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Release of Petroleum
Supply Data (See Page iii)

Petroleum Supply Monthly

January 1994

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Petroleum Supply Monthly

January 1994

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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

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Early Release of Petroleum Supply Data

Beginning on February 9, 1994, the *Weekly Petroleum Status Report* (WPSR) data, will be available on the Energy Information Administration's (EIA) Electronic Publication Bulletin Board (EPUB) at 9:00 a.m. (EST) each Wednesday. Contact Lynn A. Greenfield on (202) 586-2992 for further information and schedules.

In addition, the EIA plans to implement a new schedule which will provide our customers with an early estimate of monthly data between 6 and 12 days after the close of the month. Data will be released through EPUB under a new option entitled, "Petroleum Supply Monthly." A hardcopy release of the early estimates will also be available in the *WPSR* and the *Petroleum Supply Monthly* (PSM) as Table H1. Following is the first month's schedule for the early release of data to our customers:

- February 9, 1994: The December 1993 and January 1994 monthly estimates, based upon weekly data filed with EIA, will be available in EPUB at 5:00 p.m.. This data will appear in the *WPSR* as Table H1, printed on February 10.
- February 25, 1994: The Table H1 EPUB release of February 9 will be updated to include actual monthly data for December 1993. Table H1 in the *PSM* will be modified to reflect these new early monthly estimates.

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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Feature Article

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

Strategic Shipping Lanes

by Christopher B. Bordeaux

Introduction

This article describes six of the world's most important shipping lanes. One of the reasons these shipping lanes are important is because of the large quantities of oil that flow through them. Nearly half of the 66 million barrels of oil consumed each day, throughout the world, passes through one or more of these shipping lanes. These narrow shipping lanes are subject to congestion and are therefore referred to in this article as "chokepoints."

The six chokepoints are:

Strait of Hormuz (connects the Persian Gulf with the Gulf of Oman and the Arabian Sea)

Strait of Malacca (connects the northern Indian Ocean and the South China Sea and the Pacific Ocean)

Suez Canal in Egypt (connects the Red Sea with the Mediterranean Sea)

Bosporus (connects the Black Sea with the Aegean Sea and the Mediterranean Sea)

Rotterdam Harbor (connects the North Sea with the Rhine River)

Panama Canal in Central America (connects the Pacific Ocean with the Caribbean Sea)

The relative importance of these shipping lanes to world oil flows can be determined by evaluating the quantity of oil that flows through them and the number of merchant vessels, especially tankers, that navigate through them. The strategic significance for each chokepoint is examined and the alternate routes discussed. The possibility of closure is reviewed in light of historical events that have affected regional shipping, such as, bad weather, accidental collisions, acts of piracy, terrorism, and war.

Figure FE1. Illustrative World Crude Oil Flows and Shipping Lanes

Note: The arrows represent an approximation of the corresponding data.

Source: Energy Information Administration, *International Energy Annual*, 1989, Figure 17 and Table 20.

Table FE1. Chokepoint Comparison

	Hormuz	Malacca	Suez	Bosporus	Rotterdam	Panama
Throughput/Day						
Number of tankers ¹	70	41	10	20	8	5
Oil (rmbd)	14.0	7.0	0.9	1.6	0.6	0.5
Other routes						
Pipeline	Petroline ²	None	Sumed ³ , Tipline	None	None	Trans-Panama
Shipping	None	Indonesian Straits (Lombok, Sunda, Ombal)	South Africa's Cape of Good Hope	None	None	Cape Horn, South America
Destinations						
From	Persian Gulf	Persian Gulf	Red Sea	Black Sea	North Sea	Pacific
To	Worldwide	Worldwide	Mediterranean	Mediterranean	Europoort	Gulf Coast
Possibility of Closure	Very Low	Very Low	Medium	High	Low	Low

¹Includes all types of tankers, i.e. crude, product, chemical and LNG.

²Iraq-Syria, Iraq-Turkey, and Iraq-Red Sea pipelines require refurbishment.

³Iraq-Syria, Iraq-Turkey.

Note: These figures are estimates based on the best available data as discussed in the text.

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

Strait of Hormuz

The vulnerability of oil shipments passing through the Strait of Hormuz has long been a subject of concern among major oil-consuming countries.¹ The Persian Gulf² is the major source of seaborne oil trade, accounting for approximately 26 percent of world oil exports in 1991. Oil tankers carry some 14 million barrels of crude oil through the Strait daily. Most of this oil is destined for the United States, Western Europe, or Japan. For example, in 1992 the United States imported one fourth (25.6 percent) of its net oil imports from the Persian Gulf; Japan imported more than two-thirds (65.6 percent) of its net oil imports from the Persian Gulf; and the Western European nations of the Organization for Economic Cooperation and Development (OECD) imported 43.3 percent of their net oil imports from the Persian Gulf.³

Furthermore, the Persian Gulf area is the scene of the world's most intensive offshore exploration, production, refining and tanker terminal operations. Approximately 120 merchant ships pass through the Strait of Hormuz each day.⁴ Most of the supertankers or Ultra Large Crude Carriers (ULCCs) are capable of carrying

over 2.3 million barrels of oil and the Very Large Crude Carriers (VLCCs) are capable of carrying 1.1 to 2.3 million barrels. Most of these supertankers passing through the Strait of Hormuz are destined for the United States, Western Europe, or Japan.

The majority of the 17 million barrels per day of oil produced in the Persian Gulf passes through the Strait of Hormuz.⁵ This narrow 6 mile wide shipping lane is defined by a 2 mile wide channel for inbound traffic, a 2 mile wide channel for outbound traffic, and a 2 mile wide buffer zone. This shipping lane is the shortest practicable route around the rugged northern Oman Peninsula. However, the narrowest point between Iran and Oman is defined by a 25 mile wide body of navigable water. The Central Intelligence Agency reported that, given the dimensions of the Strait of Hormuz, the sinking of several supertankers would not block the flow of oil, although attendant oil slicks might hamper shipping for a while.⁶

During the Iran/Iraq war in early 1986, tanker traffic was reduced in the Persian Gulf mainly because of air strikes directed at oil terminals and tankers (17 tankers were damaged, five more than 325,000 dead weight tons (dwts) or 2.4 million barrels).⁷ Additionally, there was the threat of underwater mines in the

¹Central Intelligence Agency, "The Strait of Hormuz: A Geographic Brief," Reference Number GI-83-10267, (Washington, DC, November 1983).

²Persian Gulf countries are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

³Energy Information Administration, International Petroleum Statistics Report, DOE/EIA-0520(93/11), Tables 4.4, 4.7, 4.9.

⁴Maritime Administration, "Density of Merchant Shipping Traffic in Various Choke Points", (Washington, DC, May 1989).

⁵Energy Information Administration, International Petroleum Statistics Report, DOE/EIA-0520(93/11), Table 4.4.

⁶Central Intelligence Agency, "The Strait of Hormuz: A Geographic Brief," Reference Number GI-83-10267, November 1983.

⁷International Petroleum Encyclopedia, 1986 issue, PennWell Publishing Company, (Tulsa, Oklahoma) p. 171.

Figure FE2. Strait of Hormuz

Source: Energy Information Administration

shipping lanes. An international naval task force policed the Persian Gulf and cleared the shipping lanes of underwater mines. Nevertheless, the increased hazards in the Persian Gulf during the Iran/Iraq war resulted in higher insurance rates, higher shipping costs, and higher oil prices.

At one point during the war, Iran threatened to block the Strait of Hormuz but decided against it because it would have locked-in its own exports. Much of the oil that normally passed through the Strait of Hormuz was redirected and either transported directly to the Mediterranean Sea via pipeline or across Saudi Arabia to the Red Sea, then transhipped up through the Suez Canal/Sumed pipeline or around South Africa's Cape of Good Hope. These longer alternate routes resulted in increased oil costs.

During the Iran/Iraq war, the main pipeline available for transporting crude oil directly to the Mediterranean Sea was the Iraq-Turkey Pipeline. Similarly, the pipelines available to transport crude oil across Saudi Arabia to the Red Sea were the Iraq-Saudi Arabia Pipeline (IPSA) and East-West Pipeline (Petroline). This diversification of oil flow provided greater security for consuming nations.

The only pipeline currently being utilized, however, is the Petroline. Only about one third of the Petroline's 4.8 million barrels per day capacity is being utilized. In today's market, because tanker fuel costs are so low, it is more economical to move oil in supertankers to the Red Sea rather than move it through Petroline.

Strait of Malacca

The Strait of Malacca connects the northern Indian Ocean, the South China Sea, and the Pacific Ocean. The Strait of Malacca is 576 miles long and 230 miles wide. Given these dimensions, it is understandable why many consider this Strait to be the high seas. This strategic shipping lane is bordered by Indonesia's Sumatra Island and the Malaysian peninsula. The bottleneck for this Strait begins with the more narrow Singapore Strait which lies between Singapore and the Indonesian islands to the south. The Singapore Strait is 69 miles long. The narrowest point in the Strait of Singapore is Phillip Channel.

The Phillip Channel runs past Singapore and is less than two miles wide at its narrowest point. There are eastbound and westbound

shipping lanes. This tight spot creates a natural bottleneck for passing vessels. It has been a favored passageway for maritime trade since the 4th century A.D. Nearly 40,000 vessels transit the Strait each year.⁸

This shipping channel presents a difficult problem for deducing through tonnages since a number of vessels which are eastbound stop at Singapore, discharge their cargo and return to the west; the same situation exists for vessels coming from the South China Sea. In and around Singapore, numerous fishing vessels and heavy local cross-channel traffic create additional safety hazards. In recent years, numerous accidents, oil spills and pirate attacks have made the waterway one of the world's most perilous.⁹ For example, last year 110 accidents were reported.¹⁰

Significant amounts of oil flow from the Middle East to Japan and the developing Pacific Asian countries through this channel. The oil flow through this strategic channel accounts for more than 90

percent of the region's imports. Roughly seven million barrels of crude oil and refined products pass through the straits each day. Much of this oil is bound for Japan, South Korea, and the other developing countries in the Pacific rim. Japan imports roughly 71 percent of its oil requirements through this channel.¹¹

During 1991, there were 36 acts of piracy involving tankers, three of which were U.S. flagged. These occurred primarily in and around the Phillip Channel. The slow moving, heavily laden tankers ride low in the water and are a favored target for pirate attacks. Incidence of piracy is said to be underreported by a factor of two. The potential for an accident is great if pirates deprive a crew command and control of the ship. Pirates are considered a dangerous nuisance.¹²

The effect of an oil spill, resulting from the grounding or collision of a tanker, would largely depend on the exact location, magnitude, and weather conditions including tidal movements. In

Figure FE3. Strait of Malacca

Source: International Petroleum Encyclopedia and Central Intelligence Agency.

⁸Maritime Administration, "Density of Merchant Shipping Traffic in Various Choke Points," (Washington, DC, May 1989).

⁹Based on a Intelligence Memorandum from the Central Intelligence Agency, dated February 19, 1993. RTT M 93-20017, Geographic Resources Division and Energy Resources Division, Office of Resources, Trade, and Technology.

¹⁰Agence France Presse, "Plan to make vessel-reporting mandatory in Malacca Strait," July 2, 1993.

¹¹Energy Information Administration, International Energy Annual 1991, DOE/EIA-0219(91), pp: 49 and 52.

¹²Department of Energy, Office of Intelligence, "Piracy: The Threat to Tanker Traffic," Dr. Robert K. Mullen, (Washington, DC, September 1992), pp: 1-8.

the worst case scenario, where a large oil spill occurs in the worst possible location (such as the middle of Phillip Channel) the result could be closure of one or both shipping lanes for several weeks. The possibility of that happening, however, is judged to be remote.

The consequences of a closure in shipping traffic would ultimately affect the refining operations in and around Singapore. This is significant because Singapore is comparable to Houston with respect to the intensity of oil refining. Disruption of shipping schedules, with delays in offloading crude oil or taking on cargos of petroleum products is considered more likely.¹³

Because the surrounding countries, Malaysia, Indonesia, the Philippines and Japan would suffer economic damage if the flow of oil through the Strait of Malacca were interrupted; they have organized a quick response plan under the authority of the International Maritime Organization (IMO).

If the Phillip Channel were blocked, merchant ships would be redirected southeast of Sumatra through the Lombok-Makassar Straits, Sunda Strait, or the Ombai-Manipa Straits adding several days transit time to Japan-bound cargoes and increasing costs.

Suez Canal

The 124 year old Suez Canal links the Mediterranean with the Red Sea. The 120 mile long canal has long enjoyed a monopoly as the only alternative to hauling goods around the Cape of Africa to the Western Europe market.¹⁴ Since the 1970s, however, the tanker traffic has been challenged by the 198 mile long Sumed oil pipeline which pumps at capacity (about 1.6 million barrels per day) across Egypt to the Mediterranean.¹⁵ Ever since the pipeline tariff has been lowered, it has become more economical to move oil through the Sumed than through the Suez Canal.

Currently, only 10 tankers transit the Suez Canal each day.¹⁶ Many of these tankers are Very Large Crude Carriers returning in ballast (empty) from the Mediterranean to the Red Sea. Typically, Suez max tankers carry a maximum of

150,000 dwts or 1.1 million barrels of oil. The Suez Canal can handle about 78 ships per day. Therefore, the Suez Canal is greatly underutilized. Currently, only 900,000 barrels of oil are transported through the Suez Canal each day, while the Sumed is operating at capacity levels of 1.6 million barrels per day. Collectively, the Suez and Sumed currently have a total throughput of about 2.5 million barrels per day.¹⁷ The planned capacity of SUMED is expected to increase to 2.4 million barrels per day by mid 1994.¹⁸

Additionally, the Israelis are moving quantities of crude oil from the Red Sea to the Mediterranean through the Trans Israel Pipeline

Figure FF4. Suez Canal

Source: Energy Information Administration, based on the *International Petroleum Encyclopedia*.

¹³Department of Energy, Office of Intelligence, "Piracy: The Threat to Tanker Traffic," Dr. Robert K. Mullen, (Washington, DC, September 1992). pp: 1-8.

¹⁴The alternate route around the South African Cape adds 4,000 nautical miles or approximately 15 days transit time.

¹⁵Reuters European Business Report, "After War Comes Trade War, Suez Canal Head Says," September 15, 1993.

¹⁶The Reuters Library Report, "Suez Canal Receipts Up, Tanker Traffic Down," September 21, 1993.

¹⁷Reuter Library Report, "Suez Canal Head Urges Arabs to Shun Israel Rivals," October 20, 1993.

¹⁸Petroleum Argus, "Middle East Peace Accord Spurs Hopes of Reopening Pipelines," September 27, 1993, p.5.

(Tipline.) The 900,000 barrels per day pipeline connects Elat on the Red Sea Coast to Ashkelon on the Mediterranean.¹⁹ This pipeline will also compete with the movement of oil through the Suez Canal.

During the Middle East Crisis of 1966, the Suez Canal was closed to all traffic. There have been several minor oil spills in the Suez Canal during the last three years disrupting shipping for only a few days.²⁰ Given the alternate routes available today, a complete closure of the Suez Canal would not have the same impact as the Middle East Crisis of 1966.

If the Suez Canal were closed and the Sumed Pipeline closed, tankers would be diverted around the Southern tip of Africa or the Cape of Good Hope. It takes a tanker approximately 15 additional days to sail (at 15 knots) around the South African Cape compared with sailing through the Suez Canal or compared with being

offloaded into the Sumed pipeline for transshipment to the Mediterranean. Assuming the average overhead of the typical tanker is \$25,000 per day, the additional cost would be \$375,000.²¹ This would add less than a penny per gallon in increased cost assuming that the average tanker was a VLCC capable of carrying 1-2 million barrels of oil.

Bosporus

This 17 mile long waterway divides Asia from Europe and links the Black Sea with the Mediterranean Sea. This natural shipping lane has been used for centuries by Eastern European countries to transport goods in and out of the Black Sea. The Montreux Convention signed in 1936 guarantees freedom of passage and navigation to merchant shipping in peacetime. At its narrowest point, north of Istanbul, it is less than one half mile wide. The waterway is one of the world's hardest to navigate.

FE5. Bosporus

Source: Central Intelligence Agency

¹⁹The Reuters European Business Report, "After War Comes Trade War, Suez Canal Head Says", September 15, 1993 and Energy Compass, "Traders Turn to Israel Route for Mediterranean Supplies," August 27, 1993, p. 3.

²⁰Txinhua General Overseas New Service, "Israel Asks Egypt to Release Detained Tanker," November 2, 1989; The Jerusalem Post, "Trial Postponed," December 6, 1989; Reuters, Saturday, AM Cycle, "Liberian Tanker Refloated After Spilling Oil in Suez Canal," June 30, 1990; and The Reuters Library Report, "Maltese Tanker Runs Aground, Spilling oil in Suez Canal," August 19, 1990.

²¹Actual tanker rates are based on the Worldscale to determine tanker charter rates. Tanker rates can vary greatly depending on length of contract, size of ship, and cargo.

There are 140 merchant ships that pass through this narrow shipping lane each day. The Bosphorus is limited to tankers that can carry a maximum of 750,000 barrels of oil. Some 22,500 foreign merchant ships sailed through in 1992, 150 percent more than in 1960. The Istanbul-based Association of Turkish sea Pilots reported that 60 percent of the ships carried oil or oil derivatives, natural gas, chemicals and even nuclear waste.

Turkish maritime experts are concerned about the perils of increased oil tanker traffic for Istanbul's 10 million people. Istanbul residents recall the spectacular collision between a Romanian supertanker and a Greek cargo ship at the mouth of the Bosphorus in 1979. The tanker exploded, killing 42 crewmen, and spilled oil burned for a month.

Because the Turks are highly dependent on the Bosphorus for fishing, they want to limit the number of tankers transporting dangerous cargoes. Turkish authorities are calling for a revision of the 1936 Montreux Convention because of the additional oil flow expected by increased oil production in Azerbaijan and Kazakhstan.²²

There are no alternate routes at this time. Turkey has vigorously objected to expansion of oil and gas exports through Russia's Black Sea ports. Citing environmental concerns, the Turks worry that this passage cannot safely accommodate an increase in the number of cargoes resulting from new Central Asian oil and gas production. In anticipation of this potential increase in Central Asian oil and gas production, the Turkish authorities are considering building a 136 mile pipeline from a European Turkish port on the Black Sea to the Aegean Sea. The initial throughput has been pegged at 600,000 barrels per day but could be expanded as more Azeri and Kazakh crude comes on-line.²³

Rotterdam Harbor

Rotterdam Harbor is Europe's largest and busiest port -- better known as "Europoort." This man-made harbor runs inland for nearly 19 miles through

a labyrinth of narrow canals connecting the Dutch and the German refineries via the Rhine River. At the Hook of Holland or the mouth of the Harbor, there is a narrow shipping channel only 1300 feet wide. Approximately 110 merchant vessels transit Europoort daily.

Nearly 600,000 barrels per day of crude oil are offloaded in Europoort. There are numerous storage terminals and refineries located in Europoort. Once the crude oil is refined, much of it is

Figure FE6. Rotterdam Harbor

Rotterdam Europoort

0 1 2 3 km
0 1 2 miles
Scale 1: 80,000

North Sea

Source: Kaartproductie: Gemeentewerken Rotterdam.

²²Metsin Demirsar, Reuters News Service, "Turkey Anxious to Limit Bosphorus Shipping," August 23, 1993.

²³Oil Market Listener, "Russia Asserts Hegemony of Central Asian Oil As Turks Mull Compromise", Roger Frey, Houston, Texas, Document ID OML1036, November 3, 1993.

Figure FE7. Panama Canal

There have been minor oil spills in and around Europoort but cleanup has been timely and efficient. There is very little possibility of a closure in Rotterdam Harbor given the excellent history of shipping in this port.

Alternate routes in the event of a closure to Rotterdam Harbor would include existing crude and product pipelines into Germany and alternate canals through Rotterdam, Amsterdam and Antwerp.

Panama Canal

The Panama Canal extends from Panama City on the Pacific Ocean to Colon on the Caribbean Sea. It is approximately 50 miles long. The narrowest portion of the canal is only 500 feet wide, thus necessitating restrictions on larger vessels. Typically, "Panamax" tankers are less than 100,000 dwts.

Between 40 and 50 ships can transit the canal daily. In 1992, approximately 500,000 barrels per day of petroleum flowed through the canal. Transit time from Alaska to the U.S. Gulf Coast via the canal or pipeline is about 16 days. A tanker would take 40 days to reach the Gulf Coast from Alaska if it had to be re-routed around Cape Horn (the southern tip of South America).

In the event of a closure, the Trans-Panama Pipeline runs from Puerto Armuelles on the Pacific to Chiriqui Grande on the Caribbean. It currently carries exclusively Alaskan North Slope (ANS) crude oil from the Pacific to the Caribbean. It has the capability to move 800,000 barrels per day.²⁴

The last oil spill affecting the canal occurred in March 1989, when a tanker and a cargo ship collided near the Pacific Ocean entrance and an estimated 200 tons of combustible oil spilled into the coastal waters.²⁵

Reasons for Closure

What could cause these shipping lanes to close? Acts of piracy, accidental collisions, foul weather, terrorism, and war are all potential causes which could create problems in these shipping lanes. Some critics argue that there is some correlation between

the increasing age of the world tanker fleet, maintenance and safety.

In fact, the average age of the world's 6,000 tankers is increasing. Over 50 percent of the world tanker fleet is older than 15 years.²⁶ If these older vessels are not maintained well the level of danger and risk involved with shipping anywhere increases. This could be important especially if navigational equipment were affected in and around one of these chokepoints.

It is very difficult to predict when and where a shipping catastrophe will occur. In the recent past, the common threat

Source: Energy Information Administration based on a Central Intelligence Agency map.

²⁴Energy Information Administration, "Country Analysis Profiles," (Washington, DC, January 1993-March 1993).

²⁵ St. Petersburg Times, Times Publishing Company, "Oil Spill Near Panama Canal", World Digest Section of Sunday, State Edition, March 12, 1989, p: 21A.

²⁶ "Tanker Markets: Recent Developments and Outlook," SS&Y Research Services Ltd., International Energy Agency, Standing Group on Emergency Questions, (Paris, February 19, 1992) pp 5-6.

among shipping catastrophies has been human error. For example, the *Exxon Valdez* oil spill into the Alaskan coastal waters was caused by human error.

The only certainty is that the magnitude and frequency of these shipping catastrophes are unpredictable.

Consequences of Closure

Similar to previous world oil disruptions, a closure of any one of these chokepoints would have an immediate impact on oil prices. For example, this was demonstrated during the Persian Gulf Crisis in 1990-1991, when the price of crude oil and finished petroleum products rose quickly on the fear of a potential shortfall. According to the General Accounting Office:²⁷

"During the first week after Iraq invaded Kuwait on August 2, 1990, crude oil prices in the United States rose by about 36 percent. Oil market shocks can have significant effects on the economy. The lost economic output from a shock that increases the price of crude oil by \$5 a barrel has been estimated to range from about 0.1 percent to 2 percent of the United States' gross national product."

Given today's high-tech world of oil trading through such venues as the New York Market Exchange (NYMEX), the very perception of decreasing security of oil supplies is sufficient to increase spot prices. For example, almost immediately after Operation Desert Storm, when it became evident that Allied Forces would prevail, the perceived security of world oil supplies changed, thereby lowering spot prices.²⁸

Outlook for the Future

The flow of world oil is interconnected through these well established shipping lanes. Over time, these shipping lanes have become more congested, increasing the likelihood of accidents.

These accidents may occur simply because of human error. However, the countries wherein these chokepoints lie are becoming more aware of the costly consequences of shipping accidents. For example, many countries now require ship owners to carry a \$150 million liability insurance policy.

The flow of world oil through these shipping lanes is expected to increase. As stated in the "International Energy Outlook,"²⁹ "Only OPEC countries, particularly the Persian Gulf members, can add enough capacity to meet anticipated increases in world oil demand."

This means more exports through the Persian Gulf and other strategic chokepoints prior to reaching consuming countries.

It is anticipated that seaborne oil exports from the Persian Gulf will jump almost 30 percent by 1997 from 1991 levels. There will be a worldwide rise of 16 percent in the volume of seaborne crude oil trade, with a 29 percent hike in movements of refined products by tanker.³⁰

According to the *Annual Energy Outlook 1993*, U.S. oil imports are expected to rise a steady 2.5 percent each year through 2010.³¹ Much of this increase will have to come from the Persian Gulf, boosting the long-haul tanker market. Because the Persian Gulf countries are best positioned to meet the anticipated increasing demand for oil in the future, the balance of power in oil markets will shift even more in favor of the region.

It is projected that the U.S. will become more dependent on Persian Gulf oil. History shows that the more dependent consumer countries are on Persian Gulf oil, the more likely that a disruption of supplies would affect economies. The vulnerability of market economies to oil supply disruptions is also projected to increase after 1995 and by 2010 will be close to the level experienced in the early 1970's.³² It is important that these six strategic shipping lanes be kept opened so that the flow of oil to world economies can be maintained.

²⁷General Accounting Office, "Energy Security and Policy- Analysis of the Pricing of Crude Oil and Petroleum Products," GAO/RCED-93-17, (Washington, DC, March 1993) p. 3.

²⁸Office of Energy Emergency Plans and Integration, "Case Studies of Oil Industry Lessons Learned During the 1990/1991 Gulf Crisis," (Washington, DC, September 1992), p. 1.

²⁹"Tanker Markets: Recent Developments and Outlook," SS&Y Research Services Ltd., International Energy Agency, Standing Group on Emergency Questions, (Paris, February 19, 1992) p. 1.

³⁰Energy Information Administration, "International Energy Outlook," DOE/EIA-048(93), p. 6.

³¹"Drewry: Mideast in firm control of world oil supplies for 1990s," Drewry Shipping Consultants, Ltd., Oil & Gas Journal, PennWell Publishing Company, (Tulsa, Oklahoma, February 8, 1993) p 44.

³²Energy Information Administration, "Annual Energy Outlook 1993," DOE/EIA-0383(93), Table A8.

³³Energy Information Administration, "International Energy Outlook," DOE/EIA-048(93), pp: 10 and 13 and Figure 7.

Highlights

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

Highlights

Production and demand for finished motor gasoline **set records** in November 1993. An **all-time high November demand** for these fuels was brought about by the lowest November retail motor gasoline prices since 1989 and steady improvements in the economy. Despite the high demand, **stock levels** of finished motor gasoline were the highest for November since 1989.

Crude oil imports declined by about 300,000 barrels per day from October, but were at a **record high** for this time of the year.

Total **demand** for petroleum products (measured as product supplied) in November 1993 **increased** to 17.7 million barrels per day (Table H1) in response to the **continued economic recovery**, **low petroleum product prices**, and cooler than normal temperatures in the West. The economy continued to improve in November, as industrial production, led by manufacturing companies, increased 1 percent from the October level to 4 percent above November 1992. Overall, U.S. temperatures were 5 percent above normal during November on a population-weighted heating-degree-day basis. Above-normal temperatures in the East were offset by below-normal temperatures in Petroleum Administration for Defense (PAD) District II (Midwest), and PAD District III (Gulf Coast.) Continued declines in crude oil prices kept petroleum product prices low, which also had an impact on demand.

Imports of petroleum products declined to 1.8 million barrels per day during November, mainly due to high refinery production.

Other November 1993 highlights include:

- Strong growth in manufacturing offset warm temperatures in the Northeast, resulting in strong demand for distillate fuel oil. Stocks of low-sulfur diesel required for on-highway use made up 43 percent of the total end-of-November inventories.
- Demand for propane was high in November partly due to colder-than-normal weather in the Midwest, although end-of-November U.S. propane stocks were the highest in 5 years.
- Declining crude oil prices and strong product demand resulted in favorable refining margins and continued high refinery utilization.

Motor Gasoline

Motor gasoline demand increased to 7.5 million barrels per day, driven by low retail motor gasoline prices and an improving economy. This **all-time high demand for November** was sparked largely by the lowest retail motor gasoline prices since 1989. The average was less than \$1.18 per gallon, supported by

the **highest November refinery production ever** of finished motor gasoline. End-of-November **stocks** totaled 181 million barrels, the **highest for this time of year since 1989**. The high finished motor gasoline inventories may be partly responsible for the low retail prices.

Imports of finished motor gasoline, averaging 0.2 million barrels per day during the first 11 months of 1993, were at their lowest level in 11 years for the January through November period.

Distillate Fuel Oil

Demand for distillate fuel oil averaged 3.2 million barrels per day during November 1993. **This was the highest level in 8 months and the highest for November since 1989**. Weather in the Nation was colder than normal. However, in the Northeast, where most of the consumption of home heating oil is centered, temperatures were actually warmer than normal for this time of year. The increase in demand was largely concentrated in the transportation and industrial sectors. Industrial production increased by 1 percent from October and was 4 percent above the November 1992 level. The largest gains were in durable goods manufacture, which were 8 percent above the year-earlier level. The increases in industrial, highway, and railway use of distillate fuel oil were associated with the higher levels of durable goods production.

Stocks of distillate fuel oil remained high, ending the month at 150 million barrels. This was the **highest end-of-November stock level since 1986**. At 64 million barrels, stocks of low-sulfur distillate accounted for 43 percent of the total.

Propane

Demand for propane increased in November to 1.2 million barrels per day. This was slightly below the year-earlier level, when a record Midwest corn harvest resulted in unusually high demand for propane for crop drying. Cold weather in the Midwest (PAD District II) prompted the strong demand, as historically this region relies on propane as a heating fuel. Although purchases of foreign propane averaged only 0.1 million barrels per day, they were at their highest level in 2 years.

Stocks of propane at the end of November remained slightly above normal, despite the strong demand. Inventories totaled 57 million barrels. Stock levels of 20 million barrels in PAD District II (Midwest) and 30 million barrels in PAD District III (Gulf Coast) were at the high end or above the normal range, respectively, of recent years.

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

Category	1993			1992	January—November	
	November	October	Difference ^a	November	1993	1992
Products Supplied	17.7	17.2	0.5	17.1	17.1	17.0
Finished Motor Gasoline	7.5	7.4	0.1	7.1	7.5	7.3
Distillate Fuel Oil	3.2	3.0	0.2	2.9	3.0	2.9
Residual Fuel Oil	1.1	1.0	0.1	1.0	1.0	1.1
Jet Fuel	1.4	1.5	(s)	1.5	1.5	1.4
Liquefied Petroleum Gases	2.0	1.8	0.2	2.1	1.7	1.7
Other Petroleum Products ^b	2.4	2.6	-0.2	2.4	2.4	2.5
Crude Oil	(s)	(s)	(s)	(s)	(s)	(s)
Crude Oil Inputs	13.7	13.7	(s)	13.5	13.6	13.4
Operating Utilization Rate (percent)	92.8	92.4	0.4	93.7	93.8	91.6
Imports	8.7	9.1	-0.4	7.9	8.5	7.9
Crude Oil	6.9	7.2	-0.3	6.1	6.7	6.1
Strategic Petroleum Reserve	0.0	0.0	0.0	0.0	(s)	(s)
Other	6.9	7.2	-0.3	6.1	6.7	6.1
Products	1.8	2.0	-0.1	1.8	1.8	1.8
Finished Motor Gasoline	0.2	0.2	(s)	0.2	0.2	0.3
Distillate Fuel Oil	0.2	0.2	(s)	0.2	0.2	0.2
Residual Fuel Oil	0.3	0.4	(s)	0.4	0.4	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	0.2	0.1
Other Petroleum Products ^b	0.8	0.8	(s)	0.7	0.8	0.7
Exports	1.0	0.9	0.1	1.0	1.0	0.9
Crude Oil	0.1	0.1	(s)	0.1	0.1	0.1
Products	0.9	0.8	0.1	0.9	0.9	0.8
Total Net Imports	7.8	8.3	-0.5	6.9	7.5	7.0
Stock Change^c	(s)	0.8	-0.8	-0.2	0.3	0.1
Crude Oil	0.3	0.3	-0.1	-0.2	0.1	(s)
Products	-0.3	0.4	-0.7	0.1	0.2	(s)
Total Stocks at End of Period (million barrels)	1,684	1,685	-1	1,636	--	--
Crude Oil	924	917	8	899	--	--
Strategic Petroleum Reserve	587	586	1	574	--	--
Other	337	330	7	325	--	--
Products	759	768	-9	736	--	--
Finished Motor Gasoline	181	174	7	177	--	--
Distillate Fuel Oil	150	145	5	146	--	--
Residual Fuel Oil	49	47	3	47	--	--
Jet Fuel	40	40	(s)	46	--	--
Liquefied Petroleum Gases	123	139	-17	109	--	--
Other Petroleum Products ^b	217	223	-6	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*.

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	13,850	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 Capacity²	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	14,049	13,904	13,931	NA
Operating Refinery Capacity ¹	14,784	14,819	14,908	14,985	14,931	15,005	15,058	15,057	15,037	15,046	15,015	NA
Idle Capacity²	360	320	239	158	225	176	155	81	109	137	192	NA
Idle Three Months or Less	273	190	131	36	97	80	59	15	43	74	129	NA
Idle More than Three Months	87	130	108	122	128	96	96	66	66	63	63	NA
Operable Refinery Capacity	15,143	15,140	15,148	15,144	15,156	15,181	15,213	15,138	15,146	15,183	15,207	NA
Utilization Rate (percent)												
Operating Capacity	89.1	88.8	90.8	91.9	93.5	96.3	96.3	93.2	93.4	92.4	92.8	NA
Operable Capacity	87.0	86.9	89.4	91.0	92.1	95.2	95.3	92.7	92.8	91.6	91.6	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."

Crude Oil

Imports of crude oil averaged nearly 6.9 million barrels per day, the **highest ever recorded in November**, as world crude oil prices continued their steady decline. The average world price of crude oil, which began a steady decline in the spring of 1993, dropped below \$14 per barrel by the end of November 1993. While Saudi Arabia was the largest foreign supplier with shipments averaging 1.2 million barrels per day, Western Hemisphere producers accounted for nearly one-half of the November imports.

Refining Utilization

The continuing decline of crude oil prices and strong product demand sustained favorable refining margins in November, prompting many refineries to continue running at high levels. Gross inputs (crude and other oils) to atmospheric crude oil distillation units averaged 13.9 million barrels per day, well above the normal seasonal level. The operating utilization rate increased slightly to 92.8 percent. The operable utilization rate, which reflects refining capacity if all idle capacity is included, remained at 91.6 percent (Table H2).

Summary Review of 1993¹

- **Total demand for petroleum products** increased 1 percent to an estimated 17.2 million barrels per day in 1993. The increase was due largely to the improved economy, as reflected in gross domestic product and industrial production data.
- Combined **net imports of crude oil and refined petroleum products** averaged 7.5 million barrels per day during 1993, their **highest level in 14 years**.
- **Finished motor gasoline demand** was at an **all-time high**, averaging 7.5 million barrels per day. This was brought about mainly because of the improving economy and low retail prices. **Refinery production** of finished motor gasoline averaged an **all-time record high** of 7.4 million barrels per day.
- **Distillate fuel oil demand** was at its **highest level in 4 years**, averaging 3.0 million barrels per year. On October 1, 1993, the low-sulfur diesel requirement of the Clean Air Act Amendments of 1990 went into effect, requiring low-sulfur distillate fuel oil for on-highway use. **Refinery production** of distillates was a **record 3.1 million barrels per day**, with the 1993 production higher in nearly every month than during 1992.
- **Residual fuel oil demand** was weak during 1993, indicative of petroleum's shrinking share as a fuel for electric power generation.
- **Propane** stocks began the year at record low levels. However, due to high production, strong imports, and lower demand, inventories at the end of the year were at a high level.
- **Kerosene-type jet fuel demand** increased 4 percent in 1993. This was prompted by the U.S. military's switchover from naphtha-type to kerosene-type jet fuel and by increased commercial airline competition in the form of passenger fare discounts and incentives.
- **Crude oil production declined** nearly 5 percent in 1993 from a year earlier and averaged 6.8 million barrels per day in 1993. This was its **lowest level in 35 years**. Purchases of foreign crude oil increased 0.6 million barrels per day, and accounted for one half of the U.S. crude oil supply during 1993.

¹This summary is based on data from the *Petroleum Supply Monthly* (January 1993 through November 1993) and the *Weekly Petroleum Status Report* (December 1993).

Net imports of crude oil and petroleum products increased in 1993 by nearly 0.6 million barrels per day to their highest level since 1979.

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	-6	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	7,268	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	—
September	—	68	150	7,612	—
October	—	70	-8	7,411	—
November	—	84	10	7,541	—

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.

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	9 290	9 -130	16,058	1,484
1982 Average	10,252	8,649	1,550	136	-283	15,296	9 1,430
1983 Average	10,299	8,688	1,559	9 214	9 -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	9,089	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	9 1,592
Average	8,996	7,171	1,697	-1	-68	17,033	--
1993 January	E 9,257	E 7,008	1,728	264	9 370	16,320	9 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	E 8,691	E 6,732	1,732	-524	386	17,176	1,674
September	E 8,670	E 6,711	1,717	-439	7	17,709	1,661
October	RE 8,847	E 6,816	1,765	R 333	420	17,230	1,685
November	RE 8,823	RE 6,888	R 1,674	R 251	R -286	R 17,688	R 1,684
December*	E 8,880	PE 6,886	E 1,740	E 93	E -446	E 17,721	E 1,669
Average	E 8,841	PE 6,842	E 1,741	E 94	E 127	E 17,179	--

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

^b Stocks are totals as of end of period.

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

^d Includes stocks located in the Strategic Petroleum Reserve.

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

^f Net imports equal imports minus exports.

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

Footnotes continued on following page.

