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Petroleum Supply Monthly

October 1993

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Petroleum Supply Monthly, updated on the 20th of the month

Petroleum Marketing Monthly, updated on the 20th of the month

Winter Fuels Report, updated on Thursdays (Friday in event of a holiday) at 5:00 p.m. (October through March)

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

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

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

Electric Power Monthly, updated on the 1st of the month

Monthly Energy Review, updated the last week of the month

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

Contacts

The *Petroleum Supply Monthly* is prepared by the Petroleum Supply Division of the Office of Oil and Gas, Energy Information Administration, under the direction of Charles C. Heath (202) 586-6860.

Questions and comments concerning the contents of the *Petroleum Supply Monthly* may be referred to Ronald W. O'Neill (202) 586-9884, Chief of the Industry Analysis Branch, or the following specialists:

Summary Statistics	Stephen Patterson	(202) 586-5994
Supply and Disposition	Stephen Patterson	(202) 586-5994
Crude Oil Production	David Hinton	(202) 586-2990
Natural Gas Processing	David Hinton	(202) 586-2990
Refinery Operations	Nancy Masterson	(202) 586-8393
Imports	Claudette Graham	(202) 586-9649
Exports	John Nealey	(202) 586-9670
Stocks	Chris Sanders	(202) 586-8995
Transportation	Chris Sanders	(202) 586-8995
Oxygenate Data	Stephen Patterson	(202) 586-5994

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Preface

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

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

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

Summary Statistics

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

Detailed Statistics

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

Appendices

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

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

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

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Articles

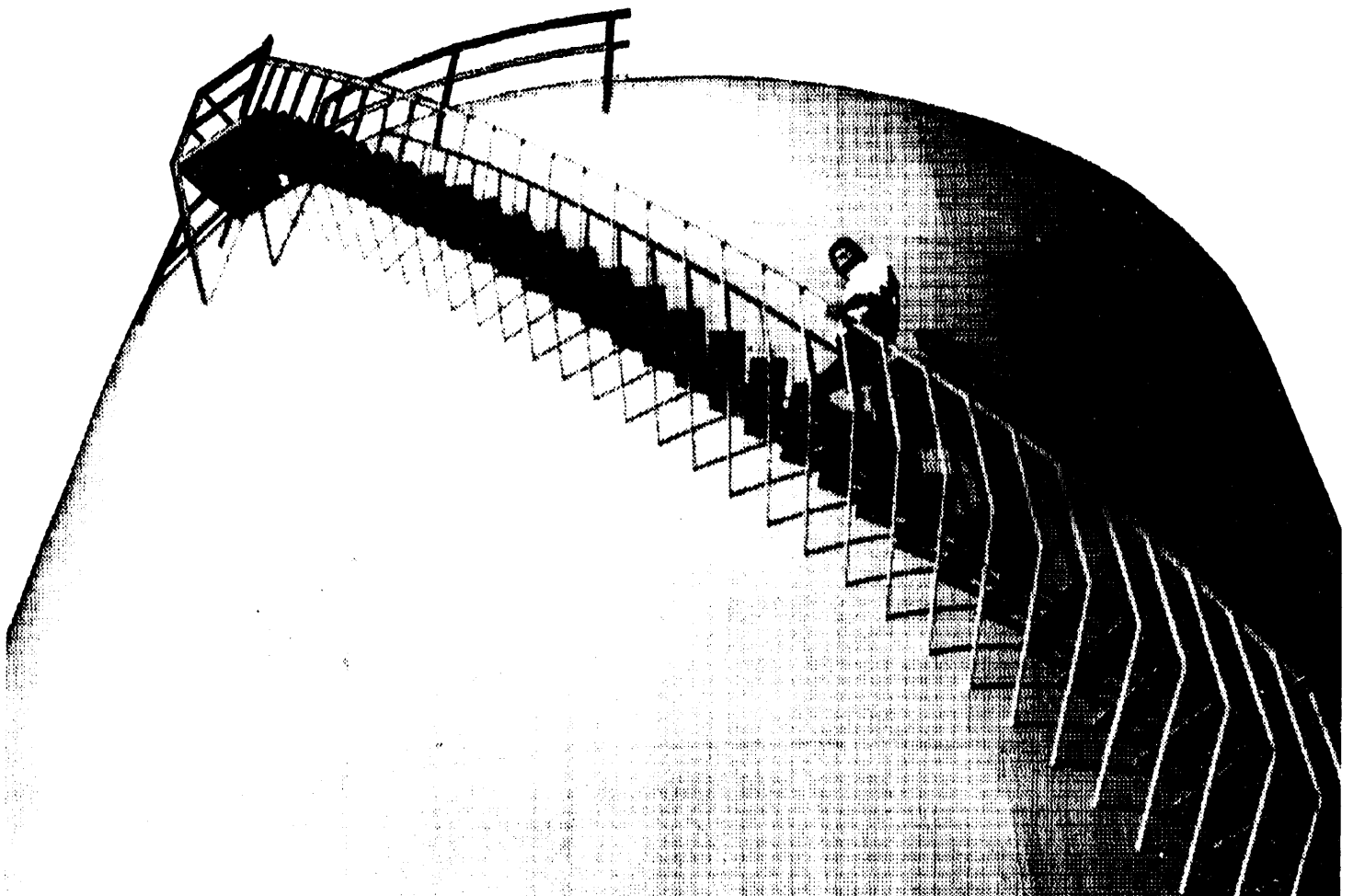
Feature articles on energy-related subjects are frequently included in this publication. The following articles have appeared in previous issues.

Trends in Petroleum Product Consumption	January 1986
Western Countries Lead U.S. Petroleum Import Sources	January 1986
U.S. Petroleum Exports Show Slight Upturn	January 1986
Motor Gasoline Trends	February 1986
Oil Imports from Saudi Arabia	February 1986
Refinery Capacity Trends and Outlook	March 1986
Timeliness and Accuracy of Petroleum Supply Data	April 1986
Midyear Petroleum Review	May 1986
Winter 1986-1987 Distillate Fuel Outlook	July 1986
Recent Trends for Middle Distillates	July 1986
Comparison of Independent Statistics on Petroleum Supply	September 1986
U.S. Petroleum Developments: 1986	November 1986
U.S. Petroleum Imports, 1986 Regional Highlights	December 1986
Leading Petroleum Importers, 1986	December 1986
U.S. Exports of Petroleum Products Reach Record High	December 1986
Trends in Petroleum Product Consumption	February 1987
Refinery Capacity: 1987	March 1987
Motor Gasoline Outlook for Summer 1987	March 1987
Motor Gasoline Trends Through 1986	March 1987
Timeliness and Accuracy of Petroleum Supply Data	April 1987
Midyear Petroleum Review	May 1987
Petroleum Heating Fuels	July 1987
Distillate Fuel Oil Outlook for Winter 1987/1988	July 1987
Petroleum Exports	August 1987
EIA Releases Annual Reserves Summary	August 1987
Comparisons of Independent Statistics on Petroleum Supply	September 1987
The Northeast-Distillate Fuel Oil Supply	November 1987
U.S. Petroleum Developments: 1987	December 1987
U.S. Petroleum Import/Export Trends Through 1987	January 1988
Motor Gasoline Trends Through 1987	February 1988
Distillate Fuel Oil Outlook: Winter 1988/1989	July 1988
Comparison of Independent Statistics on Petroleum Supply	September 1988
U.S. Petroleum Developments: 1988	December 1988
U.S. Petroleum Trade Trends: 1988	January 1989
Timeliness and Accuracy of Petroleum Supply Data	July 1989
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Effects of the Clean Air Act's Highway Diesel Fuel Oil Provisions	June 1991
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Regulation of Underground Petroleum Storage	August 1991
Alternative Transportation Fuels	October 1991
U.S. Petroleum Developments: 1991	February 1992
Comparisons of Independent Statistics on Petroleum Supply	March 1992

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Three Dimensional Seismology-A New Perspective	December 1992
Summer 1993 Motor Gasoline Outlook	April 1993
Comparisons of Independent Statistics on Petroleum Supply	May 1993
Drilling Sideways.....	June 1993
The Economics of the Clean Air Act Amendments of 1990.....	July 1993
Accuracy of Petroleum Supply Data	August 1993

Feature Article



A refinery worker makes his way around a towering storage tank to check the tank level.

Distillate Fuel Oil Outlook for Winter 1993-94

by Irv Chamberlain and Alan Griffith

The outlook for distillate fuel oil next winter is for adequate supply to meet increased demand. Distillate fuel oil stocks are currently above last year's level. Refineries have been operating at very high utilization rates for the first 6 months of 1993 and are expected to continue to do so. Consumption for the winter heating season of October 1993 through March 1994 is projected to be 3.42 million barrels per day, an increase of 4 percent over the last winter. This estimate is taken from the latest available forecast prepared by the Energy Information Administration (EIA). Two colder-weather alternative scenarios also indicate projected demand can be met.

Both residential heating oil and diesel prices are expected to rise (assuming normal winter weather). Heating oil is forecasted to average 94.9 cents per gallon this winter - the same price as winter 1992-93. The implementation of new low sulfur content requirements for on-highway diesel fuel is expected to contribute to a 6.3-percent increase in diesel prices during the upcoming winter, compared with the previous winter. The diesel price is expected to average \$1.22 per gallon for the period. Table FE1 contrasts distillate fuel oil supply and demand factors for the winters of 1990-91 through 1992-93.

Demand Trends

Distillate fuel oil is consumed in four sectors of the economy: industrial, residential and commercial, electric utility, and transportation. It is used primarily for space heating, on- and off-highway diesel engine fuel (including railroad and agricultural machinery), and electric power generation.

Distillate fuel oil demand is primarily a function of weather patterns, changes in the economy, as well as crude oil availability and price. Although the winter of 1993-94 is projected to be about 1.3-percent milder than the comparable period a year ago in the New England and Mid-Atlantic regions, the nation as a whole is projected to experience a 1.3-percent cooler winter, necessitating increased use of heating oil.

Recession and stagnation have slowed growth in the U.S. economy from the last half of 1990 through the first half of 1992. Today, the Nation is continuing the recovery that started in 1992. The Gross Domestic Product (GDP) is expected to grow 2.7 percent in 1993.

Table FE1. Distillate Fuel Oil Demand and Supply Factors, Winters 1990 - 1991 through 1992 - 1993

Factor	History		
	Winter 1990-91	Winter 1991-92	Winter 1992-93
Average Crude Oil Prices (avg. per barrel)	\$24.55	\$17.49	\$17.79
Number of Heating Degree - Days	3,716	3,787	4,016
GDP* Growth Rate (Percent)	-0.10	0.85	2.9
Winter Demand (million barrels per day)	3.03	3.12	3.22
Refinery Production (million barrels per day)	2.89	2.91	3.06
Net Imports (million barrels per day)	-0.06	-0.03	-0.01
Stock Change (million barrels per day)	-0.21	-0.23	-0.17
Stock Levels 9/30-3/31 (million barrels)	136-98	140-98	128-97
Retail Heating Oil Price (avg. per gallon)	\$1.17	\$0.95	\$0.95
Diesel Fuel Oil Price (avg. per gallon)	\$1.30	\$1.11	\$1.11

* GDP = Gross Domestic Product

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

Source: *Short-Term Energy Outlook, Petroleum Supply Monthly/Petroleum Supply Annual, Petroleum Marketing Monthly/Petroleum Marketing Annual.*

Unless otherwise referenced, data in this article are taken from the following: Weekly Petroleum Status Report, DOE/EIA-0208(September 3 (93-36) and predecessor reports); *Petroleum Supply Monthly*, July 1993, DOE/EIA-0109(93/07); *Petroleum Supply Annual 1992*, DOE/EIA-0340, Volumes 1 and 2 and predecessor reports; various issues of the *Petroleum Marketing Monthly*, DOE/EIA-0380; *Short-Term Energy Outlook*, DOE/EIA-0202(93/4Q) and predecessor reports. All data through 1992 are considered final and are not subject to further revision.

The GDP grew 2.6 and 2.9 percent, respectively, in the first two quarters of 1993 from the corresponding quarters in 1992. The projected rates of growth for the third and fourth quarters of 1993 from comparable 1992 quarters are 2.9 and 2.5 percent, respectively. A sharp increase is forecasted for the first quarter of 1994 - 3.3 percent. These growth rates should lead to higher distillate fuel oil consumption in the industrial, transportation and electric utility sectors.

The world oil price (the refiner acquisition cost of imported crude oil) is assumed to average about \$17.60 per barrel, about 3% less than the 1992 average price. The projection for 1994 is near \$17.19 per barrel. As usual, there are unknown factors. The combination of Iraq potentially restoring their pre-war production levels, markedly higher exports from the former Soviet Union, significantly higher world excess production capacity, and a possible level of crude stocks similar to or above that in 1992 could put downward pressure on world oil prices.

Heating-oil demand is concentrated in the eastern part of the country. The New England and Mid-Atlantic States accounted for 70 percent of 1991 residential sector consumption and 52 percent of 1991 commercial sector consumption of distillate fuel oil. Residential sector consumption was about the same as the previous year, while commercial sector demand rose 3 percent in 1991. These two regions accounted for 23 percent of total distillate fuel oil consumption, the same as 1990.

Supply Trends

Distillate fuel oil is supplied to the consuming sectors by domestic refinery production, net imports (imports less exports) and stock withdrawals.

Refinery Production

Weather, domestic and foreign distillate fuel oil demand, crude oil prices, refinery margins and maintenance conditions all have been favorable to the refining industry this year. Distillate fuel oil production for the first half of 1993 was about 3.5 percent higher than 1992. During this period, refinery operating utilization rates were high, ranging between 91 and 97 percent. It appears that these rates could be sustained indefinitely and existing capacity is expected to be available to meet normal anticipated distillate fuel oil demand. Recently, many refiners increased throughput in order to lower the per unit cost of upgrades necessary to meet mandated environmental requirements.

During the 1992-93 heating season, distillate fuel oil production was at a sustained high level. If there is an additional call for distillate fuel oil supplies this winter, refiners should again be in a favorable position to maximize distillate fuel oil production. This is a consequence of the mandatory addition of oxygenates to gasoline again this winter. Oxygenates actually reduce the need to produce blending components for gasoline production through volume replacement. These components

include toluene, reformat and xylenes that are produced in refineries and petrochemical plants. As a consequence, this spare capacity could be used to refine incremental quantities of heating oil if winter demand exceeds current expectations.

Stronger product demand increased refinery throughput and pushed utilization rates higher in 1992. However, operating refining capacity slipped 2 percent last year to average 14.8 million barrels per day. The increase in input coupled with the decline in capacity boosted the operating refinery utilization rate to 91.6 percent. The decrease in capacity may continue as the cost of meeting new environmental regulations could result in further refinery shutdowns.

Imports/Exports

The current distillate fuel oil import/export ratio is similar to the 1991-92 ratio. Exports have averaged 32 percent higher than imports during the first 5 months of 1993. For the comparable periods in 1992 and 1991, exports led imports by 19 and 24 percent, respectively.

However, on an annual basis, the distillate fuel oil import/export ratio has been one of near balance for the past 2 years. Imports averaged 216 thousand barrels per day in 1992. This was the first yearly gain following two declines associated with the economy. Foreign sources accounted for 7 percent of the U.S. demand for distillate fuel oil in 1992, nearly identical to the share in 1991. Combined shipments from Venezuela, the Virgin Islands, and Canada accounted for 93 percent of 1992 imports.

In 1992, exports nearly matched imports as they did in 1991. Countries in the Far East and Central and South America continued to provide a ready market for Petroleum Administration for Defense Districts (PADD) I, III and V distillate fuel oil. Sales of 219 thousand barrels per day to foreign countries were at about the same high level as in 1991. The Far East received 48 percent and countries in Central and South America accounted for 31 percent. Special attention is given to the Asia-Pacific region demand in the first sidebar.

Stocks

Crude stocks provide refiners flexibility to meet demand surges for any product. With utilization rates high in 1993, refiners may have difficulty stepping up throughput to meet unexpected demand surges, even taking into account incremental capacity made available due to oxygenate production. This situation may place additional emphasis on strong distillate fuel oil stock builds.

Refiners began their 1993 distillate fuel oil inventory building season with April stocks 6 million barrels above the observed minimum of April 1992 (92 million barrels). A late winter storm and cold weather in the East resulted in movement of distillate fuel oil stocks from the South Atlantic into the

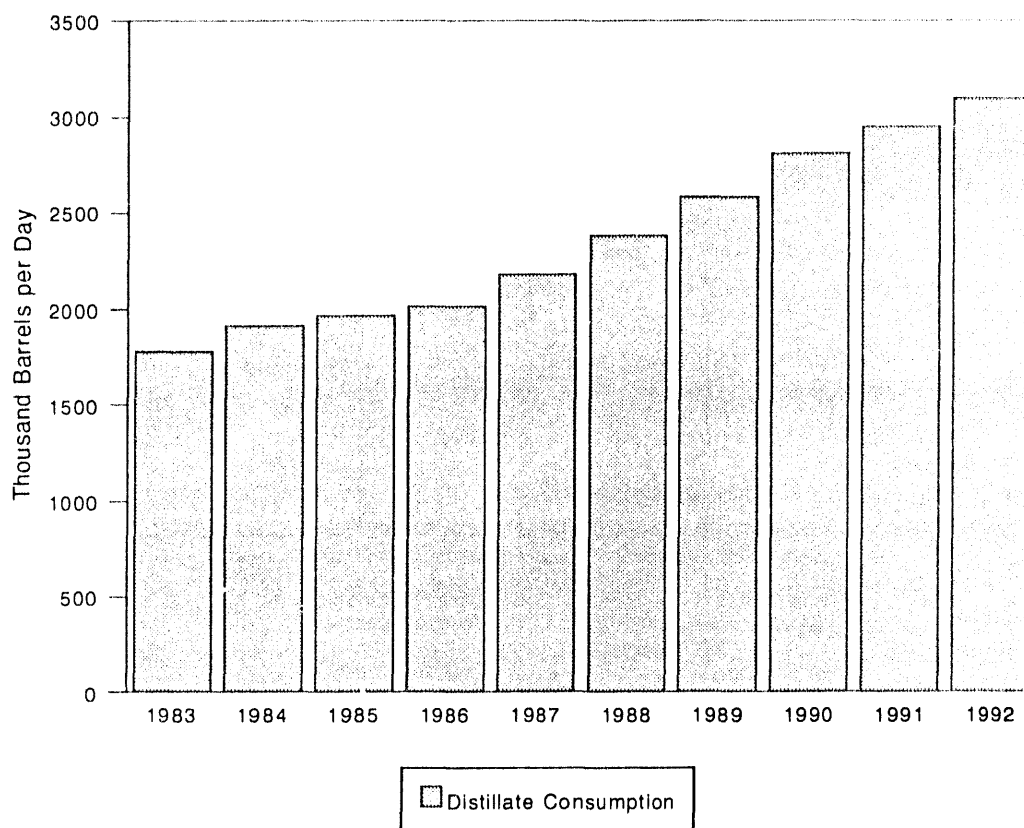
Petroleum Product Demand in the Asia-Pacific Region

U.S. petroleum product exporters have found growing markets in the Asia-Pacific region. The demand for distillate and kerojet fuels has shown strong growth since 1990 and exports to the area have increased due to supply shortfalls. Continued strong petroleum demand growth through the 1990's and supply shortfalls are expected. U.S. exporting regions may feel impacts from this continued strong distillate demand.

The Asia-Pacific countries considered here are Australia, Indonesia, India, Japan, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam. Despite sluggish economic growth worldwide, these countries have grown at 5 to 6 percent on average or about 1.5 times greater than other regions. These countries increased their demand for petroleum products by 6.3 percent in 1992.¹ Figure FE1 portrays distillate fuel oil consumption growth. Diesel fuel demand alone grew by 7.6 percent. Specifically, petroleum product demand grew 28 percent in Vietnam, 21 percent in the Philippines, 20 percent in Korea, and 11 percent in Thailand. Thailand's increases include a 31.7-percent growth in diesel fuel, mostly for industrial use, and a 3-percent growth in fuel oil for generating electricity.²

The demand growth arises from a number of factors. Overall, this is one of the most rapidly industrializing regions of the world. Due to this, the Asia-Pacific region has gained economic independence from large economic centers like the United States and Europe and has not been affected by economic recession in other regions. Different countries provide investment opportunities that stimulate growth and draw investment capital from international sources. The ground and air transportation sectors provide a large proportion of demand growth. Transportation fuels demand is expected to increase from 8 million barrels per day (MMbbl/d) in 1991 to 12 MMbbl/d in 2000. Motor vehicle ownership is expected to grow at an average rate of 4 percent per year.

Figure FE1. Distillate Fuel Consumption in the Asia-Pacific Region 1983 - 1992



Note: 1991 and 1992 are estimated assuming 5% growth in consumption.

Source: Energy Information Administration, *International Energy Annual*, DOE/EIA-0219, (Washington, D.C., various issues).

¹*Oil and Gas Journal*, May 10, 1993.

²*Bloomberg's Oil Buyer's Guide*, June 28, 1993.

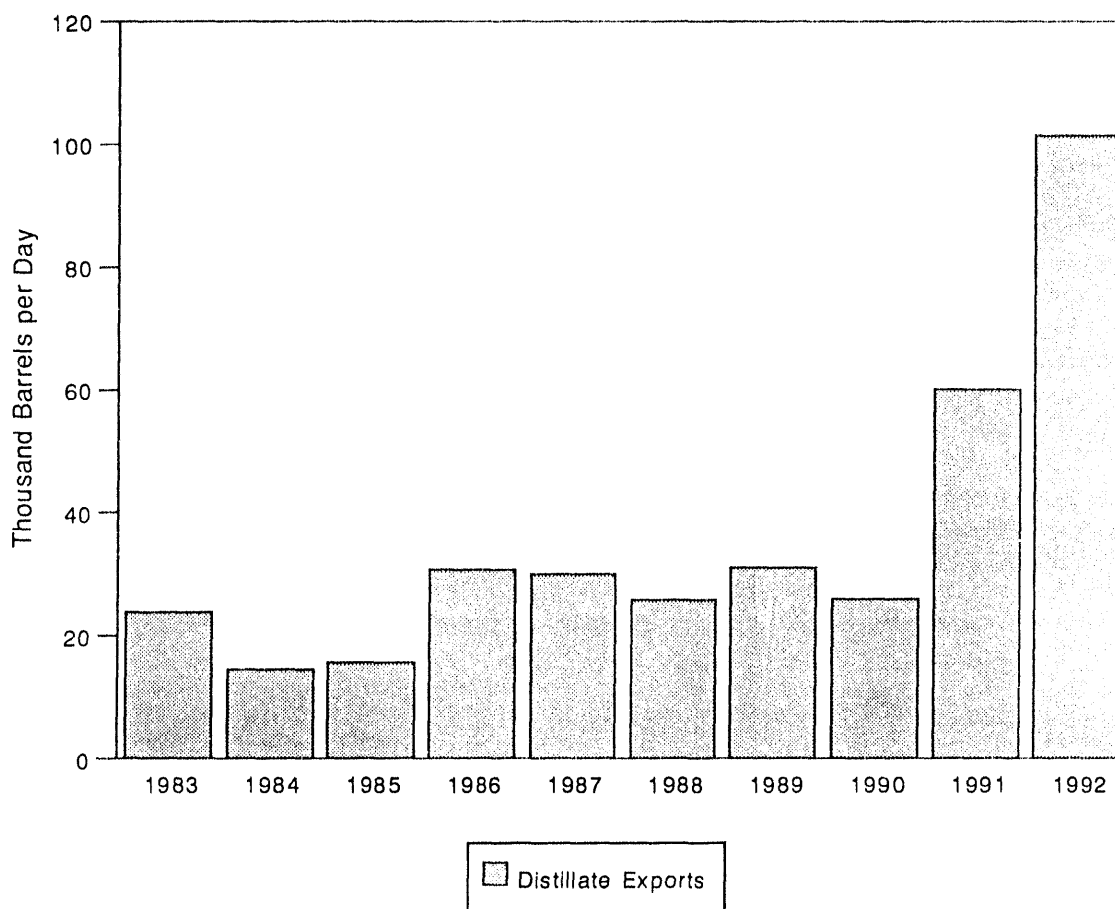
It is expected this level of demand growth may continue in the near future. The region's petroleum product demand was 13.6 MMbbl/d in 1991 and 14.5 MMbbl/d in 1992; estimates are for a demand of 16.4 MMbbl/d by 1995 and 19.1 MMbbl/d in 2000. This is a 6.6-percent yearly demand growth until 1995 and a 3.3-percent demand growth between 1995 and 2000.³

In response to these growing demands, the countries of the Asia-Pacific region have considerable planned refinery capacity expansion. One estimate shows a planned capacity expansion of 6 MMbbl/d in the next 7 years.⁴ Singapore, Japan, and Thailand are constructing additions to current refineries. Thailand, Malaysia, and Indonesia are among the countries with plans for new refinery construction.

In recent years, Asian petroleum suppliers have had greater difficulty supplying their domestic demand for distillates and other petroleum products and the planned supply additions will fall short of meeting projected demand. Supply growth is estimated to trail demand growth by 1 MMbbl/d through 2000.⁵

The U.S. petroleum industry has felt the effects of the Asia-Pacific region's demand shortfall during the last 3 years. Between 1983 and 1990, U.S. distillate exports to this region have ranged from 14.5 thousand barrels per day (Mbbbl/d) to 31.5 Mbbbl/d. In contrast, the yearly average exports of distillates in 1991, 1992, and 1993 to date were 60.2 Mbbbl/d, 101.5 Mbbbl/d, and 75.3 Mbbbl/d, respectively. U.S. exports to the Asia-Pacific region (Figure FE2), account for slightly less than 50 percent of the

Figure FE2. U.S. Exports of Distillate Fuel to Asia-Pacific Region 1983 - 1992



Source: U.S. Bureau of the Census.

³*Oil and Gas Journal*, May 10, 1993.

⁴*Octane Week*, May 31, 1993.

⁵*Octane Week*, May 31, 1993.

region's import increases from 1987 through 1992. Kerojet exports to the Asia-Pacific region have also increased in the last 3 to 4 years.

U.S. exports to the Asia-Pacific region originate in PADDs III and V and thus affect those petroleum product markets. These export levels have contributed to high refinery utilization rates in California and the Gulf Coast. The annual average rates have climbed to 90 percent utilization of operable capacity. During the high distillate export season between August and December 1992, the utilization rate averaged 94 percent in California. These export barrels may also pressure PADD III and V petroleum product markets:

- High distillate demand may compete directly with California diesel and indirectly with East Coast heating oil markets through PADD III exports of distillate fuels.
- Distillate exports may increase the demand for higher distillate yielding crude oils.
- Exports may also come from stocks and affect the inventory cushion available to meet weather related demand increases. In PADD V, production has been steady while exports have increased from 1990 through 1992. The response has been for stocks to generally decrease over the same time period.

In summary, the Asia-Pacific region is one of the highest petroleum product demand growth areas in the world. This is due to high rates of industrialization and transportation sector growth. Consequently, distillate demand grew 7.6 percent in 1992. Regional refinery capacities have not kept pace with demand growth so that imports have increased and are expected to continue to increase. California and PADD III are primary U.S. exporters to this region and continued high exports may affect U.S. markets in the form of high utilization rates, strong stock draws, higher prices, and shifting demand for distillate yielding crude oils.

Mid-Atlantic region of PADD I. This transfer allayed any weather-related supply problems.

For the first 6 months of 1993, distillate fuel oil demand was at a slightly higher level compared with comparable periods over the last 3 years. However, increased production and stable imports placed stock levels higher than a year ago.

As of mid-August 1993, distillate fuel oil stocks were about 120 million barrels which is 6 million barrels above last year's level and within the normal range for this time of year. Inventory building should continue to increase over the next several months in anticipation of the heating season.

Distillate fuel oil stock levels at the beginning of the 1993 heating season are projected to be 128 million barrels, the same level as last year. At the end of March 1994, stocks are forecasted to be 98.6 million barrels. This would be a higher end-of-first-quarter level than levels at the close of each heating season since 1986-87 (Figure FE3).

Price Trends

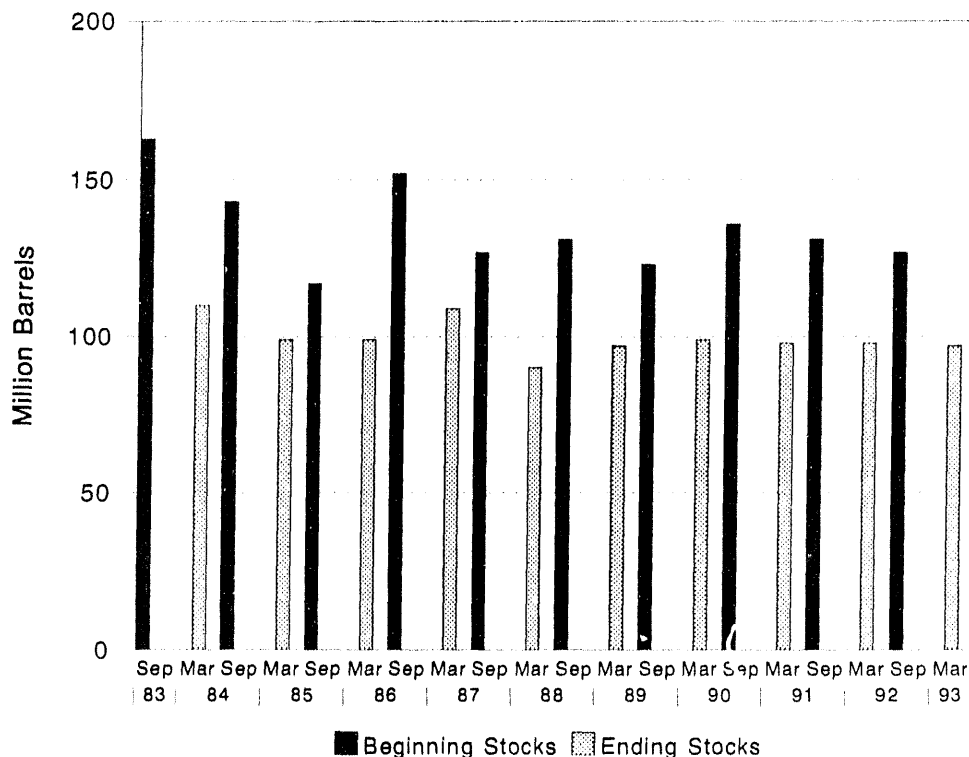
Factors Affecting Heating Oil Prices

Three main factors drive retail heating oil prices during a winter heating season: crude oil prices, normal seasonal weather

patterns, and unexpected cold weather. These factors affect underlying supply and demand fundamentals and therefore, they act as good indicators of heating oil prices. Crude oil prices generally peak in the fourth quarter of the year. This seasonal price peak is because of increased demand for heating fuels due to colder temperatures. Cold weather that drives heating oil demand normally falls between November and February. The combination of seasonally high crude prices and cold weather normally yields a heating oil price peak in December, January, or February. Unexpected crude price increases also can affect heating oil price levels. These relationships can be seen in Figure FE4, which shows the correspondence between monthly average residential heating oil price, wholesale heating oil price, and the Refiner Acquisition Cost of Imported Crude Oil.

Deviations from this normal pattern move the peak or change the normal pattern of prices over the heating season. The shift from normal patterns is typically due to a sudden strong demand that was not accounted for in stocking patterns or refinery production plans. The 1989-90 and 1991-92 seasons are examples of changes from normal. The New York Harbor daily spot price for No. 2 distillate fuel peaked at 115.2 cents per gallon (cpg) on December 27, 1989. The bi-weekly residential heating oil price peaked on January 2, 1990 at 146.5 cpg in PADD IA and at 137.3 cpg in PADD IB. This was due to 60-year record cold temperatures in the last week of December that turned into unseasonably warm weather in January through

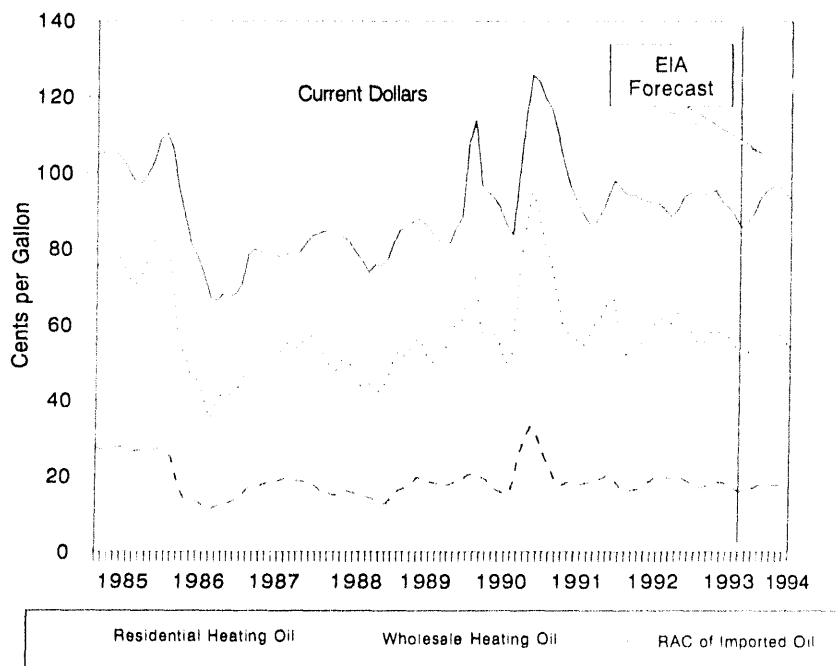
Figure FE3. U.S. Distillate Fuel Oil Stocks, Heating Season 1983 - 1993



Note: Beginning stocks are as of September 30; Ending Stocks are as of March 31.

Source: Energy Information Administration, *Petroleum Supply Monthly*, (May 1993), DOE/EIA-0109 (93/05); *Petroleum Supply Annual 1992*, DOE/EIA-0340 (92), and predecessor publications

Figure FE4. U.S. Residential Heating Oil Prices, U.S. Wholesale Heating Oil Prices, and Refiner Acquisition Cost of Imported Oil



Sources: Residential, Wholesale and Refiner's Acquisition Cost: EIA, *Petroleum Marketing Monthly*.

March 1990. During the 1991-92 season, residential heating oil prices peaked in November 1991 at 98 cpg, then quickly dropped to average 93.9 cpg the rest of the heating season. The early heating oil price peak was due to an early crude price peak and below normal temperatures in November 1991.

Distillate fuel oil prices followed the upward price of crude oil for the first quarter of 1993, starting above year-ago levels. A drop in April 1993 distillate fuel oil demand caused a price drop for that month. Residential heating oil prices were about 1 cent per gallon higher than the first 4 months of 1992, due to stronger demand this year.

Forecast for Winter 1993-94

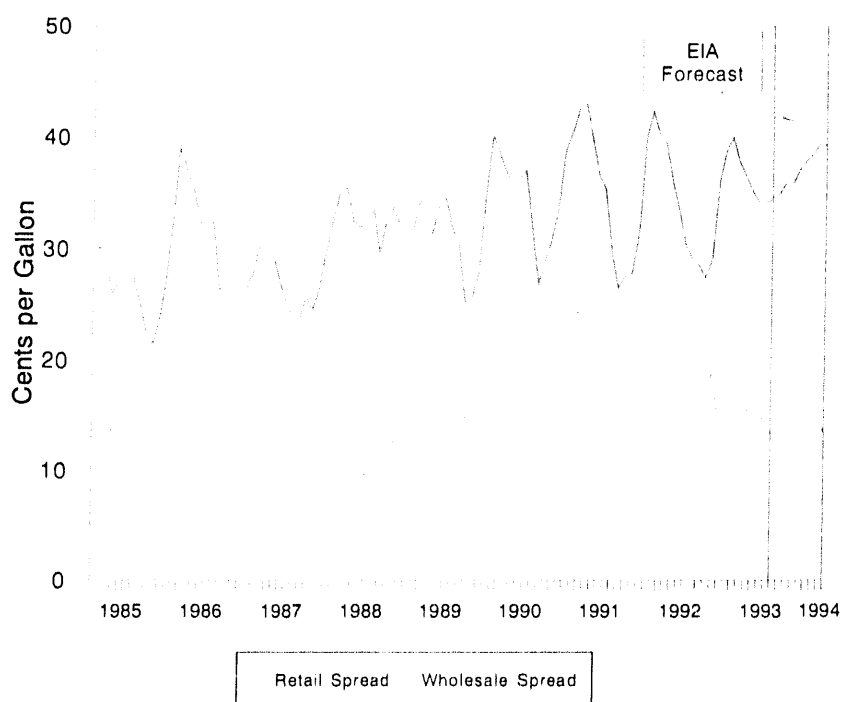
The EIA forecasts a normal price pattern for residential heating oil prices. Residential heating oil prices are expected to average 94.9 cpg this winter, the same average price as winter 1992-93. The forecast shows a price peak of 96.7 cpg in January 1994. This is based upon normal temperature and crude oil price patterns. The EIA assumes normal heating degree day levels and projects an \$16.10 per barrel refiner acquisition cost for crude oil in the third quarter of 1993, \$17.50 per barrel in the fourth quarter of 1993, and \$17.25 per barrel in the first quarter of 1994.

The fourth quarter crude oil price increase and seasonal weather patterns yield this projected retail heating oil price pattern:

- The season starts at 86.9 cpg in August, 1993. This is slightly lower than the August 1992 price of 88.6 cpg and comparable to the August 1991 price of 87.0 cpg.
- Prices rise quickly to the January, 1994 peak of 96.7 cpg. This pattern follows a typical year in which heating oil prices fall to end of summer lows, climb for 3 or 4 months then level off or drop.
- Despite the expected first quarter drop in crude oil prices, heating oil prices fall more slowly than they rose. Prices are maintained due to weather driven demand.
- Prices are projected to hit a low point in June 1994.

Another important price consideration for heating fuel marketers is the price spread between heating fuels and crude oil prices. This provides a simple representation of the profit per gallon or a price mark-up. See Figure FE5 for month average price spreads. Generally, the price spread for all distillate products, both at the wholesale and retail level, increases during the heating season in comparison to the rest of the year because of increased demand. The average heating season retail price spread from 1984 to 1992 was 32.7 cpg. The same average for the non-heating season was 29.7 cpg. The upcoming winter's expected retail price spread is 38.0 cpg or an increase of 2.9 percent over last season. The average wholesale price spread from 1984 to 1992 during the heating season was 14.6 cpg and during the non-heating season was

Figure FE5. Wholesale (U.S. Wholesale Heating Oil less RAC Imported Crude Oil) and Retail (U.S. Residential Heating Oil less U.S. Wholesale Heating Oil) Price Spreads



Sources: Residential, Wholesale and Refiner's Acquisition Cost: EIA, *Petroleum Marketing Monthly*. Calculations using Figure FE4 data.

11.2 cpg. Over the last three heating seasons the average wholesale price spread dropped from 20.2 to 15.9 cpg; this winter's projected wholesale spread is 15.5 cpg.

Low-Sulfur Diesel Fuel and Heating Oil Prices

The Clean Air Act Amendments of 1990 require that all on-highway diesel fuel contain only 0.05-percent sulfur, by weight, as of October 1, 1993. These fuel specification changes, presented in detail in the sidebar "New Low-Sulfur Diesel Fuel Requirements," are expected to cause an increase in the wholesale price spread between heating oil and diesel fuel of about 3 to 4 cpg; therefore, diesel prices are expected to rise 10.0 percent from the previous winter to \$1.22 per gallon due partially to implementation of the new requirements. Other contributors to this increase are federal tax increases and crude price increases. Increased storage and transportation costs to retail marketers are expected to be minimal.

The increased price spread between heating oil and diesel fuel, which derives from a combination of increased production costs and capital costs, is expected to reflect higher production costs of on-highway diesel fuel of 3 to 4 cpg. This is the sum of about 1 cpg increased variable costs and 2 to 3 cpg to recover investment costs. Increased variable costs come from increased reactor temperatures and pressures, increased catalyst breakdown, and the feedstock blending constraints. Capital investments include new desulfurization units, new hydrogen sources, and new tankage for high/low sulfur feedstock separation.

Table FE2. Distillate Stock Outlook for 1993-94 Winter Months
(Million Barrels)

Month	EIA Base Case	Cold Season	Cold Winter
Sep	132.0	132.0	132.0
Oct	133.1	132.0	133.1
Nov	136.5	133.1	136.5
Dec	135.0	128.2	135.0
Jan	127.0	116.2	120.4
Feb	113.0	99.0	101.0
Mar	98.6	82.1	82.2

Source: EIA forecast projections.

Downstream storage availability will determine the effects of fuel segregation on retail prices. There may be minimal cost increases downstream to provide tankage for segregated distillate products. These cost increases are expected to pass through to diesel consumers.⁶

Alternative Scenarios

The mid-price case presented in the latest EIA forecast represents the base case for distillate fuel oil demand, supply and price for the 1993-94 heating season assuming a normal winter. To examine how the petroleum industry may respond to unforeseen events, two scenarios were created which assume colder than normal weather over part or all of the heating season.^{7,8}

The results of the analysis for the scenarios demonstrate that there is considerable flexibility in the supply system for the next two quarters, and that retail markets through March 1994 are reasonably well cushioned in the event of unforeseen cold weather. Tables FE2 and FE3 summarize the values in the two scenarios and show the resulting impact on distillate stocks and retail prices forecasted in the mid-price case. The monthly estimates for retail prices and stocks for all projections are depicted in Figures FE6 and FE7.

Scenario 1: Colder Heating Season (October 1993 through March 1994)

This scenario differs from the forecasted mid-price case by examining the effects of colder than normal temperatures during the fall and winter. This scenario was developed by

Table FE3. Distillate Price Outlook for 1993-94 Winter Months
(Cents)

Month	EIA Base Case	Cold Season	Cold Winter
Sep	89.2	89.2	89.2
Oct	93.1	93.5	93.1
Nov	95.1	96.1	95.1
Dec	96.1	98.6	96.1
Jan	96.7	100.8	102.5
Feb	94.8	99.3	105.7
Mar	93.1	96.7	101.3

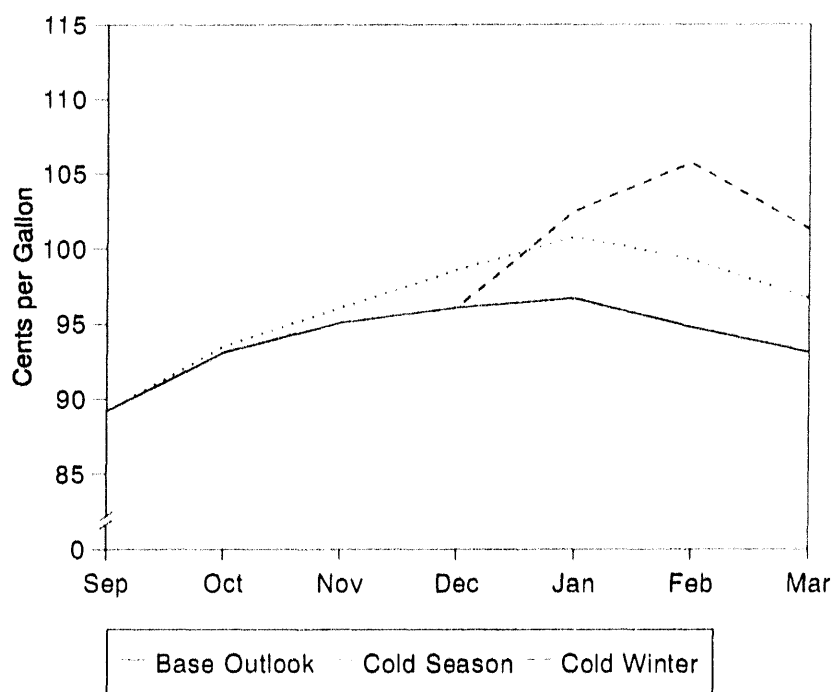
Source: EIA forecast projections.

⁶Federal Register, August 31, 1993 Volume 55 No. 162, "Regulation of Fuels and Fuel Additives: Fuel Quality Regulations for Highway Diesel Fuel Sold in 1993 and Later Calendar Years.

⁷To evaluate the outlook scenarios, a model was used to forecast the retail price and demand (product supplied) of distillate fuel oil. The model uses historical monthly data series covering the January, 1986 through July, 1993 time period and also uses a number of variables forecasted by the Short Term Energy Outlook mid-world oil price case for its projections. The model consists of a two-equation system estimated by ordinary least squares with correction for autocorrelation and a provision for the calculation of end-of-month stock levels.

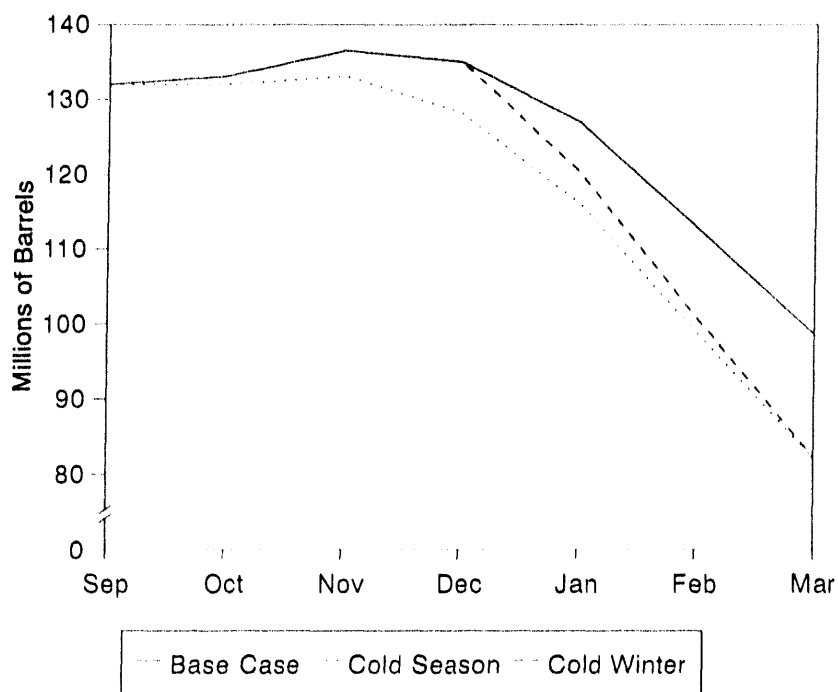
⁸The price equation estimates distillate fuel oil prices using crude oil price, stock level behavior, monthly seasonal dummy variables, and a heating degree-day variable as independent variables; an adjusted R-square of .97 was obtained for the regression in the historical time period. The demand equation estimates product supplied as a function of linear trend, seasonal dummy variables, a business cycle variable, and mean heating degree-days; an adjusted R-square of .88 was obtained using historical data.

Figure FE6. Comparison of Alternative Weather Scenarios on Distillate Price Outlook



Source: Energy Information Administration, estimates derived from regression analysis and EIA estimates.

Figure FE7. Comparison of Alternative Weather Scenarios on Distillate Stock Outlook



Source: Energy Information Administration, estimates derived from regression analysis and EIA estimates.

New Low-Sulfur Diesel Fuel Requirements

This summer, U.S. refiners faced the latest in a series of challenges to reduce air pollution. The Clean Air Act Amendments of 1990 require a maximum sulfur content of 0.05 percent by weight for all on-highway diesel fuel sold after October 1, 1993 - about 80 percent less sulfur than diesel fuel now available. Better vehicle fuel economy and maintenance cost savings may result, including extension of average engine life.

The new standards apply nationwide and are estimated to affect about 46 percent of total U.S. distillate fuel oil demand. Distributors and consumers have voiced concerns because some key refiners may not be able to produce the low sulfur fuel in sufficient quantities by the October 1 deadline. However, Energy Information Administration (EIA) statistics indicate that on-highway diesel fuel stocks have been steadily increasing throughout the country and the outlook for meeting the expected demand is good. About 44 percent of the current output of distillate fuel oil meets the new standard. Over the 7 day period August 28 through September 3, 1993, low-sulfur diesel stocks rose approximately 9 percent to reach 47.6 million barrels, while high-sulfur inventories fell about 1 percent to 79.7 million barrels. These stock trends are developing as expected as refiners prepare for the new, lower sulfur standards.

Producers are expected to make alterations in their process technology to meet these standards. Changes may include:

- increasing reactor severity in existing and new desulfurization units,
- limiting low-sulfur distillate blending operations to low-sulfur streams already existing in the refinery,
- adding desulfurization capacity, and
- segregating low-sulfur and high-sulfur distillate streams.

The California Air Resources Board (CARB) will impose limits on the aromatic hydrocarbon content for their diesel fuel pool, in addition to low sulfur requirements. CARB regulations restrict aromatic hydrocarbon levels to 10 percent by volume. This hydrocarbon level translates to a minimum cetane number of 55. All diesel fuels sold in California must meet these sulfur and aromatics specifications except for railroad and vessel bunkering end uses; this includes on-highway, off-highway, and farm diesel fuel uses.

CARB estimates the demand will be 160 thousand barrels per day (Mbbbl/d). The EIA confirms this level of demand for farm, on-highway, and off-highway diesel fuels. Total sales for these uses in California held 68.9 percent of the market share of distillate fuel sales in the state or 152 Mbbbl/d⁹. The next largest market share for these three uses was 67.9 percent in all of PADD II. (Figure FE8)

Eight refiners have announced they will produce about 160 Mbbbl/d of the new diesel specification product. Projected production volumes are: Chevron (52 Mbbbl/d), Unocal (22 Mbbbl/d), Kern Oil (20 Mbbbl/d), Texaco (20 Mbbbl/d), ARCO (15-20 Mbbbl/d), Tosco (15 Mbbbl/d), Ultramar (15 Mbbbl/d), and Exxon (2-3 Mbbbl/d).¹⁰ (Mobil and Shell have stated that they will not enter this market and hence must export their diesel fuel production.) In addition to product which meets the prescribed specifications, projected new diesel volumes include two additional types of diesel fuel:

Alternative Formula Fuels

- The limiting factor in the production of California diesel fuel is the low aromatics content. From the outset, refiners said they would not be able to produce the low aromatics specification fuels. Consequently, CARB allows certified alternative formulations of diesel fuel. These alternative fuels need not meet the low sulfur/low aromatics specifications, but, must meet the same tailpipe emissions that are produced by the low sulfur/low aromatic diesel fuels.

Variance Fuels

- The CARB developed a regulation variance procedure for those refiners who wished to produce the new diesel fuel but could not meet the deadline due to "extraordinary circumstances." Upon obtaining a company specific variance, a refiner

⁹ *Fuel Oil and Kerosene Sales 1991*, November 1992.

¹⁰ *Bloomberg's Oil Buyer's Guide*, August 23, 1993.

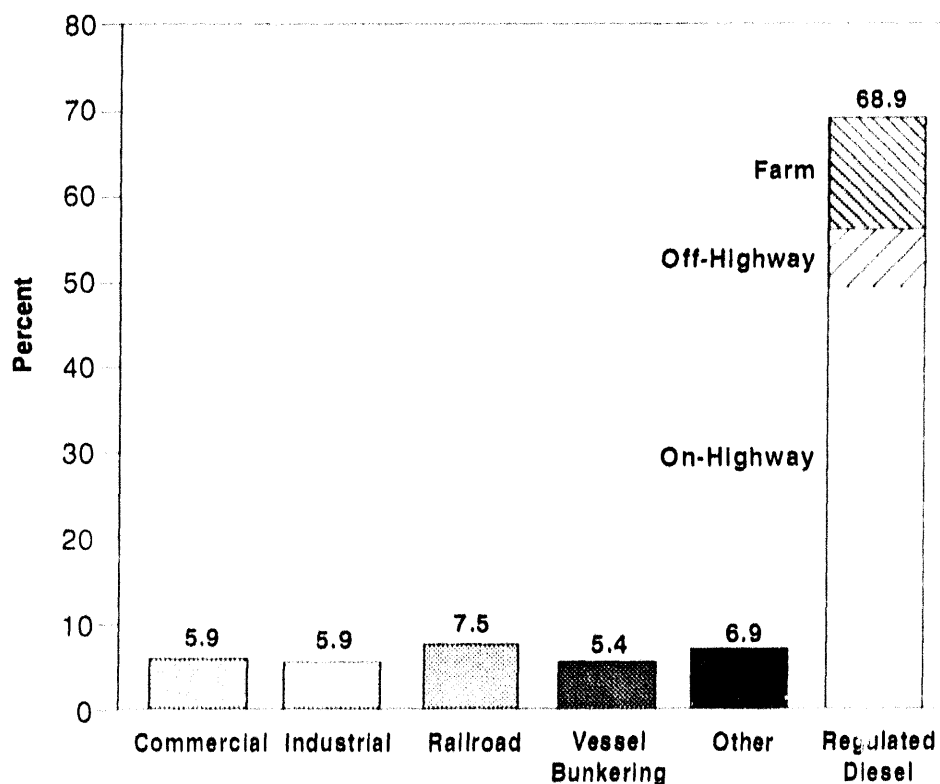
may produce and sell a specific amount of below specification fuel for a specified period of time. The CARB states that most variances will be 6 months to 1 year long. The variance contracts require the refiner to produce the low sulfur/low aromatic diesel or its equivalent, after the period of allowed variance. Variances will cost the refiner 6 cpg the first year of the regulation, 8 cpg the second, and 12 cpg the third. Chevron, Unocal, and Ultramar have been granted variances for unknown percentages of their low-sulfur diesel fuel.

Even with sufficient supplies of the new diesel fuel, high demand for distillate fuels in the Asia-Pacific region could have several effects on California petroleum markets:

- High distillate production may result in extra gasoline production. This could push down gasoline prices.
- PADD V crude demand could shift toward higher distillate yielding crude oils. This might push up crude prices and cut refiner margins.
- Distillate may be pulled out of the diesel market in California, if the Asia-Pacific region prices are conducive. This may place upward price pressure on diesel prices that are expected to be at least 3 to 4 cpg higher than historical levels.
- Inventory drawdowns may provide the export barrels. Historically, inventory drawdowns have tended to precede spot price increases.

Sufficient production of the new, low-sulfur diesel fuels is expected. Even the stricter California requirements should be met with the use of alternative formula fuels and variance fuels. A possible impact on this diesel fuel outlook is the recent high demand for distillates in the Asia-Pacific region.

Figure FE8. End Use of Distillates in California



Note: "Other" category includes Electric Utility, Residential, Oil Company, and Military end-uses.
Source: Form EIA-821, Annual Fuel Oil and Kerosene Sales Reports.

increasing the number of heating degree days for each month in the heating season by 10 percent. Because of the relatively few heating degree days occurring in the first month, it is only in November where stock and price projections begin to differ by any great extent from the base-line case. The scenario estimate would increase the demand for heating fuel by an average of 91 thousand barrels per day over the six month heating season, which results in the retail price rising to peak 4.1 cpg above that in the base case and with end-of-season stocks being 17 million barrels below the base case.

Scenario 2: Colder Winter Season (January 1994 through March 1994)

This scenario differs from the previous scenario by concentrating the cold weather in the months of January through March; the scenario assumes that the 10 percent increase in heating degree days falls into 3 months rather than 6. This projection estimates that the demand for heating oil would increase by about 5 percent during these months over

that in the base case, prices would peak 9 cpg higher during the middle of the cold snap, and that end-of-season stock levels would be about 16 million barrels below those in the base case.

Conclusion

Distillate fuel oil supplies are seen to be sufficient to meet a 4-percent increase in winter demand over that of 1992-93. High utilization rates for all of 1993 are expected to continue into the fourth quarter of this year as well as into the beginning of 1994. Augmented by stable imports and high refinery runs, stock levels are expected to end the heating season higher than at any time since the heating season of 1986-87.

On average over the upcoming winter, residential heating oil and diesel prices are seen to be 94.9 and \$1.22 per gallon, respectively. The heating oil price is the same as the previous winter and the diesel price shows a 10-percent increase over winter 1992-93.

Propane Outlook for Winter 1993-1994

by David Hinton

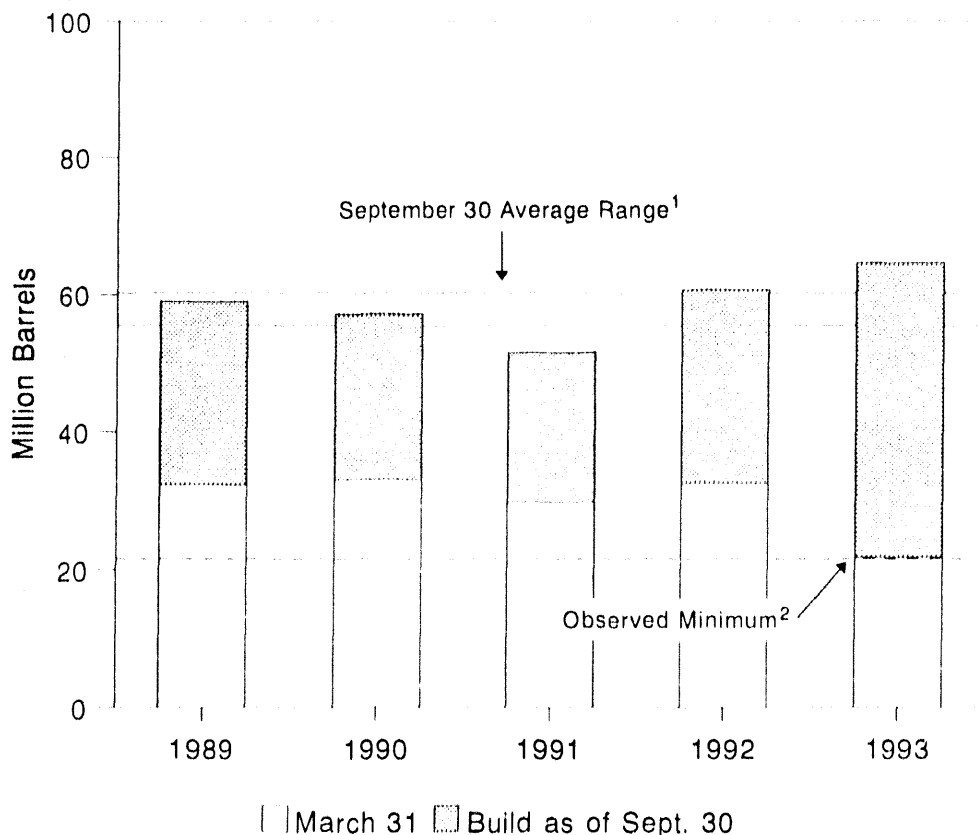
Summary

The outlook for propane supplies in the United States during the 1993-1994 winter heating season (defined as October through March) is optimistic and continues to improve. Despite the extremely low inventory level reached at the end of last winter, domestic propane supplies have recovered well, and primary stock levels reached over 64 million barrels by the end of September 1993 (Figure FE9). The combination of factors causing the severe inventory depletion in the fall of 1992 is unlikely to be repeated, and typical seasonal demand would only lead to season-ending stocks of about 33 million barrels,

about 11 million barrels higher than in spring 1993. Given anticipated supply and demand conditions, average residential prices would be expected to rise about 4 cents per gallon through January, and decline by the end of March.

Even under certain adverse scenarios, U.S. propane supplies appear adequate to serve market needs during the coming winter. Weather is the most likely source of concern, because it affects peak winter demand. Under two different hypothetical severe weather cases (moderately colder all season and severely colder during the peak demand months), domestic inventories were seen to fall to near last season's

Figure FE9. Propane Stocks March 31 and September 30, 1989 - 1993



¹Average level and width of average range based on 3 years of monthly data: January 1990 - December 1992.

²The Observed Minimum for propane stocks is based on final monthly data for the last 36 month period and was 21.8 million barrels, occurring in March 1993.

Sources: Data for 1989 - 1992, Energy Information Administration (EIA), *Petroleum Supply Annual 1989-1992*, DOE/EIA-0340(89-92), Volume 1, Table 2; data for January-July 1993, EIA, *Petroleum Supply Monthly 1993*, DOE/EIA-0109(93/01-09), Table 2; and data for August-September 1993, EIA, Form EIA-807 "Propane Telephone Survey."

ending level, with peak prices at most 4 cents above those in the base case. Potential supply problems are more difficult to model, due to the nearly unlimited possibilities, but the U.S. propane supply system has proven to possess sufficient capacity and diversity to cope with all but the most widespread breakdowns.

One area of potential concern following last winter was inventory levels in Petroleum Administration for Defense (PAD) District II, the Midwestern United States. PAD District II was the hardest hit by last season's supply drawdown, primarily caused by high demand for propane for crop drying. Stocks in the area were rapidly drawn down during fall 1992, reaching record low levels during the late winter, and were slow to recover in the off-season. However, high crop-drying demand is not expected this fall, partly because of extensive flood damage during the summer, and PAD District II stocks reached acceptable levels by the beginning of the peak heating season demand.

This article reviews the major components of propane supply and demand in the United States, and their status entering the 1993-1994 heating season. Other influences on prices are also discussed. Finally, a base case and two adverse scenarios are described for the heating season outlook, focusing on inventory levels and residential prices.

Supply

The three principal sources of propane supply during the winter heating season are domestic production at natural gas processing facilities and at petroleum refineries, withdrawals from inventory, and net imports (imports minus exports) (Table FE-4). Since gas plants and refineries, storage facilities, and import terminals are widely dispersed throughout the United States, propane markets rely on interregional movements of propane, primarily by pipeline, railcar, tanker, and barge.

¹Gas Processors Report, June 14, 1993, Houston, Texas, page 2.

²Pace Petrochemical Service, June 1993, page 118.

Domestic production has traditionally accounted for the largest share of U.S. domestic propane supply, followed by inventory withdrawals and net imports. During the 1992-1993 heating season (October through March), domestic production accounted for 78 percent of the U.S. supply of propane. During this same period, inventory drawdowns accounted for 17 percent of U.S. propane supply, while net imports provided the remaining 5 percent.

For the first 7 months of 1993, the supply of propane from domestic production remained relatively unchanged compared with the same period during 1992. Breaking with past trends, the share of propane from natural gas plants rose slightly while the supply of propane from refiners fell during this same period. The increase in refinery output of propane the past few years was the result of higher crude oil runs at refineries in association with the increase in production of some products such as motor gasoline. Since propane is essentially a byproduct of other refinery operations, higher refinery production of products such as motor gasoline promotes higher production of propane. The modest increase in propane supply from gas processing plants during the first 7 months of 1993, compared with the same period last year, was the result of several factors. First, the 1993 start-up of two new pipelines in PAD District III greatly facilitated the movement of propane to the Gulf Coast region. With the availability of expanded pipeline capacity in the Gulf Coast region, gas plant production was no longer constrained as in prior years.¹ Secondly, gas plants continued to recover large amounts of propane due to high yields and high natural gas throughput,² the latter in response to rising gas prices.

Inventory withdrawals of propane are the second largest source of supply during the heating season. Historically, U.S. propane inventories are built up during the spring and summer months when demand is low, and propane is withdrawn from inventories during the fall and winter months when demand is

Table FE4. Average Propane Supply, Demand, and Price
(Million Barrels per Day Except Where Noted)

Category	Winter 1990-1991	Winter 1991-1992	Winter 1992-1993
Production	0.91	0.94	0.96
Net Imports	0.05	0.06	0.06
Ending Stocks, September and March (Million Barrels)	57.2-29.8	51.6-32.6	60.8-21.8
Product Supplied	1.10	1.10	1.24
Residential Propane Prices (Cents per Gallon)	99.4	89.1	91.8

Note: Averages are calculated using monthly data for the winter heating season months October through March.

Sources: Energy Information Administration, *Petroleum Supply Annual 1992*, DOE/EIA-0340 (92), Volume 2, and predecessor reports, and *Winter Fuels Report*, Week Ending: April 2, 1993, DOE/EIA-0538 (92/93-25), Table 8.

much stronger. Inventory withdrawals during the 1992-1993 heating season supplied a near record 17 percent of total propane supply, the largest share of propane supply since the 1986-1987 heating season. Over the past 5 years, inventory withdrawals have accounted for shares ranging between 9 percent and about 15 percent. Consequently, by the end of the heating season in March 1993, U.S. inventories of propane were drawn down to a 23-year low of 21.8 million barrels.

The smallest component of U.S. supply of propane is net imports. Net imports provide the cushion when consumption rates exceed the rates of available supplies of propane from current domestic production and inventories. During the 1992-1993 heating season, net imports of propane accounted for nearly 5 percent of propane supply. Over the past 5 years, net imports have accounted for shares of total propane supply ranging from 5 percent to 10 percent. Reversing a downward trend of the last 2 years, net imports of propane increased to 58 thousand barrels per day during the first 7 months of 1993, compared with about 42 thousand barrels per day during the same period 1992.

Although Canada traditionally supplies the largest volume of propane to U.S. inventories, Canada's volume of net imports for the first 7 months of 1993 is down about 8 percent from the same period last year. Like the United States, Canada's supply of propane reached record lows last winter; subsequently Canadian stockholders have been busy replenishing local stocks before the onset of winter. As of September 1, 1993, Canadian inventories stood at 5.6 million barrels, nearly 4 percent below the level of specification³ grade propane in inventory this time last year. However, Canadian propane remains an important source for incremental supplies during both stockbuilding periods and for periods of peak demand during the winter heating season.

The remaining source of non-Canadian imports is mostly waterborne supplies from the Persian Gulf, North Africa, and South America. Waterborne net imports of propane to the United States for the first 7 months of 1993 were nearly triple the volume compared with the same period last year. Algeria and Saudi Arabia accounted for most of the increase in waterborne net imports between the first 7 months of 1993 and the same period during 1992. Although waterborne net imports have been relatively low the past few years, U.S. propane prices during 1993 have been high enough to attract international propane.

