	695	16
Miscellaneous Products	65	3	44	5	45	5	59	4	51	8	52	3

(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, 1998 (Continued)

(Thousand Barrels per Day, Except Where Noted)

Product	July		August		September		October		November		December		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
Inputs	**16,832**	**92**	**16,810**	**51**	**16,113**	**-27**	**15,520**	**46**	**16,078**	**51**	**16,139**	**30**	**62**
Crude Oil	15,496	58	15,660	57	14,854	-2	14,001	-7	14,769	3	14,832	8	52
Pentanes Plus	147	2	133	-1	141	0	158	-1	158	0	154	0	-2
LPGs	194	-7	199	-9	221	1	309	4	358	0	317	0	-7
Ethane/Ethylene	0	0	0	0	0	0	0	0	0	0	0	0	0
Propane/Propylene	0	0	0	0	0	0	0	0	0	0	0	0	0
Normal Butane/Butylene	73	-7	71	-5	108	(s)	185	1	235	0	213	0	-6
Isobutane/Isobutylene	122	(s)	128	-3	113	1	124	3	123	0	104	0	-1
Oth Hydrocbns/Oxygenates	361	-6	354	-8	351	-5	352	1	366	0	344	0	-4
Unfinished Oils	494	22	424	2	539	-2	650	19	433	11	493	-13	6
Motor Gas. Blend. Comp	140	23	44	9	7	-19	49	30	-2	37	4	34	16
Aviation Gas. Blend. Comp	(s)	0	-3	0	-1	0	2	0	-4	0	-4	(s)	(s)
Production	**19,680**	**69**	**19,818**	**76**	**19,077**	**-23**	**18,543**	**10**	**19,184**	**72**	**19,094**	**37**	**78**
Pentanes Plus	308	1	318	1	313	-2	310	-1	306	1	281	2	-2
LPGs	2,093	14	2,188	32	2,027	5	1,962	21	1,928	17	1,830	5	11
Ethane/Ethylene	549	5	615	6	613	3	607	5	618	3	554	7	5
Propane/Propylene	997	7	1,041	16	1,044	3	1,038	9	1,084	3	1,055	5	7
Normal Butane/Butylene	345	4	337	13	182	-1	127	2	44	10	47	-8	1
Isobutane/Isobutylene	202	-2	196	-3	189	(s)	189	5	182	1	173	1	-2
Oth Hydrocbns/Oxygenates	350	-25	327	-9	313	-2	305	-6	333	-2	330	-4	-3
Motor Gas Blend. Comp.	-143	32	-80	-8	-134	-36	-110	21	-176	31	-231	25	4
Finished Motor Gasoline	8,287	13	8,200	27	8,029	19	7,995	-3	8,263	7	8,395	11	41
Reformulated	2,555	5	2,494	-10	2,521	-23	2,430	-20	2,521	(s)	2,475	0	5
Oxygenated	491	55	584	58	628	52	806	-2	692	0	882	0	42
Other	5,241	-47	5,122	-20	4,880	-10	4,759	18	5,050	7	5,037	11	-5
Finished Aviation Gasoline	23	0	25	0	25	0	19	(s)	20	0	13	0	-1
Jet Fuel	1,484	20	1,605	3	1,474	9	1,450	-3	1,616	(s)	1,611	0	6
Naphtha-Type Jet	1	0	(s)	0	(s)	0	(s)	0	(s)	0	(s)	0	(s)
Kerosene-Type Jet	1,483	20	1,604	3	1,473	9	1,450	-3	1,616	(s)	1,611	0	6
Kerosene	67	-7	89	0	66	-9	88	-1	108	0	106	0	-2
Distillate Fuel Oil	3,583	-15	3,472	10	3,399	(s)	3,223	-8	3,439	(s)	3,431	0	3
Residual Fuel Oil	782	-4	778	3	749	(s)	668	8	741	13	810	-5	(s)
Naphtha Pet. Feedstock	246	5	247	-4	281	0	256	-13	254	0	243	-1	1
Other Oils Pet. Feedstock	236	(s)	236	0	195	0	187	(s)	193	0	208	0	(s)
Special Naphthas	66	-1	81	-1	68	-1	62	-2	70	-1	65	-1	-1
Lubricants	189	-1	196	(s)	191	0	188	4	187	(s)	178	0	(s)
Waxes	25	-1	26	-2	23	-2	24	-1	24	-1	24	-2	-1
Petroleum Coke	708	7	725	3	718	0	685	-5	695	8	718	6	9
Asphalt and Road Oil	612	20	621	16	628	-2	558	(s)	496	(s)	392	(s)	6
Still Gas	710	7	710	(s)	659	(s)	619	-1	637	0	633	0	3
Miscellaneous Products	55	4	54	5	56	0	52	(s)	52	0	57	0	3
Imports	**11,151**	**498**	**10,829**	**203**	**10,288**	**211**	**10,531**	**331**	**10,574**	**287**	**9,983**	**274**	**326**
Crude Oil	9,309	198	9,143	34	8,392	109	8,457	210	8,821	119	8,262	90	156
Pentanes Plus	5	0	48	0	60	0	39	0	42	0	22	0	0
LPGs	199	0	196	0	144	(s)	168	0	119	(s)	134	-1	(s)
Ethane/Ethylene	14	0	14	0	19	0	22	0	14	0	14	0	0
Propane/Propylene	124	0	157	0	81	(s)	123	0	92	(s)	109	-1	(s)
Normal Butane/Butylene	41	0	12	0	25	0	14	0	9	0	6	0	0
Isobutane/Isobutylene	19	0	13	0	18	0	9	0	3	0	6	0	0
Oth Hydrocbns/Oxygenates	48	18	38	0	88	0	67	0	99	0	68	0	2
Unfinished Oils	165	31	228	-2	352	-5	435	12	342	-21	242	(s)	14
Motor Gas.Blend.Comp	257	(s)	143	(s)	166	0	177	11	261	2	208	15	12
Aviation Gas. Blend. Comp	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	321	7	321	10	308	2	379	0	210	29	305	31	12
Reformulated	168	0	167	0	176	2	226	18	119	22	205	23	14
Oxygenated	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	153	7	154	10	132	(s)	153	-18	91	7	100	8	-2
Finished Aviation Gasoline	(s)	0	(s)	0	(s)	0	(s)	0	(s)	0	(s)	0	0
Jet Fuel	45	72	70	76	59	32	106	34	94	37	99	31	43
Naphtha-Type Jet	0	0	0	0	0	0	11	-11	0	0	0	0	-11
Kerosene-Type Jet	45	72	70	76	59	32	95	45	94	37	99	31	44
Kerosene	(s)	0	(s)	1	1	(s)	1	0	1	0	4	0	(s)
Distillate Fuel Oil	212	17	173	8	194	10	226	12	152	27	225	20	15
Residual Fuel Oil	266	156	229	76	225	63	207	49	181	93	167	87	71
Naphtha Pet. Feedstock	73	0	61	0	77	0	60	3	46	0	46	0	1
Other Oils Pet. Feedstock	201	0	128	0	193	0	153	0	141	0	153	0	0
Special Naphthas	6	-1	7	0	5	0	7	0	15	0	7	0	(s)
Lubricants	16	0	10	0	2	0	12	0	8	0	13	0	0
Waxes	2	0	1	(s)	1	0	1	1	1	0	1	1	(s)
Petroleum Coke	0	0	0	0	0	0	0	0	1	0	1	0	0
Asphalt and Road Oil	27	(s)	33	1	24	0	36	0	41	0	24	0	(s)
Miscellaneous Products	(s)	0	(s)	0	(s)	0	(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, 1998 (Continued)