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

Year/Month	Imports			Exports			Net Imports ^f
	Total	Crude Oil ^e	Petroleum Products	Total	Crude Oil	Petroleum Products	
1981 Average	5,996	4,396	1,599	595	228	367	5,401
1982 Average	5,113	3,488	1,625	815	236	579	4,298
1983 Average	5,051	3,329	1,722	739	184	555	4,312
1984 Average	5,437	3,426	2,011	722	181	541	4,715
1985 Average	5,067	3,201	1,866	781	204	577	4,286
1986 Average	6,224	4,178	2,045	785	154	631	5,439
1987 Average	6,678	4,674	2,004	764	151	613	5,914
1988 Average	7,402	5,107	2,295	815	155	661	6,587
1989 Average	8,061	5,843	2,217	859	142	717	7,202
1990 Average	8,018	5,894	2,123	857	109	748	7,161
1991 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	5,186	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	118	885	6,628
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	168	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	7,418
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	8,360	6,614	1,746	823	55	768	7,537
September	8,476	6,558	1,918	902	107	796	7,574
October	9,147	7,181	1,966	889	62	827	8,258
November	R 8,725	R 6,892	R 1,833	R 965	R 67	R 898	R 7,760
December	E 8,259	E 6,667	E 1,592	E 870	E 117	E 754	E 7,389
Average	E 8,497	E 6,716	E 1,781	E 970	E 103	E 868	E 7,527

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, November 1992 - Present

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

Figure S2. Petroleum Products Supplied, November 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, November 1992 - Present

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

Figure S4. Crude Oil Ending Stocks¹, November 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	7,420	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	E 6,732	E 1,527	6,614	0	6,614	32	0
September	E 6,711	E 1,470	6,558	34	6,524	253	(s)
October	E 6,816	E 1,614	7,181	0	7,181	143	0
November	RE 6,888	RE 1,675	R 6,892	0	R 6,892	R 239	0
December*	PE 6,886	PE 1,670	E 6,667	E 0	E 6,667	E 326	E 0
Average	PE 6,842	PE 1,582	E 6,716	E 15	E 6,702	E 266	E (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	Other Primary
		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	294
1983	Average	234	^e -20	11,885	164	66	723	379
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	12,488	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	66	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	24	-548	13,839	55	8	920	584
	September	52	-491	13,845	107	9	906	586
	October	19	314	13,733	62	12	917	586
	November	R 18	R 233	R 13,689	R 67	R 13	R 924	R 587
	December	E 9	E 84	E 13,660	E 117	E 10	E 928	E 587
	Average	E 34	E 60	E 13,618	E 103	E 10	--	--

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	107	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
	September	192	0	0	0	445	431	0	0
	October	317	80	0	0	530	526	0	0
	November	217	47	0	0	486	470	0	0
	11-Mo. Average	225	23	0	0	339	329	0	0
1992	11-Mo. Average	195	25	0	0	41	29	0	0
1991	11-Mo. Average	254	43	0	0	6	6	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	832	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	685	618	44	38	1,162	854
1987	Average	0	0	751	642	61	56	1,274	965
1988	Average	0	0	1,073	911	29	23	1,839	1,415
1989	Average	2	2	1,224	1,116	28	21	2,130	1,794
1990	Average	4	4	1,339	1,195	17	9	2,244	1,864
1991	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
	September	0	0	1,329	1,181	0	0	1,966	1,612
	October	0	0	1,115	969	0	0	1,961	1,574
	November	0	0	1,281	1,152	1	0	1,984	1,668
	11-Mo. Average	1	0	1,415	1,284	15	13	1,995	1,650
1992	11-Mo. Average	1	0	1,713	1,586	4	0	1,955	1,640
1991	11-Mo. Average	0	0	1,816	1,716	4	2	2,080	1,767

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 (a)	^a (a)
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	87	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	83	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	168	55	55	0	0
	August	121	121	152	152	95	80	0	0
	September	49	49	211	211	51	40	0	0
	October	148	135	242	242	131	82	0	0
	November	115	106	143	136	74	34	0	0
	11-Mo. Average ...	80	76	148	147	74	61	0	0
1992	11-Mo. Average ...	69	65	124	123	80	71	0	0
1991	11-Mo. Average ...	65	55	83	83	107	99	35	35

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 ^o	
		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	608	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	1,696	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	4,496	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	1,966	4,602	3,946
	September	489	467	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	1,108	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	1,990	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	893	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
	September	514	496	1,243	1,033	2,067	1,828	4,033	3,440
	October	603	593	1,267	993	2,388	2,045	4,350	3,619
	November	636	612	1,267	1,073	2,234	1,962	4,219	3,630
	11-Mo. Average	751	734	1,293	1,003	2,346	2,022	4,341	3,671
1992	11-Mo. Average	693	677	1,170	832	2,136	1,769	4,090	3,409
1991	11-Mo. Average	711	692	1,039	670	2,040	1,634	4,120	3,401

See footnotes at end of table.

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

Year/Month		Imports from Non-OPEC Sources ^a											
		Angola		Australia		Bahama Islands		Brazil		Canada		China People's Republic	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average	49	45	5	0	74	0	23	14	447	164	18	0
1982	Average	44	42	5	(s)	65	0	47	19	482	214	40	8
1983	Average	78	71	4	0	125	0	41	2	547	274	34	6
1984	Average	90	85	38	25	88	0	60	(s)	630	341	46	15
1985	Average	110	104	37	21	40	0	61	0	770	468	59	36
1986	Average	112	102	41	30	37	0	50	0	807	570	90	68
1987	Average	192	180	58	49	37	0	84	0	848	608	82	63
1988	Average	212	203	64	59	32	0	98	0	999	681	88	82
1989	Average	284	279	36	31	34	0	82	0	931	630	80	76
1990	Average	237	236	53	47	37	0	49	0	934	643	80	77
1991	January	232	232	21	21	25	0	31	0	978	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	(s)	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
	September	282	282	0	0	27	0	59	0	1,309	1,018	91	89
	October	440	440	53	47	42	0	15	0	1,367	1,030	61	61
	November	283	283	0	0	26	0	51	0	1,231	917	68	68
	11-Mo. Average ..	326	326	16	15	24	0	34	0	1,168	897	50	49
1992	11-Mo. Average ..	342	341	17	15	38	0	17	0	1,064	795	90	84
1991	11-Mo. Average ..	245	245	28	22	34	0	24	0	1,028	742	93	90

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	36	33	522	469	30	(s)
1982	Average	5	0	18	(s)	20	18	685	645	35	(s)
1983	Average	10	0	18	(s)	4	3	826	766	65	3
1984	Average	8	0	45	(s)	1	0	748	659	65	3
1985	Average	23	0	60	(s)	3	1	816	715	58	0
1986	Average	87	57	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	700	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
	September	224	170	32	0	28	28	929	867	22	0
	October	192	182	30	0	10	10	1,013	951	0	0
	November	153	143	25	0	0	0	1,100	1,025	(s)	0
	11-Mo. Average ...	170	144	31	0	9	8	920	869	11	0
1992	11-Mo. Average ...	131	109	57	0	11	11	821	778	26	0
1991	11-Mo. Average ...	166	124	45	3	24	24	814	783	31	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	66	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	75	352	304
1988	Average	36	0	67	62	22	0	68	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	218	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
	September	97	0	113	113	28	0	54	0	70	55	286	217
	October	111	0	115	93	30	0	33	0	69	54	352	338
	November	83	0	162	155	23	0	30	0	66	55	351	340
	11-Mo. Average ..	75	0	125	120	30	0	36	0	71	54	331	294
1992	11-Mo. Average ..	64	0	126	117	26	0	34	0	96	70	238	209
1991	11-Mo. Average ..	81	0	81	73	26	0	34	0	88	73	136	102

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	8	(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	256	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	2,430	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	8,092	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
	September	57	29	184	0	551	251	4,444	3,118	8,476	6,558
	October	176	123	236	0	453	233	4,798	3,562	9,147	7,181
	November	56	32	330	0	468	246	4,506	3,262	8,725	6,892
	11-Mo. Average ...	53	37	251	0	446	236	4,178	3,050	8,519	6,721
1992	11-Mo. Average ...	20	6	246	0	340	154	3,802	2,688	7,892	6,096
1991	11-Mo. Average ...	30	1	239	0	287	140	3,534	2,401	7,654	5,802

^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, November 1992 - Present

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

Figure S6. Motor Gasoline Ending Stocks, November 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 ^{e,d}	Exports	Product Supplied ^b	Motor Gasoline		Oxygenates
							Total ^e	Finished	
1981	Average	6,405	157	^f -28	2	6,588	253	203	--
1982	Average	6,338	197	^f -25	20	6,539	^f 235	^f 194	--
1983	Average	6,340	247	^f -45	10	6,622	222	186	--
1984	Average	6,453	299	54	6	6,693	243	205	--
1985	Average	6,419	381	-41	10	6,831	223	190	--
1986	Average	6,752	326	11	33	7,034	233	194	--
1987	Average	6,841	384	-15	35	7,206	226	189	--
1988	Average	6,956	405	3	22	7,336	228	190	--
1989	Average	6,963	369	-35	39	7,328	213	177	--
1990	Average	6,959	342	10	55	7,235	220	181	--
1991	January	6,629	228	162	50	6,645	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	7,018	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	14
	February	7,172	216	160	99	7,129	242	200	13
	March	6,897	198	-411	109	7,397	227	187	14
	April	7,123	253	-137	111	7,401	222	183	15
	May	7,394	308	80	90	7,531	223	185	17
	June	7,447	251	-75	81	7,692	220	183	18
	July	7,344	292	-242	100	7,777	213	176	20
	August	7,344	283	-336	77	7,885	200	165	21
	September	7,583	269	154	85	7,612	207	170	20
	October	7,409	210	127	80	7,411	210	174	17
	November	R 7,664	R 237	R 237	R 123	R 7,541	R 220	R 181	15
	December*	E 7,577	E 267	E 122	E 72	E 7,650	E 226	E 186	NA
	Average	E 7,351	E 249	E 20	E 97	E 7,483	--	--	--

^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, November 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, November 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 ^d	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
	February	2,813	224	-742	301	3,478	109	16
	March	2,918	235	-386	154	3,386	97	12
	April	3,010	209	30	241	2,949	98	13
	May	2,930	153	104	355	2,624	102	14
	June	3,095	168	263	158	2,843	109	17
	July	3,185	130	348	298	2,669	120	23
	August	3,084	159	249	197	2,797	128	45
	September	3,206	137	80	262	3,001	130	47
	October	3,435	242	467	241	2,968	145	55
	November	R 3,478	R 214	R 156	R 330	R 3,206	R 150	R 64
	December*	E 3,439	E 125	E -30	E 175	E 3,420	E 144	E 63
	Average	E 3,127	E 181	E 22	E 250	E 3,037	--	--

^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, November 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, November 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	(s)	186	1,264	47
1988	Average	926	644	-8	200	1,378	45
1989	Average	954	629	-2	215	1,370	44
1990	Average	950	504	13	211	1,229	49
1991	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	745	370	61	120	935	45
	September	822	420	-73	110	1,205	42
	October	839	391	141	94	995	47
	November	^R 901	^R 347	^R 85	^R 86	^R 1,077	^R 49
	December*	^E 818	^E 358	^E -31	^E 169	^E 1,038	^E 45
	Average	^E 828	^E 356	^E 15	^E 129	^E 1,039	-

^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, November 1992 - Present

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

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

Note: The observed minimum for total stocks in the last 36-month period was 40.2 million barrels, occurring in October 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 (s)	6	1,048	839	^c 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	(s)	24	1,385	1,181	50
1988	Average	1,370	1,164	90	-17	28	1,449	1,238	44
1989	Average	1,403	1,197	108	-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	-18	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	1,358	1,257	91	-91	34	1,506	1,405	43
	September	1,339	1,242	97	-78	21	1,493	1,352	41
	October	1,330	1,242	127	-24	23	1,457	1,367	40
	November	R 1,383	R 1,298	R 96	R 6	R 29	R 1,443	R 1,347	R 40
	December*	E 1,482	E 1,417	E 68	E -5	E 39	E 1,516	E 1,438	E 41
	Average	E 1,424	E 1,312	E 95	E -8	E 56	E 1,472	E 1,356	--

^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, October 1992 - Present

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

Figure S14. Propane/Propylene Ending Stocks, October 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	798	^c 54
1983	Average	730	44	^c -24	4	43	751	^c 48
1984	Average	806	67	^c 7	4	30	833	58
1985	Average	816	67	-50	3	48	883	39
1986	Average	817	110	64	4	28	831	63
1987	Average	828	88	-41	8	24	924	48
1988	Average	863	106	7	8	31	923	50
1989	Average	882	111	-52	11	24	990	32
1990	Average	878	115	48	(a)	28	917	49
1991	January	920	105	-448	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	995	53
	November	930	82	-37	0	20	1,030	52
	December	964	86	-128	(a)	38	1,139	48
	Average	915	91	-3	(a)	28	982	--
1992	January	949	90	-282	(a)	72	1,249	39
	February	955	86	-200	(a)	27	1,214	33
	March	940	68	-15	(a)	26	997	33
	April	961	80	120	0	24	896	36
	May	977	72	253	(a)	23	773	44
	June	978	66	206	(a)	27	811	50
	July	964	68	176	(a)	35	821	56
	August	946	85	117	(a)	25	889	59
	September	931	71	51	(a)	25	927	61
	October	933	104	-88	(a)	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	(a)	33	1,032	--
1993	January	965	72	-173	1	31	1,179	33
	February	959	78	-261	(a)	37	1,261	26
	March	971	85	-140	(a)	32	1,165	22
	April	973	112	233	(a)	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
	September	956	132	116	0	17	955	61
	October	953	107	-10	0	13	1,057	61
	November	964	138	-136	0	17	1,220	57
	11-Mo. Average	956	101	54	(a)	27	979	--
1992	11-Mo. Average	954	81	10	(a)	32	994	--
1991	11-Mo. Average	910	92	8	0	27	967	--

^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, October 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, October 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		Disposition			Ending Stocks ^b (Million Barrels)
		Total Production	Imports	Stock Change ^a	Refinery Inputs	Exports	
1981	Average	1,571	244	^c 18	289	42	1,468
1982	Average	1,528	226	-111	300	65	1,499
1983	Average	1,642	190	^c -4	253	73	1,509
1984	Average	1,697	195	^c -19	291	48	1,572
1985	Average	1,704	187	-75	304	62	1,599
1986	Average	1,695	242	80	302	42	1,512
1987	Average	1,748	190	-15	304	38	1,612
1988	Average	1,817	209	1	321	49	1,656
1989	Average	1,791	181	-47	315	35	1,668
1990	Average	1,749	188	48	293	40	1,556
1991	January	1,753	148	-658	364	56	2,139
	February	1,865	126	-271	322	60	1,880
	March	1,942	91	113	249	56	1,615
	April	1,937	154	346	237	31	1,477
	May	1,989	129	428	239	45	1,407
	June	1,949	148	328	245	32	1,492
	July	1,913	151	211	253	24	1,575
	August	1,899	143	175	255	18	1,594
	September	1,806	147	-84	288	31	1,718
	October	1,805	233	33	345	31	1,629
	November	1,789	156	-330	413	40	1,821
	December	1,810	139	-468	437	73	1,927
	Average	1,871	147	-15	304	41	1,689
1992	January	1,820	142	-452	384	80	1,950
	February	1,917	126	-365	326	33	2,051
	March	2,033	97	153	247	43	1,687
	April	2,102	127	401	233	45	1,549
	May	2,106	106	489	245	44	1,433
	June	2,102	104	334	257	59	1,556
	July	2,090	106	345	255	52	1,544
	August	2,016	148	369	233	55	1,507
	September	1,886	114	37	299	45	1,620
	October	1,892	171	-242	369	39	1,898
	November	1,854	148	-541	403	43	2,097
	December	1,849	176	-660	453	49	2,184
	Average	1,972	131	-10	309	49	1,755
1993	January	1,837	117	-441	440	39	1,917
	February	1,912	128	-310	367	55	1,928
	March	2,106	123	9	283	47	1,910
	April	2,151	142	466	263	69	1,495
	May	2,091	148	538	258	50	1,393
	June	2,122	111	469	260	41	1,463
	July	2,108	155	380	246	54	1,583
	August	2,078	167	475	263	45	1,462
	September	1,952	206	188	304	35	1,632
	October	1,887	195	-129	372	21	1,819
	November	1,781	180	-560	458	21	2,042
	11-Mo. Average	2,003	152	102	317	43	1,693
1992	11-Mo. Average	1,964	126	50	295	49	1,716
1991	11-Mo. Average	1,877	148	29	291	39	1,666

^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	Products Supplied	
1981	Average	2,771	188	^c -42	723	197	2,081	241
1982	Average	2,475	305	-68	787	205	1,856	^c 216
1983	Average	2,437	382	^c -6	712	236	1,877	^c 217
1984	Average	2,500	503	^c -32	791	236	2,007	198
1985	Average	2,532	550	22	886	227	1,947	206
1986	Average	2,704	504	-15	888	291	2,045	201
1987	Average	2,737	543	-1	829	264	2,187	200
1988	Average	2,773	645	22	799	294	2,303	208
1989	Average	2,771	627	12	797	305	2,285	213
1990	Average	2,842	705	-32	887	289	2,402	201
1991	January	2,653	748	204	844	317	2,036	207
	February	2,668	573	363	726	275	1,876	217
	March	2,576	551	151	819	239	1,919	222
	April	2,724	607	133	753	228	2,217	226
	May	2,853	800	198	900	327	2,228	232
	June	3,030	615	-123	1,092	304	2,372	228
	July	3,029	776	-143	1,081	321	2,545	224
	August	2,993	642	-169	1,013	296	2,496	219
	September	3,010	746	101	802	267	2,586	222
	October	2,824	611	-218	944	211	2,498	215
	November	2,750	850	-81	1,093	238	2,349	213
	December	2,797	577	-163	1,147	304	2,085	208
	Average	2,826	675	18	936	277	2,269	--
1992	January	2,702	734	203	787	272	2,175	214
	February	2,642	575	183	883	240	1,911	219
	March	2,752	713	238	730	239	2,258	227
	April	2,900	793	-31	1,043	217	2,464	226
	May	2,929	665	-113	910	199	2,598	222
	June	3,126	669	-42	787	225	2,826	221
	July	3,207	740	-156	996	284	2,822	216
	August	3,068	729	-116	884	227	2,802	212
	September	3,114	748	188	675	336	2,663	218
	October	2,923	701	-182	954	295	2,557	212
	November	2,915	697	-24	989	264	2,383	212
	December	2,853	711	-165	1,223	352	2,154	^c 207
	Average	2,928	707	-3	906	263	2,470	--
1993	January	3,026	698	^c 600	829	271	2,023	225
	February	2,815	773	122	949	282	2,235	228
	March	2,866	618	243	747	269	2,425	236
	April	2,862	719	9	900	315	2,357	236
	May	2,899	808	85	979	278	2,364	239
	June	3,022	630	-240	981	278	2,632	231
	July	3,116	875	116	945	302	2,628	235
	August	3,094	676	27	865	295	2,583	236
	September	3,016	789	-265	1,031	282	2,757	228
	October	3,108	802	-164	1,138	369	2,567	223
	November	2,978	760	-210	1,274	309	2,365	217
	11-Mo. Average	2,984	759	31	966	296	2,450	--
1992	11-Mo. Average	2,935	706	12	876	254	2,499	--
1991	11-Mo. Average	2,829	684	35	917	275	2,286	--

^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 November 1993).
- EIA, Weekly Petroleum Supply Reporting System (except domestic crude oil production) (December 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 December 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:

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

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

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

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

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

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

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

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

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

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

Note 2. Domestic Crude Oil Production

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

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

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

Note 3. Figures

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

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

propane/propylene, and liquefied petroleum gases, in this publication include features to assist in comparing current inventory levels with past inventory levels and 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, November 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 50,258	E 1,675	E 525,838	E 1,574
(2)	Lower 48 States	E 156,395	E 5,213	E 1,758,107	E 5,264
(3)	Total U.S.	E 206,653	E 6,888	E 2,283,945	E 6,838
Net Imports					
(4)	Imports (Gross Excluding Strategic Petroleum Reserve (SPR))	206,758	6,892	2,239,449	6,705
(5)	SPR Imports	0	0	5,367	16
(6)	Exports	2,015	67	33,883	101
(7)	Imports (Net Including SPR)	204,743	6,825	2,210,933	6,620
Other Sources					
(8)	SPR Stock Change (Withdrawal (+), Addition (-))	-546	-18	-12,070	-36
(9)	Other Stock Change (Withdrawal (+), Addition (-))	-6,987	-233	-19,387	-58
(10)	Product Supplied and Losses	-385	-13	-3,318	-10
(11)	Unaccounted for ^a	7,184	239	86,927	260
(12)	Total Other Sources	-734	-24	52,152	156
(13)	Crude Input to Refineries	410,662	13,689	4,547,030	13,614
(13) = (3) + (7) + (12)					
Natural Gas Liquids (NGL)					
(14)	Field Production ^b	53,042	1,768	619,754	1,856
(15)	Net Imports ^c	1,036	35	9,961	30
(16)	Stock Change (Withdrawal (+), Addition (-)) ^d	1,059	35	-2,649	-8
(17)	Total NGL Supply	55,137	1,838	627,065	1,877
Other Liquids					
Unfinished Oils and Gasoline Blending Components, Total					
(18)	Stock Change (Withdrawal (+), Addition (-))	3,477	116	-11,120	-33
(19)	Net Imports	15,153	505	172,158	515
(20)	Other Liquids New Supply (Field Production)	4,997	167	48,157	144
(21)	Refinery Processing Gain ^a	24,909	830	255,681	766
(22)	Crude Oil Product Supplied	385	13	3,309	10
(23)	Total Other Liquids	48,921	1,631	468,185	1,402
(23) = (18) through (22)					
(24)	Total Production of Products	514,720	17,157	5,642,280	16,893
(24) = (13) + (17) + (23)					
Net Imports of Refined Products					
(25)	Imports (Gross)	38,484	1,283	415,708	1,245
(26)	Exports	26,624	887	290,461	870
(27)	Imports (Net)	11,860	395	125,247	375
(28)	Total New Supply of Products	526,580	17,553	5,767,527	17,268
(28) = (24) + (27)					
(29)	Refined Products Stock Change (Withdrawal (+), Addition (-))	4,049	135	-46,573	-139
(30)	Total Petroleum Products Supplied for Domestic Use	530,629	17,688	5,720,954	17,129
(30) = (28) + (29)					
(31)	Finished Motor Gasoline	226,232	7,541	2,494,187	7,468
(32)	Distillate Fuel Oil	96,172	3,206	1,002,450	3,001
(33)	Residual Fuel Oil	32,316	1,077	347,093	1,039
(34)	Jet Fuel	43,297	1,443	490,140	1,467
(35)	Liquefied Petroleum Gases	61,267	2,042	565,547	1,693
(36)	Other ^d	70,961	2,365	818,229	2,450
(37)	Crude Oil	385	13	3,309	10
(38)	Total Products Supplied	530,629	17,688	5,720,954	17,129
(38) = (31) through (37)					
Ending Stocks, All Oils					
(39)	Crude Oil (Excluding SPR)	337,436	--	337,436	--
(40)	Strategic Petroleum Reserve	586,794	--	586,794	--
(41)	Finished Motor Gasoline	180,945	--	180,945	--
(42)	Distillate Fuel Oil	149,517	--	149,517	--
(43)	Residual Fuel Oil	49,291	--	49,291	--
(44)	Jet Fuel	40,380	--	40,380	--
(45)	Liquefied Petroleum Gases	122,674	--	122,674	--
(46)	Other ^d	216,503	--	216,503	--
(47)	Total Stocks	1,683,540	--	1,683,540	--
(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,
November 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 206,653	--	206,758	7,184	7,533	0	410,662	2,015	385	924,230
Natural Gas Liquids and LRGs	50,231	12,776	6,594	--	-17,872	--	19,096	799	67,578	134,233
Pentanes Plus	9,577	--	1,198	--	-1,059	--	5,361	160	6,311	11,559
Liquefied Petroleum Gases	40,654	12,776	5,398	--	-16,813	--	13,735	639	61,267	122,674
Ethane/Ethylene	15,138	843	0	--	-4,416	--	0	0	20,397	22,380
Propane/Propylene	15,440	13,472	4,133	--	-4,083	--	0	523	36,605	56,869
Normal Butane/Butylene	4,973	-1,702	972	--	-6,560	--	8,570	116	2,117	32,468
Isobutane/Isobutylene	5,103	163	293	--	-1,754	--	5,165	0	2,148	10,957
Other Liquids	4,997	--	15,305	--	-3,477	--	32,846	152	-9,219	152,487
Other Hydrocarbons/Oxygenates	5,291	--	494	--	-2,502	--	8,287	0	0	15,035
Unfinished Oils	--	--	14,358	--	-3,936	--	27,513	0	-9,219	98,073
Motor Gasoline Blend. Comp.	-294	--	453	--	3,059	--	-3,052	152	0	39,332
Aviation Gasoline Blend. Comp.	--	--	0	--	-98	--	98	0	0	47
Finished Petroleum Products	2,811	474,737	33,086	--	12,764	--	--	25,985	471,886	472,590
Finished Motor Gasoline	2,811	227,112	7,108	--	7,119	--	--	3,678	226,232	180,945
Reformulated	--	0	0	--	0	--	--	NA	NA	0
Oxygenated	25,170	51,055	111	--	1,745	--	--	NA	NA	31,610
Other	-22,359	176,057	6,995	--	5,374	--	--	NA	NA	149,335
Finished Aviation Gasoline	--	627	1	--	-24	--	--	0	652	1,678
Jet Fuel	--	41,491	2,868	--	180	--	--	880	43,297	40,380
Naphtha-Type	--	2,542	242	--	-222	--	--	116	2,890	2,905
Kerosene-Type	--	38,949	2,624	--	402	--	--	765	40,406	37,475
Kerosene	--	2,001	63	--	-1,749	--	--	55	3,758	5,284
Distillate Fuel Oil	--	104,340	6,409	--	4,677	--	--	9,900	96,172	149,517
0.05 percent sulfur and under	--	50,353	2,947	--	9,135	--	--	NA	NA	64,215
Greater than 0.05 percent sulfur	--	53,987	3,462	--	-4,458	--	--	NA	NA	85,302
Residual Fuel Oil	--	27,033	10,403	--	2,551	--	--	2,569	32,316	49,291
Naphtha For Petro. Feed. Use	--	4,446	1,115	--	-49	--	--	0	5,610	1,837
Other Oils For Petro. Feed. Use	--	8,001	4,020	--	226	--	--	0	11,795	1,679
Special Naphthas	--	1,734	160	--	14	--	--	45	1,835	2,256
Lubricants	--	4,790	47	--	-166	--	--	417	4,586	11,159
Waxes	--	587	67	--	-35	--	--	65	624	852
Petroleum Coke	--	18,911	42	--	-377	--	--	8,090	11,240	9,000
Asphalt and Road Oil	--	13,005	768	--	491	--	--	280	13,002	16,194
Still Gas	--	19,198	0	--	0	--	--	0	19,198	0
Miscellaneous Products	--	1,461	19	--	-94	--	--	5	1,569	2,518
Total	264,692	487,513	261,743	7,184	-1,052	0	462,604	28,950	530,629	1,683,540

^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-November 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 2,283,945	--	2,244,816	86,927	31,457	9	4,547,030	33,883	3,309	924,230
Natural Gas Liquids and LRGs	581,347	199,433	61,302	--	36,645	--	159,949	14,950	630,538	134,233
Pentanes Plus	111,692	--	10,485	--	2,649	--	54,012	524	64,992	11,559
Liquefied Petroleum Gases	469,655	199,433	50,817	--	33,996	--	105,937	14,425	565,547	122,674
Ethane/Ethylene	187,512	9,339	3,976	--	3,653	--	0	0	197,174	22,380
Propane/Propylene	171,058	149,077	33,886	--	18,020	--	29	8,870	327,102	56,869
Normal Butane/Butylene	46,565	37,376	9,591	--	12,131	--	49,568	5,556	26,277	32,468
Isobutane/isobutylene	64,520	3,641	3,384	--	192	--	56,340	0	14,993	10,957
Other Liquids	48,157	--	174,485	--	11,120	--	268,714	2,327	-59,519	152,487
Other Hydrocarbons/Oxygenates	65,050	--	4,521	--	8,153	--	61,418	0	0	15,035
Unfinished Oils	--	--	160,149	--	2,744	--	216,938	0	-59,533	98,073
Motor Gasoline Blend. Comp.	-16,893	--	9,815	--	235	--	-9,640	2,327	0	39,332
Aviation Gasoline Blend. Comp.	--	--	0	--	-12	--	-2	0	14	47
Finished Petroleum Products	38,407	5,031,941	364,891	--	12,577	--	--	276,036	5,146,626	472,590
Finished Motor Gasoline	38,407	2,409,829	82,640	--	3,363	--	--	33,326	2,494,187	180,945
Reformulated	--	0	0	--	0	--	--	NA	NA	0
Oxygenated	152,476	251,669	421	--	-142,121	--	--	NA	NA	31,610
Other	-114,069	2,158,160	82,219	--	145,484	--	--	NA	NA	149,335
Finished Aviation Gasoline	--	7,409	78	--	139	--	--	0	7,348	1,678
Jet Fuel	--	473,683	32,705	--	-2,904	--	--	19,152	490,140	40,380
Naphtha-Type	--	38,774	3,599	--	-1,671	--	--	4,358	39,686	2,905
Kerosene-Type	--	434,909	29,106	--	-1,233	--	--	14,794	450,454	37,475
Kerosene	--	14,925	289	--	-194	--	--	1,286	14,122	5,284
Distillate Fuel Oil	--	1,034,780	62,213	--	8,883	--	--	85,660	1,002,450	149,517
0.05 percent sulfur and under	--	244,974	25,354	--	-76,419	--	--	NA	NA	64,215
Greater than 0.05 percent sulfur ...	--	789,806	36,859	--	85,302	--	--	NA	NA	85,302
Residual Fuel Oil	--	276,947	118,747	--	6,582	--	--	42,019	347,093	49,291
Naphtha For Petro. Feed. Use	--	44,999	14,081	--	140	--	--	0	58,940	1,837
Other Oils For Petro. Feed. Use	--	96,485	37,000	--	-214	--	--	0	133,699	1,679
Special Naphthas	--	17,876	1,608	--	120	--	--	1,125	18,239	2,256
Lubricants	--	53,184	2,437	--	-2,152	--	--	6,152	51,621	11,159
Waxes	--	6,736	653	--	-57	--	--	636	6,810	852
Petroleum Coke	--	205,783	658	--	-525	--	--	84,792	122,174	9,000
Asphalt and Road Oil	--	156,025	11,006	--	-1,164	--	--	1,784	166,411	16,194
Still Gas	--	218,730	0	--	0	--	--	0	218,730	0
Miscellaneous Products	--	14,550	776	--	560	--	--	104	14,662	2,518
Total	2,951,856	5,231,374	2,845,494	86,927	91,799	9	4,975,693	327,196	5,720,954	1,683,540

^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,
November 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 6,888	--	6,892	239	251	0	13,689	67	13
Natural Gas Liquids and LRGs	1,874	426	220	--	-596	--	637	27	2,253
Pentanes Plus	319	--	40	--	-35	--	179	5	210
Liquefied Petroleum Gases	1,355	426	180	--	-560	--	458	21	2,042
Ethane/Ethylene	505	28	0	--	-147	--	0	0	680
Propane/Propylene	515	449	138	--	-136	--	0	17	1,220
Normal Butane/Butylene	166	-57	32	--	-219	--	286	4	71
Isobutane/Isobutylene	170	5	10	--	-58	--	172	0	72
Other Liquids	167	--	510	--	-116	--	1,095	5	-307
Other Hydrocarbons/Oxygenates	176	--	16	--	-83	--	276	0	0
Unfinished Oils	--	--	479	--	-131	--	917	0	-307
Motor Gasoline Blend. Comp.	-10	--	15	--	102	--	-102	5	0
Aviation Gasoline Blend. Comp.	--	--	0	--	-3	--	3	0	0
Finished Petroleum Products	94	15,825	1,103	--	425	--	--	866	15,730
Finished Motor Gasoline	94	7,570	237	--	237	--	--	123	7,541
Reformulated	--	0	0	--	0	--	--	NA	NA
Oxygenated	839	1,702	4	--	58	--	--	NA	NA
Other	-745	5,869	233	--	179	--	--	NA	NA
Finished Aviation Gasoline	--	21	(s)	--	-1	--	--	0	22
Jet Fuel	--	1,383	96	--	6	--	--	29	1,443
Naphtha-Type	--	85	8	--	-7	--	--	4	96
Kerosene-Type	--	1,298	87	--	13	--	--	25	1,347
Kerosene	--	67	2	--	-58	--	--	2	125
Distillate Fuel Oil	--	3,478	214	--	156	--	--	330	3,206
0.05 percent sulfur and under	--	1,878	98	--	305	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	1,800	115	--	-149	--	--	NA	NA
Residual Fuel Oil	--	901	347	--	85	--	--	86	1,077
Naphtha For Petro. Feed. Use	--	148	37	--	-2	--	--	0	187
Other Oils For Petro. Feed. Use	--	267	134	--	8	--	--	0	393
Special Naphthas	--	58	5	--	(s)	--	--	2	61
Lubricants	--	160	2	--	-6	--	--	14	153
Waxes	--	20	2	--	-1	--	--	2	21
Petroleum Coke	--	630	1	--	-13	--	--	270	375
Asphalt and Road Oil	--	434	26	--	16	--	--	9	433
Still Gas	--	640	0	--	0	--	--	0	640
Miscellaneous Products	--	49	1	--	-3	--	--	(s)	52
Total	8,823	16,250	8,725	239	-35	0	15,420	965	17,688

^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-November 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 6,838	--	6,741	260	94	(s)	13,614	101	10
Natural Gas Liquids and LRGs	1,741	597	184	--	110	--	479	45	1,888
Pentanes Plus	334	--	31	--	8	--	162	2	195
Liquefied Petroleum Gases	1,408	597	152	--	102	--	317	43	1,693
Ethane/Ethylene	561	28	12	--	11	--	0	0	590
Propane/Propylene	512	446	101	--	54	--	(s)	27	979
Normal Butane/Butylene	139	112	29	--	36	--	148	17	79
Isobutane/Isobutylene	193	11	10	--	1	--	169	0	45
Other Liquids	144	--	522	--	33	--	805	7	-178
Other Hydrocarbons/Oxygenates	195	--	14	--	24	--	184	0	0
Unfinished Oils	--	--	479	--	8	--	650	0	-178
Motor Gasoline Blend, Comp.	-51	--	29	--	1	--	-29	7	0
Aviation Gasoline Blend, Comp.	--	--	0	--	(s)	--	(s)	0	(s)
Finished Petroleum Products	115	15,066	1,092	--	38	--	--	826	15,409
Finished Motor Gasoline	115	7,215	247	--	10	--	--	100	7,468
Reformulated	--	0	0	--	0	--	--	NA	NA
Oxygenated	457	754	1	--	-426	--	--	NA	NA
Other	-342	6,462	246	--	436	--	--	NA	NA
Finished Aviation Gasoline	--	22	(s)	--	(s)	--	--	0	22
Jet Fuel	--	1,418	98	--	-9	--	--	57	1,467
Naphtha-Type	--	116	11	--	-5	--	--	13	119
Kerosene-Type	--	1,302	87	--	-4	--	--	44	1,349
Kerosene	--	45	1	--	-1	--	--	4	42
Distillate Fuel Oil	--	3,098	186	--	27	--	--	256	3,001
0.05 percent sulfur and under	--	733	76	--	-229	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	2,365	110	--	255	--	--	NA	NA
Residual Fuel Oil	--	829	358	--	20	--	--	126	1,039
Naphtha For Petro. Feed. Use	--	135	42	--	(s)	--	--	0	176
Other Oils For Petro. Feed. Use	--	289	111	--	-1	--	--	0	400
Special Naphthas	--	54	5	--	(s)	--	--	3	55
Lubricants	--	159	7	--	-6	--	--	18	155
Waxes	--	20	2	--	(s)	--	--	2	20
Petroleum Coke	--	616	2	--	-2	--	--	254	366
Asphalt and Road Oil	--	467	33	--	-3	--	--	5	498
Still Gas	--	655	0	--	0	--	--	0	655
Miscellaneous Products	--	44	2	--	2	--	--	(s)	44
Total	8,838	15,863	8,519	260	275	(s)	14,897	980	17,129

^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, November 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 817	--	41,402	-1,424	84	-1,864	0	42,743	0	0	13,865
Natural Gas Liquids and LRGs	813	731	1,222	--	3,655	-995	--	519	40	6,857	6,502
Pentanes Plus	91	--	441	--	0	-44	--	180	5	391	245
Liquefied Petroleum Gases	722	731	781	--	3,655	-951	--	339	35	6,466	6,257
Ethane/Ethylene	264	0	0	--	0	0	--	0	0	264	0
Propane/Propylene	309	1,355	663	--	3,421	-255	--	0	33	5,970	4,234
Normal Butane/Butylene	110	-490	112	--	234	-623	--	282	3	304	1,874
Isobutane/Isobutylene	39	-134	6	--	0	-73	--	57	0	-73	149
Other Liquids	1,840	--	2,919	--	569	-1,132	--	8,062	0	-1,602	17,860
Other Hydrocarbons/Oxygenates ...	1,539	--	204	--	0	-270	--	2,013	0	0	2,324
Unfinished Oils	--	--	2,265	--	530	-1,204	--	5,601	0	-1,602	10,139
Motor Gasoline Blend. Comp.	301	--	450	--	39	338	--	452	0	0	5,375
Aviation Gasoline Blend. Comp.	--	--	0	--	0	4	--	-4	0	0	22
Finished Petroleum Products	-175	52,737	23,820	--	78,183	1,342	--	--	1,084	152,139	166,076
Finished Motor Gasoline	-175	24,662	7,000	--	48,094	2,336	--	--	65	77,180	55,432
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	1,259	11,150	111	--	10,857	-528	--	--	NA	NA	12,675
Other	-1,434	13,512	6,889	--	37,237	2,864	--	--	NA	NA	42,757
Finished Aviation Gasoline	--	51	0	--	134	70	--	--	0	115	550
Jet Fuel	--	2,299	2,193	--	11,737	788	--	--	54	15,387	9,675
Naphtha-Type	--	227	184	--	102	-127	--	--	2	638	320
Kerosene-Type	--	2,072	2,009	--	11,635	915	--	--	53	14,748	9,355
Kerosene	--	46	15	--	295	-889	--	--	(s)	1,245	2,260
Distillate Fuel Oil	--	13,689	5,529	--	16,974	-1,859	--	--	164	37,887	70,121
0.05 percent sulfur and under	--	6,628	2,257	--	8,036	1,382	--	--	NA	NA	21,414
Greater than 0.05 percent sulfur ..	--	7,061	3,272	--	8,938	-3,241	--	--	NA	NA	48,707
Residual Fuel Oil	--	4,520	7,985	--	52	783	--	--	551	11,223	20,009
Petrochemical Feedstocks ^e	--	544	259	--	-33	-76	--	--	0	846	239
Special Naphthas	--	25	18	--	35	-14	--	--	14	78	105
Lubricants	--	479	35	--	613	75	--	--	92	960	2,506
Waxes	--	101	26	--	0	-24	--	--	15	136	165
Petroleum Coke	--	1,522	0	--	0	-65	--	--	122	1,465	1,004
Asphalt and Road Oil	--	2,713	757	--	226	274	--	--	2	3,420	3,502
Still Gas	--	2,003	0	--	0	0	--	--	0	2,003	0
Miscellaneous Products	--	83	3	--	56	-57	--	--	4	195	508
Total	3,295	53,468	69,363	-1,424	82,491	-2,649	0	51,324	1,124	157,394	204,303