Demand

Propane demand in the United States derives from several different sectors, primarily residential/commercial (35

percent), petrochemical (43 percent), and agricultural (8 percent). The remainder of propane demand is made up of industrial, gas utility, and other use sectors.⁴ Similar to other energy markets, propane demand is primarily affected by prices, macroeconomic growth, and weather. Moreover, variations exist between both regional and seasonal market sector demand for propane.

The residential and commercial sectors primarily consume propane as a heating and cooking fuel. Because of the predominance of space heating in residential usage, demand in this sector is extremely weather-dependent. Moreover, the concentration of heating demand in the residential sector varies dramatically from region to region. For example, in the Northeast only 17 percent of all residential propane consumers use propane as their main heating fuel. In the South, 63 percent of all residential consumers of propane use it to heat their homes during the winter. In contrast, more than two-thirds of all propane consumers in the Midwest use propane as their main heating fuel, the highest concentration of any region.⁵

Petrochemical industry use of propane comprises the largest sector demand for propane and is mainly concentrated on the Gulf Coast (PAD District III). Propane is used in petrochemical production mainly as a feedstock for ethylene crackers.⁶ Propane competes with other potential feedstocks according to the relative price and yield of both feedstocks and products. Therefore, the petrochemical industry will switch a portion of their feedstock requirements, as well as purchases, to alternative, less costly feedstocks, during the winter months when residential heating demand is strongest.

Agricultural demand for propane is primarily concentrated in the Midwest (PAD District II) and includes diverse uses such as crop drying, weed control, poultry breeding, and heating of farm buildings. Crop drying, the largest component of agricultural demand, is not only seasonal, but can vary greatly from year to year depending on crop size and moisture content. This was most evident last fall when heavy rains caused one of the largest and wettest corn harvests in recent years. Additionally, the corn harvest began later than usual, causing the period of peak agricultural demand to overlap the beginning of the residential heating season.

Prices

Propane prices in the United States, like those for all petroleum products, are influenced by a complex set of domestic and international factors. Chief among these are the prices for crude oil and natural gas, competing heating fuels, and alternative petrochemical feedstocks, as well as the domestic and international propane supply/demand balance. Despite this

³The National Energy Board of Canada classifies propane inventories as either "specification" grade propane (pure propane) or "mix" grade (propane mixed with ethane or butane).

⁴American Petroleum Institute, *Sales of Natural Gas Liquids and Liquefied Refinery Gases, September 1992*, Table 4, pp. 6 and 7.

⁵Energy Information Administration, *Housing Characteristics 1990*, DOE/EIA-0314(90), Tables 19, pp. 60-61.

⁶Ethylene crackers are the primary petrochemical processing units that convert various feedstocks, such as propane, into the intermediate product ethylene.

range of influences, U.S. propane prices have typically been more stable than those for its raw materials and competing products.

The most widely-watched prices for propane in the United States are those for spot market transactions at the major distribution hubs of Mont Belvieu, Texas, and Conway, Kansas. Mont Belvieu is the center for supplies to the Gulf Coast petrochemical industry and the East Coast via pipeline, while Conway provides pipeline shipments to the Midwest and railcar loadings for other areas. Along with the individual price levels at these two points, the differential between them is significant, providing an indication of the supply balance between the Gulf Coast and Mid-Continent areas. In recent years, Mont Belvieu prices have typically averaged several cents higher than those at Conway. However, since PAD District II inventories (including Conway) were severely reduced last winter, Conway prices have remained near or above those at Mont Belvieu, providing a slight incentive for shipments to the Mid-Continent region.

Prices for crude oil and natural gas, the raw materials from which propane is derived, generally moved in opposite directions over the summer of 1993, leading to uncertain cost influences. Crude oil prices slipped over \$3 per barrel from March through September, due to continued oversupply and rekindled uncertainty about Iraq's possible return to world markets. Natural gas prices, by contrast, have gradually risen since early June, primarily due to low pre-season storage levels.

Other significant indicators for U.S. propane markets include prices for propane on international markets and for alternative domestic petrochemical feedstocks. As with other products, a sufficient price differential between the United States and other world markets will have a significant effect on import/export flows. For most of 1993, propane prices in the United States have been several cents above those in European markets, sufficient to maintain average, but not exceptional, U.S. propane imports. The price comparison between propane and other petrochemical feedstocks is more complicated, in that each potential feedstock has not only a different price, but a different ethylene yield and mix of co-products. With crude oil prices currently depressed more than those for propane, gasoil (distillate) becomes a relative bargain compared to propane for petrochemical feedstock purposes.

Outlook Scenarios

Given the recent history and current status of the major supply, demand, and price factors for propane in the United States, the outlook for the winter 1993-1994 heating season appears to be

optimistic and improving. The spring and summer stock build in 1993 overcame, for the most part, the inventory depletion of the previous winter, and high domestic production levels allowed this recovery to be completed in time for the start of the heating season. Average prices are moderate, similar to recent years' pre-season levels, with some differences in regional differentials.

Assuming average weather and crop drying, and no unusual and unforeseen events or conditions, propane supplies should be adequate throughout the entire season. Primary stocks at the national level (Figure FE10) began October at over 64 million barrels, and are projected to experience a gradual drawdown over the season to about 33 million barrels, both above the average of recent years.^{7,8} The ending level would be about 11 million barrels above that reached in the spring of 1993. Residential prices (Figure FE11) would be expected to increase moderately, beginning at an average of 88 cents per gallon at the end of September, rising to 92 cents in January, and falling back to about 87 cents in March. This represents a slightly higher starting point than last winter's, but lower mid- and late-season price levels, based on less drastic inventory depletion than that seen in 1992-1993.

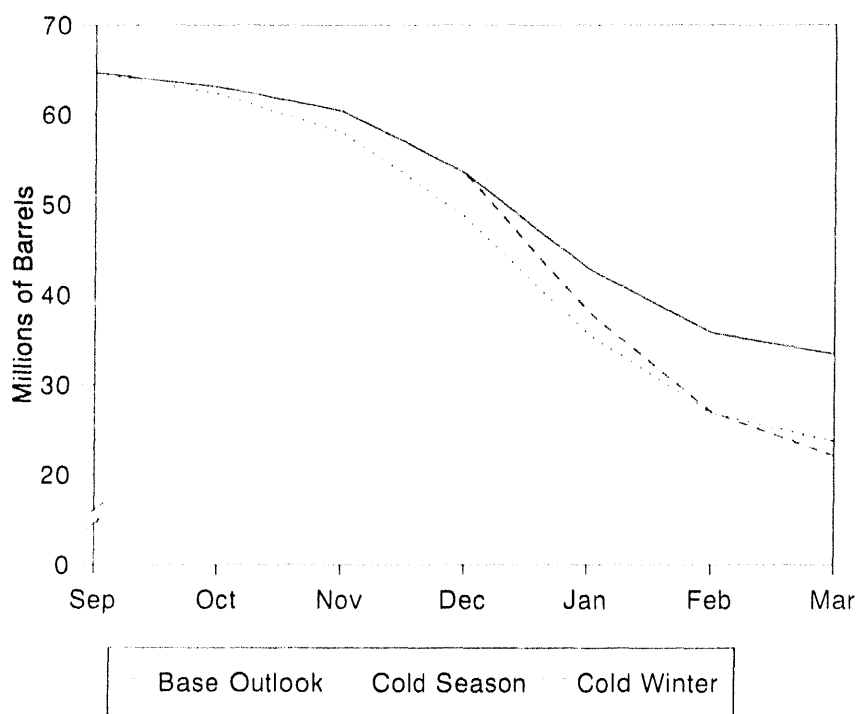
In order to assess the capacity of propane markets to respond to different conditions, various alternate hypothetical scenarios were considered. In evaluating possible alternate scenarios for the heating season, the critical variable is assumed to be weather, as measured by heating degree-days. While other demand or supply factors can have a significant impact, they are more difficult to assess, and generally less pervasive, than extreme and widespread cold weather. Under a scenario of moderately colder weather throughout the Nation and the heating season (10 percent more heating degree-days), the impacts on U.S. propane supplies and prices would be significant, but not critical. Inventory levels would drop at a steadily more rapid pace throughout the season, with primary stocks ending at approximately 24 million barrels, slightly above last season. Residential prices would peak about 3 cents higher in February, at 95 cents, and would only fall back to about 91 cents in March.

However, if the colder weather is concentrated in the peak demand months, rather than spread over the season, market reaction is more dramatic. For example, another potential scenario considers the impact of similarly greater heating demand over the season, but concentrated into the coldest winter months. A 10-percent overall increase in heating degree-days for the season, focused in the months of January through March (amounting to a 17-percent increase for those months), would result in a more drastic stock draw during that

⁷ To evaluate the outlook scenarios, a model was used to forecast the retail price and demand (product supplied) of propane. The model uses historical monthly data series covering the January 1989 through July 1993 time period, and also uses EIA forecasts of imported crude oil price for its projections. The model consists of a two equation system estimated by ordinary least squares with correction for autocorrelation and a provision for the calculation of end-of-month stock levels.

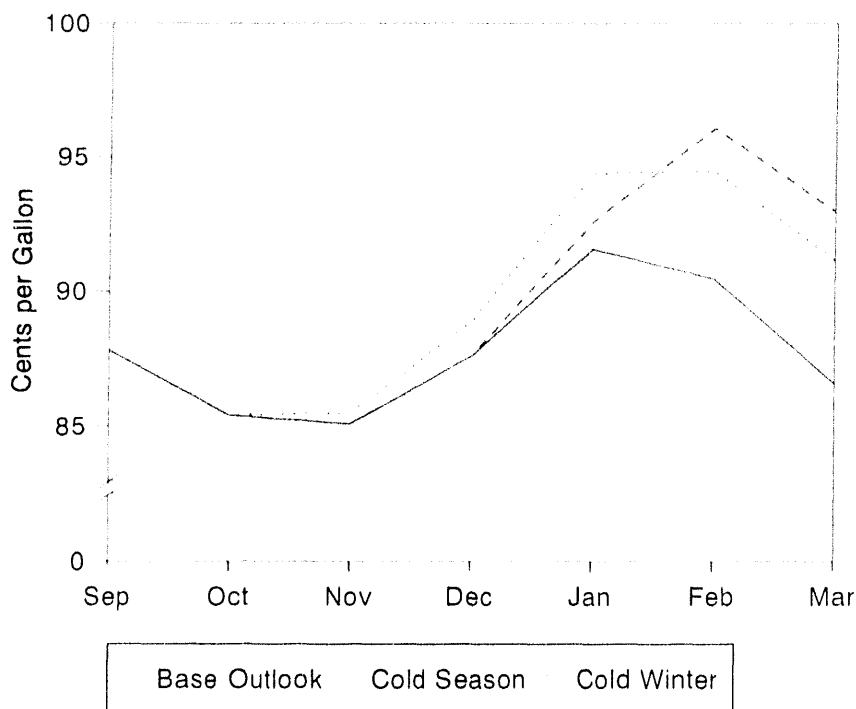
⁸ The price equation estimates the average U.S. residential price of propane using crude oil price, stock level behavior, and a heating degree-day variable as independent variables; an adjusted R-square of .89 was obtained for the regression in the historical time period. The demand equation estimates product supplied as a function of seasonal dummy variables and mean heating degree-days; an adjusted R-square of .94 was obtained using historical data.

Figure FE10. Comparison of Alternative Weather Scenarios on Propane Stock Outlook



Sources: September 1993; Energy Information Administration, Form EIA-807, "Propane Telephone Survey", October - March; Estimates derived from regression model.

Figure FE11. Comparison of Alternative Weather Scenarios on Propane Price Outlook



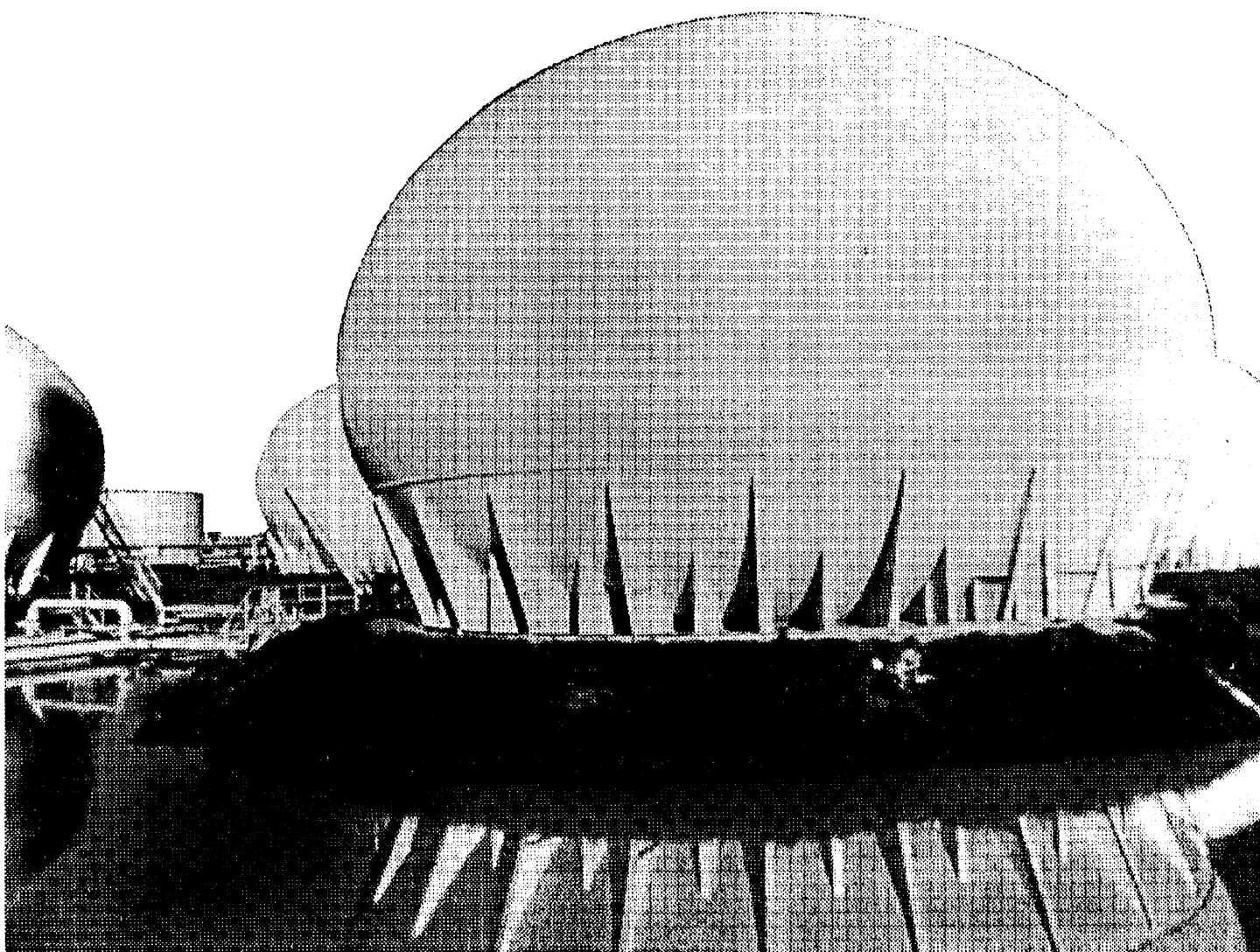
Sources: September 1993; Energy Information Administration, Form EIA-807, "Propane Telephone Survey", October - March; Estimates derived from regression model.

period, culminating in an ending stock level of approximately 22 million barrels, about 2 million barrels less than in the previous case. The price impact of this scenario would likewise be slightly more intense, resulting in a rise to 96 cents in February, and a season-ending price of 93 cents.

In summary, the combination of adequate pre-season inventories, high production levels, and moderate net imports

should provide a sufficient supply cushion to weather foreseeable circumstances over the coming heating season. The confluence of heavy crop-drying demand and cold weather seen last year is not expected to recur, due both to the unusual combination of weather factors involved, and the crop damage already experienced due to flooding over the summer in the Midwest.

Highlights



Spherical tanks are used to store liquefied petroleum gases under pressure.

Highlights

Total demand for petroleum products (measured as product supplied) in August 1993 remained close to the July level at 17.2 million barrels per day. Economic activities continued to expand slowly, as industrial production rose 0.2 percent from July 1993 and increased 4.2 percent over August 1992. Continued heavy rains and flooding in the Midwest and hot temperatures in much of the South and Midwest had limited regional and virtually no national impact on petroleum demand during August 1993.

Net imports of crude oil and petroleum products for the first 8 months of 1993 averaged 7.4 million barrels per day, an increase of 8 percent over the same period for 1992 and the highest from January through August in 3 years. Crude oil accounted for 88-percent of the net imports, and is attributed mainly to attractive world prices and a decrease in domestic production.

Other August 1993 highlights include:

- Motor gasoline production was the highest since August 1978, and demand was at its all-time high, as the average retail price per gallon continued to decline.
- Low-sulfur distillate fuel oil stocks increased in anticipation of the October 1 deadline.
- Residual fuel oil demand remained within normal seasonal levels, although electric utilities relied heavily on fuel oils to meet power needs.

- Propane production was steady, imports were at a record high for August, and stocks were at the high end of the normal range for this time of the year.
- Domestic crude oil production remained low, as world prices remained low and imports increased from January through August, compared with a year earlier. Strategic and other primary stocks were maintained at high levels.
- Low crude oil prices and strong product demand encouraged refiners to run at high levels.

Motor Gasoline

Demand for motor gasoline in August was at its record high of 7.9 million barrels per day. Total production of finished motor gasoline averaged 7.3 million barrels per day, its highest August level since 1978. High refinery production during much of the spring and summer resulted in low retail motor gasoline prices and was a contributing factor to the increase in demand. The average retail price for the month was \$1.16 per gallon, the lowest for August since 1989.

Imports were within the normal range of recent years, but exports fell to their lowest level in 9 months, as supplies were needed to satisfy the growing domestic demand. Finished motor gasoline stocks totaled 165 million barrels, which was within the normal range for this time of year.



Demand for finished motor gasoline increased 1.4 percent in August 1993 to 7.9 million barrels per day, supported by steady imports, record production, and abundant stocks.

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

Category	1993			1992	January—August	
	August	July	Difference ^a	August	1993	1992
Products Supplied	17.2	17.2	(s)	16.9	17.0	16.9
Finished Motor Gasoline	7.9	7.8	0.1	7.4	7.4	7.3
Distillate Fuel Oil	2.8	2.7	0.1	2.7	3.0	2.9
Residual Fuel Oil	0.9	1.1	-0.1	0.9	1.0	1.1
Jet Fuel	1.5	1.5	(s)	1.6	1.5	1.4
Liquefied Petroleum Gases	1.5	1.6	-0.1	1.5	1.6	1.7
Other Petroleum Products ^b	2.6	2.6	(s)	2.8	2.4	2.5
Crude Oil	(s)	(s)	(s)	(s)	(s)	(s)
Crude Oil Inputs	13.8	14.1	-0.3	13.4	13.6	13.4
Operating Utilization Rate (percent)	93.2	96.3	-3.1	91.8	92.5	91.1
Imports	8.4	9.1	-0.8	8.3	8.4	7.8
Crude Oil	6.6	7.3	-0.6	6.5	6.7	6.0
Strategic Petroleum Reserve	0.0	0.0	0.0	(s)	(s)	(s)
Other	6.6	7.3	-0.6	6.4	6.6	6.0
Products	1.7	1.9	-0.1	1.8	1.8	1.8
Finished Motor Gasoline	0.3	0.3	(s)	0.2	0.3	0.3
Distillate Fuel Oil	0.2	0.1	(s)	0.2	0.2	0.2
Residual Fuel Oil	0.4	0.3	(s)	0.3	0.3	0.4
Jet Fuel	0.1	0.1	(s)	0.1	0.1	0.1
Liquefied Petroleum Gases	0.2	0.2	(s)	0.1	0.1	0.1
Other Petroleum Products ^b	0.7	0.9	-0.2	0.7	0.7	0.7
Exports	0.8	1.0	-0.2	0.8	1.0	0.9
Crude Oil	0.1	0.1	(s)	0.1	0.1	0.1
Products	0.8	1.0	-0.2	0.7	0.9	0.8
Total Net Imports	7.5	8.1	-0.6	7.5	7.4	6.9
Stock Change^c	-0.1	0.6	-0.7	(s)	0.3	(s)
Crude Oil	-0.5	(s)	-0.6	-0.1	0.1	(s)
Products	0.4	0.5	-0.2	0.2	0.2	(s)
Total Stocks at End of Period (million barrels)	1,674	1,678	-4	1,621	--	--
Crude Oil	920	936	-16	898	--	--
Strategic Petroleum Reserve	584	583	1	570	--	--
Other	335	352	-17	326	--	--
Products	755	743	12	723	--	--
Finished Motor Gasoline	165	176	-10	167	--	--
Distillate Fuel Oil	128	120	8	123	--	--
Residual Fuel Oil	45	43	2	44	--	--
Jet Fuel	43	46	-3	45	--	--
Liquefied Petroleum Gases	138	123	15	132	--	--
Other Petroleum Products ^b	236	235	1	212	--	--

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

^b 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, and liquefied petroleum gases.

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

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

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

Source: Energy Information Administration, 1992, EIA, *Petroleum Supply Annual*; 1993, *Petroleum Supply Monthly*.

Distillate Fuel Oil

During August 1993, demand for distillate fuel oil increased 5 percent from July to 2.8 million barrels per day, within the normal range of recent years. Continued growth in industrial production, led by strong durable good manufacturing, stimulated transportation demand.

Refinery production of distillate fuel oil averaged 3.1 million barrels per day in August 1993, down slightly from a month earlier but 0.2 million barrels per day above the output in August 1992. Production of low-sulfur distillate fuel oil (0.05 percent sulfur and under) accelerated during August 1993 in anticipation of the October 1 deadline for the requirement for on-highway use of these high-quality fuels. The new diesel standard is nationwide and will affect nearly one-half of the total demand for distillate fuel oil. Production of low-sulfur distillate in August averaged 1.1 million barrels per day, one-third of total distillate fuel oil production.

Stocks of distillate fuel oil totaled 128 million barrels, a slight increase over the July 1993 inventories and higher than those a year earlier. End-of-August stocks of low-sulfur distillate fuel oil totaled 45 million barrels.

Residual Fuel Oil

Demand for residual fuel oil remained within the normal range for this time of year. With continued hot temperatures in much of the country and rising natural gas prices, many electric utilities relied on residual fuel oil to meet incremental power needs. Electric power output in August remained close to the July level, but was much higher than in August 1992. None the less, demand for residual fuel oil averaged 0.9 million barrels per day, close to the August 1992 level.

Residual fuel oil imports averaged 344 million barrels per day for the first 8 months of 1993, down slightly from a year earlier, but nearly one-half the rate of imports during the comparable period 4 years earlier.

Propane

Stocks of propane at the end of August 1993 totaled 58 million barrels, which was at the high end of the normal range for this time of the year. Regional stocks were fairly high as well, totaling 21 million barrels in Petroleum Administration for Defense (PAD) District II (Midwest) and 31 million barrels in PAD District III (Gulf Coast). The high inventory levels were due to a 36-million-barrel stock buildup since the end of March 1993.

Propane stocks had been slightly higher at the end of August 1992. A high autumn demand level followed because of crop drying

needs to process a record corn harvest and resulted in strained winter propane supplies. Because of the summer 1993 Midwestern heavy rains and flooding, a repeat of the high corn production is unlikely. With the high end-of-August 1993 stock level, propane supplies for the upcoming winter appear adequate to meet demand, even under adverse conditions.

Imports of propane increased to 0.12 million barrels per day during August 1993, the highest volume this year and a record level for August.

Crude Oil

Domestic crude oil production increased slightly to 6.7 million barrels per day. The increase was due to higher Alaskan crude oil output, which rose to 1.5 million barrels per day from a low July level. Production in Alaska was hampered significantly in July because of field maintenance and warm temperatures, which affected the operations of field gas-fired turbines. Output from Alaska's Point McIntyre field, readied for production in July, was delayed through August because of royalty and unit boundary disputes.

Crude oil production in the Lower-48 States has been falling this year, as evidenced by a 5-percent decline from fields in Texas during the first 8 months of 1993. West Coast tankering operations began moving crude oil from California's Point Arguello field to nearby petroleum refineries, but California's total production fell slightly from the July level.

Imports of crude oil averaged 6.7 million barrels per day from January through August 1993, nearly 11 percent higher than for the comparable period a year earlier. This was the largest volume since the first 8 months of 1977. Nearly 61 percent of the foreign crude oil came from producing fields in Saudi Arabia, Venezuela, Canada, and Mexico.

Crude oil stocks totaled 920 million barrels, within the normal range for this time of the year. End-of-August stocks in the Strategic Petroleum Reserve totaled 584 million barrels, the highest level since January 1991.

Refinery Utilization

Low crude oil prices and strong product demand, prompted refineries to continue running at high levels. Gross inputs to atmospheric crude oil distillation units averaged 14.0 million barrels per day, well above the normal seasonal level. The operating utilization rate fell slightly to 93.2 percent; the operable utilization rate, which reflects refining capacity if all idle capacity is included, fell to 92.7 percent (Table H2).

Table H2. U.S. Refinery Inputs, Capacities and Utilization Rates: 1992-1993
(Thousand Barrels per Day, Except Where Noted)

Item	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1992												
Gross Refinery Inputs	13,097	12,742	13,292	13,356	13,650	14,285	14,176	13,649	13,886	13,651	13,795	13,400
Operating Refinery Capacity ¹	14,965	14,940	14,893	14,958	14,873	14,808	14,808	14,861	14,809	14,844	14,728	14,691
Idle Capacity ²	731	731	725	669	618	650	623	460	499	443	576	619
Idle Three Months or Less	290	268	292	199	149	56	53	15	57	15	133	191
Idle More than Three Months	441	463	433	470	469	594	570	445	442	428	443	428
Operable Refinery Capacity	15,696	15,671	15,618	15,626	15,490	15,458	15,432	15,332	15,308	15,287	15,304	15,311
Utilization Rate (percent)												
Operating Capacity	87.5	85.3	89.2	89.3	93.1	96.5	95.7	91.8	93.8	92.0	93.7	91.2
Operable Capacity	83.4	81.3	85.1	85.5	89.4	92.4	91.9	89.1	90.7	89.3	90.1	87.5
1993												
Gross Refinery Inputs	13,176	13,161	13,535	13,773	13,957	14,457	14,500	14,034	NA	NA	NA	NA
Operating Refinery Capacity ¹	14,784	14,819	14,908	14,985	14,931	15,005	15,058	15,057	NA	NA	NA	NA
Idle Capacity ²	360	320	239	158	225	176	155	81	NA	NA	NA	NA
Idle Three Months or Less	273	190	131	36	97	80	59	15	NA	NA	NA	NA
Idle More than Three Months	87	130	108	122	128	96	96	66	NA	NA	NA	NA
Operable Refinery Capacity	15,143	15,140	15,148	15,144	15,156	15,181	15,213	15,138	NA	NA	NA	NA
Utilization Rate (percent)												
Operating Capacity	89.1	88.8	90.8	91.9	93.5	96.3	96.3	93.2	NA	NA	NA	NA
Operable Capacity	87.0	86.9	89.4	91.0	92.1	95.2	95.3	92.7	NA	NA	NA	NA

¹ Operating capacity equals the operable capacity less the total idle capacity.

² Idle capacity is the component of operable capacity that is not in operation and not under active repair, but is capable of being placed in operation within 30 days; and capacity not in operation but is under active repair that can be completed within 90 days.

NA = Not Available.

Sources: Energy Information Administration, *Petroleum Supply Monthly*, 1993 data issue, Table 28; *Petroleum Supply Annual*, Volume 2, 1992, Table 16; Form EIA-810, "Monthly Refinery Report."

Finished Motor Gasoline Product Supplied Adjustment

Beginning with the reporting of January 1993 data, the Energy Information Administration (EIA) has made adjustments 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. Each of these adjustments is discussed in detail following Table H3.

As a result of the changes, any comparisons of 1993 motor gasoline data to historical series must recognize the adjustments made in 1993. To assist in this comparison, the EIA has prepared a table of 1992 finished motor gasoline product supplied on the 1993 basis (Table H3 below) showing the published numbers by month, the adjustments, and the 1993 product supplied basis number. When making a comparison of 1993 to 1992 finished motor gasoline product supplied, it is important to use the 1993 basis numbers. For example, from Table H3 the January 1993 product supplied number of 6,746 should be compared to 6,929, not the original 6,869. The year 1992 is the only historical year for which data are available to do a comparison on the 1993 basis.

**Table H3. Finished Motor Gasoline Product Supplied Adjustment, 1992 and 1993
(Thousand Barrels per Day)**

Year/Month	Product Supplied 1992 Basis	Fuel Ethanol Adjustment	Motor Gasoline Blending Component Adjustment	Product Supplied 1993 Basis	Difference
1992:					
January	6,869	68	-8	6,929	60
February	6,963	68	-8	7,025	62
March	7,137	62	59	7,258	121
April	7,238	68	49	7,355	117
May	7,328	55	36	7,419	91
June	7,460	64	11	7,535	75
July	7,639	52	75	7,766	127
August	7,380	66	91	7,537	157
September	7,344	54	43	7,441	97
October	7,338	76	-14	7,400	62
November	7,102	91	68	7,261	159
December	7,396	100	66	7,562	166
Average	7,266	69	39	7,376	108
1993:					
January .....	.....	60	25	6,746	.....
February .....	.....	67	2	7,129	.....
March .....	.....	70	42	7,397	.....
April .....	.....	62	45	7,401	.....
May .....	.....	57	53	7,531	.....
June .....	.....	63	58	7,692	.....
July .....	.....	62	52	7,777	.....
August .....	.....	47	124	7,885	.....

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

Source: • Fuel Ethanol Adjustment - 1992, Energy Information Administration (EIA), *Petroleum Supply Monthly*, January, 1993, Appendix D, EIA-819M, "Monthly Oxygenate Telephone Report," 1993, EIA, *Petroleum Supply Monthly*. • Motor Gasoline Blending Component Adjustment - 1992, EIA, *Petroleum Supply Annual*, Volumes I and II, 1993, EIA, *Petroleum Supply Monthly*.

Revised 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 Energy Information Administration's (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 is calculated. This estimate is 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 is 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.

Due to interpretation problems encountered by survey respondents with the definition of "oxygenated" motor gasoline, the definition of oxygenated motor gasoline has been simplified. The new definition was developed with the cooperation and approval of the Environment Protection Agency (EPA) and petroleum industry organizations. It is based on the specification that oxygenated gasoline includes all motor gasoline that has 1.8 percent or more oxygen content, by weight. By definition, all gasohol falls into this category. Therefore, the adjustment that was made to January through April 1993 data to determine how much of the gasohol is used as "oxygenated" gasoline in the EPA carbon monoxide (CO) non-attainment areas specified by the Clean Air Act Amendments of 1990, and how much is used as "other" gasoline is no longer valid and has been discontinued. Revisions to January through April data will be published in the 1993 *Petroleum Supply Annual*. Gasohol will be classified entirely as "oxygenated" motor gasoline for the remainder of 1993.

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 "other gasoline" in Tables 2 through 5.

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 is correcting this series by including the quantity of "product supplied" for motor gasoline blending components with "other" finished motor gasoline. This change is 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."

The blending components adjustment shown in Table H3 is product supplied for blending components published in the 1992 issue of the *Petroleum Supply Annual*.

Fuel Ethanol Stock Adjustment

As discussed previously, downstream fuel ethanol motor gasoline blenders do not report on the Petroleum Supply Reporting System (PSRS). As a result, total end-of-month stocks of fuel ethanol have been underreported in the PSRS. 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.

Distillate Fuel Oil Export and Product Supplied Revisions

Distillate fuel oil exports were understated for the period of January through May 1993. A processing error resulted in information for selected distillate products not being included in published data. This understatement of distillate fuel oil exports resulted in an overstatement of distillate fuel oil product supplied. Table H4 presents revised export and product supplied data by PAD District for January through May 1993. These revisions are also reflected in the Summary Statistics Table S5.

Table H4. Distillate Fuel Oil Export and Product Supplied Revisions, January through May 1993
(Thousand Barrels per Day)

Months	PAD District					U.S.
	I	II	III	IV	V	
January						
Exports	1	(s)	202	0	83	287
Product Supplied	1,425	828	436	102	349	3,141
February						
Exports	1	3	134	0	164	301
Product Supplied	1,756	883	469	108	263	3,478
March						
Exports	3	(s)	62	(s)	89	154
Product Supplied	1,516	890	498	115	367	3,386
April						
Exports	(s)	1	123	0	117	241
Product Supplied	1,108	924	446	133	337	2,949
May						
Exports	21	1	165	0	168	355
Product Supplied	769	949	495	125	286	2,624

(s) = Less than 500 barrels per day.

Source: Monthly Petroleum Supply Reporting System.

Summary Statistics



Incinerators such as this one at a chemical installation turn toxic chemicals into water vapor and other harmless elements.

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

Year/Month	Field Production			Stock Change ^a		Petroleum Products Supplied	Ending Stocks ^b (Million Barrels)
	Total Domestic ^c	Crude Oil	Natural Gas Plant Liquids	Crude Oil ^d	Petroleum Products		Crude Oil ^d and Petroleum Products
1981 Average	10,230	8,572	1,609	^g 290	^g -130	16,058	1,484
1982 Average	10,252	8,649	1,550	136	-283	15,296	^g 1,430
1983 Average	10,299	8,688	1,559	^g 214	^g -234	15,231	1,454
1984 Average	10,554	8,879	1,630	199	81	15,726	1,556
1985 Average	10,636	8,971	1,609	50	-153	15,726	1,519
1986 Average	10,289	8,680	1,551	78	124	16,281	1,593
1987 Average	10,008	8,349	1,595	128	-87	16,665	1,607
1988 Average	9,818	8,140	1,625	1	-29	17,283	1,597
1989 Average	9,219	7,613	1,546	86	-129	17,325	1,581
1990 Average	8,994	7,355	1,559	-35	142	16,988	1,621
1991 January	9,255	7,500	1,647	-71	-1,027	16,893	1,587
February	9,424	7,637	1,695	231	-704	16,339	1,573
March	9,301	7,546	1,683	-239	-268	16,212	1,558
April	9,262	7,509	1,665	50	628	16,139	1,578
May	9,157	7,409	1,657	566	988	16,189	1,626
June	9,032	7,320	1,627	-299	546	16,878	1,634
July	9,056	7,347	1,622	-153	199	16,971	1,635
August	9,027	7,316	1,627	103	316	17,183	1,648
September	9,088	7,368	1,623	-156	653	16,848	1,663
October	9,212	7,437	1,686	51	-659	16,996	1,644
November	9,129	7,328	1,697	43	62	16,730	1,647
December	9,189	7,299	1,686	-611	-365	17,145	1,617
Average	9,168	7,417	1,659	-42	32	16,714	..
1992 January	9,176	7,361	1,688	540	-757	17,012	1,610
February	9,175	7,389	1,696	171	-951	16,893	1,588
March	9,123	7,348	1,694	-250	-291	16,825	1,571
April	9,072	7,293	1,693	315	92	16,764	1,583
May	8,949	7,169	1,695	-144	770	16,485	1,602
June	8,968	7,167	1,701	-581	604	16,978	1,603
July	8,961	7,131	1,683	244	290	17,143	1,620
August	8,678	6,922	1,638	-124	161	16,929	1,621
September	8,843	7,030	1,660	-160	653	16,876	1,636
October	9,025	7,126	1,722	411	-258	17,448	1,640
November	8,975	7,024	1,754	-227	77	17,091	1,636
December	9,019	7,103	1,744	-212	-1,203	17,928	^g 1,592
Average	8,996	7,171	1,697	-1	-68	17,033	..
1993 January	^E 9,257	^E 7,008	1,728	264	^g 370	16,320	^g 1,611
February	^E 8,948	^E 6,957	1,761	219	-799	17,397	1,595
March	^E 9,009	^E 6,976	1,799	246	-619	17,688	1,584
April	^E 8,904	^E 6,897	1,790	537	388	16,673	1,611
May	^E 8,775	^E 6,833	1,719	133	897	16,340	1,643
June	^E 8,697	^E 6,756	1,738	-15	586	17,032	1,660
July	^E 8,599	^E 6,654	1,723	41	542	17,208	1,678
August	^{RE} 8,691	^{RE} 6,732	1,732	^R -524	^R 386	^R 17,176	^R 1,674
September	^E 8,615	^{PE} 6,673	^E 1,735	^E -373	^E 230	^E 17,320	^E 1,661
9-Mo. Average	^E 8,832	^{PE} 6,831	^E 1,747	^E 57	^E 229	^E 17,013	..
1992 9-Mo. Average	8,993	7,200	1,683	1	67	16,878	..
1991 9-Mo. Average	9,176	7,437	1,649	3	152	16,631	..

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

^b Stocks are totals as of end of period.

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

^d Includes stocks located in the Strategic Petroleum Reserve.

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

^f Net Imports equal Imports minus Exports.

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

Footnotes continued on following page

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

Year/Month	Imports			Exports			Net Imports ¹
	Total	Crude Oil ²	Petroleum Products	Total	Crude Oil	Petroleum Products	
1981 Average	5,998	4,396	1,599	595	228	367	5,401
1982 Average	5,113	3,488	1,625	815	238	579	4,298
1983 Average	5,051	3,329	1,722	739	164	575	4,312
1984 Average	5,437	3,426	2,011	722	181	541	4,715
1985 Average	5,067	3,201	1,866	781	204	577	4,288
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 January	7,103	5,296	1,808	1,199	50	1,149	5,904
February	6,865	5,485	1,380	1,441	152	1,288	5,424
March	6,646	5,166	1,480	944	137	807	5,702
April	7,418	5,529	1,888	737	162	575	6,680
May	8,518	6,363	2,155	1,149	165	984	7,369
June	8,245	6,334	1,911	921	78	843	7,323
July	7,755	5,955	1,801	963	139	824	6,793
August	8,670	6,645	2,025	837	55	783	7,832
September	7,826	5,812	2,015	785	109	676	7,042
October	7,467	5,683	1,784	918	92	826	6,550
November	7,615	5,528	2,087	926	126	800	6,690
December	7,337	5,565	1,772	1,213	133	1,081	6,124
Average	7,627	5,782	1,844	1,001	116	885	6,626
1992 January	7,712	5,956	1,756	1,144	118	1,026	6,568
February	6,827	5,079	1,748	852	22	829	5,975
March	7,068	5,321	1,747	912	105	807	6,156
April	8,092	6,127	1,966	937	23	914	7,155
May	7,823	6,060	1,763	885	106	779	6,939
June	7,946	6,171	1,775	957	107	850	6,989
July	8,479	6,796	1,683	929	53	876	7,550
August	8,260	6,457	1,803	789	133	657	7,470
September	8,178	6,218	1,960	848	68	780	7,330
October	8,505	6,696	1,810	902	106	796	7,603
November	7,872	6,121	1,751	995	111	885	6,877
December	7,839	5,937	1,901	1,237	107	1,130	6,602
Average	7,888	6,083	1,805	950	89	861	6,938
1993 January	7,964	6,292	1,672	1,135	129	1,006	6,830
February	7,930	6,156	1,775	1,033	166	867	6,897
March	8,342	6,513	1,829	970	139	831	7,373
April	8,485	6,698	1,787	1,067	73	994	7,416
May	8,348	6,549	1,799	1,082	112	970	7,266
June	8,745	7,175	1,569	899	150	750	7,845
July	9,145	7,262	1,883	1,013	62	950	8,132
August	R 8,360	R 6,614	R 1,746	R 823	R 55	R 768	R 7,537
September*	E 7,998	E 6,309	E 1,689	E 877	E 107	E 770	E 7,121
9-Mo. Average	E 8,373	E 6,623	E 1,750	E 989	E 110	E 879	E 7,384
1992 9-Mo. Average	7,825	6,026	1,799	917	82	835	6,908
1991 9-Mo. Average	7,679	5,846	1,833	995	116	879	6,684

Footnotes continued.

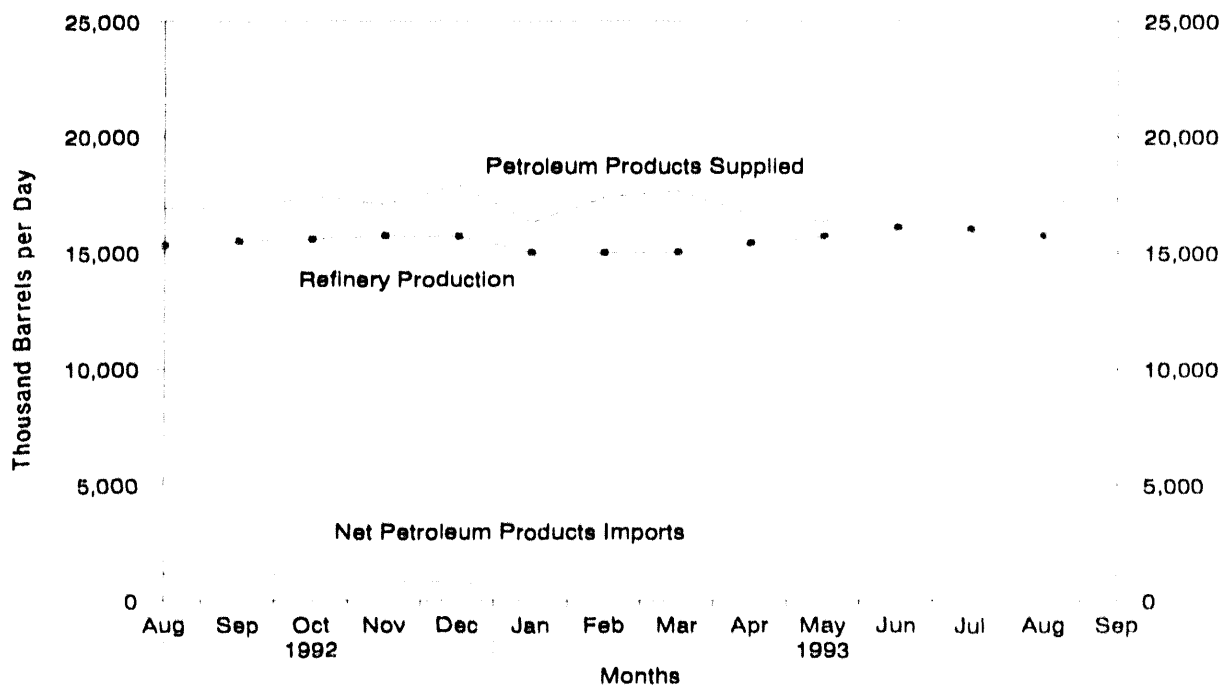
R = Revised data E = Estimated PE = Preliminary estimate RE = Revised estimate NA = Not Available.

* 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

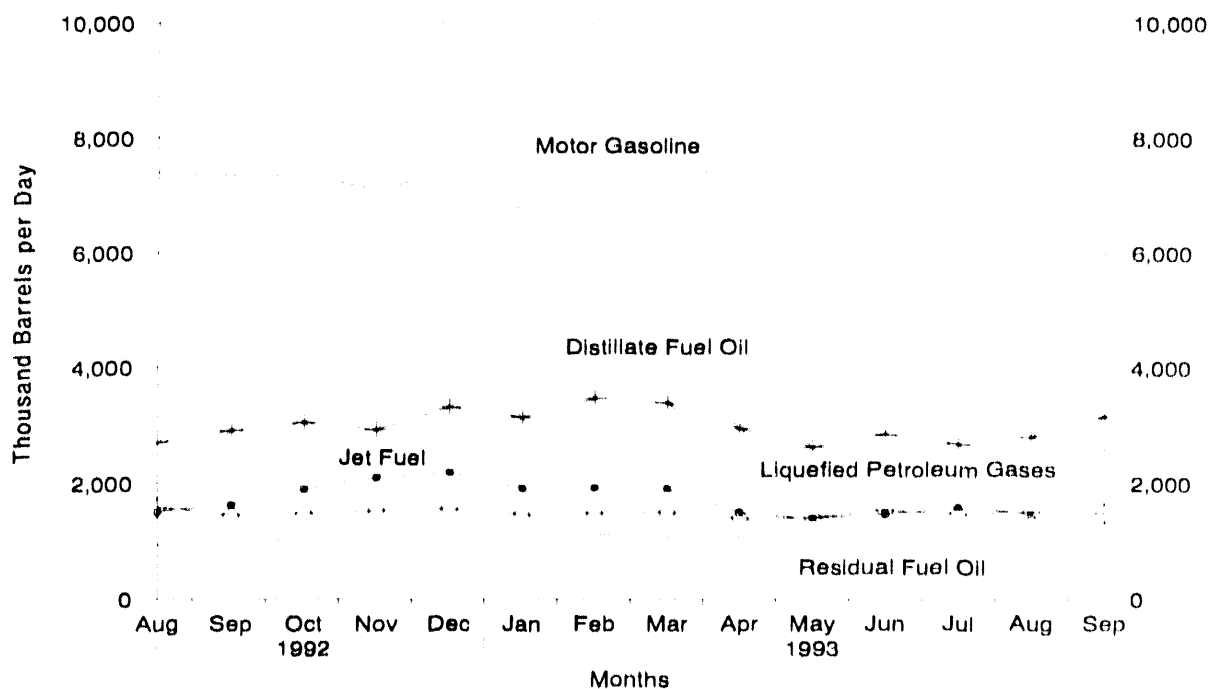
Source: See Summary Statistics Table and Figure Sources

Figure S1. Petroleum Overview, August 1992 - Present



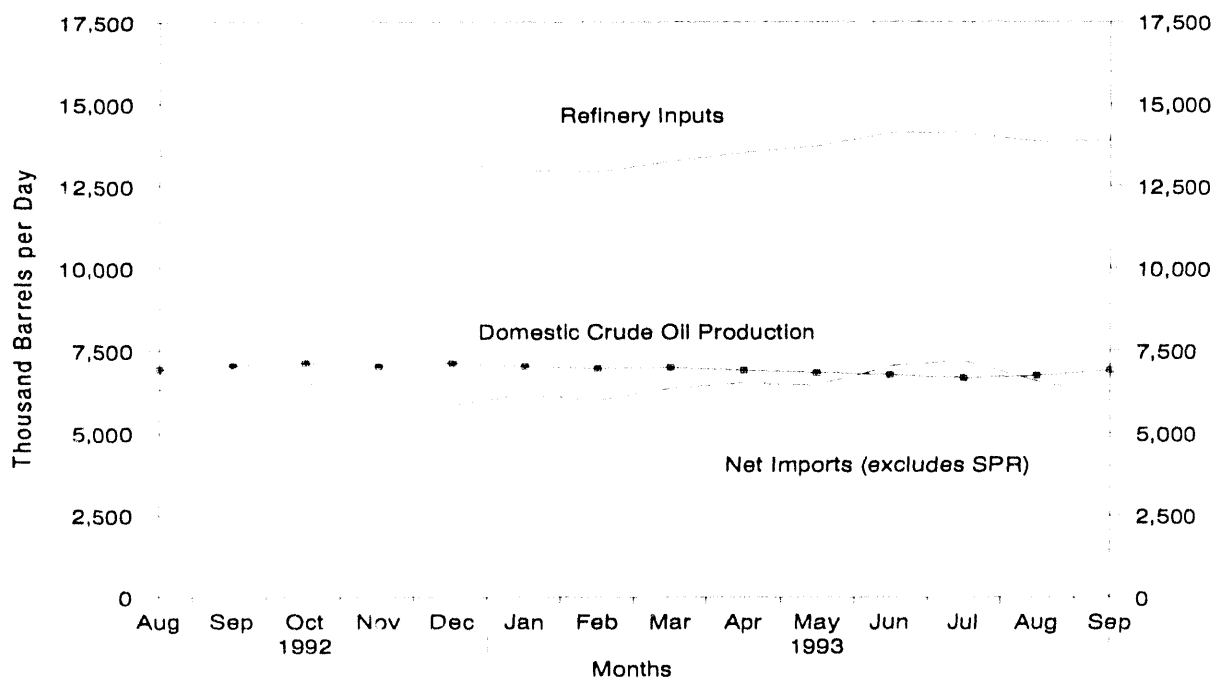
Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S1. See Summary Statistics Table and Figure Sources.

Figure S2. Petroleum Products Supplied, August 1992 - Present



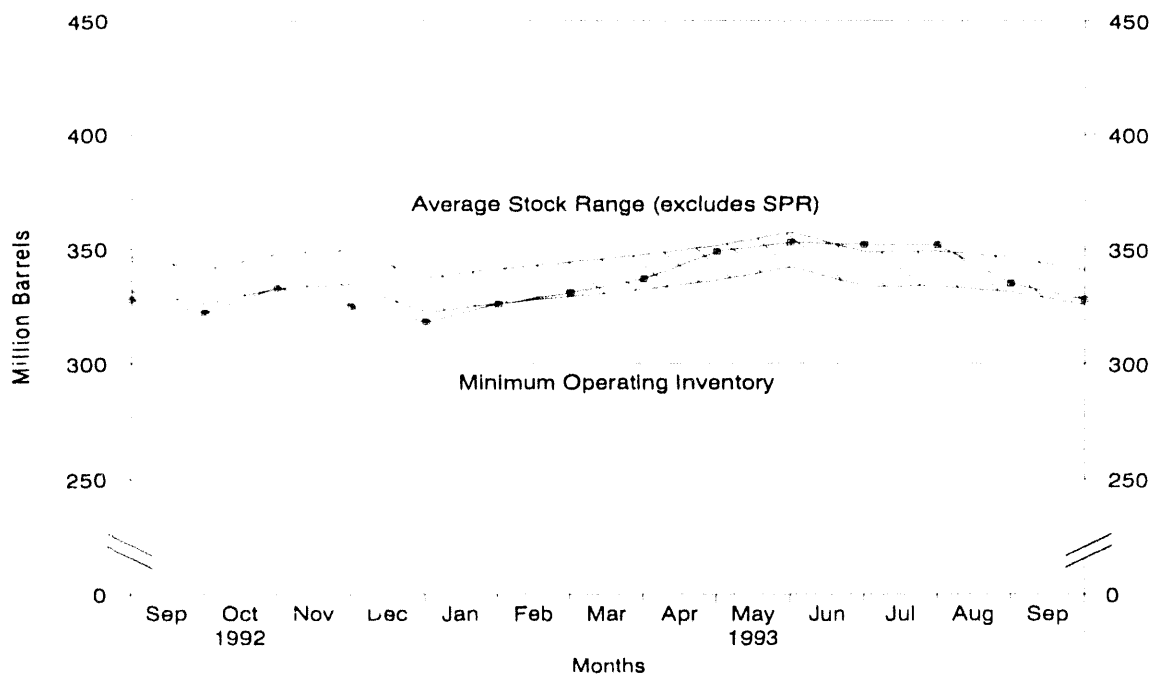
Source: Energy Information Administration, *Petroleum Supply Monthly*, Tables S4-S7, and S9. See Summary Statistics Table and Figure Sources.

Figure S3. Crude Oil Supply and Disposition, August 1992 - Present



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

Figure S4. Crude Oil Ending Stocks¹, August 1992 - Present



¹Excludes stocks held in the Strategic Petroleum Reserve (SPR).

Note: The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1988 study, the NPC estimated this inventory level for crude oil to be 300 million barrels.

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

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

Year/Month		Supply					Disposition	
		Field Production		Imports			Unaccounted for Crude Oil ^c	Crude Losses
		Total Domestic	Alaskan	Total	SPR	Other		
1981	Average	8,572	1,609	4,396	256	4,141	83	5
1982	Average	8,649	1,696	3,488	165	3,323	71	3
1983	Average	8,688	1,714	3,329	234	3,096	114	2
1984	Average	8,879	1,722	3,426	197	3,229	185	2
1985	Average	8,971	1,825	3,201	118	3,083	145	1
1986	Average	8,680	1,867	4,178	48	4,130	139	(s)
1987	Average	8,349	1,962	4,674	73	4,601	145	(s)
1988	Average	8,140	2,017	5,107	51	5,055	196	(s)
1989	Average	7,613	1,874	5,843	56	5,787	200	(s)
1990	Average	7,355	1,773	5,894	27	5,867	258	(s)
1991	January	7,500	1,848	5,296	0	5,296	-59	0
	February	7,637	1,908	5,485	0	5,485	324	0
	March	7,546	1,887	5,166	0	5,166	43	(s)
	April	7,509	1,798	5,529	0	5,529	236	(s)
	May	7,409	1,771	6,363	0	6,363	513	(s)
	June	7,320	1,757	6,334	0	6,334	59	(s)
	July	7,347	1,775	5,955	0	5,955	403	0
	August	7,316	1,731	6,645	0	6,645	11	0
	September	7,368	1,787	5,812	0	5,812	484	0
	October	7,437	1,843	5,683	0	5,683	-59	(s)
	November	7,328	1,765	5,528	0	5,528	263	(s)
	December	7,299	1,718	5,565	0	5,565	146	0
	Average	7,417	1,798	5,782	0	5,782	195	(s)
1992	January	7,361	1,789	5,956	0	5,956	290	0
	February	7,389	1,808	5,079	0	5,079	229	(s)
	March	7,348	1,785	5,321	0	5,321	287	(s)
	April	7,293	1,741	6,127	0	6,127	189	0
	May	7,169	1,682	6,060	0	6,060	421	0
	June	7,167	1,703	6,171	34	6,138	259	(s)
	July	7,131	1,655	6,796	0	6,796	332	0
	August	6,922	1,635	6,457	18	6,439	65	(s)
	September	7,030	1,700	6,218	16	6,202	385	0
	October	7,126	1,696	6,696	49	6,647	290	(s)
	November	7,024	1,674	6,121	0	6,121	296	(s)
	December	7,103	1,705	5,937	0	5,937	61	(s)
	Average	7,171	1,714	6,083	10	6,073	258	(s)
1993	January	E 7,008	E 1,654	6,292	0	6,292	82	(s)
	February	E 6,957	E 1,628	6,156	0	6,156	206	(s)
	March	E 6,976	E 1,639	6,513	32	6,481	156	0
	April	E 6,897	E 1,587	6,698	112	6,586	535	(s)
	May	E 6,833	E 1,566	6,549	0	6,549	575	0
	June	E 6,756	E 1,520	7,175	0	7,175	336	0
	July	E 6,654	E 1,441	7,262	0	7,262	311	0
	August	RE 6,732	RE 1,527	6,614	0	6,614	32	0
	September*	PE 6,673	PE 1,472	E 6,309	E 34	E 6,275	E 609	E 0
	9-Mo. Average	PE 6,831	PE 1,559	E 6,623	E 20	E 6,603	E 315	E (s)
1992	9-Mo. Average	7,200	1,722	6,026	8	6,018	273	(s)
1991	9-Mo. Average	7,437	1,806	5,846	0	5,846	222	(s)

^a Stocks are totals as of end of period.

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

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

^d Previously published as crude used directly.

^e Stock changes are calculated using new basis stock levels.

See Summary Statistics Explanatory Note 4.

Footnotes continued on following page.

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

Year/Month		Disposition				Ending Stocks ^a (Million Barrels)		
		Stock Change ^b		Refinery Inputs	Exports	Product Supplied	Total	SPR
		SPR	Other					
1981	Average	336	^e -46	12,470	228	^d 58	594	230
1982	Average	174	-38	11,774	236	^d 59	^e 644	^e 350
1983	Average	234	^e -20	11,685	164	66	723	344
1984	Average	195	4	12,044	181	64	796	451
1985	Average	117	-67	12,002	204	60	814	493
1986	Average	50	28	12,716	154	49	843	512
1987	Average	80	49	12,854	151	34	890	541
1988	Average	52	-51	13,246	155	40	890	560
1989	Average	56	30	13,401	142	28	921	580
1990	Average	16	-51	13,409	109	24	908	586
1991	January	0	-71	12,735	50	23	906	586
	February	-147	379	13,046	152	17	913	582
	March	-422	183	12,839	137	18	905	568
	April	0	50	13,042	162	21	907	568
	May	0	566	13,539	165	15	924	568
	June	(s)	-299	13,918	78	16	915	568
	July	(s)	-153	13,703	139	15	911	569
	August	(s)	103	13,800	55	13	914	569
	September	0	-156	13,694	109	16	909	569
	October	(s)	51	12,896	92	22	911	569
	November	(s)	43	12,929	126	22	912	569
	December	(s)	-611	13,465	133	23	893	569
	Average	-47	5	13,301	116	18	--	--
1992	January	(s)	540	12,923	118	26	910	569
	February	0	171	12,486	22	17	915	569
	March	(s)	-250	13,083	105	18	907	569
	April	0	315	13,260	23	11	917	569
	May	(s)	-145	13,679	106	10	912	569
	June	34	-615	14,059	107	12	895	570
	July	(s)	244	13,953	53	9	902	570
	August	20	-144	13,426	133	8	898	570
	September	43	-204	13,714	68	11	893	571
	October	69	342	13,584	106	10	906	574
	November	15	-243	13,547	111	10	899	574
	December	22	-234	13,194	107	12	893	575
	Average	17	-18	13,411	89	13	--	--
1993	January	19	245	12,980	129	10	901	575
	February	18	202	12,923	166	10	907	576
	March	58	188	13,249	139	11	915	578
	April	136	401	13,512	73	9	931	582
	May	13	120	13,701	112	10	935	582
	June	21	-37	14,125	150	8	935	583
	July	19	22	14,114	62	9	936	583
	August	^R 24	^R -548	^R 13,839	^R 55	^R 8	^R 920	^R 584
	September*	^E 52	^E -425	^E 13,889	^E 107	^E 8	^E 913	^E 586
	9-Mo. Average	^E 40	^E 17	^E 13,597	^E 110	^E 9	--	--
1992	9-Mo. Average	11	-9	13,402	82	14	--	--
1991	9-Mo. Average	-63	66	13,370	116	17	--	--

Footnotes continued.

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

SPR = Strategic Petroleum Reserve.

* See Summary Statistics Explanatory Note 1.

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

Source: See Summary Statistics Table and Figure Sources.

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

Year/Month		Imports from Arab-OPEC Sources							
		Algeria		Iraq		Kuwait		Libya	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average	311	261	(a)	0	0	0	319	317
1982	Average	170	90	3	3	5	2	26	23
1983	Average	240	176	10	10	14	7	0	0
1984	Average	323	194	12	12	36	24	1	0
1985	Average	187	84	46	46	21	4	4	0
1986	Average	271	78	81	81	68	28	0	0
1987	Average	295	115	83	82	84	70	0	0
1988	Average	300	58	345	343	92	80	0	0
1989	Average	269	60	449	441	157	155	0	0
1990	Average	280	63	518	514	86	79	0	0
1991	January	327	48	0	0	0	0	0	0
	February	246	20	0	0	0	0	0	0
	March	222	45	0	0	0	0	0	0
	April	282	74	0	0	0	0	0	0
	May	308	72	0	0	0	0	0	0
	June	304	37	0	0	0	0	0	0
	July	202	28	0	0	0	0	0	0
	August	182	16	0	0	0	0	0	0
	September	205	19	0	0	34	34	0	0
	October	235	53	0	0	33	33	0	0
	November	278	58	0	0	0	0	0	0
	December	247	54	0	0	0	0	0	0
	Average	253	44	0	0	6	6	0	0
1992	January	206	37	0	0	0	0	0	0
	February	218	57	0	0	0	0	0	0
	March	215	37	0	0	0	0	0	0
	April	182	19	0	0	0	0	0	0
	May	202	7	0	0	0	0	0	0
	June	144	12	0	0	0	0	0	0
	July	179	37	0	0	58	23	0	0
	August	261	45	0	0	66	33	0	0
	September	184	19	0	0	70	33	0	0
	October	186	8	0	0	137	109	0	0
	November	171	0	0	0	117	117	0	0
	December	203	9	0	0	165	149	0	0
	Average	196	24	0	0	51	39	0	0
1993	January	153	28	0	0	144	129	0	0
	February	256	0	0	0	251	229	0	0
	March	185	7	0	0	316	300	0	0
	April	274	26	0	0	262	262	0	0
	May	228	3	0	0	222	222	0	0
	June	169	32	0	0	235	235	0	0
	July	246	6	0	0	368	362	0	0
	August	241	28	0	0	467	451	0	0
1992	8-Mo. Average	219	16	0	0	284	275	0	0
	1992 8-Mo. Average	201	31	0	0	16	7	0	0
1991	8-Mo. Average	259	43	0	0	0	0	0	0

See footnotes at end of table.

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

Year/Month		Imports from Arab-OPEC Sources							
		Qatar		Saudi Arabia ^b		United Arab Emirates		Total Arab OPEC	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average	7	7	1,129	1,112	81	77	1,848	1,774
1982	Average	7	7	552	530	92	81	854	736
1983	Average	(a)	0	337	321	30	18	632	533
1984	Average	5	4	325	309	117	90	819	634
1985	Average	(a)	0	168	132	45	35	472	300
1986	Average	13	12	665	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									
	January	0	0	1,934	1,782	0	0	2,261	1,830
	February	0	0	1,566	1,538	0	0	1,812	1,559
	March	0	0	1,683	1,646	0	0	1,905	1,691
	April	0	0	1,764	1,702	0	0	2,046	1,776
	May	0	0	2,258	2,053	0	0	2,566	2,124
	June	0	0	1,841	1,795	0	0	2,145	1,832
	July	0	0	1,725	1,641	0	0	1,928	1,670
	August	0	0	2,019	1,964	7	0	2,208	1,980
	September	0	0	1,708	1,562	0	0	1,947	1,615
	October	0	0	1,671	1,545	18	18	1,956	1,649
	November	0	0	1,778	1,626	16	0	2,072	1,684
	December	0	0	1,645	1,566	0	0	1,892	1,620
	Average	0	0	1,802	1,703	3	2	2,064	1,754
1992									
	January	0	0	2,017	1,900	18	0	2,241	1,937
	February	0	0	1,776	1,687	0	0	1,995	1,745
	March	0	0	1,707	1,568	0	0	1,922	1,605
	April	0	0	1,734	1,524	0	0	1,916	1,543
	May	0	0	1,764	1,584	0	0	1,966	1,591
	June	0	0	1,744	1,610	0	0	1,888	1,621
	July	8	0	1,713	1,599	0	0	1,958	1,659
	August	0	0	1,594	1,473	7	0	1,929	1,551
	September	0	0	1,593	1,477	0	0	1,847	1,529
	October	0	0	1,593	1,482	4	0	1,920	1,599
	November	0	0	1,608	1,540	17	0	1,913	1,657
	December	0	0	1,793	1,725	28	0	2,188	1,882
	Average	1	0	1,720	1,597	6	0	1,974	1,660
1993									
	January	0	0	1,687	1,571	0	0	1,984	1,728
	February	0	0	1,626	1,480	0	0	2,133	1,709
	March	6	0	1,479	1,349	0	0	1,987	1,655
	April	0	0	1,606	1,478	17	17	2,161	1,783
	May	0	0	1,524	1,361	59	59	2,034	1,646
	June	0	0	1,523	1,396	66	66	1,993	1,729
	July	0	0	1,270	1,171	19	0	1,904	1,538
	August	0	0	1,151	1,036	0	0	1,859	1,515
	8-Mo. Average	1	0	1,481	1,353	20	18	2,005	1,662
1992	8-Mo. Average	1	0	1,756	1,618	3	0	1,977	1,856
1991	8-Mo. Average	0	0	1,853	1,768	1	0	2,113	1,811

See footnotes at end of table.

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

Year/Month		Imports from Other-OPEC Sources							
		Ecuador		Gabon		Indonesia		Iran	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average	48	38	35	35	366	318	0	0
1982	Average	42	32	40	40	248	226	35	35
1983	Average	61	56	59	59	338	315	48	48
1984	Average	55	47	58	57	343	304	10	10
1985	Average	67	56	52	51	314	292	27	27
1986	Average	77	64	26	25	318	297	19	19
1987	Average	29	23	35	35	285	262	98	98
1988	Average	47	33	16	15	205	186	^a (s)	^a (s)
1989	Average	89	80	50	49	183	158	0	0
1990	Average	49	38	64	64	114	98	0	0
1991	January	18	6	41	41	70	70	0	0
	February	66	55	95	95	162	153	0	0
	March	67	58	29	29	93	93	0	0
	April	35	24	72	72	69	69	0	0
	May	109	103	96	96	97	97	0	0
	June	129	126	70	70	187	187	0	0
	July	62	47	137	137	88	88	81	81
	August	112	93	56	56	93	87	48	48
	September	31	25	91	91	83	64	152	152
	October	30	24	137	137	118	91	43	43
	November	55	48	91	91	120	96	64	64
	December	41	23	91	91	163	134	0	0
	Average	63	53	84	84	111	102	32	32
1992	January	56	56	91	91	125	117	0	0
	February	61	48	105	105	39	39	0	0
	March	26	26	25	25	85	83	0	0
	April	53	46	186	186	54	49	0	0
	May	51	51	135	135	155	133	0	0
	June	105	101	129	129	109	102	0	0
	July	111	111	143	143	65	65	0	0
	August	99	93	108	108	91	85	0	0
	September	97	97	165	158	57	38	0	0
	October	42	36	167	167	54	43	0	0
	November	53	53	114	114	36	23	0	0
	December	24	24	120	120	60	60	0	0
	Average	65	62	124	123	78	70	0	0
1993	January	76	70	90	89	37	37	0	0
	February	14	14	88	88	52	51	0	0
	March	59	59	126	123	67	64	0	0
	April	74	62	127	127	76	76	0	0
	May	56	56	169	169	82	82	0	0
	June	75	75	107	107	97	67	0	0
	July	85	85	168	166	55	55	0	0
	August	121	121	152	152	95	80	0	0
	8-Mo. Average	71	68	129	128	70	64	0	0
1992	8-Mo. Average	70	67	115	115	91	85	0	0
1991	8-Mo. Average	75	64	74	74	107	105	16	16

See footnotes at end of table.