(Thousand Barrels per Day, Except Where Noted)

Product	July		August		September		October		November		December		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
Stocks (Thousand Barrels)	**1,664,602**	**-3,103**	**1,671,568**	**-2,710**	**1,652,512**	**-22**	**1,653,620**	**-4,201**	**1,674,154**	**-2,370**	**1,647,068**	**-93**	**-2,411**
Crude Oil (excl. SPR)	339,197	-1,129	330,127	-1,135	309,588	185	333,429	-3,271	337,713	-2,444	323,038	505	-1,694
Pentanes Plus	8,059	70	9,283	107	9,969	55	9,301	126	9,039	88	8,447	231	141
LPGs	132,875	1,065	145,208	1,362	152,851	74	145,898	63	134,468	-552	116,391	-1,309	337
Ethane/Ethylene	20,518	-9	21,474	0	23,542	0	23,798	0	23,284	-431	21,266	-230	-64
Propane/Propylene	67,080	233	72,555	536	76,623	18	75,235	15	72,469	-93	65,038	-405	114
Normal Butane/Butylene	36,333	868	41,831	808	43,421	56	38,602	-18	31,044	-87	22,753	-608	294
Isobutane/Isobutylene	8,944	-27	9,348	18	9,265	0	8,263	66	7,671	59	7,334	-66	-7
Oth Hydrocbns/Oxygenates	13,320	303	12,551	284	12,875	367	12,359	173	13,377	110	14,174	-2	254
Unfinished Oils	95,755	-1,190	96,902	-314	97,214	-6	97,623	-496	96,562	-380	90,913	-77	-591
Motor Gas. Blend. Comp	42,534	1,041	42,338	508	42,702	-21	42,604	20	44,791	-93	43,758	85	297
Aviation Gas. Blend. Comp	113	0	143	0	151	0	83	0	194	0	261	-30	-3
Finished Motor Gasoline	172,463	-396	168,778	-1,382	164,727	-799	160,023	-71	167,467	71	171,961	-165	-374
Reformulated	45,836	424	42,616	-677	42,928	-848	39,722	-126	42,704	-11	44,264	0	-162
Oxygenated	1,300	0	1,310	0	916	0	1,317	0	1,077	0	902	0	(s)
Other	125,327	-820	124,852	-705	120,883	49	118,984	55	123,686	82	126,795	-165	-212
Finished Aviation Gasoline	1,543	-9	1,547	0	1,741	0	1,645	1	1,716	0	1,826	0	-24
Jet Fuel	42,217	-91	46,553	-68	45,959	19	42,860	-47	45,561	-73	44,712	-18	-34
Naphtha-Type Jet	44	0	42	0	46	0	45	-1	32	0	34	0	(s)
Kerosene-Type Jet	42,173	-91	46,511	-68	45,913	19	42,815	-46	45,529	-73	44,678	-18	-33
Kerosene	6,060	-132	6,269	0	6,896	33	7,565	-33	7,629	0	6,943	0	-11
Distillate Fuel Oil	148,799	-1,847	150,466	-1,424	152,507	85	147,462	-106	154,551	74	156,193	-118	-617
Residual Fuel Oil	39,762	-176	41,693	81	39,691	-3	41,145	-275	41,735	953	44,153	756	108
Naphtha Pet. Feedstock	2,084	111	1,718	31	1,829	0	1,907	-23	2,280	0	2,093	0	47
Other Oils Pet. Feedstock	2,299	9	2,638	0	2,564	0	2,233	13	2,169	0	2,067	0	8
Special Naphthas	1,997	-4	2,169	-4	2,179	-7	2,071	-18	2,237	-5	2,211	-4	-16