^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-November 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 8,722	--	436,926	424	299	-162	0	446,533	0	0	13,865
Natural Gas Liquids and LRGs	9,441	14,324	7,444	--	35,071	1,528	--	3,044	674	61,034	6,502
Pentanes Plus	1,210	--	1,218	--	0	196	--	530	16	1,686	245
Liquefied Petroleum Gases	8,231	14,324	6,226	--	35,071	1,332	--	2,514	658	59,348	6,257
Ethane/Ethylene	2,788	0	1	--	0	0	--	0	0	2,769	0
Propane/Propylene	3,678	14,874	5,130	--	33,213	541	--	0	360	55,992	4,234
Normal Butane/Butylene	1,334	241	989	--	1,475	772	--	1,605	298	1,364	1,874
Isobutane/Isobutylene	453	-791	106	--	383	19	--	909	0	-777	149
Other Liquids	16,200	--	48,085	--	3,743	-1,108	--	75,805	37	-6,706	17,860
Other Hydrocarbons/Oxygenates	12,455	--	835	--	0	1,112	--	12,178	0	0	2,324
Unfinished Oils	--	--	40,069	--	2,332	-1,005	--	50,104	0	-6,698	10,139
Motor Gasoline Blend. Comp.	3,745	--	7,181	--	1,411	-1,237	--	13,537	37	0	5,375
Aviation Gasoline Blend. Comp.	--	--	0	--	0	22	--	-14	0	-8	22
Finished Petroleum Products	-2,669	534,286	270,137	--	794,895	8,433	--	--	10,120	1,578,096	166,076
Finished Motor Gasoline	-2,669	256,623	76,841	--	481,701	902	--	--	1,497	810,096	55,432
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	7,624	53,777	421	--	57,528	-41,728	--	--	NA	NA	12,675
Other	-10,293	202,846	76,420	--	424,173	42,628	--	--	NA	NA	42,757
Finished Aviation Gasoline	--	202	0	--	1,135	152	--	--	0	1,185	550
Jet Fuel	--	28,680	26,320	--	109,376	-25	--	--	333	164,068	9,675
Naphtha-Type	--	2,645	1,861	--	1,897	33	--	--	18	6,352	320
Kerosene-Type	--	26,035	24,459	--	107,479	-58	--	--	315	157,716	9,355
Kerosene	--	1,137	222	--	6,305	34	--	--	26	7,604	2,260
Distillate Fuel Oil	--	129,294	54,572	--	184,162	5,117	--	--	1,382	361,529	70,121
0.05 percent sulfur and under	--	30,788	20,560	--	21,326	-43,590	--	--	NA	NA	21,414
Greater than 0.05 percent sulfur ...	--	98,506	34,012	--	162,836	48,707	--	--	NA	NA	48,707
Residual Fuel Oil	--	39,495	96,604	--	2,654	2,894	--	--	3,552	132,307	20,009
Petrochemical Feedstocks ^e	--	5,486	1,797	--	-509	18	--	--	0	6,756	239
Special Naphthas	--	404	131	--	766	-144	--	--	101	1,344	105
Lubricants	--	5,639	2,130	--	5,121	-838	--	--	1,317	12,411	2,506
Waxes	--	1,353	434	--	26	-5	--	--	128	1,690	165
Petroleum Coke	--	16,321	0	--	0	3	--	--	1,603	14,715	1,004
Asphalt and Road Oil	--	28,409	10,420	--	3,260	317	--	--	111	41,661	3,502
Still Gas	--	20,527	0	--	0	0	--	--	0	20,527	0
Miscellaneous Products	--	716	666	--	898	8	--	--	70	2,202	508
Total	31,693	548,610	762,592	424	834,008	8,691	0	525,382	10,831	1,632,423	204,303

^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, November 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 27	--	1,380	-47	3	-62	0	1,425	0	0
Natural Gas Liquids and LRGs	27	24	41	--	122	-33	--	17	1	229
Pentanes Plus	3	--	15	--	0	-1	--	6	(s)	13
Liquefied Petroleum Gases	24	24	26	--	122	-32	--	11	1	216
Ethane/Ethylene	9	0	0	--	0	0	--	0	0	9
Propane/Propylene	10	45	22	--	114	-9	--	0	1	199
Normal Butane/Butylene	4	-18	4	--	8	-21	--	9	(s)	10
Isobutane/Isobutylene	1	-4	(s)	--	0	-2	--	2	0	-2
Other Liquids	61	--	97	--	19	-38	--	269	0	-53
Other Hydrocarbons/Oxygenates	51	--	7	--	0	-9	--	67	0	0
Unfinished Oils	--	--	76	--	18	-40	--	187	0	-53
Motor Gasoline Blend, Comp.	10	--	15	--	1	11	--	15	0	0
Aviation Gasoline Blend, Comp.	--	--	0	--	0	(s)	--	(s)	0	0
Finished Petroleum Products	-6	1,758	794	--	2,606	45	--	--	36	5,071
Finished Motor Gasoline	-6	822	233	--	1,603	78	--	--	2	2,573
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	42	372	4	--	362	-18	--	--	NA	NA
Other	-48	450	230	--	1,241	95	--	--	NA	NA
Finished Aviation Gasoline	--	2	0	--	4	2	--	--	0	4
Jet Fuel	--	77	73	--	391	26	--	--	2	513
Naphtha-Type	--	8	6	--	3	-4	--	--	(s)	21
Kerosene-Type	--	69	67	--	388	31	--	--	2	492
Kerosene	--	2	1	--	10	-30	--	--	(s)	41
Distillate Fuel Oil	--	456	184	--	566	-62	--	--	5	1,263
0.05 percent sulfur and under	--	221	75	--	268	46	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	235	109	--	298	-108	--	--	NA	NA
Residual Fuel Oil	--	151	266	--	2	26	--	--	18	374
Petrochemical Feedstocks ^e	--	18	9	--	-1	-3	--	--	0	28
Special Naphthas	--	1	1	--	1	(s)	--	--	(s)	3
Lubricants	--	16	1	--	20	3	--	--	3	32
Waxes	--	3	1	--	0	-1	--	--	1	5
Petroleum Coke	--	51	0	--	0	-2	--	--	4	49
Asphalt and Road Oil	--	80	25	--	8	9	--	--	(s)	114
Still Gas	--	67	0	--	0	0	--	--	0	67
Miscellaneous Products	--	3	(s)	--	2	-2	--	--	(s)	6
Total	110	1,782	2,312	-47	2,750	-88	0	1,711	37	5,246

^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-November 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 25	--	1,308	1	1	(s)	0	1,337	0	0
Natural Gas Liquids and LRGs	28	43	22	--	105	5	--	9	2	183
Pentanes Plus	4	--	4	--	0	1	--	2	(s)	5
Liquefied Petroleum Gases	25	43	19	--	105	4	--	8	2	178
Ethane/Ethylene	8	0	(s)	--	0	0	--	0	0	8
Propane/Propylene	11	45	15	--	99	2	--	0	1	168
Normal Butane/Butylene	4	1	3	--	4	2	--	5	1	4
Isobutane/Isobutylene	1	-2	(s)	--	1	(s)	--	3	0	-2
Other Liquids	49	--	144	--	11	-3	--	227	(s)	-20
Other Hydrocarbons/Oxygenates	37	--	3	--	0	3	--	36	0	0
Unfinished Oils	--	--	120	--	7	-3	--	150	0	-20
Motor Gasoline Blend. Comp.	11	--	22	--	4	-4	--	41	(s)	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	-8	1,600	809	--	2,380	25	--	--	30	4,725
Finished Motor Gasoline	-8	768	230	--	1,442	3	--	--	4	2,425
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	23	161	1	--	172	-125	--	--	NA	NA
Other	-31	607	229	--	1,270	128	--	--	NA	NA
Finished Aviation Gasoline	--	1	0	--	3	(s)	--	--	0	4
Jet Fuel	--	86	79	--	327	(s)	--	--	1	491
Naphtha-Type	--	8	6	--	6	(s)	--	--	(s)	19
Kerosene-Type	--	78	73	--	322	(s)	--	--	1	472
Kerosene	--	3	1	--	19	(s)	--	--	(s)	23
Distillate Fuel Oil	--	387	163	--	551	15	--	--	4	1,082
0.05 percent sulfur and under	--	92	62	--	64	-131	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	295	102	--	488	146	--	--	NA	NA
Residual Fuel Oil	--	118	289	--	8	9	--	--	11	396
Petrochemical Feedstocks ^e	--	16	5	--	-2	(s)	--	--	0	20
Special Naphthas	--	1	(s)	--	2	(s)	--	--	(s)	4
Lubricants	--	17	6	--	15	-3	--	--	4	37
Waxes	--	4	1	--	(s)	(s)	--	--	(s)	5
Petroleum Coke	--	49	0	--	0	(s)	--	--	5	44
Asphalt and Road Oil	--	85	31	--	10	1	--	--	(s)	125
Still Gas	--	61	0	--	0	0	--	--	0	61
Miscellaneous Products	--	2	2	--	3	(s)	--	--	(s)	7
Total	95	1,643	2,283	1	2,497	26	0	1,573	32	4,887

^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, November 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 18,562	--	20,283	623	55,567	-980	0	96,014	2	0	73,344
Natural Gas Liquids and LRGs	8,915	2,818	2,525	--	5,188	-3,848	--	5,347	91	17,856	40,462
Pentanes Plus	1,399	--	45	--	996	225	--	1,215	14	986	4,414
Liquefied Petroleum Gases	7,516	2,818	2,480	--	4,192	-4,073	--	4,132	77	16,870	36,048
Ethane/Ethylene	2,145	0	0	--	276	-892	--	0	0	3,313	4,761
Propane/Propylene	3,528	3,128	1,796	--	3,062	-1,116	--	0	32	12,598	20,351
Normal Butane/Butylene	1,334	-354	513	--	462	-1,505	--	2,615	45	800	8,296
Isobutane/Isobutylene	509	44	171	--	392	-560	--	1,517	0	159	2,640
Other Liquids	87	--	2	--	839	-797	--	2,667	0	-942	25,447
Other Hydrocarbons/Oxygenates	41	--	0	--	0	-277	--	318	0	0	1,198
Unfinished Oils	--	--	0	--	226	-1,154	--	2,322	0	-942	16,439
Motor Gasoline Blend. Comp.	46	--	2	--	613	634	--	27	0	0	7,810
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products	1,867	106,426	413	--	24,264	5,371	--	--	726	126,873	104,817
Finished Motor Gasoline	1,867	55,223	38	--	13,946	2,263	--	--	20	68,791	48,472
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	19,129	3,827	0	--	-216	204	--	--	NA	NA	1,194
Other	-17,262	51,396	38	--	14,162	2,059	--	--	NA	NA	47,278
Finished Aviation Gasoline	--	71	1	--	123	-21	--	--	0	216	363
Jet Fuel	--	5,845	58	--	3,593	-197	--	--	66	9,627	7,072
Naphtha-Type	--	451	58	--	323	46	--	--	0	786	894
Kerosene-Type	--	5,394	0	--	3,270	-243	--	--	66	8,841	6,178
Kerosene	--	801	0	--	491	158	--	--	45	1,089	1,286
Distillate Fuel Oil	--	26,264	199	--	5,903	3,316	--	--	100	28,950	33,871
0.05 percent sulfur and under	--	13,129	113	--	4,587	4,498	--	--	NA	NA	20,498
Greater than 0.05 percent sulfur ...	--	13,135	86	--	1,316	-1,182	--	--	NA	NA	13,373
Residual Fuel Oil	--	2,470	0	--	-224	197	--	--	21	2,028	2,871
Petrochemical Feedstocks ^e	--	1,391	18	--	33	-25	--	--	0	1,467	209
Special Naphthas	--	402	69	--	76	30	--	--	7	510	350
Lubricants	--	713	12	--	240	37	--	--	51	877	1,637
Waxes	--	49	9	--	0	-25	--	--	4	79	117
Petroleum Coke	--	3,892	0	--	0	-565	--	--	152	4,305	1,189
Asphalt and Road Oil	--	4,952	1	--	19	149	--	--	259	4,564	7,104
Still Gas	--	3,992	0	--	0	0	--	--	0	3,992	0
Miscellaneous Products	--	361	8	--	64	54	--	--	0	379	276
Total	29,431	109,244	23,223	623	85,858	-254	0	104,028	819	143,787	244,070

^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-November 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 213,745	--	221,870	6,733	613,054	3,858	0	1,050,808	736	0	73,344
Natural Gas Liquids and LRGs	104,824	39,718	24,086	--	26,161	12,402	--	36,413	1,968	144,006	40,462
Pentanes Plus	15,216	--	450	--	7,854	1,324	--	9,647	200	12,349	4,414
Liquefied Petroleum Gases	89,608	39,718	23,636	--	18,307	11,078	--	26,766	1,768	131,657	36,048
Ethane/Ethylene	31,989	3	3,929	--	-8,629	-51	--	0	0	27,343	4,761
Propane/Propylene	37,738	34,496	15,210	--	21,112	8,755	--	0	1,105	98,696	20,351
Normal Butane/Butylene	12,183	4,614	3,073	--	555	2,514	--	11,690	663	5,558	8,296
Isobutane/Isobutylene	7,698	605	1,424	--	5,269	-140	--	15,076	0	60	2,640
Other Liquids	-7,952	--	697	--	8,798	3,110	--	10,863	29	-12,459	25,447
Other Hydrocarbons/Oxygenates	4,048	--	0	--	0	747	--	3,301	0	0	1,198
Unfinished Oils	--	--	370	--	540	2,133	--	11,247	0	-12,470	16,439
Motor Gasoline Blend. Comp.	-12,000	--	327	--	8,258	235	--	-3,679	29	0	7,810
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-5	--	-6	0	11	0
Finished Petroleum Products	28,351	1,107,699	5,310	--	242,411	783	--	--	6,088	1,376,900	104,817
Finished Motor Gasoline	28,351	576,081	924	--	159,859	2,199	--	--	543	762,473	48,472
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	115,882	36,773	0	--	-678	-44,795	--	--	NA	NA	1,194
Other	-87,531	539,308	924	--	160,537	46,994	--	--	NA	NA	47,278
Finished Aviation Gasoline	--	945	32	--	930	-17	--	--	0	1,924	363
Jet Fuel	--	68,995	784	--	24,725	-2,261	--	--	279	96,486	7,072
Naphtha-Type	--	5,461	745	--	1,471	-121	--	--	29	7,769	894
Kerosene-Type	--	63,534	39	--	23,254	-2,140	--	--	250	88,717	6,178
Kerosene	--	5,516	0	--	1,377	-200	--	--	52	7,041	1,286
Distillate Fuel Oil	--	253,849	2,072	--	54,040	2,543	--	--	595	306,323	33,671
0.05 percent sulfur and under	--	49,083	943	--	14,444	-10,830	--	--	NA	NA	20,498
Greater than 0.05 percent sulfur ...	--	204,766	1,129	--	39,596	13,373	--	--	NA	NA	13,373
Residual Fuel Oil	--	24,167	233	--	-2,942	-142	--	--	347	21,253	2,871
Petrochemical Feedstocks ^e	--	13,863	202	--	539	8	--	--	0	14,596	209
Special Naphthas	--	4,610	694	--	438	-85	--	--	206	5,621	350
Lubricants	--	7,637	143	--	1,884	-269	--	--	436	9,497	1,637
Waxes	--	771	63	--	0	-8	--	--	54	788	117
Petroleum Coke	--	41,539	0	--	0	-1,430	--	--	2,159	40,810	1,189
Asphalt and Road Oil	--	60,694	100	--	1,243	355	--	--	1,417	60,265	7,104
Still Gas	--	45,834	0	--	0	0	--	--	0	45,834	0
Miscellaneous Products	--	3,198	63	--	318	90	--	--	1	3,488	276
Total	338,968	1,147,417	251,963	6,733	890,424	20,153	0	1,098,084	8,821	1,508,446	244,070

^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, November 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 619	--	676	21	1,852	-33	0	3,200	(s)	0
Natural Gas Liquids and LRGs	297	94	84	--	173	-128	--	178	3	595
Pentanes Plus	47	--	2	--	33	8	--	41	(s)	33
Liquefied Petroleum Gases	251	94	83	--	140	-136	--	138	3	562
Ethane/Ethylene	72	0	0	--	9	-30	--	0	0	110
Propane/Propylene	118	104	60	--	102	-37	--	0	1	420
Normal Butane/Butylene	44	-12	17	--	15	-50	--	87	2	27
Isobutane/Isobutylene	17	1	6	--	13	-19	--	51	0	5
Other Liquids	3	--	(s)	--	28	-27	--	89	0	-31
Other Hydrocarbons/Oxygenates	1	--	0	--	0	-9	--	11	0	0
Unfinished Oils	--	--	0	--	8	-38	--	77	0	-31
Motor Gasoline Blend, Comp.	2	--	(s)	--	20	21	--	1	0	0
Aviation Gasoline Blend, Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	62	3,548	14	--	809	179	--	--	24	4,229
Finished Motor Gasoline	62	1,841	1	--	465	75	--	--	1	2,293
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	638	128	0	--	-7	7	--	--	NA	NA
Other	-575	1,713	1	--	472	69	--	--	NA	NA
Finished Aviation Gasoline	--	2	(s)	--	4	-1	--	--	0	7
Jet Fuel	--	195	2	--	120	-7	--	--	2	321
Naphtha-Type	--	15	2	--	11	2	--	--	0	26
Kerosene-Type	--	180	0	--	109	-8	--	--	2	295
Kerosene	--	27	0	--	16	5	--	--	2	36
Distillate Fuel Oil	--	875	7	--	197	111	--	--	3	965
0.05 percent sulfur and under	--	438	4	--	153	150	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	438	3	--	44	-39	--	--	NA	NA
Residual Fuel Oil	--	82	0	--	-7	7	--	--	1	68
Petrochemical Feedstocks ^e	--	46	1	--	1	-1	--	--	0	49
Special Naphthas	--	13	2	--	3	1	--	--	(s)	17
Lubricants	--	24	(s)	--	8	1	--	--	2	29
Waxes	--	2	(s)	--	0	-1	--	--	(s)	3
Petroleum Coke	--	130	0	--	0	-19	--	--	5	143
Asphalt and Road Oil	--	165	(i)	--	1	5	--	--	9	152
Still Gas	--	133	0	--	0	0	--	--	0	133
Miscellaneous Products	--	12	(s)	--	2	2	--	--	0	13
Total	981	3,641	774	21	2,862	-8	0	3,468	27	4,793

^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-November 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 640	--	664	20	1,835	12	0	3,146	2	0
Natural Gas Liquids and LRGs	314	119	72	--	78	37	--	109	6	431
Pentanes Plus	46	--	1	--	24	4	--	29	1	37
Liquefied Petroleum Gases	268	119	71	--	55	33	--	80	5	394
Ethane/Ethylene	96	(s)	12	--	-26	(s)	--	0	0	82
Propane/Propylene	113	103	46	--	63	26	--	0	3	295
Normal Butane/Butylene	36	14	9	--	2	8	--	35	2	17
Isobutane/Isobutylene	23	2	4	--	16	(s)	--	45	0	(s)
Other Liquids	-24	--	2	--	26	9	--	33	(s)	-37
Other Hydrocarbons/Oxygenates	12	--	0	--	0	2	--	10	0	0
Unfinished Oils	--	--	1	--	2	6	--	34	0	-37
Motor Gasoline Blend. Comp.	-36	--	1	--	25	1	--	-11	(s)	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	85	3,316	16	--	726	2	--	--	18	4,122
Finished Motor Gasoline	85	1,725	3	--	479	7	--	--	2	2,283
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	347	110	0	--	-2	-134	--	--	NA	NA
Other	-262	1,615	3	--	481	141	--	--	NA	NA
Finished Aviation Gasoline	--	3	(s)	--	3	(s)	--	--	0	6
Jet Fuel	--	207	2	--	74	-7	--	--	1	289
Naphtha-Type	--	16	2	--	4	(s)	--	--	(s)	23
Kerosene-Type	--	190	(s)	--	70	-6	--	--	1	266
Kerosene	--	17	0	--	4	-1	--	--	(s)	21
Distillate Fuel Oil	--	760	6	--	162	8	--	--	2	919
0.05 percent sulfur and under	--	147	3	--	43	-32	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	613	3	--	119	40	--	--	NA	NA
Residual Fuel Oil	--	72	1	--	-9	(s)	--	--	1	64
Petrochemical Feedstocks ^e	--	42	1	--	2	(s)	--	--	0	44
Special Naphthas	--	14	2	--	1	(s)	--	--	1	17
Lubricants	--	23	(s)	--	6	-1	--	--	1	28
Waxes	--	2	(s)	--	0	(s)	--	--	(s)	2
Petroleum Coke	--	124	0	--	0	-4	--	--	6	122
Asphalt and Road Oil	--	182	(s)	--	4	1	--	--	4	180
Still Gas	--	137	0	--	0	0	--	--	0	137
Miscellaneous Products	--	10	(s)	--	1	(s)	--	--	(s)	10
Total	1,015	3,435	754	20	2,666	60	0	3,288	26	4,516

^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,
November 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 96,058	--	134,687	8,151	-47,148	8,140	0	183,608	0	0	757,968
Natural Gas Liquids and LRGs	33,912	7,441	2,076	--	-6,957	-12,273	--	9,505	546	38,694	81,134
Pentanes Plus	5,743	--	289	--	-710	-1,232	--	2,576	139	3,839	6,584
Liquefied Petroleum Gases	28,169	7,441	1,787	--	-6,247	-11,041	--	6,929	406	34,856	74,550
Ethane/Ethylene	12,097	843	0	--	311	-3,528	--	0	0	16,779	17,434
Propane/Propylene	10,024	7,445	1,491	--	-5,935	-2,534	--	0	341	15,218	30,496
Normal Butane/Butylene	2,211	-1,038	205	--	-409	-3,873	--	3,962	65	815	19,220
Isobutane/Isobutylene	3,837	191	91	--	-214	-1,106	--	2,967	0	2,044	7,400
Other Liquids	1,685	--	11,609	--	-1,408	-725	--	18,525	151	-6,065	70,856
Other Hydrocarbons/Oxygenates	1,815	--	0	--	0	-1,069	--	2,684	0	0	6,984
Unfinished Oils	--	--	11,608	--	-756	-753	--	17,670	0	-6,065	47,368
Motor Gasoline Blend. Comp.	70	--	1	--	-652	1,209	--	-1,941	151	0	16,491
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-112	--	112	0	0	13
Finished Petroleum Products	131	216,134	7,229	--	-106,148	1,683	--	--	13,889	101,774	131,622
Finished Motor Gasoline	131	100,879	0	--	-84,374	601	--	--	2,392	33,643	48,892
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	2,014	13,462	0	--	-10,663	868	--	--	NA	NA	7,821
Other	-1,882	87,417	0	--	-53,711	-267	--	--	NA	NA	41,071
Finished Aviation Gasoline	--	364	0	--	-264	-81	--	--	0	181	292
Jet Fuel	--	21,183	11	--	-16,127	-714	--	--	556	5,225	14,944
Naphtha-Type	--	1,493	0	--	-362	-161	--	--	0	1,292	1,143
Kerosene-Type	--	19,690	11	--	-15,765	-553	--	--	556	3,933	13,801
Kerosene	--	1,002	47	--	-746	-984	--	--	7	1,280	1,548
Distillate Fuel Oil	--	45,734	554	--	-23,405	1,179	--	--	4,996	16,708	30,840
0.05 percent sulfur and under	--	21,061	554	--	-13,146	2,126	--	--	NA	NA	14,325
Greater than 0.05 percent sulfur ...	--	24,673	0	--	-10,259	-947	--	--	NA	NA	16,515
Residual Fuel Oil	--	11,805	1,676	--	172	1,523	--	--	1,405	10,725	17,610
Petrochemical Feedstocks ^e	--	10,205	4,837	--	0	392	--	--	0	14,650	2,852
Special Naphthas	--	1,273	70	--	-111	7	--	--	19	1,206	1,769
Lubricants	--	2,998	0	--	-928	-270	--	--	202	2,138	5,275
Waxes	--	340	27	--	0	20	--	--	32	315	446
Petroleum Coke	--	8,446	0	--	0	98	--	--	4,274	4,074	2,734
Asphalt and Road Oil	--	2,679	0	--	-245	-130	--	--	5	2,559	2,970
Still Gas	--	8,532	0	--	0	0	--	--	0	8,532	0
Miscellaneous Products	--	694	7	--	-120	42	--	--	0	539	1,450
Total	131,786	223,575	155,601	8,151	-161,661	-3,175	0	211,638	14,586	134,403	1,041,580

^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 4C° 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-November 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 1,078,256	--	1,463,192	57,556	-510,547	32,300	3	2,056,154	0	0	757,968
Natural Gas Liquids and LRGs	388,431	113,680	25,665	--	-33,877	20,997	--	85,074	8,006	379,822	81,134
Pentanes Plus	67,332	--	6,840	--	-4,354	1,055	--	28,915	292	39,556	6,584
Liquefied Petroleum Gases	321,099	113,680	18,825	--	-29,523	19,942	--	56,159	7 713	340,267	74,550
Ethane/Ethylene	141,364	9,336	46	--	19,513	3,697	--	0	0	166,562	17,434
Propane/Propylene	112,085	83,472	12,295	--	-47,202	8,374	--	3	6,050	146,223	30,496
Normal Butane/Butylene	19,509	17,553	4,867	--	1,565	7,808	--	23,478	1,663	10,545	19,220
Isobutane/isobutylene	48,141	3,319	1,617	--	-3,399	63	--	32,678	0	16,937	7,400
Other Liquids	24,065	--	117,609	--	-13,599	5,989	--	160,000	817	-38,731	70,856
Other Hydrocarbons/Oxygenates	29,709	--	262	--	0	4,446	--	25,525	0	0	6,984
Unfinished Oils	--	--	115,479	--	-3,119	971	--	150,131	0	-38,742	47,368
Motor Gasoline Blend. Comp.	-5,644	--	1,868	--	-10,480	610	--	-15,683	817	0	16,491
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-38	--	27	0	11	13
Finished Petroleum Products	7,365	2,311,991	72,342	--	-1,077,131	1,916	--	--	144,647	1,168,005	131,622
Finished Motor Gasoline	7,365	1,084,344	1,363	--	-665,446	879	--	--	24,703	402,045	48,892
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	12,198	68,780	0	--	-56,928	-39,906	--	--	NA	NA	7,821
Other	-4,833	1,015,564	1,363	--	-608,518	40,785	--	--	NA	NA	41,071
Finished Aviation Gasoline	--	4,154	0	--	-2,188	-48	--	--	0	2,014	292
Jet Fuel	--	231,907	2,576	--	-143,678	-346	--	--	7,785	83,366	14,944
Naphtha-Type	--	21,355	725	--	-3,531	-602	--	--	592	18,559	1,143
Kerosene-Type	--	210,552	1,851	--	-140,147	256	--	--	7,193	64,807	13,801
Kerosene	--	6,813	47	--	-7,515	-138	--	--	1,187	-1,704	1,548
Distillate Fuel Oil	--	462,005	2,399	--	-244,239	72	--	--	43,502	176,591	30,840
0.05 percent sulfur and under	--	106,658	2,399	--	-40,113	-16,443	--	--	NA	NA	14,325
Greater than 0.05 percent sulfur ...	--	355,347	0	--	-204,126	16,515	--	--	NA	NA	16,515
Residual Fuel Oil	--	117,127	15,369	--	288	2,383	--	--	19,190	111,211	17,610
Petrochemical Feedstocks ^e	--	120,291	48,848	--	-30	-172	--	--	0	169,281	2,852
Special Naphthas	--	12,233	732	--	-1,204	379	--	--	680	10,702	1,769
Lubricants	--	32,996	133	--	-7,374	-768	--	--	3,201	23,322	5,275
Waxes	--	3,607	101	--	-26	1	--	--	299	3,382	446
Petroleum Coke	--	92,577	512	--	0	159	--	--	44,007	48,923	2,734
Asphalt and Road Oil	--	39,103	220	--	-4,503	-774	--	--	69	35,525	2,970
Still Gas	--	97,440	0	--	0	0	--	--	0	97,440	0
Miscellaneous Products	--	7,394	42	--	-1,216	289	--	--	23	5,908	1,450
Total	1,498,117	2,425,671	1,678,808	57,556	-1,635,154	61,202	3	2,301,228	153,469	1,509,096	1,041,580

^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, November 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 3,202	--	4,490	272	-1,572	271	0	8,120	0	0
Natural Gas Liquids and LRGs	1,130	248	89	--	-232	-409	--	317	18	1,290
Pentanes Plus	191	--	10	--	-24	-41	--	86	5	128
Liquefied Petroleum Gases	939	248	60	--	-208	-368	--	231	14	1,162
Ethane/Ethylene	403	28	0	--	10	-118	--	0	0	559
Propane/Propylene	334	248	50	--	-198	-84	--	0	11	507
Normal Butane/Butylene	74	-35	7	--	-14	-129	--	132	2	27
Isobutane/Isobutylene	128	6	3	--	-7	-37	--	99	0	68
Other Liquids	56	--	387	--	-47	-24	--	618	5	-202
Other Hydrocarbons/Oxygenates	54	--	0	--	0	-36	--	89	0	0
Unfinished Oils	--	--	387	--	-25	-25	--	589	0	-202
Motor Gasoline Blend. Comp.	2	--	(s)	--	-22	40	--	-65	5	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-4	--	4	0	0
Finished Petroleum Products	4	7,204	241	--	-3,538	56	--	--	463	3,392
Finished Motor Gasoline	4	3,363	0	--	-2,146	20	--	--	80	1,121
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	67	449	0	--	-355	29	--	--	NA	NA
Other	-63	2,914	0	--	-1,790	-9	--	--	NA	NA
Finished Aviation Gasoline	--	12	0	--	-9	-3	--	--	0	6
Jet Fuel	--	706	(s)	--	-538	-24	--	--	19	174
Naphtha-Type	--	50	0	--	-12	-5	--	--	0	43
Kerosene-Type	--	656	(s)	--	-526	-18	--	--	19	131
Kerosene	--	33	2	--	-25	-33	--	--	(s)	43
Distillate Fuel Oil	--	1,524	18	--	-780	39	--	--	167	557
0.05 percent sulfur and under	--	702	18	--	-438	71	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	822	0	--	-342	-32	--	--	NA	NA
Residual Fuel Oil	--	394	56	--	6	51	--	--	47	357
Petrochemical Feedstocks ^e	--	340	161	--	0	13	--	--	0	488
Special Naphthas	--	42	2	--	-4	(s)	--	--	1	40
Lubricants	--	100	0	--	-31	-9	--	--	7	71
Waxes	--	11	1	--	0	1	--	--	1	11
Petroleum Coke	--	282	0	--	0	3	--	--	142	136
Asphalt and Road Oil	--	89	0	--	-8	-4	--	--	(s)	85
Still Gas	--	284	0	--	0	0	--	--	0	284
Miscellaneous Products	--	23	(s)	--	-4	1	--	--	0	18
Total	4,393	7,453	5,187	272	-5,389	-106	0	7,055	486	4,480

^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-November 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 3,228	--	4,381	172	-1,529	97	(s)	6,158	0	0
Natural Gas Liquids and LRGs	1,163	340	77	--	-101	63	--	255	24	1,137
Pentanes Plus	202	--	20	--	-13	3	--	87	1	118
Liquefied Petroleum Gases	961	340	56	--	-88	60	--	168	23	1,019
Ethane/Ethylene	423	28	(s)	--	58	11	--	0	0	499
Propane/Propylene	336	250	37	--	-141	25	--	(s)	18	438
Normal Butane/Butylene	58	53	15	--	5	23	--	70	5	32
Isobutane/Isobutylene	144	10	5	--	-10	(s)	--	98	0	51
Other Liquids	72	--	352	--	-41	18	--	479	2	-116
Other Hydrocarbons/Oxygenates	89	--	1	--	0	13	--	76	0	0
Unfinished Oils	--	--	346	--	-9	3	--	449	0	-116
Motor Gasoline Blend. Comp.	-17	--	6	--	-31	2	--	-47	2	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	22	6,922	217	--	-3,225	6	--	--	433	3,497
Finished Motor Gasoline	22	3,247	4	--	-1,992	3	--	--	74	1,204
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	37	206	0	--	-170	-119	--	--	NA	NA
Other	-14	3,041	4	--	-1,822	122	--	--	NA	NA
Finished Aviation Gasoline	--	12	0	--	-7	(s)	--	--	0	6
Jet Fuel	--	694	8	--	-430	-1	--	--	23	250
Naphtha-Type	--	64	2	--	-11	-2	--	--	2	56
Kerosene-Type	--	630	6	--	-420	1	--	--	22	194
Kerosene	--	20	(s)	--	-23	(s)	--	--	4	-5
Distillate Fuel Oil	--	1,383	7	--	-731	(s)	--	--	130	529
0.05 percent sulfur and under	--	319	7	--	-120	-49	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	1,064	0	--	-611	49	--	--	NA	NA
Residual Fuel Oil	--	351	46	--	1	7	--	--	57	333
Petrochemical Feedstocks ^e	--	360	146	--	(s)	-1	--	--	0	507
Special Naphthas	--	37	2	--	-4	1	--	--	2	32
Lubricants	--	99	(s)	--	-22	-2	--	--	10	70
Waxes	--	11	(s)	--	(s)	(s)	--	--	1	10
Petroleum Coke	--	277	2	--	0	(s)	--	--	132	146
Asphalt and Road Oil	--	117	1	--	-13	-2	--	--	(s)	106
Still Gas	--	292	0	--	0	0	--	--	0	292
Miscellaneous Products	--	22	(s)	--	-4	1	--	--	(s)	18
Total	4,485	7,262	5,026	172	-4,896	183	(s)	6,890	459	4,518

^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,
November 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 12,330	--	2,734	1,316	-3,109	-511	0	13,782	0	0	10,774
Natural Gas Liquids and LRGs	3,530	121	759	--	-1,886	-85	--	652	3	1,954	1,364
Pentanes Plus	811	--	421	--	-286	-19	--	161	2	802	186
Liquefied Petroleum Gases	2,719	121	338	--	-1,600	-66	--	491	1	1,152	1,178
Ethane/Ethylene	630	0	0	--	-587	4	--	0	0	39	185
Propane/Propylene	1,300	237	175	--	-548	-61	--	0	1	1,224	508
Normal Butane/Butylene	490	-134	142	--	-267	-46	--	382	0	-125	279
Isobutane/Isobutylene	299	18	21	--	-178	37	--	109	0	14	206
Other Liquids	170	--	0	--	0	328	--	-227	0	69	4,259
Other Hydrocarbons/Oxygenates	84	--	0	--	0	-73	--	157	0	0	278
Unfinished Oils	--	--	0	--	0	78	--	-147	0	69	2,429
Motor Gasoline Blend, Comp.	86	--	0	--	0	323	--	-237	0	0	1,552
Aviation Gasoline Blend, Comp.	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products	-36	14,957	113	--	846	1,571	--	--	10	14,299	9,849
Finished Motor Gasoline	-36	7,089	4	--	488	632	--	--	0	6,913	4,617
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	503	678	0	--	22	220	--	--	NA	NA	588
Other	-539	6,411	4	--	466	412	--	--	NA	NA	4,029
Finished Aviation Gasoline	--	15	0	--	7	1	--	--	0	21	36
Jet Fuel	--	796	0	--	336	19	--	--	0	1,113	722
Naphtha-Type	--	319	0	--	-148	38	--	--	0	133	263
Kerosene-Type	--	477	0	--	484	-19	--	--	0	980	459
Kerosene	--	53	0	--	-40	-47	--	--	0	60	72
Distillate Fuel Oil	--	4,223	100	--	55	587	--	--	0	3,791	2,715
0.05 percent sulfur and under	--	2,400	21	--	179	356	--	--	NA	NA	1,683
Greater than 0.05 percent sulfur ...	--	1,823	79	--	-124	231	--	--	NA	NA	1,032
Residual Fuel Oil	--	314	6	--	0	5	--	--	0	315	362
Petrochemical Feedstocks ^e	--	19	0	--	0	1	--	--	0	18	1
Special Naphthas	--	0	0	--	0	0	--	--	(s)	(s)	1
Lubricants	--	0	0	--	0	0	--	--	4	-4	0
Waxes	--	57	3	--	0	24	--	--	(s)	36	48
Petroleum Coke	--	424	0	--	0	69	--	--	5	350	183
Asphalt and Road Oil	--	1,300	0	--	0	275	--	--	1	1,024	1,074
Still Gas	--	583	0	--	0	0	--	--	0	583	0
Miscellaneous Products	--	84	0	--	0	5	--	--	0	79	18
Total	15,994	15,078	3,606	1,316	-4,149	1,303	0	14,207	13	16,322	26,246