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

Year/Month		Imports from Other-OPEC Sources						Total OPEC ^c	
		Nigeria		Venezuela		Total Other OPEC			
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average	620	611	406	147	1,476	1,149	3,323	2,922
1982	Average	514	510	412	155	1,291	998	2,146	1,734
1983	Average	302	301	422	164	1,231	944	1,862	1,477
1984	Average	216	207	548	253	1,230	878	2,049	1,512
1985	Average	293	280	605	306	1,358	1,012	1,830	1,312
1986	Average	440	437	793	416	1,674	1,259	2,837	2,113
1987	Average	535	529	804	488	1,787	1,435	3,060	2,400
1988	Average	618	607	794	439	1,681	1,281	3,520	2,696
1989	Average	815	800	873	495	2,010	1,582	4,140	3,376
1990	Average	800	784	1,025	666	2,052	1,650	4,296	3,514
1991	January	504	481	1,005	673	1,637	1,271	3,898	3,101
	February	721	717	959	686	2,003	1,705	3,815	3,264
	March	531	531	998	631	1,718	1,342	3,623	3,033
	April	677	649	845	470	1,698	1,283	3,744	3,059
	May	860	838	997	581	2,158	1,715	4,724	3,839
	June	832	827	1,135	705	2,354	1,915	4,498	3,747
	July	833	817	1,102	683	2,304	1,855	4,232	3,525
	August	1,016	983	1,070	701	2,394	1,968	4,602	3,946
	September	489	487	1,163	790	2,009	1,589	3,956	3,204
	October	651	623	1,087	777	2,067	1,694	4,023	3,343
	November	704	674	1,065	671	2,099	1,644	4,171	3,328
	December	617	593	987	655	1,899	1,496	3,791	3,116
	Average	703	683	1,035	666	2,028	1,622	4,092	3,377
1992	January	593	566	1,119	787	1,984	1,617	4,224	3,554
	February	322	303	1,028	655	1,555	1,150	3,549	2,895
	March	441	409	1,106	793	1,684	1,336	3,606	2,941
	April	798	788	1,079	722	2,169	1,791	4,085	3,334
	May	773	773	1,038	745	2,152	1,837	4,118	3,428
	June	740	740	1,059	738	2,141	1,809	4,029	3,430
	July	900	883	1,163	912	2,382	2,114	4,339	3,772
	August	815	795	1,102	841	2,215	1,922	4,144	3,473
	September	774	754	1,333	953	2,426	2,001	4,274	3,531
	October	827	813	1,497	1,073	2,587	2,133	4,507	3,732
	November	626	608	1,343	921	2,173	1,719	4,086	3,376
	December	549	532	1,164	763	1,917	1,499	4,105	3,381
	Average	681	665	1,170	826	2,117	1,746	4,092	3,406
1993	January	729	729	1,385	1,038	2,317	1,962	4,301	3,690
	February	927	913	1,290	925	2,372	1,993	4,505	3,699
	March	928	892	1,208	817	2,388	1,955	4,375	3,611
	April	892	871	1,297	1,006	2,466	2,141	4,627	3,924
	May	741	723	1,226	954	2,275	1,984	4,308	3,630
	June	848	827	1,277	992	2,403	2,067	4,396	3,796
	July	883	888	1,384	1,068	2,585	2,262	4,489	3,800
	August	562	549	1,375	1,135	2,305	2,037	4,164	3,552
	8-Mo. Average	813	797	1,306	992	2,389	2,050	4,393	3,712
1992	8-Mo. Average	675	659	1,088	775	2,038	1,701	4,015	3,357
1991	8-Mo. Average	747	730	1,015	641	2,034	1,631	4,146	3,442

See footnotes at end of table.

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

Year/Month		Imports from Non-OPEC Sources ^a										China People's Republic	
		Angola		Australia		Bahama Islands		Brazil		Canada			
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average	49	45	5	0	74	0	23	14	447	164	18	0
1982	Average	44	42	5	(a)	65	0	47	19	482	214	40	8
1983	Average	78	71	4	0	125	0	41	2	547	274	34	6
1984	Average	90	85	38	25	88	0	60	(a)	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	January	232	232	21	21	25	0	31	0	970	718	68	63
	February	202	202	0	0	14	0	13	0	1,135	881	102	96
	March	186	186	0	0	0	0	0	0	1,058	764	96	96
	April	337	337	55	55	35	0	17	0	1,103	768	113	113
	May	220	220	64	57	42	0	31	0	1,027	752	119	113
	June	205	205	43	31	30	0	41	0	986	705	144	139
	July	264	264	20	20	19	0	21	0	848	615	88	88
	August	298	298	37	22	78	0	27	0	1,011	694	85	75
	September	230	230	24	24	29	0	19	0	1,137	849	91	86
	October	300	300	13	0	51	0	16	0	936	639	29	24
	November	213	213	25	13	46	0	45	0	1,107	796	96	96
	December	359	359	13	13	53	0	8	0	1,083	759	65	65
	Average	254	254	26	21	35	0	22	0	1,033	743	91	87
1992	January	360	360	11	11	63	0	18	0	1,045	786	144	144
	February	246	246	10	10	47	0	12	0	1,147	834	80	69
	March	339	339	0	0	76	0	(a)	0	1,100	832	75	75
	April	381	381	39	22	67	0	17	0	1,121	835	86	69
	May	264	264	0	0	46	0	18	0	1,013	779	129	114
	June	286	286	21	21	57	0	28	0	970	736	110	95
	July	443	443	20	20	22	0	25	0	1,044	798	68	64
	August	335	323	21	21	8	0	10	0	1,038	762	66	66
	September	248	248	0	0	8	0	21	0	1,131	839	80	75
	October	395	395	11	11	1	0	10	0	1,063	761	61	61
	November	458	458	53	49	20	0	32	0	1,037	784	86	86
	December	279	279	38	38	19	0	50	0	1,122	816	97	90
	Average	336	336	19	17	36	0	20	0	1,069	797	90	84
1993	January	354	354	0	0	18	0	3	0	1,034	778	60	60
	February	348	348	0	0	19	0	22	0	1,084	782	44	44
	March	408	408	0	0	30	0	27	0	1,065	814	79	73
	April	322	322	0	0	16	0	56	0	1,032	783	0	0
	May	287	287	13	13	8	0	41	0	1,119	874	40	40
	June	209	209	34	34	7	0	19	0	1,111	910	48	46
	July	386	386	40	40	31	0	48	0	1,247	991	24	24
	August	258	258	33	27	37	0	32	0	1,237	966	38	38
	8-Mo. Average	322	322	15	14	21	0	31	0	1,117	863	42	41
1992	8-Mo. Average	332	331	15	13	48	0	16	0	1,059	795	95	87
1991	8-Mo. Average	243	243	30	26	31	0	23	0	1,017	735	102	98

See footnotes at end of table.

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

Year/Month		Imports from Non-OPEC Sources ^a									
		Colombia		Italy		Malaysia		Mexico		Netherlands	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average	1	0	11	0	38	33	822	489	30	(a)
1982	Average	8	0	18	(a)	20	18	885	645	35	(a)
1983	Average	10	0	18	(a)	4	3	828	766	68	3
1984	Average	8	0	45	(a)	1	0	748	659	65	3
1985	Average	23	0	60	(a)	3	1	816	715	58	0
1986	Average	87	87	76	0	12	11	699	621	54	0
1987	Average	148	115	54	1	13	12	655	602	60	0
1988	Average	134	106	65	5	19	19	747	674	61	0
1989	Average	172	136	34	3	39	39	767	716	49	0
1990	Average	182	140	58	2	41	40	755	689	55	0
1991	January	194	174	25	0	0	0	798	778	6	0
	February	151	98	42	13	9	9	742	693	17	0
	March	157	127	29	0	21	21	795	772	33	0
	April	163	131	41	12	0	0	891	819	35	0
	May	163	112	60	0	66	66	757	736	45	0
	June	169	124	46	0	63	63	919	872	49	0
	July	163	111	54	0	9	9	835	748	47	0
	August	219	162	57	11	14	14	878	797	30	0
	September	168	103	89	0	10	10	805	768	44	0
	October	128	80	41	0	64	64	811	754	16	0
	November	145	135	15	0	10	10	716	656	24	0
	December	138	117	61	0	14	14	732	708	4	0
	Average	163	123	47	3	24	24	807	759	29	0
1992	January	158	111	51	0	0	0	764	721	31	0
	February	114	92	48	0	0	0	838	807	9	0
	March	101	74	44	0	0	0	846	809	34	0
	April	150	129	75	0	0	0	857	795	8	0
	May	57	46	57	0	5	5	788	764	27	0
	June	135	114	69	0	8	8	905	883	25	0
	July	103	93	36	0	40	40	830	788	21	0
	August	156	142	94	0	22	22	857	790	45	0
	September	190	179	81	0	17	17	755	720	39	0
	October	153	132	37	0	17	17	829	783	18	0
	November	127	84	33	0	8	8	762	700	26	0
	December	66	34	37	0	4	4	930	888	33	0
	Average	126	102	55	0	10	10	830	787	26	0
1993	January	188	167	48	0	0	0	858	820	11	0
	February	148	137	34	0	0	0	807	748	18	0
	March	161	129	43	0	11	10	861	815	11	0
	April	152	138	14	0	8	8	844	818	0	0
	May	147	90	18	0	21	10	907	846	10	0
	June	176	143	22	0	0	0	995	977	10	0
	July	204	184	25	0	11	11	943	878	20	0
	August	124	101	50	0	14	14	862	809	17	0
8-Mo. Average		163	136	32	0	8	7	885	840	12	0
1992	8-Mo. Average	122	100	59	0	9	9	835	794	25	0
1991	8-Mo. Average	173	130	44	4	23	23	827	777	33	0

See footnotes at end of table

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

Year Month		Imports from Non-OPEC Sources ^a											
		Netherlands Antilles		Norway		Puerto Rico		Spain		Trinidad and Tobago		United Kingdom	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average	197	0	119	114	62	0	1	(a)	133	102	375	369
1982	Average	175	0	102	102	50	0	3	(a)	112	92	456	441
1983	Average	189	0	86	65	40	0	2	(a)	96	83	382	365
1984	Average	188	0	114	112	42	0	11	0	94	87	402	378
1985	Average	40	0	32	31	28	0	29	1	113	98	310	278
1986	Average	25	0	60	53	21	0	53	0	125	93	350	317
1987	Average	29	0	80	70	21	0	55	0	106	78	352	304
1988	Average	36	0	67	62	22	0	66	0	97	71	315	254
1989	Average	42	0	138	127	32	0	67	0	94	73	215	160
1990	Average	31	0	102	96	32	0	47	0	96	76	189	155
1991	January	103	0	45	34	22	0	26	0	75	64	32	19
	February	23	0	37	37	20	0	18	0	76	76	34	21
	March	56	0	25	16	14	0	13	0	86	73	48	19
	April	61	0	51	35	23	0	66	0	84	64	61	37
	May	113	0	165	156	42	0	53	0	61	61	222	188
	June	84	0	99	84	19	0	41	0	118	104	105	70
	July	86	0	69	63	25	0	22	0	91	72	228	164
	August	100	0	142	136	42	0	48	0	91	66	254	217
	September	67	0	79	72	34	0	42	0	119	75	216	194
	October	90	0	98	98	12	0	24	0	88	76	201	166
	November	100	0	73	65	35	0	19	0	77	69	84	18
	December	88	0	94	88	36	0	26	0	87	71	154	151
	Average	81	0	82	74	27	0	33	0	88	72	138	106
1992	January	40	0	25	17	32	0	35	0	108	79	129	115
	February	82	0	11	0	23	0	16	0	109	76	63	0
	March	49	0	11	0	18	0	37	0	105	85	79	52
	April	73	0	155	147	14	0	35	0	79	75	157	128
	May	59	0	210	200	22	0	30	0	69	54	198	180
	June	83	0	234	225	36	0	46	0	94	74	248	206
	July	49	0	186	179	11	0	18	0	103	78	354	337
	August	65	0	142	134	38	0	29	0	106	54	295	282
	September	60	0	103	102	37	0	56	0	84	56	341	291
	October	90	0	190	177	29	0	32	0	108	71	411	411
	November	56	0	111	104	26	0	36	0	85	62	336	285
	December	80	0	140	133	28	0	17	0	91	71	148	110
	Average	65	0	127	119	26	0	32	0	95	70	230	200
1993	January	73	0	70	70	37	0	44	0	59	48	228	201
	February	80	0	62	61	21	0	25	0	72	58	173	127
	March	61	0	122	115	26	0	21	0	92	71	315	281
	April	86	0	109	109	18	0	61	0	78	55	348	281
	May	77	0	65	65	38	0	34	0	61	51	486	458
	June	55	0	160	160	29	0	20	0	77	55	458	408
	July	52	0	215	215	49	0	41	0	82	53	292	247
	August	52	0	180	161	30	0	37	0	50	37	343	323
	8-Mo. Average	67	0	124	120	31	0	36	0	71	54	332	292
1992	8-Mo. Average	62	0	122	113	24	0	31	0	97	72	191	164
1991	8-Mo. Average	79	0	80	71	26	0	36	0	85	72	124	93

See footnotes at end of table

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

Year/Month		Imports from Non-OPEC Sources ^a								Total Imports	
		Russia ^d		Virgin Islands		Other Non-OPEC		Total Non-OPEC			
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average	5	(s)	327	0	236	163	2,672	1,474	5,996	4,396
1982	Average	1	0	316	0	306	174	2,968	1,754	5,113	3,488
1983	Average	1	(s)	282	0	378	215	3,189	1,853	5,051	3,329
1984	Average	13	(s)	294	0	411	210	3,388	1,914	5,437	3,426
1985	Average	6	(s)	247	0	394	137	3,237	1,888	5,067	3,201
1986	Average	18	(s)	244	0	426	144	3,387	2,065	6,224	4,178
1987	Average	11	0	272	0	459	196	3,617	2,274	6,678	4,674
1988	Average	29	0	242	0	487	196	3,882	2,411	7,402	5,107
1989	Average	48	0	321	0	457	197	3,921	2,467	8,061	5,843
1990	Average	45	1	282	0	417	180	3,721	2,381	8,018	5,894
1991	January	28	0	261	0	235	91	3,205	2,195	7,103	5,296
	February	17	0	222	0	180	96	3,051	2,221	6,865	5,485
	March	13	0	214	0	179	60	3,023	2,133	6,646	5,166
	April	39	0	245	0	258	99	3,674	2,470	7,418	5,529
	May	42	0	264	0	239	63	3,794	2,524	8,518	6,363
	June	0	0	234	0	349	189	3,747	2,587	8,245	6,334
	July	58	0	191	0	384	275	3,524	2,400	7,755	5,955
	August	80	11	208	0	369	197	4,067	2,699	8,670	6,645
	September	23	0	269	0	374	197	3,871	2,608	7,826	5,812
	October	13	0	262	0	252	139	3,444	2,340	7,467	5,683
	November	16	0	264	0	335	130	3,444	2,200	7,615	5,528
	December	16	0	286	0	229	104	3,546	2,448	7,337	5,565
	Average	29	1	243	0	282	137	3,535	2,405	7,627	5,782
1992	January	17	0	250	0	208	59	3,488	2,402	7,712	5,956
	February	3	0	222	0	196	50	3,278	2,184	6,827	5,079
	March	0	0	202	0	345	114	3,462	2,380	7,068	5,321
	April	0	0	234	0	458	212	4,007	2,793	8,082	6,127
	May	0	0	246	0	467	225	3,705	2,633	7,823	6,060
	June	0	0	266	0	297	95	3,917	2,741	7,946	6,171
	July	72	32	280	0	415	152	4,140	3,024	8,479	6,796
	August	62	31	263	0	464	357	4,116	2,984	8,260	6,457
	September	53	0	217	0	382	160	3,904	2,687	8,178	6,218
	October	9	0	254	0	279	144	3,998	2,964	8,505	6,696
	November	0	0	274	0	219	124	3,786	2,745	7,872	6,121
	December	0	0	273	0	283	92	3,734	2,556	7,839	5,937
	Average	18	5	249	0	335	149	3,796	2,676	7,888	6,083
1993	January	0	0	252	0	325	104	3,663	2,602	7,964	6,292
	February	0	0	244	0	223	151	3,425	2,457	7,930	6,156
	March	0	0	244	0	390	186	3,967	2,903	8,342	6,513
	April	16	16	245	0	455	243	3,859	2,774	8,485	6,698
	May	32	32	279	0	356	152	4,039	2,919	8,348	6,549
	June	59	34	290	0	570	405	4,349	3,380	8,745	7,175
	July	157	134	202	0	585	299	4,656	3,461	9,145	7,262
	August	26	0	256	0	520	329	4,196	3,062	8,360	6,614
	8-Mo. Average	37	27	252	0	430	234	4,026	2,950	8,419	6,661
1992	8-Mo. Average	20	8	246	0	357	159	3,766	2,645	7,782	6,002
1991	8-Mo. Average	35	1	230	0	275	134	3,515	2,409	7,661	5,850

^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 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.

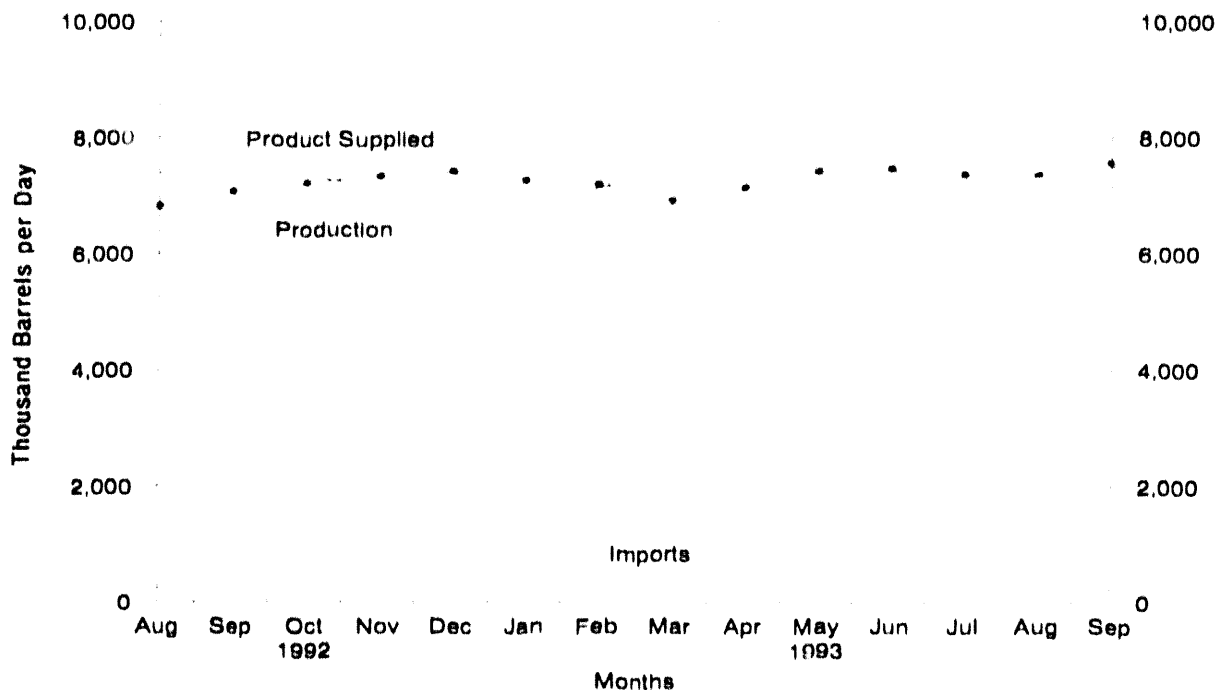
^d Imports from other States in the former U.S.S.R. may be included in imports from Russia for the years 1981 through 1992.

^e 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.

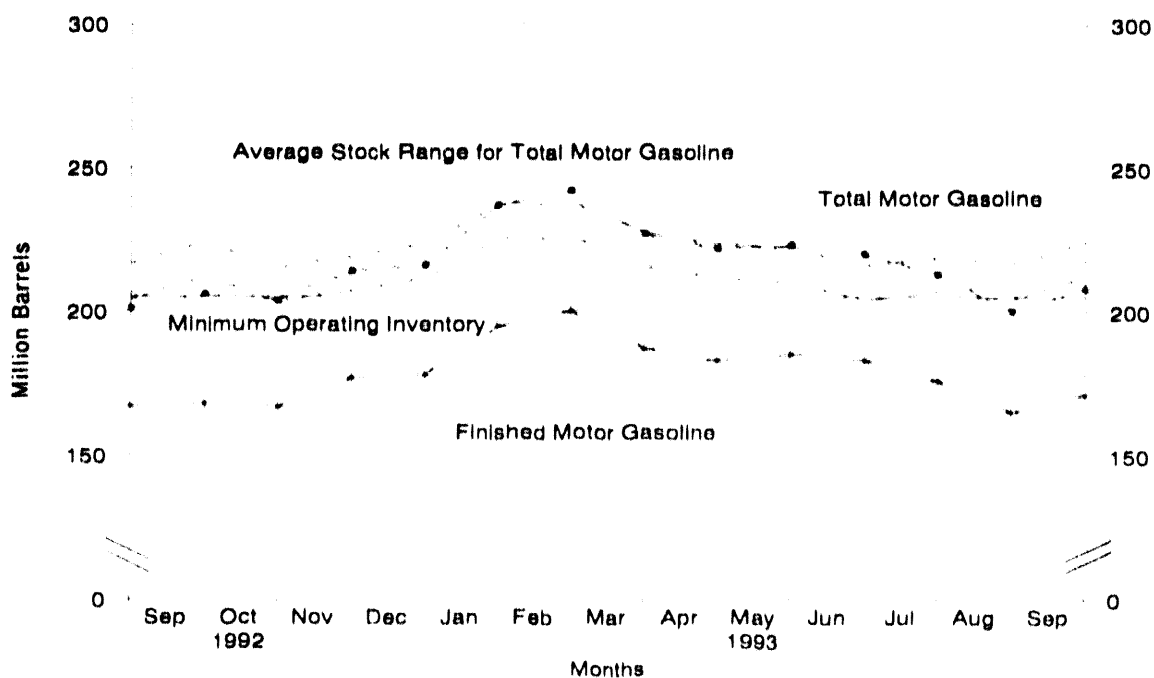
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: See Summary Statistics Table and Figure Sources.

Figure S5. Finished Motor Gasoline Supply and Disposition, August 1992 - Present



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

Figure S6. Motor Gasoline Ending Stocks, August 1992 - Present



Note: • Total motor gasoline includes motor gasoline blending components and finished motor gasoline. • The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1988 study, the NPC estimated this inventory level for total motor gasoline to be 205 million barrels.

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

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

Year/Month		Supply		Disposition		Ending Stocks ^a (Million Barrels)		Ending Stocks (Million Barrels)
		Total Production ^b	Imports ^c	Stock Change ^{d,e}	Exports	Product Supplied ^b	Motor Gasoline Total ^f	Oxygenates
1981	Average	6,408	157	-28	2	6,588	253	203
1982	Average	6,338	197	-25	20	6,539	236	194
1983	Average	6,340	247	-45	10	6,622	222	186
1984	Average	6,453	299	54	6	6,693	243	205
1985	Average	6,419	381	-41	10	6,831	223	190
1986	Average	6,752	326	11	33	7,034	233	184
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	January	6,629	228	162	50	6,845	225	186
	February	6,573	115	-252	102	6,838	219	179
	March	6,643	235	-236	97	7,017	210	171
	April	6,742	381	-67	53	7,137	205	169
	May	7,063	528	95	59	7,437	209	172
	June	7,351	364	160	99	7,456	214	177
	July	7,274	232	-177	122	7,561	208	172
	August	7,247	385	7	98	7,528	209	172
	September	7,030	312	195	63	7,083	216	178
	October	6,749	236	-354	58	7,281	203	167
	November	7,016	322	228	104	7,008	209	173
	December	7,354	216	267	79	7,224	219	182
	Average	6,975	297	3	82	7,188	..	..
1992	January	7,013	246	304	87	6,869	229	191
	February	6,726	275	-22	59	6,963	230	191
	March	6,683	247	-278	71	7,137	220	182
	April	6,954	428	54	90	7,238	218	183
	May	7,092	392	74	82	7,328	220	186
	June	7,198	424	76	86	7,460	225	188
	July	7,195	303	-249	108	7,639	215	180
	August	6,817	240	-446	123	7,380	201	167
	September	7,071	418	60	85	7,344	206	168
	October	7,198	193	-41	94	7,338	204	167
	November	7,323	170	318	74	7,102	214	177
	December	7,411	202	32	184	7,396	216	178
	Average	7,058	294	-11	96	7,268	..	..
1993	January	7,254	204	571	142	6,746	237	195
	February	7,172	216	160	99	7,129	242	200
	March	6,897	198	-411	109	7,397	227	187
	April	7,123	253	-137	111	7,401	222	183
	May	7,394	308	80	90	7,531	223	185
	June	7,447	251	-75	81	7,692	220	183
	July	7,344	292	-242	100	7,777	213	176
	August	R 7,344	R 283	R -336	R 77	R 7,885	R 200	R 165
	September*	E 7,545	E 227	E 144	E 73	E 7,548	E 208	E 171
	9-Mo. Average	E 7,280	E 248	E -29	E 98	E 7,459	..	..
1992	9-Mo. Average	6,973	330	-49	88	7,263	..	..
1991	9-Mo. Average	6,953	311	-11	83	7,192	..	..

^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.

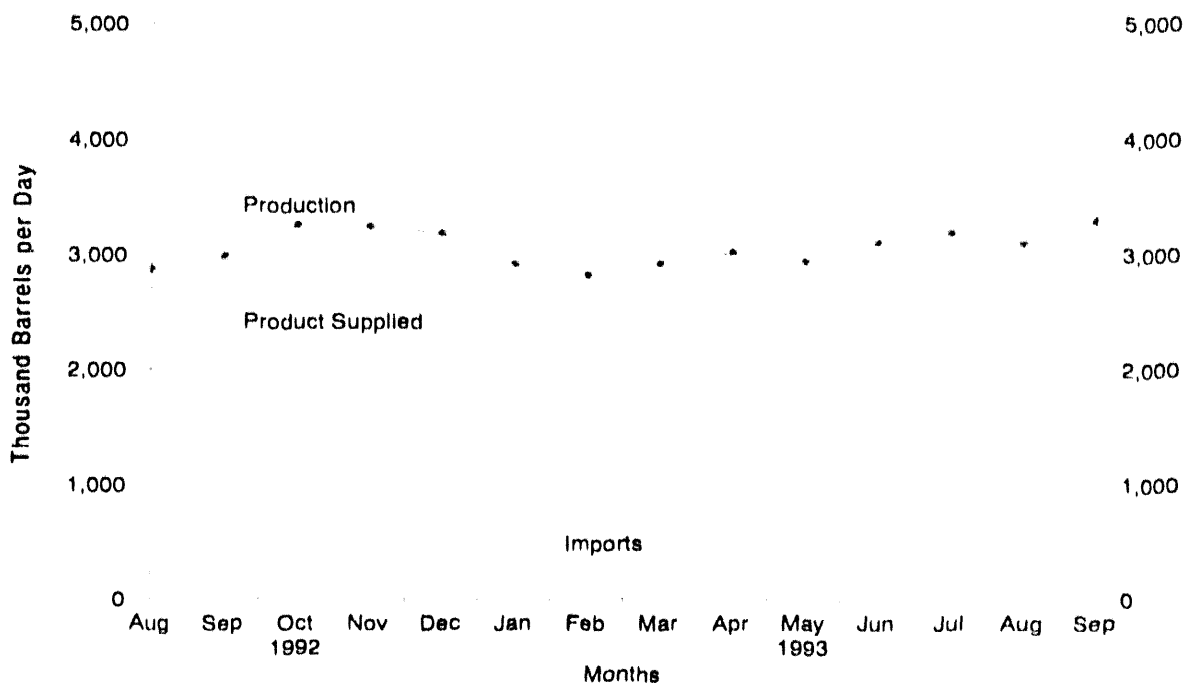
R = Revised data (s) = Less than 500 barrels per day E = Estimated NA = Not Available

* 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.

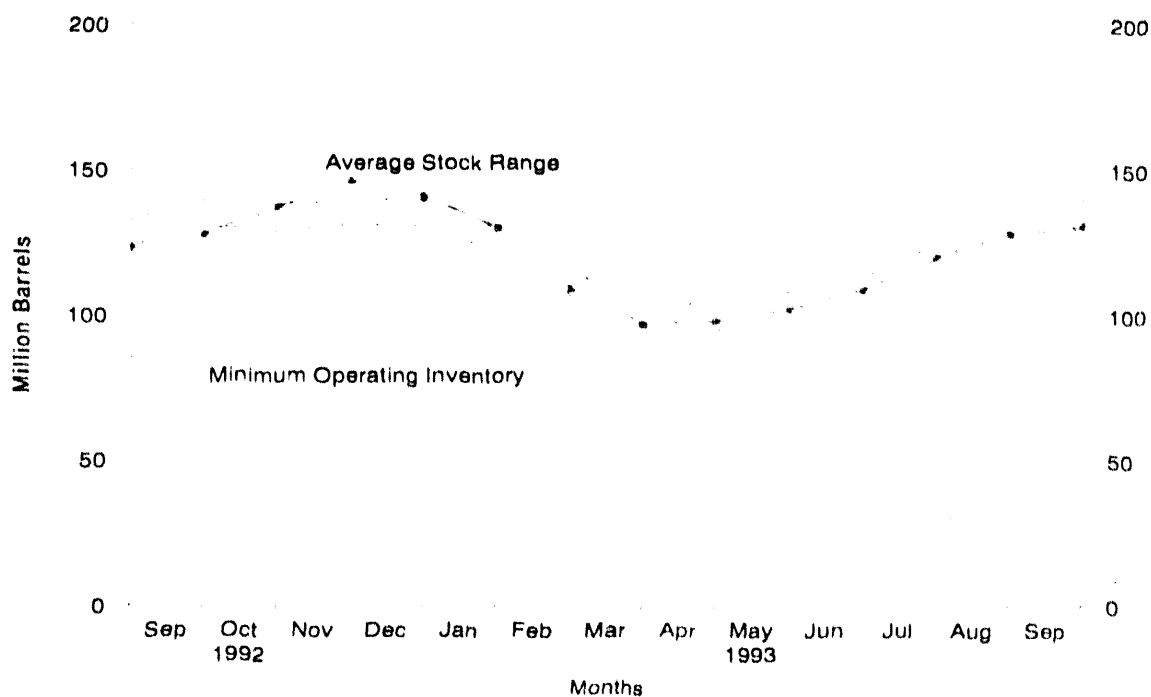
Source: See Summary Statistics Table and Figure Sources

Figure S7. Distillate Fuel Oil Supply and Disposition, August 1992 - Present



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

Figure S8. Distillate Fuel Oil Ending Stocks, August 1992 - Present



Note: The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1988 study, the NPC estimated this inventory level for distillate fuel oil to be 85 million barrels.

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

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

Year/Month		Supply ^a		Disposition			Ending Stocks ^b (Million Barrels)		
		Total Production	Imports	Stock Change ^c	Exports	Product Supplied ^a	Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur
1981	Average	2,613	173	^d -38	5	2,829	192	--	--
1982	Average	2,606	93	-35	74	2,671	^d 179	--	--
1983	Average	2,456	174	^d -124	64	2,690	140	--	--
1984	Average	2,681	272	57	51	2,845	161	--	--
1985	Average	2,687	200	-48	67	2,868	144	--	--
1986	Average	2,798	247	31	100	2,914	155	--	--
1987	Average	2,731	255	-56	66	2,976	134	--	--
1988	Average	2,859	302	-30	69	3,122	124	--	--
1989	Average	2,899	306	-49	97	3,157	106	--	--
1990	Average	2,925	278	73	109	3,021	132	--	--
1991	January	2,845	192	-662	332	3,367	112	--	--
	February	2,870	139	-359	393	2,976	102	--	--
	March	2,865	206	-112	198	2,984	98	--	--
	April	2,819	258	156	81	2,839	103	--	--
	May	2,929	186	132	218	2,765	107	--	--
	June	2,941	209	225	150	2,775	114	--	--
	July	2,998	155	356	149	2,648	125	--	--
	August	2,961	168	214	144	2,770	131	--	--
	September	3,055	237	291	136	2,865	140	--	--
	October	3,040	207	-59	259	3,047	138	--	--
	November	3,103	249	206	224	2,921	144	--	--
	December	3,107	252	-30	302	3,087	144	--	--
	Average	2,962	205	31	215	2,921	--	--	--
1992	January	2,818	232	-541	360	3,231	127	--	--
	February	2,661	217	-619	278	3,219	109	--	--
	March	2,749	238	-358	138	3,207	98	--	--
	April	2,930	202	-185	278	3,039	92	--	--
	May	2,933	179	139	222	2,753	96	--	--
	June	2,995	157	268	205	2,679	104	--	--
	July	3,067	172	328	201	2,710	115	--	--
	August	2,865	229	262	127	2,705	123	--	--
	September	2,983	237	168	145	2,908	128	--	--
	October	3,251	263	290	169	3,056	137	--	--
	November	3,240	236	316	230	2,929	146	--	--
	December	3,179	229	-183	276	3,316	141	--	--
	Average	2,974	216	-8	219	2,979	--	--	--
1993	January	2,909	182	-336	287	3,141	130	22	108
	February	2,813	224	-742	301	3,478	109	16	94
	March	2,918	235	-386	154	3,386	97	12	85
	April	3,010	209	30	241	2,949	98	13	86
	May	2,930	153	104	355	2,624	102	14	87
	June	3,095	168	263	158	2,843	109	17	92
	July	3,185	130	348	298	2,669	120	23	97
	August	R 3,084	R 159	R 249	R 197	R 2,797	R 128	R 45	R 83
	September*	E 3,289	E 155	E 153	E 138	E 3,153	E 131	E 55	E 76
	9-Mo. Average	E 3,027	E 179	E -30	E 236	E 2,999	--	--	--
1992	9-Mo. Average	2,890	207	-57	217	2,937	--	--	--
1991	9-Mo. Average	2,921	195	29	199	2,887	--	--	--

^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.

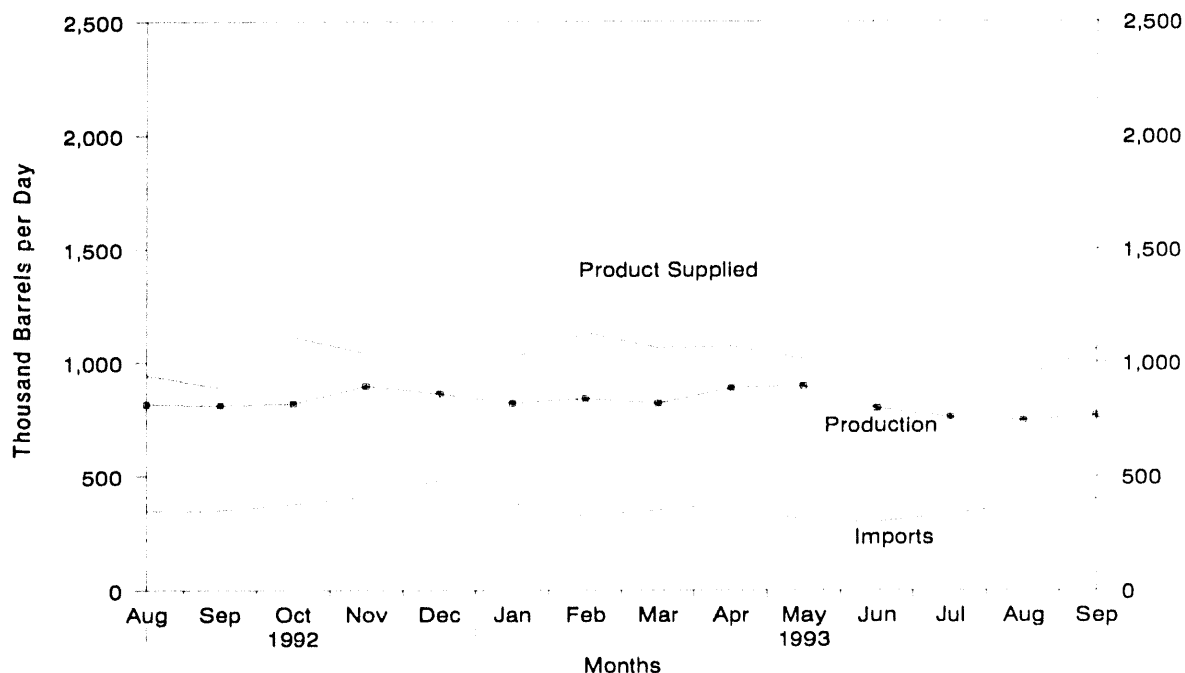
R = Revised data. (s) = Less than 500 barrels per day. E = Estimated. NA = Not available.

* 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.

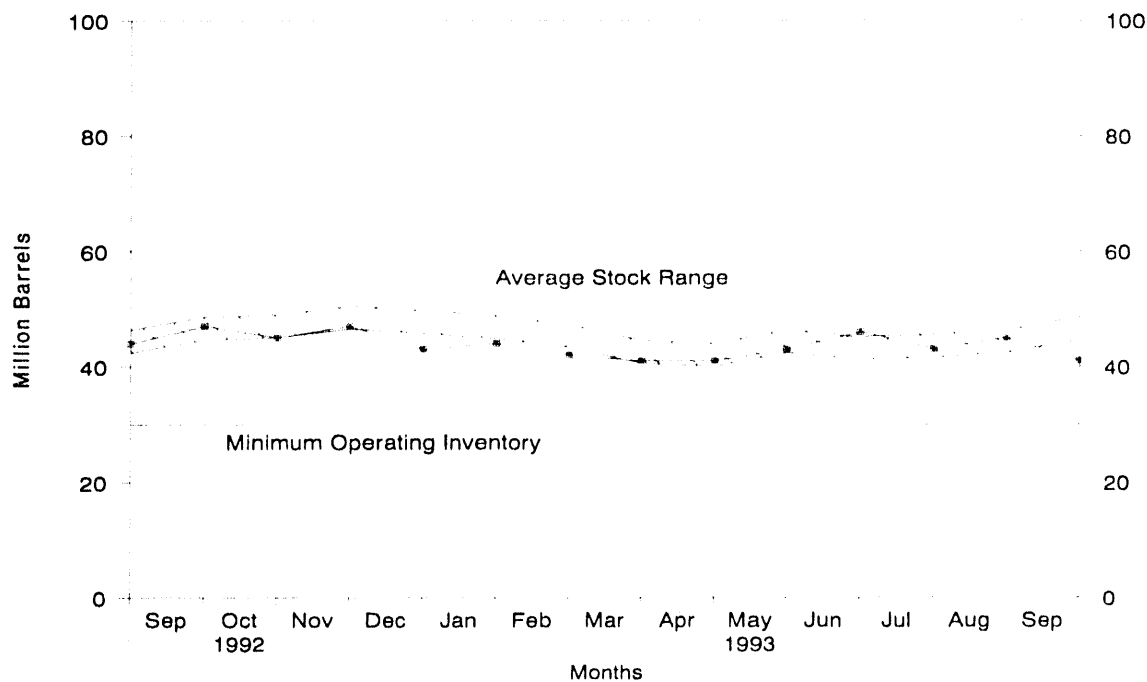
Source: See Summary Statistics Table and Figure Sources.

Figure S9. Residual Fuel Oil Supply and Disposition, August 1992 - Present



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

Figure S10. Residual Fuel Oil Ending Stocks, August 1992 - Present



Note: The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1988 study, the NPC estimated this inventory level for residual fuel oil to be 30 million barrels.

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

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

Year/Month		Supply ^a		Disposition			Ending Stocks ^c (Million Barrels)
		Total Production	Imports	Stock Change ^b	Exports	Product Supplied ^a	
1981	Average	1,321	800	^d -37	118	2,088	78
1982	Average	1,070	776	-32	209	1,716	^d 66
1983	Average	852	699	^d -55	185	1,421	49
1984	Average	891	681	12	190	1,369	53
1985	Average	882	510	-7	197	1,202	50
1986	Average	889	669	-8	147	1,418	47
1987	Average	885	565	(e)	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	January	1,001	425	-19	320	1,124	48
	February	1,050	384	-76	299	1,211	46
	March	995	332	-85	178	1,234	43
	April	916	416	68	145	1,119	45
	May	929	425	50	300	1,003	47
	June	933	512	-103	245	1,303	44
	July	871	420	-1	176	1,117	44
	August	925	599	68	216	1,240	46
	September	838	481	78	168	1,074	48
	October	814	438	6	217	1,029	48
	November	896	455	24	189	1,139	49
	December	1,051	547	28	264	1,307	50
	Average	934	453	4	226	1,158	-
1992	January	965	364	-144	184	1,289	45
	February	957	498	-55	176	1,334	44
	March	990	397	-77	310	1,154	41
	April	900	342	-78	265	1,055	39
	May	964	328	67	207	1,019	41
	June	894	334	-11	230	1,009	41
	July	838	280	-37	169	986	40
	August	815	347	125	96	941	44
	September	810	349	123	149	887	47
	October	818	376	-72	156	1,110	45
	November	895	411	49	216	1,041	47
	December	862	481	-127	158	1,312	43
	Average	892	375	-20	193	1,094	-
1993	January	820	383	49	133	1,020	44
	February	841	325	-75	113	1,128	42
	March	819	352	-46	152	1,065	41
	April	887	377	24	169	1,070	41
	May	896	308	53	137	1,014	43
	June	797	299	92	147	857	46
	July	760	337	-101	122	1,075	43
	August	R 745	R 370	61	R 120	R 935	R 45
	September ^a	E 767	E 401	E -89	E 199	E 1,058	E 41
	9-Mo. Average	E 814	E 350	E -3	E 144	E 1,024	-
1992	9-Mo. Average	904	359	-10	198	1,074	-
1991	9-Mo. Average	939	444	-2	227	1,158	-

^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.

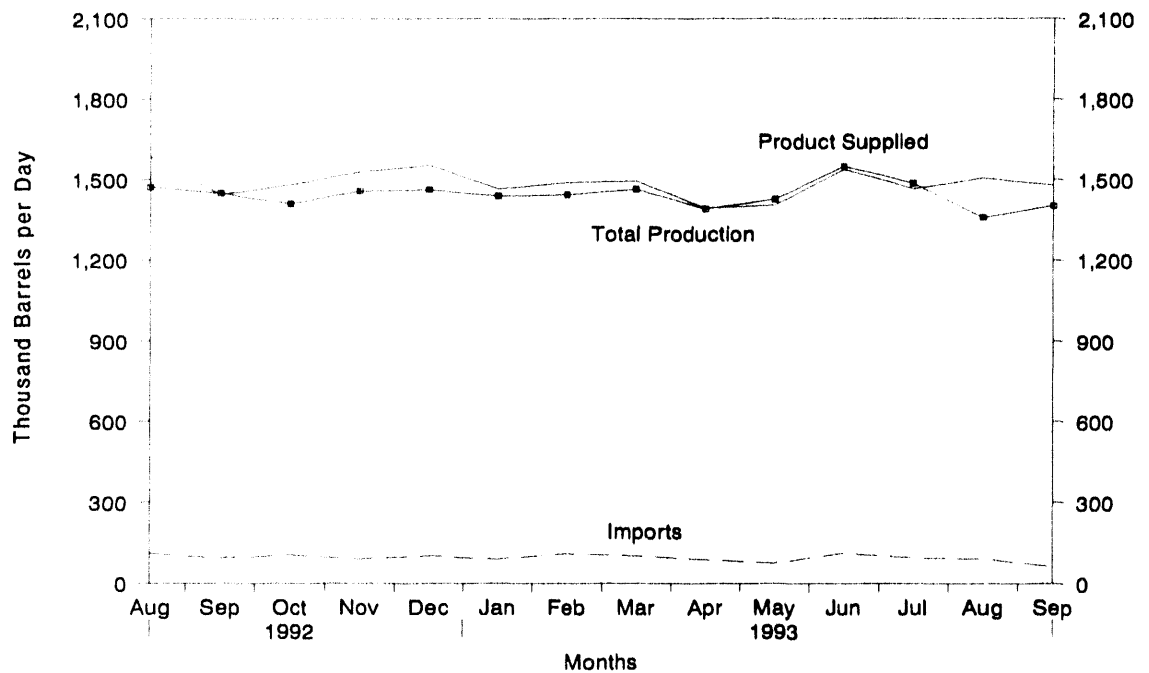
R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

* 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.

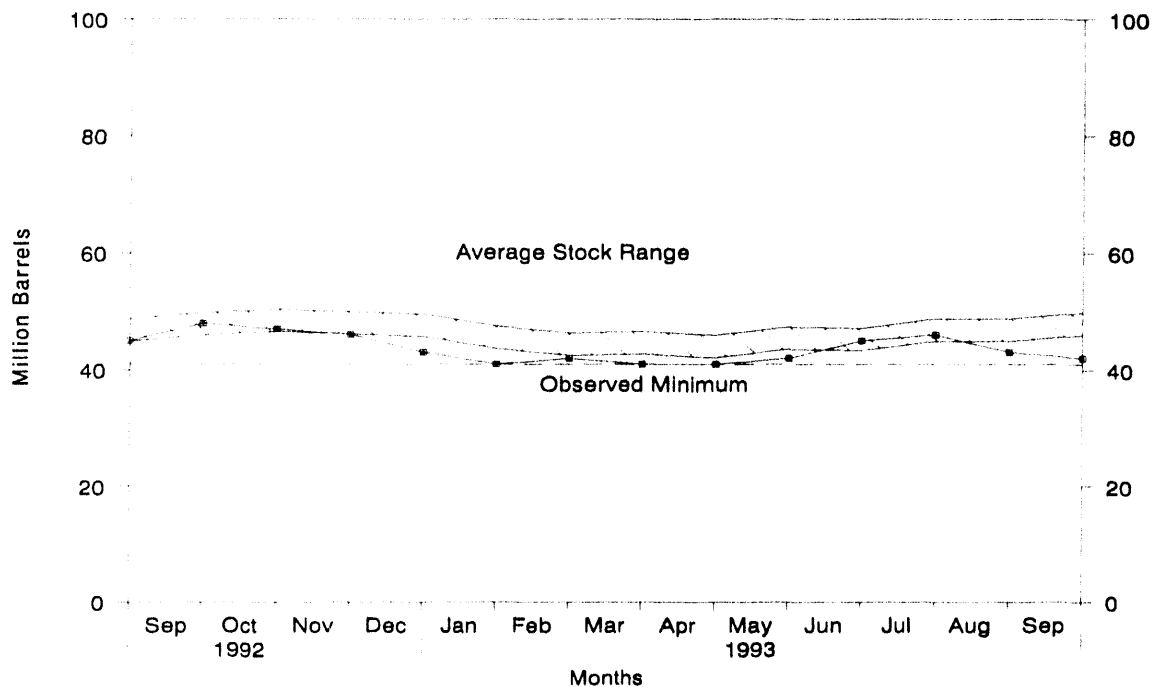
Source: See Summary Statistics Table and Figure Sources.

Figure S11. Jet Fuel Supply and Disposition, August 1992 - Present



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

Figure S12. Jet Fuel Ending Stocks, August 1992 - Present



Note: The observed minimum for total stocks in the last 36-month period was 41.0 million barrels, occurring in January 1993.
 Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S7. See Summary Statistics Table and Figure Sources.

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

Year/Month		Supply			Disposition			Ending Stocks ^a (Million Barrels)	
		Production		Imports	Stock Change ^b	Exports	Product Supplied		Total
		Total	Kerosene-Type				Total	Kerosene-Type	
1981	Average	968	775	38	^c -4	2	1,007	809	41
1982	Average	978	778	29	-12	6	1,013	804	^c 37
1983	Average	1,022	817	29	^c (a)	6	1,046	839	39
1984	Average	1,132	919	62	9	9	1,175	953	42
1985	Average	1,189	983	39	-4	13	1,218	1,005	40
1986	Average	1,293	1,097	57	25	18	1,307	1,105	50
1987	Average	1,343	1,138	67	(a)	24	1,385	1,181	50
1988	Average	1,370	1,164	90	-17	28	1,449	1,236	44
1989	Average	1,403	1,197	106	-8	27	1,489	1,284	41
1990	Average	1,488	1,311	108	31	43	1,522	1,340	52
1991	January	1,509	1,354	67	-55	73	1,559	1,378	50
	February	1,548	1,384	44	-108	159	1,541	1,360	47
	March	1,299	1,157	65	-99	40	1,423	1,270	44
	April	1,286	1,135	73	-8	38	1,329	1,173	44
	May	1,367	1,191	87	85	35	1,334	1,143	47
	June	1,473	1,300	64	58	13	1,465	1,280	48
	July	1,426	1,255	67	-47	31	1,509	1,343	47
	August	1,486	1,316	88	21	11	1,543	1,343	48
	September	1,495	1,322	92	71	10	1,506	1,321	50
	October	1,415	1,253	59	-66	50	1,489	1,319	48
	November	1,433	1,276	56	15	5	1,469	1,282	48
	December	1,530	1,357	42	22	59	1,492	1,338	49
	Average	1,438	1,274	67	-9	43	1,471	1,296	--
1992	January	1,352	1,200	39	-127	44	1,473	1,314	45
	February	1,311	1,164	56	-73	42	1,398	1,250	43
	March	1,347	1,215	56	31	7	1,365	1,218	44
	April	1,286	1,131	74	-68	18	1,409	1,262	42
	May	1,393	1,214	93	114	26	1,346	1,198	45
	June	1,374	1,234	86	-21	45	1,436	1,308	45
	July	1,473	1,328	81	59	62	1,433	1,280	46
	August	1,471	1,339	111	-32	28	1,585	1,438	45
	September	1,448	1,296	93	78	20	1,442	1,313	48
	October	1,408	1,265	105	-12	44	1,480	1,315	47
	November	1,456	1,319	90	-41	59	1,528	1,411	46
	December	1,462	1,336	102	-101	112	1,553	1,410	43
	Average	1,399	1,254	82	-16	43	1,454	1,310	--
1993	January	1,437	1,306	89	-73	134	1,464	1,371	41
	February	1,442	1,318	110	46	17	1,488	1,346	42
	March	1,463	1,332	102	-29	101	1,493	1,371	41
	April	1,390	1,262	88	-4	88	1,393	1,278	41
	May	1,426	1,300	75	37	60	1,404	1,289	42
	June	1,549	1,409	111	78	45	1,538	1,370	45
	July	1,485	1,359	94	41	73	1,465	1,337	46
	August	R 1,358	R 1,257	R 91	R -91	R 34	R 1,506	R 1,405	43
	September*	E 1,401	E 1,321	E 63	E -61	E 46	E 1,478	E 1,372	E 42
	9-Mo. Average	E 1,439	E 1,318	E 91	E -7	E 67	E 1,470	E 1,349	--
1992	9-Mo. Average	1,384	1,236	77	-4	33	1,432	1,287	--
1991	9-Mo. Average	1,431	1,267	72	-9	45	1,467	1,290	--

^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.

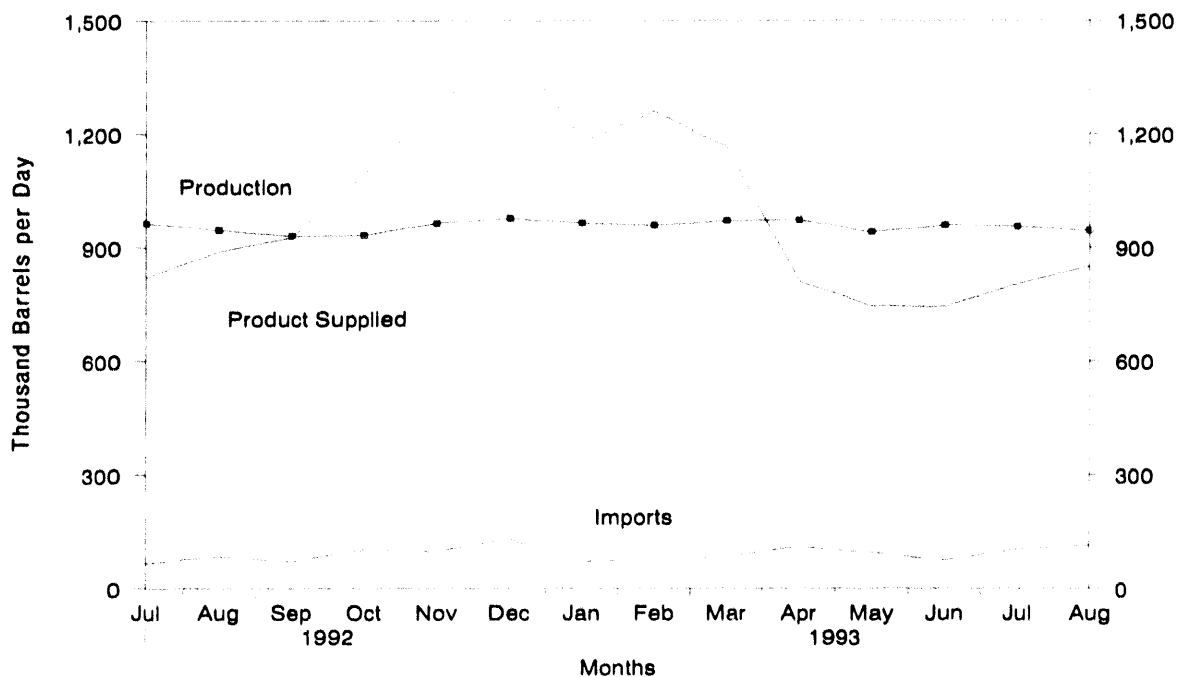
R = Revised data. (s) = Less than 500 barrels per day. E = Estimated.

* 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.

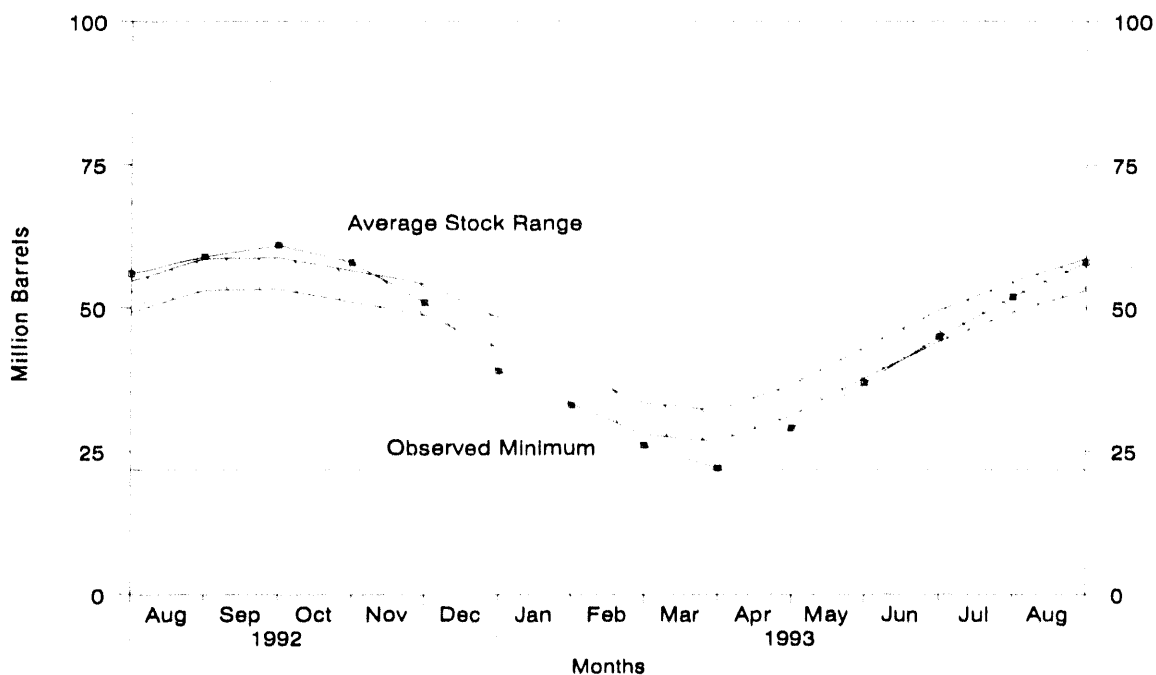
Source: See Summary Statistics Table and Figure Sources.

Figure S13. Propane/Propylene Supply and Disposition, July 1992 - Present



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

Figure S14. Propane/Propylene Ending Stocks, July 1992 - Present



Note: The Observed Minimum for propane stocks in the last 36 month period was 21.8 million barrels, occurring in March 1993.
Source: Energy Information Administration, *Petroleum Supply Monthly*, Table S8. See Summary Statistics Table and Figure Sources.

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

Year/Month		Supply		Disposition			Ending Stocks ^b (Million Barrels)	
		Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports		Product Supplied
1981	Average	745	70	^c 18	5	18	773	76
1982	Average	711	63	-59	4	31	788	^c 54
1983	Average	730	44	^c -24	4	43	751	^c 48
1984	Average	806	67	^c 7	4	30	833	58
1985	Average	816	67	-50	3	48	883	39
1986	Average	817	110	64	4	28	831	63
1987	Average	828	88	-41	8	24	924	48
1988	Average	863	106	7	8	31	923	50
1989	Average	862	111	-52	11	24	990	32
1990	Average	878	115	48	(s)	28	917	49
1991	January	920	105	-449	0	51	1,422	35
	February	923	90	-174	0	40	1,147	30
	March	912	56	-10	0	45	933	30
	April	900	101	179	0	25	798	35
	May	922	90	214	0	31	767	42
	June	906	81	223	0	22	741	49
	July	901	91	81	0	15	895	51
	August	891	73	40	0	13	910	52
	September	905	92	-22	0	14	1,006	52
	October	902	146	35	0	18	895	53
	November	930	82	-37	0	20	1,030	52
	December	964	86	-128	(s)	38	1,139	48
	Average	915	91	-3	(s)	28	982	..
1992	January	949	90	-282	(s)	72	1,249	39
	February	955	86	-200	(s)	27	1,214	33
	March	940	68	-15	(s)	28	997	33
	April	961	80	120	0	24	896	36
	May	977	72	253	(s)	23	773	44
	June	978	66	206	(s)	27	811	50
	July	964	68	176	(s)	35	821	56
	August	946	85	117	(s)	25	889	59
	September	931	71	51	(s)	25	927	61
	October	933	104	-88	(s)	30	1,095	58
	November	964	99	-243	0	33	1,273	51
	December	977	131	-385	0	45	1,448	39
	Average	956	85	-24	(s)	33	1,032	..
1993	January	965	72	-173	1	31	1,179	33
	February	959	78	-261	(s)	37	1,261	26
	March	971	85	-140	(s)	32	1,165	22
	April	973	112	233	(s)	40	812	29
	May	942	96	262	0	30	746	37
	June	958	75	266	0	23	744	45
	July	956	105	232	0	26	804	52
	August	945	116	184	0	27	851	58
	8-Mo. Average	959	93	78	(s)	31	943	..
1992	8-Mo. Average	959	77	48	(s)	33	955	..
1991	8-Mo. Average	909	86	14	0	30	951	..

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

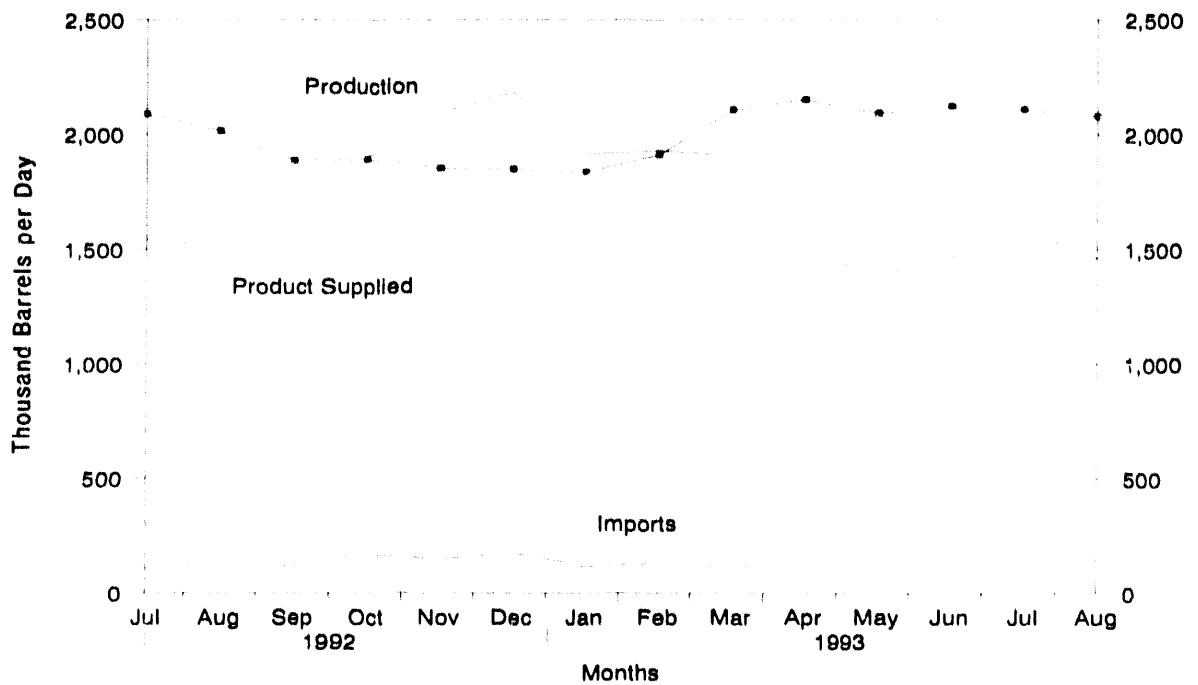
^b Stocks are totals as of end of period.

^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.

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

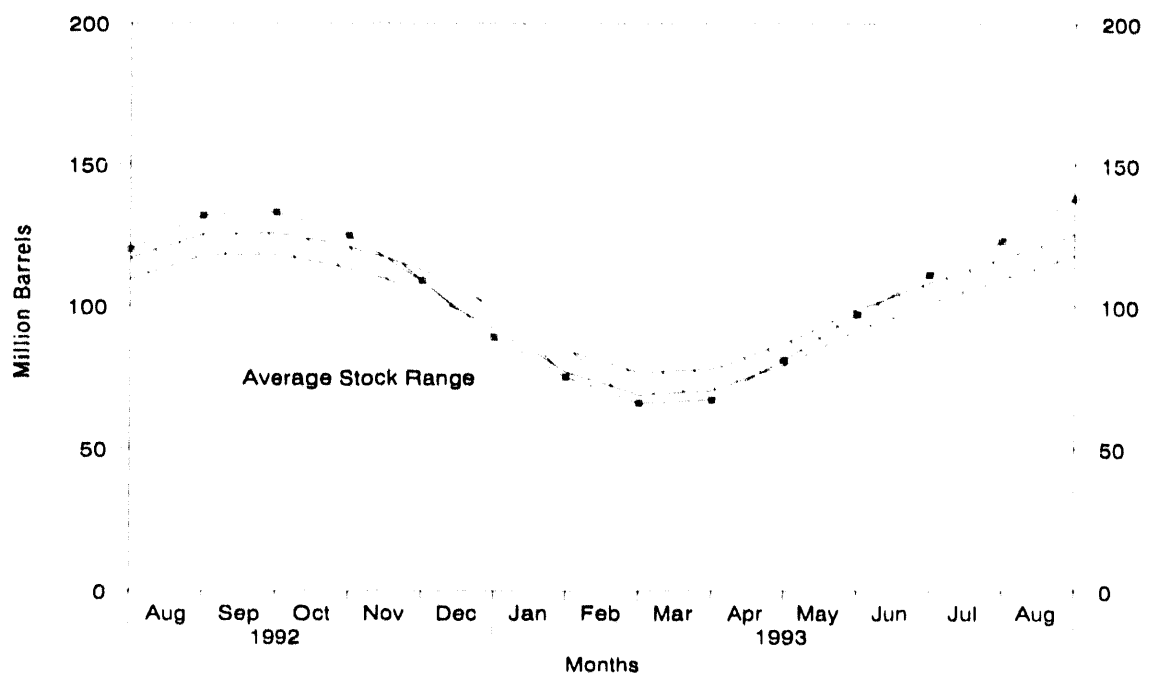
Source: See Summary Statistics Table and Figure Sources.