Lubricants	11,939	22	12,257	120	12,263	0	12,095	42	13,094	3	13,153	25	36
Waxes	954	-2	1,036	-4	1,055	0	1,012	0	1,024	0	993	0	-43
Petroleum Coke	10,176	15	10,698	-3	10,099	0	9,819	-289	9,966	-74	9,200	0	10
Asphalt and Road Oil	27,462	-796	23,940	-906	20,372	-4	16,585	-1	18,225	15	21,351	0	-257
Miscellaneous Products	1,568	33	1,828	37	1,854	0	1,886	-9	1,832	-63	1,825	28	16
Product Supplied	**19,140**	**326**	**19,108**	**239**	**18,837**	**58**	**19,086**	**102**	**18,515**	**158**	**19,198**	**221**	**233**
Crude Oil	0	0	0	0	0	0	0	0	0	0	0	0	0
Pentanes Plus	135	1	192	1	207	-1	209	-2	197	3	167	-2	-1
LPGs	1,732	24	1,762	31	1,667	46	1,997	17	2,009	37	2,163	28	21
Ethane/Ethylene	592	5	598	6	563	3	622	5	650	18	634	1	6
Propane/Propylene	882	14	1,006	6	974	20	1,171	9	1,227	6	1,371	14	7
Normal Butane/Butylene	147	7	90	20	33	24	98	4	49	12	73	8	8
Isobutane/Isobutylene	110	-2	69	-1	97	(s)	106	(s)	82	2	86	5	-1
Unfinished Oils	-208	8	-233	-33	-198	-13	-228	9	-56	-36	-69	3	5
Aviation Gas. Blend. Comp	2	0	2	0	(s)	0	(s)	0	(s)	0	2	1	(s)
Finished Motor Gasoline	8,659	21	8,500	69	8,308	2	8,405	-27	8,136	31	8,401	50	54
Reformulated	2,802	-9	2,758	25	2,677	-15	2,751	-24	2,541	18	2,629	23	19
Oxygenated	490	55	583	58	641	52	793	-2	700	0	884	0	42
Other	5,368	-25	5,159	-14	4,990	-35	4,861	-1	4,896	13	4,887	27	-7
Finished Aviation Gasoline	22	(s)	25	(s)	19	0	22	(s)	17	(s)	10	0	(s)
Jet Fuel	1,571	87	1,526	79	1,526	38	1,634	34	1,595	38	1,720	29	50
Naphtha-Type Jet	-1	(s)	-1	0	-1	0	10	-11	(s)	(s)	-1	0	-1
Kerosene-Type Jet	1,573	87	1,527	79	1,527	38	1,623	45	1,596	38	1,721	29	51
Kerosene	28	-5	82	-4	46	-10	67	1	107	-1	132	0	-2
Distillate Fuel Oil	3,322	-28	3,442	5	3,417	-41	3,537	10	3,300	21	3,458	26	17
0.05% & under	2,265	16	2,455	-13	2,424	-30	2,372	10	2,262	11	2,197	20	11
Greater than 0.05%	1,057	-44	987	18	993	-11	1,165	(s)	1,037	9	1,261	6	6
Residual Fuel Oil	925	155	840	71	908	65	690	65	792	65	790	89	69
Naphtha Pet. Feedstock	331	7	320	-2	354	1	314	-9	288	-1	296	-1	2
Other Oils Pet. Feedstock	437	(s)	353	(s)	391	0	351	(s)	337	(s)	364	0	(s)
Special Naphthas	60	-2	58	-1	53	-1	62	-2	48	-1	62	-1	-2
Lubricants	160	2	172	-3	171	4	184	2	143	1	153	-1	-1
Waxes	22	-2	21	-2	20	-2	23	-1	21	-1	21	(s)	-1
Petroleum Coke	435	14	528	4	468	(s)	436	5	410	(s)	527	4	9
Asphalt and Road Oil	738	32	762	20	766	-32	713	(s)	480	-1	312	(s)	5
Still Gas	710	7	710	(s)	659	(s)	619	-1	637	0	633	0	3
Miscellaneous Products	58	5	45	5	55	1	51	(s)	54	2	57	-3	3