^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-November 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 140,963	--	29,925	15,152	-37,249	-633	0	149,424	0	0	10,774
Natural Gas Liquids and LRGs	44,758	2,546	3,932	--	-27,355	76	--	5,575	96	18,134	1,364
Pentanes Plus	10,490	--	1,977	--	-3,500	24	--	1,800	15	7,128	186
Liquefied Petroleum Gases	34,268	2,546	1,955	--	-23,855	52	--	3,775	80	11,007	1,178
Ethane/Ethylene	11,373	0	0	--	-10,884	7	--	0	0	482	185
Propane/Propylene	14,294	2,617	1,165	--	-7,123	15	--	0	2	10,936	508
Normal Butane/Butylene	5,202	49	656	--	-3,595	-6	--	2,612	78	-372	279
Isobutane/Isobutylene	3,399	-120	134	--	-2,253	36	--	1,163	0	-39	206
Other Liquids	1,318	--	0	--	0	-104	--	912	0	510	4,259
Other Hydrocarbons/Oxygenates	1,101	--	0	--	0	176	--	925	0	0	278
Unfinished Oils	--	--	0	--	0	32	--	-542	0	510	2,429
Motor Gasoline Blend. Comp.	217	--	0	--	0	-312	--	529	0	0	1,552
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products	213	158,518	1,224	--	11,232	-973	--	--	103	172,057	9,849
Finished Motor Gasoline	213	77,509	117	--	5,539	27	--	--	3	83,348	4,617
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	3,050	3,381	0	--	78	-3,059	--	--	NA	NA	588
Other	-2,836	74,128	117	--	5,461	3,086	--	--	NA	NA	4,029
Finished Aviation Gasoline	--	244	0	--	123	-9	--	--	0	376	36
Jet Fuel	--	11,266	0	--	5,172	-113	--	--	0	16,551	722
Naphtha-Type	--	3,511	0	--	-1,687	-34	--	--	0	1,858	263
Kerosene-Type	--	7,755	0	--	6,859	-79	--	--	0	14,693	459
Kerosene	--	533	0	--	-167	55	--	--	0	311	72
Distillate Fuel Oil	--	41,325	1,060	--	565	0	--	--	1	42,949	2,715
0.05 percent sulfur and under	--	10,318	449	--	3,285	-1,032	--	--	NA	NA	1,683
Greater than 0.05 percent sulfur ...	--	31,007	611	--	-2,720	1,032	--	--	NA	NA	1,032
Residual Fuel Oil	--	3,564	15	--	0	5	--	--	0	3,574	362
Petrochemical Feedstocks ^e	--	236	0	--	0	-1	--	--	0	237	1
Special Naphthas	--	0	0	--	0	0	--	--	3	-3	1
Lubricants	--	0	0	--	0	0	--	--	47	-47	0
Waxes	--	343	32	--	0	4	--	--	1	370	48
Petroleum Coke	--	4,631	0	--	0	-50	--	--	39	4,642	183
Asphalt and Road Oil	--	11,223	0	--	0	-907	--	--	9	12,121	1,074
Still Gas	--	6,841	0	--	0	0	--	--	0	6,841	0
Miscellaneous Products	--	803	0	--	0	16	--	--	(s)	787	18
Total	187,253	181,064	35,081	15,152	-53,372	-1,634	0	155,911	199	190,701	26,246

^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, November 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 411	--	91	44	-104	-17	0	459	0	0
Natural Gas Liquids and LRGs	118	4	25	--	-63	-3	--	22	(s)	65
Pentanes Plus	27	--	14	--	-10	-1	--	5	(s)	27
Liquefied Petroleum Gases	91	4	11	--	-53	-2	--	16	(s)	38
Ethane/Ethylene	21	0	0	--	-20	(s)	--	0	0	1
Propane/Propylene	43	8	6	--	-18	-2	--	0	(s)	41
Normal Butane/Butylene	16	-4	5	--	-10	-2	--	13	0	-4
Isobutane/Isobutylene	10	1	1	--	-6	1	--	4	0	(s)
Other Liquids	6	--	0	--	0	11	--	-8	0	2
Other Hydrocarbons/Oxygenates	3	--	0	--	0	-2	--	5	0	0
Unfinished Oils	--	--	0	--	0	3	--	-5	0	2
Motor Gasoline Blend. Comp.	3	--	0	--	0	11	--	-8	0	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	-1	499	4	--	28	52	--	--	(s)	477
Finished Motor Gasoline	-1	236	(s)	--	16	21	--	--	0	230
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	17	23	0	--	1	7	--	--	NA	NA
Other	-18	214	(s)	--	16	14	--	--	NA	NA
Finished Aviation Gasoline	--	1	0	--	(s)	(s)	--	--	0	1
Jet Fuel	--	27	0	--	11	1	--	--	0	37
Naphtha-Type	--	11	0	--	-5	1	--	--	0	4
Kerosene-Type	--	16	0	--	16	-1	--	--	0	33
Kerosene	--	2	0	--	-1	-2	--	--	0	2
Distillate Fuel Oil	--	141	3	--	2	20	--	--	0	126
0.05 percent sulfur and under	--	80	1	--	6	12	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	61	3	--	-4	8	--	--	NA	NA
Residual Fuel Oil	--	10	(s)	--	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	--	2	(s)	--	0	1	--	--	(s)	1
Petroleum Coke	--	14	0	--	0	2	--	--	(s)	12
Asphalt and Road Oil	--	43	0	--	0	9	--	--	(s)	34
Still Gas	--	19	0	--	0	0	--	--	0	19
Miscellaneous Products	--	3	0	--	0	(s)	--	--	0	3
Total	533	503	120	44	-138	43	0	474	(s)	544

^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-November 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 422	--	90	45	-112	-2	0	447	0	0
Natural Gas Liquids and LRGs	134	8	12	--	-82	(s)	--	17	(s)	54
Pentanes Plus	31	--	6	--	-10	(s)	--	5	(s)	21
Liquefied Petroleum Gases	103	8	6	--	-71	(s)	--	11	(s)	33
Ethane/Ethylene	34	0	0	--	-33	(s)	--	0	0	1
Propane/Propylene	43	8	3	--	-21	(s)	--	0	(s)	33
Normal Butane/Butylene	16	(s)	2	--	-11	(s)	--	8	(s)	-1
Isobutane/Isobutylene	10	(s)	(s)	--	-7	(s)	--	3	0	(s)
Other Liquids	4	--	0	--	0	(s)	--	3	0	2
Other Hydrocarbons/Oxygenates	3	--	0	--	0	1	--	3	0	0
Unfinished Oils	--	--	0	--	0	(s)	--	-2	0	2
Motor Gasoline Blend. Comp.	1	--	0	--	0	-1	--	2	0	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	1	475	4	--	34	-3	--	--	(s)	515
Finished Motor Gasoline	1	232	(s)	--	17	(s)	--	--	(s)	250
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	9	10	0	--	(s)	-9	--	--	NA	NA
Other	-8	222	(s)	--	16	9	--	--	NA	NA
Finished Aviation Gasoline	--	1	0	--	(s)	(s)	--	--	0	1
Jet Fuel	--	34	0	--	15	(s)	--	--	0	50
Naphtha-Type	--	11	0	--	-5	(s)	--	--	0	6
Kerosene-Type	--	23	0	--	21	(s)	--	--	0	44
Kerosene	--	2	0	--	-1	(s)	--	--	0	1
Distillate Fuel Oil	--	124	3	--	2	0	--	--	(s)	129
0.05 percent sulfur and under	--	31	1	--	10	-3	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	93	2	--	-8	3	--	--	NA	NA
Residual Fuel Oil	--	11	(s)	--	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	--	34	0	--	0	-3	--	--	(s)	36
Still Gas	--	20	0	--	0	0	--	--	0	20
Miscellaneous Products	--	2	0	--	0	(s)	--	--	(s)	2
Total	561	482	105	45	-160	-5	0	467	1	571

^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,
November 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 78,886	--	7,652	-1,483	-5,394	2,748	0	74,515	2,013	385	68,279
Natural Gas Liquids and LRGs	3,061	1,665	12	--	0	-871	--	3,073	119	2,217	4,771
Pentanes Plus	1,533	--	0	--	0	11	--	1,229	0	293	130
Liquefied Petroleum Gases	1,528	1,665	12	--	0	-682	--	1,844	119	1,924	4,641
Ethane/Ethylene	2	0	0	--	0	0	--	0	0	2	0
Propane/Propylene	279	1,307	8	--	0	-117	--	0	117	1,594	1,280
Normal Butane/Butylene	828	314	0	--	0	-513	--	1,329	3	323	2,799
Isobutane/Isobutylene	419	44	4	--	0	-52	--	515	0	4	562
Other Liquids	1,214	--	775	--	0	-1,151	--	3,819	(s)	-679	34,065
Other Hydrocarbons/Oxygenates	2,012	--	290	--	0	-813	--	3,115	0	0	4,251
Unfinished Oils	--	--	485	--	0	-903	--	2,067	0	-679	21,698
Motor Gasoline Blend. Comp.	-798	--	0	--	0	555	--	-1,353	(s)	0	8,104
Aviation Gasoline Blend. Comp.	--	--	0	--	0	10	--	-10	0	0	12
Finished Petroleum Products	1,024	84,483	1,511	--	2,855	2,797	--	--	10,276	78,800	60,226
Finished Motor Gasoline	1,024	39,259	64	--	1,846	1,287	--	--	1,202	39,705	23,532
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	2,265	21,938	0	--	0	981	--	--	NA	NA	9,332
Other	-1,241	17,321	64	--	1,846	306	--	--	NA	NA	14,200
Finished Aviation Gasoline	--	126	0	--	0	7	--	--	0	119	437
Jet Fuel	--	11,368	604	--	461	284	--	--	204	11,945	7,967
Naphtha-Type	--	52	0	--	85	-18	--	--	114	41	285
Kerosene-Type	--	11,316	604	--	376	302	--	--	90	11,904	7,682
Kerosene	--	99	1	--	0	13	--	--	2	85	118
Distillate Fuel Oil	--	14,430	27	--	473	1,454	--	--	4,640	8,836	11,970
0.05 percent sulfur and under	--	7,135	2	--	344	773	--	--	NA	NA	6,295
Greater than 0.05 percent sulfur ...	--	7,295	25	--	129	681	--	--	NA	NA	5,675
Residual Fuel Oil	--	7,924	736	--	0	43	--	--	591	8,026	8,439
Petrochemical Feedstocks ^e	--	288	21	--	0	-115	--	--	0	424	215
Special Naphthas	--	34	3	--	0	-9	--	--	5	41	31
Lubricants	--	600	0	--	75	-8	--	--	67	616	1,741
Waxes	--	40	2	--	0	-30	--	--	14	58	76
Petroleum Coke	--	4,627	42	--	0	86	--	--	3,537	1,046	3,890
Asphalt and Road Oil	--	1,361	10	--	0	-77	--	--	13	1,435	1,544
Still Gas	--	4,088	0	--	0	0	--	--	0	4,088	0
Miscellaneous Products	--	259	1	--	0	-138	--	--	1	377	266
Total	84,186	86,148	9,950	-1,483	-2,539	3,723	0	81,407	12,408	78,723	167,341

^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-November 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 842,259	--	92,903	7,062	-85,557	-3,906	6	844,111	33,147	3,309	68,279
Natural Gas Liquids and LRGs	33,893	29,165	175	--	0	1,642	--	29,843	4,206	27,542	4,771
Pentanes Plus	17,444	--	0	--	0	50	--	13,120	(s)	4,274	130
Liquefied Petroleum Gases	16,449	29,165	175	--	0	1,592	--	16,723	4,206	23,268	4,641
Ethane/Ethylene	18	0	0	--	0	0	--	0	0	18	0
Propane/Propylene	3,265	13,618	86	--	0	335	--	26	1,353	15,255	1,280
Normal Butane/Butylene	8,337	14,919	6	--	0	1,043	--	10,183	2,853	9,183	2,799
Isobutane/Isobutylene	4,829	628	83	--	0	214	--	6,514	0	-1,188	562
Other Liquids	14,527	--	8,094	--	1,058	3,233	--	21,134	1,445	-2,133	34,065
Other Hydrocarbons/Oxygenates	17,737	--	3,424	--	0	1,672	--	19,489	0	0	4,251
Unfinished Oils	--	--	4,231	--	247	613	--	5,998	0	-2,133	21,698
Motor Gasoline Blend. Comp.	-3,210	--	439	--	811	939	--	-4,344	1,445	0	8,104
Aviation Gasoline Blend. Comp.	--	--	0	--	0	9	--	-9	0	0	12
Finished Petroleum Products	5,146	919,447	15,878	--	28,593	2,418	--	--	115,078	851,568	60,226
Finished Motor Gasoline	5,146	415,272	3,395	--	18,347	-644	--	--	6,580	436,224	23,532
Reformulated	--	0	0	--	0	0	--	--	NA	NA	0
Oxygenated	13,723	88,958	0	--	0	-12,635	--	--	NA	NA	9,332
Other	-8,576	326,314	3,395	--	18,347	11,991	--	--	NA	NA	14,200
Finished Aviation Gasoline	--	1,864	46	--	0	61	--	--	0	1,849	437
Jet Fuel	--	132,835	3,025	--	4,405	-159	--	--	10,755	129,669	7,967
Naphtha-Type	--	5,802	268	--	1,850	-947	--	--	3,719	5,148	285
Kerosene-Type	--	127,033	2,757	--	2,555	788	--	--	7,036	124,521	7,682
Kerosene	--	926	20	--	0	55	--	--	21	870	118
Distillate Fuel Oil	--	148,307	2,110	--	5,472	1,151	--	--	40,179	114,559	11,970
0.05 percent sulfur and under	--	48,127	1,003	--	1,058	-4,524	--	--	NA	NA	6,295
Greater than 0.05 percent sulfur ...	--	100,180	1,107	--	4,414	5,675	--	--	NA	NA	5,675
Residual Fuel Oil	--	92,594	6,526	--	0	1,442	--	--	18,930	78,748	8,439
Petrochemical Feedstocks ^e	--	1,608	234	--	0	73	--	--	0	1,769	215
Special Naphthas	--	629	51	--	0	-30	--	--	136	574	31
Lubricants	--	6,912	31	--	369	-277	--	--	1,151	6,438	1,741
Waxes	--	662	23	--	0	-49	--	--	154	580	76
Petroleum Coke	--	50,715	146	--	0	793	--	--	36,984	13,084	3,890
Asphalt and Road Oil	--	16,596	266	--	0	-155	--	--	179	16,838	1,544
Still Gas	--	48,088	--	--	0	0	--	--	0	48,088	0
Miscellaneous Products	--	2,439	--	--	0	157	--	--	10	2,277	266
Total	895,826	948,612		7,062	-35,906	3,387	6	895,088	153,876	880,287	167,341

^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, November 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 2,630	--	255	-49	-180	92	0	2,484	67	13
Natural Gas Liquids and LRGs	102	56	(s)	--	0	-22	--	102	4	74
Pentanes Plus	51	--	0	--	0	(s)	--	41	0	10
Liquefied Petroleum Gases	51	56	(s)	--	0	-23	--	61	4	64
Ethane/Ethylene	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene	9	44	(s)	--	0	-4	--	0	4	53
Normal Butane/Butylene	28	10	0	--	0	-17	--	44	(s)	11
Isobutane/Isobutylene	14	1	(s)	--	0	-2	--	17	0	(s)
Other Liquids	40	--	26	--	0	-38	--	127	(s)	-23
Other Hydrocarbons/Oxygenates	67	--	10	--	0	-27	--	104	0	0
Unfinished Oils	--	--	16	--	0	-30	--	69	0	-23
Motor Gasoline Blend. Comp.	-27	--	0	--	0	19	--	-45	(s)	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	0
Finished Petroleum Products	34	2,816	50	--	95	93	--	--	343	2,560
Finished Motor Gasoline	34	1,309	2	--	62	43	--	--	40	1,323
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	76	731	0	--	0	33	--	--	NA	NA
Other	-41	577	2	--	62	10	--	--	NA	NA
Finished Aviation Gasoline	--	4	0	--	0	(s)	--	--	0	4
Jet Fuel	--	379	20	--	15	9	--	--	7	398
Naphtha-Type	--	2	0	--	3	-1	--	--	4	1
Kerosene-Type	--	377	20	--	13	10	--	--	3	397
Kerosene	--	3	(s)	--	0	(s)	--	--	(s)	3
Distillate Fuel Oil	--	481	1	--	16	48	--	--	155	295
0.05 percent sulfur and under	--	238	(s)	--	11	26	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	243	1	--	4	23	--	--	NA	NA
Residual Fuel Oil	--	264	25	--	0	1	--	--	20	268
Petrochemical Feedstocks ^e	--	10	1	--	0	-4	--	--	0	14
Special Naphthas	--	1	(s)	--	0	(s)	--	--	(s)	1
Lubricants	--	20	0	--	3	(s)	--	--	2	21
Waxes	--	1	(s)	--	0	-1	--	--	(s)	2
Petroleum Coke	--	154	1	--	0	3	--	--	118	35
Asphalt and Road Oil	--	45	(s)	--	0	-3	--	--	(s)	48
Still Gas	--	136	0	--	0	0	--	--	0	136
Miscellaneous Products	--	8	(s)	--	0	-5	--	--	(s)	13
Total	2,806	2,872	332	-49	-85	124	0	2,714	414	2,624

^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-November 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 2,522	--	278	21	-196	-12	(s)	2,527	99	10
Natural Gas Liquids and LRGs	101	87	1	--	0	5	--	89	13	82
Pentanes Plus	52	--	0	--	0	(s)	--	39	(s)	13
Liquefied Petroleum Gases	49	87	1	--	0	5	--	50	13	70
Ethane/Ethylene	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene	10	41	(s)	--	0	1	--	(s)	4	46
Normal Butane/Butylene	25	45	(s)	--	0	3	--	30	9	27
Isobutane/Isobutylene	14	2	(s)	--	0	1	--	20	0	-4
Other Liquids	43	--	24	--	3	10	--	63	4	-6
Other Hydrocarbons/Oxygenates	53	--	10	--	0	5	--	58	0	0
Unfinished Oils	--	--	13	--	1	2	--	18	0	-6
Motor Gasoline Blend. Comp.	-10	--	1	--	2	3	--	-13	4	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	0
Finished Petroleum Products	15	2,753	48	--	86	7	--	--	345	2,550
Finished Motor Gasoline	15	1,243	10	--	55	-2	--	--	20	1,306
Reformulated	--	0	0	--	0	0	--	--	NA	NA
Oxygenated	41	266	0	--	0	-38	--	--	NA	NA
Other	-26	977	10	--	55	36	--	--	NA	NA
Finished Aviation Gasoline	--	6	(s)	--	0	(s)	--	--	0	6
Jet Fuel	--	398	9	--	13	(s)	--	--	32	388
Naphtha-Type	--	17	1	--	6	-3	--	--	11	15
Kerosene-Type	--	380	8	--	8	2	--	--	21	373
Kerosene	--	3	(s)	--	0	(s)	--	--	(s)	3
Distillate Fuel Oil	--	444	6	--	16	3	--	--	120	343
0.05 percent sulfur and under	--	144	3	--	3	-14	--	--	NA	NA
Greater than 0.05 percent sulfur ...	--	300	3	--	13	17	--	--	NA	NA
Residual Fuel Oil	--	277	20	--	0	4	--	--	57	236
Petrochemical Feedstocks ^e	--	5	1	--	0	(s)	--	--	0	5
Special Naphthas	--	2	(s)	--	0	(s)	--	--	(s)	2
Lubricants	--	21	(s)	--	1	-1	--	--	3	19
Waxes	--	2	(s)	--	0	(s)	--	--	(s)	2
Petroleum Coke	--	152	(s)	--	0	2	--	--	111	39
Asphalt and Road Oil	--	50	1	--	0	(s)	--	--	1	50
Still Gas	--	144	0	--	0	0	--	--	0	144
Miscellaneous Products	--	7	(s)	--	0	(s)	--	--	(s)	7
Total	2,662	2,840	350	21	-108	10	(s)	2,680	461	2,636

^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.

Nc.e: 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 2C. Production of Crude Oil by PAD District and State
(Thousand Barrels)

PAD District and State	September 1993		January-September 1993	
	Total	Daily Average	Total	Daily Average
PAD District I	E 802	E 27	E 7,044	E 26
Florida	477	16	E 4,045	E 15
New York	E 27	E 1	E 266	E 1
Pennsylvania	E 161	E 5	E 1,457	E 5
Virginia	(s)	(s)	E 5	E (s)
West Virginia	176	6	E 1,539	E 6
Adjustment ^a	-40	-1	E -269	E -1
PAD District II	E 19,209	E 640	E 175,852	E 644
Illinois	1,605	54	14,490	53
Indiana	228	8	2,077	8
Kansas	4,104	137	37,793	138
Kentucky	383	13	3,512	13
Michigan	E 1,013	E 34	E 9,880	E 36
Missouri	12	(s)	E 94	E (s)
Nebraska	394	13	3,705	14
North Dakota	2,547	85	23,315	85
Ohio	E 764	E 25	E 6,461	E 24
Oklahoma	7,847	262	72,456	265
South Dakota	125	4	1,114	4
Tennessee	34	1	316	1
Adjustment ^a	152	5	E 640	E 2
PAD District III	E 96,474	E 3,216	E 883,641	E 3,237
Alabama	1,632	54	13,812	51
Arkansas	E 835	E 28	E 7,582	E 28
Louisiana ^b	E 11,221	E 374	E 103,018	E 377
Mississippi	1,785	60	E 16,371	E 60
New Mexico	5,531	184	50,857	186
Texas ^b	49,491	1,650	461,144	1,689
Federal Offshore PAD District III	24,760	825	E 223,404	E 818
Adjustment ^a	1,219	41	E 7,452	E 27
PAD District IV	E 12,419	E 414	E 115,939	E 425
Colorado	E 2,347	E 78	E 21,072	E 77
Montana	1,442	48	E 13,055	E 48
Utah	1,701	57	15,898	58
Wyoming	7,045	235	E 64,943	E 238
Adjustment ^a	-116	-4	E 971	E 4
PAD District V	E 72,423	E 2,414	E 683,519	E 2,504
Alaska ^b	E 44,100	E 1,470	E 425,558	E 1,559
South Alaska	1,063	35	10,312	38
North Slope	43,037	1,435	415,250	1,521
Adjustment for Alaska ^a	(s)	(s)	E -4	E (s)
Arizona	6	(s)	55	(s)
California ^b	24,157	805	218,364	800
Nevada	128	4	1,483	5
Federal Offshore PAD District V	4,357	145	37,267	137
Adjustment excluding Alaska ^a	-325	-11	E 788	E 3
U.S. Total^b	E 201,327	E 6,711	E 1,865,995	E 6,835

^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 - 4,179; California: State - 1,726; Louisiana: State - E1,868; Texas: State -152; U.S. Total, including Federal offshore - E37,042.

(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, November 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	122	691	813	511	379	8,025	8,915
Pentanes Plus	10	81	91	98	97	1,204	1,399
Liquefied Petroleum Gases	112	610	722	413	282	6,821	7,516
Ethane	52	212	264	60	0	2,085	2,145
Propane	37	272	309	208	177	3,143	3,528
Normal Butane	23	87	110	77	105	1,152	1,334
Isobutane	0	39	39	68	0	441	509
Stocks							
Natural Gas Liquids	72	45	117	123	44	2,793	2,960
Pentanes Plus	2	13	15	25	17	311	353
Liquefied Petroleum Gases	70	32	102	98	27	2,482	2,607
Ethane	0	0	0	11	0	698	709
Propane	65	22	87	44	18	1,144	1,206
Normal Butane	5	6	11	25	9	485	519
Isobutane	0	4	4	18	0	155	173

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Net Production									
Natural Gas Liquids	18,326	3,232	6,777	616	4,961	33,912	3,530	3,061	50,231
Pentanes Plus	3,112	653	1,205	170	603	5,743	811	1,533	9,577
Liquefied Petroleum Gases	15,214	2,579	5,572	446	4,358	28,169	2,719	1,528	40,654
Ethane	6,301	1,234	2,366	94	2,102	12,097	630	2	15,138
Propane	5,623	849	1,910	188	1,454	10,024	1,300	279	15,440
Normal Butane	2,339	-1,371	602	119	522	2,211	490	828	4,973
Isobutane	951	1,867	694	45	280	3,837	299	419	5,103
Stocks									
Natural Gas Liquids	328	1,258	1,429	144	156	3,315	231	156	6,779
Pentanes Plus	128	251	388	8	23	798	105	11	1,282
Liquefied Petroleum Gases	200	1,007	1,041	136	133	2,517	126	145	5,497
Ethane	15	350	112	97	8	582	2	0	1,293
Propane	128	270	564	28	100	1,090	78	113	2,574
Normal Butane	44	240	251	9	16	560	36	9	1,135
Isobutane	13	147	114	2	9	285	10	23	495

Note: Refer to Appendix A for Refining District descriptions.

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

**Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts,
November 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	39,925	2,818	42,743	64,729	10,977	20,308	96,014
Natural Gas Liquids	519	0	519	3,160	577	1,610	5,347
Pentanes Plus	180	0	180	412	26	777	1,215
Liquefied Petroleum Gases	339	0	339	2,748	551	833	4,132
Ethane	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0
Normal Butane	282	0	282	1,712	435	468	2,615
Isobutane	57	0	57	1,036	116	365	1,517
Other Liquids	7,971	91	8,062	2,997	-98	-232	2,667
Other Hydrocarbons/Hydrogen/Oxygenates	2,009	4	2,013	160	96	62	318
Other Hydrocarbons/Hydrogen	107	4	111	41	0	0	41
Oxygenates	W	W	1,902	119	96	62	277
Fuel Ethanol	W	W	W	W	W	W	236
Methanol	W	W	W	W	W	W	W
MTBE	W	W	1,891	W	W	W	W
Other Oxygenates ^a	W	W	W	W	W	W	W
Unfinished Oils (net)	5,495	108	5,601	2,626	-53	-251	2,322
Motor Gasoline Blend. Comp. (net)	471	-19	452	211	-141	-43	27
Aviation Gasoline Blend. Comp. (net)	-4	0	-4	0	0	0	0
Total Input to Refineries	48,415	2,909	51,324	70,886	11,456	21,686	104,028
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	1,330	94	1,424	2,246	364	684	3,294
Operable Capacity (daily average)	1,475	97	1,572	2,328	383	665	3,376
Operable Utilization Rate (percent) ^{b,c}	90.1	96.8	90.6	96.5	95.0	103.0	97.6
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Cracking	596	19	615	793	126	205	1,123
Catalytic Hydrocracking	64	3	67	99	0	5	105
Delayed and Fluid Coking	87	0	87	139	62	64	265
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.97	0.81	0.96	1.15	1.59	0.73	1.11
API Gravity, Weighted Average (degrees)	30.29	37.04	30.74	32.87	30.94	35.81	33.27
Operable Capacity (daily average)	1,475	97	1,572	2,328	383	665	3,376
Operating	1,475	97	1,572	2,272	383	665	3,320
Idle	0	0	0	56	0	0	56
Alaskan Crude Oil Receipts	0	0	0	834	0	0	834

See footnotes at end of table.

**Table 28. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts,
November 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	16,419	86,463	73,829	4,631	2,266	183,608	13,782	74,515	410,662
Natural Gas Liquids	1,055	4,239	3,720	274	217	9,505	652	3,073	19,096
Pentanes Plus	457	1,465	389	137	128	2,576	161	1,229	5,361
Liquefied Petroleum Gases	598	2,774	3,331	137	89	6,929	491	1,844	13,735
Ethane	0	0	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0	0	0
Normal Butane	487	1,183	2,236	47	9	3,962	382	1,329	8,570
Isobutane	111	1,591	1,095	90	80	2,967	109	515	5,165
Other Liquids	-153	13,841	4,265	451	121	18,525	-227	3,819	32,846
Other Hydrocarbons/Hydrogen/Oxygenates	164	1,574	927	1	18	2,684	157	3,115	8,287
Other Hydrocarbons/Hydrogen	91	152	391	0	0	634	0	1,095	1,881
Oxygenates	73	1,422	536	W	W	2,050	157	2,020	6,406
Fuel Ethanol	W	W	W	W	W	W	W	W	386
Methanol	W	W	W	W	W	W	W	W	48
MTBE	W	1,338	W	W	W	1,878	W	2,006	5,885
Other Oxygenates ^a	W	W	W	W	W	W	W	W	87
Unfinished Oils (net)	-251	13,604	3,755	474	88	17,670	-147	2,067	27,513
Motor Gasoline Blend. Comp. (net)	-66	-1,337	-529	-24	15	-1,941	-237	-1,353	-3,052
Aviation Gasoline Blend. Comp. (net)	0	0	112	0	0	112	0	-10	98
Total Input to Refineries	17,321	104,543	81,814	5,356	2,604	211,638	14,207	81,407	462,604
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	552	2,901	2,524	156	76	6,209	467	2,537	13,931
Operable Capacity (daily average)	579	3,218	2,663	249	98	6,806	519	2,932	15,207
Operable Utilization Rate (percent) ^{b,c}	95.4	90.2	94.8	62.7	77.4	91.2	90.0	86.5	91.6
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Cracking	182	1,284	855	29	28	2,378	145	696	4,957
Catalytic Hydrocracking	19	195	163	0	0	377	7	468	1,023
Delayed and Fluid Coking	5	314	342	12	0	673	37	484	1,547
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.74	1.16	1.33	1.43	0.56	1.19	1.23	1.13	1.14
API Gravity, Weighted Average (degrees)	38.76	32.19	31.73	30.79	40.41	32.65	34.01	25.58	31.32
Operable Capacity (daily average)	579	3,218	2,663	249	98	6,806	519	2,932	15,207
Operating	579	3,191	2,663	249	98	6,779	509	2,834	15,015
Idle	0	27	0	0	0	27	10	98	192
Alaskan Crude Oil Receipts	0	0	361	10	0	371	0	41,228	42,433

^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,
November 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
Liquefied Refinery Gases	736	-5	731	2,075	247	496	2,818
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	1,326	29	1,355	2,227	266	635	3,128
Propane	W	W	W	W	W	W	W
Propylene	W	W	W	W	W	W	W
Normal Butane/Butylene	-460	-30	-490	-243	-8	-103	-354
Normal Butane	W	W	W	W	W	W	W
Butylene	W	W	W	W	W	W	W
Isobutane/Isobutylene	-130	-4	-134	91	-11	-36	44
Isobutane	W	W	W	W	W	W	W
Isobutylene	W	W	W	W	W	W	W
Finished Motor Gasoline	23,473	1,189	24,662	37,520	6,219	11,484	55,223
Reformulated	0	0	0	0	0	0	0
Oxygenated	11,150	0	11,150	757	1,225	1,845	3,827
Other	12,323	1,189	13,512	36,763	4,994	9,639	51,396
Finished Aviation Gasoline	51	0	51	21	35	15	71
Jet Fuel	2,299	0	2,299	3,890	696	1,259	5,845
Naphtha-Type	227	0	227	256	27	168	451
Kerosene-Type	2,072	0	2,072	3,634	669	1,091	5,394
Commercial	1,855	0	1,855	3,534	669	1,082	5,285
Military	217	0	217	100	0	9	109
Kerosene	-15	61	46	602	137	62	801
Distillate Fuel Oil	12,954	735	13,689	17,283	3,064	5,917	26,264
0.05 percent sulfur and under	6,351	277	6,628	10,016	504	2,609	13,129
Greater than 0.05 percent sulfur	6,603	458	7,061	7,267	2,560	3,308	13,135
Residual Fuel Oil	4,439	81	4,520	1,982	310	178	2,470
Less than 0.31 percent sulfur	845	34	879	0	0	20	20
0.31 to 1.00 percent sulfur	3,368	47	3,415	478	0	51	529
Greater than 1.00 percent sulfur	226	0	226	1,504	310	107	1,921
Naphtha for Petrochemical Feedstock Use	536	0	536	610	0	22	632
Other Oils for Petrochemical Feedstock Use	8	0	8	680	0	79	759
Special Naphthas	0	25	25	291	0	111	402
Lubricants	236	243	479	498	0	215	713
Naphthenic	0	0	0	0	0	0	0
Paraffinic	236	243	479	498	0	215	713
Waxes	0	101	101	23	0	26	49
Petroleum Coke	1,497	25	1,522	2,532	652	708	3,892
Marketable	578	0	578	1,483	484	466	2,433
Catalyst	919	25	944	1,049	168	242	1,459
Asphalt and Road Oil	2,435	278	2,713	3,714	367	871	4,952
Still Gas	1,859	144	2,003	2,739	431	822	3,992
Miscellaneous Products	32	51	83	250	45	66	361
Fuel Use	0	0	0	0	0	0	0
Nonfuel Use	32	51	83	250	45	66	361
Total	50,540	2,928	53,468	74,710	12,203	22,331	109,244
Processing Gain(-) or Loss(+) ^a	-2,125	-19	-2,144	-3,824	-747	-645	-5,216

See footnotes at end of table.

**Table 29. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts,
November 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	436	4,326	2,582	70	27	7,441	121	1,665	12,776
Ethane/Ethylene	2	594	247	0	0	843	0	0	843
Ethane	W	W	W	W	W	W	W	W	661
Ethylene	W	W	W	W	W	W	W	W	182
Propane/Propylene	559	4,257	2,510	70	49	7,445	237	1,307	13,472
Propane	W	W	W	W	W	W	W	W	9,595
Propylene	W	W	W	W	W	W	W	W	3,877
Normal Butane/Butylene	-145	-526	-337	-7	-23	-1,038	-134	314	-1,702
Normal Butane	W	W	W	W	W	W	W	W	-1,780
Butylene	W	W	W	W	W	W	W	W	78
Isobutane/Isobutylene	20	1	162	7	1	191	18	44	163
Isobutane	W	W	W	W	W	W	W	W	76
Isobutylene	W	W	W	W	W	W	W	W	87
Finished Motor Gasoline	9,677	50,007	37,874	1,712	1,609	100,879	7,089	39,259	227,112
Reformulated	0	0	0	0	0	0	0	0	0
Oxygenated	923	8,456	3,941	6	136	13,462	678	21,938	51,055
Other	8,754	41,551	33,933	1,706	1,473	87,417	6,411	17,321	176,057
Finished Aviation Gasoline	141	193	30	0	0	364	15	126	627
Jet Fuel	1,441	8,722	10,507	276	237	21,183	796	11,368	41,491
Naphtha-Type	223	238	791	214	27	1,493	319	52	2,542
Kerosene-Type	1,218	8,484	9,716	62	210	19,690	477	11,316	38,949
Commercial	963	7,916	9,215	62	0	18,156	477	9,604	35,377
Military	255	568	501	0	210	1,534	0	1,712	3,572
Kerosene	3	651	375	14	-41	1,002	53	99	2,001
Distillate Fuel Oil	4,253	21,817	17,826	1,269	569	45,734	4,223	14,430	104,340
0.05 percent sulfur and under	2,356	12,572	4,873	660	600	21,061	2,400	7,135	50,353
Greater than 0.05 percent sulfur	1,897	9,245	12,953	609	-31	24,673	1,823	7,295	53,987
Residual Fuel Oil	298	6,008	5,153	322	24	11,805	314	7,924	27,033
Less than 0.31 percent sulfur	148	4	641	47	0	840	72	664	2,475
0.31 to 1.00 percent sulfur	79	1,726	338	224	24	2,391	101	684	7,120
Greater than 1.00 percent sulfur	71	4,278	4,174	51	0	8,574	141	6,576	17,438
Naphtha for Petrochemical Feedstock Use	118	2,639	479	0	4	3,240	0	38	4,446
Other Oils for Petrochemical Feedstock Use	141	4,600	2,224	0	0	6,965	19	250	8,001
Special Naphthas	129	705	291	148	0	1,273	0	34	1,734
Lubricants	W	1,741	W	W	W	2,998	0	600	4,790
Naphthenic	W	376	W	W	W	855	0	214	1,069
Paraffinic	W	1,365	W	W	W	2,143	0	386	3,721
Waxes	8	201	87	44	0	340	57	40	587
Petroleum Coke	344	4,168	3,754	162	18	8,446	424	4,627	18,911
Marketable	51	2,398	2,694	121	0	5,264	261	3,593	12,129
Catalyst	293	1,770	1,060	41	18	3,182	163	1,034	6,782
Asphalt and Road Oil	403	806	564	799	107	2,679	1,300	1,361	13,005
Still Gas	634	4,571	3,097	185	45	8,532	583	4,088	19,198
Miscellaneous Products	62	279	353	0	0	694	84	239	1,461
Fuel Use	14	0	128	0	0	142	0	0	142
Nonfuel Use	48	279	225	0	0	552	84	239	1,319
Total	18,124	111,434	85,989	5,429	2,599	223,575	15,078	86,148	487,513
Processing Gain(-) or Loss(+) ^a	-803	-6,891	-4,175	-73	5	-11,937	-871	-4,741	-24,909

^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,
November 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
Crude Oil	12,524	559	13,083	9,393	1,745	1,969	13,107
Petroleum Products	56,787	2,515	59,302	38,991	6,655	15,077	60,723
Pentanes Plus	220	0	220	398	86	188	672
Liquefied Petroleum Gases	2,035	14	2,049	2,279	226	1,557	4,062
Ethane/Ethylene	0	0	0	1	0	1	2
Propane/Propylene	713	6	719	1,317	27	825	2,169
Normal Butane/Butylene	1,181	4	1,185	712	135	593	1,440
Isobutane/Isobutylene	141	4	145	249	64	138	451
Other Hydrocarbons/Hydrogen/Oxygenates	1,465	10	1,475	220	92	24	336
Other Hydrocarbons/Hydrogen	0	6	6	34	0	0	34
Oxygenates	W	W	1,469	186	92	24	302
Fuel Ethanol	W	W	W	W	W	W	159
Methanol	W	W	W	W	W	W	W
MTBE	W	W	1,215	W	W	W	W
Other Oxygenates ^a	W	W	W	W	W	W	W
Unfinished Oils	9,538	601	10,139	11,013	735	4,691	16,439
Naphthas and Lighter	2,573	141	2,714	2,881	204	926	4,011
Kerosene and Light Gas Oils	2,210	12	2,222	1,502	69	472	2,043
Heavy Gas Oils	3,758	380	4,138	4,310	449	1,818	6,577
Residuum	997	68	1,065	2,320	13	1,475	3,808
Motor Gasoline Blending Components	5,080	95	5,175	4,685	655	1,641	6,981
Aviation Gasoline Blending Components	22	0	22	0	0	0	0
Finished Motor Gasoline	12,377	330	12,707	6,403	1,459	2,716	10,578
Reformulated	0	0	0	0	0	0	0
Oxygenated	3,094	0	3,094	326	284	235	845
Other	9,283	330	9,613	6,077	1,175	2,481	9,733
Finished Aviation Gasoline	61	0	61	40	32	24	96
Jet Fuel	1,469	0	1,469	1,941	240	458	2,639
Naphtha-Type	44	0	44	260	44	117	421
Kerosene-Type	1,425	0	1,425	1,681	196	341	2,218
Kerosene	50	43	93	347	25	150	522
Distillate Fuel Oil	15,689	463	16,152	6,111	1,176	2,192	9,479
0.05 percent sulfur and under	2,114	219	2,333	2,647	215	662	3,524
Greater than 0.05 percent sulfur	13,575	244	13,819	3,464	961	1,530	5,955
Residual Fuel Oil	5,530	64	5,594	1,532	298	96	1,926
Less than 0.31 percent sulfur	2,034	43	2,077	0	0	9	9
0.31 to 1.00 percent sulfur	2,542	21	2,563	346	0	1	347
Greater than 1.00 percent sulfur	954	0	954	1,186	298	86	1,570
Naphtha for Petrochemical Feedstock Use	234	0	234	188	0	17	205
Other Oils for Petrochemical Feedstock Use	5	0	5	4	0	0	4
Special Naphthas	0	28	28	185	0	100	285
Lubricants	290	420	710	729	0	0	729
Waxes	0	165	165	96	0	21	117
Petroleum Coke (Marketable)	1,004	0	1,004	315	750	124	1,189
Asphalt and Road Oil	1,691	235	1,926	2,416	872	1,048	4,336
Miscellaneous Products	27	47	74	89	9	30	128
Total Stocks, All Oils	69,311	3,074	72,385	48,384	8,400	17,046	73,830

See footnotes at end of table.