Figure S15. Liquefied Petroleum Gases Supply and Disposition, July 1992 - Present



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

Figure S16. Liquefied Petroleum Gases Ending Stocks, July 1992 - Present



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

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

Year/Month		Supply		Stock Change ^a	Disposition			Ending Stocks ^b (Million Barrels)
		Total Production	Imports		Refinery Inputs	Exports	Product Supplied	
1981	Average	1,571	244	^c 18	289	42	1,486	135
1982	Average	1,528	226	-111	300	65	1,499	^c 94
1983	Average	1,642	190	^c -4	253	73	1,509	^c 101
1984	Average	1,697	195	^c -19	291	48	1,572	101
1985	Average	1,704	187	-75	304	62	1,599	74
1986	Average	1,695	242	80	302	42	1,512	103
1987	Average	1,748	190	-15	304	38	1,512	97
1988	Average	1,817	209	1	321	49	1,556	97
1989	Average	1,791	181	-47	315	35	1,668	80
1990	Average	1,749	188	48	293	40	1,556	98
1991	January	1,753	148	-658	364	56	2,139	78
	February	1,665	126	-271	322	60	1,880	70
	March	1,642	91	113	249	56	1,615	73
	April	1,937	154	346	237	31	1,477	84
	May	1,989	129	428	239	45	1,407	97
	June	1,949	148	328	245	32	1,492	107
	July	1,913	151	211	253	24	1,575	113
	August	1,899	143	175	255	18	1,594	119
	September	1,806	147	-84	288	31	1,718	116
	October	1,805	233	33	345	31	1,629	117
	November	1,789	156	-330	413	40	1,821	107
	December	1,810	139	-488	437	73	1,927	92
	Average	1,871	147	-15	304	41	1,689	..
1992	January	1,820	142	-452	384	80	1,950	78
	February	1,917	126	-365	326	33	2,051	68
	March	2,033	97	153	247	43	1,687	72
	April	2,102	127	401	233	45	1,549	84
	May	2,106	106	489	245	44	1,433	100
	June	2,102	104	334	257	59	1,556	110
	July	2,090	106	345	255	52	1,544	120
	August	2,016	148	369	233	55	1,507	132
	September	1,886	114	37	299	45	1,620	133
	October	1,892	171	-242	369	39	1,898	125
	November	1,854	148	-541	403	43	2,097	109
	December	1,849	176	-660	453	49	2,184	89
	Average	1,972	131	-10	309	49	1,755	..
1993	January	1,837	117	-441	440	39	1,917	75
	February	1,912	128	-310	367	55	1,928	66
	March	2,106	123	9	263	47	1,910	67
	April	2,151	142	466	263	69	1,495	81
	May	2,091	148	538	258	50	1,393	97
	June	2,122	111	469	260	41	1,463	111
	July	2,108	155	380	246	54	1,583	123
	August	2,078	167	475	263	45	1,462	138
	8-Mo. Average	2,052	137	202	294	50	1,642	..
1992	8-Mo. Average	2,023	120	162	272	51	1,657	..
1991	8-Mo. Average	1,906	136	86	270	40	1,646	..

^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.

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

Source: See Summary Statistics Table and Figure Sources.

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

Year/Month		Supply		Disposition			Ending Stocks ^b (Million Barrels)
		Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	
1981	Average	2,771	188	^c -42	723	197	241
1982	Average	2,475	305	^c -68	787	205	^c 216
1983	Average	2,437	382	^c -6	712	236	^c 217
1984	Average	2,500	503	^c -32	791	236	198
1985	Average	2,532	550	22	886	227	206
1986	Average	2,704	504	-15	888	291	201
1987	Average	2,737	543	-1	829	264	200
1988	Average	2,773	645	22	799	294	208
1989	Average	2,771	627	12	797	305	213
1990	Average	2,842	705	-32	887	289	201
1991	January	2,653	748	204	844	317	207
	February	2,668	573	363	726	275	217
	March	2,576	551	151	819	239	222
	April	2,724	607	133	753	228	226
	May	2,853	800	198	900	327	232
	June	3,030	615	-123	1,092	304	228
	July	3,029	776	-143	1,081	321	224
	August	2,993	642	-169	1,013	296	219
	September	3,010	748	101	802	267	222
	October	2,824	611	-215	944	211	215
	November	2,750	650	-81	1,093	238	213
	December	2,797	577	-163	1,147	304	208
	Average	2,826	675	18	936	277	..
1992	January	2,702	734	203	787	272	214
	February	2,642	575	183	883	240	219
	March	2,752	713	238	730	239	227
	April	2,900	793	-31	1,043	217	226
	May	2,929	665	-113	910	199	222
	June	3,126	669	-42	787	225	221
	July	3,207	740	-156	996	284	216
	August	3,068	729	-116	884	227	212
	September	3,114	748	188	675	336	218
	October	2,923	701	-182	954	295	212
	November	2,915	697	-24	989	264	212
	December	2,853	711	-165	1,223	352	^c 207
	Average	2,928	707	-3	906	263	..
1993	January	3,026	698	^c 600	829	271	225
	February	2,815	773	122	949	282	228
	March	2,866	818	243	747	269	236
	April	2,862	719	9	900	315	236
	May	2,899	808	85	979	278	239
	June	3,022	630	-240	981	278	231
	July	3,116	875	116	945	302	235
	August	3,094	676	27	865	295	236
	8-Mo Average	2,965	750	122	899	286	..
1992	8-Mo Average	2,917	703	20	877	238	..
1991	8-Mo Average	2,817	665	74	905	289	..

^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.

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, and liquefied petroleum gases. • 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 Table and Figure 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 1992).
- EIA, *Petroleum Supply Monthly* (January 1993 through August 1993).
- EIA, Weekly Petroleum Supply Reporting System (except domestic crude oil production) (September 1993). 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 1993 through September 1993). 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 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 "Minimum Operating Inventory" (MOI) on the stocks graphs for crude oil, finished motor gasoline, distillate fuel oil, and residual fuel oil represent estimates of those inventory levels made by the National Petroleum Council (NPC) and published in April 1989 in a report of the NPC's Committee on Petroleum Storage & Transportation. The NPC defines the MOI as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. The NPC report presents the findings of a study which was directed by the NPC Committee. MOI estimates presented in the report were developed by consensus through a decision-making process that relied on the judgement of Committee members based on their operating experience, on historical inventory trends, and on the results of an NPC survey of companies that provide primary inventory data to the EIA. The estimated MOI

values are: Crude oil -- 300 million barrels; finished motor gasoline -- 205 million barrels; distillate fuel oil -- 85 million barrels; and residual fuel oil -- 30 million barrels.

The NPC did not develop a minimum operating inventory level for jet fuel stocks or propane/propylene stocks. The line labeled "observed minimum" is 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.

Beginning no later than November 1992, the Clean Air Act Amendments of 1990 require that all gasoline sold in carbon monoxide nonattainment areas have an oxygen content of 2.7 percent (by weight) during winter months. Beginning in 1995 further requirements are that only reformulated gasoline having an average oxygen content of 2.0 percent be sold in the nine worst ozone nonattainment areas.

In 1991, the Energy Information Administration (EIA) conducted a frame identifier survey 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 affected stocks reported and stock change calculations. However, a new basis stock level was not calculated.

Detailed Statistics



At some locations, oil skimmers and knockout tanks (in background) are used to remove waste water from the crude oil. The crude oil is then put into storage tanks and gauged.

Table 1. U.S. Petroleum Balance, August 1993

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 47,340	E 1,527	E 381,458	E 1,570
(2)	Lower 48 States	E 161,345	E 5,205	E 1,283,209	E 5,281
(3)	Total U.S.	E 208,686	E 6,732	E 1,664,668	E 6,850
	Net Imports				
(4)	Imports (Gross Excluding Strategic Petroleum Reserve (SPR))	205,041	6,614	1,614,336	6,643
(5)	SPR Imports	0	0	4,354	18
(6)	Exports	1,712	55	26,735	110
(7)	Imports (Net Including SPR)	203,329	6,559	1,591,955	6,551
	Other Sources				
(8)	SPR Stock Change (Withdrawal (+), Addition (-))	-754	-24	-9,363	-39
(9)	Other Stock Change (Withdrawal (+), Addition (-))	16,993	548	-17,383	-72
(10)	Product Supplied and Losses	-237	-8	-2,291	-9
(11)	Unaccounted for ^a	995	32	67,727	279
(12)	Total Other Sources	16,997	548	38,690	159
(13)	Crude Input to Refineries	429,012	13,839	3,295,312	13,561
(13) = (3) + (7) + (12)					
Natural Gas Liquids (NGL)					
(14)	Field Production ^b	59,016	1,904	452,037	1,860
(15)	Net Imports ^c	998	32	6,559	27
(16)	Stock Change (Withdrawal (+), Addition (-)) ^c	-1,545	-50	-4,225	-17
(17)	Total NGL Supply	58,470	1,886	454,371	1,870
Other Liquids					
	Unfinished Oils and Gasoline Blending Components, Total				
(18)	Stock Change (Withdrawal (+), Addition (-))	-4,868	-157	-22,504	-93
(19)	Net Imports	14,760	476	124,863	514
(20)	Other Liquids New Supply (Field Production)	1,713	55	36,115	149
(21)	Refinery Processing Gain ^a	24,105	778	184,561	760
(22)	Crude Oil Product Supplied	237	8	2,285	9
(23)	Total Other Liquids	35,947	1,160	325,320	1,339
(23) = (18) through (22)					
(24)	Total Production of Products	523,429	16,885	4,075,003	16,770
(24) = (13) + (17) + (23)					
Net Imports of Refined Products					
(25)	Imports (Gross)	38,286	1,235	294,066	1,210
(26)	Exports	23,720	765	215,161	885
(27)	Imports (Net)	14,566	470	78,905	325
(28)	Total New Supply of Products	537,995	17,355	4,153,908	17,094
(28) = (24) + (27)					
(29)	Refined Products Stock Change (Withdrawal (+), Addition (-))	-5,548	-179	-28,971	-119
(30)	Total Petroleum Products Supplied for Domestic Use	532,447	17,176	4,124,937	16,975
(30) = (28) + (29)					
(31)	Finished Motor Gasoline	244,444	7,885	1,809,840	7,448
(32)	Distillate Fuel Oil	86,704	2,797	724,234	2,980
(33)	Residual Fuel Oil	28,972	935	247,780	1,020
(34)	Jet Fuel	46,691	1,506	356,905	1,469
(35)	Liquefied Petroleum Gases	45,316	1,462	398,920	1,642
(36)	Other ^d	80,084	2,583	584,973	2,407
(37)	Crude Oil	237	8	2,285	9
(38)	Total Products Supplied	532,447	17,176	4,124,937	16,975
(38) = (31) through (37)					
Ending Stocks, All Oils					
(39)	Crude Oil (Excluding SPR)	335,432	--	335,432	--
(40)	Strategic Petroleum Reserve	584,087	--	584,087	--
(41)	Finished Motor Gasoline	165,243	--	165,243	--
(42)	Distillate Fuel Oil	127,945	--	127,945	--
(43)	Residual Fuel Oil	44,558	--	44,558	--
(44)	Jet Fuel	43,262	--	43,262	--
(45)	Liquefied Petroleum Gases	137,847	--	137,847	--
(46)	Other ^d	235,813	--	235,813	--
(47)	Total Stocks	1,674,187	--	1,674,187	--
(47) = (39) through (46)					

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

^b Includes fuel ethanol blended into finished motor gasoline.

^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.

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

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,
August 1993
(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 208,686	--	205,041	995	-16,239	0	429,012	1,712	237	919,519
Natural Gas Liquids and LRGs	53,700	21,655	6,215	--	16,266	--	13,771	1,437	50,096	150,982
Pentanes Plus	10,930	--	1,027	--	1,545	--	5,603	29	4,780	13,135
Liquefied Petroleum Gases	42,770	21,655	5,188	--	14,721	--	8,168	1,408	45,316	137,847
Ethane/Ethylene	16,924	983	605	--	2,855	--	0	0	15,657	25,111
Propane/Propylene	15,586	13,723	3,591	--	5,693	--	0	830	26,377	57,797
Normal Butane/Butylene	4,307	6,522	589	--	6,399	--	2,517	578	1,924	41,111
Isobutane/Isobutylene	5,953	427	403	--	-226	--	5,651	0	1,358	13,828
Other Liquids	1,713	--	14,811	--	4,868	--	21,217	51	-9,612	163,871
Other Hydrocarbons/Oxygenates	5,563	--	362	--	1,448	--	4,477	0	0	21,013
Unfinished Oils	--	--	13,483	--	5,768	--	17,326	0	-9,611	107,593
Motor Gasoline Blend, Comp.	-3,850	--	966	--	-2,361	--	-574	51	0	35,221
Aviation Gasoline Blend, Comp.	--	--	0	--	13	--	-12	0	-1	44
Finished Petroleum Products	5,316	466,450	33,098	--	-9,173	--	--	22,312	491,726	439,815
Finished Motor Gasoline	5,316	222,357	8,761	--	-10,408	--	--	2,399	244,444	165,243
Reformulated	--	0	0	--	0	--	--	NA	NA	0
Oxygenated	14,660	10,757	0	--	3,000	--	--	NA	NA	8,730
Other	-9,344	211,600	8,761	--	-13,408	--	--	NA	NA	156,513
Finished Aviation Gasoline	--	751	16	--	-182	--	--	0	949	1,619
Jet Fuel	--	42,097	2,826	--	-2,809	--	--	1,041	46,691	43,262
Naphtha-Type	--	3,130	263	--	-18	--	--	284	3,127	3,849
Kerosene-Type	--	38,967	2,563	--	-2,791	--	--	757	43,564	39,413
Kerosene	--	1,052	7	--	17	--	--	21	1,021	5,474
Distillate Fuel Oil	--	95,617	4,915	--	7,726	--	--	6,102	86,704	127,945
0.05 percent sulfur and under ..	--	35,436	1,907	--	21,511	--	--	NA	NA	44,741
Greater than 0.05 percent sulfur ..	--	60,181	3,008	--	-13,785	--	--	NA	NA	83,204
Residual Fuel Oil	--	23,100	11,474	--	1,885	--	--	3,717	28,972	44,558
Naphtha For Petro. Feed. Use	--	4,366	921	--	-796	--	--	0	6,083	1,998
Other Oils For Petro. Feed. Use	--	9,441	2,662	--	6	--	--	0	12,097	1,452
Special Naphthas	--	1,775	210	--	-56	--	--	202	1,839	2,319
Lubricants	--	4,734	180	--	-817	--	--	520	5,211	11,614
Waxes	--	603	51	--	-30	--	--	67	617	852
Petroleum Coke	--	19,375	0	--	-568	--	--	7,986	11,957	10,307
Asphalt and Road Oil	--	19,010	1,035	--	-3,270	--	--	251	23,064	20,360
Still Gas	--	20,823	0	--	0	--	--	0	20,823	0
Miscellaneous Products	--	1,349	40	--	129	--	--	6	1,254	2,812
Total	269,415	488,105	259,165	995	-4,278	0	464,000	25,511	532,447	1,674,187

^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.

NA = Not available.

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-August 1993
(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 1,664,668	--	1,618,690	67,727	26,746	6	3,295,312	26,735	2,285	919,519
Natural Gas Liquids and LRGs	424,879	155,090	39,889	--	53,394	--	109,463	12,262	444,739	150,982
Pentanes Plus	81,390	--	6,719	--	4,225	--	37,908	160	45,818	13,135
Liquefied Petroleum Gases	343,489	155,090	33,170	--	49,169	--	71,557	12,103	398,920	137,847
Ethane/Ethylene	138,788	6,759	2,798	--	6,384	--	0	0	141,961	25,111
Propane/Propylene	124,313	108,668	22,484	--	18,948	--	29	7,420	229,068	57,797
Normal Butane/Butylene	32,296	36,544	5,819	--	20,774	--	30,612	4,683	18,590	41,111
Isobutane/Isobutylene	48,092	3,119	2,069	--	3,063	--	40,916	0	9,301	13,828
Other Liquids	36,115	--	126,411	--	22,504	--	180,431	1,548	-41,957	163,871
Other Hydrocarbons/Oxygenates	48,454	--	3,254	--	14,131	--	37,577	0	0	21,013
Unfinished Oils	--	--	115,770	--	12,264	--	145,474	0	-41,968	107,593
Motor Gasoline Blend. Comp.	-12,339	--	7,387	--	-3,876	--	-2,624	1,548	0	35,221
Aviation Gasoline Blend. Comp.	--	--	0	--	-15	--	4	0	11	44
Finished Petroleum Products	27,158	3,614,677	260,896	--	-20,198	--	--	203,059	3,719,870	439,815
Finished Motor Gasoline	27,158	1,734,000	60,965	--	-12,339	--	--	24,622	1,809,840	165,243
Reformulated	--	0	0	--	NA	--	--	NA	NA	0
Oxygenated	85,526	114,771	46	--	NA	--	--	NA	NA	8,730
Other	-58,368	1,619,229	60,919	--	NA	--	--	NA	NA	156,513
Finished Aviation Gasoline	--	5,478	73	--	80	--	--	0	5,471	1,619
Jet Fuel	--	350,788	23,005	--	-22	--	--	16,910	356,905	43,262
Naphtha-Type	--	30,587	2,432	--	-727	--	--	3,952	29,794	3,849
Kerosene-Type	--	320,201	20,573	--	705	--	--	12,958	327,111	39,413
Kerosene	--	9,666	180	--	-4	--	--	1,171	8,679	5,474
Distillate Fuel Oil	--	727,760	44,209	--	-12,689	--	--	60,424	724,234	127,945
0.05 percent sulfur and under	--	100,207	16,519	--	NA	--	--	NA	NA	44,741
Greater than 0.05 percent sulfur ..	--	627,553	27,690	--	NA	--	--	NA	NA	83,204
Residual Fuel Oil	--	199,250	83,617	--	1,849	--	--	33,238	247,780	44,558
Naphtha For Petro. Feed. Use	--	32,593	10,667	--	301	--	--	0	42,959	1,998
Other Oils For Petro. Feed. Use	--	71,400	25,091	--	-441	--	--	0	96,932	1,452
Special Naphthas	--	12,967	1,160	--	183	--	--	982	12,962	2,319
Lubricants	--	38,197	2,293	--	-1,697	--	--	4,636	37,551	11,614
Waxes	--	4,862	504	--	-57	--	--	455	4,968	852
Petroleum Coke	--	149,719	356	--	782	--	--	59,617	89,676	10,307
Asphalt and Road Oil	--	108,107	8,049	--	3,002	--	--	921	112,233	20,360
Still Gas	--	159,477	0	--	0	--	--	0	159,477	0
Miscellaneous Products	--	10,413	727	--	854	--	--	83	10,203	2,812
Total	2,152,820	3,769,767	2,045,886	67,727	82,446	6	3,585,206	243,605	4,124,937	1,674,187

^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.

NA = Not available.

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,
August 1993**
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ^c
Crude Oil	E 6,732	--	6,614	32	-524	0	13,839	55	8
Natural Gas Liquids and LRGs	1,732	699	200	--	525	--	444	46	1,616
Pentanes Plus	353	--	33	--	50	--	181	1	154
Liquefied Petroleum Gases	1,380	699	167	--	475	--	263	45	1,462
Ethane/Ethylene	546	32	20	--	92	--	0	0	505
Propane/Propylene	503	443	116	--	184	--	0	27	851
Normal Butane/Butylene	139	210	19	--	206	--	81	19	62
Isobutane/Isobutylene	192	14	13	--	-7	--	182	0	44
Other Liquids	55	--	478	--	157	--	684	2	-310
Other Hydrocarbons/Oxygenates	179	--	12	--	47	--	144	0	0
Unfinished Oils	--	--	435	--	186	--	559	0	-310
Motor Gasoline Blend. Comp.	-124	--	31	--	-76	--	-19	2	0
Aviation Gasoline Blend. Comp.	--	--	0	--	(s)	--	(s)	0	(s)
Finished Petroleum Products	171	15,047	1,068	--	-296	--	--	720	15,862
Finished Motor Gasoline	171	7,173	283	--	-336	--	--	77	7,885
Reformulated	--	0	0	--	0	--	--	NA	NA
Oxygenated	473	347	0	--	97	--	--	NA	NA
Other	-301	6,826	283	--	-433	--	--	NA	NA
Finished Aviation Gasoline	--	24	1	--	-6	--	--	0	31
Jet Fuel	--	1,358	91	--	-91	--	--	34	1,506
Naphtha-Type	--	101	8	--	-1	--	--	9	101
Kerosene-Type	--	1,257	83	--	-90	--	--	24	1,405
Kerosene	--	34	(s)	--	1	--	--	1	33
Distillate Fuel Oil	--	3,084	159	--	249	--	--	197	2,797
0.05 percent sulfur and under	--	1,143	62	--	694	--	--	NA	NA
Greater than 0.05 percent sulfur ..	--	1,941	97	--	-445	--	--	NA	NA
Residual Fuel Oil	--	745	370	--	61	--	--	120	935
Naphtha For Petro. Feed. Use	--	141	30	--	-26	--	--	0	196
Other Oils For Petro. Feed. Use	--	305	86	--	(s)	--	--	0	390
Special Naphthas	--	57	7	--	-2	--	--	7	59
Lubricants	--	163	6	--	-26	--	--	17	168
Waxes	--	19	2	--	-1	--	--	2	20
Petroleum Coke	--	625	0	--	-18	--	--	258	386
Asphalt and Road Oil	--	613	33	--	-105	--	--	8	744
Still Gas	--	672	0	--	0	--	--	0	672
Miscellaneous Products	--	44	1	--	4	--	--	(s)	40
Total	8,691	15,745	8,360	32	-138	0	14,968	823	17,176

^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.

NA = Not available.

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-August 1993
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil ^a	Stock Change ^b	Crude Losses	Refinery Inputs	Exports	Products Supplied ^c
Crude Oil	E 6,850	--	6,661	279	110	(s)	13,561	110	9
Natural Gas Liquids and LRGs	1,748	638	164	--	220	--	450	50	1,830
Pentanes Plus	335	--	28	--	17	--	156	1	189
Liquefied Petroleum Gases	1,414	638	137	--	202	--	294	50	1,642
Ethane/Ethylene	571	28	12	--	26	--	0	0	584
Propane/Propylene	512	447	93	--	78	--	(s)	31	943
Normal Butane/Butylene	133	150	24	--	85	--	126	19	77
Isobutane/Isobutylene	198	13	9	--	13	--	168	0	38
Other Liquids	149	--	520	--	93	--	743	6	-173
Other Hydrocarbons/Oxygenates	199	--	13	--	58	--	155	0	0
Unfinished Oils	--	--	476	--	50	--	599	0	-173
Motor Gasoline Blend. Comp.	-51	--	30	--	-16	--	-11	6	0
Aviation Gasoline Blend. Comp.	--	--	0	--	(s)	--	(s)	0	(s)
Finished Petroleum Products	112	14,875	1,074	--	-83	--	--	836	15,308
Finished Motor Gasoline	112	7,136	251	--	-51	--	--	101	7,448
Reformulated	--	0	0	--	NA	--	--	NA	NA
Oxygenated	352	472	(s)	--	NA	--	--	NA	NA
Other	-240	6,663	251	--	NA	--	--	NA	NA
Finished Aviation Gasoline	--	23	(s)	--	(s)	--	--	0	23
Jet Fuel	--	1,444	95	--	(s)	--	--	70	1,469
Naphtha-Type	--	126	10	--	-3	--	--	16	123
Kerosene-Type	--	1,318	85	--	3	--	--	53	1,346
Kerosene	--	40	1	--	(s)	--	--	5	36
Distillate Fuel Oil	--	2,995	182	--	-52	--	--	249	2,980
0.05 percent sulfur and under	--	412	68	--	NA	--	--	NA	NA
Greater than 0.05 percent sulfur ..	--	2,583	114	--	NA	--	--	NA	NA
Residual Fuel Oil	--	820	344	--	8	--	--	137	1,020
Naphtha For Petro. Feed. Use	--	134	44	--	1	--	--	0	177
Other Oils For Petro. Feed. Use	--	294	103	--	-2	--	--	0	399
Special Naphthas	--	63	5	--	1	--	--	4	53
Lubricants	--	157	9	--	-7	--	--	19	155
Waxes	--	20	2	--	(s)	--	--	2	20
Petroleum Coke	--	616	1	--	3	--	--	245	369
Asphalt and Road Oil	--	445	33	--	12	--	--	4	462
Still Gas	--	656	0	--	0	--	--	0	656
Miscellaneous Products	--	43	3	--	4	--	--	(s)	42
Total	8,859	16,513	8,419	279	339	(s)	14,754	1,002	16,975

^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.

NA = Not available.

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,
August 1993
(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 818	--	39,065	2,016	8	-639	0	42,546	0	0	15,291
Natural Gas Liquids and LRGs	895	1,604	431	--	2,846	776	--	155	46	4,799	7,682
Pentanes Plus	124	--	269	--	0	462	--	77	(s)	-146	507
Liquefied Petroleum Gases	771	1,604	162	--	2,846	314	--	78	45	4,946	7,175
Ethane/Ethylene	262	0	0	--	0	0	--	0	0	262	0
Propane/Propylene	333	1,341	124	--	2,726	-112	--	0	41	4,595	4,208
Normal Butane/Butylene	132	409	31	--	120	508	--	15	4	165	2,777
Isobutane/Isobutylene	44	-146	7	--	0	-82	--	63	0	-76	190
Other Liquids	2,074	--	4,586	--	280	1,953	--	6,075	0	-1,086	19,886
Other Hydrocarbons/Oxygenates ..	1,257	--	0	--	0	510	--	747	0	0	3,014
Unfinished Oils	--	--	3,643	--	246	1,119	--	3,856	0	-1,086	11,430
Motor Gasoline Blend. Comp.	817	--	943	--	34	324	--	1,470	0	0	5,442
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	2	0	-2	0
Finished Petroleum Products	-744	49,066	25,445	--	71,754	2,062	--	--	553	142,889	146,985
Finished Motor Gasoline	-744	22,969	8,188	--	42,854	-5,613	--	--	5	78,876	50,733
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	733	274	0	--	1,036	1,423	--	--	NA	NA	2,204
Other	-1,477	22,695	8,188	--	41,818	-7,036	--	--	NA	NA	48,529
Finished Aviation Gasoline	--	23	0	--	113	-147	--	--	0	283	482
Jet Fuel	--	2,112	2,389	--	9,939	-1,467	--	--	13	15,894	9,782
Naphtha-Type	--	266	184	--	88	93	--	--	13	432	429
Kerosene-Type	--	1,846	2,205	--	9,851	-1,560	--	--	(s)	15,462	9,353
Kerosene	--	28	7	--	545	580	--	--	0	-2	2,633
Distillate Fuel Oil	--	11,632	4,293	--	17,059	7,623	--	--	17	25,344	59,167
0.05 percent sulfur and under	--	2,855	1,564	--	503	7,105	--	--	NA	NA	18,247
Greater than 0.05 percent sulfur ..	--	8,777	2,729	--	16,556	518	--	--	NA	NA	40,920
Residual Fuel Oil	--	3,350	9,264	--	335	2,120	--	--	5	10,824	17,567
Petrochemical Feedstocks ^e	--	567	213	--	-106	-124	--	--	0	798	251
Special Naphthas	--	76	9	--	90	-35	--	--	10	200	83
Lubricants	--	537	167	--	514	-37	--	--	98	1,157	2,788
Waxes	--	111	43	--	2	-10	--	--	13	153	172
Petroleum Coke	--	1,550	0	--	0	-99	--	--	376	1,273	948
Asphalt and Road Oil	--	3,997	840	--	363	-621	--	--	11	5,810	3,853
Still Gas	--	2,047	0	--	0	0	--	--	0	2,047	0
Miscellaneous Products	--	71	32	--	46	-88	--	--	5	232	526
Total	3,043	50,672	69,527	2,016	74,888	4,172	0	48,776	598	146,600	191,844

^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.

NA = Not available.

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-August 1993
(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 6,242	--	307,662	880	90	1,264	0	313,610	0	0	15,291
Natural Gas Liquids and LRGs	6,810	11,990	4,802	--	24,557	2,708	--	1,814	510	43,127	7,682
Pentanes Plus	870	--	563	--	0	458	--	77	10	888	507
Liquefied Petroleum Gases	5,940	11,990	4,239	--	24,557	2,250	--	1,737	500	42,239	7,175
Ethane/Ethylene	1,960	0	1	--	0	0	--	0	0	1,961	0
Propane/Propylene	2,687	10,653	3,508	--	23,509	515	--	0	262	39,580	4,208
Normal Butane/Butylene	959	1,819	649	--	665	1,675	--	990	238	1,189	2,777
Isobutane/Isobutylene	334	482	81	--	383	60	--	747	0	491	190
Other Liquids	12,802	--	37,036	--	2,094	918	--	55,416	37	-4,439	19,886
Other Hydrocarbons/Oxygenates	8,208	--	588	--	0	1,802	--	6,994	0	0	3,014
Unfinished Oils	--	--	30,744	--	1,355	286	--	36,244	0	-4,431	11,430
Motor Gasoline Blend, Comp.	4,594	--	5,704	--	739	-1,170	--	12,170	37	0	5,442
Aviation Gasoline Blend, Comp.	--	--	0	--	0	0	--	8	0	-8	0
Finished Petroleum Products	-3,853	375,022	197,441	--	573,892	-8,658	--	--	8,010	1,143,151	148,985
Finished Motor Gasoline	-3,853	183,213	56,574	--	346,011	-3,797	--	--	1,300	584,442	50,733
Reformulated	--	0	0	--	0	NA	--	--	NA	NA	0
Oxygenated	4,276	27,923	46	--	32,651	NA	--	--	NA	NA	2,204
Other	-8,129	155,290	56,528	--	313,360	NA	--	--	NA	NA	48,529
Finished Aviation Gasoline	--	135	0	--	828	84	--	--	0	879	482
Jet Fuel	--	21,126	19,931	--	80,205	82	--	--	273	120,907	9,782
Naphtha-Type	--	1,851	1,047	--	1,563	142	--	--	14	4,305	429
Kerosene-Type	--	19,275	18,884	--	78,642	-60	--	--	259	116,602	9,353
Kerosene	--	871	161	--	3,566	407	--	--	24	4,167	2,633
Distillate Fuel Oil	--	89,313	40,596	--	133,930	-5,837	--	--	1,074	268,602	59,167
0.05 percent sulfur and under	--	12,747	14,640	--	4,691	NA	--	--	NA	NA	18,247
Greater than 0.05 percent sulfur	--	76,566	25,956	--	129,239	NA	--	--	NA	NA	40,920
Residual Fuel Oil	--	26,505	68,204	--	2,256	452	--	--	2,999	93,514	17,567
Petrochemical Feedstocks ^e	--	4,007	1,335	--	-375	30	--	--	0	4,937	251
Special Naphthas	--	209	79	--	669	-166	--	--	61	1,062	83
Lubricants	--	4,031	2,023	--	3,560	-556	--	--	998	9,172	2,788
Waxes	--	989	359	--	24	2	--	--	91	1,279	172
Petroleum Coke	--	11,512	0	--	0	-53	--	--	1,046	10,519	948
Asphalt and Road Oil	--	18,159	7,521	--	2,480	668	--	--	90	27,402	3,853
Still Gas	--	14,454	0	--	0	0	--	--	0	14,454	0
Miscellaneous Products	--	498	658	--	738	26	--	--	52	1,816	526
Total	22,001	387,012	546,941	880	600,633	-3,768	0	370,840	8,557	1,181,838	191,844

^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.

NA = Not available.

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, August 1993
(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 28	--	1,280	65	(s)	-21	0	1,372	0	0
Natural Gas Liquids and LRGs	29	52	14	--	92	25	--	5	1	155
Pentanes Plus	4	--	9	--	0	15	--	2	(s)	-5
Liquefied Petroleum Gases	25	52	5	--	92	10	--	3	1	160
Ethane/Ethylene	8	0	0	--	0	0	--	0	0	8
Propane/Propylene	11	43	4	--	88	-4	--	0	1	148
Normal Butane/Butylene	4	13	1	--	4	16	--	(s)	(s)	5
Isobutane/Isobutylene	1	-5	(s)	--	0	-3	--	2	0	-2
Other Liquids	67	--	148	--	9	63	--	198	0	-35
Other Hydrocarbons/Oxygenates	41	--	0	--	0	16	--	24	0	0
Unfinished Oils	--	--	118	--	8	38	--	124	0	-35
Motor Gasoline Blend, Comp.	26	--	30	--	1	10	--	47	0	0
Aviation Gasoline Blend, Comp.	--	--	0	--	0	0	--	(s)	0	(s)
Finished Petroleum Products	-24	1,583	821	--	2,315	67	--	--	18	4,609
Finished Motor Gasoline	-24	741	284	--	1,382	-181	--	--	(s)	2,544
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	24	9	0	--	33	46	--	--	NA	NA
Other	-48	732	284	--	1,349	-227	--	--	NA	NA
Finished Aviation Gasoline	--	1	0	--	4	-5	--	--	0	9
Jet Fuel	--	68	77	--	321	-47	--	--	(s)	513
Naphtha-Type	--	9	6	--	3	3	--	--	(s)	14
Kerosene-Type	--	60	71	--	318	-50	--	--	(s)	499
Kerosene	--	1	(s)	--	18	19	--	--	0	(s)
Distillate Fuel Oil	--	375	138	--	550	246	--	--	1	818
0.05 percent sulfur and under	--	92	50	--	16	229	--	--	NA	NA
Greater than 0.05 percent sulfur ..	--	283	88	--	534	17	--	--	NA	NA
Residual Fuel Oil	--	108	299	--	11	68	--	--	(s)	349
Petrochemical Feedstocks	--	18	7	--	-3	-4	--	--	0	26
Special Naphthas	--	2	(s)	--	3	-1	--	--	(s)	6
Lubricants	--	17	5	--	17	-1	--	--	3	37
Waxes	--	4	1	--	(s)	(s)	--	--	(s)	5
Petroleum Coke	--	50	0	--	0	-3	--	--	12	41
Asphalt and Road Oil	--	129	27	--	12	-20	--	--	(s)	187
Still Gas	--	66	0	--	0	0	--	--	0	66
Miscellaneous Products	--	2	1	--	1	-3	--	--	(s)	7
Total	98	1,635	2,243	65	2,416	135	0	1,573	19	4,729

^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.

NA = Not available.

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-August 1993
(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 28	--	1,266	4	(s)	5	0	1,291	0	0
Natural Gas Liquids and LRGs	28	49	20	--	101	11	--	7	2	177
Pentanes Plus	4	--	2	--	0	2	--	(s)	(s)	4
Liquefied Petroleum Gases	24	49	17	--	101	9	--	7	2	174
Ethane/Ethylene	8	0	(s)	--	0	0	--	0	0	8
Propane/Propylene	11	44	14	--	97	2	--	0	1	163
Normal Butane/Butylene	4	7	3	--	3	7	--	4	1	5
Isobutane/Isobutylene	1	-2	(s)	--	2	(s)	--	3	0	-2
Other Liquids	53	--	152	--	9	4	--	228	(s)	-18
Other Hydrocarbons/Oxygenates	34	--	2	--	0	7	--	29	0	0
Unfinished Oils	--	--	127	--	8	1	--	149	0	18
Motor Gasoline Blend. Comp.	19	--	23	--	3	-5	--	50	(s)	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	(s)	0	(s)
Finished Petroleum Products	-16	1,543	813	--	2,362	-36	--	--	33	4,704
Finished Motor Gasoline	-16	754	233	--	1,424	-16	--	--	5	2,405
Reformulated	--	0	0	--	0	NA	--	--	NA	NA
Oxygenated	18	115	(s)	--	134	NA	--	--	NA	NA
Other	-33	839	233	--	1,290	NA	--	--	NA	NA
Finished Aviation Gasoline	--	1	0	--	3	(s)	--	--	0	4
Jet Fuel	--	87	82	--	330	(s)	--	--	1	498
Naphtha-Type	--	8	4	--	6	1	--	--	(s)	18
Kerosene-Type	--	79	78	--	324	(s)	--	--	1	480
Kerosene	--	4	1	--	15	2	--	--	(s)	17
Distillate Fuel Oil	--	368	167	--	551	-24	--	--	4	1,105
0.05 percent sulfur and under	--	52	80	--	19	NA	--	--	NA	NA
Greater than 0.05 percent sulfur ..	--	315	107	--	532	NA	--	--	NA	NA
Residual Fuel Oil	--	109	281	--	9	2	--	--	12	385
Petrochemical Feedstocks ^e	--	16	5	--	-2	(s)	--	--	0	20
Special Naphthas	--	1	(s)	--	3	-1	--	--	(s)	4
Lubricants	--	17	8	--	15	-2	--	--	4	38
Waxes	--	4	1	--	(s)	(s)	--	--	(s)	5
Petroleum Coke	--	47	0	--	0	(s)	--	--	4	43
Asphalt and Road Oil	--	75	31	--	10	3	--	--	(s)	113
Still Gas	--	59	0	--	0	0	--	--	0	59
Miscellaneous Products	--	2	3	--	3	(s)	--	--	(s)	7
Total	91	1,593	2,251	4	2,472	-16	0	1,526	35	4,864

^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.

NA = Not available.

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, August 1993
(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 19,774	--	21,784	289	84,749	-1,787	0	98,348	5	0	75,493
Natural Gas Liquids and LRGs	9,715	4,207	2,374	--	862	6,040	--	2,597	214	8,307	44,813
Pentanes Plus	1,513	--	36	--	94	978	--	1,052	25	410	4,933
Liquefied Petroleum Gases	8,202	4,207	2,338	--	768	5,064	--	1,545	189	8,717	39,880
Ethane/Ethylene	3,021	0	805	--	-750	860	--	0	0	2,016	4,304
Propane/Propylene	3,361	3,213	1,493	--	2,115	2,467	--	0	158	7,557	20,893
Normal Butane/Butylene	1,105	837	88	--	-823	1,573	--	142	31	-439	11,352
Isobutane/Isobutylene	715	57	152	--	226	164	--	1,403	0	-417	3,331
Other Liquids	-2,040	--	1	--	748	-147	--	-382	1	-765	26,823
Other Hydrocarbons/Oxygenates	221	--	0	--	0	-116	--	337	0	0	1,647
Unfinished Oils	--	--	0	--	153	760	--	158	0	-765	17,806
Motor Gasoline Blend, Comp.	-2,261	--	1	--	593	-791	--	-877	1	0	7,370
Aviation Gasoline Blend, Comp.	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products	3,375	101,126	551	--	22,950	-7,074	--	--	570	134,506	99,898
Finished Motor Gasoline	3,375	53,527	101	--	15,237	-2,945	--	--	16	75,169	43,701
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	11,142	4,348	0	--	-56	36	--	--	NA	NA	1,168
Other	-7,767	49,179	101	--	15,293	-2,981	--	--	NA	NA	42,533
Finished Aviation Gasoline	--	80	6	--	108	-17	--	--	0	211	352
Jet Fuel	--	6,160	79	--	2,235	-666	--	--	30	9,110	8,925
Naphtha-Type	--	547	79	--	172	41	--	--	0	757	862
Kerosene-Type	--	5,613	0	--	2,063	-707	--	--	30	8,353	8,063
Kerosene	--	168	0	--	264	-294	--	--	1	725	1,173
Distillate Fuel Oil	--	21,691	204	--	4,701	-1,376	--	--	122	27,850	27,305
0.05 percent sulfur and under	--	8,353	70	--	2,212	6,479	--	--	NA	NA	10,554
Greater than 0.05 percent sulfur	--	15,338	134	--	2,489	-7,855	--	--	NA	NA	16,751
Residual Fuel Oil	--	1,859	16	--	19	220	--	--	0	1,674	3,346
Petrochemical Feedstocks ^e	--	1,082	10	--	106	23	--	--	0	1,175	335
Special Naphthas	--	485	62	--	26	-10	--	--	7	576	395
Lubricants	--	738	13	--	122	53	--	--	37	889	1,722
Waxes	--	83	3	--	0	7	--	--	9	70	128
Petroleum Coke	--	3,824	0	--	0	-64	--	--	135	3,753	2,469
Asphalt and Road Oil	--	6,768	50	--	101	-1,870	--	--	213	8,576	9,858
Still Gas	--	4,452	0	--	0	0	--	--	0	4,452	0
Miscellaneous Products	--	209	7	--	31	-29	--	--	(s)	276	189
Total	30,824	105,333	24,680	289	79,307	-2,988	0	100,563	790	142,048	247,027

^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.

NA = Not available.

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-August 1993
(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 156,642	--	154,789	5,595	450,501	6,007	0	760,825	695	0	75,493
Natural Gas Liquids and LRGs	76,845	30,842	16,234	--	10,765	16,753	--	24,094	1,755	92,084	44,813
Pentanes Plus	10,960	--	330	--	5,082	1,843	--	6,422	139	7,968	4,933
Liquefied Petroleum Gases	65,885	30,842	15,904	--	5,683	14,910	--	17,672	1,616	84,116	39,880
Ethane/Ethylene	24,048	2	2,751	--	-9,922	508	--	0	0	17,387	4,304
Propane/Propylene	27,388	25,231	10,291	--	12,050	9,297	--	0	1,025	64,638	20,893
Normal Butane/Butylene	8,743	5,035	2,057	--	70	5,570	--	7,021	591	2,583	11,352
Isobutane/Isobutylene	5,706	574	805	--	3,625	551	--	10,651	0	492	3,331
Other Liquids	-6,866	--	649	--	6,131	4,486	--	4,823	29	-9,424	26,823
Other Hydrocarbons/Oxygenates	3,602	--	0	--	0	1,196	--	2,406	0	0	1,647
Unfinished Oils	--	--	370	--	149	3,500	--	6,454	0	-9,435	17,806
Motor Gasoline Blend, Comp	-10,468	--	279	--	5,982	-205	--	-4,031	29	0	7,370
Aviation Gasoline Blend, Comp	--	--	0	--	0	-5	--	-6	0	11	0
Finished Petroleum Products	21,731	794,250	3,700	--	170,176	-4,136	--	--	3,253	990,740	99,898
Finished Motor Gasoline	21,731	414,244	671	--	115,861	2,572	--	--	365	554,713	43,701
Reformulated	--	0	0	--	0	NA	--	--	NA	NA	0
Oxygenated	65,000	24,518	0	--	-257	NA	--	--	NA	NA	1,168
Other	-43,269	389,726	671	--	116,118	NA	--	--	NA	NA	42,533
Finished Aviation Gasoline	--	726	27	--	593	-28	--	--	0	1,374	352
Jet Fuel	--	50,797	602	--	17,924	-408	--	--	212	69,519	8,925
Naphtha-Type	--	4,073	563	--	821	-153	--	--	29	5,581	862
Kerosene-Type	--	46,724	39	--	17,103	255	--	--	183	63,938	8,063
Kerosene	--	3,603	0	--	601	-313	--	--	6	4,511	1,173
Distillate Fuel Oil	--	178,137	1,355	--	34,879	4,023	--	--	385	218,009	27,305
0.05 percent sulfur and under	--	13,834	553	--	1,341	NA	--	--	NA	NA	10,554
Greater than 0.05 percent sulfur	--	164,303	802	--	33,538	NA	--	--	NA	NA	16,751
Residual Fuel Oil	--	17,463	162	--	2,429	333	--	--	51	14,812	3,346
Petrochemical Feedstocks ^e	--	10,758	143	--	375	134	--	--	0	11,142	335
Special Naphthas	--	3,588	465	--	229	-40	--	--	185	4,137	395
Lubricants	--	5,533	116	--	1,248	184	--	--	305	6,776	1,722
Waxes	--	564	40	--	0	3	--	--	42	559	128
Petroleum Coke	--	30,105	0	--	0	-150	--	--	1,062	29,193	2,469
Asphalt and Road Oil	--	42,545	79	--	674	3,109	--	--	639	39,550	9,858
Still Gas	--	33,819	0	--	0	0	--	--	0	33,819	0
Miscellaneous Products	--	2,368	40	--	221	3	--	--	1	2,625	189
Total	248,352	825,092	175,372	5,595	637,573	23,110	0	789,742	5,732	1,073,400	247,027

^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

NA = Not available

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, August 1993
(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 638	--	702	9	1,768	-58	0	3,173	(s)	0
Natural Gas Liquids and LRGs	313	136	77	--	28	195	--	84	7	268
Pentanes Plus	49	--	1	--	3	31	--	34	1	-13
Liquefied Petroleum Gases	265	136	75	--	25	163	--	50	6	281
Ethane/Ethylene	97	0	20	--	24	28	--	0	0	65
Propane/Propylene	108	104	48	--	68	80	--	0	5	244
Normal Butane/Butylene	36	30	3	--	27	51	--	5	1	-14
Isobutane/Isobutylene	23	2	5	--	7	5	--	45	0	-13
Other Liquids	-66	--	(s)	--	24	-5	--	-12	(s)	-25
Other Hydrocarbons/Oxygenates	7	--	0	--	0	-4	--	11	0	0
Unfinished Oils	--	--	0	--	5	25	--	5	0	25
Motor Gasoline Blend, Comp.	-73	--	(s)	--	19	26	--	-28	(s)	0
Aviation Gasoline Blend, Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	109	3,262	18	--	740	-228	--	--	18	4,339
Finished Motor Gasoline	109	1,727	3	--	492	-95	--	--	1	2,425
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	359	140	0	--	2	1	--	--	NA	NA
Other	-251	1,586	3	--	493	-96	--	--	NA	NA
Finished Aviation Gasoline	--	3	(s)	--	3	-1	--	--	0	7
Jet Fuel	--	199	3	--	72	-21	--	--	1	294
Naphtha Type	--	18	3	--	6	1	--	--	0	24
Kerosene Type	--	181	0	--	67	-23	--	--	1	269
Kerosene	--	5	0	--	9	-9	--	--	(s)	23
Distillate Fuel Oil	--	700	7	--	152	-44	--	--	4	898
0.05 percent sulfur and under	--	205	2	--	71	209	--	--	NA	NA
Greater than 0.05 percent sulfur	--	495	4	--	80	-253	--	--	NA	NA
Residual Fuel Oil	--	60	1	--	1	7	--	--	0	54
Petrochemical Feedstocks ^e	--	35	(s)	--	3	1	--	--	0	38
Special Naphthas	--	16	2	--	1	(s)	--	--	(s)	19
Lubricants	--	24	(s)	--	4	-2	--	--	1	29
Waxes	--	3	(s)	--	0	(s)	--	--	(s)	2
Petroleum Coke	--	123	0	--	0	-2	--	--	4	121
Asphalt and Road Oil	--	218	2	--	3	-60	--	--	7	277
Still Gas	--	144	0	--	0	0	--	--	0	144
Miscellaneous Products	--	7	(s)	--	1	-1	--	--	(s)	9
Total	994	3,398	796	9	2,558	-96	0	3,244	25	4,582

^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.

NA = Not available.

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-August 1993
(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 645	--	637	23	1,854	25	0	3,131	3	0
Natural Gas Liquids and LRGs	316	127	67	--	44	69	--	99	7	379
Pentanes Plus	45	--	1	--	21	8	--	26	1	33
Liquefied Petroleum Gases	271	127	65	--	23	61	--	73	7	346
Ethane/Ethylene	99	(s)	11	--	41	2	--	0	0	72
Propane/Propylene	113	104	42	--	50	38	--	0	4	266
Normal Butane/Butylene	36	21	8	--	(s)	23	--	29	2	11
Isobutane/Isobutylene	23	2	3	--	15	2	--	44	0	2
Other Liquids	-28	--	3	--	25	18	--	20	(s)	-39
Other Hydrocarbons/Oxygenates	15	--	0	--	0	5	--	10	0	0
Unfinished Oils	--	--	2	--	1	14	--	27	0	39
Motor Gasoline Blend, Comp	43	--	1	--	25	1	--	17	(s)	0
Aviation Gasoline Blend, Comp	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	89	3,269	15	--	700	-17	--	--	13	4,077
Finished Motor Gasoline	89	1,705	3	--	477	-11	--	--	2	2,283
Reformulated	--	0	0	--	0	NA	--	--	NA	NA
Oxygenated	267	101	0	--	-1	NA	--	--	NA	NA
Other	-178	1,604	3	--	478	NA	--	--	NA	NA
Finished Aviation Gasoline	--	3	(s)	--	2	(s)	--	--	0	6
Jet Fuel	--	209	2	--	74	-2	--	--	1	286
Naphtha Type	--	17	2	--	3	-1	--	--	(s)	23
Kerosene Type	--	192	(s)	--	70	-1	--	--	1	263
Kerosene	--	15	0	--	2	-1	--	--	(s)	19
Distillate Fuel Oil	--	733	6	--	144	-17	--	--	2	897
0.05 percent sulfur and under	--	57	2	--	6	NA	--	--	NA	NA
Greater than 0.05 percent sulfur	--	676	3	--	138	NA	--	--	NA	NA
Residual Fuel Oil	--	72	1	--	-10	1	--	--	(s)	61
Petrochemical Feedstocks ^e	--	44	1	--	2	1	--	--	0	46
Special Naphthas	--	15	2	--	1	(s)	--	--	1	17
Lubricants	--	23	(s)	--	5	-1	--	--	1	28
Waxes	--	2	(s)	--	0	(s)	--	--	(s)	2
Petroleum Coke	--	124	0	--	0	-1	--	--	4	120
Asphalt and Road Oil	--	175	(s)	--	3	13	--	--	3	163
Still Gas	--	139	0	--	0	0	--	--	0	139
Miscellaneous Products	--	10	(s)	--	1	(s)	--	--	(s)	11
Total	1,022	3,395	722	23	2,624	95	0	3,250	24	4,417

^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.

NA = Not available.

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,
August 1993
(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 98,651	--	131,739	6	-43,959	-6,813	0	193,250	0	0	751,971
Natural Gas Liquids and LRGs	35,833	12,340	2,821	--	-1,201	8,428	--	7,749	821	32,797	92,151
Pentanes Plus	6,566	--	283	--	254	71	--	3,053	0	3,979	7,446
Liquefied Petroleum Gases	29,267	12,340	2,538	--	-1,455	8,355	--	4,696	821	28,818	84,705
Ethane/Ethylene	12,713	983	0	--	1,636	1,991	--	0	0	13,341	20,621
Propane/Propylene	10,267	7,730	1,883	--	-4,142	3,048	--	0	506	12,184	31,000
Normal Butane/Butylene	1,851	3,253	434	--	1,056	3,585	--	1,318	314	1,377	23,593
Isobutane/isobutylene	4,436	374	221	--	-5	-269	--	3,378	0	1,917	9,491
Other Liquids	884	--	9,644	--	-1,276	1,976	--	14,715	(s)	-7,439	75,738
Other Hydrocarbons/Oxygenates	2,811	--	0	--	0	754	--	2,057	0	0	9,464
Unfinished Oils	--	--	9,644	--	-399	2,505	--	14,180	0	-7,440	51,380
Motor Gasoline Blend. Comp.	-1,927	--	0	--	-877	-1,293	--	-1,511	(s)	0	14,853
Aviation Gasoline Blend. Comp.	--	--	0	--	0	10	--	-11	0	1	41
Finished Petroleum Products	2,044	215,080	5,094	--	-98,560	-317	--	--	13,169	110,807	126,580
Finished Motor Gasoline	2,044	99,798	0	--	-60,271	-55	--	--	2,246	39,380	47,017
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	1,173	4,675	0	--	-980	578	--	--	NA	NA	3,550
Other	871	95,123	0	--	-59,291	-633	--	--	NA	NA	43,467
Finished Aviation Gasoline	--	455	0	--	-235	50	--	--	0	170	381
Jet Fuel	--	20,058	346	--	-13,088	-195	--	--	297	7,214	15,787
Naphtha-Type	--	1,750	0	--	-348	4	--	--	0	1,398	1,488
Kerosene-Type	--	18,308	346	--	-12,740	-199	--	--	297	5,816	14,299
Kerosene	--	723	0	--	-796	-231	--	--	16	142	1,442
Distillate Fuel Oil	--	45,448	227	--	-22,425	2,642	--	--	4,315	16,293	29,304
0.05 percent sulfur and under	--	19,864	227	--	-3,102	6,205	--	--	NA	NA	10,673
Greater than 0.05 percent sulfur ..	--	25,584	0	--	-19,323	-3,563	--	--	NA	NA	18,631
Residual Fuel Oil	--	8,918	953	--	-354	-988	--	--	1,351	9,154	15,121
Petrochemical Feedstocks ^e	--	12,045	3,360	--	0	-780	--	--	0	16,185	2,607
Special Naphthas	--	1,156	135	--	-116	-22	--	--	183	1,014	1,778
Lubricants	--	2,833	0	--	-732	-620	--	--	276	2,445	5,377
Waxes	--	302	2	--	-2	-42	--	--	27	317	375
Petroleum Coke	--	8,781	0	--	0	-392	--	--	4,449	4,724	2,620
Asphalt and Road Oil	--	4,728	71	--	-464	163	--	--	8	4,164	3,180
Still Gas	--	9,050	0	--	0	0	--	--	0	9,050	0
Miscellaneous Products	--	785	0	--	-77	153	--	--	(s)	555	1,591
Total	137,413	227,420	149,298	6	-144,996	3,272	0	215,714	13,989	136,165	1,046,440

^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.

NA = Not available.

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-August 1993
(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 787,168	--	1,067,529	43,945	-372,427	26,303	3	1,499,909	0	0	751,971
Natural Gas Liquids and LRGs	282,974	88,419	16,658	--	-14,165	32,014	--	58,389	6,365	277,118	92,151
Pentanes Plus	49,065	--	4,970	--	-2,499	1,917	--	20,511	1	29,107	7,446
Liquefied Petroleum Gases	233,909	88,419	11,688	--	-11,666	30,097	--	37,878	6,365	248,010	84,705
Ethane/Ethylene	103,588	6,757	46	--	18,723	6,884	--	0	0	122,230	20,621
Propane/Propylene	81,429	61,117	7,873	--	-30,224	8,878	--	3	5,066	106,248	31,000
Normal Butane/Butylene	12,835	17,820	2,760	--	2,129	12,181	--	14,001	1,299	8,063	23,593
Isobutane/Isobutylene	36,057	2,725	1,009	--	-2,294	2,154	--	23,874	0	11,469	9,491
Other Liquids	19,188	--	82,810	--	-8,764	10,871	--	107,472	513	-25,622	75,738
Other Hydrocarbons/Oxygenates	23,795	--	233	--	0	6,926	--	17,102	0	0	9,464
Unfinished Oils	--	--	81,382	--	-1,700	4,983	--	100,329	0	-25,630	51,380
Motor Gasoline Blend. Comp.	-4,607	--	1,195	--	-7,064	-1,028	--	-9,961	513	0	14,853
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-10	--	2	0	8	41
Finished Petroleum Products	5,793	1,668,424	49,678	--	-772,968	-3,126	--	--	109,436	844,617	126,580
Finished Motor Gasoline	5,793	782,956	1,363	--	-478,969	-996	--	--	18,647	293,492	47,017
Reformulated	--	0	0	--	0	NA	--	--	NA	NA	0
Oxygenated	6,842	32,182	0	--	-32,425	NA	--	--	NA	NA	3,550
Other	-1,049	750,774	1,363	--	-446,544	NA	--	--	NA	NA	43,467
Finished Aviation Gasoline	--	3,077	0	--	-1,505	41	--	--	0	1,531	381
Jet Fuel	--	170,930	1,773	--	-105,180	497	--	--	6,402	60,624	15,787
Naphtha-Type	--	16,395	554	--	-2,643	-257	--	--	592	13,971	1,488
Kerosene-Type	--	154,535	1,219	--	-102,537	754	--	--	5,810	46,653	14,299
Kerosene	--	4,079	0	--	-4,080	-244	--	--	1,128	-885	1,442
Distillate Fuel Oil	--	326,835	896	--	-173,359	-1,464	--	--	32,040	123,796	29,304
0.05 percent sulfur and under	--	42,052	896	--	-8,965	NA	--	--	NA	NA	10,673
Greater than 0.05 percent sulfur ...	--	284,783	0	--	-164,394	NA	--	--	NA	NA	18,631
Residual Fuel Oil	--	84,982	10,245	--	173	-106	--	--	15,907	79,599	15,121
Petrochemical Feedstocks ^e	--	88,044	34,110	--	0	-417	--	--	0	122,571	2,607
Special Naphthas	--	8,692	576	--	-898	388	--	--	617	7,365	1,778
Lubricants	--	23,730	123	--	-5,013	-666	--	--	2,462	17,044	5,377
Waxes	--	2,570	66	--	-24	-70	--	--	209	2,473	375
Petroleum Coke	--	67,730	279	--	0	45	--	--	31,949	36,015	2,620
Asphalt and Road Oil	--	28,363	220	--	-3,154	-564	--	--	52	25,941	3,180
Still Gas	--	71,171	0	--	0	0	--	--	0	71,171	0
Miscellaneous Products	--	5,265	27	--	-959	430	--	--	23	3,880	1,591
Total	1,095,122	1,756,843	1,216,675	43,945	-1,168,324	66,062	3	1,665,770	116,313	1,096,113	1,046,440

^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.

NA = Not available.

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, August 1993
(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 3,182	--	4,250	(s)	-1,418	-220	0	6,234	0	0
Natural Gas Liquids and LRGs	1,156	398	91	--	-39	272	--	250	26	1,058
Pentanes Plus	212	--	9	--	8	2	--	98	0	128
Liquefied Petroleum Gases	944	398	82	--	-47	270	--	151	26	930
Ethane/Ethylene	410	32	0	--	53	64	--	0	0	430
Propane/Propylene	331	249	61	--	-134	98	--	0	16	393
Normal Butane/Butylene	80	105	14	--	34	116	--	43	10	44
Isobutane/isobutylene	143	12	7	--	(s)	-9	--	109	0	62
Other Liquids	29	--	311	--	-41	64	--	475	(s)	-240
Other Hydrocarbons/Oxygenates	91	--	0	--	0	24	--	66	0	0
Unfinished Oils	--	--	311	--	-13	81	--	457	0	-240
Motor Gasoline Blend. Comp.	-62	--	0	--	-28	-42	--	-49	(s)	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	66	6,938	164	--	-3,179	-10	--	--	425	3,574
Finished Motor Gasoline	66	3,219	0	--	-1,944	-2	--	--	72	1,270
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	38	151	0	--	-32	19	--	--	NA	NA
Other	28	3,068	0	--	-1,913	-20	--	--	NA	NA
Finished Aviation Gasoline	--	15	0	--	-8	2	--	--	0	5
Jet Fuel	--	647	11	--	-422	-6	--	--	10	233
Naphtha-Type	--	56	0	--	-11	(s)	--	--	0	45
Kerosene-Type	--	591	11	--	-411	-6	--	--	10	188
Kerosene	--	23	0	--	-26	-7	--	--	1	5
Distillate Fuel Oil	--	1,466	7	--	-723	85	--	--	139	526
0.05 percent sulfur and under	--	641	7	--	-100	200	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	825	0	--	-623	-115	--	--	NA	NA
Residual Fuel Oil	--	288	31	--	-11	-32	--	--	44	295
Petrochemical Feedstocks ^e	--	389	108	--	0	-25	--	--	0	522
Special Naphthas	--	37	4	--	-4	-1	--	--	6	33
Lubricants	--	91	0	--	-24	-20	--	--	9	79
Waxes	--	10	(s)	--	(s)	-1	--	--	1	10
Petroleum Coke	--	283	0	--	0	-13	--	--	144	152
Asphalt and Road Oil	--	153	2	--	-15	5	--	--	(s)	134
Still Gas	--	292	0	--	0	0	--	--	0	292
Miscellaneous Products	--	25	0	--	-2	5	--	--	(s)	18
Total	4,433	7,336	4,816	(s)	-4,677	106	0	6,959	451	4,392

^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.

NA = Not available.

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-August 1993
(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 3,239	--	4,393	181	-1,533	108	(s)	6,172	0	0
Natural Gas Liquids and LRGs	1,165	364	69	--	-58	132	--	240	26	1,140
Pentanes Plus	202	--	20	--	-10	8	--	84	(s)	120
Liquefied Petroleum Gases	963	364	48	--	-48	124	--	156	26	1,021
Ethane/Ethylene	426	28	(s)	--	77	28	--	0	0	503
Propane/Propylene	335	252	32	--	-124	37	--	(s)	21	437
Normal Butane/Butylene	53	73	11	--	9	50	--	58	5	33
Isobutane/Isobutylene	148	11	4	--	-9	9	--	98	0	47
Other Liquids	79	--	341	--	-36	45	--	442	2	-105
Other Hydrocarbons/Oxygenates	98	--	1	--	0	29	--	70	0	0
Unfinished Oils	--	--	335	--	-7	21	--	413	0	-105
Motor Gasoline Blend. Comp.	-19	--	5	--	-29	-4	--	-41	2	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	24	6,866	204	--	-3,181	-13	--	--	450	3,476
Finished Motor Gasoline	24	3,222	6	--	-1,971	-4	--	--	77	1,208
Reformulated	--	0	0	--	0	NA	--	--	NA	NA
Oxygenated	28	132	0	--	-133	NA	--	--	NA	NA
Other	-4	3,090	6	--	-1,838	NA	--	--	NA	NA
Finished Aviation Gasoline	--	13	0	--	-6	(s)	--	--	0	6
Jet Fuel	--	703	7	--	-433	2	--	--	26	249
Naphtha-Type	--	67	2	--	-11	-1	--	--	2	57
Kerosene-Type	--	636	5	--	-422	3	--	--	24	192
Kerosene	--	17	0	--	-17	-1	--	--	5	-4
Distillate Fuel Oil	--	1,345	4	--	-713	-6	--	--	132	509
0.05 percent sulfur and under	--	173	4	--	-37	NA	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	1,172	0	--	-677	NA	--	--	NA	NA
Residual Fuel Oil	--	350	42	--	1	(s)	--	--	65	328
Petrochemical Feedstocks ^e	--	362	140	--	0	-2	--	--	0	504
Special Naphthas	--	36	2	--	-4	2	--	--	3	30
Lubricants	--	98	1	--	-21	-3	--	--	10	70
Waxes	--	11	(s)	--	(s)	(s)	--	--	1	10
Petroleum Coke	--	279	1	--	0	(s)	--	--	131	148
Asphalt and Road Oil	--	117	1	--	-13	-2	--	--	(s)	107
Still Gas	--	293	0	--	0	0	--	--	0	293
Miscellaneous Products	--	22	(s)	--	-4	2	--	--	(s)	16
Total	4,507	7,230	5,007	181	-4,808	272	(s)	6,855	479	4,511

^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.

NA = Not available.

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, August 1993
(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 12,791	--	2,992	1,786	-3,765	-815	0	14,619	0	0	11,243
Natural Gas Liquids and LRGs	4,059	378	583	--	-2,507	163	--	432	4	1,914	1,449
Pentanes Plus	1,045	--	439	--	-348	33	--	157	3	943	170
Liquefied Petroleum Gases	3,014	378	144	--	-2,159	130	--	275	1	971	1,279
Ethane/Ethylene	926	0	0	--	-886	4	--	0	0	36	186
Propane/Propylene	1,316	270	89	--	-699	33	--	0	1	942	485
Normal Butane/Butylene	458	107	36	--	-353	82	--	166	0	0	420
Isobutane/Isobutylene	314	1	19	--	-221	11	--	109	0	-7	188
Other Liquids	108	--	0	--	0	-205	--	186	0	127	4,181
Other Hydrocarbons/Oxygenates	51	--	0	--	0	37	--	14	0	0	308
Unfinished Oils	--	--	0	--	0	86	--	-213	0	127	2,688
Motor Gasoline Blend. Comp.	57	--	0	--	0	-328	--	385	0	0	1,185
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products	-28	15,343	142	--	1,133	-1,772	--	--	22	18,341	8,840
Finished Motor Gasoline	-28	7,554	10	--	673	-450	--	--	(s)	8,659	3,897
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	293	35	0	--	0	-27	--	--	NA	NA	39
Other	-321	7,519	10	--	673	-423	--	--	NA	NA	3,858
Finished Aviation Gasoline	--	32	0	--	14	-3	--	--	0	49	36
Jet Fuel	--	1,144	0	--	381	-55	--	--	0	1,580	743
Naphtha-Type	--	328	0	--	-167	-32	--	--	0	193	218
Kerosene-Type	--	816	0	--	548	-23	--	--	0	1,387	525
Kerosene	--	25	0	--	-13	-44	--	--	0	56	169
Distillate Fuel Oil	--	3,859	130	--	78	-324	--	--	0	4,391	2,122
0.05 percent sulfur and under	--	1,134	46	--	322	314	--	--	NA	NA	703
Greater than 0.05 percent sulfur ...	--	2,725	84	--	-244	-638	--	--	NA	NA	1,419
Residual Fuel Oil	--	182	0	--	0	-84	--	--	0	266	331
Petrochemical Feedstocks ^e	--	22	0	--	0	0	--	--	0	22	0
Special Naphthas	--	0	0	--	0	0	--	--	(s)	(s)	1
Lubricants	--	0	0	--	0	0	--	--	5	-5	0
Waxes	--	45	2	--	0	22	--	--	(s)	25	47
Petroleum Coke	--	388	0	--	0	-243	--	--	14	617	150
Asphalt and Road Oil	--	1,358	0	--	0	-593	--	--	1	1,950	1,337
Still Gas	--	652	0	--	0	0	--	--	0	652	0
Miscellaneous Products	--	82	0	--	0	2	--	--	C	80	7
Total	16,930	15,721	3,717	1,786	-5,139	-2,629	0	15,237	26	20,382	25,713

^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.

NA = Not available.