(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, March 1999

Products	March 1999		February 1999		Year-to-Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Fuel Ethanol						
Production	3,163	102	2,782	99	9,104	101
Stocks	3,722	—	3,240	—	—	—
MTBE						
Production	5,511	178	5,945	212	18,149	202
Stocks	9,418	—	10,063	—	—	—

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												
1998	96	85	86	85	81	83	85	87	98	103	97	100
1999	102	99	102									
Stocks (thous. bbls.)												
1998	2,633	2,519	2,360	2,423	2,732	2,829	2,951	2,991	3,169	3,195	3,300	2,814
1999	2,973	3,240	3,722									
East Coast (PADD I)												
Production												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
Stocks (thous. bbls.)												
1998	110	99	86	32	32	139	230	298	101	94	84	78
1999	68	56	46									
Midwest (PADD II)												
Production												
1998	95	84	85	84	81	82	84	87	97	102	96	99
1999	101	99	101									
Stocks (thous. bbls.)												
1998	1,633	1,661	1,588	1,607	1,697	1,478	1,344	1,377	1,578	1,747	1,841	1,483
1999	1,649	1,897	2,460									
Gulf Coast (PADD III)												
Production												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
Stocks (thous. bbls.)												
1998	394	225	271	382	565	612	717	608	610	554	602	625
1999	767	796	802									
Rocky Mountain (PADD IV)												
Production												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
Stocks (thous. bbls.)												
1998	108	91	94	97	103	118	130	163	179	163	122	97
1999	99	90	94									
West Coast (PADD V)												
Production												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
Stocks (thous. bbls.)												
1998	387	443	321	306	334	482	530	545	701	637	651	531
1999	389	400	320									