**Table 30. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts,
November 1993 (Continued)**
(Thousand Barrels)

Commodity	PAD District III						PAD Dist.	PAD Dist.	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	IV	V	
							Rocky Mt.	West Coast	
Crude Oil	1,232	27,399	18,144	1,303	525	48,603	1,949	21,395	98,137
Petroleum Products	9,999	75,765	47,509	5,761	1,291	140,325	10,197	62,937	333,484
Pentanes Plus	107	112	37	9	26	291	7	21	1,211
Liquefied Petroleum Gases	1,398	3,309	4,514	41	40	9,302	447	1,624	17,484
Ethane/Ethylene	87	445	0	0	0	532	0	0	534
Propane/Propylene	641	946	1,306	11	8	2,912	126	100	6,026
Normal Butane/Butylene	27	1,059	2,504	13	9	3,962	188	1,196	7,971
Isobutane/Isobutylene	233	859	704	17	23	1,896	133	328	2,953
Other Hydrocarbons/Hydrogen/Oxygenates	184	1,210	614	1	40	2,049	153	2,678	6,691
Other Hydrocarbons/Hydrogen	0	0	1	0	0	1	0	5	46
Oxygenates	184	1,210	613	W	W	2,048	153	2,673	6,645
Fuel Ethanol	W	W	W	W	W	W	W	W	390
Methanol	W	W	W	W	W	W	W	W	399
MTBE	W	1,025	W	W	W	1,729	W	2,622	5,796
Other Oxygenates ^a	W	W	W	W	W	W	W	W	60
Unfinished Oils	2,661	26,873	16,269	1,121	444	47,368	2,429	21,698	98,073
Naphthas and Lighter	916	6,257	3,537	305	120	11,135	543	3,801	22,204
Kerosene and Light Gas Oils	483	4,971	2,374	178	33	8,039	371	4,011	16,686
Heavy Gas Oils	835	9,379	7,066	531	291	18,102	1,120	10,345	40,282
Residuum	427	6,266	3,292	107	0	10,092	395	3,541	18,901
Motor Gasoline Blending Components	1,508	8,321	5,175	212	295	15,511	1,552	7,229	36,448
Aviation Gasoline Blending Components	0	0	13	0	0	13	0	12	47
Finished Motor Gasoline	1,527	11,884	6,017	1,157	124	20,709	2,003	8,267	54,264
Reformulated	0	0	0	0	0	0	0	0	0
Oxygenated	0	1,926	529	38	0	2,493	191	4,007	10,630
Other	1,527	9,958	5,488	1,119	124	18,216	1,812	4,260	43,634
Finished Aviation Gasoline	41	124	51	0	0	216	27	113	513
Jet Fuel	434	3,080	3,024	171	36	6,745	346	3,675	14,874
Naphtha-Type	57	77	515	126	12	787	176	72	1,500
Kerosene-Type	377	3,003	2,509	45	24	5,958	170	3,603	13,374
Kerosene	33	647	200	9	11	900	31	99	1,645
Distillate Fuel Oil	1,031	8,978	4,513	894	153	15,569	1,528	5,979	48,707
0.05 percent sulfur and under	425	3,067	1,073	371	86	5,022	870	2,560	14,309
Greater than 0.05 percent sulfur	606	5,911	3,440	523	67	10,547	658	3,419	34,398
Residual Fuel Oil	238	4,110	2,510	213	13	7,084	362	4,892	19,858
Less than 0.31 percent sulfur	34	1	716	2	0	753	86	435	3,360
0.31 to 1.00 percent sulfur	23	684	189	171	13	1,080	88	708	4,786
Greater than 1.00 percent sulfur	181	3,425	1,605	40	0	5,251	188	3,749	11,712
Naphtha for Petrochemical Feedstock Use	16	901	408	0	10	1,335	0	63	1,837
Other Oils for Petrochemical Feedstock Use	53	1,335	129	0	0	1,517	1	152	1,679
Special Naphthas	105	1,072	99	94	0	1,370	1	31	1,715
Lubricants	23	2,566	1,192	589	0	4,370	0	913	6,722
Waxes	7	191	221	27	0	446	48	76	852
Petroleum Coke (Marketable)	4	249	1,886	595	0	2,734	183	3,890	9,000
Asphalt and Road Oil	589	651	537	628	99	2,504	1,065	1,440	11,271
Miscellaneous Products	40	152	100	0	0	292	14	85	593
Total Stocks, All Oils	11,231	103,164	65,653	7,064	1,816	188,928	12,146	84,332	431,621

^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
November 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	1.8	-0.2	1.5	3.1	2.3	2.5	2.9
Finished Motor Gasoline ^b	45.1	41.2	44.8	50.5	52.1	49.1	50.4
Finished Aviation Gasoline ^c	0.1	0.0	0.1	0.0	0.3	0.1	0.1
Naphtha-Type Jet Fuel	0.5	0.0	0.5	0.4	0.3	0.8	0.5
Kerosene-Type Jet Fuel	4.6	0.0	4.3	5.4	6.1	5.4	5.5
Kerosene	0.0	2.1	0.1	0.9	1.3	0.3	0.8
Distillate Fuel Oil	28.5	25.1	28.3	25.7	28.1	29.5	26.7
Residual Fuel Oil	9.8	2.8	9.4	2.9	2.8	0.9	2.5
Naphtha for Petrochemical Feedstock Use	1.2	0.0	1.1	0.9	0.0	0.1	0.6
Other Oils for Petrochemical Feedstock Use	0.0	0.0	0.0	1.0	0.0	0.4	0.8
Special Naphthas	0.0	0.9	0.1	0.4	0.0	0.6	0.4
Lubricants	0.5	8.3	1.0	0.7	0.0	1.1	0.7
Waxes	0.0	3.5	0.2	0.0	0.0	0.1	0.1
Petroleum Coke	3.3	0.9	3.2	3.8	6.0	3.5	4.0
Asphalt and Road Oil	5.4	9.5	5.6	5.5	3.4	4.3	5.0
Still Gas	4.1	4.9	4.1	4.1	4.0	4.1	4.1
Miscellaneous Products	0.1	1.7	0.2	0.4	0.4	0.3	0.4
Processing Gain(-) or Loss(+) ^d	-4.7	-0.7	-4.4	-5.7	-6.8	-3.2	-5.3

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	2.7	4.3	3.3	1.4	1.2	3.7	0.9	2.2	2.9
Finished Motor Gasoline ^b	52.7	45.5	43.5	28.6	57.7	45.0	47.8	45.0	46.3
Finished Aviation Gasoline ^c	0.9	0.2	-0.1	0.0	0.0	0.1	0.1	0.2	0.1
Naphtha-Type Jet Fuel	1.4	0.2	1.0	4.2	1.2	0.7	2.3	0.1	0.6
Kerosene-Type Jet Fuel	7.5	8.5	12.5	1.2	8.9	9.8	3.5	14.8	8.9
Kerosene	0.0	0.7	0.5	0.3	-1.7	0.5	0.4	0.1	0.5
Distillate Fuel Oil	26.3	21.8	23.0	24.9	24.2	22.7	31.0	18.8	23.8
Residual Fuel Oil	1.8	6.0	6.6	6.3	1.0	5.9	2.3	10.4	6.2
Naphtha for Petrochemical Feedstock Use	0.7	2.6	0.6	0.0	0.2	1.6	0.0	0.1	1.0
Other Oils for Petrochemical Feedstock Use	0.9	4.6	2.9	0.0	0.0	3.5	0.1	0.3	1.8
Special Naphthas	0.8	0.7	0.4	2.9	0.0	0.6	0.0	0.0	0.4
Lubricants	0.2	1.7	1.0	8.4	0.0	1.5	0.0	0.8	1.1
Waxes	0.1	0.2	0.1	0.9	0.0	0.2	0.4	0.1	0.1
Petroleum Coke	2.1	4.2	4.8	3.2	0.8	4.2	3.1	6.0	4.3
Asphalt and Road Oil	2.5	0.8	0.7	15.7	4.6	1.3	9.5	1.8	3.0
Still Gas	3.9	4.6	4.0	3.6	1.9	4.2	4.3	5.3	4.4
Miscellaneous Products	0.4	0.3	0.5	0.0	0.0	0.3	0.6	0.3	0.3
Processing Gain(-) or Loss(+) ^d	-5.0	-6.9	-5.4	-1.4	0.2	-5.9	-6.4	-6.2	-5.7

^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,
November 1993
(Thousand Barrels)**

PAD District and State of Entry	Residual Fuel Oil			
	Less than 0.31% Sulfur	0.31 to 1.00% Sulfur	Greater than 1.00% Sulfur	Total
PAD District I	983	2,176	4,826	7,985
Delaware	108	0	0	108
Florida	0	420	997	1,417
Georgia	0	0	253	253
Maine	146	221	373	740
Maryland	0	80	465	545
Massachusetts	318	0	298	616
New Jersey	139	0	738	877
New York	272	1,048	667	1,987
North Carolina	0	0	464	464
Pennsylvania	0	407	370	777
South Carolina	0	0	199	199
Vermont	0	0	2	2
PAD District III	0	373	1,303	1,676
Louisiana	0	0	30	30
Texas	0	373	1,273	1,646
PAD District IV	0	0	6	6
Montana	0	0	6	6
PAD District V	58	0	678	736
Alaska	0	0	48	48
California	58	0	613	671
Washington	0	0	17	17
U.S. Total	1,041	2,549	6,813	10,403

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

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

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil^{a,b}	41,402	41,179	113,791	2,734	7,652	206,758	6,892
Natural Gas Liquids	1,222	2,525	2,076	759	12	6,594	220
Pentanes Plus	441	45	289	421	0	1,196	40
Liquefied Petroleum Gases	781	2,480	1,787	338	12	5,398	180
Ethane	0	0	0	0	0	0	0
Ethylene	0	0	0	0	0	0	0
Propane	663	1,734	1,491	175	8	4,071	136
Propylene	0	62	0	0	0	62	2
Normal Butane	112	513	205	142	0	972	32
Butylene	0	0	0	0	0	0	0
Isobutane	8	171	91	21	4	293	10
Isobutylene	0	0	0	0	0	0	0
Other Liquids	2,919	2	11,609	0	775	15,305	510
Other Hydrocarbons/Hydrogen/Oxygenates	204	0	0	0	290	494	16
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0
Oxygenates	204	0	0	0	290	494	16
Fuel Ethanol	0	0	0	0	0	0	0
MTBE	204	0	0	0	290	494	16
Other Oxygenates ^c	0	0	0	0	0	0	0
Unfinished Oils ^a	2,265	0	11,608	0	485	14,358	479
Naphthas and Lighter	0	0	898	0	0	898	30
Kerosene and Light Gas Oils	0	0	0	0	0	0	0
Heavy Gas Oils	1,853	0	2,546	0	40	4,439	148
Residuum	412	0	8,164	0	445	9,021	301
Motor Gasoline Blending Components	450	2	1	0	0	453	15
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	23,820	413	7,229	113	1,511	33,086	1,103
Finished Motor Gasoline	7,060	38	0	4	64	7,106	237
Reformulated	0	0	0	0	0	0	0
Oxygenated	111	0	0	0	0	111	4
Other	6,889	38	0	4	64	6,995	233
Finished Aviation Gasoline	0	1	0	0	0	1	(s)
Jet Fuel	2,193	58	11	0	604	2,866	96
Naphtha-Type	184	58	0	0	0	242	8
Kerosene-Type	2,009	0	11	0	604	2,624	87
Bonded Aircraft Fuel	884	0	0	0	0	884	29
Other	1,125	0	11	0	604	1,740	58
Kerosene	15	0	47	0	1	63	2
Distillate Fuel Oil	5,529	199	554	100	27	6,409	214
Bonded Ship Bunkers	0	0	0	0	20	20	1
0.05 percent sulfur and under	0	0	0	0	0	0	0
Greater than 0.05 percent sulfur	0	0	0	0	20	20	1
Other	5,529	199	554	100	7	6,389	213
0.05 percent sulfur and under	2,257	113	554	21	2	2,947	98
Greater than 0.05 percent sulfur	3,272	86	0	79	5	3,442	115
Residual Fuel Oil	7,985	0	1,676	6	736	10,403	347
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	7,985	0	1,676	6	736	10,403	347
Less than 0.31 percent sulfur	983	0	0	0	58	1,041	35
0.31 to 1.00 percent sulfur	2,176	0	373	0	0	2,549	85
Greater than 1.00 percent sulfur	4,826	0	1,303	6	678	6,813	227
Naphtha for Petrochemical Feedstock Use	259	18	817	0	21	1,115	37
Other Oils for Petrochemical Feedstock Use	0	0	4,020	0	0	4,020	134
Special Naphthas	18	69	70	0	3	160	5
Lubricants	35	12	0	0	0	47	2
Waxes	26	9	27	3	2	67	2
Petroleum Coke	0	0	0	0	42	42	1
Asphalt and Road Oil	757	1	0	0	10	768	26
Miscellaneous Products	3	8	7	0	1	19	1
Total	69,363	44,119	134,705	3,806	9,950	261,743	8,725

^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-November 1993
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil^{a,b}	436,926	443,244	1,241,818	29,925	92,903	2,244,816	6,721
Natural Gas Liquids	7,444	24,086	25,665	3,932	175	61,302	184
Pentanes Plus	1,218	450	6,840	1,977	0	10,485	31
Liquefied Petroleum Gases	6,226	23,636	18,825	1,955	175	50,817	152
Ethane	1	3,929	0	0	0	3,930	12
Ethylene	0	0	46	0	0	46	(s)
Propane	5,130	13,850	12,295	1,165	86	32,526	97
Propylene	0	1,360	0	0	0	1,360	4
Normal Butane	989	3,073	4,867	656	6	9,591	29
Butylene	0	0	0	0	0	0	0
Isobutane	106	1,424	1,609	134	83	3,356	10
Isobutylene	0	0	8	0	0	8	(s)
Other Liquids	48,085	697	117,609	0	8,094	174,485	522
Other Hydrocarbons/Hydrogen/Oxygenates	835	0	262	0	3,424	4,521	14
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0
Oxygenates	835	0	262	0	3,424	4,521	14
Fuel Ethanol	0	0	0	0	185	185	1
MTBE	801	0	262	0	3,239	4,302	13
Other Oxygenates ^c	34	0	0	0	0	34	(s)
Unfinished Oils ^a	40,069	370	115,479	0	4,231	160,149	479
Naphthas and Lighter	1,934	370	21,172	0	0	23,476	70
Kerosene and Light Gas Oils	0	0	0	0	0	0	0
Heavy Gas Oils	29,896	0	22,790	0	814	53,500	160
Residuum	8,239	0	71,517	0	3,417	83,173	249
Motor Gasoline Blending Components	7,181	327	1,868	0	439	9,815	29
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	270,137	5,310	72,342	1,224	15,878	364,891	1,092
Finished Motor Gasoline	76,841	924	1,363	117	3,395	82,640	247
Reformulated	0	0	0	0	0	0	0
Oxygenated	421	0	0	0	0	421	1
Other	76,420	924	1,363	117	3,395	82,219	246
Finished Aviation Gasoline	0	32	0	0	46	78	(s)
Jet Fuel	26,320	784	2,576	0	3,025	32,705	98
Naphtha-Type	1,861	745	725	0	268	3,599	11
Kerosene-Type	24,459	39	1,851	0	2,757	29,106	87
Bonded Aircraft Fuel	15,351	0	0	0	267	15,618	47
Other	9,108	39	1,851	0	2,490	13,488	40
Kerosene	222	0	47	0	20	289	1
Distillate Fuel Oil	54,572	2,072	2,399	1,060	2,110	62,213	186
Bonded Ship Bunkers	0	0	0	19	625	644	2
0.05 percent sulfur and under	0	0	0	19	0	19	(s)
Greater than 0.05 percent sulfur	0	0	0	0	625	625	2
Other	54,572	2,072	2,399	1,041	1,485	61,569	184
0.05 percent sulfur and under	20,560	943	2,399	430	1,003	25,335	76
Greater than 0.05 percent sulfur	34,012	1,129	0	611	482	36,234	108
Residual Fuel Oil	96,604	233	15,369	15	6,526	118,747	356
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	96,604	233	15,369	15	6,526	118,747	356
Less than 0.31 percent sulfur	13,889	0	1,033	4	1,392	16,318	49
0.31 to 1.00 percent sulfur	18,821	158	434	5	426	19,844	59
Greater than 1.00 percent sulfur	63,894	75	13,902	6	4,708	82,585	247
Naphtha for Petrochemical Feedstock Use	1,797	202	11,848	0	234	14,081	42
Other Oils for Petrochemical Feedstock Use	0	0	37,000	0	0	37,000	111
Special Naphthas	131	694	732	0	51	1,608	5
Lubricants	2,130	143	133	0	31	2,437	7
Waxes	434	63	101	32	23	653	2
Petroleum Coke	0	0	512	0	146	658	2
Asphalt and Road Oil	10,420	100	220	0	266	11,006	33
Miscellaneous Products	666	63	42	0	5	776	2
Total	762,592	473,337	1,457,434	35,081	117,050	2,845,494	8,519

^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
November 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	50,033	1,879	3,396	0	53	20	0	0	0	0
Algeria	1,396	0	1,593	0	0	0	0	0	0	0
Kuwait	14,090	0	0	0	0	0	0	0	0	0
Saudi Arabia	34,547	1,879	1,803	0	53	0	0	0	0	0
United Arab Emirates	0	0	0	0	0	20	0	0	0	0
Other OPEC	58,854	0	1,623	240	716	834	1,815	2,189	0	0
Ecuador	3,192	0	0	0	0	0	0	249	0	0
Gabon	4,075	0	0	0	0	0	0	219	0	0
Indonesia	1,028	0	760	0	0	0	0	431	0	0
Nigeria	18,369	0	305	0	0	0	0	403	0	0
Venezuela	32,190	0	558	240	716	834	1,815	887	0	0
Non OPEC	97,871	3,519	9,339	213	6,337	2,012	4,594	8,214	63	160
Angola	8,482	0	0	0	0	0	0	0	0	0
Bahama Islands	0	0	0	0	0	0	0	777	0	0
Belgium	0	0	118	0	0	0	0	0	0	0
Brazil	0	0	0	0	1,426	0	0	37	0	0
Cameroon	0	0	0	0	0	0	0	303	0	0
Canada	27,498	3,223	200	3	1,963	58	2,231	711	16	160
China, People's Republic of	2,041	0	0	0	0	0	0	0	0	0
Colombia	4,280	0	0	0	0	0	0	322	0	0
Egypt	1,737	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	107	0	0	0	0	625	0	0
Guatemala	204	0	0	0	0	0	0	0	0	0
Italy	0	11	247	0	231	0	0	247	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	2,191	0	0	0	0	0	0	0
Mexico	30,742	285	233	0	0	300	0	650	47	0
Netherlands	0	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	1,503	0	0	50	0	711	0	0
Norway	4,648	0	226	0	0	0	0	0	0	0
Oman	3,491	0	316	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	544	0	0
Portugal	0	0	172	0	0	0	0	349	0	0
Puerto Rico	0	0	0	0	0	184	0	0	0	0
Singapore	0	0	0	0	0	295	0	0	0	0
Spain	0	0	328	0	248	0	0	0	0	0
Sweden	0	0	241	0	0	0	0	0	0	0
Syria	1,042	0	0	0	0	0	0	0	0	0
Thailand	241	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	1,655	0	0	0	0	0	0	331	0	0
Turkey	0	0	708	0	0	0	0	0	0	0
United Kingdom	10,203	0	319	0	0	0	0	0	0	0
Russia	946	0	723	0	0	0	0	0	0	0
Virgin Islands	0	0	1,344	210	2,261	1,125	2,363	2,607	0	0
Zaire	661	0	0	0	0	0	0	0	0	0
Other	0	0	363	0	208	0	0	0	0	0
Total	206,758	5,398	14,358	453	7,106	2,866	6,409	10,403	63	160
Persian Gulf^d	48,637	1,879	1,803	0	53	20	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
November 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	4,020	0	0	133	9,501	59,534	1,668	317	1,984
Algeria	0	3,525	0	0	0	5,118	6,514	47	171	217
Kuwait	0	495	0	0	0	495	14,585	470	17	486
Saudi Arabia	0	0	0	0	133	3,868	38,415	1,152	129	1,281
United Arab Emirates	0	0	0	0	0	20	20	0	1	1
Other OPEC	238	0	0	388	129	8,172	67,026	1,962	272	2,234
Ecuador	0	0	0	0	0	249	3,441	106	8	115
Gabon	0	0	0	0	0	219	4,294	136	7	143
Indonesia	0	0	0	0	0	1,191	2,219	34	40	74
Nigeria	0	0	0	0	0	708	19,077	612	24	636
Venezuela	238	0	0	388	129	5,805	37,995	1,073	194	1,267
Non OPEC	877	0	47	380	1,557	37,312	135,183	3,262	1,244	4,506
Angola	0	0	0	0	0	0	8,482	283	0	283
Bahama Islands	0	0	0	0	0	777	777	0	26	26
Belgium	21	0	0	0	0	139	139	0	5	5
Brazil	0	0	0	0	71	1,534	1,534	0	51	51
Cameroon	0	0	0	0	0	303	303	0	10	10
Canada	46	0	47	55	706	9,419	36,917	917	314	1,231
China, People's Republic of	0	0	0	0	0	0	2,041	68	0	68
Colombia	0	0	0	0	0	322	4,602	143	11	153
Egypt	0	0	0	0	1	1	1,738	58	(s)	58
Germany, FR	0	0	0	0	11	743	743	0	25	25
Guatemala	0	0	0	0	0	0	204	7	0	7
Italy	0	0	0	0	22	758	758	0	25	25
Japan	0	0	0	0	2	2	2	0	(s)	(s)
Korea, Republic of	47	0	0	0	0	2,238	2,238	0	75	75
Mexico	0	0	0	0	732	2,247	32,989	1,025	75	1,100
Netherlands	0	0	0	0	7	7	7	0	(s)	(s)
Netherlands Antilles	234	0	0	0	0	2,498	2,498	0	83	83
Norway	0	0	0	0	0	226	4,874	155	8	162
Oman	0	0	0	0	0	316	3,807	116	11	127
Peru	0	0	0	0	0	544	544	0	18	18
Portugal	0	0	0	0	0	521	521	0	17	17
Puerto Rico	494	0	0	0	0	678	678	0	23	23
Singapore	0	0	0	0	0	295	295	0	10	10
Spain	0	0	0	325	0	901	901	0	30	30
Sweden	0	0	0	0	0	241	241	0	8	8
Syria	0	0	0	0	0	0	1,042	35	0	35
Thailand	0	0	0	0	0	0	241	8	0	8
Trinidad and Tobago	0	0	0	0	0	331	1,986	55	11	66
Turkey	35	0	0	0	0	743	743	0	25	25
United Kingdom	0	0	0	0	0	319	10,522	340	11	351
Russia	0	0	0	0	0	723	1,669	32	24	56
Virgin Islands	0	0	0	0	0	9,910	9,910	0	330	330
Zaire	0	0	0	0	0	0	661	22	0	22
Other	0	0	0	0	5	576	576	0	19	19
Total	1,115	4,020	47	768	1,819	54,985	261,743	6,892	1,833	8,725
Persian Gulf^d	0	495	0	0	133	4,383	53,020	1,621	146	1,767

^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
November 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	5,295	388	0	0	53	0	0	0	0	0
Saudi Arabia	5,295	388	0	0	53	0	0	0	0	0
Other OPEC	18,189	0	305	240	716	834	1,815	2,131	0	0
Ecuador	0	0	0	0	0	0	0	249	0	0
Gabon	1,000	0	0	0	0	0	0	219	0	0
Indonesia	0	0	0	0	0	0	0	373	0	0
Nigeria	10,196	0	305	0	0	0	0	403	0	0
Venezuela	6,993	0	0	240	716	834	1,815	887	0	0
Non OPEC	17,918	393	1,960	210	6,231	1,359	3,714	5,854	15	18
Angola	4,123	0	0	0	0	0	0	0	0	0
Bahama Islands	0	0	0	0	0	0	0	777	0	0
Belgium	0	0	118	0	0	0	0	0	0	0
Brazil	0	0	0	0	1,426	0	0	37	0	0
Canada	1,715	393	0	0	1,857	0	1,905	688	15	18
China, People's Republic of	639	0	0	0	0	0	0	0	0	0
Colombia	936	0	0	0	0	0	0	322	0	0
Egypt	709	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	107	0	0	0	0	252	0	0
Italy	0	0	0	0	231	0	0	247	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Mexico	2,323	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	0	0	0	50	0	711	0	0
Norway	4,142	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	213	0	0
Portugal	0	0	172	0	0	0	0	0	0	0
Puerto Rico	0	0	0	0	0	184	0	0	0	0
Spain	0	0	219	0	248	0	0	0	0	0
United Kingdom	2,670	0	0	0	0	0	0	0	0	0
Virgin Islands	0	0	1,344	210	2,261	1,125	1,809	2,607	0	0
Zaire	661	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	208	0	0	0	0	0
Total	41,402	781	2,265	450	7,000	2,193	5,529	7,985	15	18
Persian Gulf ^d	5,295	388	0	0	53	0	0	0	0	0

See footnotes at end of table.

**Table 36. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,^a
November 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	133	574	5,869	177	19	196
Saudi Arabia	0	0	0	0	133	574	5,869	177	19	196
Other OPEC	0	0	0	388	0	6,429	24,618	606	214	821
Ecuador	0	0	0	0	0	249	249	0	8	8
Gabon	0	0	0	0	0	219	1,219	33	7	41
Indonesia	0	0	0	0	0	373	373	0	12	12
Nigeria	0	0	0	0	0	708	10,904	340	24	363
Venezuela	0	0	0	388	0	4,880	11,873	233	163	396
Non OPEC	259	0	35	369	541	20,958	38,876	597	699	1,296
Angola	0	0	0	0	0	0	4,123	137	0	137
Bahama Islands	0	0	0	0	0	777	777	0	26	26
Belgium	0	0	0	0	0	118	118	0	4	4
Brazil	0	0	0	0	71	1,534	1,534	0	51	51
Canada	5	0	35	44	19	4,979	6,694	57	166	223
China, People's Republic of	0	0	0	0	0	0	639	21	0	21
Colombia	0	0	0	0	0	322	1,258	31	11	42
Egypt	0	0	0	0	0	0	709	24	0	24
Germany, FR	0	0	0	0	7	366	366	0	12	12
Italy	0	0	0	0	0	478	478	0	16	16
Japan	0	0	0	0	2	2	2	0	(s)	(s)
Mexico	0	0	0	0	441	441	2,764	77	15	92
Netherlands Antilles	0	0	0	0	0	761	761	0	25	25
Norway	0	0	0	0	0	0	4,142	138	0	138
Peru	0	0	0	0	0	213	213	0	7	7
Portugal	0	0	0	0	0	172	172	0	6	6
Puerto Rico	254	0	0	0	0	438	438	0	15	15
Spain	0	0	0	325	0	792	792	0	26	26
United Kingdom	0	0	0	0	0	0	2,670	89	0	89
Virgin Islands	0	0	0	0	0	9,356	9,356	0	312	312
Zaire	0	0	0	0	0	0	661	22	0	22
Other	0	0	0	0	1	209	209	0	7	7
Total	259	0	35	757	674	27,961	69,363	1,380	932	2,312
Persian Gulf^d	0	0	0	0	133	574	5,869	177	19	196

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

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

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

^d 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
November 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	3,306	0	0	0	0	0	0	0	0	0
Algeria	794	0	0	0	0	0	0	0	0	0
Kuwait	1,000	0	0	0	0	0	0	0	0	0
Saudi Arabia	1,512	0	0	0	0	0	0	0	0	0
Other OPEC	9,474	0	0	0	0	0	0	0	0	0
Ecuador	1,461	0	0	0	0	0	0	0	0	0
Nigeria	3,909	0	0	0	0	0	0	0	0	0
Venezuela	4,104	0	0	0	0	0	0	0	0	0
Non OPEC	28,399	2,480	0	2	38	58	199	0	0	69
Angola	494	0	0	0	0	0	0	0	0	0
Canada	20,283	2,480	0	2	38	58	199	0	0	69
Colombia	1,417	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	0	0	0	0	0	0	0
Mexico	3,175	0	0	0	0	0	0	0	0	0
Norway	506	0	0	0	0	0	0	0	0	0
Oman	547	0	0	0	0	0	0	0	0	0
United Kingdom	1,977	0	0	0	0	0	0	0	0	0
Total	41,179	2,480	0	2	38	58	199	0	0	69
Persian Gulf ^d	2,512	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
November 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	3,306	110	0	110
Algeria	0	0	0	0	0	0	794	26	0	26
Kuwait	0	0	0	0	0	0	1,000	33	0	33
Saudi Arabia	0	0	0	0	0	0	1,512	50	0	50
Other OPEC	0	0	0	0	0	0	9,474	316	0	316
Ecuador	0	0	0	0	0	0	1,461	49	0	49
Nigeria	0	0	0	0	0	0	3,909	130	0	130
Venezuela	0	0	0	0	0	0	4,104	137	0	137
Non OPEC	18	0	12	1	63	2,940	31,339	947	98	1,045
Angola	0	0	0	0	0	0	494	16	0	16
Canada	18	0	12	1	59	2,936	23,219	676	98	774
Colombia	0	0	0	0	0	0	1,417	47	0	47
Germany, FR	0	0	0	0	4	4	4	0	(s)	(s)
Mexico	0	0	0	0	0	0	3,175	106	0	106
Norway	0	0	0	0	0	0	506	17	0	17
Oman	0	0	0	0	0	0	547	18	0	18
United Kingdom	0	0	0	0	0	0	1,977	66	0	66
Total	18	0	12	1	63	2,940	44,119	1,373	98	1,471
Persian Gulf^d	0	0	0	0	0	0	2,512	84	0	84

^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
November 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	40,343	1,491	3,396	0	0	0	0	0	0	0
Algeria	602	0	1,593	0	0	0	0	0	0	0
Kuwait	12,001	0	0	0	0	0	0	0	0	0
Saudi Arabia	27,740	1,491	1,803	0	0	0	0	0	0	0
Other OPEC	29,013	0	1,099	0	0	0	0	0	0	0
Ecuador	581	0	0	0	0	0	0	0	0	0
Gabon	3,075	0	0	0	0	0	0	0	0	0
Indonesia	0	0	541	0	0	0	0	0	0	0
Nigeria	4,264	0	0	0	0	0	0	0	0	0
Venezuela	21,093	0	558	0	0	0	0	0	0	0
Non OPEC	44,435	296	7,113	1	0	11	554	1,676	47	70
Angola	3,865	0	0	0	0	0	0	0	0	0
Belgium	0	0	0	0	0	0	0	0	0	0
Cameroon	0	0	0	0	0	0	0	303	0	0
Canada	495	0	160	1	0	0	0	0	0	70
China, People's Republic of	719	0	0	0	0	0	0	0	0	0
Colombia	1,927	0	0	0	0	0	0	0	0	0
Egypt	1,028	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	0	0	0	0	373	0	0
Guatemala	204	0	0	0	0	0	0	0	0	0
Italy	0	11	247	0	0	0	0	0	0	0
Korea, Republic of	0	0	2,191	0	0	0	0	0	0	0
Mexico	25,244	285	233	0	0	11	0	320	47	0
Netherlands	0	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	1,503	0	0	0	0	0	0	0
Oman	1,513	0	316	0	0	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	349	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Spain	0	0	109	0	0	0	0	0	0	0
Sweden	0	0	241	0	0	0	0	0	0	0
Syria	1,042	0	0	0	0	0	0	0	0	0
Thailand	241	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	1,655	0	0	0	0	0	0	331	0	0
Turkey	0	0	708	0	0	0	0	0	0	0
United Kingdom	5,556	0	319	0	0	0	0	0	0	0
Russia	946	0	723	0	0	0	0	0	0	0
Virgin Islands	0	0	0	0	0	0	554	0	0	0
Other	0	0	363	0	0	0	0	0	0	0
Total	113,791	1,787	11,608	1	0	11	554	1,676	47	70
Persian Gulf^d	39,741	1,491	1,803	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
November 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	4,020	0	0	0	8,907	49,250	1,345	297	1,642
Algeria	0	3,525	0	0	0	5,118	5,720	20	171	191
Kuwait	0	495	0	0	0	495	12,496	400	17	417
Saudi Arabia	0	0	0	0	0	3,294	31,034	925	110	1,034
Other OPEC	238	0	0	0	0	1,337	30,350	967	45	1,012
Ecuador	0	0	0	0	0	0	581	19	0	19
Gabon	0	0	0	0	0	0	3,075	103	0	103
Indonesia	0	0	0	0	0	541	541	0	18	18
Nigeria	0	0	0	0	0	0	4,264	142	0	142
Venezuela	238	0	0	0	0	796	21,889	703	27	730
Non OPEC	579	0	0	0	323	10,670	55,105	1,481	356	1,837
Angola	0	0	0	0	0	0	3,865	129	0	129
Belgium	21	0	0	0	0	21	21	0	1	1
Cameroon	0	0	0	0	0	303	303	0	10	10
Canada	23	0	0	0	0	254	749	17	8	25
China, People's Republic of	0	0	0	0	0	0	719	24	0	24
Colombia	0	0	0	0	0	0	1,927	64	0	64
Egypt	0	0	0	0	1	1	1,029	34	(s)	34
Germany, FR	0	0	0	0	0	373	373	0	12	12
Guatemala	0	0	0	0	0	0	204	7	0	7
Italy	0	0	0	0	22	280	280	0	9	9
Korea, Republic of	26	0	0	0	0	2,217	2,217	0	74	74
Mexico	0	0	0	0	289	1,185	26,429	841	40	881
Netherlands	0	0	0	0	7	7	7	0	(s)	(s)
Netherlands Antilles	204	0	0	0	0	1,737	1,737	0	58	58
Oman	0	0	0	0	0	316	1,829	50	11	61
Portugal	0	0	0	0	0	349	349	0	12	12
Puerto Rico	240	0	0	0	0	240	240	0	8	8
Spain	0	0	0	0	0	109	109	0	4	4
Sweden	0	0	0	0	0	241	241	0	8	8
Syria	0	0	0	0	0	0	1,042	35	0	35
Thailand	0	0	0	0	0	0	241	8	0	8
Trinidad and Tobago	0	0	0	0	0	331	1,986	55	11	66
Turkey	35	0	0	0	0	743	743	0	25	25
United Kingdom	0	0	0	0	0	319	5,875	185	11	196
Russia	0	0	0	0	0	723	1,669	32	24	56
Virgin Islands	0	0	0	0	0	554	554	0	18	18
Other	0	0	0	0	4	367	367	0	12	12
Total	817	4,020	0	0	323	20,914	134,705	3,793	697	4,490
Persian Gulf^d	0	495	0	0	0	3,789	43,530	1,325	126	1,451