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-August 1993
(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 103,520	--	21,653	11,479	-29,561	-164	0	107,255	0	0	11,243
Natural Gas Liquids and LRGs	33,517	2,010	2,047	--	-21,157	161	--	3,866	89	12,301	1,449
Pentanes Plus	7,728	--	856	--	-2,583	8	--	1,393	10	4,590	170
Liquefied Petroleum Gases	25,789	2,010	1,191	--	-18,574	153	--	2,473	79	7,711	1,279
Ethane/Ethylene	9,180	0	0	--	-8,801	8	--	0	0	371	186
Propane/Propylene	10,396	1,852	746	--	-5,335	-8	--	0	1	7,666	485
Normal Butane/Butylene	3,751	278	347	--	-2,724	135	--	1,681	78	-242	420
Isobutane/Isobutylene	2,462	-120	98	--	-1,714	18	--	792	0	-84	188
Other Liquids	635	--	0	--	0	-182	--	453	0	364	4,181
Other Hydrocarbons/Oxygenates	766	--	0	--	0	206	--	560	0	0	308
Unfinished Oils	--	--	0	--	0	291	--	-655	0	364	2,688
Motor Gasoline Blend. Comp.	-131	--	0	--	0	-679	--	548	0	0	1,185
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products	427	112,840	753	--	8,410	-1,982	--	--	81	124,331	8,840
Finished Motor Gasoline	427	55,538	83	--	4,147	-693	--	--	3	60,886	3,897
Reformulated	--	0	0	--	0	NA	--	--	NA	NA	0
Oxygenated	1,711	1,910	0	--	31	NA	--	--	NA	NA	39
Other	-1,283	53,628	83	--	4,116	NA	--	--	NA	NA	3,858
Finished Aviation Gasoline	--	187	0	--	84	-9	--	--	0	280	36
Jet Fuel	--	8,699	0	--	3,819	-92	--	--	0	12,610	743
Naphtha-Type	--	2,640	0	--	-1,307	-79	--	--	0	1,412	218
Kerosene-Type	--	6,059	0	--	5,126	-13	--	--	0	11,198	525
Kerosene	--	444	0	--	-87	152	--	--	0	205	169
Distillate Fuel Oil	--	28,483	647	--	447	-593	--	--	1	30,169	2,122
0.05 percent sulfur and under	--	3,421	311	--	2,868	NA	--	--	NA	NA	703
Greater than 0.05 percent sulfur ..	--	25,062	336	--	-2,421	NA	--	--	NA	NA	1,419
Residual Fuel Oil	--	2,578	0	--	0	-26	--	--	0	2,604	331
Petrochemical Feedstocks ^e	--	174	0	--	0	-2	--	--	0	176	0
Special Naphthas	--	0	0	--	0	0	--	--	2	-2	1
Lubricants	--	0	0	--	0	0	--	--	34	-34	0
Waxes	--	232	23	--	0	3	--	--	(s)	252	47
Petroleum Coke	--	3,358	0	--	0	-83	--	--	34	3,407	150
Asphalt and Road Oil	--	7,632	0	--	0	-644	--	--	7	8,269	1,337
Still Gas	--	4,958	0	--	0	0	--	--	0	4,958	0
Miscellaneous Products	--	557	0	--	0	5	--	--	0	552	7
Total	138,099	114,850	24,453	11,479	-42,308	-2,167	0	111,574	170	136,996	25,713

^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.

NA = Not available.

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, August 1993
(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 413	--	97	58	-121	-26	0	472	0	0
Natural Gas Liquids and LRGs	131	12	19	--	-81	5	--	14	(s)	62
Pentanes Plus	34	--	14	--	-11	1	--	5	(s)	30
Liquefied Petroleum Gases	97	12	5	--	-70	4	--	9	(s)	31
Ethane/Ethylene	30	0	0	--	-29	(s)	--	0	0	1
Propane/Propylene	42	9	3	--	-23	1	--	0	(s)	30
Normal Butane/Butylene	15	3	1	--	-11	3	--	5	0	0
Isobutane/Isobutylene	10	(s)	1	--	-7	(s)	--	4	0	(s)
Other Liquids	3	--	0	--	0	-7	--	6	0	4
Other Hydrocarbons/Oxygenates	2	--	0	--	0	1	--	(s)	0	0
Unfinished Oils	--	--	0	--	0	3	--	-7	0	4
Motor Gasoline Blend, Comp.	2	--	0	--	0	-11	--	12	0	0
Aviation Gasoline Blend, Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	-1	495	5	--	37	-57	--	--	1	592
Finished Motor Gasoline	-1	244	(s)	--	22	-15	--	--	(s)	279
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	9	1	0	--	0	-1	--	--	NA	NA
Other	-10	243	(s)	--	22	-14	--	--	NA	NA
Finished Aviation Gasoline	--	1	0	--	(s)	(s)	--	--	0	2
Jet Fuel	--	37	0	--	12	-2	--	--	0	51
Naphtha-Type	--	11	0	--	-5	-1	--	--	0	6
Kerosene-Type	--	26	0	--	18	-1	--	--	0	45
Kerosene	--	1	0	--	(s)	-1	--	--	0	2
Distillate Fuel Oil	--	124	4	--	3	-10	--	--	0	142
0.05 percent sulfur and under	--	37	1	--	10	10	--	--	NA	NA
Greater than 0.05 percent sulfur ..	--	88	3	--	-8	-21	--	--	NA	NA
Residual Fuel Oil	--	6	0	--	0	-3	--	--	0	9
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	--	1	(s)	--	0	1	--	--	(s)	1
Petroleum Coke	--	13	0	--	0	-8	--	--	(s)	20
Asphalt and Road Oil	--	44	0	--	0	-19	--	--	(s)	63
Still Gas	--	21	0	--	0	0	--	--	0	21
Miscellaneous Products	--	3	0	--	0	(s)	--	--	0	3
Total	546	507	120	58	-166	-85	0	492	1	657

^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.

NA = Not available.

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-August 1993
(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 426	--	89	47	-122	-1	0	441	0	0
Natural Gas Liquids and LRGs	138	8	8	--	-87	1	--	16	(s)	51
Pentanes Plus	32	--	4	--	-11	(s)	--	6	(s)	19
Liquefied Petroleum Gases	106	8	5	--	-76	1	--	10	(s)	32
Ethane/Ethylene	38	0	0	--	-36	(s)	--	0	0	2
Propane/Propylene	43	8	3	--	-22	(s)	--	0	(s)	32
Normal Butane/Butylene	15	1	1	--	-11	1	--	7	(s)	-1
Isobutane/Isobutylene	10	(s)	(s)	--	-7	(s)	--	3	0	(s)
Other Liquids	3	--	0	--	0	-1	--	2	0	1
Other Hydrocarbons/Oxygenates	3	--	0	--	0	1	--	2	0	0
Unfinished Oils	--	--	0	--	0	1	--	-3	0	1
Motor Gasoline Blend, Comp.	-1	--	0	--	0	-3	--	2	0	0
Aviation Gasoline Blend, Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	2	464	3	--	35	-8	--	--	(s)	512
Finished Motor Gasoline	2	229	(s)	--	17	-3	--	--	(s)	251
Reformulated	--	0	0	--	0	NA	--	--	NA	NA
Oxygenated	7	8	0	--	(s)	NA	--	--	NA	NA
Other	-5	221	(s)	--	17	NA	--	--	NA	NA
Finished Aviation Gasoline	--	1	0	--	(s)	(s)	--	--	0	1
Jet Fuel	--	38	0	--	16	(s)	--	--	0	52
Naphtha-Type	--	11	0	--	-5	(s)	--	--	0	6
Kerosene-Type	--	25	0	--	21	(s)	--	--	0	46
Kerosene	--	2	0	--	(s)	1	--	--	0	1
Distillate Fuel Oil	--	117	3	--	2	-2	--	--	(s)	124
0.05 percent sulfur and under	--	14	1	--	12	NA	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	103	1	--	-10	NA	--	--	NA	NA
Residual Fuel Oil	--	11	0	--	0	(s)	--	--	0	11
Petrochemical Feedstocks ^e	--	1	0	--	0	(s)	--	--	0	1
Special Naphthas	--	0	0	--	0	0	--	--	(s)	(s)
Lubricants	--	0	0	--	0	0	--	--	(s)	(s)
Waxes	--	1	(s)	--	0	(s)	--	--	(s)	1
Petroleum Coke	--	14	0	--	0	(s)	--	--	(s)	14
Asphalt and Road Oil	--	31	0	--	0	-3	--	--	(s)	34
Still Gas	--	20	0	--	0	0	--	--	0	20
Miscellaneous Products	--	2	0	--	0	(s)	--	--	0	2
Total	568	473	101	47	-174	-9	0	459	1	564

^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.

NA = Not available.

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,
August 1993
(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 76,652	--	9,491	-3,102	-7,033	-6,185	0	80,249	1,707	237	65,521
Natural Gas Liquids and LRGs	3,198	3,126	6	--	0	861	--	2,838	353	2,278	4,887
Pentanes Plus	1,682	--	0	--	0	3	--	1,264	(s)	415	79
Liquefied Petroleum Gases	1,516	3,126	6	--	0	858	--	1,574	352	1,664	4,808
Ethane/Ethylene	2	0	0	--	0	0	--	0	0	2	0
Propane/Propylene	309	1,169	2	--	0	257	--	0	124	1,099	1,211
Normal Butane/Butylene	781	1,816	0	--	0	651	--	876	229	821	2,969
Isobutane/Isobutylene	444	141	4	--	0	-50	--	698	0	-59	628
Other Liquids	686	--	580	--	250	1,291	--	623	49	-447	37,243
Other Hydrocarbons/Oxygenates	1,223	--	362	--	0	263	--	1,322	0	0	8,580
Unfinished Oils	--	--	196	--	0	1,298	--	-655	0	-447	24,289
Motor Gasoline Blend. Comp.	-537	--	22	--	250	-273	--	-41	49	0	6,371
Aviation Gasoline Blend. Comp.	--	--	0	--	0	3	--	-3	0	0	3
Finished Petroleum Products	669	85,833	1,866	--	2,723	-2,092	--	--	7,999	85,184	55,512
Finished Motor Gasoline	669	38,509	462	--	1,507	-1,345	--	--	132	42,360	19,895
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	1,319	1,425	0	--	0	990	--	--	NA	NA	1,769
Other	-651	37,084	462	--	1,507	-2,335	--	--	NA	NA	18,126
Finished Aviation Gasoline	--	161	10	--	0	-65	--	--	0	236	368
Jet Fuel	--	12,623	12	--	533	-426	--	--	700	12,894	8,025
Naphtha-Type	--	239	0	--	255	-124	--	--	271	347	852
Kerosene-Type	--	12,384	12	--	278	-302	--	--	429	12,547	7,173
Kerosene	--	110	0	--	0	6	--	--	4	100	57
Distillate Fuel Oil	--	12,987	61	--	587	-839	--	--	1,648	12,826	10,047
0.05 percent sulfur and under	--	5,230	0	--	65	1,408	--	--	NA	NA	4,564
Greater than 0.05 percent sulfur ..	--	7,757	61	--	522	-2,247	--	--	NA	NA	5,483
Residual Fuel Oil	--	8,791	1,241	--	0	617	--	--	2,361	7,054	8,193
Petrochemical Feedstocks ^e	--	91	0	--	0	91	--	--	0	0	257
Special Naphthas	--	58	4	--	0	11	--	--	2	49	62
Lubricants	--	626	0	--	96	-107	--	--	103	726	1,727
Waxes	--	62	1	--	0	-7	--	--	18	52	130
Petroleum Coke	--	4,832	0	--	0	230	--	--	3,013	1,589	4,120
Asphalt and Road Oil	--	2,159	74	--	0	-349	--	--	18	2,564	2,132
Still Gas	--	4,622	0	--	0	0	--	--	0	4,622	0
Miscellaneous Products	--	202	1	--	0	91	--	--	1	111	499
Total	81,205	88,959	11,943	-3,102	-4,060	-6,125	0	83,710	10,108	87,252	163,163

^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.

NA = Not available.

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-August 1993
(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 611,096	--	67,057	5,827	-48,603	-6,664	3	613,713	26,040	2,285	65,621
Natural Gas Liquids and LRGs	24,733	21,829	148	--	0	1,758	--	21,300	3,543	20,109	4,887
Pentanes Plus	12,767	--	0	--	0	-1	--	9,503	(s)	3,265	79
Liquefied Petroleum Gases	11,966	21,829	148	--	0	1,759	--	11,797	3,542	16,845	4,808
Ethane/Ethylene	12	0	0	--	0	0	--	0	0	12	0
Propane/Propylene	2,413	9,815	66	--	0	266	--	26	1,066	10,936	1,211
Normal Butane/Butylene	6,008	11,592	6	--	0	1,213	--	6,919	2,476	6,998	2,969
Isobutane/Isobutylene	3,533	422	76	--	0	280	--	4,852	0	-1,101	628
Other Liquids	10,357	--	5,916	--	539	6,411	--	12,267	970	-2,836	37,243
Other Hydrocarbons/Oxygenates	12,083	--	2,433	--	0	4,001	--	10,515	0	0	6,580
Unfinished Oils	--	--	3,274	--	196	3,204	--	3,102	0	-2,836	24,289
Motor Gasoline Blend. Comp.	-1,726	--	209	--	343	-794	--	-1,350	970	0	6,371
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0	3
Finished Petroleum Products	3,059	664,141	9,324	--	20,490	-2,296	--	--	62,280	617,031	55,512
Finished Motor Gasoline	3,059	298,049	2,274	--	12,950	-4,281	--	--	4,307	316,306	19,895
Reformulated	--	0	0	--	0	NA	--	--	NA	NA	0
Oxygenated	7,697	28,238	0	--	0	NA	--	--	NA	NA	1,769
Other	-4,638	269,811	2,274	--	12,950	NA	--	--	NA	NA	18,126
Finished Aviation Gasoline	--	1,353	46	--	0	-8	--	--	0	1,407	368
Jet Fuel	--	99,236	699	--	3,232	-101	--	--	10,022	93,246	8,025
Naphtha-Type	--	5,628	268	--	1,566	-380	--	--	3,316	4,526	852
Kerosene-Type	--	93,608	431	--	1,666	279	--	--	6,706	88,720	7,173
Kerosene	--	669	19	--	0	-6	--	--	13	681	57
Distillate Fuel Oil	--	104,992	715	--	4,103	-772	--	--	26,924	83,658	10,047
0.05 percent sulfur and under	--	28,153	119	--	65	NA	--	--	NA	NA	4,564
Greater than 0.05 percent sulfur ..	--	76,839	596	--	4,038	NA	--	--	NA	NA	5,483
Residual Fuel Oil	--	67,722	5,006	--	0	1,196	--	--	14,281	57,251	8,193
Petrochemical Feedstocks ^e	--	1,010	170	--	0	115	--	--	0	1,065	257
Special Naphthas	--	478	40	--	0	1	--	--	118	399	62
Lubricants	--	4,903	31	--	205	-291	--	--	837	4,593	1,727
Waxes	--	507	16	--	0	5	--	--	112	406	130
Petroleum Coke	--	37,014	77	--	0	1,023	--	--	25,525	10,543	4,120
Asphalt and Road Oil	--	11,408	229	--	0	433	--	--	133	11,071	2,132
Still Gas	--	35,075	0	--	0	0	--	--	0	35,075	0
Miscellaneous Products	--	1,725	2	--	0	390	--	--	7	1,330	499
Total	649,245	685,970	82,445	5,827	-27,574	-791	3	647,280	112,833	636,589	163,163

^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.

NA = Not available.

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, August 1993
(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 2,473	--	306	-100	-227	-200	0	2,589	55	8
Natural Gas Liquids and LRGs	103	101	(s)	--	0	28	--	92	11	73
Pentanes Plus	54	--	0	--	0	(s)	--	41	(s)	13
Liquefied Petroleum Gases	49	101	(s)	--	0	28	--	51	11	60
Ethane/Ethylene	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene	10	38	(s)	--	0	8	--	0	4	35
Normal Butane/Butylene	25	59	0	--	0	21	--	28	7	26
Isobutane/Isobutylene	14	5	(s)	--	0	-2	--	23	0	-2
Other Liquids	22	--	19	--	8	42	--	20	2	-14
Other Hydrocarbons/Oxygenates	39	--	12	--	0	8	--	43	0	0
Unfinished Oils	--	--	6	--	0	42	--	-21	0	-14
Motor Gasoline Blend, Comp.	-17	--	1	--	8	-9	--	-1	2	0
Aviation Gasoline Blend, Comp.	--	--	0	--	0	(s)	--	(s)	0	0
Finished Petroleum Products	22	2,769	60	--	88	-87	--	--	258	2,748
Finished Motor Gasoline	22	1,242	15	--	49	-43	--	--	4	1,366
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	43	46	0	--	0	32	--	--	NA	NA
Other	-21	1,196	15	--	49	-75	--	--	NA	NA
Finished Aviation Gasoline	--	5	(s)	--	0	-2	--	--	0	8
Jet Fuel	--	407	(s)	--	17	-14	--	--	23	416
Naphtha-Type	--	8	0	--	8	-4	--	--	9	11
Kerosene-Type	--	399	(s)	--	9	-10	--	--	14	405
Kerosene	--	4	0	--	0	(s)	--	--	(s)	3
Distillate Fuel Oil	--	419	2	--	19	-27	--	--	53	414
0.05 percent sulfur and under	--	169	0	--	2	45	--	--	NA	NA
Greater than 0.05 percent sulfur ..	--	250	2	--	17	-72	--	--	NA	NA
Residual Fuel Oil	--	284	40	--	0	20	--	--	76	228
Petrochemical Feedstocks ^e	--	3	0	--	0	3	--	--	0	0
Special Naphthas	--	2	(s)	--	0	(s)	--	--	(s)	2
Lubricants	--	20	0	--	3	-3	--	--	3	23
Waxes	--	2	(s)	--	0	(s)	--	--	1	2
Petroleum Coke	--	156	0	--	0	7	--	--	97	51
Asphalt and Road Oil	--	70	2	--	0	-11	--	--	1	83
Still Gas	--	149	0	--	0	0	--	--	0	149
Miscellaneous Products	--	7	(s)	--	0	3	--	--	(s)	4
Total	2,620	2,870	385	-100	-131	-196	0	2,700	326	2,815

^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.

NA = Not available.

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-August 1993
(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 2,515	--	276	24	-200	-27	(s)	2,526	107	9
Natural Gas Liquids and LRGs	102	90	1	--	0	7	--	88	15	83
Pentanes Plus	53	--	0	--	0	(s)	--	39	(s)	13
Liquefied Petroleum Gases	49	90	1	--	0	7	--	49	15	69
Ethane/Ethylene	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene	10	40	(s)	--	0	1	--	(s)	4	45
Normal Butane/Butylene	25	48	(s)	--	0	5	--	28	10	29
Isobutane/isobutylene	15	2	(s)	--	0	1	--	20	0	.5
Other Liquids	43	--	24	--	2	26	--	50	4	-12
Other Hydrocarbons/Oxygenates	50	--	10	--	0	16	--	43	0	0
Unfinished Oils	--	--	13	--	1	13	--	13	0	-12
Motor Gasoline Blend. Comp.	-7	--	1	--	1	-3	--	-6	4	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	13	2,733	38	--	84	-9	--	--	339	2,539
Finished Motor Gasoline	13	1,227	9	--	53	-18	--	--	18	1,302
Reformulated	--	0	0	--	0	NA	--	--	NA	NA
Oxygenated	32	116	0	--	0	NA	--	--	NA	NA
Other	-19	1,110	9	--	53	NA	--	--	NA	NA
Finished Aviation Gasoline	--	6	(s)	--	0	(s)	--	--	0	6
Jet Fuel	--	408	3	--	13	(s)	--	--	41	384
Naphtha-Type	--	23	1	--	8	-2	--	--	14	19
Kerosene-Type	--	385	2	--	7	1	--	--	28	365
Kerosene	--	3	(s)	--	0	(s)	--	--	(s)	3
Distillate Fuel Oil	--	432	3	--	17	-3	--	--	111	344
0.05 percent sulfur and under	--	116	(s)	--	(s)	NA	--	--	NA	NA
Greater than 0.05 percent sulfur ..	--	316	2	--	17	NA	--	--	NA	NA
Residual Fuel Oil	--	279	21	--	0	5	--	--	59	236
Petrochemical Feedstocks ^e	--	4	1	--	0	(s)	--	--	0	4
Special Naphthas	--	2	(s)	--	0	(s)	--	--	(s)	2
Lubricants	--	20	(s)	--	1	-1	--	--	3	19
Waxes	--	2	(s)	--	0	(s)	--	--	(s)	2
Petroleum Cokes	--	152	(s)	--	0	4	--	--	105	43
Asphalt and Road Oil	--	47	1	--	0	2	--	--	1	46
Still Gas	--	144	0	--	0	0	--	--	0	144
Miscellaneous Products	--	7	(s)	--	0	2	--	--	(s)	5
Total	2,672	2,823	339	24	-113	-3	(s)	2,664	464	2,620

^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.

NA = Not available.

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	June 1993		January-June 1993	
	Total	Daily Average	Total	Daily Average
PAD District I	E 784	E 28	E 4,831	E 28
Florida	447	15	E 2,614	E 14
New York	E 34	E 1	E 177	E 1
Pennsylvania	E 181	E 5	E 985	E 5
Virginia	E 1	E (s)	E 4	E (s)
West Virginia	155	5	E 1,024	E 6
Adjustment ^a	E -15	E -1	E -154	E -1
PAD District II	E 19,525	E 651	E 117,217	E 648
Illinois	1,820	54	9,610	53
Indiana	181	5	1,359	8
Kansas	4,210	140	24,668	138
Kentucky	481	15	2,419	13
Michigan	E 1,109	E 37	E 6,533	E 38
Missouri	13	(s)	E 61	E (s)
Nebraska	416	14	2,481	14
North Dakota	2,573	88	15,557	86
Ohio	E 748	E 25	E 4,266	E 24
Oklahoma	8,128	271	48,262	267
South Dakota	122	4	741	4
Tennessee	41	1	212	1
Adjustment ^a	E -76	E -3	E 1,049	E 6
PAD District III	E 95,998	E 3,200	E 589,857	E 3,258
Alabama	1,471	49	8,985	50
Arkansas	E 811	E 27	E 5,093	E 28
Louisiana ^b	E 11,308	E 377	E 68,456	E 378
Mississippi	1,788	59	E 10,983	E 61
New Mexico	5,570	188	33,903	187
Texas ^b	50,295	1,678	309,063	1,708
Federal Offshore PAD District III	24,914	830	E 147,461	E 815
Adjustment ^a	E -138	E -5	E 5,712	E 32
PAD District IV	E 12,699	E 423	E 77,838	E 430
Colorado	E 2,369	E 79	E 13,870	E 77
Montana	1,429	48	E 8,674	E 48
Utah	1,788	60	10,808	60
Wyoming	E 7,014	E 234	E 43,241	E 239
Adjustment ^a	E 99	E 3	E 1,245	E 7
PAD District V	E 73,672	E 2,456	E 480,380	E 2,544
Alaska ^b	E 45,609	E 1,520	E 289,435	E 1,599
South Alaska	1,165	39	7,130	39
North Slope	44,444	1,481	282,308	1,560
Adjustment for Alaska ^a	E (s)	E (s)	E -3	E (s)
Arizona	7	(s)	38	(s)
California ^b	23,620	787	144,414	798
Nevada	141	5	1,078	6
Federal Offshore PAD District V	4,246	142	24,101	133
Adjustment excluding Alaska ^a	E 49	E 2	E 1,310	E 7
U.S. Total^b	E 202,678	E 6,756	E 1,249,723	E 6,905

^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 - 4,246; California: State - 1,732; Louisiana: State - E1,815; Texas: State - 170; U.S. Total, including Federal offshore - E37,122.

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

E = Estimated.

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

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

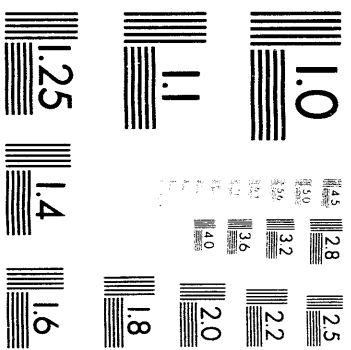
Table 27. Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining Districts, August 1993
(Thousand Barrels)

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	221	674	895	570	399	8,746	9,715
Pentanes Plus	41	83	124	110	110	1,293	1,513
Liquefied Petroleum Gases	180	591	771	480	289	7,453	8,202
Ethane	56	208	262	67	0	2,954	3,021
Propane	68	265	333	227	174	2,960	3,361
Normal Butane	46	86	132	88	113	904	1,105
Isobutane	10	34	44	78	2	635	715
Stocks							
Natural Gas Liquids	166	47	213	109	36	3,077	3,222
Pentanes Plus	8	8	16	18	11	893	922
Liquefied Petroleum Gases	158	39	197	91	25	2,184	2,300
Ethane	0	0	0	11	0	648	659
Propane	101	31	132	45	20	749	814
Normal Butane	56	5	61	21	5	696	722
Isobutane	1	3	4	14	0	91	105

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	19,022	3,908	7,294	697	4,912	35,833	4,059	3,198	53,700
Pentanes Plus	3,648	761	1,302	194	661	6,566	1,045	1,682	10,930
Liquefied Petroleum Gases	15,374	3,147	6,992	503	4,251	29,267	3,014	1,516	42,770
Ethane	6,306	1,683	2,597	99	2,028	12,713	926	2	16,924
Propane	5,663	929	2,032	212	1,431	10,267	1,316	309	15,586
Normal Butane	2,415	1,852	627	143	518	1,851	458	761	4,307
Isobutane	990	2,367	736	49	274	4,436	314	444	5,953
Stocks									
Natural Gas Liquids	291	6,521	1,948	155	160	9,075	224	172	12,906
Pentanes Plus	125	859	501	9	34	1,528	92	13	2,571
Liquefied Petroleum Gases	166	5,662	1,447	146	126	7,547	132	159	10,335
Ethane	17	1,926	117	97	17	2,174	1	0	2,834
Propane	93	1,973	766	40	78	2,950	71	122	4,089
Normal Butane	41	776	373	8	17	1,215	44	8	2,050
Isobutane	15	987	191	1	14	1,208	16	29	1,362

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-816, "Monthly Natural Gas Liquids Report."



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**Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts,
August 1993**
(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	39,549	2,997	42,546	66,699	10,988	20,661	98,348
Natural Gas Liquids	155	0	155	1,782	224	591	2,597
Pentanes Plus	77	0	77	542	131	379	1,052
Liquefied Petroleum Gases	78	0	78	1,240	93	212	1,545
Ethane	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0
Normal Butane	15	0	15	142	0	0	142
Isobutane	63	0	63	1,098	93	212	1,403
Other Liquids	6,057	18	6,075	1,125	79	-1,586	-382
Other Hydrocarbons/Hydrogen/Oxygenates	744	3	747	133	123	81	337
Other Hydrocarbons/Hydrogen	0	3	3	18	0	0	18
Oxygenates	W	W	744	115	123	81	319
Fuel Ethanol	W	W	W	W	W	W	211
Methanol	W	W	W	W	W	W	W
MTBE	W	W	735	W	W	W	W
Other Oxygenates ^a	W	W	W	W	W	W	W
Unfinished Oils (net)	3,828	28	3,856	2,117	-7	-1,952	158
Motor Gasoline Blend. Comp. (net)	1,483	-13	1,470	-1,125	-37	285	-877
Aviation Gasoline Blend. Comp. (net)	2	0	2	0	0	0	0
Total Input to Refineries	45,761	3,015	48,776	69,606	11,291	19,666	100,563
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	1,275	97	1,372	2,222	355	676	3,252
Operable Capacity (daily average)	1,452	97	1,549	2,330	358	665	3,352
Operable Utilization Rate (percent) ^{b,c}	87.8	99.7	88.6	95.4	99.0	101.7	97.0
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Cracking	585	21	606	841	119	158	1,119
Catalytic Hydrocracking	49	4	53	124	0	8	132
Delayed and Fluid Coking	86	0	86	154	61	60	275
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	1.15	0.80	1.13	1.27	1.80	0.66	1.20
API Gravity, Weighted Average (degrees)	29.54	35.94	30.01	33.02	29.86	36.06	33.30
Operable Capacity (daily average)	1,452	97	1,549	2,330	358	665	3,352
Operating	1,452	97	1,549	2,320	358	665	3,343
Idle	0	0	0	9	0	0	9
Alaskan Crude Oil Receipts	0	0	0	1,236	0	0	1,236

See footnotes at end of table.

**Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts,
August 1993 (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	16,636	91,720	75,619	6,380	2,895	193,250	14,619	80,249	429,012
Natural Gas Liquids	1,167	3,754	2,332	239	257	7,749	432	2,838	13,771
Pentanes Plus	607	1,657	489	140	160	3,053	157	1,264	5,603
Liquefied Petroleum Gases	560	2,097	1,843	99	97	4,696	275	1,574	8,168
Ethane	0	0	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0	0	0
Normal Butane	430	317	571	0	0	1,318	166	876	2,517
Isobutane	130	1,780	1,272	99	97	3,378	109	698	5,651
Other Liquids	150	10,017	4,514	-2	36	14,715	186	623	21,217
Other Hydrocarbons/Hydrogen/Oxygenates	121	1,053	861	9	13	2,057	14	1,322	4,477
Other Hydrocarbons/Hydrogen	112	158	465	0	0	735	0	333	1,089
Oxygenates	9	895	396	W	W	1,322	14	989	3,388
Fuel Ethanol	W	W	W	W	W	W	W	W	261
Methanol	W	W	W	W	W	W	W	W	43
MTBE	W	865	W	W	W	1,196	W	989	3,036
Other Oxygenates ^a	W	W	W	W	W	W	W	W	48
Unfinished Oils (net)	-40	10,485	3,669	74	-8	14,180	-213	-655	17,326
Motor Gasoline Blend. Comp. (net)	69	-1,520	-6	-85	31	-1,511	385	-41	-574
Aviation Gasoline Blend. Comp. (net)	0	-1	-10	0	0	-11	0	-3	-12
Total Input to Refineries	17,953	105,491	82,465	6,617	3,188	215,714	15,237	83,710	464,000
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	540	2,972	2,488	206	93	6,300	476	2,635	14,034
Operable Capacity (daily average)	579	3,218	2,663	249	98	6,806	519	2,911	15,138
Operable Utilization Rate (percent) ^{b,c}	93.2	92.4	93.4	82.9	95.7	92.6	91.6	90.5	92.7
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Cracking	181	1,263	896	31	31	2,402	156	700	4,983
Catalytic Hydrocracking	22	224	216	0	0	463	7	442	1,097
Delayed and Fluid Coking	5	302	354	15	0	676	30	464	1,532
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.78	1.07	1.33	1.47	1.18	1.16	1.18	1.16	1.17
API Gravity, Weighted Average (degrees)	38.18	32.12	31.19	32.65	36.51	32.35	34.92	25.27	31.07
Operable Capacity (daily average)	579	3,218	2,663	249	98	6,806	519	2,911	15,138
Operating	579	3,191	2,663	249	98	6,779	509	2,876	15,057
Idle	0	27	0	0	0	27	10	35	81
Alaskan Crude Oil Receipts	59	0	726	4	0	789	0	42,668	44,693

^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 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,
August 1993**
(Thousand Barrels)

Commodity	PAD District I			PAD District II			Total
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	
Liquefied Refinery Gases	1,545	59	1,604	3,206	379	622	4,207
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	1,309	32	1,341	2,445	256	512	3,213
Propane	W	W	W	W	W	W	W
Propylene	W	W	W	W	W	W	W
Normal Butane/Butylene	374	35	409	650	136	151	937
Normal Butane	W	W	W	W	W	W	W
Butylene	W	W	W	W	W	W	W
Isobutane/Isobutylene	-138	-8	-146	111	-13	-41	57
Isobutane	W	W	W	W	W	W	W
Isobutylene	W	W	W	W	W	W	W
Finished Motor Gasoline	21,856	1,113	22,969	37,717	5,990	9,820	53,527
Reformulated	0	0	0	0	0	0	0
Oxygenated	274	0	274	1,130	1,225	1,993	4,348
Other	21,582	1,113	22,695	36,587	4,765	7,827	49,179
Finished Aviation Gasoline	23	0	23	44	21	15	80
Jet Fuel	2,112	0	2,112	4,061	644	1,455	6,160
Naphtha-Type	266	0	266	243	2	302	547
Kerosene-Type	1,846	0	1,846	3,818	642	1,153	5,613
Commercial	1,789	0	1,789	3,744	642	1,153	5,539
Military	57	0	57	74	0	0	74
Kerosene	-16	42	26	248	111	-191	168
Distillate Fuel Oil	10,866	765	11,632	13,739	2,605	5,347	21,691
0.05 percent sulfur and under	2,549	306	2,855	5,065	380	908	6,353
Greater than 0.05 percent sulfur	8,317	460	8,777	8,674	2,225	4,439	15,338
Residual Fuel Oil	3,287	63	3,350	1,416	251	192	1,859
Less than 0.31 percent sulfur	475	17	492	0	0	24	24
0.31 to 1.00 percent sulfur	2,641	46	2,687	298	0	61	359
Greater than 1.00 percent sulfur	171	0	171	1,118	251	107	1,476
Naphtha for Petrochemical Feedstock Use	554	0	554	685	0	13	698
Other Oils for Petrochemical Feedstock Use	13	0	13	328	0	56	384
Special Naphthas	39	37	76	400	0	85	485
Lubricants	242	295	537	495	0	243	738
Naphthenic	0	0	0	0	0	0	0
Paraffinic	242	295	537	495	0	243	738
Waxes	0	111	111	57	0	26	83
Petroleum Coke	1,523	27	1,550	2,466	624	734	3,824
Marketable	581	0	581	1,334	470	533	2,337
Catalyst	942	27	969	1,132	154	201	1,487
Asphalt and Road Oil	3,688	309	3,997	5,042	806	920	6,768
Still Gas	1,890	157	2,047	3,139	388	925	4,452
Miscellaneous Products	24	47	71	157	46	6	209
Fuel Use	0	0	0	0	0	0	0
Nonfuel Use	24	47	71	157	46	6	209
Total	47,648	3,026	50,672	73,200	11,865	20,268	105,333
Processing Gain(-) or Loss(+) ^a	-1,885	-11	-1,896	-3,594	-574	-602	-4,770

See footnotes at end of table.

**Table 29. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts,
August 1993 (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	848	7,487	3,772	125	108	12,340	378	3,126	21,655
Ethane/Ethylene	1	718	264	0	0	983	0	0	983
Ethane	W	W	W	W	W	W	W	W	738
Ethylene	W	W	W	W	W	W	W	W	245
Propane/Propylene	577	4,479	2,533	77	64	7,730	270	1,169	13,723
Propane	W	W	W	W	W	W	W	W	9,643
Propylene	W	W	W	W	W	W	W	W	4,080
Normal Butane/Butylene	257	2,070	851	42	33	3,253	107	1,816	6,522
Normal Butane	W	W	W	W	W	W	W	W	6,236
Butylene	W	W	W	W	W	W	W	W	286
Isobutane/Isobutylene	13	220	124	6	11	374	1	141	427
Isobutane	W	W	W	W	W	W	W	W	392
Isobutylene	W	W	W	W	W	W	W	W	35
Finished Motor Gasoline	9,102	49,436	37,851	1,597	1,812	99,798	7,554	38,509	222,357
Reformulated	0	0	0	0	0	0	0	0	0
Oxygenated	37	2,451	2,065	0	122	4,675	35	1,425	10,757
Other	9,065	46,985	35,786	1,597	1,690	95,123	7,519	37,084	211,600
Finished Aviation Gasoline	223	100	132	0	0	455	32	161	751
Jet Fuel	1,804	9,053	8,550	429	222	20,058	1,144	12,623	42,097
Naphtha-Type	390	290	613	243	214	1,750	328	239	3,130
Kerosene-Type	1,414	8,763	7,937	186	8	18,308	816	12,384	38,967
Commercial	1,270	7,954	7,571	186	6	16,987	816	11,205	36,336
Military	144	809	366	0	2	1,321	0	1,179	2,631
Kerosene	50	525	71	0	77	723	25	110	1,052
Distillate Fuel Oil	3,600	19,985	19,296	1,840	727	45,448	3,859	12,987	95,617
0.05 percent sulfur and under	829	11,220	7,133	250	432	19,864	1,134	5,230	35,436
Greater than 0.05 percent sulfur	2,771	8,765	12,163	1,590	295	25,584	2,725	7,757	60,181
Residual Fuel Oil	323	5,423	2,880	273	19	8,918	182	8,791	23,100
Less than 0.31 percent sulfur	129	4	598	56	0	787	40	1,112	2,455
0.31 to 1.00 percent sulfur	85	1,608	535	160	19	2,407	-18	940	6,375
Greater than 1.00 percent sulfur	109	3,811	1,747	57	0	5,724	160	6,739	14,270
Naphtha for Petrochemical Feedstock Use	125	2,734	462	0	-2	3,319	0	-205	4,366
Other Oils for Petrochemical Feedstock Use	185	4,960	3,581	0	0	8,726	22	296	9,441
Special Naphthas	102	688	246	120	0	1,156	0	58	1,775
Lubricants	W	1,553	W	W	W	2,833	0	626	4,734
Naphthenic	W	106	W	W	W	661	0	332	993
Paraffinic	W	1,447	W	W	W	2,172	0	294	3,741
Waxes	10	164	63	65	0	302	45	62	603
Petroleum Coke	343	4,229	4,040	147	22	8,781	388	4,832	19,375
Marketable	40	2,397	2,955	98	0	5,490	204	3,698	12,310
Catalyst	303	1,832	1,085	49	22	3,291	184	1,134	7,065
Asphalt and Road Oil	532	1,668	1,712	1,245	171	4,728	1,358	2,159	19,010
Still Gas	699	4,749	3,303	204	95	9,050	652	4,622	20,823
Miscellaneous Products	39	360	386	0	0	785	82	202	1,349
Fuel Use	16	0	126	0	0	142	0	0	142
Nonfuel Use	23	360	260	0	0	643	82	202	1,207
Total	18,028	112,514	86,941	6,686	3,251	227,420	15,721	88,959	488,105
Processing Gain(-) or Loss(+) ^a	-75	-7,023	-4,476	-69	-63	-11,706	-484	-5,249	-24,105

^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,
August 1993**
(Thousand Barrels)

Commodity	PAD District I			PAD District II			Total
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	
Crude Oil	13,652	527	14,179	9,778	1,887	2,004	13,669
Petroleum Products	50,742	2,412	53,154	40,158	7,977	14,562	62,697
Pentanes Plus	470	0	470	216	77	215	508
Liquefied Petroleum Gases	2,557	25	2,582	3,171	263	1,072	4,506
Ethane/Ethylene	0	0	0	1	0	0	1
Propane/Propylene	701	3	704	1,484	27	124	1,635
Normal Butane/Butylene	1,672	21	1,693	1,340	164	824	2,328
Isobutane/Isobutylene	184	1	185	346	72	124	542
Other Hydrocarbons/Hydrogen/Oxygenates	2,547	8	2,555	287	147	26	460
Other Hydrocarbons/Hydrogen	0	4	4	44	0	0	44
Oxygenates	W	W	2,551	243	147	26	416
Fuel Ethanol	W	W	W	W	W	W	221
Methanol	W	W	W	W	W	W	W
MTBE	W	W	2,233	W	W	W	W
Other Oxygenates ^a	W	W	W	W	W	W	W
Unfinished Oils	10,847	583	11,430	11,349	587	5,870	17,806
Naphthas and Lighter	2,411	153	2,564	2,771	163	1,393	4,327
Kerosene and Light Gas Oils	2,868	7	2,875	1,943	54	699	2,696
Heavy Gas Oils	4,507	325	4,832	3,788	309	2,516	6,613
Residuum	1,061	98	1,159	2,847	61	1,262	4,170
Motor Gasoline Blending Components	5,130	49	5,179	4,895	472	1,152	6,519
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Motor Gasoline	9,483	213	9,696	5,506	951	1,960	8,417
Reformulated	0	0	0	0	0	0	0
Oxygenated	425	0	425	227	255	125	607
Other	9,058	213	9,271	5,279	696	1,835	7,810
Finished Aviation Gasoline	52	0	52	53	3	21	77
Jet Fuel	1,616	0	1,616	1,910	281	534	2,725
Naphtha-Type	83	0	83	201	27	183	411
Kerosene-Type	1,533	0	1,533	1,709	254	351	2,314
Kerosene	49	35	84	323	16	94	433
Distillate Fuel Oil	10,881	301	11,182	5,366	1,538	2,190	9,094
0.05 percent sulfur and under	1,165	244	1,409	1,922	229	270	2,421
Greater than 0.05 percent sulfur	9,716	57	9,773	3,444	1,309	1,920	6,673
Residual Fuel Oil	4,433	98	4,531	1,662	236	91	1,989
Less than 0.31 percent sulfur	776	75	851	2	0	14	16
0.31 to 1.00 percent sulfur	2,725	23	2,748	291	0	1	292
Greater than 1.00 percent sulfur	932	0	932	1,369	236	76	1,681
Naphtha for Petrochemical Feedstock Use	248	0	248	309	0	22	331
Other Oils for Petrochemical Feedstock Use	3	0	3	4	0	0	4
Special Naphthas	0	16	16	191	0	134	325
Lubricants	286	389	675	778	0	0	778
Waxes	0	172	172	94	0	34	128
Petroleum Coke (Marketable)	948	0	948	555	1,761	153	2,469
Asphalt and Road Oil	1,163	491	1,654	3,413	1,639	983	6,035
Miscellaneous Products	29	32	61	76	6	11	93
Total Stocks, All Oils	64,394	2,939	67,333	49,936	9,864	16,566	76,366

See footnotes at end of table.

**Table 30. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts,
August 1993 (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 M.	West Coast	
Crude Oil	1,189	26,140	16,534	1,415	318	45,596	2,011	19,466	94,921
Petroleum Products	10,477	74,096	51,942	6,525	1,434	144,174	9,730	65,925	335,980
Pentanes Plus	83	90	46	12	17	248	6	27	1,259
Liquefied Petroleum Gases	2,034	4,567	6,527	70	52	13,250	542	1,702	22,582
Ethane/Ethylene	81	360	0	0	0	441	0	0	442
Propane/Propylene	814	1,149	1,784	9	6	3,762	112	80	6,293
Normal Butane/Butylene	761	1,986	3,821	52	22	6,642	325	1,256	12,244
Isobutane/Isobutylene	378	1,072	922	9	24	2,405	105	366	3,603
Other Hydrocarbons/Hydrogen/Oxygenates	372	1,883	739	0	42	3,036	84	4,703	10,838
Other Hydrocarbons/Hydrogen	0	0	1	0	0	1	0	3	52
Oxygenates	372	1,883	738	W	W	3,035	84	4,700	10,786
Fuel Ethanol	W	W	W	W	W	W	W	W	529
Methanol	W	W	W	W	W	W	W	W	516
MTBE	W	1,613	W	W	W	2,613	W	4,588	9,673
Other Oxygenates ^a	W	W	W	W	W	W	W	W	68
Unfinished Oils	2,767	26,633	20,043	1,573	364	51,380	2,688	24,289	107,593
Naphthas and Lighter	921	6,504	4,478	461	30	12,394	569	4,082	23,936
Kerosene and Light Gas Oils	199	3,464	2,589	202	6	6,460	614	3,879	16,524
Heavy Gas Oils	923	11,140	9,101	801	328	22,293	1,083	12,875	47,696
Residuum	724	5,525	3,875	109	0	10,233	422	3,453	19,437
Motor Gasoline Blending Components	1,220	7,666	4,573	283	223	13,965	1,185	6,016	32,864
Aviation Gasoline Blending Components	0	0	41	0	0	41	0	3	44
Finished Motor Gasoline	1,442	10,751	5,193	852	114	18,352	1,689	6,747	44,901
Reformulated	0	0	0	0	0	0	0	0	0
Oxygenated	0	1,396	203	0	0	1,599	2	366	2,999
Other	1,442	9,355	4,990	852	114	16,753	1,687	6,381	41,902
Finished Aviation Gasoline	75	115	126	0	0	316	28	116	589
Jet Fuel	526	3,955	2,906	181	143	7,711	405	3,776	16,233
Naphtha-Type	118	248	414	129	123	1,032	149	125	1,800
Kerosene-Type	408	3,707	2,492	52	20	6,679	256	3,651	14,433
Kerosene	47	596	133	8	112	896	144	45	1,602
Distillate Fuel Oil	950	7,980	4,530	941	169	14,578	1,221	5,077	41,152
0.05 percent sulfur and under	218	1,960	1,246	440	33	3,897	263	2,036	10,026
Greater than 0.05 percent sulfur	732	6,028	3,284	501	136	10,681	958	3,041	31,126
Residual Fuel Oil	287	3,191	2,625	178	19	6,300	331	6,029	19,180
Less than 0.31 percent sulfur	30	1	596	4	0	631	113	579	2,190
0.31 to 1.00 percent sulfur	31	307	387	139	19	883	61	614	4,598
Greater than 1.00 percent sulfur	226	2,883	1,642	35	0	4,786	157	4,836	12,392
Naphtha for Petrochemical Feedstock Use	35	715	567	0	6	1,323	0	96	1,998
Other Oils for Petrochemical Feedstock Use	89	1,025	170	0	0	1,284	0	161	1,452
Special Naphthas	105	1,153	126	110	0	1,494	1	62	1,898
Lubricants	22	2,513	1,118	786	0	4,439	0	842	6,734
Waxes	6	153	177	39	0	375	47	130	852
Petroleum Coke (Marketable)	0	411	1,636	573	0	2,620	150	4,120	10,307
Asphalt and Road Oil	410	496	527	919	173	2,525	1,206	1,900	13,320
Miscellaneous Products	7	195	139	0	0	341	3	84	582
Total Stocks, All Oils	11,666	100,236	68,476	7,940	1,752	190,070	11,741	85,391	430,901

^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
August 1993**

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	3.6	2.0	3.5	4.7	3.5	3.3	4.3
Finished Motor Gasoline ^b	44.9	37.1	44.4	53.7	51.7	47.4	52.3
Finished Aviation Gasoline ^c	0.1	0.0	0.1	0.1	0.2	0.1	0.1
Naphtha-Type Jet Fuel	0.6	0.0	0.6	0.4	0.0	1.6	0.6
Kerosene-Type Jet Fuel	4.3	0.0	4.0	5.6	5.9	6.2	5.7
Kerosene	0.0	1.4	0.1	0.4	1.0	-1.0	0.2
Distillate Fuel Oil	25.1	25.3	25.1	20.0	23.7	28.6	22.0
Residual Fuel Oil	7.6	2.1	7.2	2.1	2.3	1.0	1.9
Naphtha for Petrochemical Feedstock Use	1.3	0.0	1.2	1.0	0.0	0.1	0.7
Other Oils for Petrochemical Feedstock Use	0.0	0.0	0.0	0.5	0.0	0.3	0.4
Special Naphthas	0.1	1.2	0.2	0.6	0.0	0.5	0.5
Lubricants	0.6	9.8	1.2	0.7	0.0	1.3	0.8
Waxes	0.0	3.7	0.2	0.1	0.0	0.1	0.1
Petroleum Coke	3.5	0.9	3.3	3.6	5.7	3.9	3.9
Asphalt and Road Oil	8.5	10.2	8.6	7.3	7.3	4.9	6.9
Still Gas	4.4	5.2	4.4	4.6	3.5	4.9	4.5
Miscellaneous Products	0.1	1.6	0.2	0.2	0.4	0.0	0.2
Processing Gain(-) or Loss(+) ^d	-4.4	-0.4	-4.1	-5.2	-5.2	-3.2	-4.8

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	5.1	7.3	4.8	1.9	3.7	6.0	2.6	3.9	4.9
Finished Motor Gasoline ^b	46.7	45.2	43.7	22.2	52.3	44.1	46.7	43.2	45.9
Finished Aviation Gasoline ^c	1.3	0.1	0.2	0.0	0.0	0.2	0.2	0.2	0.2
Naphtha-Type Jet Fuel	2.4	0.3	0.8	3.8	7.4	0.8	2.3	0.3	0.7
Kerosene-Type Jet Fuel	8.5	8.6	10.0	2.9	0.3	8.8	5.7	15.6	8.7
Kerosene	0.3	0.5	0.1	0.0	2.7	0.4	0.2	0.1	0.2
Distillate Fuel Oil	21.7	19.6	24.3	28.5	25.2	21.9	26.8	16.3	21.4
Residual Fuel Oil	2.0	5.3	3.6	4.2	0.7	4.3	1.3	11.0	5.2
Naphtha for Petrochemical Feedstock Use	0.8	2.7	0.6	0.0	-0.1	1.6	0.0	-0.3	1.0
Other Oils for Petrochemical Feedstock Use	1.1	4.9	4.5	0.0	0.0	4.2	0.2	0.4	2.1
Special Naphthas	0.6	0.7	0.3	1.9	0.0	0.6	0.0	0.1	0.4
Lubricants	0.3	1.5	0.8	9.9	0.0	1.4	0.0	0.8	1.1
Waxes	0.1	0.2	0.1	1.0	0.0	0.2	0.3	0.1	0.1
Petroleum Coke	2.1	4.1	5.1	2.3	0.8	4.2	2.7	6.1	4.3
Asphalt and Road Oil	3.2	1.0	2.2	19.3	5.9	2.3	9.4	2.7	4.3
Still Gas	4.2	4.7	4.2	3.2	3.3	4.4	4.5	5.8	4.7
Miscellaneous Products	0.2	0.4	0.5	0.0	0.0	0.4	0.6	0.3	0.3
Processing Gain(-) or Loss(+) ^d	-0.5	-6.9	-5.7	-1.1	-2.2	-5.6	-3.4	-6.6	-5.4

^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,
August 1993
(Thousand Barrels)**

PAD District and State of Entry	Residual Fuel Oil			Total
	Less than 0.31% Sulfur	0.31 to 1.00% Sulfur	Greater than 1.00% Sulfur	
PAD District I	1,328	2,219	5,719	9,264
Florida	0	429	1,248	1,677
Georgia	0	0	192	192
Maine	17	0	399	416
Maryland	178	268	630	1,076
Massachusetts	0	270	29	299
New Jersey	0	183	848	1,031
New York	225	468	985	1,678
North Carolina	0	0	446	446
Pennsylvania	906	329	14	1,249
Rhode Island	0	0	200	200
South Carolina	0	0	122	122
Vermont	0	0	1	1
Virginia	0	272	605	877
PAD District II	0	2	14	16
North Dakota	0	2	14	16
PAD District III	104	0	849	953
Mississippi	0	0	543	543
Texas	104	0	306	410
PAD District V	463	0	778	1,241
California	0	0	625	625
Oregon	463	0	0	463
Washington	0	0	153	153
U.S. Total	1,893	2,221	7,360	11,474

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

**Table 33. Imports of Crude Oil and Petroleum Products by PAD District,
August 1993
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil^{a,b}	39,065	40,559	112,934	2,992	9,491	205,041	6,614
Natural Gas Liquids	451	2,374	2,821	583	6	6,215	200
Pentanes Plus	269	36	283	439	0	1,027	33
Liquefied Petroleum Gases	162	2,338	2,538	144	6	5,188	167
Ethane	0	605	0	0	0	605	20
Ethylene	0	0	0	0	0	0	0
Propane	124	1,308	1,883	89	2	3,406	110
Propylene	0	185	0	0	0	185	6
Normal Butane	31	88	434	36	0	589	19
Butylene	0	0	0	0	0	0	0
Isobutane	7	152	221	19	4	403	13
Isobutylene	0	0	0	0	0	0	0
Other Liquids	4,588	1	9,644	0	580	14,811	478
Other Hydrocarbons/Hydrogen/Oxygenates	0	0	0	0	362	362	12
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0
Oxygenates	0	0	0	0	362	362	12
Fuel Ethanol	0	0	0	0	0	0	0
MTBE	0	0	0	0	362	362	12
Other Oxygenates ^c	0	0	0	0	0	0	0
Unfinished Oils ^a	3,643	0	9,644	0	196	13,483	435
Naphtha and Lighter	0	0	1,709	0	0	1,709	55
Kerosene and Light Gas Oils	0	0	0	0	0	0	0
Heavy Gas Oils	3,130	0	1,947	0	0	5,077	164
Residuum	513	0	5,988	0	196	6,697	216
Motor Gasoline Blending Components	943	1	0	0	22	966	31
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	25,445	551	5,094	142	1,886	33,098	1,068
Finished Motor Gasoline	8,188	101	0	10	462	8,761	283
Reformulated	0	0	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	8,188	101	0	10	462	8,761	283
Finished Aviation Gasoline	0	6	0	0	10	16	1
Jet Fuel	2,389	79	346	0	12	2,826	91
Naphtha-Type	184	79	0	0	0	263	8
Kerosene-Type	2,205	0	346	0	12	2,563	83
Bonded Aircraft Fuel	1,470	0	0	0	12	1,482	48
Other	735	0	346	0	0	1,081	35
Kerosene	7	0	0	0	0	7	(s)
Distillate Fuel Oil	4,293	204	227	130	61	4,915	159
Bonded Ship Bunkers	0	0	0	5	53	58	2
0.05 percent sulfur and under	0	0	0	5	0	5	(s)
Greater than 0.05 percent sulfur	0	0	0	0	53	53	2
Other	4,293	204	227	125	8	4,857	157
0.05 percent sulfur and under	1,564	70	227	41	0	1,902	61
Greater than 0.05 percent sulfur	2,729	134	0	84	8	2,955	95
Residual Fuel Oil	9,264	16	953	0	1,241	11,474	370
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	9,264	16	953	0	1,241	11,474	370
Less than 0.31 percent sulfur	1,326	0	104	0	463	1,893	61
0.31 to 1.00 percent sulfur	2,219	2	0	0	0	2,221	72
Greater than 1.00 percent sulfur	5,719	14	849	0	778	7,360	237
Naphtha for Petrochemical Feedstock Use	213	10	698	0	0	921	30
Other Oils for Petrochemical Feedstock Use	0	0	2,662	0	0	2,662	86
Special Naphthas	9	62	135	0	4	210	7
Lubricants	167	13	0	0	0	180	6
Waxes	43	3	2	2	1	51	2
Petroleum Coke	0	0	0	0	0	0	0
Asphalt and Road Oil	840	50	71	0	74	1,035	33
Miscellaneous Products	32	7	0	0	1	40	1
Total	69,527	43,485	130,493	3,717	11,943	259,165	8,360

^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 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-814, "Monthly Imports Report."

**Table 34. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District,
January-August 1993
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts					U.S. Total	Daily Average
	I	II	III	IV	V		
Crude Oil^{a,b}	307,662	319,358	902,960	21,653	67,057	1,618,690	6,661
Natural Gas Liquids	4,802	16,234	16,658	2,047	148	39,889	164
Pentanes Plus	563	330	4,970	856	0	6,719	28
Liquefied Petroleum Gases	4,239	15,904	11,688	1,191	148	33,170	137
Ethane	1	2,751	0	0	0	2,752	11
Ethylene	0	0	46	0	0	46	(s)
Propane	3,508	9,140	7,873	746	66	21,333	88
Propylene	0	1,151	0	0	0	1,151	5
Normal Butane	649	2,057	2,760	347	6	5,819	24
Butylene	0	0	0	0	0	0	0
Isobutane	81	805	1,001	98	76	2,061	8
Isobutylene	0	0	8	0	0	8	(s)
Other Liquids	37,036	649	82,810	0	5,916	126,411	520
Other Hydrocarbons/Hydrogen/Oxygenates	588	0	233	0	2,433	3,254	13
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0
Oxygenates	588	0	233	0	2,433	3,254	13
Fuel Ethanol	0	0	0	0	117	117	(s)
MTBE	554	0	233	0	2,316	3,103	13
Other Oxygenates ^c	34	0	0	0	0	34	(s)
Unfinished Oils ^a	30,744	370	81,382	0	3,274	115,770	476
Naphthas and Lighter	1,605	370	17,137	0	0	19,112	79
Kerosene and Light Gas Oils	0	0	0	0	0	0	0
Heavy Gas Oils	23,446	0	14,131	0	734	38,311	158
Residuum	5,693	0	50,114	0	2,540	58,347	240
Motor Gasoline Blending Components	5,704	279	1,195	0	209	7,387	30
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	197,441	3,700	49,678	753	9,324	260,896	1,074
Finished Motor Gasoline	56,574	671	1,363	83	2,274	60,965	251
Reformulated	0	0	0	0	0	0	0
Oxygenated	46	0	0	0	0	46	(s)
Other	56,528	671	1,363	83	2,274	60,919	251
Finished Aviation Gasoline	0	27	0	0	46	73	(s)
Jet Fuel	19,931	602	1,773	0	699	23,005	95
Naphtha-Type	1,047	563	554	0	268	2,432	10
Kerosene-Type	18,884	39	1,219	0	431	20,573	85
Bonded Aircraft Fuel	12,117	0	0	0	263	12,380	51
Other	6,767	39	1,219	0	168	8,193	34
Kerosene	161	0	0	0	19	180	1
Distillate Fuel Oil	40,596	1,355	896	647	715	44,209	182
Bonded Ship Bunkers	0	0	0	13	519	532	2
0.05 percent sulfur and under	0	0	0	13	0	13	(s)
Greater than 0.05 percent sulfur	0	0	0	0	519	519	2
Other	40,596	1,355	896	634	196	43,677	180
0.05 percent sulfur and under	14,640	553	896	298	119	16,506	68
Greater than 0.05 percent sulfur	25,956	802	0	336	77	27,171	112
Residual Fuel Oil	68,204	162	10,245	0	5,006	83,617	344
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	68,204	162	10,245	0	5,006	83,617	344
Less than 0.31 percent sulfur	8,814	0	1,000	0	1,019	10,833	45
0.31 to 1.00 percent sulfur	13,582	130	61	0	426	14,199	58
Greater than 1.00 percent sulfur	45,808	32	9,184	0	3,561	58,585	241
Naphtha for Petrochemical Feedstock Use	1,335	143	9,019	0	170	10,667	44
Other Oils for Petrochemical Feedstock Use	0	0	25,091	0	0	25,091	103
Special Naphthas	79	465	576	0	40	1,160	5
Lubricants	2,023	116	123	0	31	2,293	9
Waxes	359	40	66	23	16	504	2
Petroleum Coke	0	0	279	0	77	356	1
Asphalt and Road Oil	7,521	79	220	0	229	8,049	33
Miscellaneous Products	658	40	27	0	2	727	3
Total	546,941	339,941	1,052,106	24,453	82,445	2,045,886	8,419

^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 or 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
August 1993
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	46,973	2,223	3,888	0	534	47	0	1,035	0	0
Algeria	870	1,121	1,500	0	0	0	0	1,035	0	0
Kuwait	13,983	500	0	0	0	0	0	0	0	0
Saudi Arabia	32,120	602	2,388	0	534	47	0	0	0	0
Other OPEC	63,142	0	927	70	944	1,470	1,531	2,521	0	19
Ecuador	3,764	0	0	0	0	0	0	0	0	0
Gabon	4,711	0	0	0	0	0	0	0	0	0
Indonesia	2,473	0	0	0	0	0	0	463	0	0
Nigeria	17,017	0	0	0	0	0	0	403	0	0
Venezuela	35,177	0	927	70	944	1,470	1,531	1,655	0	19
Non OPEC	94,926	2,965	8,668	896	7,283	1,309	3,384	7,918	7	191
Angola	7,991	0	0	0	0	0	0	0	0	0
Argentina	400	0	0	129	0	0	69	0	0	0
Australia	828	0	196	0	0	0	0	0	0	0
Bahama Islands	0	0	0	0	0	0	0	1,143	0	0
Belgium	0	0	0	0	0	0	0	0	0	0
Benin	207	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	981	0	0	0	0	0
Cameroon	549	0	0	0	0	0	0	0	0	0
Canada	29,934	1,650	296	108	1,556	94	1,473	879	7	182
China, People's Republic of	1,166	0	0	0	0	0	0	0	0	0
Colombia	3,125	0	0	0	0	0	0	727	0	0
Congo	1,875	0	0	0	0	0	0	0	0	0
Egypt	1,777	0	265	0	0	0	0	0	0	0
France	0	19	348	0	506	0	0	0	0	0
Germany, FR	0	0	552	0	0	0	0	0	0	0
Guatemala	221	0	0	0	0	0	0	0	0	0
Italy	0	13	480	0	720	0	0	299	0	9
Ivory Coast	0	0	180	0	0	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	718	22	0	0	0	0	0	0
Malaysia	429	0	0	0	0	0	0	0	0	0
Mexico	25,079	283	34	194	0	9	228	625	0	0
Netherlands	0	0	0	267	266	0	0	0	0	0
Netherlands Antilles	0	0	638	0	0	0	0	830	0	0
New Zealand	0	0	0	0	211	0	0	0	0	0
Norway	4,988	0	306	0	273	0	0	0	0	0
Oman	1,504	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	487	0	0
Portugal	0	0	0	0	0	0	0	306	0	0
Puerto Rico	0	0	0	0	0	184	0	0	0	0
Spain	0	0	636	0	509	0	0	0	0	0
Sweden	0	0	0	0	92	0	0	0	0	0
Syria	1,001	0	231	0	0	0	0	0	0	0
Thailand	245	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	1,153	0	0	0	0	0	0	408	0	0
Turkey	0	0	169	0	0	0	0	490	0	0
United Kingdom	10,025	0	587	0	0	0	0	0	0	0
Russia	0	0	821	0	0	0	0	0	0	0
Virgin Islands	0	0	1,934	176	1,456	1,022	1,614	1,724	0	0
Zaire	702	0	0	0	0	0	0	0	0	0
Other	1,729	0	277	0	713	0	0	0	0	0
Total	205,041	5,188	13,483	966	8,761	2,826	4,915	11,474	7	210
Persian Gulf^d	46,103	1,102	2,388	0	534	47	0	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
August 1993 (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	2,656	0	0	283	10,666	57,639	1,515	344	1,859
Algeria	0	2,656	0	0	283	6,595	7,465	28	213	241
Kuwait	0	0	0	0	0	500	14,483	451	16	467
Saudi Arabia	0	0	0	0	0	3,571	35,691	1,036	115	1,151
Other OPEC	0	0	0	693	129	8,304	71,446	2,037	268	2,305
Ecuador	0	0	0	0	0	0	3,764	121	0	121
Gabon	0	0	0	0	0	0	4,711	152	0	152
Indonesia	0	0	0	0	0	463	2,936	80	15	95
Nigeria	0	0	0	0	0	403	17,420	549	13	562
Venezuela	0	0	0	693	129	7,438	42,615	1,135	240	1,375
Non OPEC	921	6	180	342	1,084	35,154	130,080	3,062	1,134	4,196
Angola	0	0	0	0	0	0	7,991	258	0	258
Argentina	0	0	0	0	0	198	598	13	6	19
Australia	0	0	0	0	0	196	1,022	27	6	33
Bahama Islands	0	0	0	0	0	1,143	1,143	0	37	37
Belgium	0	6	0	0	0	6	6	0	(s)	(s)
Benin	0	0	0	0	0	0	207	7	0	7
Brazil	0	0	0	0	0	981	981	0	32	32
Cameroon	0	0	0	0	0	0	549	18	0	18
Canada	58	0	43	317	754	8,417	38,351	966	272	1,237
China, People's Republic	0	0	0	0	22	22	1,188	38	1	39
Colombia	0	0	0	0	0	727	3,852	101	23	124
Congo	0	0	0	0	0	0	1,875	60	0	60
Egypt	0	0	0	0	2	267	2,044	57	9	66
France	0	0	0	0	0	873	873	0	28	28
Germany, FR	0	0	0	0	3	555	555	0	18	18
Guatemala	0	0	0	0	0	0	221	7	0	7
Italy	21	0	0	0	0	1,542	1,542	0	50	50
Ivory Coast	0	0	0	0	0	180	180	0	6	6
Japan	0	0	0	0	2	2	2	0	(s)	(s)
Korea, Republic of	58	0	0	0	0	798	798	0	26	26
Malaysia	0	0	0	0	0	0	429	14	0	14
Mexico	0	0	0	0	270	1,643	26,722	809	53	862
Netherlands	4	0	0	0	0	537	537	0	17	17
Netherlands Antilles	114	0	0	25	0	1,607	1,607	0	52	52
New Zealand	0	0	0	0	0	211	211	0	7	7
Norway	0	0	0	0	0	579	5,567	161	19	180
Oman	0	0	0	0	0	0	1,504	49	0	49
Peru	0	0	0	0	0	487	487	0	16	16
Portugal	0	0	0	0	0	306	306	0	10	10
Puerto Rico	578	0	137	0	30	929	929	0	30	30
Spain	0	0	0	0	0	1,145	1,145	0	37	37
Sweden	0	0	0	0	0	92	92	0	3	3
Syria	0	0	0	0	0	231	1,232	32	7	40
Thailand	0	0	0	0	0	0	245	8	0	8
Trinidad and Tobago	0	0	0	0	0	408	1,561	37	13	50
Turkey	66	0	0	0	0	725	725	0	23	23
United Kingdom	22	0	0	0	0	609	10,634	323	20	343
Russia	0	0	0	0	0	821	821	0	26	26
Virgin Islands	0	0	0	0	0	7,926	7,926	0	256	256
Zaire	0	0	0	0	0	0	702	23	0	23
Other	0	0	0	0	1	991	2,720	56	32	88
Total	921	2,662	180	1,035	1,496	54,124	259,165	6,614	1,746	8,360
Persian Gulf^d	0	0	0	0	0	4,071	50,174	1,487	131	1,619

^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 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels or 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
August 1993
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	3,969	0	150	0	534	47	0	1,035	0	0
Algeria	0	0	150	0	0	0	0	1,035	0	0
Saudi Arabia	3,969	0	0	0	534	47	0	0	0	0
Other OPEC	15,746	0	0	70	944	1,470	1,531	1,938	0	0
Ecuador	345	0	0	0	0	0	0	0	0	0
Gabon	2,390	0	0	0	0	0	0	0	0	0
Nigeria	7,993	0	0	0	0	0	0	403	0	0
Venezuela	5,018	0	0	70	944	1,470	1,531	1,535	0	0
Non OPEC	19,350	162	3,493	873	6,710	872	2,762	6,291	7	9
Angola	4,814	0	0	0	0	0	0	0	0	0
Argentina	0	0	0	129	0	0	69	0	0	0
Bahama Islands	0	0	0	0	0	0	0	1,143	0	0
Brazil	0	0	0	0	981	0	0	0	0	0
Canada	1,864	162	0	107	1,421	3	1,078	726	7	9
China, People's Republic of	0	0	0	0	0	0	0	0	0	0
Colombia	0	0	0	0	0	0	0	727	0	0
Egypt	704	0	0	0	0	0	0	0	0	0
France	0	0	0	0	506	0	0	0	0	0
Germany, FR	0	0	552	0	0	0	0	0	0	0
Italy	0	0	480	0	720	0	0	299	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Mexico	3,717	0	0	194	0	0	228	0	0	0
Netherlands	0	0	0	267	266	0	0	0	0	0
Netherlands Antilles	0	0	0	0	0	0	0	777	0	0
Norway	4,469	0	0	0	273	0	0	0	0	0
Peru	0	0	0	0	0	0	0	487	0	0
Puerto Rico	0	0	0	0	0	184	0	0	0	0
Spain	0	0	413	0	509	0	0	0	0	0
Sweden	0	0	0	0	92	0	0	0	0	0
Syria	458	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	408	0	0
United Kingdom	2,622	0	114	0	0	0	0	0	0	0
Virgin Islands	0	0	1,934	176	1,229	685	1,387	1,724	0	0
Zaire	702	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	713	0	0	0	0	0
Total	39,065	162	3,643	943	8,188	2,389	4,293	9,264	7	9
Persian Gulf^d	3,969	0	0	0	534	47	0	0	0	0

See footnotes at end of table.