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/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total U.S.												
Production												
1998	188	176	201	209	195	204	220	217	210	202	220	221
1999	216	212	178									
Stocks (thous. bbls.)												
1998	8,690	8,725	8,976	9,025	8,400	8,762	8,544	7,695	8,117	7,408	7,880	9,283
1999	8,833	10,063	9,418									
East Coast (PADD I)												
Production												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
Stocks (thous. bbls.)												
1998	1,676	1,514	1,794	1,464	2,058	1,657	1,734	1,341	1,275	1,476	1,876	1,515
1999	1,677	1,959	2,251									
Midwest (PADD II)												
Production												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
Stocks (thous. bbls.)												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
Gulf Coast (PADD III)												
Production												
1998	164	153	179	184	173	176	191	188	181	173	190	193
1999	181	187	161									
Stocks (thous. bbls.)												
1998	3,712	4,084	3,871	4,132	3,150	3,854	3,174	2,950	3,295	3,159	3,233	3,982
1999	4,442	4,696	4,549									
Rocky Mountain (PADD IV)												
Production												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
Stocks (thous. bbls.)												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
West Coast (PADD V)												
Production												
1998	W	W	W	W	W	W	W	W	W	W	W	W
1999	W	W	W									
Stocks (thous. bbls.)												
1998	3,009	2,869	3,090	3,101	2,891	2,938	3,231	3,104	3,216	2,513	2,530	3,559
1999	2,443	3,087	2,322									

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	201	217	200	206	211	205
1998	188	176	201	209	195	204	220	217	210	202	220	221
1999	216	212	178									
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	99	92	93	104	106	113	99	108	109	108
1998	97	77	104	107	94	106	114	108	100	100	117	114
1999	105	111	83									
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	83	94	102	105	95	104	101	98	102	97
1998	91	99	97	102	101	99	106	109	111	102	104	107
1999	110	101	94									

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

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; CH_3-(CH_2)n-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

the reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude oil and product slate conditions.

Benzene (C_6H_6). An aromatic hydrocarbon present in small proportion in some crude oils and made commercially from petroleum by the catalytic reforming of naphthenes in petroleum naphtha. Also made from coal in the manufacture of coke. Used as a solvent, in manufacturing detergents, synthetic fibers, and petrochemicals and as a component of high-octane gasoline.

Blending Components. See Motor or Aviation Gasoline Blending Components.

Blending Plant. A facility which has no refining capability but is either capable of producing finished motor gasoline through mechanical blending or blends oxygenates with motor gasoline.

Bonded Petroleum Imports. Petroleum imported and entered into Customs bonded storage. These imports are not included in the import statistics until they are: (1) withdrawn from storage free of duty for use as fuel for vessels and aircraft engaged in international trade; or (2) withdrawn from storage with duty paid for domestic use.

BTX. The acronym for the commercial petroleum aromatics benzene, toluene, and xylene. See individual categories for definitions.

Bulk Station. A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of less than 50,000 barrels and receives its petroleum products by tank car or truck.

Bulk Terminal. A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of 50,000 barrels or more and/or receives petroleum products by tanker, barge, or pipeline.

Butane (C_4H_{10}). A normally gaseous straight-chain or branch-chain hydrocarbon extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

> ***Isobutane (C_4H_{10}).*** A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

> ***Normal Butane (C_4H_{10}).*** A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

Butylene (C_4H_8). An olefinic hydrocarbon recovered from refinery processes.

Captive Refinery Oxygenate Plants. Oxygenate production facilities located within or adjacent to a refinery complex.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

> ***Fresh Feeds.*** Crude oil or petroleum distillates which are being fed to processing units for the first time.

> ***Recycled Feeds.*** Feeds that are continuously fed back for additional processing.

Catalytic Hydrocracking. A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel, and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

Catalytic Hydrotreating. A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

Catalytic Reforming. A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

Low Pressure. A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

High Pressure. A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

Charge Capacity. The input (feed) capacity of the refinery processing facilities.