^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
November 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	2,734	338	0	0	4	0	100	6	0	0
Canada	2,734	338	0	0	4	0	100	6	0	0
Total	2,734	338	0	0	4	0	100	6	0	0
PAD District V										
Arab OPEC	1,089	0	0	0	0	20	0	0	0	0
Kuwait	1,089	0	0	0	0	0	0	0	0	0
United Arab Emirates	0	0	0	0	0	20	0	0	0	0
Other OPEC	2,178	0	219	0	0	0	0	58	0	0
Ecuador	1,150	0	0	0	0	0	0	0	0	0
Indonesia	1,028	0	219	0	0	0	0	58	0	0
Venezuela	0	0	0	0	0	0	0	0	0	0
Non OPEC	4,385	12	266	0	64	584	27	678	1	3
Canada	2,271	12	40	0	64	0	27	17	1	3
China, People's Republic of	683	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	289	0	330	0	0
Norway	0	0	226	0	0	0	0	0	0	0
Oman	1,431	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	331	0	0
Singapore	0	0	0	0	0	295	0	0	0	0
Total	7,652	12	485	0	64	604	27	736	1	3
Persian Gulf ^d	1,089	0	0	0	0	20	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
November 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
PAD District IV										
Non OPEC	0	0	0	0	424	872	3,606	91	29	120
Canada	0	0	0	0	424	872	3,606	91	29	120
Total	0	0	0	0	424	872	3,606	91	29	120
PAD District V										
Arab OPEC	0	0	0	0	0	20	1,109	36	1	37
Kuwait	0	0	0	0	0	0	1,089	36	0	36
United Arab Emirates	0	0	0	0	0	20	20	0	1	1
Other OPEC	0	0	0	0	129	406	2,584	73	14	86
Ecuador	0	0	0	0	0	0	1,150	38	0	38
Indonesia	0	0	0	0	0	277	1,305	34	9	44
Venezuela	0	0	0	0	129	129	129	0	4	4
Non OPEC	21	0	0	10	206	1,872	6,257	146	62	209
Canada	0	0	0	10	204	378	2,649	76	13	88
China, People's Republic of	0	0	0	0	0	0	683	23	0	23
Korea, Republic of	21	0	0	0	0	21	21	0	1	1
Mexico	0	0	0	0	2	621	621	0	21	21
Norway	0	0	0	0	0	226	226	0	8	8
Oman	0	0	0	0	0	0	1,431	48	0	48
Peru	0	0	0	0	0	331	331	0	11	11
Singapore	0	0	0	0	0	295	295	0	10	10
Total	21	0	0	10	335	2,298	9,950	255	77	332
Persian Gulf ^d	0	0	0	0	0	20	1,109	36	1	37

^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-November 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	550,972	16,871	40,663	0	5,140	1,213	368	8,597	0	0
Algeria	7,824	7,727	12,031	0	0	0	368	6,421	0	0
Kuwait	110,032	628	0	0	0	0	0	2,176	0	0
Qatar	0	0	197	0	0	0	0	0	0	0
Saudi Arabia	428,764	8,516	28,032	0	5,140	1,193	0	0	0	0
United Arab Emirates	4,352	0	603	0	0	20	0	0	0	0
Other OPEC	675,247	341	14,056	3,561	14,263	15,544	22,147	29,430	0	28
Ecuador	25,437	0	0	0	0	0	0	1,156	0	0
Gabon	49,018	0	0	0	0	0	0	445	0	0
Indonesia	20,362	0	760	0	0	1	0	3,318	0	9
Nigeria	245,321	0	1,098	0	0	0	241	4,148	0	0
Venezuela	335,109	341	12,198	3,561	14,263	15,543	21,906	20,363	0	19
Non OPEC	1,018,597	33,605	105,230	6,254	63,237	15,948	39,698	80,720	289	1,580
Angola	108,741	0	0	0	0	0	0	0	0	0
Argentina	4,227	0	0	373	0	0	69	448	0	0
Australia	4,975	182	196	0	0	0	0	0	0	0
Bahama Islands	0	0	0	0	0	0	0	7,963	0	0
Belgium	0	0	1,984	123	1,745	0	0	660	0	0
Benin	886	0	0	0	0	0	0	0	0	0
Brazil	0	0	591	23	10,009	0	0	428	0	0
Brunei	155	0	0	0	0	0	0	0	0	0
Cameroon	2,714	0	132	0	0	0	0	1,161	0	0
Canada	299,743	29,169	4,538	435	18,540	876	19,213	6,993	223	1,454
China, People's Republic of	16,497	0	0	0	162	0	0	0	0	62
Colombia	48,094	0	0	0	0	0	0	8,707	0	0
Congo	18,405	0	0	0	0	0	0	2,170	0	0
Denmark	420	0	0	0	0	0	0	0	0	0
Egypt	22,762	0	1,662	0	0	141	0	357	0	0
France	0	121	2,219	213	3,097	0	0	0	0	0
Germany, FR	0	0	4,842	0	0	0	0	1,370	0	0
Greece	0	0	324	0	0	0	0	0	0	0
Guatemala	1,872	0	0	0	0	0	0	0	0	0
India	0	0	868	0	0	0	0	0	0	0
Italy	0	46	4,576	0	4,734	0	0	756	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	9,137	131	0	0	0	954	0	0
Malaysia	2,771	4	0	0	333	0	0	0	0	0
Mauritania	0	0	145	0	0	0	0	0	0	0
Mexico	290,250	3,398	2,185	1,843	190	1,343	415	4,158	47	36
Netherlands	0	0	2,183	267	817	0	0	282	0	0
Netherlands Antilles	0	25	10,252	330	529	554	477	10,770	19	0
New Zealand	823	0	0	0	211	0	0	0	0	0
Norway	40,125	0	1,171	0	273	0	0	269	0	0
Oman	7,974	0	4,545	0	0	0	0	0	0	0
Panama	0	0	359	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	3,079	0	0
Portugal	0	19	244	0	0	0	0	1,380	0	0
Puerto Rico	0	0	237	0	0	1,861	133	0	0	0
Singapore	504	0	4,749	0	0	561	0	381	0	0
Spain	0	0	6,078	0	2,847	0	0	415	0	0
Sweden	0	0	829	0	92	0	0	0	0	0
Syria	5,863	0	2,058	0	0	0	0	0	0	0
Thailand	1,482	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	17,995	0	221	239	672	250	215	4,010	0	0
Tunisia	0	0	175	0	0	0	0	155	0	0
Turkey	0	0	2,231	0	0	0	0	2,140	0	0
United Kingdom	98,237	633	9,036	0	2,319	0	0	281	0	0
Russia	12,264	0	5,501	0	0	0	0	0	0	0
Virgin Islands	0	0	18,469	2,277	15,034	10,362	19,176	18,542	0	0
Yemen	549	0	1,046	0	0	0	0	1,729	0	0
Zaire	6,135	0	0	0	0	0	0	146	0	0
Other	4,134	0	2,030	0	1,633	0	0	769	0	0
Total	2,244,816	50,817	160,149	9,815	82,640	32,705	62,213	118,747	289	1,608
Persian Gulf^d	543,148	9,144	28,832	0	5,140	1,213	0	2,176	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-November 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	34,569	0	0	5,879	115,463	666,435	1,650	346	1,995
Algeria	1,617	34,074	0	0	5,151	67,389	75,213	23	202	225
Kuwait	0	495	0	0	0	3,299	113,331	329	10	339
Qatar	0	0	0	0	0	197	197	0	1	1
Saudi Arabia	546	0	0	0	528	43,955	472,719	1,284	132	1,415
United Arab Emirates	0	0	0	0	0	623	4,975	13	2	15
Other OPEC	1,809	469	0	5,746	899	108,293	783,540	2,022	324	2,346
Ecuador	0	0	0	0	0	1,156	26,593	76	3	80
Gabon	0	0	0	0	0	445	49,463	147	1	148
Indonesia	422	0	0	0	0	4,510	24,872	61	14	74
Nigeria	0	0	0	0	0	5,487	250,808	734	16	751
Venezuela	1,387	469	0	5,746	899	96,695	431,804	1,003	290	1,293
Non OPEC	10,109	1,962	2,437	5,260	10,593	376,922	1,395,519	3,050	1,129	4,178
Angola	0	0	0	0	0	0	108,741	326	0	326
Argentina	691	368	0	0	456	2,405	6,632	13	7	20
Australia	0	0	0	0	0	378	5,353	15	1	16
Bahama Islands	0	0	0	0	0	7,963	7,963	0	24	24
Belgium	64	367	0	0	8	4,951	4,951	0	15	15
Benin	0	0	0	0	0	0	886	3	0	3
Brazil	69	0	0	0	213	11,333	11,333	0	34	34
Brunel	0	0	0	0	0	0	155	(s)	0	(s)
Cameroon	0	0	0	0	0	1,293	4,007	8	4	12
Canada	772	0	487	2,029	5,509	90,238	389,981	897	270	1,168
China, People's Republic of	0	0	0	0	93	317	16,814	49	1	50
Colombia	0	0	0	0	2	8,709	56,803	144	26	170
Congo	0	0	0	0	0	2,170	20,575	55	6	62
Denmark	0	0	0	0	0	0	420	1	0	1
Egypt	0	0	0	0	9	2,169	24,931	68	6	75
France	83	0	28	0	254	6,015	6,015	0	18	18
Germany, FR	0	0	0	0	64	6,276	6,276	0	19	19
Greece	0	0	0	0	0	324	324	0	1	1
Guatemala	0	0	0	0	0	0	1,872	6	0	6
India	0	283	0	0	0	1,151	1,151	0	3	3
Italy	33	0	95	0	126	10,394	10,394	0	31	31
Ivory Coast	0	0	0	0	0	664	664	0	2	2
Japan	25	0	31	0	24	88	88	0	(s)	(s)
Korea, Republic of	637	0	0	0	0	10,859	10,859	0	33	33
Malaysia	0	0	0	0	0	337	3,108	8	1	9
Mauritania	0	0	0	0	0	145	145	0	(s)	(s)
Mexico	595	0	0	0	2,927	17,137	307,387	869	51	920
Netherlands	32	0	0	0	62	3,643	3,643	0	11	11
Netherlands Antilles	957	675	0	453	0	25,041	25,041	0	75	75
New Zealand	0	0	0	0	0	211	1,034	2	1	3
Norway	0	0	0	0	0	1,713	41,838	120	5	125
Oman	0	0	0	0	0	4,545	12,519	24	14	37
Panama	0	0	0	0	0	359	359	0	1	1
Peru	0	0	0	0	0	3,079	3,079	0	9	9
Portugal	21	0	0	0	0	1,664	1,664	0	5	5
Puerto Rico	5,406	0	1,735	0	629	10,001	10,001	0	30	30
Singapore	120	0	0	0	0	5,811	6,315	2	17	19
Spain	0	0	51	2,778	0	12,169	12,169	0	36	36
Sweden	18	0	0	0	0	939	939	0	3	3
Syria	0	0	0	0	0	2,058	7,921	18	6	24
Thailand	0	0	0	0	0	0	1,482	4	0	4
Trinidad and Tobago	0	0	10	0	0	5,617	23,612	54	17	71
Tunisia	0	0	0	0	0	330	330	0	1	1
Turkey	272	0	0	0	0	4,643	4,643	0	14	14
United Kingdom	123	0	0	0	0	12,392	110,629	294	37	331
Russia	0	0	0	0	0	5,501	17,765	37	16	53
Virgin Islands	0	0	0	0	0	83,860	83,860	0	251	251
Yemen	191	0	0	0	0	2,966	3,515	2	9	11
Zaire	0	0	0	0	0	146	6,281	18	(s)	19
Other	0	269	0	0	217	4,918	9,052	12	15	27
Total	14,081	37,000	2,437	11,006	17,171	600,678	2,845,494	6,721	1,798	8,519

^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-November 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	54,325	2,039	2,203	0	5,140	716	0	6,351	0	0
Algeria	613	236	1,600	0	0	0	0	5,722	0	0
Kuwait	1,045	0	0	0	0	0	0	629	0	0
Saudi Arabia	52,667	1,803	0	0	5,140	716	0	0	0	0
United Arab Emirates	0	0	603	0	0	0	0	0	0	0
Other OPEC	201,581	170	1,009	3,196	13,786	15,275	22,118	25,784	0	0
Ecuador	1,067	0	0	0	0	0	0	1,156	0	0
Gabon	15,593	0	0	0	0	0	0	445	0	0
Indonesia	0	0	0	0	0	0	0	1,893	0	0
Nigeria	125,156	0	485	0	0	0	241	3,700	0	0
Venezuela	59,765	170	524	3,196	13,786	15,275	21,877	18,590	0	0
Non OPEC	181,020	4,017	36,857	3,985	57,915	10,329	32,454	64,469	222	131
Angola	52,669	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	7,930	0	0
Belgium	0	0	375	123	1,745	0	0	660	0	0
Brazil	0	0	371	0	9,466	0	0	428	0	0
Cameroon	0	0	132	0	0	0	0	858	0	0
Canada	20,412	3,403	895	107	16,352	9	15,057	6,099	222	127
China, People's Republic of	4,033	0	0	0	0	0	0	0	0	0
Colombia	5,138	0	0	0	0	0	0	7,917	0	0
Congo	0	0	0	0	0	0	0	2,170	0	0
Egypt	7,010	0	0	0	0	0	0	0	0	0
France	0	0	653	213	2,821	0	0	0	0	0
Germany, FR	0	0	2,127	0	0	0	0	624	0	0
India	0	0	222	0	0	0	0	0	0	0
Italy	0	0	2,121	0	4,673	0	0	756	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
Mauritania	0	0	145	0	0	0	0	0	0	0
Mexico	31,124	0	0	468	190	0	415	190	0	0
Netherlands	0	0	306	267	817	0	0	282	0	0
Netherlands Antilles	0	0	1,156	0	430	167	259	10,463	0	0
Norway	23,252	0	0	0	273	0	0	0	0	0
Panama	0	0	359	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	2,616	0	0
Portugal	0	0	172	0	0	0	0	256	0	0
Puerto Rico	0	0	237	0	0	1,861	133	0	0	0
Singapore	0	0	294	0	0	0	0	0	0	0
Spain	0	0	4,255	0	2,573	0	0	415	0	0
Sweden	0	0	140	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	672	26	215	3,679	0	0
United Kingdom	30,142	614	4,085	0	2,319	0	0	281	0	0
Virgin Islands	0	0	17,880	2,199	13,526	8,266	16,306	17,568	0	0
Yemen	0	0	477	0	0	0	0	0	0	0
Zaire	5,063	0	0	0	0	0	0	146	0	0
Other	673	0	0	0	1,633	0	0	568	0	0
Total	436,926	6,226	40,069	7,181	76,841	26,320	54,572	96,604	222	131
Persian Gulf^d	53,712	1,803	603	0	5,140	716	0	629	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-November 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	397	16,846	71,171	163	50	213
Algeria	0	0	0	0	0	7,558	8,171	2	23	24
Kuwait	0	0	0	0	0	629	1,674	3	2	5
Saudi Arabia	0	0	0	0	397	8,056	60,723	158	24	182
United Arab Emirates	0	0	0	0	0	603	603	0	2	2
Other OPEC	0	0	0	5,467	0	86,805	288,386	604	260	863
Ecuador	0	0	0	0	0	1,156	2,223	3	3	7
Gabon	0	0	0	0	0	445	16,038	47	1	48
Indonesia	0	0	0	0	0	1,893	1,893	0	6	6
Nigeria	0	0	0	0	0	4,426	129,582	375	13	388
Venezuela	0	0	0	5,467	0	78,885	136,650	179	236	415
Non OPEC	1,797	0	2,130	4,953	2,756	222,015	403,035	542	665	1,207
Angola	0	0	0	0	0	0	52,669	158	0	158
Argentina	0	0	0	0	0	755	755	0	2	2
Bahama Islands	0	0	0	0	0	7,930	7,930	0	24	24
Belgium	0	0	0	0	0	2,903	2,903	0	9	9
Brazil	0	0	0	0	186	10,451	10,451	0	31	31
Cameroon	0	0	0	0	0	990	990	0	3	3
Canada	84	0	344	1,792	231	44,722	65,134	61	134	195
China, People's Republic of	0	0	0	0	37	37	4,070	12	(s)	12
Colombia	0	0	0	0	0	7,917	13,055	15	24	39
Congo	0	0	0	0	0	2,170	2,170	0	6	6
Egypt	0	0	0	0	0	0	7,010	21	0	21
France	22	0	0	0	254	3,963	3,963	0	12	12
Germany, FR	0	0	0	0	48	2,799	2,799	0	8	8
India	0	0	0	0	0	222	222	0	1	1
Italy	0	0	28	0	59	7,641	7,641	0	23	23
Ivory Coast	0	0	0	0	0	247	247	0	1	1
Japan	11	0	0	0	24	35	35	0	(s)	(s)
Malaysia	0	0	0	0	0	333	333	0	1	1
Mauritania	0	0	0	0	0	145	145	0	(s)	(s)
Mexico	0	0	0	0	1,218	2,481	33,605	93	7	101
Netherlands	0	0	0	0	55	1,727	1,727	0	5	5
Netherlands Antilles	0	0	0	453	0	12,928	12,928	0	39	39
Norway	0	0	0	0	0	273	23,525	70	1	70
Panama	0	0	0	0	0	359	359	0	1	1
Peru	0	0	0	0	0	2,616	2,616	0	8	8
Portugal	0	0	0	0	0	428	428	0	1	1
Puerto Rico	1,680	0	1,735	0	629	6,275	6,275	0	19	19
Singapore	0	0	0	0	0	294	294	0	1	1
Spain	0	0	23	2,708	0	9,974	9,974	0	30	30
Sweden	0	0	0	0	0	232	232	0	1	1
Syria	0	0	0	0	0	455	913	1	1	3
Trinidad and Tobago	0	0	0	0	0	4,830	5,876	3	14	18
United Kingdom	0	0	0	0	0	7,299	37,441	90	22	112
Virgin Islands	0	0	0	0	0	75,745	75,745	0	227	227
Yemen	0	0	0	0	0	477	477	0	1	1
Zaire	0	0	0	0	0	146	5,209	15	(s)	16
Other	0	0	0	0	15	2,216	2,889	2	7	9
Total	1,797	0	2,130	10,420	3,153	325,666	762,592	1,308	975	2,283
Persian Gulf^d	0	0	0	0	397	9,288	63,000	161	28	189

^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-November 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	40,991	0	0	0	0	0	0	0	0	0
Algeria	1,091	0	0	0	0	0	0	0	0	0
Kuwait	11,328	0	0	0	0	0	0	0	0	0
Saudi Arabia	27,526	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	89,064	0	0	0	0	0	0	0	0	0
Ecuador	7,370	0	0	0	0	0	0	0	0	0
Gabon	1,053	0	0	0	0	0	0	0	0	0
Indonesia	397	0	0	0	0	0	0	0	0	0
Nigeria	33,121	0	0	0	0	0	0	0	0	0
Venezuela	47,123	0	0	0	0	0	0	0	0	0
Non OPEC	313,189	23,636	370	327	924	784	2,072	233	0	694
Angola	5,948	0	0	0	0	0	0	0	0	0
Canada	221,870	23,636	370	327	924	784	2,072	233	0	694
Colombia	8,435	0	0	0	0	0	0	0	0	0
Congo	3,195	0	0	0	0	0	0	0	0	0
Egypt	521	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	0	0	0	0	0	0	0
Malaysia	438	0	0	0	0	0	0	0	0	0
Mexico	44,294	0	0	0	0	0	0	0	0	0
Norway	7,523	0	0	0	0	0	0	0	0	0
Oman	547	0	0	0	0	0	0	0	0	0
Syria	1,273	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	17,388	0	0	0	0	0	0	0	0	0
Total	443,244	23,636	370	327	924	784	2,072	233	0	694
Persian Gulf^d	39,900	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-November 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	40,991	123	0	123
Algeria	0	0	0	0	0	0	1,091	3	0	3
Kuwait	0	0	0	0	0	0	11,328	34	0	34
Saudi Arabia	0	0	0	0	0	0	27,526	82	0	82
United Arab Emirates	0	0	0	0	0	0	1,046	3	0	3
Other OPEC	0	0	0	0	0	0	89,064	267	0	267
Ecuador	0	0	0	0	0	0	7,370	22	0	22
Gabon	0	0	0	0	0	0	1,053	3	0	3
Indonesia	0	0	0	0	0	0	397	1	0	1
Nigeria	0	0	0	0	0	0	33,121	99	0	99
Venezuela	0	0	0	0	0	0	47,123	141	0	141
Non OPEC	202	0	143	100	608	30,093	343,282	938	90	1,028
Angola	0	0	0	0	0	0	5,948	18	0	18
Canada	202	0	143	100	599	30,084	251,954	664	90	754
Colombia	0	0	0	0	0	0	8,435	25	0	25
Congo	0	0	0	0	0	0	3,195	10	0	10
Egypt	0	0	0	0	0	0	521	2	0	2
Germany, FR	0	0	0	0	9	9	9	0	(s)	(s)
Malaysia	0	0	0	0	0	0	438	1	0	1
Mexico	0	0	0	0	0	0	44,294	133	0	133
Norway	0	0	0	0	0	0	7,523	23	0	23
Oman	0	0	0	0	0	0	547	2	0	2
Syria	0	0	0	0	0	0	1,273	4	0	4
Trinidad and Tobago	0	0	0	0	0	0	1,757	5	0	5
United Kingdom	0	0	0	0	0	0	17,388	52	0	52
Total	202	0	143	100	608	30,093	473,337	1,327	90	1,417
Persian Gulf^d	0	0	0	0	0	0	39,900	119	0	119

^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-November 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	447,753	14,832	38,660	0	0	0	368	1,748	0	0
Algeria	6,120	7,491	10,431	0	0	0	368	699	0	0
Kuwait	89,756	628	0	0	0	0	0	1,049	0	0
Qatar	0	0	197	0	0	0	0	0	0	0
Saudi Arabia	348,571	6,713	28,032	0	0	0	0	0	0	0
United Arab Emirates	3,306	0	0	0	0	0	0	0	0	0
Other OPEC	348,759	171	12,482	135	0	0	0	1,970	0	28
Ecuador	2,369	0	0	0	0	0	0	0	0	0
Gabon	32,372	0	0	0	0	0	0	0	0	0
Indonesia	784	0	541	0	0	0	0	0	0	9
Nigeria	87,044	0	613	0	0	0	0	448	0	0
Venezuela	224,190	171	11,328	135	0	0	0	1,522	0	19
Non OPEC	447,306	3,822	64,337	1,733	1,363	2,576	2,031	11,651	47	704
Angola	50,124	0	0	0	0	0	0	0	0	0
Argentina	4,227	0	0	3	0	0	0	132	0	0
Australia	699	182	0	0	0	0	0	0	0	0
Bahama Islands	0	0	0	0	0	0	0	33	0	0
Belgium	0	0	1,609	0	0	0	0	0	0	0
Benin	886	0	0	0	0	0	0	0	0	0
Brazil	0	0	220	23	281	0	0	0	0	0
Cameroon	2,714	0	0	0	0	0	0	303	0	0
Canada	4,428	0	3,193	1	0	10	0	356	0	582
China, People's Republic of	5,303	0	0	0	0	0	0	0	0	62
Colombia	32,631	0	0	0	0	0	0	790	0	0
Congo	15,210	0	0	0	0	0	0	0	0	0
Denmark	420	0	0	0	0	0	0	0	0	0
Egypt	15,231	0	1,662	0	0	141	0	357	0	0
France	0	121	1,566	0	245	0	0	0	0	0
Germany, FR	0	0	2,715	0	0	0	0	746	0	0
Greece	0	0	324	0	0	0	0	0	0	0
Guatemala	1,872	0	0	0	0	0	0	0	0	0
India	0	0	646	0	0	0	0	0	0	0
Italy	0	46	2,455	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	9,137	0	0	0	0	0	0	0
Malaysia	853	4	0	0	0	0	0	0	0	0
Mexico	213,714	3,398	1,242	1,375	0	562	0	1,191	47	36
Netherlands	0	0	1,877	0	0	0	0	0	0	0
Netherlands Antilles	0	25	9,096	330	0	0	0	307	0	0
New Zealand	280	0	0	0	0	0	0	0	0	0
Norway	9,350	0	945	0	0	0	0	269	0	0
Oman	1,986	0	4,545	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	132	0	0
Portugal	0	19	72	0	0	0	0	1,124	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Singapore	0	0	2,234	0	0	0	0	381	0	0
Spain	0	0	1,823	0	0	0	0	0	0	0
Sweden	0	0	689	0	0	0	0	0	0	0
Syria	4,132	0	1,603	0	0	0	0	0	0	0
Thailand	994	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	15,192	0	221	1	0	224	0	331	0	0
Tunisia	0	0	175	0	0	0	0	155	0	0
Turkey	0	0	2,231	0	0	0	0	2,140	0	0
United Kingdom	50,707	19	4,951	0	0	0	0	0	0	0
Russia	12,264	0	5,501	0	0	0	0	0	0	0
Virgin Islands	0	0	589	0	837	1,639	2,031	974	0	0
Yemen	549	0	569	0	0	0	0	1,729	0	0
Zaire	1,072	0	0	0	0	0	0	0	0	0
Other	2,468	0	2,030	0	0	0	0	201	0	0
Total	1,241,818	18,825	115,479	1,868	1,363	2,576	2,399	15,369	47	732
Persian Gulf^d	441,633	7,341	28,229	0	0	0	0	1,049	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-November 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	34,569	0	0	5,282	97,822	545,375	1,341	292	1,633
Algeria	1,617	34,074	0	0	5,151	59,831	65,951	18	179	197
Kuwait	0	495	0	0	0	2,172	91,928	269	7	275
Qatar	0	0	0	0	0	197	197	0	1	1
Saudi Arabia	546	0	0	0	131	35,422	383,993	1,044	106	1,150
United Arab Emirates	0	0	0	0	0	0	3,306	10	0	10
Other OPEC	1,809	469	0	220	131	17,415	364,174	1,038	52	1,090
Ecuador	0	0	0	0	0	0	2,369	7	0	7
Gabon	0	0	0	0	0	0	32,372	97	0	97
Indonesia	422	0	0	0	0	972	1,756	2	3	5
Nigeria	0	0	0	0	0	1,061	88,105	261	3	264
Venezuela	1,387	469	0	220	131	15,382	239,572	671	46	717
Non OPEC	7,876	1,962	133	0	2,344	100,579	547,885	1,339	301	1,640
Angola	0	0	0	0	0	0	50,124	150	0	150
Argentina	691	368	0	0	456	1,650	5,877	13	5	18
Australia	0	0	0	0	0	182	881	2	1	3
Bahama Islands	0	0	0	0	0	33	33	0	(s)	(s)
Belgium	64	367	0	0	8	2,048	2,048	0	6	6
Benin	0	0	0	0	0	0	886	3	0	3
Brazil	69	0	0	0	27	620	620	0	2	2
Cameroon	0	0	0	0	0	303	3,017	8	1	9
Canada	486	0	0	0	0	4,628	9,056	13	14	27
China, People's Republic of	0	0	0	0	56	118	5,421	16	(s)	16
Colombia	0	0	0	0	2	792	33,423	98	2	100
Congo	0	0	0	0	0	0	15,210	46	0	46
Denmark	0	0	0	0	0	0	420	1	0	1
Egypt	0	0	0	0	9	2,169	17,400	46	6	52
France	61	0	28	0	0	2,021	2,021	0	6	6
Germany, FR	0	0	0	0	6	3,467	3,467	0	10	10
Greece	0	0	0	0	0	324	324	0	1	1
Guatemala	0	0	0	0	0	0	1,872	6	0	6
India	0	283	0	0	0	929	929	0	3	3
Italy	33	0	67	0	67	2,692	2,692	0	8	8
Ivory Coast	0	0	0	0	0	417	417	0	1	1
Japan	14	0	0	0	0	22	22	0	(s)	(s)
Korea, Republic of	403	0	0	0	0	9,540	9,540	0	29	29
Malaysia	0	0	0	0	0	4	857	3	(s)	3
Mexico	595	0	0	0	1,689	10,135	223,849	640	30	670
Netherlands	32	0	0	0	7	1,916	1,916	0	6	6
Netherlands Antilles	957	675	0	0	0	11,390	11,390	0	34	34
New Zealand	0	0	0	0	0	0	280	1	0	1
Norway	0	0	0	0	0	1,214	10,564	28	4	32
Oman	0	0	0	0	0	4,545	6,531	6	14	20
Peru	0	0	0	0	0	132	132	0	(s)	(s)
Portugal	21	0	0	0	0	1,236	1,236	0	4	4
Puerto Rico	3,726	0	0	0	0	3,726	3,726	0	11	11
Singapore	120	0	0	0	0	2,735	2,735	0	8	8
Spain	0	0	28	0	0	1,851	1,851	0	6	6
Sweden	18	0	0	0	0	707	707	0	2	2
Syria	0	0	0	0	0	1,603	5,735	12	5	17
Thailand	0	0	0	0	0	0	994	3	0	3
Trinidad and Tobago	0	0	10	0	0	787	15,979	45	2	48
Tunisia	0	0	0	0	0	330	330	0	1	1
Turkey	272	0	0	0	0	4,643	4,643	0	14	14
United Kingdom	123	0	0	0	0	5,093	55,800	152	15	167
Russia	0	0	0	0	0	5,501	17,765	37	16	53
Virgin Islands	0	0	0	0	0	6,070	6,070	0	18	18
Yemen	191	0	0	0	0	2,489	3,038	2	7	9
Zaire	0	0	0	0	0	0	1,072	3	0	3
Other	0	269	0	0	17	2,517	4,985	7	8	15
Total	11,848	37,000	133	220	7,757	215,616	1,457,434	3,718	646	4,364
Persian Gulf^d	546	764	0	0	131	38,060	479,693	1,322	114	1,436

^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-November 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	29,925	1,955	0	0	117	0	1,060	15	0	0
Canada	29,925	1,955	0	0	117	0	1,060	15	0	0
Total	29,925	1,955	0	0	117	0	1,060	15	0	0
PAD District V										
Arab OPEC	7,903	0	0	0	0	497	0	498	0	0
Kuwait	7,903	0	0	0	0	0	0	498	0	0
Saudi Arabia	0	0	0	0	0	477	0	0	0	0
United Arab Emirates	0	0	0	0	0	20	0	0	0	0
Other OPEC	37,843	0	565	230	477	269	29	1,676	0	0
Ecuador	14,631	0	0	0	0	0	0	0	0	0
Indonesia	19,181	0	219	0	0	1	0	1,425	0	0
Venezuela	4,031	0	346	230	477	268	29	251	0	0
Non OPEC	47,157	175	3,666	209	2,918	2,259	2,061	4,352	20	51
Australia	4,276	0	196	0	0	0	0	0	0	0
Brazil	0	0	0	0	262	0	0	0	0	0
Brunel	155	0	0	0	0	0	0	0	0	0
Canada	23,108	175	80	0	1,147	73	1,024	290	1	51
China, People's Republic of	7,161	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	1,480	0	0	0	0	0	0	0	0	0
Mexico	1,118	0	943	0	0	781	0	2,777	0	0
Netherlands Antilles	0	0	0	0	99	387	218	0	19	0
New Zealand	543	0	0	0	211	0	0	0	0	0
Norway	0	0	226	0	0	0	0	0	0	0
Oman	5,441	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	331	0	0
Singapore	504	0	2,221	0	0	561	0	0	0	0
Spain	0	0	0	0	274	0	0	0	0	0
Thailand	488	0	0	0	0	0	0	0	0	0
Virgin Islands	0	0	0	78	671	457	839	0	0	0
Other	993	0	0	0	0	0	0	0	0	0
Total	92,903	175	4,231	439	3,395	3,025	2,110	6,526	20	51
Persian Gulf ^d	7,903	0	0	0	0	497	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-November 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		
								Crude Oil	Products	Total
PAD District IV										
Non OPEC	0	0	0	0	2,009	5,156	35,081	90	15	105
Canada	0	0	0	0	2,009	5,156	35,081	90	15	105
Total	0	0	0	0	2,009	5,156	35,081	90	15	105
PAD District V										
Arab OPEC	0	0	0	0	0	995	8,898	24	3	27
Kuwait	0	0	0	0	0	498	8,401	24	1	25
Saudi Arabia	0	0	0	0	0	477	477	0	1	1
United Arab Emirates	0	0	0	0	0	20	20	0	(s)	(s)
Other OPEC	0	0	0	59	768	4,073	41,916	113	12	125
Ecuador	0	0	0	0	0	0	14,631	44	0	44
Indonesia	0	0	0	0	0	1,645	20,826	57	5	62
Venezuela	0	0	0	59	768	2,428	6,459	12	7	19
Non OPEC	234	0	31	207	2,872	19,079	66,236	141	57	198
Australia	0	0	0	0	0	196	4,472	13	1	13
Brazil	0	0	0	0	0	262	262	0	1	1
Brunei	0	0	0	0	0	0	155	(s)	0	(s)
Canada	0	0	0	137	2,670	5,648	28,756	69	17	86
China, People's Republic of	0	0	0	0	0	162	7,323	21	(s)	22
Colombia	0	0	0	0	0	0	1,890	6	0	6
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	234	0	0	0	0	1,319	1,319	0	4	4
Malaysia	0	0	0	0	0	0	1,480	4	0	4
Mexico	0	0	0	0	20	4,521	5,639	3	14	17
Netherlands Antilles	0	0	0	0	0	723	723	0	2	2
New Zealand	0	0	0	0	0	211	754	2	1	2
Norway	0	0	0	0	0	226	226	0	1	1
Oman	0	0	0	0	0	0	5,441	16	0	16
Peru	0	0	0	0	0	331	331	0	1	1
Singapore	0	0	0	0	0	2,782	3,286	2	8	10
Spain	0	0	0	70	0	344	344	0	1	1
Thailand	0	0	0	0	0	0	488	1	0	1
Virgin Islands	0	0	0	0	0	2,045	2,045	0	6	6
Other	0	0	0	0	185	185	1,178	3	1	4
Total	234	0	31	266	3,644	24,147	117,050	278	72	350

^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,
November 1993
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil ^a	0	2	0	0	2,013	2,015	67
Natural Gas Liquids	40	91	548	3	119	799	27
Pentanes Plus	5	14	139	2	0	160	5
Liquefied Petroleum Gases	35	77	406	1	119	639	21
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	33	32	341	1	117	523	17
Normal Butane/Butylene	3	45	65	0	3	116	4
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	0	0	151	0	(s)	152	5
Other Hydrocarbons/Oxygenates	0	0	0	0	0	0	0
Motor Gasoline Blend. Comp.	0	0	151	0	(s)	152	5
Finished Petroleum Products	1,084	726	13,889	10	10,276	25,985	866
Finished Motor Gasoline	65	20	2,392	0	1,202	3,678	123
Naphtha-Type Jet Fuel	2	0	0	0	114	116	4
Kerosene-Type Jet Fuel	53	66	556	0	90	765	25
Kerosene	(s)	45	7	0	2	55	2
Distillate Fuel Oil	164	100	4,996	0	4,640	9,900	330
Residual Fuel Oil	551	21	1,405	0	591	2,569	86
Special Naphthas	14	7	19	(s)	5	45	2
Lubricants	92	51	202	4	67	417	14
Waxes	15	4	32	(s)	14	65	2
Petroleum Coke	122	152	4,274	5	3,537	8,090	270
Asphalt and Road Oil	2	259	5	1	13	280	9
Miscellaneous Products	4	0	0	0	1	5	(s)
Total	1,124	819	14,586	13	12,408	28,950	965

^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-November 1993
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil^a	0	736	0	0	33,147	33,883	101
Natural Gas Liquids	674	1,968	8,006	96	4,206	14,950	45
Pentanes Plus	16	200	292	15	(s)	524	2
Liquefied Petroleum Gases	658	1,768	7,713	80	4,206	14,425	43
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	360	1,105	6,050	2	1,353	8,870	27
Normal Butane/Butylene	298	663	1,663	78	2,853	5,556	17
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	37	29	817	0	1,445	2,327	7
Other Hydrocarbons/Oxygenates	0	0	0	0	0	0	0
Motor Gasoline Blend. Comp.	37	29	817	0	1,445	2,327	7
Finished Petroleum Products	10,120	6,088	144,647	103	115,078	276,036	826
Finished Motor Gasoline	1,497	543	24,703	3	6,580	33,326	100
Naphtha-Type Jet Fuel	18	29	592	0	3,719	4,358	13
Kerosene-Type Jet Fuel	315	250	7,193	0	7,036	14,794	44
Kerosene	26	52	1,187	0	21	1,286	4
Distillate Fuel Oil	1,382	595	43,502	1	40,179	85,660	256
Residual Fuel Oil	3,552	347	19,190	0	18,930	42,019	126
Special Naphthas	101	206	680	3	136	1,125	3
Lubricants	1,317	436	3,201	47	1,151	6,152	18
Waxes	128	54	299	1	154	636	2
Petroleum Coke	1,603	2,159	44,007	39	36,984	84,792	254
Asphalt and Road Oil	111	1,417	69	9	179	1,784	5
Miscellaneous Products	70	1	23	(s)	10	104	(s)
Total	10,831	8,821	153,469	199	153,876	327,196	980

^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, November 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	315	2	0	0	0
Australia	0	0	2	0	0	0	0	0
Bahama Islands	0	0	0	324	0	0	113	233
Bahrain	0	0	0	0	0	0	0	0
Belgium & Luxembourg	0	0	(s)	0	0	0	13	0
Brazil	0	0	0	0	0	0	215	0
Cameroon	0	0	0	0	0	0	0	0
Canada	2	17	119	87	209	45	292	793
Chile	0	0	0	0	0	0	0	0
China, People's Republic of	0	0	0	243	0	0	1,240	0
China, Taiwan	0	0	1	0	0	0	1,244	0
Colombia	0	0	0	0	0	0	(s)	0
Costa Rica	0	0	0	109	0	0	80	0
Denmark	0	0	0	0	0	0	0	0
Dominican Republic	0	4	15	0	0	0	0	0
Ecuador	0	0	0	0	0	0	0	0
Egypt	0	0	0	0	0	0	(s)	0
El Salvador	0	0	0	0	0	0	0	0
Finland	0	0	0	0	0	0	0	(s)
France	0	0	0	0	0	0	275	0
French Pacific Islands	0	0	0	0	0	0	0	41
Greece	0	0	0	0	0	0	(s)	0
Guatemala	0	0	0	73	0	0	92	0
Honduras	0	0	0	0	0	0	(s)	0
Hong Kong	0	0	0	0	0	0	(s)	(s)
India	0	0	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0	7	0
Ireland	0	0	0	0	0	0	0	140
Israel	0	0	0	0	0	0	1	0
Italy	0	0	0	0	0	0	(s)	0
Jamaica	0	0	0	0	0	0	0	607
Japan	0	0	(s)	(s)	419	2	(s)	0
Korea, Republic of	0	139	2	0	250	0	3,780	75
Malaysia	0	0	0	0	0	0	0	0
Mexico	0	0	476	1,783	0	(s)	36	373
Netherlands	0	0	0	0	0	0	431	0
Netherlands Antilles	0	0	5	0	0	0	410	0
New Zealand	0	0	0	0	0	0	0	0
Nigeria	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0
Panama	0	0	0	0	0	0	(s)	0
Peru	0	0	0	0	0	0	144	0
Philippines	0	0	0	131	0	0	0	0
Poland	0	0	0	0	0	0	0	0
Puerto Rico	0	0	1	0	0	7	6	0
Russia	0	0	0	0	0	0	0	0
Saudi Arabia	0	0	5	0	0	0	1	0
Singapore	0	0	0	574	0	0	797	0
South Africa	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	612	0
Sweden	0	0	0	0	0	0	4	0
Switzerland	0	0	0	0	0	0	0	0
Thailand	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	(s)	0
Turkey	0	0	0	0	0	0	1	0
United Arab Emirates	0	0	0	0	0	0	95	308
United Kingdom	0	0	0	2	0	0	3	0
Uruguay	0	0	0	0	0	0	0	0
Venezuela	0	0	0	0	0	0	(s)	0
Virgin Islands	2,013	0	0	0	0	0	(s)	0
Yugoslavia	0	0	0	0	0	0	0	0
Other	0	0	13	38	0	0	5	0
Total	2,015	160	639	3,678	880	55	9,900	2,569

See footnotes at end of table.