**Table 36. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,^a
August 1993 (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	1,766	5,735	128	57	185
Algeria	0	0	0	0	0	1,185	1,185	0	38	38
Saudi Arabia	0	0	0	0	0	581	4,550	128	19	147
Other OPEC	0	0	0	563	0	6,516	22,262	508	210	718
Ecuador	0	0	0	0	0	0	345	11	0	11
Gabon	0	0	0	0	0	0	2,390	77	0	77
Nigeria	0	0	0	0	0	403	8,396	258	13	271
Venezuela	0	0	0	563	0	6,113	11,131	162	197	359
Non OPEC	213	0	167	277	344	22,180	41,530	624	715	1,340
Angola	0	0	0	0	0	0	4,814	155	0	155
Argentina	0	0	0	0	0	198	198	0	6	6
Bahama Islands	0	0	0	0	0	1,143	1,143	0	37	37
Brazil	0	0	0	0	0	981	981	0	32	32
Canada	7	0	30	252	17	3,819	5,683	60	123	183
China, People's Republic of	0	0	0	0	22	22	22	0	1	1
Colombia	0	0	0	0	0	727	727	0	23	23
Egypt	0	0	0	0	0	0	704	23	0	23
France	0	0	0	0	0	506	506	0	16	16
Germany, FR	0	0	0	0	3	555	555	0	18	18
Italy	0	0	0	0	0	1,499	1,499	0	48	48
Japan	0	0	0	0	2	2	2	0	(s)	(s)
Mexico	0	0	0	0	269	691	4,408	120	22	142
Netherlands	0	0	0	0	0	533	533	0	17	17
Netherlands Antilles	0	0	0	25	0	802	802	0	26	26
Norway	0	0	0	0	0	273	4,742	144	9	153
Peru	0	0	0	0	0	487	487	0	16	16
Puerto Rico	206	0	137	0	30	557	557	0	18	18
Spain	0	0	0	0	0	922	922	0	30	30
Sweden	0	0	0	0	0	92	92	0	3	3
Syria	0	0	0	0	0	0	458	15	0	15
Trinidad and Tobago	0	0	0	0	0	408	408	0	13	13
United Kingdom	0	0	0	0	0	114	2,736	85	4	88
Virgin Islands	0	0	0	0	0	7,135	7,135	0	230	230
Zaire	0	0	0	0	0	0	702	23	0	23
Other	0	0	0	0	1	714	714	0	23	23
Total	213	0	167	840	344	30,462	69,527	1,260	983	2,243
Persian Gulf^d	0	0	0	0	0	581	4,550	128	19	147

^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 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels or 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
August 1993
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	5,189	0	0	0	0	0	0	0	0	0
Kuwait	2,268	0	0	0	0	0	0	0	0	0
Saudi Arabia	2,921	0	0	0	0	0	0	0	0	0
Other OPEC	9,805	0	0	0	0	0	0	0	0	0
Ecuador	1,126	0	0	0	0	0	0	0	0	0
Indonesia	397	0	0	0	0	0	0	0	0	0
Nigeria	3,187	0	0	0	0	0	0	0	0	0
Venezuela	5,095	0	0	0	0	0	0	0	0	0
Non OPEC	25,565	2,338	0	1	101	79	204	16	0	62
Canada	21,754	2,338	0	1	101	79	204	16	0	62
Colombia	1,444	0	0	0	0	0	0	0	0	0
Mexico	2,367	0	0	0	0	0	0	0	0	0
Total	40,559	2,338	0	1	101	79	204	16	0	62
Persian Gulf^d	5,189	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
August 1993 (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	5,189	167	0	167
Kuwait	0	0	0	0	0	0	2,268	73	0	73
Saudi Arabia	0	0	0	0	0	0	2,921	94	0	94
Other OPEC	0	0	0	0	0	0	9,805	316	0	316
Ecuador	0	0	0	0	0	0	1,126	36	0	36
Indonesia	0	0	0	0	0	0	397	13	0	13
Nigeria	0	0	0	0	0	0	3,187	103	0	103
Venezuela	0	0	0	0	0	0	5,095	164	0	164
Non OPEC	10	0	13	50	52	2,926	28,491	825	94	919
Canada	10	0	13	50	52	2,926	24,680	702	94	796
Colombia	0	0	0	0	0	0	1,444	47	0	47
Mexico	0	0	0	0	0	0	2,367	76	0	76
Total	10	0	13	50	52	2,926	43,485	1,308	94	1,403
Persian Gulf^d	0	0	0	0	0	0	5,189	167	0	167

^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 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels or 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
August 1993
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	36,527	2,223	3,738	0	0	0	0	0	0	0
Algeria	870	1,121	1,350	0	0	0	0	0	0	0
Kuwait	10,427	500	0	0	0	0	0	0	0	0
Saudi Arabia	25,230	602	2,388	0	0	0	0	0	0	0
Other OPEC	34,122	0	927	0	0	0	0	0	0	19
Ecuador	1,071	0	0	0	0	0	0	0	0	0
Gabon	2,321	0	0	0	0	0	0	0	0	0
Indonesia	241	0	0	0	0	0	0	0	0	0
Nigeria	5,837	0	0	0	0	0	0	0	0	0
Venezuela	24,652	0	927	0	0	0	0	0	0	19
Non OPEC	42,285	315	4,979	0	0	346	227	953	0	116
Angola	3,177	0	0	0	0	0	0	0	0	0
Argentina	400	0	0	0	0	0	0	0	0	0
Australia	619	0	0	0	0	0	0	0	0	0
Belgium	0	0	0	0	0	0	0	0	0	0
Benin	207	0	0	0	0	0	0	0	0	0
Cameroon	549	0	0	0	0	0	0	0	0	0
Canada	896	0	296	0	0	0	0	104	0	107
China, People's Republic of	563	0	0	0	0	0	0	0	0	0
Colombia	1,681	0	0	0	0	0	0	0	0	0
Congo	1,875	0	0	0	0	0	0	0	0	0
Egypt	1,073	0	265	0	0	0	0	0	0	0
France	0	19	348	0	0	0	0	0	0	0
Guatemala	221	0	0	0	0	0	0	0	0	0
Italy	0	13	0	0	0	0	0	0	0	9
Ivory Coast	0	0	180	0	0	0	0	0	0	0
Korea, Republic of	0	0	718	0	0	0	0	0	0	0
Malaysia	429	0	0	0	0	0	0	0	0	0
Mexico	18,995	283	34	0	0	9	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	638	0	0	0	0	53	0	0
Norway	519	0	306	0	0	0	0	0	0	0
Oman	473	0	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	306	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Spain	0	0	223	0	0	0	0	0	0	0
Syria	543	0	231	0	0	0	0	0	0	0
Thailand	245	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	1,153	0	0	0	0	0	0	0	0	0
Turkey	0	0	169	0	0	0	0	490	0	0
United Kingdom	7,403	0	473	0	0	0	0	0	0	0
Russia	0	0	821	0	0	0	0	0	0	0
Virgin Islands	0	0	0	0	0	337	227	0	0	0
Other	1,264	0	277	0	0	0	0	0	0	0
Total	112,934	2,538	9,644	0	0	346	227	953	0	135
Persian Gulf^d	35,657	1,102	2,388	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
August 1993 (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	2,656	0	0	283	8,900	45,427	1,178	287	1,465
Algeria	0	2,656	0	0	283	5,410	6,280	28	175	203
Kuwait	0	0	0	0	0	500	10,927	336	16	352
Saudi Arabia	0	0	0	0	0	2,990	28,220	814	96	910
Other OPEC	0	0	0	71	0	1,017	35,139	1,101	33	1,134
Ecuador	0	0	0	0	0	0	1,071	35	0	35
Gabon	0	0	0	0	0	0	2,321	75	0	75
Indonesia	0	0	0	0	0	0	241	8	0	8
Nigeria	0	0	0	0	0	0	5,837	188	0	188
Venezuela	0	0	0	71	0	1,017	25,669	795	33	828
Non OPEC	698	6	0	0	2	7,642	49,927	1,364	247	1,611
Angola	0	0	0	0	0	0	3,177	102	0	102
Argentina	0	0	0	0	0	0	400	13	0	13
Australia	0	0	0	0	0	0	619	20	0	20
Belgium	0	6	0	0	0	6	6	0	(s)	(s)
Benin	0	0	0	0	0	0	207	7	0	7
Cameroon	0	0	0	0	0	0	549	18	0	18
Canada	41	0	0	0	0	548	1,444	29	18	47
China, People's Republic of	0	0	0	0	0	0	563	18	0	18
Colombia	0	0	0	0	0	0	1,681	54	0	54
Congo	0	0	0	0	0	0	1,875	60	0	60
Egypt	0	0	0	0	2	267	1,340	35	9	43
France	0	0	0	0	0	367	367	0	12	12
Guatemala	0	0	0	0	0	0	221	7	0	7
Italy	21	0	0	0	0	43	43	0	1	1
Ivory Coast	0	0	0	0	0	180	180	0	6	6
Korea, Republic of	58	0	0	0	0	776	776	0	25	25
Malaysia	0	0	0	0	0	0	429	14	0	14
Mexico	0	0	0	0	0	326	19,321	613	11	623
Netherlands	4	0	0	0	0	4	4	0	(s)	(s)
Netherlands Antilles	114	0	0	0	0	805	805	0	26	26
Norway	0	0	0	0	0	306	825	17	10	27
Oman	0	0	0	0	0	0	473	15	0	15
Portugal	0	0	0	0	0	306	306	0	10	10
Puerto Rico	372	0	0	0	0	372	372	0	12	12
Spain	0	0	0	0	0	223	223	0	7	7
Syria	0	0	0	0	0	231	774	18	7	25
Thailand	0	0	0	0	0	0	245	8	0	8
Trinidad and Tobago	0	0	0	0	0	0	1,153	37	0	37
Turkey	66	0	0	0	0	725	725	0	23	23
United Kingdom	22	0	0	0	0	495	7,898	239	16	255
Russia	0	0	0	0	0	821	821	0	26	26
Virgin Islands	0	0	0	0	0	564	564	0	18	18
Other	0	0	0	0	0	277	1,541	41	9	50
Total	698	2,662	0	71	285	17,559	130,493	3,643	566	4,209
Persian Gulf^d	0	0	0	0	0	3,490	39,147	1,150	113	1,263

^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 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels or 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
August 1993
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
PAD District IV										
Non OPEC	2,992	144	0	0	10	0	130	0	0	0
Canada	2,992	144	0	0	10	0	130	0	0	0
Total	2,992	144	0	0	10	0	130	0	0	0
PAD District V										
Arab OPEC	1,288	0	0	0	0	0	0	0	0	0
Kuwait	1,288	0	0	0	0	0	0	0	0	0
Other OPEC	3,469	0	0	0	0	0	0	583	0	0
Ecuador	1,222	0	0	0	0	0	0	0	0	0
Indonesia	1,835	0	0	0	0	0	0	463	0	0
Venezuela	412	0	0	0	0	0	0	120	0	0
Non OPEC	4,734	6	196	22	462	12	61	658	0	4
Australia	207	0	196	0	0	0	0	0	0	0
Canada	2,428	6	0	0	24	12	61	33	0	4
China, People's Republic of	603	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	22	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	625	0	0
New Zealand	0	0	0	0	211	0	0	0	0	0
Oman	1,031	0	0	0	0	0	0	0	0	0
Virgin Islands	0	0	0	0	227	0	0	0	0	0
Other	465	0	0	0	0	0	0	0	0	0
Total	9,491	6	196	22	462	12	61	1,241	0	4
Persian Gulf ^d	1,288	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
August 1993 (Continued)
(Thousand Barrels)**

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use					Total Crude Oil and Products	Daily Average		
								Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Crude Oil	Products	Total
PAD District IV										
Non OPEC	0	0	0	0	441	725	3,717	97	23	120
Canada	0	0	0	0	441	725	3,717	97	23	120
Total	0	0	0	0	441	725	3,717	97	23	120
PAD District V										
Arab OPEC	0	0	0	0	0	0	1,288	42	0	42
Kuwait	0	0	0	0	0	0	1,288	42	0	42
Other OPEC	0	0	0	59	129	771	4,240	112	25	137
Ecuador	0	0	0	0	0	0	1,222	39	0	39
Indonesia	0	0	0	0	0	463	2,298	59	15	74
Venezuela	0	0	0	59	129	308	720	13	10	23
Non OPEC	0	0	0	15	245	1,681	6,415	153	54	207
Australia	0	0	0	0	0	196	403	7	6	13
Canada	0	0	0	15	244	399	2,827	78	13	91
China, People's Republic of	0	0	0	0	0	0	603	19	0	19
Korea, Republic of	0	0	0	0	0	22	22	0	1	1
Mexico	0	0	0	0	1	626	626	0	20	20
New Zealand	0	0	0	0	0	211	211	0	7	7
Oman	0	0	0	0	0	0	1,031	33	0	33
Virgin Islands	0	0	0	0	0	227	227	0	7	7
Other	0	0	0	0	0	0	465	15	0	15
Total	0	0	0	74	374	2,452	11,943	306	79	385
Persian Gulf ^d	0	0	0	0	0	0	1,288	42	0	42

^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 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels or 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-August 1993
(Thousand Barrels)

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	403,778	10,598	31,309	0	4,144	625	0	8,770	0	0
Algeria	3,957	6,325	8,807	0	0	0	0	5,001	0	0
Kuwait	66,706	500	0	0	0	0	0	1,769	0	0
Qatar	0	0	197	0	0	0	0	0	0	0
Saudi Arabia	328,761	3,771	21,702	0	4,144	625	0	0	0	0
United Arab Emirates	4,352	0	603	0	0	0	0	0	0	0
Other OPEC	498,160	341	10,752	2,418	11,304	12,360	17,370	21,257	0	28
Ecuador	16,579	0	0	0	0	0	0	567	0	0
Gabon	31,137	0	0	0	0	0	0	226	0	0
Indonesia	15,594	0	0	0	0	1	0	1,052	0	9
Nigeria	193,684	0	793	0	0	0	241	2,897	0	0
Venezuela	241,166	341	9,959	2,418	11,304	12,359	17,129	16,515	0	19
Non OPEC	716,754	22,233	73,709	4,969	45,517	10,020	26,839	55,590	180	1,132
Angola	78,155	0	0	0	0	0	0	0	0	0
Argentina	4,227	0	0	370	0	0	69	316	0	0
Australia	3,517	0	196	0	0	0	0	0	0	0
Bahama Islands	0	0	0	0	0	0	0	5,059	0	0
Belgium	0	0	1,868	123	1,497	0	0	329	0	0
Benin	682	0	0	0	0	0	0	0	0	0
Brazil	0	0	351	23	6,780	0	0	221	0	0
Brunei	155	0	0	0	0	0	0	0	0	0
Cameroon	2,048	0	0	0	0	0	0	858	0	0
Canada	209,794	19,650	3,019	388	12,628	679	13,124	5,140	161	1,006
China, People's Republic of	9,882	0	0	0	162	0	0	0	0	62
Colombia	33,066	0	0	0	0	0	0	6,448	0	0
Congo	15,758	0	0	0	0	0	0	1,948	0	0
Denmark	420	0	0	0	0	0	0	0	0	0
Egypt	15,514	0	1,423	0	0	141	0	152	0	0
France	0	78	1,615	213	2,330	0	0	0	0	0
Germany, FR	0	0	3,973	0	0	0	0	373	0	0
Greece	0	0	324	0	0	0	0	0	0	0
Guatemala	1,228	0	0	0	0	0	0	0	0	0
India	0	0	888	0	0	0	0	0	0	0
Italy	0	13	3,684	0	3,507	0	0	299	0	28
Ivory Coast	0	0	417	0	0	0	0	247	0	0
Japan	0	8	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	5,231	131	0	0	0	954	0	0
Malaysia	1,629	4	0	0	333	0	0	0	0	0
Mexico	204,016	2,238	1,902	1,547	190	623	415	2,188	0	36
Netherlands	0	0	1,810	287	817	0	0	0	0	0
Netherlands Antilles	0	0	6,538	92	529	229	0	7,264	19	0
New Zealand	823	0	0	0	211	0	0	0	0	0
Norway	29,222	0	535	0	273	0	0	0	0	0
Oman	3,757	0	2,881	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	1,114	0	0
Portugal	0	19	0	0	0	0	0	1,031	0	0
Puerto Rico	0	0	237	0	0	1,047	50	0	0	0
Singapore	504	0	3,242	0	0	0	0	0	0	0
Spain	0	0	4,792	0	1,772	0	0	138	0	0
Sweden	0	0	207	0	92	0	0	0	0	0
Syria	3,240	0	1,390	0	0	0	0	0	0	0
Thailand	703	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	13,011	0	221	239	443	250	0	3,192	0	0
Tunisia	0	0	175	0	0	0	0	155	0	0
Turkey	0	0	1,132	0	0	0	0	1,677	0	0
United Kingdom	71,053	225	6,912	0	2,319	0	0	0	0	0
Russia	6,630	0	2,302	0	0	0	0	0	0	0
Virgin Islands	0	0	14,842	1,578	10,209	7,051	13,181	14,458	0	0
Yemen	0	0	569	0	0	0	0	1,415	0	0
Zaire	4,160	0	0	0	0	0	0	0	0	0
Other	3,560	0	1,255	0	1,425	0	0	614	0	0
Total	1,618,690	33,170	115,770	7,387	60,965	23,005	44,209	83,617	180	1,160
Persian Gulf^d	399,819	4,271	22,502	0	4,144	625	0	1,769	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-August 1993 (Continued)
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products ^b	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	2,163	23,238	0	0	4,506	83,351	487,127	1,662	343	2,005
Algeria	1,617	23,238	0	0	4,183	49,171	53,128	16	202	219
Kuwait	0	0	0	0	0	2,269	68,975	275	9	284
Qatar	0	0	0	0	0	197	197	0	1	1
Saudi Arabia	546	0	0	0	323	31,111	359,872	1,353	128	1,481
United Arab Emirates	0	0	0	0	0	603	4,955	18	2	20
Other OPEC	1,333	230	0	4,269	641	82,303	580,463	2,050	339	2,389
Ecuador	0	0	0	0	0	567	17,146	68	2	71
Gabon	0	0	0	0	0	226	31,363	128	1	129
Indonesia	422	0	0	0	0	1,484	17,078	64	6	70
Nigeria	0	0	0	0	0	3,931	197,615	797	16	813
Venezuela	911	230	0	4,269	641	76,095	317,261	992	313	1,306
Non OPEC	7,171	1,623	2,293	3,780	6,486	261,542	978,296	2,950	1,076	4,026
Angola	0	0	0	0	0	0	78,155	322	0	322
Argentina	225	368	0	0	279	1,627	5,854	17	7	24
Australia	0	0	0	0	0	196	3,713	14	1	15
Bahama Islands	0	0	0	0	0	5,059	5,059	0	21	21
Belgium	43	367	0	0	0	4,225	4,225	0	17	17
Benin	0	0	0	0	0	0	682	3	0	3
Brazil	35	0	0	0	142	7,552	7,552	0	31	31
Brunei	0	0	0	0	0	0	155	1	0	1
Cameroon	0	0	0	0	0	858	2,906	8	4	12
Canada	621	0	353	1,431	3,427	61,625	271,419	863	254	1,117
China, People's Republic of	0	0	0	0	37	261	10,143	41	1	42
Colombia	0	0	0	0	2	6,450	39,516	136	27	163
Congo	0	0	0	0	0	1,948	17,706	65	8	73
Denmark	0	0	0	0	0	0	420	2	0	2
Egypt	0	0	0	0	6	1,722	17,236	64	7	71
France	83	0	28	0	254	4,599	4,599	0	19	19
Germany, FR	0	0	0	0	33	4,379	4,379	0	18	18
Greece	0	0	0	0	0	324	324	0	1	1
Guatemala	0	0	0	0	0	0	1,228	5	0	5
India	0	283	0	0	0	1,151	1,151	0	5	5
Italy	33	0	95	0	104	7,763	7,763	0	32	32
Ivory Coast	0	0	0	0	0	664	664	0	3	3
Japan	25	0	31	0	19	83	83	0	(5)	(5)
Korea, Republic of	381	0	0	0	0	6,697	6,697	0	28	28
Malaysia	0	0	0	0	0	337	1,966	7	1	8
Mexico	595	0	0	0	1,363	11,097	215,113	840	46	885
Netherlands	32	0	0	0	55	2,981	2,981	0	12	12
Netherlands Antilles	723	336	0	453	0	16,183	16,183	0	67	67
New Zealand	0	0	0	0	0	211	1,034	3	1	4
Norway	0	0	0	0	0	808	30,030	120	3	124
Oman	0	0	0	0	0	2,881	6,638	15	12	27
Peru	0	0	0	0	0	1,114	1,114	0	5	5
Portugal	0	0	0	0	0	1,050	1,050	0	4	4
Puerto Rico	3,879	0	1,735	0	629	7,577	7,577	0	31	31
Singapore	0	0	0	0	0	3,242	3,746	2	13	15
Spain	0	0	41	1,896	0	8,639	8,639	0	36	36
Sweden	18	0	0	0	0	317	317	0	1	1
Syria	0	0	0	0	0	1,390	4,830	13	6	19
Thailand	0	0	0	0	0	0	703	3	0	3
Trinidad and Tobago	0	0	10	0	0	4,355	17,366	54	18	71
Tunisia	0	0	0	0	0	330	330	0	1	1
Turkey	203	0	0	0	0	3,012	3,012	0	12	12
United Kingdom	84	0	0	0	0	9,540	80,593	292	39	332
Russia	0	0	0	0	0	2,302	8,932	27	9	37
Virgin Islands	0	0	0	0	0	61,119	61,119	0	252	252
Yemen	191	0	0	0	0	2,175	2,175	0	9	9
Zaire	0	0	0	0	0	0	4,160	17	0	17
Other	0	269	0	0	136	3,699	7,259	15	15	30
Total	10,667	25,091	2,293	8,049	11,633	427,196	2,045,886	6,661	1,758	8,419
Persian Gulf^d	546	269	0	0	323	34,449	434,268	1,645	142	1,787

^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 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels or 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-August 1993
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	40,175	1,456	1,842	0	4,144	624	0	4,688	0	0
Algeria	613	236	1,239	0	0	0	0	4,302	0	0
Kuwait	1,045	0	0	0	0	0	0	386	0	0
Saudi Arabia	38,517	1,220	0	0	4,144	624	0	0	0	0
United Arab Emirates	0	0	603	0	0	0	0	0	0	0
Other OPEC	145,025	170	629	2,418	11,304	12,091	17,370	18,121	0	0
Ecuador	1,067	0	0	0	0	0	0	567	0	0
Gabon	8,074	0	0	0	0	0	0	228	0	0
Nigeria	97,379	0	180	0	0	0	241	2,449	0	0
Venezuela	38,505	170	449	2,418	11,304	12,091	17,129	14,879	0	0
Non OPEC	122,462	2,613	28,273	3,286	41,126	7,216	23,226	45,395	161	79
Angola	37,899	0	0	0	0	0	0	0	0	0
Argentina	0	0	0	370	0	0	69	316	0	0
Bahama Islands	0	0	0	0	0	0	0	5,059	0	0
Belgium	0	0	257	123	1,497	0	0	329	0	0
Brazil	0	0	131	0	6,479	0	0	221	0	0
Cameroon	0	0	0	0	0	0	0	858	0	0
Canada	15,242	2,407	622	107	10,855	8	10,407	4,350	161	75
China, People's Republic of	1,331	0	0	0	0	0	0	0	0	0
Colombia	2,063	0	0	0	0	0	0	5,790	0	0
Congo	0	0	0	0	0	0	0	1,948	0	0
Egypt	4,903	0	0	0	0	0	0	0	0	0
France	0	0	653	213	2,054	0	0	0	0	0
Germany, FR	0	0	1,258	0	0	0	0	0	0	0
India	0	0	222	0	0	0	0	0	0	0
Italy	0	0	1,887	0	3,446	0	0	299	0	4
Ivory Coast	0	0	0	0	0	0	0	247	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Malaysia	0	0	0	0	333	0	0	0	0	0
Mexico	21,873	0	0	468	190	0	415	0	0	0
Netherlands	0	0	306	267	817	0	0	0	0	0
Netherlands Antilles	0	0	1,061	0	430	117	0	7,056	0	0
Norway	15,346	0	0	0	273	0	0	0	0	0
Peru	0	0	0	0	0	0	0	1,114	0	0
Portugal	0	0	0	0	0	0	0	256	0	0
Puerto Rico	0	0	237	0	0	1,047	50	0	0	0
Singapore	0	0	294	0	0	0	0	0	0	0
Spain	0	0	3,370	0	1,772	0	0	138	0	0
Sweden	0	0	0	0	92	0	0	0	0	0
Syria	458	0	455	0	0	0	0	0	0	0
Trinidad and Tobago	1,046	0	0	238	443	26	0	3,192	0	0
United Kingdom	18,535	206	3,467	0	2,319	0	0	0	0	0
Virgin Islands	0	0	14,053	1,500	8,701	6,018	12,285	13,809	0	0
Zaire	3,088	0	0	0	0	0	0	0	0	0
Other	673	0	0	0	1,425	0	0	413	0	0
Total	307,662	4,239	30,744	5,704	56,574	19,931	40,596	68,204	161	79
Persian Gulf^d	39,562	1,220	603	0	4,144	624	0	386	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-August 1993 (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	221	12,975	53,150	165	53	219
Algeria	0	0	0	0	0	5,777	6,390	3	24	26
Kuwait	0	0	0	0	0	386	1,431	4	2	6
Saudi Arabia	0	0	0	0	221	6,209	44,726	159	26	184
United Arab Emirates	0	0	0	0	0	603	603	0	2	2
Other OPEC	0	0	0	3,990	0	66,093	211,118	597	272	869
Ecuador	0	0	0	0	0	567	1,634	4	2	7
Gabon	0	0	0	0	0	226	8,300	33	1	34
Nigeria	0	0	0	0	0	2,870	100,249	401	12	413
Venezuela	0	0	0	3,990	0	62,430	100,935	158	257	415
Non OPEC	1,335	0	2,023	3,531	1,947	160,211	282,673	504	659	1,163
Angola	0	0	0	0	0	0	37,899	156	0	156
Argentina	0	0	0	0	0	755	755	0	3	3
Bahama Islands	0	0	0	0	0	5,059	5,059	0	21	21
Belgium	0	0	0	0	0	2,206	2,206	0	9	9
Brazil	0	0	0	0	115	6,946	6,946	0	29	29
Cameroon	0	0	0	0	0	858	858	0	4	4
Canada	66	0	237	1,252	178	30,725	45,967	63	126	189
China, People's Republic of	0	0	0	0	37	37	1,368	5	(s)	6
Colombia	0	0	0	0	0	5,790	7,853	8	24	32
Congo	0	0	0	0	0	1,948	1,948	0	8	8
Egypt	0	0	0	0	0	0	4,908	20	0	20
France	22	0	0	0	254	3,196	3,196	0	13	13
Germany, FR	0	0	0	0	26	1,284	1,284	0	5	5
India	0	0	0	0	0	222	222	0	1	1
Italy	0	0	28	0	59	5,723	5,723	0	24	24
Ivory Coast	0	0	0	0	0	247	247	0	1	1
Japan	11	0	0	0	19	30	30	0	(s)	(s)
Malaysia	0	0	0	0	0	333	333	0	1	1
Mexico	0	0	0	0	563	1,636	23,509	90	7	97
Netherlands	0	0	0	0	55	1,445	1,445	0	6	6
Netherlands Antilles	0	0	0	453	0	9,117	9,117	0	38	38
Norway	0	0	0	0	0	273	15,619	63	1	64
Peru	0	0	0	0	0	1,114	1,114	0	5	5
Portugal	0	0	0	0	0	256	256	0	1	1
Puerto Rico	1,236	0	1,735	0	629	4,934	4,934	0	20	20
Singapore	0	0	0	0	0	294	294	0	1	1
Spain	0	0	23	1,826	0	7,129	7,129	0	29	29
Sweden	0	0	0	0	0	92	92	0	(s)	(s)
Syria	0	0	0	0	0	455	913	2	2	4
Trinidad and Tobago	0	0	0	0	0	3,899	4,945	4	16	20
United Kingdom	0	0	0	0	0	5,992	24,527	76	25	101
Virgin Islands	0	0	0	0	0	56,366	56,366	0	232	232
Zaire	0	0	0	0	0	0	3,088	13	0	13
Other	0	0	0	0	12	1,850	2,523	3	8	10
Total	1,335	0	2,023	7,521	2,168	239,279	546,941	1,266	985	2,251
Persian Gulf^d	0	0	0	0	221	7,198	46,760	163	30	192

^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 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels or 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-August 1993
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	30,903	0	0	0	0	0	0	0	0	0
Kuwait	7,343	0	0	0	0	0	0	0	0	0
Saudi Arabia	22,514	0	0	0	0	0	0	0	0	0
United Arab Emirates	1,046	0	0	0	0	0	0	0	0	0
Other OPEC	66,233	0	0	0	0	0	0	0	0	0
Ecuador	3,684	0	0	0	0	0	0	0	0	0
Gabon	437	0	0	0	0	0	0	0	0	0
Indonesia	397	0	0	0	0	0	0	0	0	0
Nigeria	25,892	0	0	0	0	0	0	0	0	0
Venezuela	35,823	0	0	0	0	0	0	0	0	0
Non OPEC	222,222	15,904	370	279	671	602	1,355	162	0	465
Angola	3,044	0	0	0	0	0	0	0	0	0
Canada	154,789	15,904	370	279	671	602	1,355	162	0	465
Colombia	5,968	0	0	0	0	0	0	0	0	0
Congo	2,275	0	0	0	0	0	0	0	0	0
Egypt	521	0	0	0	0	0	0	0	0	0
Mexico	32,795	0	0	0	0	0	0	0	0	0
Norway	6,023	0	0	0	0	0	0	0	0	0
Syria	1,092	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	1,757	0	0	0	0	0	0	0	0	0
United Kingdom	13,958	0	0	0	0	0	0	0	0	0
Total	319,358	15,904	370	279	671	602	1,355	162	0	465
Persian Gulf^d	30,903	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-August 1993 (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	30,903	127	0	127
Kuwait	0	0	0	0	0	0	7,343	30	0	30
Saudi Arabia	0	0	0	0	0	0	22,514	93	0	93
United Arab Emirates	0	0	0	0	0	0	1,046	4	0	4
Other OPEC	0	0	0	0	0	0	66,233	273	0	273
Ecuador	0	0	0	0	0	0	3,684	15	0	15
Gabon	0	0	0	0	0	0	437	2	0	2
Indonesia	0	0	0	0	0	0	397	2	0	2
Nigeria	0	0	0	0	0	0	25,892	107	0	107
Venezuela	0	0	0	0	0	0	35,823	147	0	147
Non OPEC	143	0	116	79	437	20,583	242,805	914	85	999
Angola	0	0	0	0	0	0	3,044	13	0	13
Canada	143	0	116	79	437	20,583	175,372	637	85	722
Colombia	0	0	0	0	0	0	5,968	25	0	25
Congo	0	0	0	0	0	0	2,275	9	0	9
Egypt	0	0	0	0	0	0	521	2	0	2
Mexico	0	0	0	0	0	0	32,795	135	0	135
Norway	0	0	0	0	0	0	6,023	25	0	25
Syria	0	0	0	0	0	0	1,092	4	0	4
Trinidad and Tobago	0	0	0	0	0	0	1,757	7	0	7
United Kingdom	0	0	0	0	0	0	13,958	57	0	57
Total	143	0	116	79	437	20,583	339,941	1,314	85	1,399
Persian Gulf^d	0	0	0	0	0	0	30,903	127	0	127

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

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

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

^d Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) - Less than 500 barrels or 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-August 1993
(Thousand Barrels)**

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	327,684	9,140	29,467	0	0	0	0	1,584	0	0
Algeria	3,344	6,089	7,568	0	0	0	0	699	0	0
Kuwait	53,304	500	0	0	0	0	0	885	0	0
Qatar	0	0	197	0	0	0	0	0	0	0
Saudi Arabia	267,730	2,551	21,702	0	0	0	0	0	0	0
United Arab Emirates	3,306	0	0	0	0	0	0	0	0	0
Other OPEC	258,968	171	9,777	0	0	0	0	1,833	0	28
Ecuador	1,788	0	0	0	0	0	0	0	0	0
Gabon	22,626	0	0	0	0	0	0	0	0	0
Indonesia	784	0	0	0	0	0	0	0	0	9
Nigeria	70,413	0	613	0	0	0	0	448	0	0
Venezuela	163,357	171	9,164	0	0	0	0	1,385	0	19
Non OPEC	316,308	2,377	42,138	1,195	1,363	1,773	896	6,828	0	548
Angola	37,212	0	0	0	0	0	0	0	0	0
Argentina	4,227	0	0	0	0	0	0	0	0	0
Australia	699	0	0	0	0	0	0	0	0	0
Belgium	0	0	1,609	0	0	0	0	0	0	0
Benin	682	0	0	0	0	0	0	0	0	0
Brazil	0	0	220	23	281	0	0	0	0	0
Cameroon	2,048	0	0	0	0	0	0	0	0	0
Canada	1,821	0	2,027	0	0	0	0	356	0	426
China, People's Republic of	3,270	0	0	0	0	0	0	0	0	62
Colombia	23,145	0	0	0	0	0	0	658	0	0
Congo	13,483	0	0	0	0	0	0	0	0	0
Denmark	420	0	0	0	0	0	0	0	0	0
Egypt	10,085	0	1,423	0	0	141	0	152	0	0
France	0	76	962	0	245	0	0	0	0	0
Germany, FR	0	0	2,715	0	0	0	0	373	0	0
Greece	0	0	324	0	0	0	0	0	0	0
Guatemala	1,228	0	0	0	0	0	0	0	0	0
India	0	0	646	0	0	0	0	0	0	0
Italy	0	13	1,797	0	0	0	0	0	0	24
Ivory Coast	0	0	417	0	0	0	0	0	0	0
Japan	0	8	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	5,231	0	0	0	0	0	0	0
Malaysia	853	4	0	0	0	0	0	0	0	0
Mexico	148,230	2,238	959	1,079	0	375	0	209	0	36
Netherlands	0	0	1,504	0	0	0	0	0	0	0
Netherlands Antilles	0	0	5,477	92	0	0	0	208	0	0
New Zealand	280	0	0	0	0	0	0	0	0	0
Norway	7,853	0	535	0	0	0	0	0	0	0
Oman	473	0	2,881	0	0	0	0	0	0	0
Portugal	0	19	0	0	0	0	0	775	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Singapore	0	0	1,159	0	0	0	0	0	0	0
Spain	0	0	1,422	0	0	0	0	0	0	0
Sweden	0	0	207	0	0	0	0	0	0	0
Syria	1,690	0	935	0	0	0	0	0	0	0
Thailand	245	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	10,208	0	221	1	0	224	0	0	0	0
Tunisia	0	0	175	0	0	0	0	155	0	0
Turkey	0	0	1,132	0	0	0	0	1,677	0	0
United Kingdom	38,560	19	3,445	0	0	0	0	0	0	0
Russia	6,630	0	2,302	0	0	0	0	0	0	0
Virgin Islands	0	0	589	0	837	1,033	896	649	0	0
Yemen	0	0	569	0	0	0	0	1,415	0	0
Zaire	1,072	0	0	0	0	0	0	0	0	0
Other	1,894	0	1,255	0	0	0	0	201	0	0
Total	902,960	11,688	81,382	1,195	1,363	1,773	896	10,245	0	576
Persian Gulf^d	324,340	3,051	21,899	0	0	0	0	885	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-August 1993 (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	2,163	23,238	0	0	4,285	69,877	397,561	1,348	288	1,636
Algeria	1,617	23,238	0	0	4,183	43,394	46,738	14	179	192
Kuwait	0	0	0	0	0	1,385	54,689	219	6	225
Qatar	0	0	0	0	0	197	197	0	1	1
Saudi Arabia	540	0	0	0	102	24,901	292,631	1,102	102	1,204
United Arab Emirates	0	0	0	0	0	0	3,306	14	0	14
Other OPEC	1,333	230	0	220	131	13,723	272,691	1,066	56	1,122
Ecuador	0	0	0	0	0	0	1,788	7	0	7
Gabon	0	0	0	0	0	0	22,626	93	0	93
Indonesia	422	0	0	0	0	431	1,215	3	2	5
Nigeria	0	0	0	0	0	1,061	71,474	290	4	294
Venezuela	911	230	0	220	131	12,231	175,588	672	50	723
Non OPEC	5,523	1,623	123	0	1,159	65,546	381,854	1,302	270	1,571
Angola	0	0	0	0	0	0	37,212	153	0	153
Argentina	225	368	0	0	279	872	5,099	17	4	21
Australia	0	0	0	0	0	0	699	3	0	3
Belgium	43	367	0	0	0	2,019	2,019	0	8	8
Benin	0	0	0	0	0	0	682	3	0	3
Brazil	35	0	0	0	27	586	586	0	2	2
Cameroon	0	0	0	0	0	0	2,048	8	0	8
Canada	412	0	0	0	0	3,221	5,042	7	13	21
China, People's Republic of	0	0	0	0	0	62	3,332	13	(s)	14
Colombia	0	0	0	0	2	660	23,805	95	3	98
Congo	0	0	0	0	0	0	13,483	55	0	55
Denmark	0	0	0	0	0	0	420	2	0	2
Egypt	0	0	0	0	6	1,722	11,807	42	7	49
France	61	0	28	0	0	1,372	1,372	0	6	6
Germany, FR	0	0	0	0	6	3,094	3,094	0	13	13
Greece	0	0	0	0	0	324	324	0	1	1
Guatemala	0	0	0	0	0	0	1,228	5	0	5
India	0	283	0	0	0	929	929	0	4	4
Italy	33	0	67	0	45	1,979	1,979	0	8	8
Ivory Coast	0	0	0	0	0	417	417	0	2	2
Japan	14	0	0	0	0	22	22	0	(s)	(s)
Korea, Republic of	211	0	0	0	0	5,442	5,442	0	22	22
Malaysia	0	0	0	0	0	4	857	4	(s)	4
Mexico	595	0	0	0	787	6,278	154,508	610	26	636
Netherlands	32	0	0	0	0	1,536	1,536	0	6	6
Netherlands Antilles	723	336	0	0	0	6,836	6,836	0	28	28
New Zealand	0	0	0	0	0	0	280	1	0	1
Norway	0	0	0	0	0	535	8,388	32	2	35
Oman	0	0	0	0	0	2,881	3,354	2	12	14
Portugal	0	0	0	0	0	794	794	0	3	3
Puerto Rico	2,643	0	0	0	0	2,643	2,643	0	11	11
Singapore	0	0	0	0	0	1,159	1,159	0	5	5
Spain	0	0	18	0	0	1,440	1,440	0	6	6
Sweden	18	0	0	0	0	225	225	0	1	1
Syria	0	0	0	0	0	935	2,625	7	4	11
Thailand	0	0	0	0	0	0	245	1	0	1
Trinidad and Tobago	0	0	10	0	0	456	10,664	42	2	44
Tunisia	0	0	0	0	0	330	330	0	1	1
Turkey	203	0	0	0	0	3,012	3,012	0	12	12
United Kingdom	84	0	0	0	0	3,548	42,108	159	15	173
Russia	0	0	0	0	0	2,302	8,932	27	9	37
Virgin Islands	0	0	0	0	0	4,004	4,004	0	16	16
Yemen	191	0	0	0	0	2,175	2,175	0	9	9
Zaire	0	0	0	0	0	0	1,072	4	0	4
Other	0	269	0	0	7	1,732	3,626	8	7	15
Total	9,019	25,091	123	220	5,575	149,146	1,052,106	3,716	614	4,330
Persian Gulf^d	546	269	0	0	102	26,752	351,092	1,335	110	1,445

^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 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels or 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-August 1993
(Thousand Barrels)

Country of Origin	Crude Oil ^b	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
PAD District IV										
Non OPEC	21,653	1,191	0	0	83	0	647	0	0	0
Canada	21,653	1,191	0	0	83	0	647	0	0	0
Total	21,653	1,191	0	0	83	0	647	0	0	0
PAD District V										
Arab OPEC	5,014	0	0	0	0	1	0	498	0	0
Kuwait	5,014	0	0	0	0	0	0	498	0	0
Saudi Arabia	0	0	0	0	0	1	0	0	0	0
Other OPEC	27,934	0	346	0	0	269	0	1,303	0	0
Ecuador	10,040	0	0	0	0	0	0	0	0	0
Indonesia	14,413	0	0	0	0	1	0	1,052	0	0
Venezuela	3,481	0	346	0	0	268	0	251	0	0
Non OPEC	34,109	148	2,928	209	2,274	429	715	3,205	19	40
Australia	2,818	0	196	0	0	0	0	0	0	0
Brazil	0	0	0	0	20	0	0	0	0	0
Brunei	155	0	0	0	0	0	0	0	0	0
Canada	16,289	148	0	0	1,019	69	715	272	0	40
China, People's Republic of	5,281	0	0	0	162	0	0	0	0	0
Colombia	1,890	0	0	0	0	0	0	0	0	0
France	0	0	0	0	31	0	0	0	0	0
Germany, FR	0	0	0	0	0	0	0	0	0	0
Italy	0	0	0	0	61	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	131	0	0	0	954	0	0
Malaysia	776	0	0	0	0	0	0	0	0	0
Mexico	1,118	0	943	0	0	248	0	1,979	0	0
Netherlands Antilles	0	0	0	0	99	112	0	0	19	0
New Zealand	543	0	0	0	211	0	0	0	0	0
Oman	3,284	0	0	0	0	0	0	0	0	0
Singapore	504	0	1,789	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0	0	0
Thailand	458	0	0	0	0	0	0	0	0	0
Virgin Islands	0	0	0	78	671	0	0	0	0	0
Other	993	0	0	0	0	0	0	0	0	0
Total	67,057	148	3,274	209	2,274	699	715	5,006	19	40
Persian Gulf ^d	5,014	0	0	0	0	1	0	498	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-August 1993 (Continued)
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use					Total Crude Oil and Products	Daily Average		
								Lubricants	Asphalt and Road Oil	Other Products ^c	Total Products	Crude Oil	Products	Total
PAD District IV										
Non OPEC	0	0	0	0	879	2,800	24,453	89	12	101
Canada	0	0	0	0	879	2,800	24,453	89	12	101
Total	0	0	0	0	879	2,800	24,453	89	12	101
PAD District V										
Arab OPEC	0	0	0	0	0	499	5,513	21	2	23
Kuwait	0	0	0	0	0	498	5,512	21	2	23
Saudi Arabia	0	0	0	0	0	1	1	0	(s)	(s)
Other OPEC	0	0	0	59	510	2,487	30,421	115	10	125
Ecuador	0	0	0	0	0	0	10,040	41	0	41
Indonesia	0	0	0	0	0	1,053	15,468	59	4	64
Venezuela	0	0	0	59	510	1,434	4,915	14	6	20
Non OPEC	170	0	31	170	2,064	12,402	46,511	140	51	191
Australia	0	0	0	0	0	196	3,014	12	1	12
Brazil	0	0	0	0	0	20	20	0	(s)	(s)
Brunei	0	0	0	0	0	0	155	1	0	1
Canada	0	0	0	100	1,933	4,296	20,585	67	18	85
China, People's Republic of	0	0	0	0	0	162	5,443	22	1	22
Colombia	0	0	0	0	0	0	1,890	8	0	8
France	0	0	0	0	0	31	31	0	(s)	(s)
Germany, FR	0	0	0	0	1	1	1	0	(s)	(s)
Italy	0	0	0	0	0	61	61	0	(s)	(s)
Japan	0	0	31	0	0	31	31	0	(s)	(s)
Korea, Republic of	170	0	0	0	0	1,255	1,255	0	5	5
Malaysia	0	0	0	0	0	0	776	3	0	3
Mexico	0	0	0	0	13	3,183	4,301	5	13	18
Netherlands Antilles	0	0	0	0	0	230	230	0	1	1
New Zealand	0	0	0	0	0	211	754	2	1	3
Oman	0	0	0	0	0	0	3,284	14	0	14
Singapore	0	0	0	0	0	1,789	2,293	2	7	9
Spain	0	0	0	70	0	70	70	0	(s)	(s)
Thailand	0	0	0	0	0	0	458	2	0	2
Virgin Islands	0	0	0	0	0	749	749	0	3	3
Other	0	0	0	0	117	117	1,110	4	(s)	5
Total	170	0	31	229	2,574	15,388	82,445	276	63	339
Persian Gulf ^d	0	0	0	0	0	499	5,513	21	2	23

^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 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels or 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,
August 1993**
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U.S. Total	Daily Average
	I	II	III	IV	V		
Crude Oil^a	0	5	0	0	1,707	1,712	55
Natural Gas Liquids	46	214	821	4	353	1,437	46
Pentanes Plus	(s)	25	0	3	(s)	29	1
Liquefied Petroleum Gases	45	189	821	1	352	1,408	45
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	41	156	506	1	124	830	27
Normal Butane/Butylene	4	31	314	0	229	578	19
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	0	1	(s)	0	49	51	2
Other Hydrocarbons/Oxygenates	0	0	0	0	0	0	0
Motor Gasoline Blend. Comp.	0	1	(s)	0	49	51	2
Finished Petroleum Products	553	570	13,169	22	7,999	22,312	720
Finished Motor Gasoline	5	16	2,246	(s)	132	2,399	77
Naphtha-Type Jet Fuel	13	0	0	0	271	284	9
Kerosene-Type Jet Fuel	(s)	30	297	0	429	757	24
Kerosene	0	1	16	0	4	21	1
Distillate Fuel Oil	17	122	4,315	0	1,648	6,102	197
Residual Fuel Oil	5	0	1,351	0	2,361	3,717	120
Special Naphthas	10	7	183	(s)	2	202	7
Lubricants	98	37	276	5	103	520	17
Waxes	13	9	27	(s)	18	67	2
Petroleum Coke	376	135	4,449	14	3,013	7,986	258
Asphalt and Road Oil	11	213	8	1	18	251	8
Miscellaneous Products	5	(s)	(s)	0	1	6	(s)
Total	598	790	13,989	26	10,108	25,511	823

^a Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) certain domestically produced crude oil destined for Canada; and (3) shipments to U.S. territories, and 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-August 1993
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil^a	0	695	0	0	26,040	26,735	110
Natural Gas Liquids	510	1,755	6,365	89	3,543	12,262	50
Pentanes Plus	10	139	1	10	(s)	160	1
Liquefied Petroleum Gases	500	1,616	6,365	79	3,542	12,103	50
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	262	1,025	5,066	1	1,066	7,420	31
Normal Butane/Butylene	238	591	1,299	78	2,476	4,683	19
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	37	29	513	0	970	1,548	6
Other Hydrocarbons/Oxygenates	0	0	0	0	0	0	0
Motor Gasoline Blend, Comp.	37	29	513	0	970	1,548	6
Finished Petroleum Products	8,010	3,253	109,436	81	62,280	203,059	836
Finished Motor Gasoline	1,300	365	18,647	3	4,307	24,622	101
Naphtha-Type Jet Fuel	14	29	592	0	3,316	3,952	16
Kerosene-Type Jet Fuel	259	183	5,810	0	6,706	12,958	53
Kerosene	24	6	1,128	0	13	1,171	5
Distillate Fuel Oil	1,074	385	32,040	1	26,924	60,424	249
Residual Fuel Oil	2,999	51	15,907	0	14,281	33,237	137
Special Naphthas	61	185	617	2	118	982	4
Lubricants	998	305	2,462	34	837	4,636	19
Waxes	91	42	209	(s)	112	455	2
Petroleum Coke	1,046	1,062	31,949	34	25,525	59,617	245
Asphalt and Road Oil	90	639	52	7	133	921	4
Miscellaneous Products	52	1	23	0	7	83	(s)
Total	8,557	5,732	116,313	170	112,833	243,605	1,002

^a Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) certain domestically produced crude oil destined for Canada; and (3) shipments to U.S. territories, and 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, August 1993
(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	185	44	0	(s)	0
Australia	0	0	(s)	0	0	0	0	0
Bahama Islands	0	0	6	48	13	0	551	105
Bahrain	0	0	0	0	0	0	0	0
Belgium & Luxembourg	0	0	1	1	0	0	0	0
Brazil	0	0	0	0	0	0	216	38
Cameroon	0	0	0	0	0	0	0	0
Canada	5	28	231	58	256	1	256	355
Chile	0	0	134	0	0	0	0	0
China, People's Republic of	0	0	0	0	0	0	887	0
China, Taiwan	0	0	0	0	0	0	568	328
Colombia	0	0	(s)	0	0	(s)	1	0
Costa Rica	0	0	0	100	0	0	139	0
Denmark	0	0	0	0	0	0	0	0
Dominican Republic	0	0	27	29	0	0	(s)	30
Ecuador	0	0	225	0	0	0	0	0
Egypt	0	0	0	0	0	0	0	0
El Salvador	0	0	24	7	0	1	0	0
Finland	0	0	0	0	0	0	0	0
France	0	0	(s)	0	0	0	0	0
French Pacific Islands	0	0	0	4	19	0	0	39
Ghana	0	0	0	0	0	0	0	0
Greece	0	0	0	0	0	0	0	0
Guatemala	0	0	(s)	209	8	0	183	0
Guinea	0	0	0	0	0	0	(s)	0
Honduras	0	0	21	0	0	0	1	0
Hong Kong	0	0	0	0	(s)	(s)	363	(s)
India	0	0	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0	0	0
Ireland	0	0	0	0	0	0	0	0
Israel	0	0	1	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0
Jamaica	0	0	19	121	0	0	33	431
Japan	0	0	3	(s)	334	1	296	0
Korea, Republic of	0	(s)	0	0	148	0	1	1,018
Malaysia	0	0	0	0	0	0	0	0
Mexico	0	0	549	1,480	0	1	41	568
Netherlands	0	0	0	0	0	0	597	0
Netherlands Antilles	0	0	0	0	0	0	201	0
New Zealand	0	0	0	0	0	0	0	0
Nigeria	0	0	0	0	207	0	0	0
Norway	0	0	0	0	0	0	0	0
Panama	0	0	0	0	0	0	228	141
Peru	0	0	(s)	0	0	0	0	123
Philippines	0	0	0	0	0	0	321	209
Poland	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	0	0	151	0
Puerto Rico	0	0	1	0	13	0	47	4
Russia	0	0	0	0	0	0	1	1
Saudi Arabia	0	0	0	0	0	0	1	0
Singapore	0	0	0	0	0	0	648	240
South Africa	0	0	0	0	0	0	25	0
Spain	0	0	(s)	0	0	0	63	0
Suriname	0	0	15	0	0	0	0	0
Sweden	0	0	0	0	0	0	0	0
Switzerland	0	0	0	0	0	0	0	0
Thailand	0	0	0	0	0	0	(s)	0
Trinidad and Tobago	0	0	(s)	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0
United Arab Emirates	0	0	0	0	0	0	0	0
United Kingdom	0	0	(s)	2	0	0	1	0
Uruguay	0	0	0	0	0	0	0	0
Venezuela	0	0	140	0	0	0	(s)	0
Virgin Islands	1,707	0	0	0	0	18	0	0
Other	0	0	9	156	0	0	301	91
Total	1,712	29	1,408	2,399	1,041	21	6,102	3,717

See footnotes at end of table.

Table 47. Exports of Crude Oil and Petroleum Products by Destination, August 1993 (Continued)
(Thousand Barrels)

Destination	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products ^b	Crude Oil and Products	
							Total	Daily Average
Argentina	0	4	(s)	(s)	(s)	0	234	8
Australia	0	11	1	122	0	0	134	4
Bahama Islands	(s)	8	0	0	(s)	0	731	24
Bahrain	0	(s)	(s)	0	0	0	(s)	(s)
Belgium & Luxembourg	6	1	(s)	0	1	(s)	9	(s)
Brazil	(s)	1	(s)	99	0	(s)	354	11
Cameroon	0	(s)	0	0	0	0	(s)	(s)
Canada	166	102	26	290	225	2	2,003	65
Chile	0	9	(s)	8	0	(s)	149	5
China, People's Republic of	0	29	(s)	0	1	0	917	30
China, Taiwan	1	21	(s)	0	(s)	(s)	918	30
Colombia	(s)	3	(s)	(s)	0	(s)	6	(s)
Costa Rica	1	5	(s)	0	(s)	0	245	8
Denmark	0	(s)	0	168	0	0	166	5
Dominican Republic	0	7	0	0	0	(s)	93	3
Ecuador	0	1	(s)	0	(s)	0	226	7
Egypt	0	(s)	(s)	0	0	0	(s)	(s)
El Salvador	(s)	4	0	0	0	(s)	37	1
Finland	0	(s)	0	0	0	0	(s)	(s)
France	(s)	2	2	33	1	0	38	1
French Pacific Islands	0	(s)	0	0	0	0	62	2
Ghana	0	(s)	0	0	0	0	(s)	(s)
Greece	0	3	0	83	0	0	86	3
Guatemala	1	4	(s)	0	0	0	385	12
Guinea	0	2	0	0	0	0	2	(s)
Honduras	1	8	(s)	0	0	0	31	1
Hong Kong	(s)	8	3	0	0	(s)	375	12
India	0	(s)	1	0	(s)	0	1	(s)
Indonesia	0	1	(s)	0	0	0	1	(s)
Ireland	0	0	1	0	0	(s)	1	(s)
Israel	6	1	(s)	0	0	0	8	(s)
Italy	0	(s)	1	1,077	(s)	0	1,079	35
Jamaica	(s)	(s)	(s)	0	0	(s)	605	20
Japan	4	23	3	1,832	2	1	2,499	81
Korea, Republic of	0	4	1	(s)	(s)	(s)	1,172	38
Malaysia	0	1	0	0	0	(s)	1	(s)
Mexico	6	138	19	39	8	(s)	2,847	92
Netherlands	0	2	1	980	1	(s)	1,581	51
Netherlands Antilles	0	2	0	0	(s)	0	203	7
New Zealand	0	(s)	(s)	2	(s)	0	2	(s)
Nigeria	0	1	0	0	0	0	208	7
Norway	1	(s)	0	0	0	0	1	(s)
Panama	2	5	0	0	0	49	423	14
Peru	0	32	(s)	138	0	(s)	292	9
Philippines	(s)	8	(s)	0	0	(s)	538	17
Poland	0	1	0	0	0	0	1	(s)
Portugal	0	(s)	0	79	0	0	230	7
Puerto Rico	1	11	1	0	0	0	78	3
Russia	0	(s)	0	0	0	(s)	2	(s)
Saudi Arabia	0	2	(s)	0	0	(s)	4	(s)
Singapore	(s)	4	(s)	(s)	1	(s)	893	29
South Africa	0	(s)	(s)	78	0	0	103	3
Spain	(s)	1	(s)	1,625	(s)	0	1,690	55
Suriname	0	(s)	0	0	0	0	15	(s)
Sweden	0	(s)	(s)	(s)	0	0	1	(s)
Switzerland	0	(s)	0	0	0	0	(s)	(s)
Thailand	0	8	(s)	(s)	0	(s)	9	(s)
Trinidad and Tobago	(s)	(s)	0	0	0	0	1	(s)
Turkey	0	(s)	0	1,059	0	0	1,059	34
United Arab Emirates	0	1	0	0	0	(s)	1	(s)
United Kingdom	(s)	9	1	154	3	(s)	170	5
Uruguay	0	2	0	0	0	(s)	2	(s)
Venezuela	0	1	(s)	116	(s)	1	258	8
Virgin Islands	0	(s)	0	0	0	0	1,723	56
Other	(s)	27	(s)	0	1	(s)	585	19
Total	202	520	67	7,986	251	57	25,511	823

^a Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet, (2) certain domestically produced crude oil destined for Canada, and (3) shipments to U.S. territories, and 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-August 1993
(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	230	44	0	143	0
Australia	0	0	7	299	0	(s)	265	68
Bahama Islands	0	0	121	320	96	0	1,681	1,219
Bahrain	0	0	0	0	0	0	1	0
Belgium & Luxembourg	0	0	11	2	0	0	43	0
Brazil	0	0	435	0	140	(s)	3,309	38
Cameroon	0	0	0	0	0	0	0	0
Canada	695	158	2,027	2,417	1,734	21	1,658	3,938
Chile	0	0	231	0	0	219	287	0
China, People's Republic of	0	0	0	212	715	1	5,088	0
China, Taiwan	0	0	501	1,338	0	(s)	4,727	1,420
Colombia	0	(s)	584	0	0	(s)	8	0
Costa Rica	0	0	1	283	31	0	396	102
Denmark	0	0	1	0	0	0	0	0
Dominican Republic	0	0	295	196	6	(s)	4	237
Ecuador	0	0	1,453	0	0	0	2	0
Egypt	0	0	0	0	0	5	14	0
El Salvador	0	0	129	174	13	1	333	31
Finland	0	0	0	0	0	0	0	0
France	0	0	(s)	15	0	0	429	0
French Pacific Islands	0	0	16	4	19	0	1	182
Ghana	0	0	0	0	0	0	0	0
Greece	0	0	0	0	0	(s)	0	0
Guatemala	0	0	192	1,143	62	17	778	854
Guinea	0	0	0	0	1	0	(s)	0
Honduras	0	0	123	515	108	0	884	0
Hong Kong	0	0	1	0	(s)	(s)	716	303
India	0	0	0	0	555	0	1,087	273
Indonesia	0	0	276	0	0	0	1,544	3
Ireland	0	0	0	0	0	0	(s)	154
Israel	0	(s)	1	18	1,153	(s)	8	(s)
Italy	0	1	3	0	0	0	121	2,538
Jamaica	0	0	85	121	30	(s)	188	4,450
Japan	0	0	10	195	8,312	312	2,797	1,354
Korea, Republic of	400	(s)	37	271	2,242	544	9,132	3,207
Malaysia	0	0	2	0	0	0	1	0
Mexico	0	0	4,655	14,209	55	8	826	5,382
Netherlands	0	0	1	0	21	1	4,440	195
Netherlands Antilles	0	0	14	921	28	0	1,900	229
New Zealand	0	0	0	0	0	(s)	1	0
Nigeria	0	0	0	0	685	0	215	0
Norway	0	0	(s)	0	0	0	0	0
Panama	0	0	142	15	30	6	2,187	1,252
Peru	0	0	34	10	11	0	1,284	298
Philippines	0	0	0	16	0	0	2,210	209
Poland	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	(s)	0	634	0
Puerto Rico	0	0	15	1,119	546	(s)	1,879	5
Russia	0	0	0	0	0	0	1	1
Saudi Arabia	0	0	(s)	(s)	0	(s)	4	0
Singapore	0	0	(s)	149	226	0	5,480	3,676
South Africa	0	0	0	0	0	0	177	26
Spain	0	0	1	0	1	0	1,078	57
Suriname	0	0	26	0	0	0	0	0
Sweden	0	0	(s)	0	0	0	78	0
Switzerland	0	0	(s)	0	0	1	(s)	0
Thailand	0	0	155	0	0	(s)	1	306
Trinidad and Tobago	0	0	1	0	0	0	2	0
Turkey	0	0	0	0	0	0	0	0
United Arab Emirates	0	0	(s)	0	0	0	(s)	1,127
United Kingdom	0	0	29	8	1	16	3	0
Uruguay	0	0	0	0	0	0	0	0
Venezuela	0	0	141	(s)	0	0	5	1
Virgin Islands	25,640	0	2	0	0	16	310	0
Yugoslavia	0	0	0	0	0	0	1	0
Other	0	0	257	423	46	1	2,141	105
Total	26,735	160	12,103	24,622	16,910	1,171	60,424	33,238

See footnotes at end of table

**Table 48. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination,
January-August 1993 (Continued)**
(Thousand Barrels)

Destination							Crude Oil and Products	
	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products ^b	Total	Daily Average
Argentina	1	51	2	(s)	(s)	75	548	2
Australia	3	49	6	2,228	2	(s)	2,926	12
Bahama Islands	2	31	0	0	2	0	3,472	14
Bahrain	(s)	1	(s)	392	(s)	0	394	2
Belgium & Luxembourg	16	40	6	4,403	5	(s)	4,524	19
Brazil	301	60	1	416	(s)	1	4,701	19
Cameroon	0	3	0	72	0	0	74	(s)
Canada	350	780	123	3,227	740	42	17,911	74
Chile	(s)	61	2	6	(s)	2	788	3
China, People's Republic of	(s)	169	3	0	1	0	6,170	25
China, Taiwan	15	155	4	3	7	772	8,941	37
Colombia	3	38	8	151	1	2	775	3
Costa Rica	12	76	2	0	(s)	(s)	904	4
Denmark	0	1	2	842	(s)	0	846	3
Dominican Republic	3	37	(s)	100	0	1	879	4
Ecuador	(s)	8	1	0	1	(s)	1,464	6
Egypt	(s)	2	(s)	2	1	0	26	(s)
El Salvador	3	49	1	0	0	1	734	3
Finland	0	5	(s)	526	1	(s)	533	2
France	16	10	16	1,184	4	(s)	1,673	7
French Pacific Islands	0	2	0	0	(s)	0	223	1
Ghana	0	(s)	0	0	0	0	(s)	(s)
Greece	(s)	9	(s)	1,040	0	(s)	1,049	4
Guatemala	17	43	5	0	(s)	(s)	3,111	13
Guinea	(s)	8	0	0	0	0	9	(s)
Honduras	9	35	1	0	0	(s)	1,656	7
Hong Kong	1	32	12	0	0	(s)	1,065	4
India	(s)	79	7	84	(s)	2	2,069	9
Indonesia	(s)	245	1	82	1	0	2,153	9
Ireland	(s)	(s)	3	97	0	(s)	255	1
Israel	6	11	(s)	302	0	(s)	1,499	6
Italy	1	5	4	6,658	3	1	9,333	38
Jamaica	1	5	1	55	0	2	4,940	20
Japan	89	158	26	13,247	10	22	26,534	109
Korea, Republic of	16	51	8	713	1	1	16,624	68
Malaysia	(s)	7	1	(s)	(s)	2	12	(s)
Mexico	33	970	126	605	56	57	26,981	111
Netherlands	30	16	5	4,576	6	(s)	9,291	38
Netherlands Antilles	0	322	(s)	0	(s)	231	3,646	15
New Zealand	0	10	3	321	1	0	335	1
Nigeria	(s)	90	(s)	0	1	(s)	992	4
Norway	1	3	(s)	36	0	(s)	40	(s)
Panama	4	21	(s)	72	0	199	3,927	16
Peru	(s)	98	2	140	0	1	1,878	8
Philippines	(s)	25	5	30	(s)	1	2,495	10
Poland	0	5	(s)	0	0	0	5	(s)
Portugal	(s)	(s)	(s)	177	(s)	0	812	3
Puerto Rico	10	90	7	0	(s)	1	3,672	15
Russia	1	14	(s)	0	0	(s)	18	(s)
Saudi Arabia	(s)	17	(s)	88	0	1	111	(s)
Singapore	1	110	3	22	3	1	9,671	40
South Africa	(s)	23	2	297	(s)	0	525	2
Spain	(s)	6	17	5,980	1	(s)	7,141	29
Suriname	0	1	0	0	0	0	27	(s)
Sweden	0	7	1	431	0	81	598	2
Switzerland	8	2	(s)	58	(s)	0	69	(s)
Thailand	1	47	2	13	(s)	3	529	2
Trinidad and Tobago	(s)	2	(s)	0	(s)	(s)	6	(s)
Turkey	0	12	(s)	6,203	(s)	0	6,215	26
United Arab Emirates	(s)	34	0	231	2	1	1,396	6
United Kingdom	2	32	8	1,657	14	(s)	1,769	7
Uruguay	0	9	(s)	0	0	3	12	(s)
Venezuela	7	12	3	1,049	5	4	1,227	5
Virgin Islands	(s)	1	0	0	0	1	25,970	107
Yugoslavia	0	(s)	0	322	0	0	323	1
Other	3	311	1	788	10	95	4,180	17
Total	982	4,636	466	59,617	921	1,631	243,605	1,002

^a Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet, (2) certain domestically produced crude oil destined for Canada, and (3) shipments to U.S. territories, and 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 49. Net Imports of Crude Oil and Petroleum Products Into the United States by Country,
August 1993**
(Thousand Barrels per Day)