Coal. A black or brownish-black solid combustible substance formed by the partial decomposition of vegetable matter without access to air. The rank of coal, which includes anthracite, bituminous coal, subbituminous coal, and lignite, is based on fixed carbon, volatile matter, and heating value. Coal rank indicates the progressive alteration, or coalification, from lignite to anthracite. Lignite contains approximately 9 to 17 million BTU per ton. The heat contents of subbituminous and bituminous coal range from 16 to 24 million BTU per ton, and from 19 to 30 million BTU per ton, respectively. Anthracite contains approximately 22 to 28 million BTU per ton.

Commercial Kerosene-Type Jet Fuel. See **Kerosene-Type Jet Fuel.**

Crude Oil (Including Lease Condensate). A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

Domestic. Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 USC 1331.

Foreign. Crude oil produced outside the United States. Imported Athabasca hydrocarbons (tar sands from Canada) are included.

Crude Oil, Refinery Receipts. Receipts of domestic and foreign crude oil at a refinery. Includes all crude oil in transit except crude oil in transit by pipeline. Foreign crude oil is reported as a receipt only after entry through customs. Crude oil of foreign origin held in bonded storage is excluded.

Crude Oil Losses. Represents the volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc. as opposed to refinery processing losses.

Crude Oil Production. The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

Crude Oil Qualities. Refers to two properties of crude oil, the sulfur content and API gravity, which affect processing complexity and product characteristics.

Delayed Coking. A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

Disposition. The components of petroleum disposition are stock change, crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels. Distillate fuel oil is reported in the following sulfur categories: 0.05% sulfur and under, for use in on-highway diesel engines which could be described as meeting EPA regulations; and greater than 0.05% sulfur, for use in all other distillate applications.

No. 1 Distillate. A petroleum distillate which meets the specifications for No. 1 heating or fuel oil as defined in ASTM D 396 and/or the specifications for No. 1 diesel fuel as defined in ASTM Specification D 975 with distillation temperatures of 420° F at the 10-percent recovery point and 550° F at the 90-percent recovery point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100° F.

No. 2 Distillate. A petroleum distillate which meets the specifications for No. 2 heating or fuel oil as defined in ASTM D 396 and/or the specifications for No. 2 diesel

fuel as defined in ASTM Specification D 975 with distillation temperatures of 540° and 640° F at the 90-percent recovery point, and kinematic viscosities between 2.0 and 4.3 centistokes at 100° F.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; with minimum and maximum kinematic viscosities between 5.8 and 26.4 centistokes at 100° F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

Electricity (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ending Stocks. Primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

ETBE (Ethyl tertiary butyl ether) $(CH_3)_3COC_2H_5$. An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

Ethane (C_2H_6). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

Ether. A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

Ethylene (C_2H_4). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Exports. Shipments of crude oil and petroleum products from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, new supply of other hydrocarbons/oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.

Flexicoking. A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

Fluid Coking. A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

Fresh Feed Input. Represents input of material (crude oil, unfinished oils, natural gas liquids, other hydrocarbons and oxygenates or finished products) to processing units at a refinery that is being processed (input) into a particular unit for the first time.

Examples:

(1) Unfinished oils coming out of a crude oil distillation unit which are input into a catalytic cracking unit are considered fresh feed to the catalytic cracking unit.

(2) Unfinished oils coming out of a catalytic cracking unit being looped back into the same catalytic cracking unit to be reprocessed are not considered fresh feed.

Fuel Ethanol (C_2H_5OH). An anhydrous denatured aliphatic alcohol intended for gasoline blending as described in Oxygenates definition.

Fuels Solvent Deasphalting. A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

Gasohol. A blend of finished motor gasoline and alcohol (generally ethanol but sometimes methanol), limited to 10 percent by volume of alcohol.

Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

Gross Input to Atmospheric Crude Oil Distillation Units. Total input to atmospheric crude oil distillation units. Includes all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Heavy Gas Oil. Petroleum distillates with an approximate boiling range from 651° to 1000° F.

Hydrogen. The lightest of all gases, occurring chiefly in combination with oxygen in water; exists also in acids, bases, alcohols, petroleum, and other hydrocarbons.

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

Imported Crude Oil Burned As Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Imports. Receipts of crude oil and petroleum products into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Isobutane. See **Butane.**

Isobutylene (C_4H_8). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isohexane (C_6H_{14}). A saturated branch-chain hydrocarbon. It is a colorless liquid that boils at a temperature of 156.2° F.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane (C_4), an alkylation process feedstock, and normal pentane and hexane into isopentane (C_5) and isohexane (C_6), high-octane gasoline components.