Table 47. Exports of Crude Oil and Petroleum Products by Destination, November 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	(s)	2	(s)	1	(s)	152	471	16
Australia	1	7	1	277	(s)	(s)	289	10
Bahama Islands	(s)	1	0	0	0	0	671	22
Bahrain	(s)	(s)	0	0	0	0	(s)	(s)
Belgium & Luxembourg	(s)	9	(s)	276	1	0	300	10
Brazil	0	1	(s)	66	0	(s)	282	9
Cameroon	0	(s)	0	0	0	0	(s)	(s)
Canada	17	113	22	459	262	1	2,436	81
Chile	0	3	(s)	0	(s)	0	3	(s)
China, People's Republic of	0	(s)	(s)	0	(s)	(s)	1,484	49
China, Taiwan	1	13	(s)	0	1	(s)	1,262	42
Colombia	(s)	9	(s)	0	(s)	(s)	10	(s)
Costa Rica	(s)	7	(s)	0	0	0	196	7
Denmark	0	(s)	(s)	0	0	0	(s)	(s)
Dominican Republic	0	3	2	0	0	(s)	24	1
Ecuador	0	1	0	0	0	(s)	1	(s)
Egypt	0	19	0	0	(s)	0	19	1
El Salvador	0	2	(s)	0	0	0	2	(s)
Finland	0	(s)	0	0	0	0	(s)	(s)
France	(s)	1	2	0	1	(s)	279	9
French Pacific Islands	0	(s)	0	0	0	0	41	1
Greece	0	1	(s)	363	0	(s)	365	12
Guatemala	(s)	3	(s)	0	0	0	169	6
Honduras	1	4	(s)	0	0	0	6	(s)
Hong Kong	(s)	2	1	0	0	(s)	4	(s)
India	0	8	(s)	0	(s)	(s)	9	(s)
Indonesia	(s)	5	(s)	0	(s)	0	12	(s)
Ireland	0	(s)	(s)	98	0	(s)	238	8
Israel	0	(s)	0	0	0	0	2	(s)
Italy	0	1	(s)	939	(s)	0	940	31
Jamaica	(s)	1	(s)	72	0	(s)	680	23
Japan	4	24	3	2,142	1	(s)	2,597	87
Korea, Republic of	(s)	6	1	2	1	0	4,256	142
Malaysia	0	1	0	0	0	0	1	(s)
Mexico	4	99	18	159	4	(s)	2,953	98
Netherlands	0	1	1	288	2	0	722	24
Netherlands Antilles	0	1	0	0	0	0	416	14
New Zealand	0	1	(s)	0	0	0	1	(s)
Nigeria	0	1	0	0	0	0	1	(s)
Norway	1	0	(s)	0	0	0	1	(s)
Panama	0	12	(s)	0	0	(s)	12	(s)
Peru	0	1	(s)	0	0	0	145	5
Philippines	0	2	(s)	0	0	(s)	133	4
Poland	0	1	(s)	0	0	0	1	(s)
Puerto Rico	1	11	1	0	0	(s)	28	1
Russia	1	1	0	0	0	0	2	(s)
Saudi Arabia	(s)	3	0	0	0	(s)	10	(s)
Singapore	(s)	6	(s)	0	(s)	(s)	1,378	46
South Africa	0	4	1	0	0	0	5	(s)
Spain	0	(s)	(s)	1,230	(s)	0	1,843	61
Sweden	0	1	(s)	(s)	0	0	5	(s)
Switzerland	6	(s)	(s)	0	(s)	0	6	(s)
Thailand	(s)	7	(s)	0	0	(s)	7	(s)
Trinidad and Tobago	0	0	(s)	0	(s)	0	1	(s)
Turkey	0	0	(s)	756	(s)	0	757	25
United Arab Emirates	1	1	0	58	0	(s)	463	15
United Kingdom	(s)	1	1	181	2	(s)	190	6
Uruguay	0	1	0	0	0	0	1	(s)
Venezuela	2	(s)	(s)	180	1	(s)	183	6
Virgin Islands	0	(s)	0	0	0	0	2,013	67
Yugoslavia	0	(s)	0	0	0	0	(s)	(s)
Other	0	11	(s)	219	(s)	(s)	287	10
Total	45	417	65	8,090	280	157	28,950	965

^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-November 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	2	545	48	0	153	0
Australia	0	0	10	299	0	(s)	577	139
Bahama Islands	0	0	141	702	113	0	2,067	1,664
Bahrain	0	0	0	0	0	0	1	0
Belgium & Luxembourg	0	0	11	2	0	0	63	0
Brazil	0	0	435	(s)	140	(s)	4,154	38
Cameroon	0	0	0	0	0	0	0	0
Canada	738	227	2,419	2,914	2,322	67	2,455	5,228
Chile	0	0	231	0	0	219	267	0
China, People's Republic of	0	0	0	700	715	1	7,801	240
China, Taiwan	0	0	731	1,612	0	(s)	6,959	2,290
Colombia	0	(s)	633	0	0	(s)	9	0
Costa Rica	0	0	1	392	31	0	476	102
Denmark	0	0	1	0	0	(s)	0	0
Dominican Republic	0	4	326	347	6	(s)	102	237
Ecuador	0	0	1,582	0	0	0	3	0
Egypt	0	0	0	0	0	5	14	0
El Salvador	0	0	157	174	13	1	333	31
Finland	0	0	0	0	0	0	0	(s)
France	0	0	(s)	15	0	0	855	0
French Pacific Islands	0	0	16	4	19	0	1	304
Ghana	0	0	0	0	0	0	0	0
Greece	0	0	(s)	0	0	(s)	(s)	0
Guatemala	0	0	208	1,441	67	27	1,120	854
Guinea	0	0	0	0	1	0	(s)	0
Honduras	0	0	151	672	128	42	1,040	0
Hong Kong	0	0	1	0	(s)	(s)	941	303
India	0	0	0	0	555	0	1,310	273
Indonesia	0	0	276	0	0	0	1,551	3
Ireland	0	0	0	0	0	0	(s)	294
Israel	0	(s)	3	18	1,407	(s)	218	(s)
Italy	0	1	4	1	0	0	121	2,538
Jamaica	0	0	137	121	30	1	499	6,066
Japan	0	0	10	196	8,970	314	3,265	1,692
Korea, Republic of	400	139	39	271	2,493	544	15,591	3,583
Malaysia	0	0	2	0	0	0	5	0
Mexico	0	0	5,868	18,717	55	13	909	7,477
Netherlands	0	0	1	0	21	1	5,578	195
Netherlands Antilles	0	0	34	921	28	(s)	2,872	428
New Zealand	0	0	0	0	0	(s)	1	0
Nigeria	0	0	0	303	985	0	215	0
Norway	0	0	(s)	0	0	0	0	0
Panama	0	0	189	15	30	6	2,187	1,439
Peru	0	153	34	10	11	0	2,235	298
Philippines	0	0	0	146	50	0	2,972	209
Poland	0	0	0	0	0	0	(s)	0
Portugal	0	0	0	0	(s)	0	870	0
Puerto Rico	0	0	19	1,120	926	7	2,035	7
Russia	0	0	0	0	0	0	1	1
Saudi Arabia	0	0	5	(s)	0	(s)	7	0
Singapore	0	0	(s)	1,149	226	0	8,789	4,078
South Africa	0	0	0	0	0	0	177	26
Spain	0	0	1	0	1	0	2,121	57
Suriname	0	0	26	0	0	0	0	0
Sweden	0	0	(s)	0	0	0	82	0
Switzerland	0	0	(s)	0	0	1	(s)	0
Thailand	0	0	155	0	0	(s)	2	306
Trinidad and Tobago	0	0	1	0	0	0	2	0
Turkey	0	0	0	0	0	0	1	0
United Arab Emirates	0	0	(s)	0	0	0	96	1,435
United Kingdom	0	0	30	13	1	16	8	0
Uruguay	0	0	0	0	0	0	0	0
Venezuela	0	0	141	(s)	0	0	6	1
Virgin Islands	32,747	0	2	0	0	16	310	0
Yugoslavia	0	0	0	0	0	0	2	0
Other	0	0	284	50	62	1	2,227	185
Total	33,883	524	14,425	33,326	19,152	1,286	85,660	42,019

See footnotes at end of table.

**Table 48. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination,
January-November 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	1	82	3	2	1	227	1,063	3
Australia	5	65	8	3,415	3	(s)	4,519	14
Bahama Islands	2	37	0	0	3	0	4,729	14
Bahrain	(s)	1	(s)	587	(s)	0	589	2
Belgium & Luxembourg	21	58	6	6,789	7	(s)	6,959	21
Brazil	301	62	1	614	1	1	5,746	17
Cameroon	0	3	0	107	0	0	110	(s)
Canada	403	1,108	175	4,564	1,545	375	24,540	73
Chile	(s)	74	2	6	1	3	802	2
China, People's Republic of	4	251	4	0	2	(s)	9,720	29
China, Taiwan	19	213	4	5	8	1,028	12,869	39
Colombia	3	75	8	271	1	3	1,004	3
Costa Rica	15	104	3	0	(s)	(s)	1,125	3
Denmark	0	2	3	1,301	(s)	0	1,306	4
Dominican Republic	4	51	3	100	0	1	1,183	4
Ecuador	(s)	16	2	0	1	(s)	1,605	5
Egypt	(s)	25	(s)	2	1	0	48	(s)
El Salvador	3	64	1	0	0	1	778	2
Finland	0	8	(s)	526	1	(s)	536	2
France	16	12	21	1,575	7	(s)	2,502	7
French Pacific Islands	0	2	0	0	(s)	0	346	1
Ghana	0	1	0	0	0	0	1	(s)
Greece	(s)	13	(s)	1,403	0	(s)	1,417	4
Guatemala	24	60	8	0	(s)	(s)	3,810	11
Guinea	(s)	12	0	0	0	0	13	(s)
Honduras	12	57	1	0	0	(s)	2,103	6
Hong Kong	2	39	14	0	0	(s)	1,301	4
India	(s)	120	9	84	1	4	2,355	7
Indonesia	1	263	1	165	1	0	2,261	7
Ireland	(s)	(s)	3	195	0	(s)	494	1
Israel	16	16	(s)	302	0	(s)	1,981	6
Italy	1	6	5	9,205	3	1	11,886	36
Jamaica	2	8	2	127	0	2	6,994	21
Japan	95	249	38	18,887	13	24	33,754	101
Korea, Republic of	19	74	11	1,161	2	1	24,329	73
Malaysia	(s)	10	1	(s)	(s)	2	21	(s)
Mexico	45	1,305	187	337	74	58	35,546	106
Netherlands	30	21	7	5,890	13	(s)	11,757	35
Netherlands Antilles	0	324	(s)	0	1	272	4,881	15
New Zealand	(s)	13	4	437	1	0	455	1
Nigeria	(s)	91	(s)	0	1	1	1,297	4
Norway	3	3	(s)	36	0	(s)	42	(s)
Panama	4	36	(s)	72	0	199	4,177	13
Peru	(s)	126	3	140	0	1	3,009	9
Philippines	(s)	32	5	30	(s)	2	3,446	10
Poland	0	7	(s)	0	0	0	7	(s)
Portugal	(s)	1	(s)	177	(s)	0	1,048	3
Puerto Rico	13	128	11	0	(s)	1	4,267	13
Russia	2	18	(s)	0	0	(s)	24	(s)
Saudi Arabia	1	24	(s)	121	0	2	160	(s)
Singapore	2	140	4	22	4	2	14,415	43
South Africa	(s)	28	2	374	1	0	607	2
Spain	(s)	11	18	7,901	2	(s)	10,112	30
Suriname	0	2	0	0	0	0	28	(s)
Sweden	0	10	1	433	0	82	608	2
Switzerland	14	2	(s)	58	1	0	76	(s)
Thailand	1	64	3	14	(s)	4	550	2
Trinidad and Tobago	(s)	3	1	0	(s)	(s)	8	(s)
Turkey	0	14	(s)	9,532	(s)	0	9,547	29
United Arab Emirates	1	37	0	347	2	1	1,919	6
United Kingdom	3	50	10	2,731	18	(s)	2,879	9
Uruguay	0	11	(s)	0	0	3	14	(s)
Venezuela	12	13	3	1,368	6	6	1,558	5
Virgin Islands	(s)	2	0	0	0	1	33,077	99
Yugoslavia	0	1	0	322	0	0	324	1
Other	4	356	2	1,217	11	95	4,946	15
Total	1,125	6,152	636	84,792	1,784	2,431	327,196	980

^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,
November 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	1,668	62	2	1	-3	-10	-2	(s)	252	301	1,969
Algeria	47	0	0	0	0	0	0	0	171	171	217
Kuwait	470	0	0	0	0	0	0	(s)	16	16	486
Saudi Arabia	1,152	62	2	0	(s)	0	0	(s)	65	129	1,280
United Arab Emirates	0	0	0	1	-3	-10	-2	(s)	(s)	-15	-15
Other OPEC	1,962	0	24	28	60	73	-6	(s)	87	266	2,228
Ecuador	106	0	0	0	0	8	0	(s)	(s)	8	115
Gabon	136	0	0	0	0	7	0	0	0	7	143
Indonesia	34	0	0	0	(s)	14	0	(s)	25	39	74
Nigeria	612	0	0	0	0	13	0	(s)	10	24	636
Venezuela	1,073	0	24	28	60	30	-6	(s)	52	187	1,260
Non OPEC	3,195	96	89	38	-173	198	-260	-12	393	368	3,563
Angola	283	0	0	0	0	0	0	0	0	0	283
Argentina	0	0	-10	(s)	0	0	(s)	(s)	-5	-16	-16
Australia	0	(s)	0	0	0	0	-9	(s)	(s)	-10	-10
Bahama Islands	0	0	-11	0	-4	18	0	(s)	(s)	4	4
Belgium & Luxembourg	0	(s)	0	0	(s)	0	-9	(s)	5	-5	-5
Brazil	0	0	48	0	-7	1	-2	(s)	2	42	42
Cameroon	0	0	0	0	0	10	0	(s)	0	10	10
Canada	917	103	63	-5	65	-3	-14	-2	26	233	1,149
China, People's Republic of	68	0	-8	0	-41	0	0	(s)	(s)	-49	19
China, Taiwan	0	(s)	0	0	-41	0	0	(s)	(s)	-42	-42
Colombia	143	0	0	0	(s)	11	0	(s)	(s)	10	153
Egypt	58	0	0	0	(s)	0	0	-1	(s)	-1	57
France	0	0	0	0	-9	0	0	(s)	(s)	-9	-9
Greece	0	0	0	0	(s)	0	-12	(s)	(s)	-12	-12
Guatemala	7	0	-2	0	-3	0	0	(s)	(s)	-6	1
India	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Italy	0	(s)	8	0	(s)	8	-31	(s)	9	-6	-6
Jamaica	0	0	0	0	0	-20	-2	(s)	(s)	-23	-23
Japan	0	(s)	(s)	-14	(s)	0	-71	-1	(s)	-86	-86
Korea, Republic of	0	(s)	0	-8	-126	-3	(s)	(s)	70	-67	-67
Malaysia	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Mexico	1,025	-6	-59	10	-1	9	-5	-3	33	-24	1,001
Netherlands	0	0	0	0	-14	0	-10	(s)	(s)	-24	-24
Netherlands Antilles	0	(s)	0	2	-14	24	0	(s)	58	69	69
Norway	155	0	0	0	0	0	0	0	8	8	162
Oman	116	0	0	0	0	0	0	0	11	11	127
Panama	0	0	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Peru	0	0	0	0	-5	18	0	(s)	(s)	13	13
Puerto Rico	0	(s)	0	6	(s)	0	0	(s)	16	22	22
Romania	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Russia	32	0	0	0	0	0	0	(s)	24	24	56
Spain	0	0	8	0	-20	0	-41	(s)	22	-31	-31
Sweden	0	0	0	0	(s)	0	(s)	(s)	8	8	8
Syria	35	0	0	0	0	0	0	0	0	0	35
Thailand	8	0	0	0	0	0	0	(s)	(s)	(s)	8
Trinidad and Tobago	55	0	0	0	(s)	11	0	0	(s)	11	66
Turkey	0	0	0	0	(s)	0	-25	0	25	(s)	(s)
United Kingdom	340	0	(s)	0	(s)	0	-6	(s)	11	4	344
Virgin Islands	-67	0	75	38	79	87	0	(s)	52	330	263
Zaire	22	0	0	0	0	0	0	0	0	0	22
Other	0	-1	-21	10	-29	26	-11	-2	21	-6	-6
Total	6,825	159	114	66	-116	261	-268	-12	732	935	7,760
Persian Gulf ^c	1,621	62	2	1	-3	-10	-2	(s)	81	130	1,752

^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-November 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	1,650	50	15	4	1	21	-1	(s)	249	339	1,989
Algeria	23	23	0	0	1	19	0	(s)	158	202	225
Kuwait	329	2	0	0	(s)	7	0	(s)	1	10	339
Qatar	0	0	0	0	(s)	0	(s)	(s)	1	1	1
Saudi Arabia	1,284	25	15	4	(s)	0	(s)	(s)	87	131	1,415
United Arab Emirates	13	(s)	0	(s)	(s)	-4	-1	(s)	2	-4	9
Other OPEC	2,022	-5	42	44	61	88	-5	-1	79	304	2,326
Ecuador	76	-5	0	0	(s)	3	0	(s)	(s)	-1	75
Gabon	147	0	0	0	0	1	0	0	0	1	148
Indonesia	61	-1	0	(s)	-5	10	(s)	-1	4	7	68
Iran	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Nigeria	734	0	-1	-2	(s)	12	0	(s)	3	13	747
Venezuela	1,003	1	43	47	66	61	-4	(s)	73	285	1,288
Non OPEC	2,948	63	90	-8	-132	120	-246	-10	398	277	3,225
Angola	326	0	0	0	0	0	0	(s)	(s)	(s)	326
Argentina	13	(s)	-2	(s)	(s)	1	1	(s)	4	4	17
Australia	15	1	-1	0	-2	(s)	-10	(s)	1	-12	2
Bahama Islands	0	(s)	-2	(s)	-6	19	0	(s)	(s)	10	10
Belgium & Luxembourg	0	(s)	5	0	(s)	2	-20	(s)	8	-6	-6
Benin	3	0	0	0	0	0	0	0	0	0	3
Brazil	0	-1	30	(s)	-12	1	-2	(s)	2	17	17
Brunei	(s)	0	0	0	0	0	0	(s)	0	(s)	(s)
Cameroon	8	0	0	0	0	3	(s)	(s)	(s)	4	12
Canada	895	80	47	-4	50	5	-13	-2	36	199	1,094
China, People's Republic of	49	0	-2	-2	-23	-1	(s)	-1	(s)	-28	21
China, Taiwan	0	-2	-5	0	-21	-7	(s)	-1	-3	-39	-39
Colombia	144	-2	0	0	(s)	26	-1	(s)	(s)	23	167
Congo	55	0	0	0	0	6	0	(s)	0	6	62
Egypt	68	0	0	(s)	(s)	1	(s)	(s)	5	6	74
France	0	(s)	9	0	-3	0	-5	(s)	8	11	11
Greece	0	(s)	0	0	(s)	0	-4	(s)	1	-3	-3
Guatemala	6	-1	-4	(s)	-3	-3	0	(s)	(s)	-11	-6
India	0	0	0	-2	-4	-1	(s)	(s)	3	-4	-4
Italy	0	(s)	14	0	(s)	-5	-28	(s)	14	-4	-4
Jamaica	0	(s)	(s)	(s)	-1	-18	(s)	(s)	(s)	-21	-21
Japan	0	(s)	-1	-27	-10	-5	-57	-1	-1	-101	-101
Korea, Republic of	-1	(s)	-1	-7	-47	-8	-3	(s)	28	-39	-40
Malaysia	8	(s)	1	0	(s)	0	(s)	(s)	(s)	1	9
Mexico	869	-7	-55	4	-1	-10	-3	-4	22	-55	814
Netherlands	0	(s)	2	(s)	-17	(s)	-18	(s)	7	-24	-24
Netherlands Antilles	0	(s)	-1	2	-7	31	0	-1	37	60	60
Norway	120	(s)	1	0	0	1	(s)	(s)	3	5	125
Oman	24	0	0	0	0	0	0	(s)	14	14	37
Panama	0	-1	(s)	(s)	-7	-4	(s)	(s)	(s)	-11	-11
Peru	0	(s)	(s)	(s)	-7	8	(s)	(s)	(s)	(s)	(s)
Puerto Rico	0	(s)	-3	3	-8	(s)	0	5	19	17	17
Romania	0	0	0	0	(s)	0	0	(s)	0	(s)	(s)
Russia	37	0	0	0	(s)	(s)	0	(s)	16	16	53
Spain	0	(s)	9	(s)	-6	1	-24	(s)	26	6	6
Sweden	0	(s)	(s)	0	(s)	0	-1	(s)	2	1	1
Syria	18	0	0	0	(s)	0	0	(s)	6	6	24
Thailand	4	(s)	0	0	(s)	-1	(s)	(s)	(s)	-2	3
Trinidad and Tobago	54	(s)	2	1	1	12	0	(s)	1	17	71
Turkey	0	0	0	0	(s)	6	-29	(s)	7	-15	-15
United Kingdom	294	2	7	(s)	(s)	1	-8	(s)	27	28	323
Virgin Islands	-98	(s)	45	31	56	56	0	(s)	62	250	152
Yemen	2	0	0	0	0	5	0	0	4	9	11
Zaire	18	0	0	0	0	(s)	0	(s)	0	(s)	19
Other	18	-4	-5	-4	-55	-4	-17	-3	38	-53	-36
Total	6,620	109	148	41	-70	230	-252	-11	727	920	7,540
Persian Gulf^c	1,626	27	15	4	(s)	2	-3	(s)	92	137	1,763

^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,
November 1993
(Thousand Barrels)**

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Crude Oil	13,865	73,344	757,968	10,774	68,279	924,230
Refinery	13,083	13,107	48,603	1,949	21,395	98,137
Tank Farms and Pipelines	775	59,028	107,437	8,063	29,640	204,943
Leases	7	1,209	15,134	762	1,085	18,197
Strategic Petroleum Reserve	0	0	586,794	0	0	586,794
Alaskan In Transit	0	0	0	0	16,159	16,159
Total Stocks, All Oils (excluding Crude Oil)	190,438	170,726	283,612	15,472	99,062	759,310
Refinery	59,302	60,723	140,325	10,197	62,937	333,484
Bulk Terminal	102,132	71,233	99,448	2,795	30,044	305,652
Pipeline	28,887	35,810	40,524	2,249	5,925	113,395
Natural Gas Processing Plant	117	2,960	3,315	231	156	6,779
Pentanes Plus	245	4,414	6,584	186	130	11,559
Refinery	220	672	291	7	21	1,211
Bulk Terminal	10	2,866	4,405	0	98	7,379
Pipeline	0	523	1,090	74	0	1,687
Natural Gas Processing Plant	15	353	798	105	11	1,282
Liquefied Petroleum Gases	6,257	36,048	74,550	1,178	4,641	122,674
Refinery	2,049	4,062	9,302	447	1,624	17,484
Bulk Terminal	1,971	22,804	55,983	146	2,872	83,776
Pipeline	2,135	6,575	6,748	459	0	15,917
Natural Gas Processing Plant	102	2,607	2,517	126	145	5,497
Ethane/Ethylene	0	4,761	17,434	185	0	22,380
Refinery	0	2	532	0	0	534
Bulk Terminal	0	2,652	13,630	0	0	16,282
Pipeline	0	1,398	2,690	183	0	4,271
Natural Gas Processing Plant	0	709	582	2	0	1,293
Propane/Propylene	4,234	20,351	30,496	508	1,280	56,869
Refinery	719	2,169	2,912	126	100	6,026
Bulk Terminal	1,474	13,289	23,732	145	1,067	39,707
Pipeline	1,954	3,687	2,762	159	0	8,562
Natural Gas Processing Plant	87	1,206	1,090	78	113	2,574
Normal Butane/Butylene	1,874	8,296	19,220	279	2,799	32,468
Refinery	1,185	1,440	3,962	188	1,196	7,971
Bulk Terminal	497	5,261	13,901	1	1,594	21,254
Pipeline	181	1,076	797	54	0	2,108
Natural Gas Processing Plant	11	519	560	36	9	1,135
Isobutane/isobutylene	149	2,640	7,400	206	562	10,957
Refinery	145	451	1,896	133	328	2,953
Bulk Terminal	0	1,602	4,720	0	211	6,533
Pipeline	0	414	499	63	0	976
Natural Gas Processing Plant	4	173	285	10	23	495
Other Hydrocarbons/Hydrogen/Oxygenates	2,324	1,198	6,984	278	4,251	15,035
Refinery	1,475	336	2,049	153	2,678	6,691
Bulk Terminal	849	862	4,557	125	1,158	7,551
Pipeline	0	0	378	0	415	793
Other Hydrocarbons/Hydrogen	6	34	1	0	5	46
Refinery	6	34	1	0	5	46
Fuel Ethanol	241	981	407	89	617	2,335
Refinery	W	159	W	W	W	390
Bulk Terminal ^a	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
ETBE	W	W	W	W	W	W
Refinery	W	W	W	W	W	W
Bulk Terminal	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Methanol	W	W	W	W	W	399
Refinery	W	W	W	W	W	399

See footnotes at end of table.

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

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
MTBE	1,909	W	6,133	W	3,616	12,024
Refinery	1,215	W	1,729	W	2,622	5,796
Bulk Terminal	W	W	4,026	W	586	5,442
Pipeline	W	W	378	W	408	786
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	10,139	16,439	47,368	2,429	21,698	98,073
Refinery						
Naphthas and Lighter	2,714	4,011	11,135	543	3,801	22,204
Kerosene and Light Gas Oils	2,222	2,043	8,039	371	4,011	16,686
Heavy Gas Oils	4,138	6,577	18,102	1,120	10,345	40,282
Residuum	1,065	3,808	10,092	395	3,541	18,901
Motor Gasoline Blending Components	5,375	7,810	16,491	1,552	8,104	39,332
Refinery	5,175	6,981	15,511	1,552	7,229	36,448
Bulk Terminal	200	226	747	0	214	1,387
Pipeline	0	603	233	0	661	1,497
Aviation Gasoline Blending Components	22	0	13	0	12	47
Refinery	22	0	13	0	12	47
Finished Motor Gasoline	55,432	48,472	48,892	4,617	23,532	180,945
Refinery	12,707	10,578	20,709	2,003	8,267	54,264
Bulk Terminal	28,804	21,864	10,336	1,872	12,970	75,646
Pipeline	13,921	16,030	17,847	942	2,295	51,035
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	12,675	1,194	7,821	588	9,332	31,610
Refinery	3,094	845	2,493	191	4,007	10,630
Bulk Terminal	5,439	232	251	310	4,717	10,949
Pipeline	4,142	117	5,077	87	608	10,031
Other	42,757	47,278	41,071	4,029	14,200	149,335
Refinery	9,613	9,733	18,216	1,812	4,260	43,634
Bulk Terminal	23,365	21,632	10,085	1,362	8,253	64,697
Pipeline	9,779	15,913	12,770	855	1,687	41,004
Finished Aviation Gasoline	550	363	292	36	437	1,678
Refinery	61	96	216	27	113	513
Bulk Terminal	489	159	46	9	324	1,027
Pipeline	0	108	30	0	0	138
Naphtha-Type Jet Fuel	320	894	1,143	263	285	2,905
Refinery	44	421	787	176	72	1,500
Bulk Terminal	125	229	55	0	1	410
Pipeline	151	244	301	87	212	995
Kerosene-Type Jet Fuel	9,355	6,178	13,801	459	7,682	37,475
Refinery	1,425	2,218	5,958	170	3,603	13,374
Bulk Terminal	3,219	1,763	2,835	114	3,083	11,014
Pipeline	4,711	2,197	5,008	175	996	13,087

See footnotes at end of table.

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

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Kerosene	2,280	1,286	1,548	72	118	5,284
Refinery	93	522	900	31	99	1,645
Bulk Terminal	1,879	605	249	10	15	2,758
Pipeline	288	159	399	31	4	881
Distillate Fuel Oil	70,121	33,871	30,840	2,715	11,970	149,517
Refinery	16,152	9,479	15,589	1,528	5,979	48,707
Bulk Terminal	46,288	15,093	6,830	710	4,879	73,800
Pipeline	7,681	9,299	8,441	477	1,112	27,010
0.05 Percent Sulfur and Under	21,414	20,498	14,325	1,683	6,295	64,215
Refinery	2,333	3,524	5,022	870	2,560	14,309
Bulk Terminal	15,892	9,994	3,811	442	3,159	33,098
Pipeline	3,189	6,980	5,692	371	576	16,808
Greater than 0.05 Percent Sulfur	48,707	13,373	16,515	1,032	5,675	85,302
Refinery	13,819	5,955	10,547	658	3,419	34,398
Bulk Terminal	30,396	5,099	3,219	268	1,720	40,702
Pipeline	4,492	2,319	2,749	106	536	10,202
Residual Fuel Oil^c	20,009	2,871	17,610	362	8,439	49,291
Refinery	5,594	1,926	7,084	362	4,892	19,858
Bulk Terminal	14,415	923	10,526	0	3,317	29,181
Pipeline	0	22	0	0	230	252
Less than 0.31% Sulfur	6,486	9	860	86	496	7,937
Refinery	2,077	9	753	86	435	3,360
Bulk Terminal	4,409	0	107	0	61	4,577
0.31 to 1.00% Sulfur	6,129	688	7,372	88	1,096	15,373
Refinery	2,563	347	1,080	88	708	4,786
Bulk Terminal	3,566	341	6,292	0	388	10,587
Greater than 1.00% Sulfur	7,394	2,152	9,378	188	6,617	25,729
Refinery	954	1,570	5,251	188	3,749	11,712
Bulk Terminal	6,440	582	4,127	0	2,868	14,017
Naphtha for Petrochemical Feedstock Use	234	205	1,335	0	63	1,837
Refinery	234	205	1,335	0	63	1,837
Other Oils for Petrochemical Feedstock Use	5	4	1,517	1	152	1,679
Refinery	5	4	1,517	1	152	1,679
Special Naphthas	105	350	1,769	1	31	2,256
Refinery	28	285	1,370	1	31	1,715
Bulk Terminal	77	65	399	0	0	541
Lubricants	2,506	1,837	5,275	0	1,741	11,159
Refinery	710	729	4,370	0	913	6,722
Bulk Terminal	1,796	908	905	0	828	4,437
Waxes	165	117	446	48	76	852
Refinery	165	117	446	48	76	852
Petroleum Coke	1,004	1,189	2,734	183	3,890	9,000
Refinery	1,004	1,189	2,734	183	3,890	9,000
Asphalt and Road Oil	3,502	7,104	2,970	1,074	1,544	16,194
Refinery	1,926	4,336	2,504	1,065	1,440	11,271
Bulk Terminal	1,576	2,768	466	9	104	4,923
Miscellaneous Products	508	276	1,450	18	266	2,518
Refinery	74	128	292	14	85	593
Bulk Terminal	434	98	1,109	0	181	1,822
Pipeline	0	50	49	4	0	103
Total Stocks, All Oils	204,303	244,070	1,041,580	26,246	167,341	1,683,540

^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, November 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	41,511	0	8,533	32,978	1,972	62,440	18,225	44,215	20,009	2,280
Connecticut	2,245	0	551	1,694	2	4,942	545	4,397	61	W
Delaware, D.C., Maryland	2,154	0	942	1,212	53	5,075	2,559	2,516	2,083	W
Florida	5,655	0	0	5,655	113	2,055	1,216	839	1,096	161
Georgia	2,032	0	0	2,032	33	1,258	696	562	355	W
Maine, New Hampshire, Vermont	754	0	0	754	236	2,799	956	1,843	436	W
Massachusetts	1,492	0	0	1,492	258	2,421	835	1,786	1,173	W
New Jersey	10,378	0	3,634	6,744	77	17,978	3,198	14,780	6,813	W
New York	4,241	0	872	3,369	334	10,252	1,817	8,435	5,725	W
North Carolina	2,600	0	583	2,017	181	2,339	1,288	1,051	390	W
Pennsylvania	5,635	0	1,399	4,236	370	7,573	2,584	4,989	797	W
Rhode Island	640	0	0	640	W	1,631	322	1,309	W	W
South Carolina	986	0	0	986	79	960	589	371	W	W
Virginia	2,527	0	552	1,975	138	3,002	1,679	1,323	646	W
West Virginia	172	0	0	172	W	155	141	14	W	W
PAD District II	32,442	0	1,077	31,365	1,127	24,572	13,518	11,054	2,849	16,664
Illinois	6,237	0	87	6,150	203	4,894	2,281	2,613	1,134	1,011
Indiana	3,840	0	84	3,756	78	3,023	1,393	1,630	218	W
Iowa	1,138	0	0	1,138	W	1,087	846	141	W	W
Kansas, Nebraska	2,644	0	0	2,644	16	1,819	1,331	488	15	10,721
Kentucky	1,430	0	240	1,190	57	1,208	390	818	W	W
Michigan	3,153	0	62	3,091	141	2,149	1,235	914	73	2,180
Minnesota	2,046	0	284	1,762	W	1,405	751	654	306	W
Missouri	1,379	0	0	1,379	W	654	569	85	W	W
North Dakota, South Dakota	734	0	1	733	W	708	341	368	W	W
Ohio	4,118	0	39	4,079	372	2,678	1,617	1,061	218	W
Oklahoma	2,045	0	237	1,808	W	1,594	429	1,165	224	1,116
Tennessee	1,916	0	43	1,873	73	1,428	1,066	362	254	W
Wisconsin	1,762	0	0	1,762	W	1,924	1,169	755	62	W
PAD District III	31,045	0	2,744	28,301	1,149	22,399	8,633	13,766	17,610	27,734
Alabama	1,389	0	38	1,351	55	778	525	253	309	191
Arkansas	739	0	0	739	W	684	423	261	W	W
Louisiana	6,591	0	529	6,062	396	5,221	1,260	3,961	7,833	3,417
Mississippi	2,829	0	114	2,715	4	1,773	430	1,343	W	2,851
New Mexico	407	0	0	407	W	283	211	72	13	W
Texas	19,090	0	2,063	17,027	680	13,660	5,784	7,876	9,257	21,124
PAD District IV	3,675	0	501	3,174	41	2,238	1,312	926	362	349
Colorado	1,198	0	501	697	W	429	132	297	W	W
Idaho	334	0	0	334	W	186	122	64	W	W
Montana	995	0	0	995	W	561	358	203	72	11
Utah	540	0	0	540	W	530	291	239	168	236
Wyoming	608	0	0	608	W	532	409	123	W	43
PAD District V	21,237	0	8,724	12,513	114	10,858	5,719	5,139	8,209	1,280
Alaska	502	0	0	502	W	808	260	548	W	W
Arizona	926	0	157	769	W	225	156	69	W	W
California	13,558	0	8,428	5,132	100	5,918	3,548	2,370	4,017	279
Hawaii	565	0	0	565	W	465	38	427	W	W
Nevada	242	0	141	101	W	182	112	70	W	W
Oregon	1,253	0	0	1,253	W	932	476	456	1,347	W
Washington	4,191	0	0	4,191	W	2,328	1,129	1,199	1,626	21
U.S. Total	129,910	0	21,579	108,331	4,403	122,507	47,407	75,100	49,039	48,307

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, November 1993
(Thousand Barrels)

Commodity	From I to			From II to				From III to	
	II	III	V	I	III	IV	V	I	II
Crude Oil	84	0	0	168	1,468	310	0	0	55,508
Petroleum Products	8,394	43	0	3,860	3,537	2,791	0	86,713	30,297
Pentanes Plus	0	0	0	0	196	0	0	0	1,059
Liquefied Petroleum Gases	0	0	0	1,198	1,288	109	0	2,457	5,989
Unfinished Oils	28	0	0	9	0	0	0	549	207
Motor Gasoline Blending Components	8	0	0	11	0	0	0	36	616
Finished Motor Gasoline	5,185	0	0	1,630	1,164	1,608	0	51,378	12,657
Reformulated	0	0	0	0	0	0	0	0	0
Oxygenated	0	0	0	214	0	22	0	10,643	20
Other	5,185	0	0	1,416	1,164	1,586	0	40,735	12,637
Finished Aviation Gasoline	9	0	0	0	0	7	0	143	121
Jet Fuel	427	0	0	181	187	583	0	11,983	4,048
Naphtha-Type	0	0	0	0	0	0	0	102	260
Kerosene-Type	427	0	0	181	187	583	0	11,881	3,788
Kerosene	27	0	0	17	0	0	0	305	441
Distillate Fuel Oil	2,677	13	0	621	419	484	0	19,043	4,508
0.05 percent sulfur and under	1,926	0	0	313	268	463	0	9,649	3,584
Greater than 0.05 percent sulfur	751	13	0	308	151	21	0	9,394	924
Residual Fuel Oil	0	0	0	52	273	0	0	0	101
Petrochemical Feedstocks ^a	33	0	0	0	0	0	0	0	0
Special Naphthas	0	2	0	0	0	0	0	37	76
Lubricants	0	28	0	56	0	0	0	585	296
Waxes	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	85	0	0	0	141	104
Miscellaneous Products	0	0	0	0	10	0	0	56	74
Total	8,478	43	0	4,028	5,005	3,101	0	86,713	85,805