Country	Crude Oil ^a	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products ^b	Total Products	Total Crude Oil and Products
Arab OPEC	1,515	72	17	2	(s)	33	0	(s)	220	344	1,859
Algeria	28	36	0	0	0	33	0	0	143	213	241
Kuwait	451	16	0	0	(s)	0	0	(s)	0	16	467
Saudi Arabia	1,036	19	17	2	(s)	0	0	(s)	77	115	1,151
United Arab Emirates	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Other OPEC	2,037	-12	30	41	49	81	-4	(s)	59	246	2,282
Ecuador	121	-7	0	0	0	0	0	(s)	(s)	-7	114
Gabon	152	0	0	0	0	0	0	0	0	0	152
Indonesia	80	0	0	0	0	15	0	(s)	(s)	15	95
Nigeria	549	0	0	-7	0	13	0	(s)	0	6	555
Venezuela	1,135	-5	30	47	49	53	-4	(s)	59	232	1,366
Non OPEC	3,007	62	158	16	-88	136	-254	-11	371	369	3,396
Angola	258	0	0	0	0	0	0	(s)	(s)	(s)	258
Argentina	13	0	-6	-1	2	0	(s)	(s)	4	-1	12
Australia	27	(s)	0	0	0	0	-4	(s)	6	2	29
Bahama Islands	0	(s)	-2	(s)	-18	33	0	(s)	(s)	13	13
Belgium & Luxembourg	0	(s)	(s)	0	0	0	0	(s)	(s)	(s)	(s)
Benin	7	0	0	0	0	0	0	0	0	0	7
Brazil	0	0	32	0	-7	-1	-3	(s)	(s)	20	20
Cameroon	18	0	0	0	0	0	0	(s)	0	(s)	18
Canada	965	78	48	-5	39	17	-9	-2	41	207	1,173
China, People's Republic of	38	0	0	0	-29	0	0	-1	1	-29	9
China, Taiwan	0	0	0	0	-18	-11	0	-1	(s)	30	-30
Colombia	101	(s)	0	0	(s)	23	(s)	(s)	(s)	23	124
Congo	60	0	0	0	0	0	0	0	0	0	60
Egypt	57	0	0	0	0	0	0	(s)	9	9	66
France	0	1	16	0	0	0	-1	(s)	11	27	27
Greece	0	0	0	0	0	0	-3	(s)	0	-3	-3
Guatemala	7	(s)	-7	(s)	-5	0	0	(s)	(s)	-12	-5
India	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Italy	0	(s)	23	0	0	10	-35	(s)	16	15	15
Jamaica	0	-1	-4	0	-1	-14	0	(s)	(s)	-20	-20
Japan	0	(s)	(s)	-11	-10	0	-59	-1	(s)	81	81
Korea, Republic of	0	0	0	-5	(s)	-33	(s)	(s)	26	-12	-12
Malaysia	14	0	0	0	0	0	0	(s)	(s)	(s)	14
Mexico	809	-9	-48	(s)	6	2	-1	-4	15	-39	770
Netherlands	0	0	9	0	-19	0	-32	(s)	9	-34	-34
Netherlands Antilles	0	0	0	0	-6	27	0	(s)	25	45	45
Norway	161	0	9	0	0	0	0	(s)	10	19	180
Oman	49	0	0	0	0	0	0	0	0	0	49
Panama	0	0	0	0	-7	-5	0	(s)	-2	-14	14
Peru	0	(s)	0	0	0	12	-4	-1	(s)	6	6
Puerto Rico	0	(s)	0	6	-2	(s)	0	4	20	27	27
Romania	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Russia	0	0	0	0	(s)	(s)	0	(s)	26	26	26
Spain	0	(s)	16	0	-2	0	-52	(s)	21	-18	-18
Sweden	0	0	3	0	0	0	(s)	(s)	(s)	3	3
Syria	32	0	0	0	(s)	0	0	(s)	7	7	40
Thailand	8	0	0	0	(s)	0	(s)	(s)	(s)	(s)	8
Trinidad and Tobago	37	(s)	0	0	0	13	0	(s)	(s)	13	50
Turkey	0	0	0	0	0	16	-34	(s)	8	-11	11
United Kingdom	323	(s)	(s)	0	(s)	0	-5	(s)	20	14	338
Virgin Islands	-55	0	47	33	52	56	0	(s)	68	255	200
Zaire	23	0	0	0	0	0	0	(s)	0	(s)	23
Other	56	-7	20	-1	-63	-10	-11	-3	32	-42	14
Total	6,559	122	205	58	-38	250	-258	-11	650	978	7,537
Persian Gulf^c	1,487	36	17	2	(s)	0	0	(s)	77	131	1,618

^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 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-August 1993
(Thousand Barrels per Day)

Country	Crude Oil ^a	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products ^b	Total Products	Total Crude Oil and Products
Arab OPEC	1,662	44	17	3	(s)	23	-1	(s)	252	337	1,998
Algeria	16	26	0	0	(s)	21	0	(s)	156	202	219
Kuwait	275	2	0	0	(s)	7	0	(s)	(s)	9	284
Qatar	0	0	0	0	(s)	0	(s)	(s)	1	1	1
Saudi Arabia	1,353	16	17	3	(s)	0	(s)	(s)	93	128	1,480
United Arab Emirates	18	(s)	0	0	(s)	-5	-1	(s)	2	-3	15
Other OPEC	2,050	-6	47	48	64	87	-5	-1	81	315	2,365
Ecuador	68	-6	0	0	(s)	2	0	(s)	(s)	-4	65
Gabon	128	0	0	0	0	1	0	0	0	1	129
Indonesia	64	-1	0	(s)	-6	4	(s)	-1	2	-3	61
Iran	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Nigeria	797	0	0	-3	(s)	12	0	(s)	3	12	809
Venezuela	992	1	47	51	70	68	-4	(s)	76	308	1,301
Non OPEC	2,840	49	88	-26	-131	97	-238	-8	384	214	3,054
Angola	322	0	0	0	0	0	0	(s)	(s)	(s)	322
Argentina	17	0	-1	(s)	(s)	1	1	(s)	4	4	22
Australia	14	(s)	-1	0	-1	(s)	-9	(s)	1	-11	3
Bahama Islands	0	(s)	-1	(s)	-7	16	0	(s)	(s)	7	7
Belgium & Luxembourg	0	(s)	6	0	(s)	1	-18	(s)	10	-1	-1
Benin	3	0	0	0	0	0	0	0	0	0	3
Brazil	0	-2	28	-1	-14	1	-2	(s)	1	12	12
Brunei	1	0	0	0	0	0	0	(s)	0	(s)	1
Cameroon	8	0	0	0	0	4	(s)	(s)	0	3	12
Canada	860	73	42	-4	47	5	-13	-2	35	183	1,043
China, People's Republic of	41	0	(s)	-3	-21	0	0	-1	(s)	-24	16
China, Taiwan	0	-2	-6	0	-19	-6	(s)	-1	-3	-37	-37
Colombia	138	-2	0	0	(s)	27	-1	(s)	(s)	23	159
Congo	65	0	0	0	0	8	0	(s)	0	8	73
Egypt	64	0	0	1	(s)	1	(s)	(s)	6	7	71
France	0	(s)	10	0	-2	0	-5	(s)	9	12	12
Greece	0	0	0	0	0	0	-4	(s)	1	-3	-3
Guatemala	5	-1	-5	(s)	-3	-4	0	(s)	(s)	-13	-8
India	0	0	0	-2	-4	-1	(s)	(s)	5	-4	-4
Italy	0	(s)	14	0	(s)	-9	-27	(s)	16	-6	-6
Jamaica	0	(s)	(s)	(s)	-1	-18	(s)	(s)	(s)	-20	-20
Japan	0	(s)	-1	-34	-12	-6	-55	-1	-2	-109	-109
Korea, Republic of	-2	(s)	-1	-9	-38	-9	-3	(s)	21	-39	-41
Malaysia	7	(s)	1	0	(s)	0	(s)	(s)	(s)	1	8
Mexico	840	-10	-58	2	-2	-13	-2	-4	21	-65	774
Netherlands	0	(s)	3	(s)	-18	-1	-19	(s)	9	-26	-26
Netherlands Antilles	0	(s)	-2	1	-8	29	0	-1	33	52	52
Norway	120	(s)	1	0	0	0	(s)	(s)	2	3	123
Oman	15	0	0	0	0	0	0	(s)	12	12	27
Panama	0	-1	(s)	(s)	-9	-5	(s)	(s)	-1	-16	-16
Peru	0	(s)	(s)	(s)	-5	3	-1	(s)	(s)	-3	-3
Puerto Rico	0	(s)	-5	2	-8	(s)	0	7	19	16	16
Romania	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Russia	27	0	0	0	(s)	(s)	0	(s)	9	9	37
Spain	0	(s)	7	(s)	-4	(s)	-25	(s)	27	6	6
Sweden	0	(s)	(s)	0	(s)	0	-2	(s)	1	-1	-1
Syria	13	0	0	0	(s)	0	0	(s)	6	6	19
Thailand	3	-1	0	0	(s)	-1	(s)	(s)	(s)	-2	1
Trinidad and Tobago	54	(s)	2	1	(s)	13	0	(s)	2	18	71
Turkey	0	0	0	0	0	7	-26	(s)	5	-13	-13
United Kingdom	292	1	10	(s)	(s)	0	-7	(s)	29	32	324
Virgin Islands	-106	(s)	42	29	53	59	0	(s)	67	250	145
Yemen	0	0	0	0	0	6	0	0	3	9	9
Zaire	17	0	0	0	0	0	0	(s)	0	(s)	17
Other	22	-4	-1	-7	-54	-11	-18	-3	37	-60	-38
Total	6,551	87	150	25	-67	207	-244	-10	717	866	7,417
Persian Gulf^c	1,645	18	17	3	(s)	3	-3	(s)	97	134	1,779

^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 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,
August 1993**
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Crude Oil	15,291	75,493	751,971	11,243	65,521	919,519
Refinery	14,179	13,669	45,596	2,011	19,466	94,921
Tank Farms and Pipelines	1,108	60,582	107,102	8,329	29,095	206,214
Leases	6	1,242	15,186	903	982	18,319
Strategic Petroleum Reserve	0	0	584,087	0	0	584,087
Alaskan In Transit	0	0	0	0	15,978	15,978
Total Stocks, All Oils (excluding Crude Oil)	176,553	171,534	294,469	14,470	97,642	754,668
Refinery	53,154	62,697	144,474	9,730	65,925	335,980
Bulk Terminal	98,284	70,724	102,053	2,346	25,796	297,203
Pipeline	26,902	34,891	38,867	2,170	5,749	108,579
Natural Gas Processing Plant	213	3,222	9,075	224	172	12,906
Pentanes Plus	507	4,933	7,446	170	79	13,135
Refinery	470	508	248	6	27	1,259
Bulk Terminal	21	2,716	4,521	0	39	7,297
Pipeline	0	787	1,149	72	0	2,008
Natural Gas Processing Plant	16	922	1,528	92	13	2,571
Liquefied Petroleum Gases	7,175	39,880	84,705	1,279	4,808	137,847
Refinery	2,582	4,506	13,250	542	1,702	22,582
Bulk Terminal	2,150	25,838	57,236	148	2,947	88,319
Pipeline	2,246	7,236	6,672	457	0	16,611
Natural Gas Processing Plant	197	2,300	7,547	132	159	10,335
Ethane/Ethylene	0	4,304	20,821	186	0	25,111
Refinery	0	1	441	0	0	442
Bulk Terminal	0	1,780	15,159	0	0	16,939
Pipeline	0	1,864	2,847	185	0	4,896
Natural Gas Processing Plant	0	659	2,174	1	0	2,834
Propane/Propylene	4,208	20,893	31,000	485	1,211	57,797
Refinery	704	1,835	3,762	112	80	6,293
Bulk Terminal	1,240	15,616	21,718	148	1,009	39,731
Pipeline	2,132	2,828	2,570	154	0	7,684
Natural Gas Processing Plant	132	814	2,950	71	122	4,089
Normal Butane/Butylene	2,777	11,352	23,593	420	2,969	41,111
Refinery	1,693	2,328	6,642	325	1,256	12,244
Bulk Terminal	909	6,419	14,931	0	1,705	23,964
Pipeline	114	1,883	805	51	0	2,853
Natural Gas Processing Plant	61	722	1,215	44	8	2,050
Isobutane/Isobutylene	190	3,331	9,491	188	628	13,828
Refinery	185	542	2,405	105	366	3,603
Bulk Terminal	1	2,023	5,428	0	233	7,685
Pipeline	0	661	450	67	0	1,178
Natural Gas Processing Plant	4	105	1,208	16	29	1,362
Other Hydrocarbons/Hydrogen/Oxygenates	3,014	1,647	9,464	308	6,580	21,013
Refinery	2,555	460	3,036	84	4,703	10,838
Bulk Terminal	459	1,187	6,048	224	1,297	9,215
Pipeline	0	0	380	0	580	960
Other Hydrocarbons/Hydrogen	4	44	1	0	3	52
Refinery	4	44	1	0	3	52
Fuel Ethanol	309	1,408	616	47	697	3,077
Refinery	W	221	W	W	W	529
Bulk Terminal	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
ETBE	W	W	W	W	W	W
Refinery	W	W	W	W	W	W
Bulk Terminal	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Methanol	W	W	W	W	W	516
Refinery	W	W	W	W	W	516

See footnotes at end of table

**Table 51. Stocks of Crude Oil and Petroleum Products by PAD District,
August 1993 (Continued)**
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
MTBE	2,536	W	8,295	W	5,825	17,106
Refinery	2,233	W	2,613	W	4,588	9,673
Bulk Terminal	W	W	5,302	W	665	6,481
Pipeline	W	W	380	W	572	952
Other Oxygenates^b	W	W	W	W	W	W
Refinery	W	W	W	W	W	W
Bulk Terminal	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Unfinished Oils	11,430	17,836	51,380	2,688	24,289	107,593
Refinery						
Naphthas and Lighter	2,564	4,327	12,394	569	4,082	23,936
Kerosene and Light Gas Oils	2,875	2,696	6,460	614	3,879	16,524
Heavy Gas Oils	4,832	6,613	22,293	1,083	12,875	47,696
Residuum	1,159	4,170	10,233	422	3,453	19,437
Motor Gasoline Blending Components	5,442	7,370	14,853	1,185	6,371	35,221
Refinery	5,179	6,519	13,965	1,185	6,016	32,864
Bulk Terminal	260	501	627	0	38	1,426
Pipeline	3	350	261	0	317	931
Aviation Gasoline Blending Components	0	0	41	0	3	44
Refinery	0	0	41	0	3	44
Finished Motor Gasoline	50,733	43,701	47,017	3,897	19,895	165,243
Refinery	9,696	8,417	18,352	1,689	6,747	44,901
Bulk Terminal	28,440	20,506	11,089	1,186	10,685	71,906
Pipeline	12,597	14,778	17,576	1,022	2,463	48,436
Reformulated	0	0	0	0	0	0
Refinery	0	0	0	0	0	0
Bulk Terminal	0	0	0	0	0	0
Pipeline	0	0	0	0	0	0
Oxygenated	2,204	1,168	3,550	39	1,769	8,730
Refinery	425	607	1,599	2	366	2,999
Bulk Terminal	987	367	235	37	1,016	2,642
Pipeline	792	194	1,716	0	387	3,089
Other	48,529	42,533	43,487	3,858	18,126	156,513
Refinery	9,271	7,810	16,753	1,687	6,381	41,902
Bulk Terminal	27,453	20,139	10,854	1,149	9,669	69,264
Pipeline	11,805	14,584	15,860	1,022	2,076	45,347
Finished Aviation Gasoline	482	352	381	36	368	1,619
Refinery	52	77	316	28	116	589
Bulk Terminal	430	221	65	8	252	976
Pipeline	0	54	0	0	0	54
Naphtha-Type Jet Fuel	429	862	1,488	218	852	3,849
Refinery	83	411	1,032	149	125	1,800
Bulk Terminal	229	246	118	0	400	993
Pipeline	117	205	338	69	327	1,056
Kerosene-Type Jet Fuel	9,353	8,063	14,299	525	7,173	39,413
Refinery	1,533	2,314	6,679	256	3,651	14,433
Bulk Terminal	3,794	2,314	3,170	150	2,675	12,103
Pipeline	4,026	3,435	4,450	119	847	12,877

See footnotes at end of table.

**Table 51. Stocks of Crude Oil and Petroleum Products by PAD District,
August 1993 (Continued)**
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Kerosene	2,633	1,173	1,442	169	57	5,474
Refinery	84	433	896	144	45	1,602
Bulk Terminal	1,959	691	247	6	8	2,911
Pipeline	590	49	299	19	4	961
Distillate Fuel Oil	59,167	27,305	29,304	2,122	10,047	127,945
Refinery	11,182	9,094	14,578	1,221	5,077	41,152
Bulk Terminal	40,662	10,261	7,056	493	3,900	62,372
Pipeline	7,323	7,950	7,670	408	1,070	24,421
0.05 Percent Sulfur and Under	18,247	10,554	10,673	703	4,564	44,741
Refinery	1,409	2,421	3,897	263	2,036	10,026
Bulk Terminal	14,139	4,161	3,100	260	2,020	23,680
Pipeline	2,699	3,972	3,676	180	508	11,035
Greater than 0.05 Percent Sulfur	40,920	16,751	18,631	1,419	5,483	83,204
Refinery	9,773	6,673	10,681	958	3,041	31,126
Bulk Terminal	26,523	6,100	3,956	233	1,880	38,692
Pipeline	4,624	3,978	3,994	228	562	13,386
Residual Fuel Oil^c	17,567	3,348	15,121	331	8,193	44,558
Refinery	4,531	1,989	6,300	331	6,029	19,180
Bulk Terminal	13,036	1,357	8,821	0	2,023	25,237
Pipeline	0	0	0	0	141	141
Less than 0.31% Sulfur	4,238	16	1,020	113	633	6,020
Refinery	851	16	631	113	579	2,190
Bulk Terminal	3,387	0	389	0	54	3,830
0.31 to 1.00% Sulfur	5,587	682	5,471	61	853	12,654
Refinery	2,748	292	883	61	614	4,598
Bulk Terminal	2,839	390	4,588	0	239	8,056
Greater than 1.00% Sulfur	7,742	2,648	8,630	157	6,566	25,743
Refinery	932	1,681	4,786	157	4,836	12,392
Bulk Terminal	6,810	967	3,844	0	1,730	13,351
Naphtha for Petrochemical Feedstock Use	248	331	1,323	0	96	1,998
Refinery	248	331	1,323	0	96	1,998
Other Oils for Petrochemical Feedstock Use	3	4	1,284	0	161	1,452
Refinery	3	4	1,284	0	161	1,452
Special Naphthas	83	395	1,778	1	62	2,316
Refinery	16	325	1,494	1	62	1,898
Bulk Terminal	67	70	284	0	0	421
Lubricants	2,788	1,722	5,377	0	1,727	11,614
Refinery	675	778	4,439	0	842	6,734
Bulk Terminal	2,113	944	938	0	885	4,880
Waxes	172	128	375	47	130	852
Refinery	172	128	375	47	130	852
Petroleum Coke	948	2,469	2,620	150	4,120	10,307
Refinery	948	2,469	2,620	150	4,120	10,307
Asphalt and Road Oil	3,853	9,858	3,180	1,337	2,132	20,360
Refinery	1,654	6,035	2,525	1,206	1,900	13,320
Bulk Terminal	2,199	3,823	655	131	232	7,040
Miscellaneous Products	526	189	1,591	7	499	2,812
Refinery	61	93	341	3	84	582
Bulk Terminal	465	49	1,178	0	415	2,107
Pipeline	0	47	72	4	0	123
Total Stocks, All Oils	191,844	247,027	1,046,440	25,713	163,163	1,674,187

^a Includes stocks held by producers.

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

^c Sulfur content not available for stocks held by pipelines.

W = Withheld to avoid disclosure of individual company data.

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

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

Table 52. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, August 1993
(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	38,136	0	1,412	36,724	2,043	51,844	15,548	36,296	17,567	2,076
Connecticut	1,658	0	0	1,658	7	2,844	525	2,319	35	W
Delaware, D.C., Maryland	2,130	0	78	2,052	127	4,487	1,721	2,766	2,361	W
Florida	5,647	0	0	5,647	111	1,486	467	1,019	1,501	167
Georgia	2,171	0	0	2,171	30	989	272	717	185	W
Maine, New Hampshire, Vermont	957	0	0	957	232	2,760	996	1,764	564	W
Massachusetts	1,767	0	0	1,767	256	3,675	170	3,505	1,282	W
New Jersey	8,454	0	667	7,787	129	14,011	2,930	11,081	5,188	W
New York	4,140	0	369	3,771	432	10,532	4,804	5,728	4,221	W
North Carolina	1,866	0	0	1,866	191	1,255	512	743	295	W
Pennsylvania	5,052	0	298	4,754	245	5,749	1,446	4,303	764	W
Rhode Island	618	0	0	618	W	1,213	335	878	W	W
South Carolina	1,043	0	0	1,043	35	632	339	293	W	W
Virginia	2,487	0	0	2,487	103	2,089	911	1,178	631	W
West Virginia	146	0	0	146	W	122	120	2	W	W
PAD District II	28,923	0	974	27,949	1,124	19,355	6,582	12,773	3,346	18,065
Illinois	5,692	0	146	5,546	165	3,647	1,190	2,457	1,275	895
Indiana	3,998	0	86	3,912	103	3,105	1,209	1,896	340	W
Iowa	737	0	0	737	W	689	440	249	W	W
Kansas, Nebraska	2,174	0	0	2,174	3	1,417	557	860	32	12,261
Kentucky	1,419	0	161	1,258	50	736	79	657	W	W
Michigan	2,965	0	48	2,917	105	1,660	602	1,058	118	2,378
Minnesota	1,217	0	255	962	W	1,788	405	1,383	209	W
Missouri	1,333	0	0	1,333	W	265	177	88	W	W
North Dakota, South Dakota	529	0	1	528	W	405	103	302	W	W
Ohio	3,647	0	30	3,617	506	1,883	812	1,071	663	W
Oklahoma	1,690	0	126	1,564	W	1,492	162	1,330	208	829
Tennessee	2,169	0	121	2,048	52	801	404	397	212	W
Wisconsin	1,353	0	0	1,353	W	1,467	442	1,025	49	W
PAD District III	29,441	0	1,834	27,607	1,143	21,634	6,997	14,637	15,121	28,430
Alabama	1,258	0	0	1,258	41	499	291	208	295	171
Arkansas	701	0	0	701	W	312	117	195	W	W
Louisiana	5,638	0	203	5,435	338	5,341	1,489	3,852	6,456	3,790
Mississippi	3,074	0	209	2,865	4	1,876	559	1,317	W	2,651
New Mexico	444	0	0	444	W	212	50	162	19	W
Texas	18,326	0	1,422	16,904	643	13,394	4,491	8,903	7,731	21,704
PAD District IV	2,875	0	39	2,836	150	1,714	523	1,191	331	331
Colorado	922	0	39	883	W	301	159	142	W	W
Idaho	264	0	0	264	W	151	52	99	W	W
Montana	882	0	0	882	W	452	204	248	75	11
Utah	409	0	0	409	W	368	87	281	131	232
Wyoming	398	0	0	398	W	442	21	421	W	33
PAD District V	17,432	0	1,382	16,050	53	8,977	4,056	4,921	8,052	1,211
Alaska	558	0	51	507	W	637	207	430	W	W
Arizona	955	0	85	870	W	123	68	55	W	W
California	10,589	0	819	9,770	46	5,455	2,818	2,637	5,045	275
Hawaii	591	0	15	576	W	600	42	558	W	W
Nevada	229	0	17	212	W	104	42	62	W	W
Oregon	962	0	132	830	W	641	360	281	155	W
Washington	3,548	0	263	3,285	W	1,417	519	898	1,584	25
U.S. Total	116,807	0	5,641	111,166	4,513	103,524	33,706	69,818	44,417	50,113

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, August 1993
(Thousand Barrels)

Commodity	From I to			From II to				From III to	
	II	III	V	I	III	IV	V	I	II
Crude Oil	117	0	0	125	1,504	293	0	0	53,934
Petroleum Products	8,071	210	0	3,164	6,516	3,273	0	79,997	27,382
Pentanes Plus	0	0	0	0	1,020	0	0	0	952
Liquefied Petroleum Gases	0	0	0	664	3,832	65	0	2,182	4,456
Unfinished Oils	27	0	0	0	0	0	0	273	126
Motor Gasoline Blending Components	9	30	0	18	0	0	0	55	602
Finished Motor Gasoline	5,847	0	0	1,431	1,079	1,874	0	47,270	13,160
Reformulated	0	0	0	0	0	0	0	0	0
Oxygenated	23	0	0	79	0	0	0	980	0
Other	5,824	0	0	1,352	1,079	1,874	0	46,290	13,160
Finished Aviation Gasoline	16	0	0	0	0	14	0	129	106
Jet Fuel	193	0	0	211	279	639	0	9,921	3,079
Naphtha-Type	0	0	0	0	49	0	0	88	132
Kerosene-Type	193	0	0	211	230	639	0	9,833	2,947
Kerosene	39	0	0	8	0	0	0	576	220
Distillate Fuel Oil	1,834	177	0	537	280	681	0	18,533	4,061
0.05 percent sulfur and under	91	0	0	174	88	508	0	420	2,753
Greater than 0.05 percent sulfur	1,743	177	0	363	194	173	0	18,113	1,308
Residual Fuel Oil	0	0	0	36	0	0	0	299	55
Petrochemical Feedstocks ^a	106	0	0	0	0	0	0	0	0
Special Naphthas	0	3	0	0	0	0	0	93	26
Lubricants	0	0	0	57	18	0	0	457	197
Waxes	0	0	0	0	0	0	0	2	0
Asphalt and Road Oil	0	0	0	202	0	0	0	161	303
Miscellaneous Products	0	0	0	0	8	0	0	46	39
Total	8,188	210	0	3,289	8,020	3,566	0	79,997	81,316

Commodity	From III to		From IV to			From V to			
	IV	V	II	III	V	I	II	III	IV
Crude Oil	0	0	2,620	1,438	0	0	0	7,033	0
Petroleum Products	0	1,921	2,058	1,537	1,052	0	0	0	0
Pentanes Plus	0	0	162	186	0	0	0	0	0
Liquefied Petroleum Gases	0	0	873	1,351	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	250	0	0	0	0	0	0	0
Finished Motor Gasoline	0	920	614	0	587	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	0	920	614	0	587	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	0
Jet Fuel	0	367	92	0	166	0	0	0	0
Naphtha-Type	0	177	89	0	78	0	0	0	0
Kerosene-Type	0	190	3	0	88	0	0	0	0
Kerosene	0	0	13	0	0	0	0	0	0
Distillate Fuel Oil	0	288	304	0	299	0	0	0	0
0.05 percent sulfur and under	0	15	136	0	50	0	0	0	0
Greater than 0.05 percent sulfur	0	273	168	0	249	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	96	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	0	1,921	4,678	2,975	1,052	0	0	7,033	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,
August 1993
(Thousand Barrels)**

Commodity	From I to		From II to			From III to	
	II	III	I	III	IV	I	II
Crude Oil	117	0	0	1,504	293	0	53,749
Petroleum Products	7,867	0	1,603	6,299	3,273	66,344	24,739
Pentanes Plus	0	0	0	1,020	0	0	952
Liquefied Petroleum Gases	0	0	664	3,832	65	2,003	4,456
Motor Gasoline Blending Components	0	0	18	0	0	55	602
Finished Motor Gasoline	5,824	0	571	965	1,874	38,126	12,083
Reformulated	0	0	0	0	0	0	0
Oxygenated	0	0	0	0	0	306	0
Other	5,824	0	571	965	1,874	37,820	12,083
Finished Aviation Gasoline	16	0	0	0	14	18	106
Jet Fuel	192	0	139	279	639	8,849	2,900
Naphtha-Type	0	0	0	49	0	88	132
Kerosene-Type	193	0	139	230	639	8,761	2,768
Kerosene	39	0	0	0	0	576	171
Distillate Fuel Oil	1,795	0	211	195	681	16,719	3,469
0.05 percent sulfur and under	91	0	122	42	508	0	2,646
Greater than 0.05 percent sulfur	1,704	0	89	153	173	16,719	823
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	8	0	0	0
Total	7,984	0	1,603	7,803	3,566	66,344	78,488

Commodity	From III to		From IV to			From V to	
	IV	V	II	III	V	III	IV
Crude Oil	0	0	2,620	1,438	0	4,491	0
Petroleum Products	0	1,575	2,058	1,537	1,052	0	0
Pentanes Plus	0	0	162	186	0	0	0
Liquefied Petroleum Gases	0	0	873	1,351	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0
Finished Motor Gasoline	0	920	814	0	587	0	0
Reformulated	0	0	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	0	920	614	0	587	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0
Jet Fuel	0	367	92	0	166	0	0
Naphtha-Type	0	177	89	0	78	0	0
Kerosene-Type	0	190	3	0	88	0	0
Kerosene	0	0	13	0	0	0	0
Distillate Fuel Oil	0	288	304	0	299	0	0
0.05 percent sulfur and under	0	15	136	0	50	0	0
Greater than 0.05 percent sulfur	0	273	168	0	249	0	0
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	0	1,575	4,678	2,975	1,052	4,491	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, August 1993
(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	125	0	0	0	0
Petroleum Products	204	210	0	1,561	217	0	13,653	24
Liquefied Petroleum Gases	0	0	0	0	0	0	179	0
Unfinished Oils	27	0	0	0	0	0	273	0
Motor Gasoline Blending Components	9	30	0	0	0	0	0	0
Finished Motor Gasoline	23	0	0	860	114	0	9,144	0
Reformulated	0	0	0	0	0	0	0	0
Oxygenated	23	0	0	79	0	0	674	0
Other	0	0	0	781	114	0	8,470	0
Finished Aviation Gasoline	0	0	0	0	0	0	113	24
Jet Fuel	0	0	0	72	0	0	1,072	0
Naphtha-Type	0	0	0	0	0	0	0	0
Kerosene-Type	0	0	0	72	0	0	1,072	0
Kerosene	0	0	0	8	0	0	0	0
Distillate Fuel Oil	39	177	0	326	85	0	1,814	0
0.05 percent sulfur and under	0	0	0	52	44	0	420	0
Greater than 0.05 percent sulfur	39	177	0	274	41	0	1,394	0
Residual Fuel Oil	0	0	0	38	0	0	299	0
Less than 0.31 percent sulfur	0	0	0	0	0	0	239	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	38	0	0	60	0
Petrochemical Feedstocks ^a	108	0	0	0	0	0	0	0
Special Naphthas	0	3	0	0	0	0	93	0
Lubricants	0	0	0	57	18	0	457	0
Waxes	0	0	0	0	0	0	2	0
Asphalt and Road Oil	0	0	0	202	0	0	161	0
Miscellaneous Products	0	0	0	0	0	0	46	0
Total	204	210	0	1,686	217	0	13,653	24

Commodity	From III to				From V to		
	Central Atlantic	Lower Atlantic	II	V	I	II	III
Crude Oil	0	0	185	0	0	0	2,542
Petroleum Products	723	12,906	2,643	346	0	0	0
Liquefied Petroleum Gases	0	179	0	0	0	0	0
Unfinished Oils	65	208	126	0	0	0	0
Motor Gasoline Blending Components	0	0	0	250	0	0	0
Finished Motor Gasoline	297	8,847	1,077	0	0	0	0
Reformulated	0	0	0	0	0	0	0
Oxygenated	201	473	0	0	0	0	0
Other	96	8,374	1,077	0	0	0	0
Finished Aviation Gasoline	0	89	0	0	0	0	0
Jet Fuel	0	1,072	179	0	0	0	0
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	0	1,072	179	0	0	0	0
Kerosene	0	0	49	0	0	0	0
Distillate Fuel Oil	0	1,814	592	0	0	0	0
0.05 percent sulfur and under	0	420	107	0	0	0	0
Greater than 0.05 percent sulfur	0	1,394	485	0	0	0	0
Residual Fuel Oil	0	299	55	0	0	0	0
Less than 0.31 percent sulfur	0	239	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	60	55	0	0	0	0
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0
Special Naphthas	0	93	26	0	0	0	0
Lubricants	348	109	197	96	0	0	0
Waxes	2	0	0	0	0	0	0
Asphalt and Road Oil	0	161	303	0	0	0	0
Miscellaneous Products	11	35	39	0	0	0	0
Total	723	12,906	2,828	346	0	0	2,542

^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 J12, 'Monthly Product Pipeline Report' and 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, August 1993
(Thousand Barrels)

Commodity	PAD District I			PAD District II		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	125	117	8	56,671	1,922	54,749
Petroleum Products	83,161	8,281	74,880	37,511	12,953	24,558
Pentanes Plus	0	0	0	1,114	1,020	94
Liquefied Petroleum Gases	2,846	0	2,846	5,329	4,561	768
Ethane/Ethylene	0	0	0	722	1,472	-750
Propane/Propylene	2,726	0	2,726	3,350	1,235	2,115
Normal Butane/Butylene	120	0	120	482	1,305	-823
Isobutane/Isobutylene	0	0	0	775	549	226
Unfinished Oils	273	27	246	153	0	153
Motor Gasoline Blending Components	73	39	34	611	18	593
Finished Motor Gasoline	48,701	5,847	42,854	19,621	4,384	15,237
Reformulated	0	0	0	0	0	0
Oxygenated	1,059	23	1,036	23	79	-56
Other	47,642	5,824	41,818	19,598	4,305	15,293
Finished Aviation Gasoline	129	16	113	122	14	108
Jet Fuel	10,132	193	9,939	3,364	1,129	2,235
Naphtha-Type	88	0	88	221	49	172
Kerosene-Type	10,044	193	9,851	3,143	1,080	2,063
Kerosene	584	39	545	272	8	264
Distillate Fuel Oil	19,070	2,011	17,059	8,199	1,498	4,701
0.05 percent sulfur and under	594	91	503	2,980	768	2,212
Greater than 0.05 percent sulfur	18,476	1,920	16,556	3,219	730	2,489
Residual Fuel Oil	335	0	335	55	36	19
Petrochemical Feedstocks ^a	0	106	-106	106	0	106
Special Naphthas	93	3	90	26	0	26
Lubricants	514	0	514	197	75	122
Waxes	2	0	2	0	0	0
Asphalt and Road Oil	363	0	363	303	202	101
Miscellaneous Products	46	0	46	39	8	31
Total	83,286	8,398	74,888	94,182	14,875	79,307

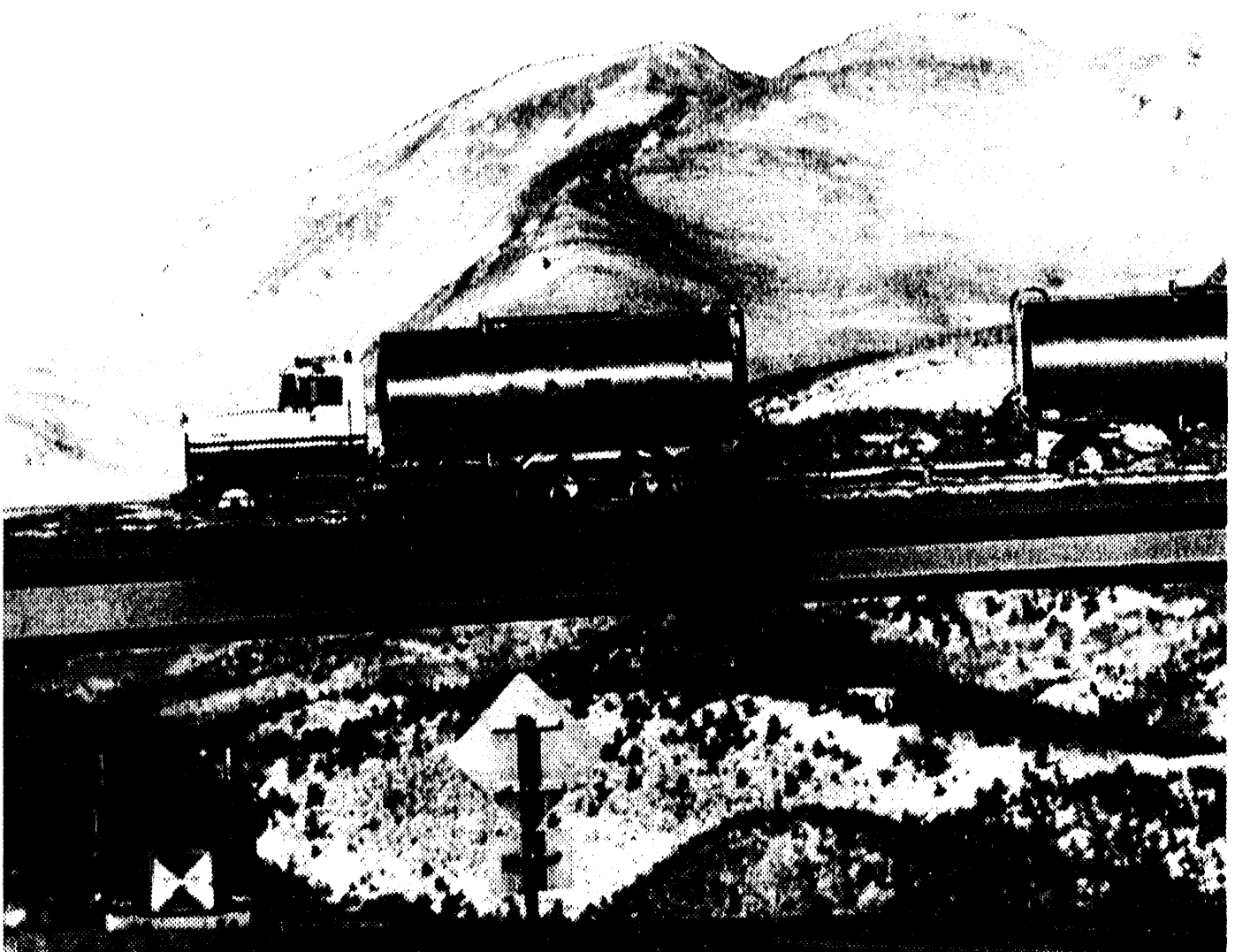
Commodity	PAD District III			PAD District IV			PAD District V		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	9,975	53,934	-43,959	293	4,058	-3,765	0	7,033	-7,033
Petroleum Products	8,263	109,300	-101,037	3,273	4,647	-1,374	2,973	0	2,973
Pentanes Plus	1,206	952	254	0	348	-348	0	0	0
Liquefied Petroleum Gases	5,183	6,638	-1,455	65	2,224	-2,159	0	0	0
Ethane/Ethylene	2,068	432	1,636	0	886	-886	0	0	0
Propane/Propylene	1,052	5,194	-4,142	64	763	-699	0	0	0
Normal Butane/Butylene	1,373	317	1,056	1	354	-353	0	0	0
Isobutane/Isobutylene	690	695	-5	0	221	-221	0	0	0
Unfinished Oils	0	399	-399	0	0	0	0	0	0
Motor Gasoline Blending Components	30	907	-877	0	0	0	250	0	250
Finished Motor Gasoline	1,079	61,350	-60,271	1,874	1,201	673	1,507	0	1,507
Reformulated	0	0	0	0	0	0	0	0	0
Oxygenated	0	980	-980	0	0	0	0	0	0
Other	1,079	60,370	-59,291	1,874	1,201	673	1,507	0	1,507
Finished Aviation Gasoline	0	235	-235	14	0	14	0	0	0
Jet Fuel	279	13,367	-13,088	639	258	381	533	0	533
Naphtha-Type	49	397	-348	0	167	-167	255	0	255
Kerosene-Type	230	12,970	-12,740	639	91	548	278	0	278
Kerosene	0	796	-796	0	13	-13	0	0	0
Distillate Fuel Oil	457	22,882	-22,425	681	603	78	587	0	587
0.05 percent sulfur and under	86	3,188	-3,102	508	186	322	65	0	65
Greater than 0.05 percent sulfur	371	19,694	-19,323	173	417	-244	522	0	522
Residual Fuel Oil	0	354	-354	0	0	0	0	0	0
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0	0	0
Special Naphthas	3	119	-116	0	0	0	0	0	0
Lubricants	18	750	-732	0	0	0	96	0	96
Waxes	0	2	-2	0	0	0	0	0	0
Asphalt and Road Oil	0	464	-464	0	0	0	0	0	0
Miscellaneous Products	8	85	-77	0	0	0	0	0	0
Total	18,238	183,234	-144,996	3,566	8,705	-5,139	2,973	7,033	-4,060

^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



Tank trucks are used to distribute heating oil to remote areas.

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.

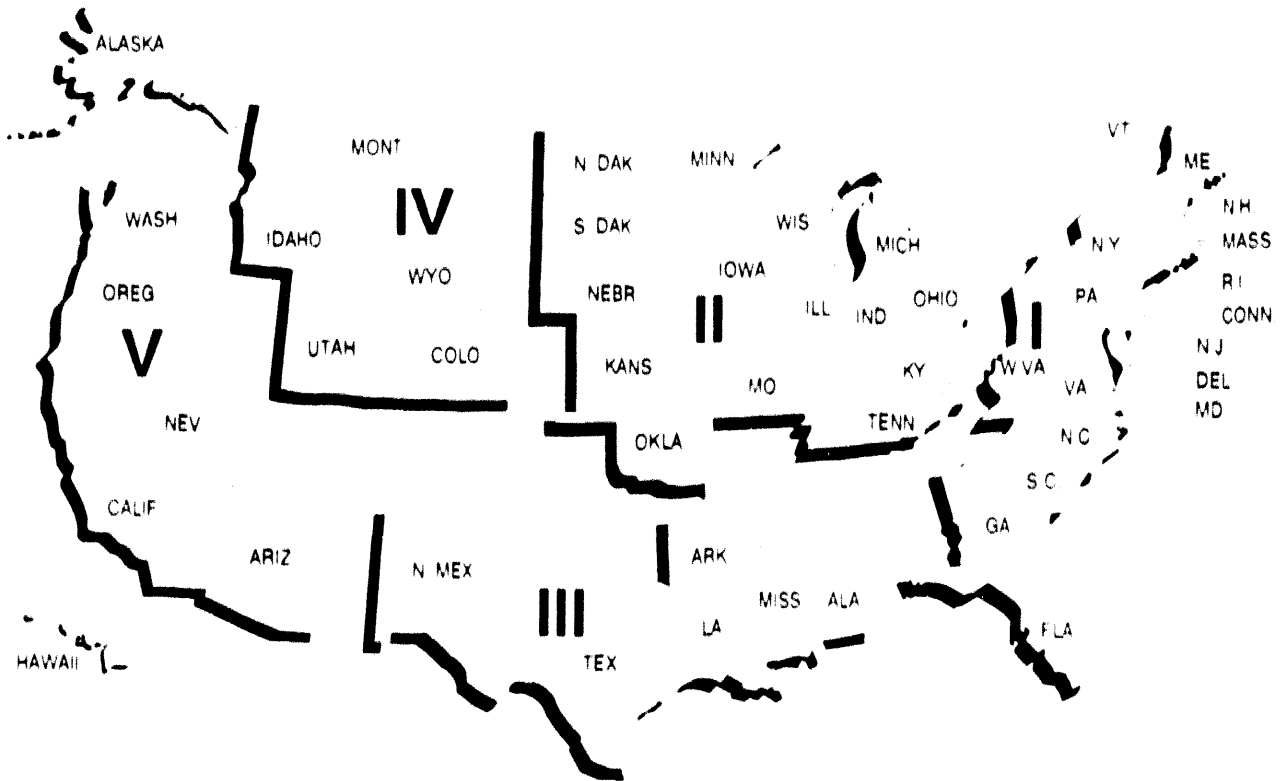
PAD District IV

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

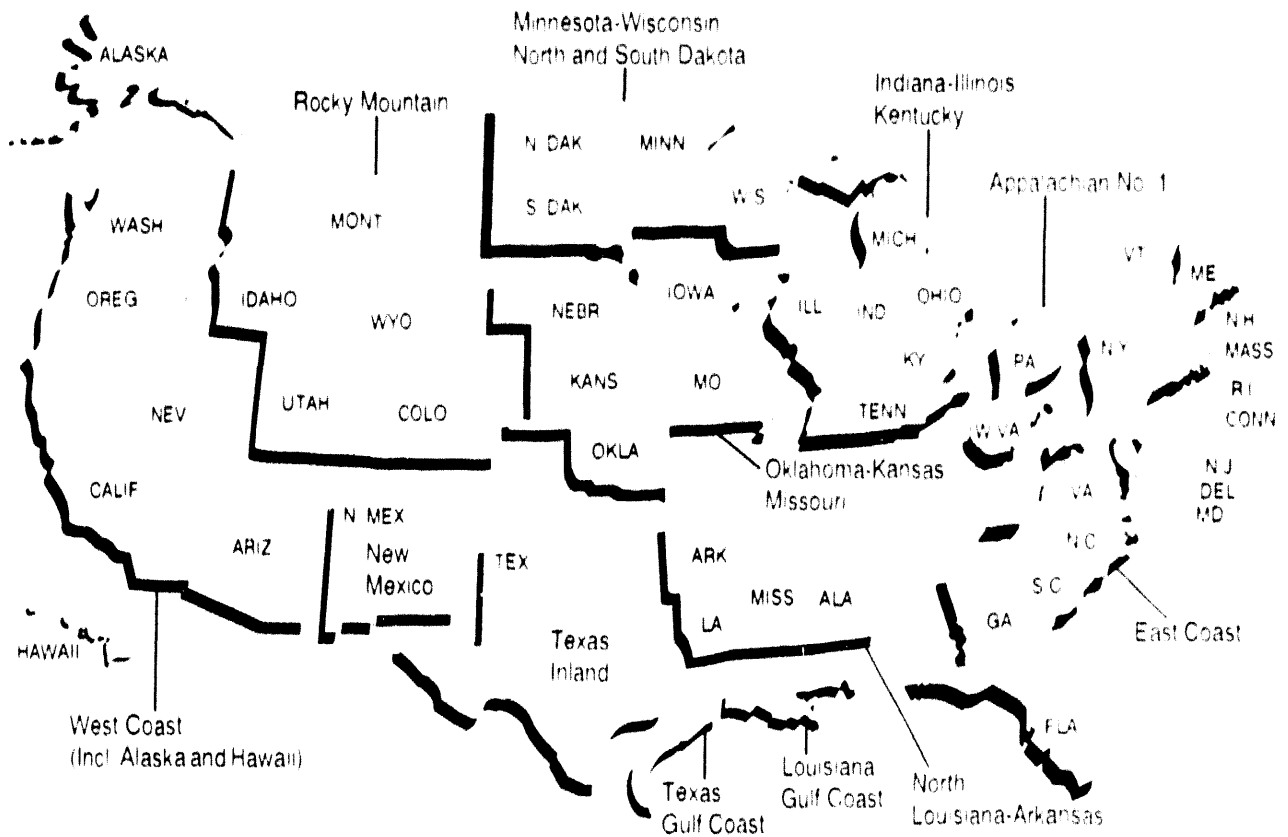
PAD District V

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

Petroleum Administration for Defense (PAD) Districts

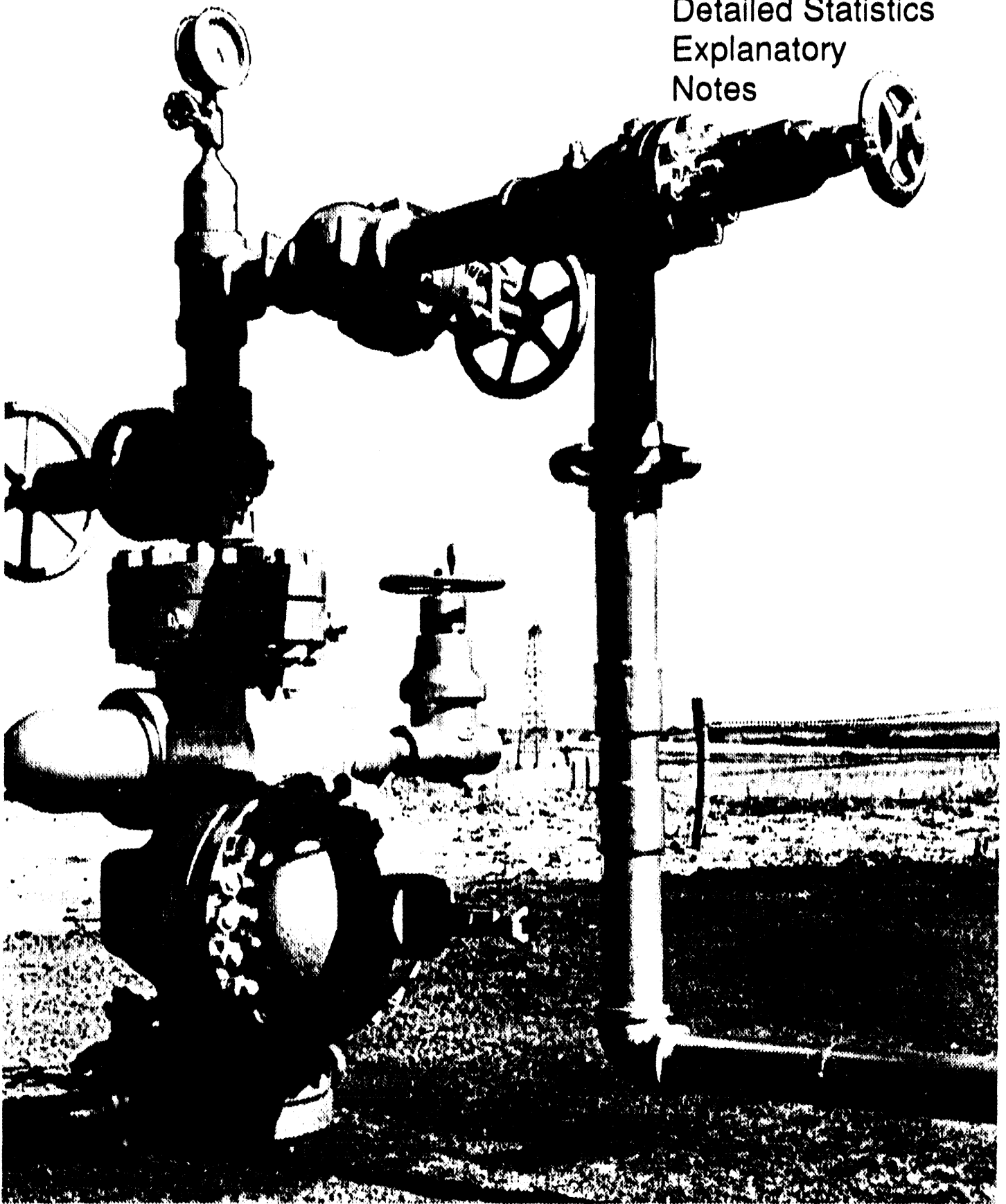


Refining Districts



Appendix B

Detailed Statistics
Explanatory
Notes



The cluster of pipes and valves that control the flow of oil at the mouth of an oil well is what oilmen call a "Christmas Tree."

Explanatory Notes

The following Explanatory Notes are provided to assist in understanding and interpreting the data presented in the Detailed Statistics section in 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. 1981 Changes in the Petroleum Supply Reporting System
- Note 9. 1983 Changes in the Petroleum Supply Reporting System
- Note 10. 1984 Changes in the Petroleum Supply Reporting System
- Note 11. 1985 Changes in the Petroleum Supply Reporting System
- Note 12. 1986 Changes in the Petroleum Supply Reporting System
- Note 13. 1987 Changes in the Petroleum Supply Reporting System
- Note 14. 1989 Changes in the Petroleum Supply Reporting System
- Note 15. 1990 Changes in the Petroleum Supply Reporting System
- Note 16. 1991 Changes in the Petroleum Supply Reporting System
- Note 17. 1993 Changes in the Petroleum Supply Reporting System

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:

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-818	"Monthly International Energy Agency Imports/Stocks At Sea Report"
EIA-819M	"Monthly Oxygenate Telephone Report"
EIA-819A	"Annual Oxygenate Report"
EIA-820	"Annual Refinery Report"

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

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

data are collected on end-of-month stocks only. These data are published in the *WPSR*.

Forms EIA-810 through 814, 816, and 817 comprise the MPSRS. These surveys are used to collect detailed refinery, natural gas plant and oxygenate plant operations data, refinery, bulk terminal, oxygenate plant, 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 Summary Statistics and the Detailed Statistics sections of the *Petroleum Supply Annual (PSA)*, Volumes 1 and 2.

Summary information on the revision error between preliminary and final data is found in the feature article in the *PSM* entitled, "Timeliness and Accuracy of Petroleum Supply Data." The last article was published in the August 1993 issue and evaluated the accuracy of the data for 1992 compared with previous years.

The Form EIA-818, "Monthly International Energy Agency Imports Stocks At Sea Report" is used to collect data on imports of crude oil and petroleum products and worldwide quantities of petroleum in transit or held as stocks at sea by U.S. companies. These data are not published but are used to assist the EIA in fulfilling its data-reporting obligation to the International Energy Agency (IEA) and to satisfy requirements of the North Atlantic Treaty Organization Civil Emergency Planning Organization. The data are used by the IEA in ongoing monitoring programs and contribute to petroleum sharing programs during periods of international petroleum supply disruption.

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect preliminary data on production, imports, and stocks of oxygenates by PAD District. These data are used to monitor the supply of oxygenates. Data are collected from a sample of respondents reporting on the MPSRS surveys and the EIA-822A D, "Oxygenate Operations Identification Survey." Data are published in Appendix D of this publication and also in the *WPSR*.

The Form EIA-819A, "Annual Oxygenate Report" is used to collect data on current and projected nameplate production capacity of oxygenates. The results of this survey are published in the Oxygenate Capacity section of the *PSA*, Volume 1.

The Form EIA-820, "Annual Refinery Report" is used to collect data on refinery fuel use and consumption of steam and electricity, refinery receipts of crude oil by method of

transportation, and refinery operable and storage capacity. 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. In 1993, the collection system was further expanded to include imports, stocks, and blending of oxygenates.

The forms that comprise the MPSRS are

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

Respondent Frame

Form EIA-810, "Monthly Refinery Report" - Operators of all operating and idle petroleum refineries and blending plants located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. Approximately 240 respondents report on the Form EIA-810.

Form EIA-811, "Monthly Bulk Terminal Report" - Every bulk terminal operating company located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and other U.S. possessions. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or

more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. In addition, the Form EIA-811 must be completed by merchant oxygenate plants that produce oxygenates. Approximately 350 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 170 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 860 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 800 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 35 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 the EIA-822A/D, "Oxygenate Operations Identification Survey." The universe consists of (1) operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations), (2) operators of petroleum refineries, (3) operators of bulk terminals, bulk stations, blending plants, and other nonrefinery facilities that store and/or blend oxygenates, and (4) importers of oxygenates (importer of record) located in or importing oxygenates into the 50 States and the District of Columbia. Approximately 136 respondents report on the Form EIA-819M.

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

Collection Methods

Except for the EIA-819M, survey forms for the MPSRS can be submitted by mail, facsimile, or electronic transmission. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month. Data for the EIA-819M are solicited by telephone or transmitted to the EIA by facsimile. Data for the EIA-819M survey are collected beginning on the seventh working day of each month. 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. The ending stock value of the previous month is used as the value for beginning and ending stocks for the current month.

On the EIA-819M, data are aggregated for each geographic region. Estimation factors, which are derived from 1992 reported 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 Energy Information Administration 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 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.

Data on PSM Table 28, "Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts," Table 30, "Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts," Table 51, "Stocks of Crude Oil and Petroleum Products by PAD District," and Table 52, "Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products, by State" as well as data on the production and stocks of oxygenates published in Appendix D are subject to statistical nondisclosure procedures for oxygenates. Statistics representing data aggregated from less than three com-

panies or aggregated data representing 60 percent or more of a single company's data are suppressed.

With the exception of Tables 28, 29, 30, 51, and 52 in the PSM (and corresponding PSA tables), the 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 17 for a further discussion of this calculation.

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

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

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

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

Disposition

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

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

Refinery Inputs - Refinery inputs of crude oil and intermediate materials (unfinished oils, gasoline blending components, other hydrocarbons and oxygenates, liquefied petroleum gases, and pentanes plus) that are processed at refineries to produce finished petroleum products.

Crude oil inputs represents total crude oil (domestic and foreign) input to atmospheric crude oil distillation units

and other refinery processing units (i.e., catalytic cracking units, cokers).

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

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

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

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

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

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

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

Yields

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

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

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

Stocks

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

Movements

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

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

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

Note 4. Domestic Crude Oil Production

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

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

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

Table B1 is intended to provide further insight into the EIA's estimates of monthly U.S. crude oil production. It shows: (a) how the aggregate of reported State data evolves over a period of 18 months; (b) the number of producing States that have not reported production for a given month within that period; and (c) various EIA estimates of monthly crude oil production within that period:

- The original estimate is a monthly aggregate of the weekly crude oil production estimates published in the *Weekly Petroleum Status Report*. This original monthly estimate is used in the *Petroleum Supply Monthly* (PSM) Tables S1 and S2 until replaced by the interim estimate.
- The interim estimate is used in the PSM Tables 1 through 25, and in Tables S1 and S2 until replaced by the final estimate.
- The initial estimate based upon first purchase data collected on the Form EIA-182 is used as an estimation

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																	
	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	2-93	3-93	4-93	5-93	6-93	7-93	8-93	9-93
Reported State Data ^c																		
6-14-92	1828	0																
7-14-92	2566	1749	0															
8-14-92	4046	2538	1773	0														
9-14-92	6688	4738	2680	1740	0													
10-14-92	7152	6638	4767	2572	1652	0												
11-14-92	7166	7046	6954	6520	2465	1765	0											
12-14-92	7173	7054	7050	7005	4959	2562	1696	0										
1-14-93	7174	7055	7055	7006	6726	6416	2514	1743	0									
2-14-93	7174	7056	7054	7009	6816	6810	5644	4121	1725	0								
3-14-93	7174	7057	7053	7019	6817	6822	6482	5636	4290	1717	0							
4-14-93	7185	7068	7065	7031	6828	6922	6917	6820	6873	4048	1700	0						
5-14-93	7188	7069	7067	7032	6822	6924	6997	6829	6877	5549	4119	1738	0					
6-14-93	7297	7173	7174	7137	6926	7030	7103	7007	6989	6745	6237	4112	1664	0				
7-14-93	7297	7173	7174	7137	6926	7030	7103	7009	6991	6753	6743	6353	4058	1577	0			
8-14-93	7296	7173	7174	7141	6928	7035	7109	7005	7071	6756	6746	6762	6277	4053	1595	0		
9-14-93	7295	7172	7174	7142	6932	7045	7123	7019	7085	6770	6762	6778	6680	6254	4089	1442	0	
10-14-93	7295	7174	7176	7144	6934	7047	7125	7021	7086	6799	6793	6809	6696	6647	5974	3917	1542	0
Producing States Without Reported Monthly Production ^d																		
10-14-93	0	0	0	0	0	0	0	0	0	5	5	5	6	6	9	17	29	33
Month of Production																		
	4-92	5-92	6-92	7-92	8-92	9-92	10-92	11-92	12-92	1-93	2-93	3-93	4-93	5-93	6-93	7-93	8-93	9-93
Production Estimates																		
Original ^e	7279	7212	7217	7114	6958	6996	7031	7014	7078	7023	7001	6980	6904	6840	6771	6681	6771	6673
Interim ^f	7291	7110	7138	7096	6928	7019	7065	7027	7125	7008	6957	6976	6897	6833	6756	6654	6732	
Form EIA-182																		
Initial.....	7161	6878	6981	6945	6748	6835	6942	6908	6925	7001	6732	6962	6620	6128	6496	6441	6472	
Revised.....	7160	6918	6981	6936	6753	6862	6958	6887	6951	6775	6812	6810	6714	6625	6600	6417		
Final ^g	7293	7169	7167	7131	6922	7030	7126	7024	7103									

^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 1992 (annual average of 75 thousand barrels per day) for four States (Michigan, New York, Ohio, and Pennsylvania) for which only annual State data are available.

^d Michigan, New York, Ohio, and Pennsylvania are counted as having monthly reported data in 1992 after their annual reports were received. These data are first reported as of 6-14-93.

^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* 1992, DOE/EIA 0340(92)/2.

tool in generating the interim estimate. The initial volume represents the best estimate available 40 days after the end of the production month and includes imputation for nonresponse and possible reporting errors. The revised volume is the best estimate available about 70 days after the production month and includes imputation as needed. A final revision is published concurrent with publication of Form EIA-182 price data in the *Petroleum Marketing Annual*.

- The final estimate is published in the *PSA*.

Note 5. Export Data

Each month the Energy Information Administration (EIA) receives magnetic tapes of aggregated export statistics from the U.S. Bureau of the Census (EM-522 and EM-594).

Census export statistics used in the *Petroleum Supply Monthly* reflect both government and nongovernment exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

- (1) Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
- (2) Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

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

Country and Area of Destination

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

Note 6. Quality Control and Data Revision

Quality Control

The Energy Information Administration (EIA) monitors the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. Through a tracking system, the EIA provides insight into the activities of primary operators and distributors in the petroleum industry. The tracking system, known as the Petroleum Supply Reporting System (PSRS), consists of production, inputs, imports, inventories, movements, and other petroleum-related data collected on weekly, monthly, and annual surveys.

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

In any survey, nonresponse can be a major concern because the effects can cause serious bias in survey results. Nonresponse occurs whenever requested information is not obtained from all units in a survey. The PSRS surveys have a very high response rate. 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.

A principal objective of PSRS surveys is to provide a timely and accurate picture of petroleum industry activities. As part of this objective, a comparison of the data collected on the PSRS with other similar data series from sources outside of the Petroleum Supply Division is performed each year. The results of this data comparison are published in the *Petroleum Supply Monthly* (PSM) feature article, "Comparison of Independent Statistics on Petroleum Supply" and in subsequent explanatory notes.

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.

Resubmissions

Resubmissions are any changes to the originally submitted data that were either requested by the EIA or initiated by the respondent. Resubmissions are compared with the original submission and processed at the time of receipt. For Forms EIA-810 through 813, 816, and 817 the Resubmission Tracking System (RTS) is run after resubmissions have been processed for the month. The RTS enables the user to study major products and data series to see how company resubmissions impact published data on a month by month basis. During the processing year, a summary of the effect of these resubmissions to major series is provided in Appendix C.

For the EIA-819M data, a determination is made on whether to process the resubmissions based on the magnitude of the revision. Cell entries on publication tables are marked with an "R" for revised.

Late Response

Respondents who fail to respond within the prescribed time limit (25th day following the end of the report month) become nonrespondents for that particular report period and are contacted by phone to obtain the current month's data. Respondents who are chronically late (i.e.,

3 consecutive months) are notified by EIA either by letter or telephone.

Nonresponse

Follow-up action is taken when a company fails to respond adequately to data requests from the EIA. Preliminary attempts to gather delinquent reports are made by phone. Noncompliance form letters are sent to those companies that have not submitted reports and have not responded to data requests by phone.

Note 7. Frames Maintenance

The Petroleum Supply Division (PSD) maintains complete lists of respondents to its monthly surveys. Each survey has a list of companies and facilities required to submit petroleum activity data. This list is known as the survey frame. Frame maintenance procedures are used to monitor the status of petroleum companies and facilities currently contained in each survey frame as well as to identify new members to be added to the frame. As a result, all known petroleum supply organizations falling within the definition of "Who Must Submit" participate in the survey.

The activities for frames maintenance are conducted within three time frames: monthly, annually, and triennially. 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 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.

The sample frame for the Form EIA-819M, "Monthly Oxygenate Telephone Report," is also updated on a monthly basis as needed.

Annual frames maintenance focuses on re-evaluating the "must submit" companies filing the Form EIA-814. In addition, the PSD conducts a comprehensive frame identifier survey of companies that produce, blend, store, or import oxygenates. This information is used in determining which companies are eligible respondents to the Monthly Petroleum Supply Reporting System surveys.

To supplement monthly and annual frames maintenance activities and to provide more thorough coverage, the

Table B2. New Basis Stocks¹
(Million Barrels)

Commodity	1980	1982	1983
Crude Oil			
Total	488	645	723
Other Primary	380	351	379
Crude Oil and Petroleum Products	1,425	1,461	1454
Motor Gasoline			
Total	263	244	222
Finished	214	202	186
Distillate Fuel Oil	205	186	140
Residual Fuel Oil	91	69	49
Jet Fuel			
Total	42	39	39
Kerosene-type	36	32	32
Liquefied Petroleum Gases	128	102	108
Propane/Propylene	69	57	55
Other Petroleum Products	207	219	210

¹ Stocks as of December 31.

PSD also conducts a comprehensive triennial frames investigation. These triennial evaluations result in the reassessment and recompilation of the complete frame for each survey.

Changes in Survey Frames

Beginning in January 1981, the Energy Information Administration (EIA) expanded its universe to include non-refinery blenders; redefined motor gasoline into two categories (finished leaded and finished unleaded); and separated blending components from finished motor gasoline as a reporting category. Refer to Explanatory Note 8 for future discussion.

In January 1981, 1983, and 1984 numerous respondents were added to bulk terminal and pipeline surveys affect-

ing subsequent stocks reported and stock change calculations. Table B2 displays the end-of-year stocks, in million barrels using the expanded coverage (new basis).

Beginning in January 1986, as a result of frames maintenance activities, 39 respondents were added to the monthly survey frames: 2 motor gasoline blenders, 30 bulk terminal operators, 3 pipeline operators, 3 crude oil stock holders, and 1 tanker and barge operator. Table B3 shows the impact of the data reported by the new respondents on published data for production and stocks of major petroleum products.

Also, beginning in January 1986, a major petroleum company consolidated production and stocks reporting for some of its facilities. Data previously reported separately on Form EIA-811, "Monthly Bulk Terminal Report," and on Form EIA-816, "Monthly Natural Gas Liquids Report" for two facilities were combined with data reported for two refineries on Form EIA-810, "Monthly Refinery Report." The primary impact of this reporting change is on Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District," which showed a decrease in natural gas liquids (NGL) stocks at bulk terminals and natural gas processing plants, and an increase in NGL stocks at refineries.

Beginning no later than November 1992, the Clean Air Act Amendments of 1990 require that all gasoline sold in carbon monoxide nonattainment areas have an oxygen content of 2.7 percent (by weight) during winter months. Beginning in 1995 further requirements are that only reformulated gasoline having an average oxygen content of 2.0 percent be sold in the nine worst ozone nonattainment areas.