Isopentane. See **Natural Gasoline and Isopentane.**

Kerosene. A petroleum distillate that has a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. The fuel is designated in ASTM Specification D1655 and Military Specifications MIL-T-5624R and MIL-T-83133D (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type used primarily for turbojet and turboprop aircraft engines.

> ***Commercial.*** Kerosene-type jet fuel intended for use in commercial aircraft.
>
> ***Military.*** Kerosene-type jet fuel intended for use in military aircraft.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Light Gas Oils. Liquid petroleum distillates heavier than naphtha, with an approximate boiling range from 401° F to 650° F.

Liquefied Petroleum Gases (LPG). Ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. Excludes still gas.

Lubricants. A substance used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products, or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Do not include byproducts of lubricating oil refining such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Reporting categories include:

> ***Paraffinic.*** Includes all grades of bright stock and neutrals with a Viscosity Index > 75.

Naphthenic. Includes all lubricating oil base stocks with a Viscosity Index < 75.

Note: The criterion for categorizing the lubricants is based solely on the Viscosity Index of the stocks and is independent of crude sources and type of processing used to produce the oils.

Exceptions: Lubricating oil base stocks that have been historically classified as naphthenic or paraffinic by a refiner may continue to be so categorized irrespective of the Viscosity Index criterion.

Example:

(1) Unextracted paraffinic oils that would not meet the Viscosity Index test.

Merchant Oxygenate Plants. Oxygenate production facilities that are not associated with a petroleum refinery. Production from these facilities is sold under contract or on the spot market to refiners or other gasoline blenders.

Methanol (CH_3OH). A light, volatile alcohol intended for gasoline blending as described in Oxygenate definition.

Middle Distillates. A general classification of refined petroleum products that includes distillate fuel oil and kerosene.

Military Kerosene-Type Jet Fuel. See **Kerosene-Type Jet Fuel.**

Miscellaneous Products. Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils).

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that has been blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as given in ASTM Specification D-4814 or Federal Specification VV-G-1690C, includes a range in distillation temperatures from 122 degrees to 158 degrees F at the 10-percent recovery point and from 365 degrees to 374 degrees F at the 90-percent recovery point. "Motor gasoline" includes reformulated gasoline, oxygenated gasoline, and other finished gasoline. Blendstock is excluded until blending has been completed.

Reformulated Gasoline. Gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211K of the Clean Air Act. Includes oxygenated fuels program reformulated gasoline (OPRG). Excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Oxygenated Gasoline. Gasoline formulated for use in motor vehicles that has an oxygen content of 1.8 percent or higher, by weight. Includes gasohol. Excludes reformulated gasoline, oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB).

OPRG. "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control period.

Other Finished or Conventional Gasoline. Motor gasoline not included in the oxygenated or reformulated gasoline categories. Excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Motor Gasoline Blending. Mechanical mixing of motor gasoline blending components and oxygenates to produce finished motor gasoline. Mechanical mixing of finished motor gasoline with motor gasoline blending components or oxygenates which results in increased volumes of finished motor gasoline, and/or changes in the classification of finished motor gasoline (e.g., other finished motor gasoline mixed with MTBE to produce oxygenated motor gasoline), is considered motor gasoline blending.

Motor Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) and includes reformulated gasoline blendstock for oxygenate blending (RBOB). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as individual components and included in the total for other hydrocarbons, hydrogens, and oxygenates.

MTBE (Methyl tertiary butyl ether) ($(CH_3)_3COCH_3$). An ether intended for gasoline blending as described in Oxygenate definition.

Naphtha. A generic term applied to a petroleum fraction with an approximate boiling range between 122° and 400° F.

Naphtha Less Than 401° F. See **Petrochemical Feedstocks.**

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290° F at the 20-percent recovery point and 470° F at the 90-percent

point, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: ethane, propane, normal butane, isobutane, and pentanes plus.

Natural Gas Processing Plant. A facility designed (1) to achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities, and (2) to control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C_5H_{12}), obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Receipts. The difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge.