In 1991, the EIA conducted a frame identifier survey of companies that produce, blend, store, or import

Table B3. Impact of New Respondents to December 1985 PSM Data

Product	Refinery Production (thousand barrels per day)		Stocks ^a (thousand barrels)	
	Reported by New Respondents	Published U.S. Total	Reported by New Respondents	Published U.S. Total
Leaded Gasoline	1.3	2,326	224	81,379
Unleaded Gasoline	0.6	4,323	276	108,422
Distillate Fuel Oil	0	3,174	1,217	143,911
Residual Fuel Oil	0	1,055	1,747	50,671
NGLs & LRGs	0	393	409	80,898
Other Products	0	3,302	1,413	239,158
Crude Oil (excl. SPR)	—	—	2,314	318,695

^a Stocks as of December 31, 1985.

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 affected stocks reported and stock change calculations. However, a new basis stock level was not calculated.

Sampling

The sampling procedure used for the survey Form EIA-819M is the cut-off method and is performed using software developed by EIA's Office of Statistical Standards. In the cut-off method, companies are ranked from largest to smallest on the basis of quantities reported (oxygenate production, oxygenate stocks, and oxygenate imports) during 1992. 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.

Note 8. 1981 Changes in the Petroleum Supply Reporting System

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures, and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration (EIA) in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting system.

The EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings through 1980. Estimates of the magnitudes of differences in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline sales data series, which is derived from State tax receipts. The difference increased to about 3 percent in 1979 and 1980. There were two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). Table B4 provides 1979 and 1980 data as published in the *Petroleum Statement, Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied.

The EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years.

Table B4. Finished Motor Gasoline Product Supplied
(Thousand Barrels per Day)

	EIA Reported	API Recast	EIA Recast	FHWA ^a
1979	7,034	7,302	7,183-7,347	7,258
1980	6,579	6,882	6,806-6,889	6,792

^a FHWA gasoline statistics based on data from Federal Highway Administration, *Estimate of Total Gasoline Use*, Table MF-21A published October 1980 and September 1981. Aviation gasoline (Table MF-24) has been subtracted from FHWA product supplied quantities to make data comparable.

Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate

and residual fuel oils produced by a refinery are shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate fuel oil, and one-third to residual fuel oil.

Beginning in January 1981, this adjustment was discontinued because there was not sufficient empirical evidence to support it. Table B5 presents distillate and residual fuel oil refinery production in 1979 and 1980 as published (adjusted) and on the same basis as 1981 statistics (unadjusted) to permit comparison.

Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

Table B5. Distillate and Residual Fuel Oil Production and Product Supplied (Thousand Barrels per Day)

	Adjusted Refinery Production	Unadjusted Refinery Production	Difference	Unadjusted Product Supplied
Distillate Fuel Oil				
1979	3,152	3,169	16	3,327
1980	2,661	2,764	103	2,969
Residual Fuel Oil				
1979	1,687	1,695	8	2,834
1980	1,580	1,634	54	2,562

Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in Table 1. These imbalances are reported as negative product supplied in Table 2. Since these changes only involve redistribution of the volumes of finished motor gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

Alaskan In-Transit Stocks

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 for Total and 380 million barrels for Other Primary.

Note 9. 1983 Changes in the Petroleum Supply Reporting System

January 1983 marked the implementation of recent changes in the collection, processing and availability of the Energy Information Administration's (EIA) petroleum supply data. Survey forms and definitions were made consistent; frames for bulk terminals, petroleum product pipelines and crude oil stock holders were updated, and the survey processing system was redesigned and incorporated into the new Petroleum Supply Reporting System (PSRS).

Changes in Data Collection

Changes in data collection can be grouped into five categories. Some were made to improve consistency, others to classify activity more precisely, and others to combine or eliminate information elements or to reduce the frequency of reporting in recognition of the trade-off between data value and reporting burden. The changes are itemized below.

- Motor gasoline was divided into three standard categories (finished leaded motor gasoline, finished unleaded motor gasoline and motor gasoline blending components).
- Aviation gasoline blending components were added to Form EIA-817.
- Crude oil burned as fuel on leases and by pipelines is reported as a single item on Form EIA-813. Previously it was reported as distillate or residual fuel oil consumption.
- No. 4 Fuel Oil is now included with distillate fuel oil.
- Gasohol was eliminated as a separate category and is now reported as either "finished leaded motor gasoline" or "finished unleaded motor gasoline."
- Waterborne movements of petrochemical feedstocks are now divided into naphtha-less than 400 degrees end-point and other-oils equal to or greater than 400 degrees end-point on Form EIA-817.
- Data aggregation for Petroleum Administration for Defense District (PADD) I was divided into three sub-districts on Forms EIA-812 and 817.

- Detailed categories of Gross Input to Crude Oil Distillation Units were eliminated, and only Total Gross Inputs is collected on Form EIA-810.
- Waterborne movements of crude oil and petroleum products between PADD's, on Form EIA-817, no longer reflect shipping and receiving States.
- Reporting of production and stocks of No. 4 Fuel Oil by sulfur levels were eliminated from Forms EIA-810, 811, 812, and 817.
- Crude oil stocks are collected at PADD levels rather than State levels on Form EIA-813.
- Shipments from natural gas processing plants no longer reflect destination by facility type on Form EIA-816.
- The four categories for unfinished oils were reduced to two on Form EIA-810.
- The five categories for sulfur content of residual fuel oil were reduced to three on Forms EIA-810, 811, and 817.
- Normal Butane and Other Butanes were combined into a single category on Forms EIA-810, 811, and 816.
- Three subcategories of lubricating oils (bright stock, neutral, and other) were combined into a single category on the Form EIA-810.
- Three subcategories of waxes (microcrystalline, crystalline-fully refined, and crystalline-other) were combined into a single category on the Form EIA-810.
- Asphalt and Road Oil were combined into a single category on Forms EIA-810 and 811.
- Plant fuel use and Losses were combined on Form EIA-816.
- Natural Gasoline and Isopentane were combined on Form EIA-816.

Change in Crude Oil Lease Stocks

The end-of-month crude oil stocks held on leases are reported on the Form 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 Energy Information Administration (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 the EIA reported data and the state government data was made and the difference added to the EIA data for 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 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.

Note 10. 1984 Changes in the Petroleum Supply Reporting System

In January 1984, a number of changes in the reporting of natural gas liquids (NGL) were implemented. The modified system reflects supply and disposition of NGL on a component, rather than a product, basis.

From 1979 to 1983, the Energy Information Administration (EIA) collected and reported information on the supply and disposition of nine NGL products. Beginning with January 1984, NGL supply and disposition data were reported for 5 components to be consistent with record keeping practices used by the industry. Table B6 shows the product category under the new and old basis.

Table B6. Product Basis vs. Component Basis Reporting

1979-1983 Product Basis	1984 Component Basis				
	Ethane	Propane	Normal Butane	Isobutane	Pentanes Plus
Ethane	•				
Ethane-Propane Mixtures	•	•			
Propane		•			
Butane-Propane Mixtures		•	•		
Butane			•		
Isobutane				•	
Unfractionated Stream	•	•	•	•	•
Natural Gasoline and Isopentane					•
Plant Condensate					•

**Table B7. Algorithm for Allocating NGL Imports/Exports
(Percent)**

Product	EIA Component Slate				
	Ethane	Propane	Normal Butane	Isobutane	Pentanes Plus
Import Product					
Natural Gasoline and Isopentane (EIA-814)					100
Plant Condensate (EIA-814)					100
Ethane (IM-145)	100				
Propane (IM-145)		100			
Butane (IM-145)			65	35	
Butane-Propane Mixtures (IM-145)		40	35	20	5
Ethane-Propane Mixtures (IM-145)	60	40			
Export Product					
Ethane (All PAD Districts)	100				
Propane (All PAD Districts)		100			
Butane (All PAD Districts)			100		
Mixed Streams					
PAD Districts I, IV, V		40	60		
PAD District II	30	25	15	15	15
PAD District III		80	20		

Four Petroleum Supply Reporting System surveys were modified beginning in January 1984. They were:

EIA-810	"Monthly Refinery Report"
EIA-811	"Monthly Bulk Terminal Report"
EIA-812	"Monthly Product Pipeline Report"
EIA-816	"Monthly Natural Gas Liquids Report"

This change affected stocks reported and stock change calculations. Under the new basis, end-of-year 1983 stocks would have been 108 million barrels for Liquefied Petroleum Gases and 210 million barrels for Other Petroleum Products.

A fifth survey, Form EIA-814, "Monthly Imports Report" (formerly Form ERA-60), was not modified. Therefore, to allocate imports and exports of mixed NGL streams to individual component parts, the EIA developed a statistical algorithm.

Imports

The imports algorithm was based on information gathered from the larger importers of NGL, who were asked to provide component analysis of the products they imported during the first 6 months of 1983. The percentages shown in Table B7 are derived from the weighted averages of the data provided by the importers.

Exports

The exports algorithm was based on information gathered from the larger exporters of NGL, who were asked to provide component analysis of the products they exported during 1983. The percentages shown in Table B7 are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by Petroleum Administration for Defense District of exportation, due to the wide variation of components included in the mixed streams.

Note 11. 1985 Changes in the Petroleum Supply Reporting System

Beginning in January 1985, inter-Petroleum Administration for Defense (PAD) District pipeline movements of crude oil were included in the crude oil supply balance at the PAD District level but did not affect National level statistics. As a result of including these movements, *Net Receipts* of crude oil and *Unaccounted for Crude Oil* at the PAD District level changed significantly. Also affected were crude oil imports and unfinished oil imports at the PAD District level which are provided by *PAD District of Entry* (Tables 6-10) and by *PAD District of Processing* (Tables 16-19).

The tables in the *Petroleum Supply Monthly* that were changed due to the inclusion of inter PAD District pipeline movements of crude oil are the following:

- Tables 6 through 10, "PAD Districts I to V: Supply and Disposition of Crude Oil and Petroleum Products "

Effective January 1988, crude oil imports and unfinished oil imports in Tables 4 through 8 were reported at the *PAD District of Entry* rather than at the *PAD District of Processing*. *Net Receipts* now include movements by pipeline as well as by tanker and barge.

- Table 26, "Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts "

— The crude oil line includes movements by pipeline as well as by tanker and barge.

- Table 27, "Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts "

— A line was added to report crude oil movements

- Table 29, "Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts "

The crude oil line includes movements by pipeline as well as by tanker and barge.

Note 12. 1986 Changes in the Petroleum Supply Reporting System

Beginning in January 1986, several changes to the Petroleum Supply Reporting System (PSRS) went into effect. These changes affected the frame of operators of petroleum facilities required to complete the monthly surveys in the PSRS and resulted in some changes to the tables presented in the *Petroleum Supply Monthly* (PSM). Refer to Explanatory Note 7 for detailed description of frames maintenance and updates.

Changes in Data Collection

- The unit of measure used on Form EIA-814, "Monthly Imports Report," was changed from barrels to thousands of barrels.
- Unfinished oil imports data, previously reported as one product on the Form EIA-814, were separated into the following four classifications:

Naphthas and lighter

Kerosene and light gas oils

- Heavy gas oils
- Residuum

- The number of categories for reporting natural gas liquids and liquefied petroleum gases data on Form EIA-814 was reduced from 19 to 5 by eliminating the requirement to separately identify categories for further processing, petrochemical use, and fuel use.
- The requirements to report the type of processing facility and the applicable section of the oil import regulations were eliminated for the Form EIA-814.
- The requirement to report data for imports of crude oil, unfinished oils, and finished products on separate schedules of the Form EIA-814 was eliminated.
- The requirement to report two end use categories, petrochemical use and other use, for still gas and liquefied refinery gases, was eliminated on Form EIA-810, "Monthly Refinery Report."
- Form EIA-815, "Monthly Shipments from Puerto Rico to the United States Report," was discontinued. The data previously reported on this form are now reported on Form EIA-814.

Changes in Publication Tables

Several changes were also made to tables in the *PSM* either as a direct result of changes in reporting requirements or to improve the usefulness of the publication. These changes were:

- Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District "

Alaskan crude oil receipts were shown separately.

- Table 14, "Refinery Production of Petroleum Products by PAD District "

The breakout between "petrochemical feedstock use" and "other use" were no longer shown separately for still gas or for liquefied refinery gases.

- Tables 16 and 17, "Imports of Crude Oil and Petroleum Products by PAD District."

Imports of unfinished oils were separated into four categories: naphthas and lighter, kerosene and light gas oils, heavy gas oils, and residuum.

- Tables 18 and 19, "Imports of Crude Oil and Petroleum Products by Source "

- Countries formerly included in the categories "Other Western Hemisphere" and "Other Eastern Hemisphere" were shown individually.

- Table 24, "Stocks of Crude Oil and Petroleum Products by PAD District."

- The breakout between "petrochemical feedstock use" and "other use" for each liquefied petroleum gas was eliminated.

Note 13. 1987 Changes in the Petroleum Supply Reporting System

Several changes to the Petroleum Supply Reporting System (PSRS) went into effect at the beginning of January 1987. These changes were made as part of the Energy Information Administration's (EIA's) continuing effort to provide pertinent, timely, and consistent energy information. These changes were subsequently reflected in the *Petroleum Supply Annual*.

Changes in Data Collection

Fresh feed input to catalytic cracking units, hydrocracking units, and cokers were added to the Form EIA-810, "Monthly Refinery Report."

Changes in Publication Tables

- The "Appalachian No. 2" Refining District was combined with the "Indiana, Illinois, Kentucky," Refining District. This affected *Petroleum Supply Monthly* (PSM) Tables 12 through 15, 24, 30, and 31.
- Fresh feed inputs to catalytic cracking units, hydrocracking units, and cokers were added to Table 13, "Refinery Input of Crude Oil and Petroleum Products by PAD District."

Clarification

In 1986, several refineries and terminals in the United States applied for Foreign Trade Zone (FTZ) status and applications from three refineries were approved. Consequently, during 1986, some refineries with FTZ status were treated as if they were within the United States while the Hawaiian FTZ was considered outside.

Effective with the January 1987 data, all FTZ facilities located within the 50 United States are considered domestic entities and are included in PSM statistics. The principal differences in the PSM data series as a result of adding the Hawaiian FTZ was an approximate 1-percent

increase in crude imports and a 3-percent decrease in product imports.

Note 14. 1989 Changes in the Petroleum Supply Reporting System

Several changes to the Petroleum Supply Reporting System (PSRS) went into effect at the beginning of January 1989. These changes were made to reduce respondent burden, to fulfill user requests for additional data, and to improve accuracy and consistency in reporting. To reflect these changes and to improve the usefulness of the *Petroleum Supply Monthly* (PSM) publication, the following changes were made in January 1989 and subsequently reflected in the *Petroleum Supply Annual* (PSA).

Changes in Data Collection

- Data on inputs and production of naphthenic and paraffinic lubricants were added to the Form EIA-810, "Monthly Refinery Report."
- Separate lines for the collection of inputs and production of olefins (ethylene, propylene, and butylene) were added to Form EIA-810, "Monthly Refinery Report."
- The collection of data on the movement of Liquefied Petroleum Gases (LPGs) and Liquefied Refinery Gases (LRGs) on a component basis were added to the Forms EIA-812, "Monthly Product Pipeline Report," and the EIA-817, "Monthly Tanker and Barge Movement Report."
- Bonded imports of jet fuel and fuel oils and imports of LPGs previously published from data provided by the U.S. Bureau of the Census were discontinued. Data are now published from the data reported on Form EIA-814, "Monthly Imports Report."
- Exports of butane/propane and ethane/propane mixtures were split in a ratio of 60 percent for the butane and ethane portions and 40 percent for the propane portion.
- The reporting of products other than Natural Gas Liquids (NGLs) by natural gas processing plants was eliminated on Form EIA-816, "Monthly Natural Gas Liquids Report."
- Fractionators were required to report only end-of-month stocks of NGLs on Form EIA-816, "Monthly Natural Gas Liquids Report."

Changes in Natural Gas Liquids and Crude Oil Statistics

Beginning with the January 1989 issue of the *PSM*, adjustments were being made to refinery inputs and product supplied of 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 was made to refinery input in all Petroleum Administration for Defense (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 began in 1987 and has grown as injections of NGLs into the TAPS have increased. Data for 1988 was revised to account for the adjustment in the *PSA* published in May 1989. Revisions for 1987 data are not planned.

Changes in Publication Tables

- Year-to-Date tables on Supply and Disposition by PAD District (Tables 7, 9, 11, 13, and 15) were added.
- "Stock Withdrawal" was renamed "Stock Change" and was moved from Supply to Disposition in Tables 2 through 15. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.
- A jet fuel total line was added to Tables 2-15, 19, 20, 23, 24, 43-46.
- PAD District Supply and Disposition tables (Tables 6 through 15) now display liquefied petroleum gases on a component basis.
- Tables showing net imports by country for the current month and year-to-date (Tables 39 and 40) were added.
- Table numbers were changed as a result of data additions and table reorganization. Table B8 is provided to show the old to new table numbers for the detailed statistics tables.
- Table 17, "Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining District."
 - Stocks at natural gas processing plants by Refining District previously published in Table 24 was included with net production of petroleum products at natural gas plants.
 - The reporting of products other than natural gas liquids by natural gas processing plants was eliminated.
- Table 19, "Net Refinery Production of Finished Petroleum Products by PAD and Refining District."

Table B8. Conversion Table for 1989 PSM

Table Numbers											
Old	New	Old	New	Old	New	Old	New	Old	New	Old	New
1	1	NA	9	12, 24	17	18, 33	25	19	33	24, 31	41
2	2	8	10	13	18	18, 33	26	19	34	25	42
3	3	NA	11	14, 30	19	18, 33	27	20	35	26	43
4	4	9	12	24, 31	20	18, 33	28	21	36	27	44
5	5	NA	13	15	21	18, 33	29	22	37	28, 32	45
6	6	10	14	34	22	19	30	23	38	29	46
NA	7	NA	15	16	23	19	31	NA	39		
7	8	11	16	17	24	19	32	NA	40		

NA = Not Applicable

- Net production of olefins (ethylene, propylene, and butylene) was added.
- Net production of naphthenic and paraffinic lubricants was added.
- Net production of residual fuel oil by percent sulfur, previously published as Table 30, was added.
- Table 20, "Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining District."
 - Stocks at refineries by Refining District were added from Table 24.
 - Stocks of residual fuel oil by percent sulfur content, previously published as Table 31, were added.
- Tables 25 through 34, "Imports of Crude Oil and Petroleum Products by Country of Origin."
 - Data previously included in the "Other Products" category were displayed separately for naphthas for petrochemical feedstock use, other oils for petrochemical feedstock use, lubricants, and asphalt and road oil.
 - Sulfur content categories for residual fuel oil, previously published as Table 33, were added.
- Tables 37 and 38, "Exports of Crude Oil and Petroleum Products by Destination."
 - Data for exports by destination previously included in the "Other Products" category were displayed separately for pentanes plus, kerosene, naphthas for petrochemical feedstock use, and other oils for petrochemical feedstock use.
- Table 41, "Stocks of Crude Oil and Petroleum Products by PAD District."
 - Refining District data were eliminated. Refinery stocks and natural gas processing plant stocks by Refining District were added to Tables 17 and 20, respectively.
 - Sulfur content categories for residual fuel oil, previously published as Table 31, were added.

Note 15. 1990 Changes in the Petroleum Supply Reporting System

Beginning with the May 1990 issue of the *Petroleum Supply Monthly*, stocks of propane/propylene were added

to Table 42, "Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by State." This change was subsequently reflected in the *Petroleum Supply Annual*.

Note 16. 1991 Changes in the Petroleum Supply Reporting System

Several changes were made to the Petroleum Supply Reporting System effective with the March issue of the *Petroleum Supply Monthly* (PSM). These changes were made to provide additional data and to improve the usefulness of the publication.

Changes in Publication Tables

Summary Statistics Tables

- A new table was added to show jet fuel supply and disposition.
- Table S8, "Other Petroleum Products Supply and Disposition" was redesignated as Table S9. Jet fuel data is no longer included. Historical data were revised to exclude jet fuel.
- Table S3, "Crude Oil and Petroleum Product Imports" was expanded to display all Organization of Petroleum Exporting Countries (OPEC) and additional Non-OPEC countries. A separate column for crude oil imports was also been added for each country.
- Time periods were included in table titles.

Figures

- Annual graphs were eliminated.
- Time periods were included in figure titles.
- Sources were provided for each figure.
- Bar graphs used to display end-of-month stocks were replaced with line graphs.

Sources

The sources and explanatory notes for this section were updated and relocated to the end of the Summary Statistics section.

Detailed Statistics Tables

- Table 1, "U.S. Petroleum Balance"

Table B9. Conversion Table for 1991 PSM

Table Numbers

Old	New	Old	New	Old	New	Old	New	Old	New	Old	New
1	1	N	11	13	21	21	31	31	41	41	51
2	2	N	12	14	22	22	32	32	42	42	52
3	3	9	13	N	23	23	33	33	43	43	53
4	4	10	14	N	24	24	34	34	44	44	54
5	5	N	15	15	25	25	35	35	45	45	55
6	6	N	16	16	26	26	36	36	46	46	56
N	7	11	17	17	27	27	37	37	47		
N	8	12	18	18	28	28	38	38	48		
7	9	N	19	19	29	29	39	39	49		
8	10	N	20	20	30	30	40	40	50		

N = New Table

- A line was added to display jet fuel as a separate category for Total Products Supplied and Total Stocks (lines 34 and 44, respectively).
- PAD District Supply and Disposition Tables
 - A year-to-date table in thousand barrels and a current month table in thousand barrels per day were added for each PAD District.
- Imports of Crude Oil and Petroleum Products by PAD District
 - Residual fuel oil sulfur categories were added.
- Imports of Crude Oil and Petroleum Products by Country of Origin
 - Residual fuel oil sulfur categories by country of origin were eliminated. These categories are now reported on a PAD District basis.
 - Separate daily average columns were added for crude oil and petroleum products.
- Table numbers were changed as a result of table additions. Table B9 is provided to show the old to new table numbers for the detailed statistics tables.

Note 17. 1993 Changes in the Petroleum Supply Reporting System

In keeping with the Department of Energy's (DOE's) mandated responsibilities, the Energy Information Administration (EIA) made several changes to the Petroleum Supply Reporting System (PSRS) effective in January

1993. These changes were designed to accommodate the revisions to the Clean Air Act of 1990, and to reflect current and upcoming changes in the petroleum industry. These changes will be subsequently reflected in the 1993 *Petroleum Supply Annual*.

Changes in Data Collection

- Motor gasoline categories have been revised to reflect the change in the type of fuels produced. The new categories are: reformulated gasoline, oxygenated gasoline, and other finished gasoline. These changes were made to Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movement Report."
- Distillate Fuel Oil has been split into two sulfur categories to meet Environmental Protection Agency requirements effective in October 1993. The new categories for inputs, production, end-of-month stocks and movements are: 0.05% sulfur and under, and greater than 0.05% sulfur. These changes were made to Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movement Report."
- Other hydrocarbons, hydrogen, and alcohol (Code 090) has been renamed "Other hydrocarbons, hydrogen, and oxygenates" on Form EIA-810, "Monthly Refinery Report." A new line has also been added to report Other hydrocarbons and hydrogen separately.
- Data on inputs and end-of-month stocks of oxygenates (i.e., fuel ethanol, ethyl tertiary butyl ether (ETBE),

methanol, methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other oxygenates) has been added to Form EIA-810, "Monthly Refinery Report."

- Inputs and production of Isobutylene (Code 634) has been added as sub-categories to Isobutane (Code 615) on Form EIA-810, "Monthly Refinery Report."
- Data on inputs and production of military kerosene-type jet fuel and commercial kerosene-type jet fuel has been added to Form EIA-810, "Monthly Refinery Report."
- Liquefied Petroleum and Refinery Gases column headings for Ethane, Propane, Normal Butane, and Isobutane have been revised to include olefins (e.g., Ethane/Ethylene etc.) on Form EIA-811, "Monthly Bulk Terminal Report."
- Data on end-of-month stocks of oxygenates (i.e., fuel ethanol, ethyl tertiary butyl ether (ETBE), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other oxygenates) have been added to Forms EIA-811, "Monthly Bulk Terminal Report," and EIA-812, "Monthly Product Pipeline Report." Data for methanol are not collected at this time but has been included on the form for future use.
- Imports of oxygenates (i.e., fuel ethanol, ethyl tertiary butyl ether (ETBE), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other oxygenates) have been added to Form EIA-814, "Monthly Imports Report." Data for methanol are not requested at this time.
- Imports of olefins are collected separately from liquefied petroleum gases (i.e., ethylene, propylene, butylene, and isobutylene) on Form EIA-814, "Monthly Imports Report."
- Data on blended into motor gasoline has been eliminated on the Form EIA-819M, "Monthly Oxygenate Telephone Report."
- Data on methanol is no longer required on the Form EIA-819M, "Monthly Oxygenate Telephone Report" but remains on the form for future use.

Changes in Summary Statistics Tables

• Table S1. Crude and Petroleum Products Overview

- History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.

• Table S2. Crude Oil Supply and Disposition

- History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
- The Crude Used Directly column has been eliminated. This column is no longer applicable since the years 1973 through 1980 have been eliminated. The data for 1981 and 1982 are provided in a footnote.

• Table S3. Crude Oil and Petroleum Product Imports

- History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
- The Former USSR has been renamed Russia. The remaining states that comprised the Former USSR have been included in the Other Non-OPEC column.

• Table S4. Finished Motor Gasoline Supply and Disposition

- History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
- Product supplied-unleaded and product supplied-unleaded (percent of Total) columns have been eliminated. A new column has been added to display end-of-month stocks of oxygenates. These stocks **are not included** in the Total Motor Gasoline end-of-month stocks.

• Table S5. Distillate Fuel Oil Supply and Disposition

- History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
- Distillate fuel oil stocks have been separated into two sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur).
- The Crude Used Directly column has been eliminated. This column is no longer applicable since the years 1973 through 1980 have been eliminated. The data for 1981 and 1982 are provided in a footnote.

• Table S6. Residual Fuel Oil Supply and Disposition

- History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.

- The Crude Used Directly column has been eliminated. This column is no longer applicable since the years 1973 through 1980 have been eliminated. The data for 1981 and 1982 are provided in a footnote.
- Table S7. Jet Fuel Supply and Disposition
 - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
- Table S8. Propane/Propylene Supply and Disposition
 - A new summary table has been added to display supply and disposition data for propane/propylene. This information will continue to be included in the Liquefied Petroleum Gases Supply and Disposition table (renumbered as Table S9).
- Table S9. Liquefied Petroleum Gases Supply and Disposition
 - Formerly numbered as Table S8.
 - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
- Table S10. Other Petroleum Products Supply and Disposition
 - Formerly numbered as Table S9.
 - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
- Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/ Hydrogen/Oxygenates for clarification.
- Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
- Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 28. Refinery Input
 - Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/ Hydrogen/Oxygenates for clarification. Sub-categories are displayed for Other Hydrocarbons/Hydrogen and for Oxygenates.
 - Oxygenates are displayed separately for fuel ethanol, methanol, MTBE, and other oxygenates. Other oxygenates includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl alcohol (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
- Table 29. Refinery Net Production
 - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification. Isobutylene is displayed as a sub-category to be consistent with the other liquefied gases.
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated (EPA approved), and other.
 - Military and commercial kerosene-type jet fuel has been added.
 - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.

Changes in Detailed Statistics Tables

- Table 1. U.S. Petroleum Balance
 - Line 14 includes fuel ethanol blended into finished motor gasoline. This quantity is comparable to the sum of field production of finished motor gasoline and natural gas liquids and LRGs on Table 2.
 - Line 20 has been modified to read: Other Liquids New Supply (Field Production) to accommodate motor gasoline blending components field production.
- Tables 2 through 25. Supply and Disposition
 - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
 - Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/ Hydrogen/Oxygenates for clarification. Sub-categories are displayed for Other Hydrocarbons/Hydrogen and for Oxygenates.
 - Oxygenates are displayed separately for fuel ethanol, methanol, MTBE, and other oxygenates. Other oxygenates includes ethyl tertiary butyl ether (ETBE),
- Table 30. Refinery Stocks
 - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
 - Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/ Hydrogen/Oxygenates for clarification. Sub-categories are displayed for Other Hydrocarbons/Hydrogen and for Oxygenates.
 - Oxygenates are displayed separately for fuel ethanol, methanol, MTBE, and other oxygenates. Other oxygenates includes ethyl tertiary butyl ether (ETBE),

- tertiary amyl methyl alcohol (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
- Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
 - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Tables 33 and 34. Imports by PAD District
 - Data on olefins are displayed separately from liquefied petroleum gases.
 - Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/ Hydrogen/Oxygenates for clarification. Sub-categories are displayed for Other Hydrocarbons/Hydrogen and for Oxygenates.
 - Oxygenates are displayed separately for fuel ethanol, MTBE, and other oxygenates. Other oxygenates includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl alcohol (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
 - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added to both bonded ship bunkers and other.
 - Tables 35-44. Imports by Country of Origin
 - A new line has been added to appear below the Total line to show the sum of the Persian Gulf countries.
 - Former USSR has been changed to read Russia. States formerly included in USSR are now included in the Other countries category under Non-OPEC.
 - Tables 45 and 46. Exports
 - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
 - Other Hydrocarbons/Oxygenates and Motor Gasoline Blending Components have been added as export products under the Other Liquids category.
 - Tables 47-48. Exports by Destination
 - Miscellaneous products category has been renamed Other Products to accommodate exports of other hydrocarbons/ oxygenates and motor gasoline blending components.
 - Tables 49-50. Net Imports
 - A new line has been added to appear below the Total line to show the sum of the Persian Gulf countries.
 - Former USSR has been changed to read Russia. States formerly included in USSR are now included in the Other countries category under Non-OPEC.
 - Table 51. Stocks
 - Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/ Hydrogen/Oxygenates for clarification. Sub-categories are displayed for Other hydrocarbons/hydrogen fuel ethanol, ETBE, methanol, MTBE, and other oxygenates.
 - Other oxygenates includes tertiary amyl methyl alcohol (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
 - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
 - Table 52. Refinery, Bulk Terminal, and Natural Gas Plant Stocks
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
 - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
 - Table 53. Movements by Pipeline, Tanker, and Barge
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
 - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
 - Table 54. Movements by Pipeline

- Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
- Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 55. Movements by Tanker and Barge
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
 - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 56. Net Movements
 - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
 - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.

Changes in Appendix C

- Inputs
 - Other hydrocarbons has been renamed Other Hydrocarbons/ Oxygenates for clarification.
- Production
 - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
 - A new line has been added to display field production of motor gasoline blending components.
- Imports
 - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.

- Stocks
 - Other hydrocarbons has been renamed Other Hydrocarbons/ Oxygenates for clarification.
 - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
- Product Supplied
 - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
 - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.

Changes in Appendix D

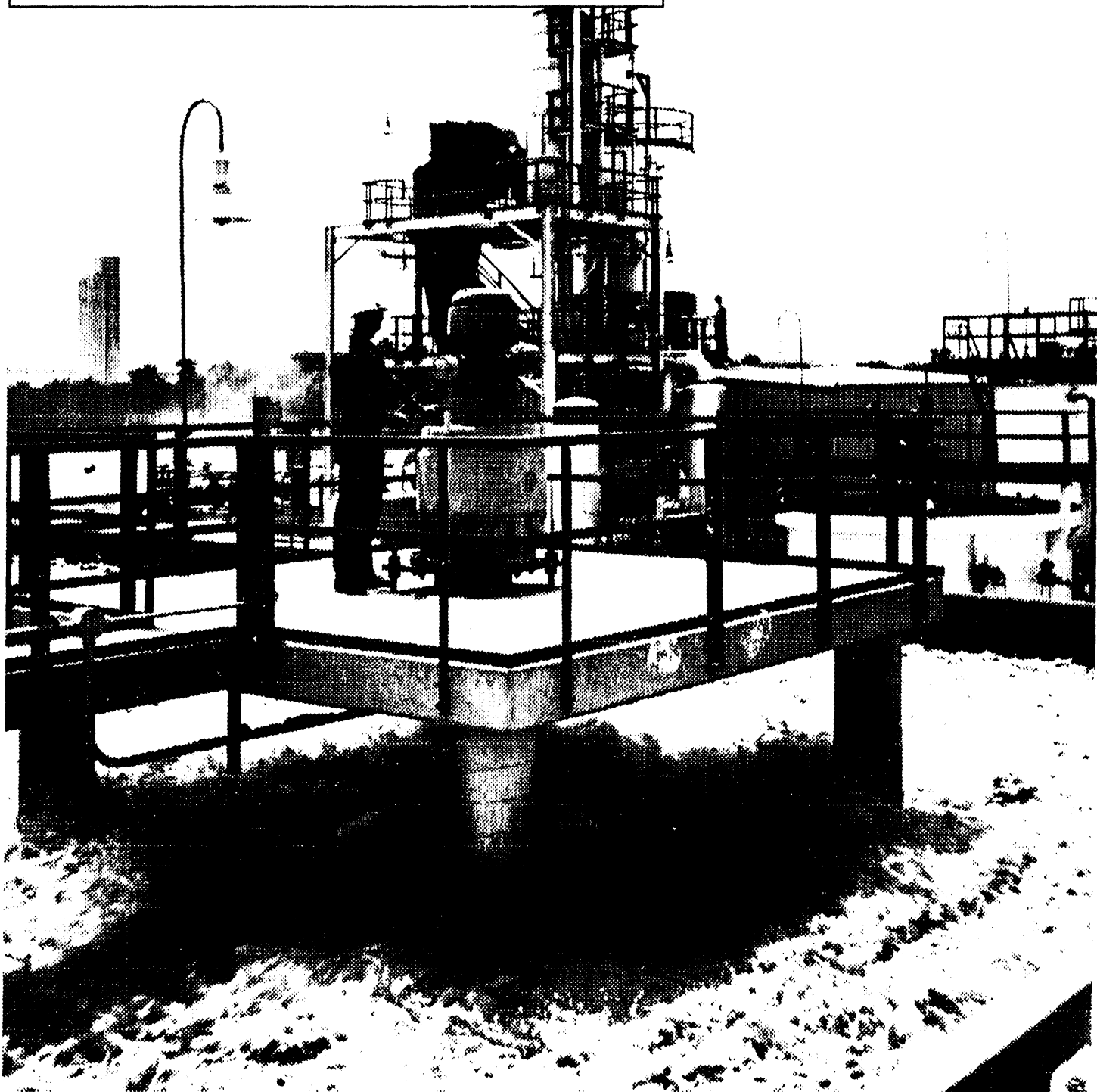
- Table D1. U.S. Summary Table
 - Data on blended into motor gasoline has been eliminated. This information is no longer collected on the survey EIA-819M, "Monthly Oxygenate Telephone Report."
- Table D2. Monthly Fuel Ethanol Production and Ending Stocks
 - Data for the previous year as well as current year are displayed.
 - Data on blended into motor gasoline has been eliminated. This information is no longer collected on the survey EIA-819M, "Monthly Oxygenate Telephone Report."
 - Data for fuel ethanol imports has been dropped due to small volumes reported by respondents.
- Table D3. Monthly MTBE Production and Ending Stocks
 - Data for the previous year as well as current year are displayed.
 - Data on blended into motor gasoline has been eliminated. This information is no longer collected on the survey EIA-819M, "Monthly Oxygenate Telephone Report."
 - Data on MTBE imports has been dropped from the table due to small volumes reported by respondents.

Appendix C

Impact of Resubmissions on Major Series, 1993

This table contains information on revisions to published statistics caused by resubmission of respondent survey forms. The table shows the published value in the *Petroleum Supply Monthly* (PSM) and the cumulative difference resulting from resubmissions for the major product series. The official published petroleum supply statistics are not changed to reflect revisions until publication of the *Petroleum Supply Annual* (PSA), except in cases of catastrophic error.

This table is provided as a service to analysts who need to know the latest available statistics. It should be used with caution because resubmissions are received on an irregular basis and the impact on published data can change from month to month. In some cases, the pattern of revision caused by resubmissions during the year is a poor indicator of final statistics that will be published in the PSA.



Surface aerators are used at U.S. petroleum refineries to help prevent water pollution. These aerators speed up the oxidation process by beating air into water.

Table C1. Impact of Resubmissions on Major Series, 1993
(Thousand Barrels per Day, Except Where Noted)

Product	January		February		March		April		May		June		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
Inputs.....	14,249	-9	14,238	-17	14,259	6	14,875	69	14,939	115	15,366	-4	27
Crude Oil.....	12,980	-43	12,923	-58	13,249	-49	13,512	26	13,701	128	14,125	3	2
Pentanes Plus.....	153	(s)	167	5	149	-2	137	5	153	2	162	0	2
LPGs.....	440	1	367	-5	263	-9	263	-14	258	-4	260	-12	-7
Ethane/Ethylene.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Propane/Propylene.....	1	0	(s)	0	(s)	0	(s)	0	0	0	0	0	0
Normal Butane/Butylene.....	289	(s)	211	-6	103	-8	97	-12	84	-3	80	-9	-6
Isobutane/Isobutylene.....	150	1	155	1	160	-1	166	-2	174	-1	180	-3	-1
Oth Hydrocbrns/Oxygenates.....	247	-6	197	-7	143	-3	132	-1	138	-6	123	(s)	-4
Unfinished Oils.....	504	38	584	59	421	67	609	65	657	-5	718	1	37
Motor Gas Blend Comp.....	-75	(s)	1	-10	34	2	24	-12	31	3	-23	5	-2
Aviation Gas Blend Comp.....	(s)	0	(s)	0	(s)	0	(s)	0	(s)	0	1	0	0
Production.....	17,284	32	16,996	-40	17,069	-9	17,423	52	17,835	107	18,032	9	26
Pentanes Plus.....	319	4	323	3	330	1	338	1	333	1	344	2	2
LPGs.....	1,837	(s)	1,912	9	2,106	1	2,151	10	2,091	18	2,122	11	8
Ethane/Ethylene.....	588	(s)	608	5	630	(s)	625	(s)	587	1	585	3	1
Propane/Propylene.....	965	1	959	3	971	(s)	973	3	942	6	958	4	3
Normal Butane/Butylene.....	106	1	164	1	301	1	331	8	315	11	341	5	5
Isobutane/Isobutylene.....	177	-1	182	1	204	-1	223	-1	247	-1	237	-1	-1
Oth Hydrocbrns/Oxygenates.....	461	35	163	-37	164	-20	155	-6	165	-7	141	4	-5
Motor Gas Blend Comp.....	-25	14	-2	3	-42	-1	-45	4	-53	-15	-58	7	2
Finished Motor Gasoline.....	7,254	-8	7,172	-16	6,897	5	7,123	7	7,394	54	7,447	-12	5
Reformulated.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Oxygenated.....	1,067	57	1,211	80	383	65	252	58	699	79	739	77	69
Other.....	5,588	-65	5,961	-97	6,513	-59	6,871	-51	6,695	-25	6,708	-89	-64
Finished Aviation Gasoline.....	16	(s)	19	(s)	22	(s)	19	-1	25	-1	27	(s)	(s)
Jet Fuel.....	1,437	(s)	1,442	-2	1,463	(s)	1,390	1	1,426	2	1,549	-2	(s)
Naphtha-Type Jet.....	131	-1	125	0	131	(s)	127	-1	126	(s)	141	0	(s)
Kerosene-Type Jet.....	1,308	1	1,318	-2	1,332	(s)	1,262	2	1,300	2	1,409	-2	(s)
Kerosene.....	74	-1	63	0	49	0	22	0	26	(s)	26	0	(s)
Distillate Fuel Oil.....	2,909	1	2,813	2	2,918	(s)	3,010	36	2,930	64	3,095	-2	17
Residual Fuel Oil.....	820	(s)	841	-1	819	(s)	887	10	896	12	797	-1	3
Naphtha Pet. Feedstock.....	124	0	128	0	130	0	134	0	137	0	136	0	0
Other Oils Pet. Feedstock.....	287	-1	292	-2	314	(s)	301	-1	269	-2	286	0	-1
Special Naphthas.....	47	(s)	47	0	57	(s)	55	0	54	(s)	59	0	(s)
Lubricants.....	154	0	162	(s)	165	-1	149	0	155	0	162	0	(s)
Waxes.....	19	0	21	0	20	0	21	0	20	1	21	0	(s)
Petroleum Coke.....	598	-1	615	(s)	617	2	607	-2	595	3	622	1	(s)
Asphalt and Road Oil.....	285	-9	306	1	373	5	414	2	459	-13	529	1	-2
Still Gas.....	622	-1	636	-1	623	(s)	652	-7	677	-10	684	(s)	-3
Miscellaneous Products.....	45	(s)	43	(s)	45	(s)	41	(s)	39	(s)	44	(s)	(s)
Imports.....	7,964	19	7,930	4	8,342	-77	8,485	255	8,348	46	8,745	8	42
Crude Oil.....	6,292	0	6,156	0	6,513	-26	6,698	230	6,549	38	7,175	8	41
Pentanes Plus.....	10	0	49	(s)	29	0	36	0	43	0	3	0	(s)
LPGs.....	117	9	128	8	123	(s)	142	14	148	(s)	111	(s)	5
Ethane/Ethylene.....	11	0	10	0	12	0	(s)	18	7	0	12	0	3
Propane/Propylene.....	72	7	78	5	85	(s)	112	-4	96	(s)	75	(s)	1
Normal Butane/Butylene.....	31	1	32	1	18	-1	22	-7	34	-2	17	-2	-2
Isobutane/Isobutylene.....	3	1	8	2	8	1	7	7	11	2	7	2	2
Oth Hydrocbrns/Oxygenates.....	17	0	17	1	12	2	5	0	17	0	15	0	(s)
Unfinished Oils.....	486	0	496	0	496	0	397	27	509	0	403	0	4
Motor Gas Blend Comp.....	21	0	31	0	47	0	41	0	16	0	26	0	0
Aviation Gas Blend Comp.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline.....	204	0	216	0	198	-31	253	0	308	8	251	0	-4
Reformulated.....	0	0	0	0	0	0	0	0	0	0	0	0	0
Oxygenated.....	0	0	0	0	0	0	0	0	0	0	2	0	0
Other.....	204	0	216	0	198	-31	253	0	308	8	249	0	-4
Finished Aviation Gasoline.....	(s)	0	(s)	0	(s)	0	(s)	0	(s)	0	(s)	0	0
Jet Fuel.....	89	(s)	110	0	102	-26	88	0	75	0	111	0	-4
Naphtha-Type Jet.....	7	0	9	0	7	-5	2	0	8	0	31	0	-1
Kerosene-Type Jet.....	82	(s)	101	0	96	-21	86	0	67	0	79	0	-4
Kerosene.....	1	0	2	0	1	0	1	0	(s)	0	(s)	0	0
Distillate Fuel Oil.....	182	0	224	(s)	235	(s)	209	0	153	(s)	168	0	(s)
Residual Fuel Oil.....	383	2	325	0	352	(s)	377	0	308	1	299	0	1
Naphtha Pet. Feedstock.....	31	0	18	0	32	5	46	0	98	0	46	(s)	1
Other Oils Pet. Feedstock.....	93	0	99	0	144	0	125	-16	75	0	87	0	-3
Special Naphthas.....	3	0	7	0	6	(s)	2	0	4	0	6	0	(s)
Lubricants.....	15	0	9	1	13	0	8	0	9	0	9	0	(s)
Waxes.....	1	0	1	0	3	-1	3	0	2	0	3	0	(s)
Petroleum Coke.....	1	0	1	0	7	0	0	0	0	0	1	0	0
Asphalt and Road Oil.....	15	8	43	-6	28	0	54	0	25	0	29	0	(s)
Miscellaneous Products.....	3	0	2	0	(s)	0	1	(s)	12	0	2	0	(s)

(s) = Less than 500 barrels per day.

NA = Not Available.

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, 1993
(Thousand Barrels per Day, Except Where Noted)

Product	January		February		March		April		May		June		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
Stocks (Thousand Barrels)	1,611,388	4,451	1,595,153	4,199	1,583,590	4,040	1,611,337	3,703	1,643,278	4,428	1,660,392	4,305	4,188
Crude Oil (excl. SPR)	325,640	1,022	331,285	1,000	337,114	-71	349,129	-486	352,845	-85	351,747	484	311
Pentanes Plus	8,260	154	7,731	-54	8,318	58	9,683	0	10,236	74	10,634	161	66
LPGs	74,993	-1,198	66,322	-1,201	68,610	158	80,596	409	97,260	527	111,342	936	62
Ethane/Ethylene	16,496	137	15,940	376	17,596	-2	19,595	1	20,480	2	22,170	365	147
Propane/Propylene	33,489	-1,078	26,174	-902	21,834	45	28,817	208	36,937	340	44,921	95	-215
Normal Butane/Butylene	14,383	-219	13,589	-483	16,421	57	20,844	85	26,599	87	30,616	402	-12
Isobutane/Isobutylene	10,625	-38	10,619	-192	10,759	58	11,340	115	13,244	98	13,635	74	19
Oth Hydrocbns/Oxygenates	14,016	1,274	13,515	462	14,528	-17	15,362	-158	16,702	-121	17,684	-4	239
Unfinished Oils	99,259	974	99,707	1,025	103,484	1,014	101,927	-289	104,377	32	101,407	98	476
Motor Gas Blend Comp	41,309	431	41,800	777	40,370	686	39,465	1,153	37,201	580	36,835	631	710
Aviation Gas Blend Comp	61	0	55	0	51	0	59	0	53	0	37	0	0
Finished Motor Gasoline	195,291	402	199,766	-263	187,039	4	182,920	99	185,412	258	183,150	-434	11
Reformulated	0	0	0	0	0	0	0	0	0	0	0	0	0
Oxygenated	32,349	-1,349	23,025	-1,622	17,461	-1,971	11,280	-1,933	10,155	-2,504	8,829	-2,475	-1,976
Other	162,942	1,751	176,741	1,359	169,578	1,975	171,640	2,032	175,257	2,762	174,321	2,041	1,987
Finished Aviation Gasoline	1,717	2	1,905	1	1,783	0	1,771	-20	1,674	-6	1,805	-9	-5
Jet Fuel	41,014	-37	42,315	74	41,429	278	41,322	-130	42,471	-107	44,796	23	17
Naphtha-Type Jet	4,763	0	4,489	3	4,415	1	4,043	-18	4,242	11	4,065	0	-1
Kerosene-Type Jet	36,251	-37	37,826	71	37,014	277	37,279	-112	38,229	-118	40,731	23	17
Kerosene	5,289	-4	4,520	-23	4,455	-43	3,933	-39	4,170	13	5,389	0	-16
Distillate Fuel Oil	130,222	-42	109,433	344	97,456	-523	98,341	618	101,556	754	109,436	128	213
Residual Fuel Oil	44,221	63	42,116	98	40,690	64	41,409	314	43,046	298	45,795	114	159
Naphtha Pet. Feedstock	1,616	0	1,801	0	1,787	0	2,360	0	2,746	0	2,971	0	0
Other Oils Pet. Feedstock	1,680	-25	1,958	-12	1,846	-4	1,372	-12	1,502	-70	1,250	0	-21
Special Naphthas	2,216	231	2,256	224	2,389	249	2,380	243	2,456	208	2,189	218	229
Lubricants	13,514	230	13,691	270	13,437	264	12,976	307	12,503	334	12,032	294	283
Waxes	919	0	901	0	860	0	880	0	1,002	95	871	0	16
Petroleum Coke	10,494	253	10,597	475	10,710	734	10,532	624	10,830	730	9,997	473	548
Asphalt and Road Oil	22,115	411	25,336	617	29,111	867	30,853	791	30,745	588	25,949	828	684
Miscellaneous Products	2,231	310	2,336	385	2,532	322	2,365	279	2,369	306	2,323	384	331
Product Supplied	16,320	-92	17,397	-69	17,688	-145	16,673	32	16,340	119	17,032	37	-19
Crude Oil	10	0	10	0	11	0	9	0	10	0	8	0	0
Pentanes Plus	196	-1	222	6	190	-1	191	-3	204	-3	172	-1	(s)
LPGs	1,917	46	1,928	23	1,910	-34	1,495	30	1,393	18	1,463	10	15
Ethane/Ethylene	672	-5	632	-4	589	12	558	18	566	1	541	-10	2
Propane/Propylene	1,179	43	1,261	1	1,165	-30	812	-7	746	2	744	12	4
Normal Butane/Butylene	31	8	-5	17	109	-9	80	12	59	12	126	2	7
Isobutane/Isobutylene	35	(s)	34	8	47	-7	45	6	23	3	51	5	2
Oth Hydrocbns/Oxygenates	0	0	0	0	0	0	0	0	0	0	0	0	0
Unfinished Oils	-144	-69	-103	-61	-47	-66	-160	5	-227	-5	-217	-3	-33
Motor Gas Blend Comp	0	0	0	0	0	0	0	0	0	0	0	0	0
Aviation Gas Blend Comp	(s)	0	(s)	0	(s)	0	(s)	0	0	0	(s)	0	0
Finished Motor Gasoline	6,746	-21	7,129	7	7,397	-34	7,401	4	7,531	57	7,692	11	4
Reformulated	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxygenated	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Finished Aviation Gasoline	10	(s)	12	(s)	27	(s)	19	(s)	28	-1	23	(s)	(s)
Jet Fuel	1,464	1	1,488	-6	1,493	-33	1,393	15	1,404	1	1,538	-6	-5
Naphtha-Type Jet	93	-1	143	(s)	123	-4	115	-1	115	-1	168	(s)	-1
Kerosene-Type Jet	1,371	2	1,346	-6	1,371	-28	1,278	15	1,289	2	1,370	-7	-3
Kerosene	63	-1	91	1	52	1	30	(s)	11	-2	-15	(s)	(s)
Distillate Fuel Oil	3,141	3	3,478	-11	3,386	28	2,949	-2	2,624	60	2,843	19	17
Residual Fuel Oil	1,020	(s)	1,128	-2	1,065	1	1,070	1	1,014	14	857	5	3
Naphtha Pet. Feedstock	158	0	139	0	162	5	181	0	222	0	174	(s)	1
Other Oils Pet. Feedstock	388	-1	381	-2	462	-1	441	-17	339	(s)	382	-2	-4
Special Naphthas	40	-8	46	(s)	58	-1	56	(s)	55	1	70	(s)	-1
Lubricants	149	-7	144	-1	166	(s)	157	-1	142	-1	171	1	-2
Waxes	18	0	21	0	23	-1	22	0	16	-2	26	3	(s)
Petroleum Coke	339	-9	373	-7	394	-7	336	2	362	(s)	407	9	-2
Asphalt and Road Oil	145	-14	233	-12	277	-4	405	4	485	-7	709	-7	-6
Still Gas	622	-1	636	-1	623	(s)	652	-7	677	-10	684	(s)	-3
Miscellaneous Products	39	-10	41	-3	39	2	47	2	50	-1	47	-3	-2

(s) = Less than 500 barrels per day.

NA = Not Available

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.

Appendix D

EIA 819M Monthly Oxygenate Telephone Report



The Clean Air Act Amendments of 1990 include provisions intended to reduce toxic vehicle emissions.

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. These data have been published in the *Weekly Petroleum Status Report* (WPSR) and the *Petroleum Supply Monthly* since March 1992.

Data are collected from a sample of respondents reporting on the Monthly Petroleum Supply Reporting System surveys. Final data on production and stocks of fuel ethanol and MTBE are presented in the Detailed Statistics section beginning with the March 1993 issue. The quantity of oxygenates blended into motor gasoline previously published in this appendix is now presented in the Highlights section.

Table D1. U.S. Summary Table, September 1993

Products	September 1993		August 1993		Year-to-Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Fuel Ethanol						
Production	2,145	72	2,036	66	19,945	73
Stocks	2,633	--	2,768	--	2,633	--
MTBE						
Production	4,722	157	4,396	142	36,146	132
Stocks	15,510	--	17,047	--	15,510	--

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												
1992	78	71	68	68	68	66	66	70	67	74	74	75
1993	76	73	77	76	74	76	69	66	72			
Stocks (thous. bbls.)												
1992	1,076	1,287	1,462	1,457	1,858	1,941	2,362	2,530	2,973	2,980	2,547	1,791
1993	2,036	1,929	1,878	2,069	2,314	2,499	2,459	2,768	2,633			
East Coast (PADD I)												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)												
1992	85	93	100	82	88	67	200	207	177	163	139	99
1993	117	64	62	41	138	112	37	157	135			
Midwest (PADD II)												
Production												
1992	73	66	63	64	64	61	61	66	66	72	72	73
1993	74	71	75	74	73	74	67	64	70			
Stocks (thous. bbls.)												
1992	532	662	791	794	1,010	1,143	1,344	1,361	1,639	1,553	1,279	889
1993	1,094	1,124	1,143	1,310	1,322	1,413	1,570	1,408	1,314			
Gulf Coast (PADD III)												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)												
1992	248	344	394	452	530	464	562	612	405	477	465	254
1993	203	244	216	294	312	333	358	616	530			
Rocky Mountain (PADD IV)												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)												
1992	27	11	20	14	15	12	17	20	21	44	60	70
1993	61	44	45	41	42	45	47	47	50			
West Coast (PADD V)												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)												
1992	184	177	156	114	214	254	240	330	732	743	604	479
1993	561	453	412	383	502	596	447	540	604			

W = Withheld to avoid disclosure of individual company data.

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

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

Table D3. Monthly Methyl Tertiary Butyl Ether (MTBE) Production and Stocks by Petroleum Administration for Defense Districts (PADD)
(Thousand Barrels per Day, Except Where Noted)

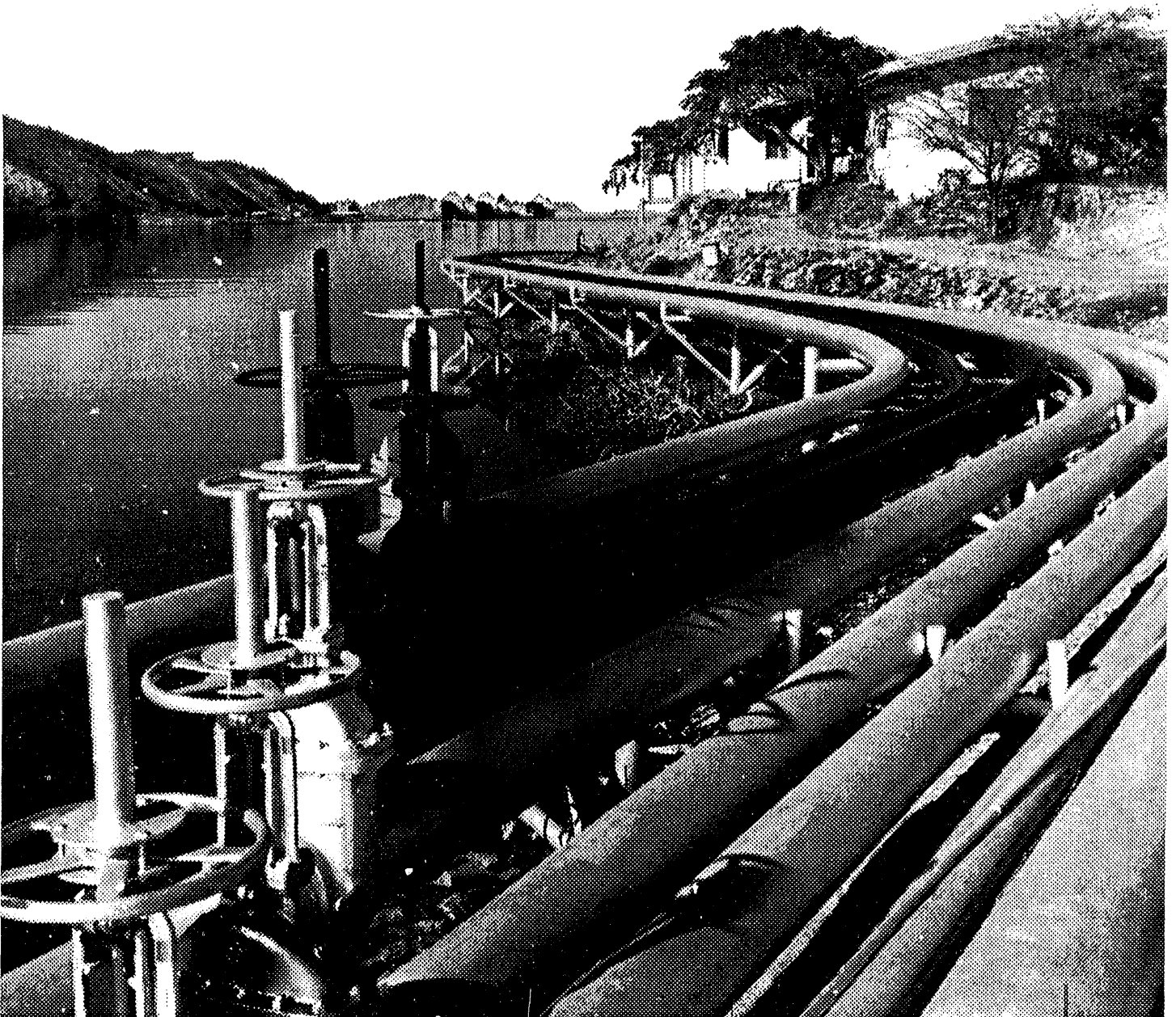
District/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total U.S.												
Production												
1992	98	94	89	79	90	90	101	91	104	118	128	125
1993	115	114	112	138	132	126	155	142	157			
Stocks (thous. bbls.)												
1992	11,999	12,681	13,966	14,962	15,961	18,887	20,436	23,131	22,853	19,208	16,342	12,818
1993	10,648	10,148	10,550	11,953	13,476	14,544	16,044	17,047	15,510			
East Coast (PADD I)												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)												
1992	3,086	2,944	3,551	3,929	4,453	4,663	4,824	5,046	4,875	3,839	3,098	2,613
1993	1,881	1,833	1,492	1,598	2,201	2,578	2,429	3,062	2,604			
Midwest (PADD II)												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
Gulf Coast (PADD III)												
Production												
1992	88	82	77	69	77	77	88	78	93	108	118	114
1993	102	101	99	124	117	111	139	125	139			
Stocks (thous. bbls.)												
1992	5,104	5,711	6,058	6,728	6,870	8,549	8,928	9,847	9,192	8,309	7,380	6,159
1993	4,987	4,707	5,304	6,152	6,553	6,890	7,834	8,040	7,664			
Rocky Mountain (PADD IV)												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
West Coast (PADD V)												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W	W	W	W	W	W	W			
Stocks (thous. bbls.)												
1992	3,418	3,673	4,011	4,064	4,309	5,385	6,419	7,936	8,466	6,723	5,543	4,768
1993	3,536	3,333	3,516	3,921	4,427	4,774	5,452	5,481	4,782			

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."

Glossary



Pipelines carry natural gas across geographic regions.

Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; $\text{CH}_3\text{-(CH}_2\text{)}_n\text{-OH}$ (e.g., methanol, ethanol, and tertiary butyl alcohol).

Alkylate. The product of an alkylation reaction. It usually refers to the high octane product from alkylation units. This alkylate is used in blending high octane gasoline.

Alkylation. A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it is calculated as follows:

$$\text{Degrees API} = \frac{141.5}{\text{sp.gr. } 60^\circ \text{ F} / 60^\circ \text{ F}} - 131.5$$

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, reformat, 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 (C₆H₆). An aromatic hydrocarbon present in small proportion in some crude oils and made commercially from petroleum by the catalytic reforming of naphthenes in petroleum naphtha. Also made from coal in the manufacture of coke. Used as a solvent, in manufacturing detergents, synthetic fibers, and petrochemicals and as a component of high-octane gasoline.

Blending Components. See Motor or Aviation Gasoline Blending Components.

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

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

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

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

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

Butane (C₄H₁₀). A normally gaseous straight-chain or branch-chain hydrocarbon extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Isobutane (C₄H₁₀). A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

Normal Butane (C₄H₁₀). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

Butylene (C₄H₈). An olefinic hydrocarbon recovered from refinery processes.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Foreign. Crude oil produced outside the United States. Imported Athabasca hydrocarbons 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 and Greater than 0.05% sulfur.

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

No. 2 Distillate. A petroleum distillate which meets the specifications for No. 2 heating or fuel oil as defined in ASTM D 396 and/or the specifications for No. 2 diesel fuel as defined in ASTM Specification D 975 with distillation temperatures of 540° and 640° F at the 90-percent recovery point, and kinematic viscosities between 2.0 and 4.3 centistokes at 100° F.

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

100° F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

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

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

ETBE (Ethyl tertiary butyl ether) (CH₃)₃COC₂H₅. An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

Ethane (C₂H₆). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

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

Ethylene (C₂H₄). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

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

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

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

Fluid Coking. A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for

continuous conversion of heavy, low-grade oils into lighter products.

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

Examples:

- (1) Unfinished oils coming out of a crude oil distillation unit which are input into a catalytic cracking unit are considered fresh feed to the catalytic cracking unit.
- (2) Unfinished oils coming out of a catalytic cracking unit being looped back into the same catalytic cracking unit to be reprocessed are not considered fresh feed.

Fuel Ethanol (C₂H₅OH). An anhydrous denatured aliphatic alcohol intended for gasoline blending as described in Oxygenates definition.

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

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

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 goods into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Isobutane. See Butane.

Isobutylene (C₄H₈). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isohexane (C₆H₁₄). A saturated branch-chain hydrocarbon. It is a colorless liquid that boils at a temperature of 156.2° F.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane (C₄), an alkylation process feedstock, and normal pentane and hexane into isopentane (C₅) and isohexane (C₆), high-octane gasoline components.

Isopentane. See Natural Gasoline and Isopentane.

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

Kerosene-Type Jet Fuel. A quality kerosene product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. The fuel is designated in ASTM Specification D1655 and Military Specification MIL-T-5624L (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 commercial use.

Military. Kerosene-type jet fuel intended for military use.

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 eligible 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 D439 or Federal Specification VV-G-1690B, includes a range in distillation temperatures from 122° to 158° F at the 10-percent recovery point and from 365° to 374° 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 are certified as "reformulated gasoline" by the U.S. Environmental Protection Agency.

Oxygenated Gasoline. Gasoline formulated for use in motor vehicles that has an oxygen content of 1.8 percent or higher, by weight.

Other Finished. Motor gasoline not included in the oxygenated or reformulated gasoline categories.

Motor Gasoline Blending. Mechanical mixing of motor gasoline blending components and oxygenates to produce finished motor gasoline (see definition of Motor Gasoline).

Motor Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished motor gasoline (e.g. straight-run gasoline, alkylate, reformat, benzene, toluene, and xylene). 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) ($\text{CH}_3)_3\text{COCH}_3$. An ether intended for gasoline blending as described in Oxygenate definition.

Nameplate Capacity. The maximum design production capacity specified by the manufacturer of a processing unit or the maximum amount of a product that can be produced running the manufacturing unit at full capacity.

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-56241. (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

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

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

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

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

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C₅H₁₂), obtained by fractionation of natural gasoline or isomerization of normal pentane.

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

Normal Butane. See Butane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Gabon, 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.

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 instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which was established in 1942.

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 amount of product that can be produced from processing facilities.

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

Propane (C₃H₈). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene (C₃H₆). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

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 Specifications D396 and 975. 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. Imports of residual fuel oil include imported crude oil burned as fuel.

Residuum. Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000° F.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Shell Storage Capacity. The design capacity of a petroleum storage tank which is always greater than or equal to working storage capacity.

Special Naphthas. All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6 million BTU's per fuel oil equivalent barrel.

Stock Change. The difference between stocks at the beginning of the month and stocks at the end of the month. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

Strategic Petroleum Reserve (SPR). Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Sulfur. A nonmetallic element of lemon-yellow color, sometimes known as "brimstone".

Supply. The components of petroleum supply are field production, refinery production, imports, and net receipts when calculated on a PAD District basis.

TAME (Tertiary amyl methyl ether) $(CH_3)_2(C_2H_5)COCH_3$. An oxygenate blend stock formed by the catalytic etherification of isoamylene with methanol.

Tank Farm. An installation used by gathering and trunk pipeline companies, crude oil producers, and terminal operators (except refineries) to store crude oil.

Tanker and Barge. Vessels that transport crude oil or petroleum products. Data are reported for movements between PAD Districts; from a PAD District to the Panama Canal; or from the Panama Canal to a PAD District.

TBA (Tertiary butyl alcohol) $(CH_3)_3COH$. An alcohol primarily used as a chemical feedstock, a solvent or feedstock for isobutylene production for MTBE; produced as a co-product of propylene oxide production or by direct hydration of isobutylene.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

Toluene $(C_6H_5CH_3)$. Colorless liquid of the aromatic group of petroleum hydrocarbons, made by the catalytic reforming of petroleum naphthas containing methyl cyclohexane. A high-octane gasoline-blending agent, solvent, and chemical intermediate, base for TNT.

Unaccounted for Crude Oil. Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum. See individual categories for definition.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

United States. The United States is defined as the 50 States and the District of Columbia.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling

temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics: penetration at 77° F (D1321)-60 maximum; viscosity at 210° F in Saybolt Universal Seconds (SUS); (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum; oil content (D721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics: viscosity at 210° F (D88)-59.9 SUS (10.18 centistokes) maximum; oil content (D721)-0.5 percent maximum; other +20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics: viscosity at 210° F (D88)-59.9 SUS (10.18 centistokes) maximum; oil content (D721)-0.51 percent minimum to 15 percent maximum.

Working Storage Capacity. The difference in volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

Xylene $(C_6H_4(CH_3)_2)$. Colorless liquid of the aromatic group of hydrocarbons made the catalytic reforming of certain naphthenic petroleum fractions. Used as high-octane motor and aviation gasoline blending agents, solvents, chemical intermediates. Isomers are metaxylene, orthoxylene, paraxylene.

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