Normal Butane. See **Butane.**

OPEC. The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. The Neutral Zone between Kuwait and Saudi Arabia is considered part of OPEC. Prior to January 1, 1993, Ecuador was a member of OPEC. Prior to January 1995, Gabon was a member of OPEC.

OPRG. "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control area during an oxygenated fuels program control period.

Operable Capacity. The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

Operating Capacity. The component of operable capacity that is in operation at the beginning of the period.

Operable Utilization Rate. Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operable refining capacity of the units.

Operating Utilization Rate. Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operating refining capacity of the units.

Other Finished. See **Motor Gasoline (Finished).**

Other Hydrocarbons. Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Other Oils Equal To or Greater Than 401° F. See **Petrochemical Feedstocks.**

Other Oxygenates. Other aliphatic alcohols and aliphatic ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Oxygenated Gasoline. See **Motor Gasoline (Finished).**

Oxygenates. Any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. Through a series of waivers and interpretive rules, the Environmental Protection Agency (EPA) has determined the allowable limits for oxygenates in unleaded gasoline. The "Substantially Similar" Interpretive Rules (56 FR (February 11, 1991)) allows blends of aliphatic alcohols other than methanol and aliphatic ethers, provided the oxygen content does not exceed 2.7 percent by weight. The "Substantially Similar"

Interpretive Rules also provides for blends of methanol up to 0.3 percent by volume exclusive of other oxygenates, and butanol or alcohols of a higher molecular weight up to 2.75 percent by weight. Individual waivers pertaining to the use of oxygenates in unleaded gasoline have been issued by the EPA. They include:

Fuel Ethanol. Blends of up to 10 percent by volume anhydrous ethanol (200 proof) (commonly referred to as the "gasohol waiver").

Methanol. Blends of methanol and gasoline-grade tertiary butyl alcohol (GTBA) such that the total oxygen content does not exceed 3.5 percent by weight and the ratio of methanol to GTBA is less than or equal to 1. It is also specified that this blended fuel must meet ASTM volatility specifications (commonly referred to as the "ARCO" waiver).

Blends of up to 5.0 percent by volume methanol with a minimum of 2.5 percent by volume cosolvent alcohols having a carbon number of 4 or less (i.e., ethanol, propanol, butanol, and/or GTBA). The total oxygen must not exceed 3.7 percent by weight, and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity specifications (commonly referred to as the "DuPont" waiver).

MTBE (Methyl tertiary butyl ether). Blends up to 15.0 percent by volume MTBE which must meet the ASTM D4814 specifications. Blenders must take precautions that the blends are not used as base gasolines for other oxygenated blends (commonly referred to as the "Sun" waiver).

Pentanes Plus. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Persian Gulf. The countries that comprise the Persian Gulf are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

Petrochemical Feedstocks. Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are "Naphtha Less Than 401° F" and "Other Oils Equal To or Greater Than 401° F."

Naphtha Less Than 401° F. A naphtha with a boiling range of less than 401° F that is intended for use as a petrochemical feedstock.

Other Oils Equal To or Greater Than 401° F. Oils with a boiling range equal to or greater than 401° F that are intended for use as a petrochemical feedstock.

Petroleum Administration for Defense (PAD) Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts by the Petroleum Administration for Defense in 1950. These districts were originally defined during World War II for purposes of administering oil allocation.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sold as is or further purified by calcining.

Catalyst Coke. In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Pipeline (Petroleum). Crude oil and product pipelines used to transport crude oil and petroleum products respectively, (including interstate, intrastate, and intracompany pipelines) within the 50 States and the District of Columbia.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Processing Gain. The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.

Processing Loss. The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed.

Product Supplied, Crude Oil. Crude oil burned on leases and by pipelines as fuel.

Production Capacity. The maximum amount of product that can be produced from processing facilities.

Products Supplied. Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts when calculated on a PAD District basis), minus stock change, minus crude oil losses, minus refinery inputs, minus exports.

Propane (C_3H_8). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene (C_3H_6). 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 pallative 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 consisting of a mixture of hydrocarbons obtained or derived from petroleum fractions, or through a Fischer-Tropsch type process, in which the straight chained paraffin series predominates. This includes all marketable wax, whether crude or refined, with a congealing point (ASTM D 938) between 100 and 200° F and a maximum oil content (ASTM D 3235) of 50 weight percent. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.**

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.