Commodity	From III to		From IV to			From V to			
	IV	V	II	III	V	I	II	III	IV
Crude Oil	0	0	1,921	1,498	0	0	0	5,394	0
Petroleum Products	0	2,191	1,788	1,064	979	271	0	44	0
Pentanes Plus	0	0	133	153	0	0	0	0	0
Liquefied Petroleum Gases	0	0	798	911	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	0	1,503	506	0	614	271	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	1,503	506	0	614	271	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	0
Jet Fuel	0	283	69	0	178	0	0	0	0
Naphtha-Type	0	0	63	0	85	0	0	0	0
Kerosene-Type	0	283	6	0	93	0	0	0	0
Kerosene	0	0	40	0	0	0	0	0	0
Distillate Fuel Oil	0	286	242	0	187	0	0	0	0
0.05 percent sulfur and under	0	181	121	0	163	0	0	0	0
Greater than 0.05 percent sulfur	0	105	121	0	24	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	119	0	0	0	0	0	44	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	2,191	3,709	2,562	979	271	0	5,438	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,
November 1993
(Thousand Barrels)**

Commodity	From I to		From II to			From III to	
	II	III	I	III	IV	I	II
Crude Oil	84	0	0	1,468	310	0	55,508
Petroleum Products	8,313	0	2,213	3,033	2,791	70,952	26,955
Pentanes Plus	0	0	0	196	0	0	1,059
Liquefied Petroleum Gases	0	0	1,198	1,288	109	2,310	5,989
Motor Gasoline Blending Components	0	0	11	0	0	0	551
Finished Motor Gasoline	5,185	0	747	1,067	1,608	41,017	10,900
Reformulated	0	0	0	0	0	0	0
Oxygenated	0	0	0	0	22	9,652	0
Other	5,185	0	747	1,067	1,586	31,365	10,900
Finished Aviation Gasoline	9	0	0	0	7	9	99
Jet Fuel	427	0	82	187	583	9,838	3,848
Naphtha-Type	0	0	0	0	0	102	260
Kerosene-Type	427	0	82	187	583	9,736	3,588
Kerosene	27	0	15	0	0	291	441
Distillate Fuel Oil	2,665	0	160	285	484	17,487	4,068
0.05 percent sulfur and under	1,926	0	9	226	463	9,199	3,398
Greater than 0.05 percent sulfur	739	0	151	59	21	8,288	670
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	10	0	0	0
Total	8,397	0	2,213	4,501	3,101	70,952	82,463

Commodity	From III to		From IV to			From V to	
	IV	V	II	III	V	III	IV
Crude Oil	0	0	1,921	1,498	0	3,592	0
Petroleum Products	0	1,875	1,788	1,064	979	0	0
Pentanes Plus	0	0	133	153	0	0	0
Liquefied Petroleum Gases	0	0	798	911	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0
Finished Motor Gasoline	0	1,306	506	0	614	0	0
Reformulated	0	0	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	0	1,306	506	0	614	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0
Jet Fuel	0	283	69	0	178	0	0
Naphtha-Type	0	0	63	0	85	0	0
Kerosene-Type	0	283	6	0	93	0	0
Kerosene	0	0	40	0	0	0	0
Distillate Fuel Oil	0	286	242	0	187	0	0
0.05 percent sulfur and under	0	181	121	0	163	0	0
Greater than 0.05 percent sulfur	0	105	121	0	24	0	0
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	0	1,875	3,709	2,562	979	3,592	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, November 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	168	0	0	0	0
Petroleum Products	81	43	0	1,647	504	0	15,761	854
Liquefied Petroleum Gases	0	0	0	0	0	0	147	0
Unfinished Oils	28	0	0	9	0	0	549	0
Motor Gasoline Blending Components	8	0	0	0	0	0	36	0
Finished Motor Gasoline	0	0	0	883	97	0	10,361	638
Reformulated	0	0	0	0	0	0	0	0
Oxygenated	0	0	0	214	0	0	991	438
Other	0	0	0	669	97	0	9,370	200
Finished Aviation Gasoline	0	0	0	0	0	0	134	20
Jet Fuel	0	0	0	99	0	0	2,145	196
Naphtha-Type	0	0	0	0	0	0	0	0
Kerosene-Type	0	0	0	99	0	0	2,145	196
Kerosene	0	0	0	2	0	0	14	0
Distillate Fuel Oil	12	13	0	461	134	0	1,556	0
0.05 percent sulfur and under	0	0	0	304	42	0	450	0
Greater than 0.05 percent sulfur	12	13	0	157	92	0	1,106	0
Residual Fuel Oil	0	0	0	52	273	0	0	0
Less than 0.31 percent sulfur	0	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur	0	0	0	0	0	0	0	0
Greater than 1.00 percent sulfur	0	0	0	52	273	0	0	0
Petrochemical Feedstocks ^a	33	0	0	0	0	0	0	0
Special Naphthas	0	2	0	0	0	0	37	0
Lubricants	0	28	0	56	0	0	585	0
Waxes	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	85	0	0	141	0
Miscellaneous Products	0	0	0	0	0	0	56	0
Total	81	43	0	1,815	504	0	15,761	854

Commodity	From III to				From V to		
	Central Atlantic	Lower Atlantic	II	V	I	II	III
Crude Oil	0	0	0	0	0	0	1,802
Petroleum Products	514	14,393	3,342	316	271	0	44
Liquefied Petroleum Gases	0	147	0	0	0	0	0
Unfinished Oils	28	521	207	0	0	0	0
Motor Gasoline Blending Components	0	36	65	0	0	0	0
Finished Motor Gasoline	68	9,655	1,757	197	271	0	0
Reformulated	0	0	0	0	0	0	0
Oxygenated	0	553	20	0	0	0	0
Other	68	9,102	1,737	197	271	0	0
Finished Aviation Gasoline	22	92	22	0	0	0	0
Jet Fuel	0	1,949	200	0	0	0	0
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	0	1,949	200	0	0	0	0
Kerosene	0	14	0	0	0	0	0
Distillate Fuel Oil	0	1,556	440	0	0	0	0
0.05 percent sulfur and under	0	450	186	0	0	0	0
Greater than 0.05 percent sulfur	0	1,106	254	0	0	0	0
Residual Fuel Oil	0	0	101	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	101	0	0	0	0
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0
Special Naphthas	0	37	76	0	0	0	0
Lubricants	383	202	296	119	0	0	44
Waxes	0	0	0	0	0	0	0
Asphalt and Road Oil	0	141	104	0	0	0	0
Miscellaneous Products	13	43	74	0	0	0	0
Total	514	14,393	3,342	316	271	0	1,846

^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" 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, November 1993
(Thousand Barrels)

Commodity	PAD District I			PAD District II		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	188	84	84	57,513	1,948	55,567
Petroleum Products	90,844	8,437	82,407	40,479	10,188	30,291
Pentanes Plus	0	0	0	1,192	198	996
Liquefied Petroleum Gases	3,655	0	3,655	6,787	2,595	4,192
Ethane/Ethylene	0	0	0	613	337	276
Propane/Propylene	3,421	0	3,421	4,688	1,608	3,082
Normal Butane/Butylene	234	0	234	1,029	567	462
Isobutane/Isobutylene	0	0	0	477	85	392
Unfinished Oils	558	28	530	235	9	226
Motor Gasoline Blending Components	47	8	39	624	11	613
Finished Motor Gasoline	53,279	5,185	48,094	18,348	4,402	13,946
Reformulated	0	0	0	0	0	0
Oxygenated	10,857	0	10,857	20	236	-216
Other	42,422	5,185	37,237	18,328	4,168	14,162
Finished Aviation Gasoline	143	9	134	130	7	123
Jet Fuel	12,164	427	11,737	4,544	951	3,593
Naphtha-Type	102	0	102	323	0	323
Kerosene-Type	12,062	427	11,635	4,221	951	3,270
Kerosene	322	27	295	508	17	491
Distillate Fuel Oil	19,664	2,690	16,974	7,427	1,524	5,903
0.05 percent sulfur and under	9,982	1,928	8,058	5,631	1,044	4,587
Greater than 0.05 percent sulfur	9,702	764	8,938	1,796	480	1,316
Residual Fuel Oil	52	0	52	101	325	-224
Petrochemical Feedstocks ^a	0	33	-33	33	0	33
Special Naphthas	37	2	35	76	0	76
Lubricants	641	28	613	296	56	240
Waxes	0	0	0	0	0	0
Asphalt and Road Oil	226	0	226	104	85	19
Miscellaneous Products	56	0	56	74	10	64
Total	91,012	8,521	82,491	97,992	12,134	85,858

Commodity	PAD District III			PAD District IV			PAD District V		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	8,360	55,508	-47,148	310	3,419	-3,109	0	5,394	-5,394
Petroleum Products	4,688	119,201	-114,513	2,791	3,831	-1,040	3,170	315	2,855
Pentanes Plus	349	1,059	-710	0	286	-286	0	0	0
Liquefied Petroleum Gases	2,199	8,446	-6,247	109	1,709	-1,600	0	0	0
Ethane/Ethylene	641	330	311	0	587	-587	0	0	0
Propane/Propylene	877	6,812	-5,935	108	654	-546	0	0	0
Normal Butane/Butylene	481	890	-409	3	290	-287	0	0	0
Isobutane/Isobutylene	200	414	-214	0	178	-178	0	0	0
Unfinished Oils	0	758	-758	0	0	0	0	0	0
Motor Gasoline Blending Components	0	652	-652	0	0	0	0	0	0
Finished Motor Gasoline	1,164	65,538	-64,374	1,608	1,120	488	2,117	271	1,846
Reformulated	0	0	0	0	0	0	0	0	0
Oxygenated	0	10,663	-10,663	22	0	22	0	0	0
Other	1,164	54,875	-53,711	1,586	1,120	466	2,117	271	1,846
Finished Aviation Gasoline	0	264	-264	7	0	7	0	0	0
Jet Fuel	187	16,314	-16,127	583	247	336	461	0	461
Naphtha-Type	0	362	-362	0	148	-148	85	0	85
Kerosene-Type	187	15,952	-15,765	583	99	484	376	0	376
Kerosene	0	748	-748	0	40	-40	0	0	0
Distillate Fuel Oil	432	23,837	-23,405	484	429	55	473	0	473
0.05 percent sulfur and under	268	13,414	-13,146	463	284	179	344	0	344
Greater than 0.05 percent sulfur	164	10,423	-10,259	21	145	-124	129	0	129
Residual Fuel Oil	273	101	172	0	0	0	0	0	0
Petrochemical Feedstocks ^a	0	0	0	0	0	0	0	0	0
Special Naphthas	2	113	-111	0	0	0	0	0	0
Lubricants	72	1,000	-928	0	0	0	119	44	75
Waxes	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	245	-245	0	0	0	0	0	0
Miscellaneous Products	10	130	-120	0	0	0	0	0	0
Total	13,048	174,709	-161,661	3,101	7,250	-4,149	3,170	5,709	-2,539

^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.

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 Districts are not included.

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

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

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

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

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect data on production, 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 Information 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, and lubricants is suppressed on PSM Table 29, "Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts" and the corresponding PSA table to avoid disclosure of company identifiable data.

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. In addition, complementary suppression is performed to avoid any residual disclosure.

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																	
	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	10-93	11-93	12-93
Reported State Data^c																		
9-14-92	1740	0																
10-14-92	2572	1652	0															
11-14-92	6520	2465	1765	0														
12-14-92	7005	4959	2562	1696	0													
1-14-93	7006	6726	6416	2514	1743	0												
2-14-93	7009	6816	6810	5644	4121	1725	0											
3-14-93	7019	6817	6822	6482	5636	4290	1717	0										
4-14-93	7031	6828	6922	6917	6820	6873	4048	1700	0									
5-14-93	7032	6822	6924	6997	6829	6877	5549	4119	1738	0								
6-14-93	7137	6926	7030	7103	7007	6989	6745	6237	4112	1664	0							
7-14-93	7137	6926	7030	7103	7009	6991	6753	6743	6353	4058	1577	0						
8-14-93	7141	6928	7035	7109	7005	7071	6756	6746	6762	6277	4053	1595	0					
9-14-93	7142	6932	7045	7123	7019	7085	6770	6762	6778	6680	6254	4089	1442	0				
10-14-93	7144	6934	7047	7125	7021	7086	6799	6793	6809	6696	6647	5974	3917	1542	0			
11-14-93	7144	6934	7047	7125	7025	7086	6870	6793	6809	6697	6649	6219	5297	4053	1490	0		
12-14-93	7140	6931	7044	7122	7021	7083	6868	6791	6807	6695	6647	6607	6487	5356	3960	1629	0	
1-14-94	7140	6931	7044	7121	7020	7084	6877	6870	6887	6723	6675	6636	6525	6564	6136	3819	1685	0
Producing States Without Reported Monthly Production^d																		
1-14-94	0	0	0	0	0	0	4	4	4	5	5	5	5	6	7	19	29	33
Production Estimates																		
Month of Production																		
	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	10-93	11-93	12-93
Original ^e	7114	6958	6996	7031	7014	7078	7023	7001	6980	6904	6840	6771	6681	6771	6673	6788	6886	6886
Interim ^f	7096	6928	7019	7065	7027	7125	7008	6957	6976	6897	6833	6756	6654	6732	6711	6816	6888	
Form EIA-182																		
Initial	6945	6748	6836	6942	6908	6925	7001	6732	6962	6620	6128	6496	6441	6472	6027	6667	6701	
Revised	6936	6753	6862	6958	6887	6951	6775	6812	6810	6714	6625	6600	6417	6569	6492	6685		
Final ^g	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 1985, 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.
- 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	
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference
Inputs.....	14,249	-8	14,238	-15	14,259	7	14,675	70	14,939	116	15,388	-3
Crude Oil.....	12,980	-43	12,923	-58	13,249	-49	13,512	28	13,701	128	14,125	3
Pentanes Plus.....	153	(s)	167	5	149	-2	137	5	153	2	162	0
LPGs.....	440	1	387	-5	263	-9	283	-14	258	-4	260	-12
Ethane/Ethylene.....	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
Normal Butane/Butylene.....	289	(s)	211	-8	103	-8	97	-12	84	-3	80	-9
Isobutane/Isobutylene.....	150	1	155	1	180	-1	168	-2	174	-1	180	-3
Oth Hydrocbrns/Oxygenates..	247	-5	197	-8	143	-2	132	0	138	7	123	1
Unfinished Oils.....	504	38	584	59	421	67	609	65	657	-5	718	1
Motor Gas. Blend. Comp.....	-75	(s)	1	-10	34	2	24	-12	31	3	-23	5
Aviation Gas. Blend. Comp...	(s)	0	(s)	0	(s)	0	(s)	0	(s)	0	1	0
Production.....	17,284	31	16,996	-39	17,069	-16	17,423	65	17,635	120	18,032	22
Pentanes Plus.....	319	4	323	4	330	1	338	2	333	3	344	4
LPGs.....	1,837	2	1,912	12	2,106	-7	2,151	20	2,091	30	2,122	26
Ethane/Ethylene.....	588	(s)	608	5	630	0	625	4	587	5	585	6
Propane/Propylene.....	985	2	959	4	971	-7	973	6	942	11	958	11
Normal Butane/Butylene.....	108	1	184	1	301	(s)	331	9	315	13	341	7
Isobutane/Isobutylene.....	177	(s)	182	3	204	(s)	223	1	247	1	237	1
Oth Hydrocbrns/Oxygenates..	481	31	163	-39	164	-19	155	-5	165	-9	141	1
Motor Gas Blend. Comp.....	-25	14	-2	3	-42	-1	-45	4	-53	-15	-58	7
Finished Motor Gasoline.....	7,254	-8	7,172	-16	6,897	5	7,123	7	7,394	54	7,447	-12
Reformulated.....	0	0	0	0	0	0	0	0	0	0	0	0
Oxygenated.....	1,667	57	1,211	80	383	65	252	58	699	84	739	81
Other.....	5,588	-65	5,961	-97	6,513	-59	6,871	-51	6,695	-29	6,708	-93
Finished Aviation Gasoline....	16	(s)	19	(s)	22	(s)	19	-1	25	-1	27	(s)
Jet Fuel.....	1,437	(s)	1,442	-2	1,483	(s)	1,390	1	1,426	2	1,549	-2
Naphtha-Type Jet.....	131	-1	125	0	131	(s)	127	-1	126	(s)	141	0
Kerosene-Type Jet.....	1,308	1	1,318	-2	1,332	(s)	1,262	2	1,300	2	1,409	-2
Kerosene.....	74	-1	63	0	49	0	22	0	26	(s)	26	0
Distillate Fuel Oil.....	2,909	1	2,813	2	2,918	(s)	3,010	36	2,930	64	3,095	-2
Residual Fuel Oil.....	820	(s)	841	-1	819	-1	887	10	896	12	797	-1
Naphtha Pet. Feedstock.....	124	0	128	0	130	0	134	0	137	0	136	0
Other Oils Pet. Feedstock.....	287	-1	292	-2	314	(s)	301	-1	269	-2	286	0
Special Naphthas.....	47	(s)	47	0	57	(s)	55	0	54	(s)	59	0
Lubricants.....	154	0	162	(s)	165	-1	149	0	155	0	162	0
Waxes.....	19	0	21	0	20	0	21	0	20	1	21	0
Petroleum Coke.....	598	-1	615	(s)	617	2	607	-2	595	3	622	1
Asphalt and Road Oil.....	285	-9	306	1	373	5	414	2	459	-13	529	1
Still Gas.....	622	-1	636	-1	623	(s)	652	-7	677	-10	684	(s)
Miscellaneous Products.....	45	(s)	43	(s)	45	(s)	41	(s)	39	(s)	44	(s)
Imports.....	7,964	24	7,930	4	8,342	-74	8,485	255	8,348	319	8,745	44
Crude Oil.....	6,292	0	6,156	0	6,513	-26	6,698	230	6,549	260	7,175	26
Pentanes Plus.....	10	0	49	(s)	29	0	36	0	43	0	3	0
LPGs.....	117	9	128	8	123	(s)	142	14	148	1	111	1
Ethane/Ethylene.....	11	0	10	0	12	0	(s)	18	7	0	12	0
Propane/Propylene.....	72	7	78	5	85	(s)	112	-4	96	(s)	75	(s)
Normal Butane/Butylene.....	31	1	32	1	18	-1	22	-7	34	-1	17	-1
Isobutane/Isobutylene.....	3	1	8	2	8	1	7	7	11	2	7	2
Oth Hydrocbrns/Oxygenates..	17	5	17	1	12	4	5	0	17	3	15	3
Unfinished Oils.....	486	0	496	0	496	0	397	27	509	23	403	13
Motor Gas. Blend. Comp.....	21	0	31	0	47	0	41	0	16	0	26	(s)
Aviation Gas. Blend. Comp...	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
Reformulated.....	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
Other.....	204	0	216	0	198	-31	253	0	308	8	249	0
Finished Aviation Gasoline....	(s)	0	(s)	0	(s)	0	(s)	0	(s)	0	(s)	0
Jet Fuel.....	89	(s)	110	0	102	-26	88	0	75	0	111	0
Naphtha-Type Jet.....	7	0	9	0	7	-5	2	0	8	0	31	0
Kerosene-Type Jet.....	82	(s)	101	0	96	-21	86	0	87	0	79	0
Kerosene.....	1	0	2	0	1	0	1	0	(s)	0	(s)	0
Distillate Fuel Oil.....	182	0	224	(s)	235	(s)	209	0	153	(s)	168	0
Residual Fuel Oil.....	383	2	325	0	352	(s)	377	0	308	1	299	0
Naphtha Pet. Feedstock.....	31	0	18	0	32	5	46	0	98	24	46	(s)
Other Oils Pet. Feedstock.....	93	0	99	0	144	0	125	-16	75	0	87	0
Special Naphthas.....	3	0	7	0	6	(s)	2	0	4	0	6	0
Lubricants.....	15	(s)	9	1	13	(s)	8	0	9	0	9	0
Waxes.....	1	0	1	0	3	-1	3	0	2	0	3	0
Petroleum Coke.....	1	0	1	0	7	0	0	0	0	0	1	0
Asphalt and Road Oil.....	15	8	43	-6	28	0	54	0	25	0	29	(s)
Miscellaneous Products.....	3	0	2	0	(s)	0	1	(s)	12	0	2	0

(s) = Less than 500 barrels per day.

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.

Table C1. Impact of Resubmissions on Major Series, 1993 (Continued)

(Thousand Barrels per Day, Except Where Noted)

Product	July		August		September		October		November		December		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
Inputs.....	15,304	7	14,968	5	15,179	-1	--	--	--	--	--	--	20
Crude Oil	14,114	22	13,839	11	13,845	0	--	--	--	--	--	--	5
Pentanes Plus	146	9	181	-2	182	0	--	--	--	--	--	--	2
LPGs.....	248	0	263	1	304	0	--	--	--	--	--	--	-5
Ethane/Ethylene.....	0	0	0	0	0	0	--	--	--	--	--	--	0
Propane/Propylene.....	0	0	0	0	0	0	--	--	--	--	--	--	0
Normal Butane/Butylene.....	67	0	81	0	137	0	--	--	--	--	--	--	-4
Isobutane/Isobutylene.....	179	0	182	1	167	0	--	--	--	--	--	--	-1
Oth Hydrocbns/Oxygenates ..	114	1	144	-1	239	0	--	--	--	--	--	--	-2
Unfinished Oils	741	-25	559	-1	787	-1	--	--	--	--	--	--	21
Motor Gas. Blend. Comp.....	-57	(s)	-19	-3	-176	0	--	--	--	--	--	--	-1
Aviation Gas. Blend. Comp...	(s)	0	(s)	0	-1	0	--	--	--	--	--	--	0
Production.....	17,999	22	17,704	45	17,919	-5	--	--	--	--	--	--	28
Pentanes Plus	340	3	353	3	340	3	--	--	--	--	--	--	3
LPGs.....	2,108	18	2,078	21	1,952	24	--	--	--	--	--	--	16
Ethane/Ethylene.....	591	5	578	5	570	4	--	--	--	--	--	--	4
Propane/Propylene.....	956	7	945	13	956	12	--	--	--	--	--	--	6
Normal Butane/Butylene.....	352	3	349	3	224	7	--	--	--	--	--	--	5
Isobutane/Isobutylene.....	209	3	208	1	201	1	--	--	--	--	--	--	1
Oth Hydrocbns/Oxygenates ..	160	-3	179	3	174	-30	--	--	--	--	--	--	-7
Motor Gas Blend. Comp.....	-52	-21	-124	-1	-150	-1	--	--	--	--	--	--	-1
Finished Motor Gasoline.....	7,344	23	7,344	-3	7,583	1	--	--	--	--	--	--	6
Reformulated.....	0	0	0	0	0	0	--	--	--	--	--	--	0
Oxygenated.....	840	0	820	1	1,835	46	--	--	--	--	--	--	52
Other	6,504	23	6,524	-3	5,748	-45	--	--	--	--	--	--	-46
Finished Aviation Gasoline....	28	0	24	(s)	23	0	--	--	--	--	--	--	(s)
Jet Fuel.....	1,485	(s)	1,358	(s)	1,339	-1	--	--	--	--	--	--	(s)
Naphtha-Type Jet.....	126	0	101	(s)	98	(s)	--	--	--	--	--	--	(s)
Kerosene-Type Jet.....	1,359	(s)	1,257	(s)	1,242	-1	--	--	--	--	--	--	(s)
Kerosene.....	26	(s)	34	0	53	-2	--	--	--	--	--	--	(s)
Distillate Fuel Oil.....	3,185	1	3,084	18	3,206	1	--	--	--	--	--	--	14
Residual Fuel Oil.....	760	2	745	7	822	0	--	--	--	--	--	--	3
Naphtha Pet. Feedstock.....	143	0	141	0	129	0	--	--	--	--	--	--	0
Other Oils Pet. Feedstock	298	0	305	0	291	0	--	--	--	--	--	--	-1
Special Naphthas	50	(s)	57	1	51	0	--	--	--	--	--	--	(s)
Lubricants.....	159	0	153	0	169	0	--	--	--	--	--	--	(s)
Waxes	19	0	19	0	21	0	--	--	--	--	--	--	(s)
Petroleum Coke.....	650	0	625	(s)	617	0	--	--	--	--	--	--	(s)
Asphalt and Road Oil.....	568	0	613	-3	583	0	--	--	--	--	--	--	-2
Still Gas	685	(s)	672	(s)	674	0	--	--	--	--	--	--	-2
Miscellaneous Products.....	43	0	44	(s)	43	0	--	--	--	--	--	--	(s)
Imports	9,145	59	8,360	40	8,476	25	--	--	--	--	--	--	78
Crude Oil	7,262	27	6,614	26	6,558	23	--	--	--	--	--	--	63
Pentanes Plus	20	9	33	0	40	0	--	--	--	--	--	--	1
LPGs.....	155	14	167	1	206	1	--	--	--	--	--	--	5
Ethane/Ethylene.....	20	0	20	0	20	0	--	--	--	--	--	--	2
Propane/Propylene.....	105	13	116	0	132	(s)	--	--	--	--	--	--	2
Normal Butane/Butylene.....	20	1	19	1	43	1	--	--	--	--	--	--	-1
Isobutane/Isobutylene.....	11	0	13	0	11	0	--	--	--	--	--	--	2
Oth Hydrocbns/Oxygenates ..	14	3	12	3	18	3	--	--	--	--	--	--	3
Unfinished Oils	586	7	435	10	493	0	--	--	--	--	--	--	9
Motor Gas. Blend. Comp.....	30	0	31	0	39	0	--	--	--	--	--	--	(s)
Aviation Gas. Blend. Comp...	0	0	0	0	0	0	--	--	--	--	--	--	0
Finished Motor Gasoline.....	292	(s)	283	0	269	-2	--	--	--	--	--	--	-3
Reformulated.....	0	0	0	0	0	0	--	--	--	--	--	--	0
Oxygenated.....	0	0	0	0	0	0	--	--	--	--	--	--	0
Other	292	(s)	283	0	269	-2	--	--	--	--	--	--	-3
Finished Aviation Gasoline....	1	0	1	0	(s)	0	--	--	--	--	--	--	0
Jet Fuel.....	94	0	91	0	97	0	--	--	--	--	--	--	-3
Naphtha-Type Jet.....	8	0	8	0	18	0	--	--	--	--	--	--	-1
Kerosene-Type Jet.....	86	0	83	0	78	0	--	--	--	--	--	--	-2
Kerosene.....	(s)	0	(s)	0	1	0	--	--	--	--	--	--	0
Distillate Fuel Oil.....	130	(s)	159	0	137	0	--	--	--	--	--	--	(s)
Residual Fuel Oil.....	337	0	370	0	420	0	--	--	--	--	--	--	(s)
Naphtha Pet. Feedstock.....	50	0	30	0	36	0	--	--	--	--	--	--	3
Other Oils Pet. Feedstock	117	0	86	0	104	0	--	--	--	--	--	--	-2
Special Naphthas	3	0	7	0	6	0	--	--	--	--	--	--	(s)
Lubricants.....	6	(s)	6	0	2	(s)	--	--	--	--	--	--	(s)
Waxes	2	0	2	0	2	0	--	--	--	--	--	--	(s)
Petroleum Coke.....	3	0	0	0	6	0	--	--	--	--	--	--	0
Asphalt and Road Oil.....	40	0	33	0	43	0	--	--	--	--	--	--	(s)
Miscellaneous Products.....	2	0	1	0	1	0	--	--	--	--	--	--	(s)

(s) = Less than 500 barrels per day.

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.

Table C1. Impact of Resubmissions on Major Series, 1993 (Continued)

(Thousand Barrels per Day, Except Where Noted)

Product	January		February		March		April		May		June	
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference
Stocks (Thousand Barrels)	1,611,388	4,061	1,595,153	3,698	1,583,590	3,676	1,611,337	3,365	1,643,275	4,028	1,660,392	4,063
Crude Oil (excl. SPR)	325,640	1,068	331,285	1,054	337,114	-17	349,129	-442	352,845	8	351,747	504
Pentanes Plus	8,260	155	7,731	-52	8,318	60	9,683	2	10,236	76	10,634	164
LPGs	74,993	-1,196	66,322	-1,198	66,610	159	80,596	411	97,260	528	111,342	1,146
Ethane/Ethylene	16,496	137	15,940	376	17,596	-2	19,595	1	20,480	2	22,170	364
Propane/Propylene	33,489	-1,078	26,174	-901	21,834	45	28,817	209	36,937	341	44,921	307
Normal Butane/Butylene	14,383	-217	13,589	-481	16,421	58	20,844	86	26,599	87	30,616	402
Isobutane/Isobutylene	10,625	-38	10,619	-192	10,759	58	11,340	115	13,244	98	13,635	73
Oth Hydrocbns/Oxygenates	14,016	1,265	13,515	343	14,528	-58	15,362	-203	16,702	-167	17,684	-68
Unfinished Oils	99,259	813	99,707	817	103,484	807	101,927	-497	104,377	-178	101,407	-101
Motor Gas. Blend. Comp.	41,309	429	41,800	775	40,370	684	39,465	1,151	37,201	578	36,835	629
Aviation Gas. Blend. Comp.	61	0	55	0	51	0	59	0	53	0	37	0
Finished Motor Gasoline	195,291	497	199,766	-128	187,039	200	182,920	333	185,412	386	183,150	-373
Reformulated	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
Other	162,942	1,846	176,741	1,494	169,578	2,171	171,640	2,266	175,257	2,890	174,321	2,102
Finished Aviation Gasoline	1,717	2	1,905	1	1,763	0	1,771	-20	1,674	-6	1,805	-9
Jet Fuel	41,014	-37	42,315	74	41,429	278	41,322	-130	42,471	-107	44,796	23
Naphtha-Type Jet	4,763	0	4,489	3	4,415	1	4,043	-18	4,242	11	4,065	0
Kerosene-Type Jet	36,251	-37	37,826	71	37,014	277	37,279	-112	38,229	-118	40,731	23
Kerosene	5,289	-4	4,520	-23	4,455	-43	3,933	-39	4,170	13	5,389	0
Distillate Fuel Oil	130,222	-32	109,433	339	97,456	-526	98,341	616	101,556	745	109,436	117
Residual Fuel Oil	44,221	-309	42,116	-263	40,690	-300	41,409	-49	43,046	-23	45,795	-166
Naphtha Pet. Feedstock	1,616	0	1,801	0	1,787	0	2,360	0	2,746	0	2,971	0
Other Oils Pet. Feedstock	1,680	-25	1,958	-12	1,846	-4	1,372	-12	1,502	-70	1,250	0
Special Naphthas	2,216	231	2,256	224	2,389	249	2,380	243	2,456	208	2,189	218
Lubricants	13,514	230	13,691	270	13,437	264	12,976	307	12,503	334	12,032	294
Waxes	919	0	901	0	860	0	880	0	1,002	95	871	0
Petroleum Coke	10,494	253	10,597	475	10,710	734	10,532	624	10,830	730	9,997	473
Asphalt and Road Oil	22,115	411	25,336	617	29,111	867	30,853	791	30,745	588	25,949	828
Miscellaneous Products	2,231	310	2,336	385	2,532	322	2,365	279	2,369	306	2,323	384
Product Supplied	16,320	-76	17,397	-66	17,688	-155	16,673	42	16,340	182	17,032	61
Crude Oil	10	0	10	0	11	0	9	0	10	0	8	0
Pentanes Plus	196	-1	222	7	190	-1	191	-1	204	-1	172	1
LPGs	1,917	49	1,928	25	1,910	-42	1,495	40	1,393	31	1,463	18
Ethane/Ethylene	672	-5	638	-4	589	11	558	22	566	5	541	-6
Propane/Propylene	1,179	43	1,261	2	1,165	-37	812	-4	746	7	744	12
Normal Butane/Butylene	31	8	-5	18	109	-10	80	14	59	15	126	5
Isobutane/Isobutylene	35	2	34	10	47	-6	45	8	23	5	51	7
Oth Hydrocbns/Oxygenates	0	0	0	0	0	0	0	0	0	0	0	0
Unfinished Oils	-144	-64	-103	-59	-47	-66	-160	5	-227	18	-217	10
Motor Gas. Blend. Comp.	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
Finished Motor Gasoline	6,746	-24	7,129	6	7,397	-36	7,401	2	7,531	61	7,692	14
Reformulated	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
Other	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)
Jet Fuel	1,464	1	1,488	-6	1,493	-33	1,393	15	1,404	1	1,538	-6
Naphtha-Type Jet	93	-1	143	(s)	123	-4	115	-1	115	-1	168	(s)
Kerosene-Type Jet	1,371	2	1,346	-6	1,371	-28	1,278	15	1,289	2	1,370	-7
Kerosene	63	-1	61	1	52	1	30	(s)	11	-2	-15	(s)
Distillate Fuel Oil	3,141	2	3,478	-11	3,386	28	2,949	-2	2,624	60	2,843	19
Residual Fuel Oil	1,020	12	1,128	-3	1,065	1	1,070	1	1,014	12	857	3
Naphtha Pet. Feedstock	158	0	139	0	162	5	161	0	222	24	174	(s)
Other Oils Pet. Feedstock	388	-1	381	-2	462	-1	441	-17	339	(s)	382	-2
Special Naphthas	40	-8	46	(s)	58	-1	56	(s)	55	1	70	(s)
Lubricants	149	-7	144	-1	166	(s)	157	-1	142	-1	171	1
Waxes	18	0	21	0	23	-1	22	0	16	-2	26	3
Petroleum Coke	339	-9	373	-7	394	-7	336	2	362	(s)	407	9
Asphalt and Road Oil	145	-14	233	-12	277	-4	405	4	485	-7	709	-6
Still Gas	622	-1	636	-1	623	(s)	652	-7	677	-10	684	(s)
Miscellaneous Products	39	-10	41	-3	39	2	47	2	50	-1	47	-3

(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.

Table C1. Impact of Resubmissions on Major Series, 1993 (Continued)

(Thousand Barrels per Day, Except Where Noted)

Product	July		August		September		October		November		December		Year to Date
	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	PSM Value	Difference	Average Difference
Stocks (Thousand Barrels)	1,678,465	1,223	1,674,187	-548	1,661,248	712	--	--	--	--	--	--	2,698
Crude Oil (excl. SPR)	352,425	-574	335,432	11	320,703	0	--	--	--	--	--	--	177
Pentanes Plus	11,590	262	13,135	222	13,269	0	--	--	--	--	--	--	99
LPGs	123,126	1,440	137,847	339	143,483	342	--	--	--	--	--	--	219
Ethane/Ethylene	22,256	-1	25,111	-314	27,280	-1	--	--	--	--	--	--	62
Propane/Propylene	52,104	1,050	57,797	831	61,276	0	--	--	--	--	--	--	89
Normal Butane/Butylene	34,712	336	41,111	260	41,312	343	--	--	--	--	--	--	97
Isobutane/Isobutylene	14,054	55	13,828	-438	13,615	0	--	--	--	--	--	--	-30
Oth Hydrocbrns/Oxygenates ..	19,565	-125	21,013	72	19,633	-738	--	--	--	--	--	--	36
Unfinished Oils	101,825	383	107,593	-143	102,700	0	--	--	--	--	--	--	211
Motor Gas. Blend. Comp	37,582	-32	35,221	24	37,154	0	--	--	--	--	--	--	471
Aviation Gas. Blend. Comp	31	0	44	0	58	0	--	--	--	--	--	--	0
Finished Motor Gasoline	175,651	-9	165,243	-63	169,875	-199	--	--	--	--	--	--	72
Reformulated	0	0	0	0	0	0	--	--	--	--	--	--	0
Oxygenated	5,730	-72	8,730	-163	22,188	272	--	--	--	--	--	--	-1,313
Other	169,921	63	156,513	100	147,687	-471	--	--	--	--	--	--	1,385
Finished Aviation Gasoline	1,801	-1	1,619	12	1,538	0	--	--	--	--	--	--	-2
Jet Fuel	46,071	-3	43,262	-248	40,934	-94	--	--	--	--	--	--	-27
Naphtha-Type Jet	3,867	-1	3,849	9	3,040	-5	--	--	--	--	--	--	0
Kerosene-Type Jet	42,204	-2	39,413	-257	37,894	-89	--	--	--	--	--	--	-27
Kerosene	5,457	1	5,474	0	5,925	-116	--	--	--	--	--	--	-23
Distillate Fuel Oil	120,219	93	127,945	68	130,350	300	--	--	--	--	--	--	191
Residual Fuel Oil	42,673	-210	44,558	-88	42,368	1,199	--	--	--	--	--	--	-23
Naphtha Pet. Feedstock	2,794	0	1,998	0	1,838	0	--	--	--	--	--	--	0
Other Oils Pet. Feedstock	1,446	0	1,452	0	1,591	0	--	--	--	--	--	--	-14
Special Naphthas	2,375	-2	2,319	-15	2,349	0	--	--	--	--	--	--	151
Lubricants	12,431	0	11,614	-92	11,207	0	--	--	--	--	--	--	179
Waxes	882	0	852	0	836	0	--	--	--	--	--	--	11
Petroleum Coke	10,875	0	10,307	-131	10,128	0	--	--	--	--	--	--	351
Asphalt and Road Oil	23,630	0	20,360	-527	17,031	18	--	--	--	--	--	--	399
Miscellaneous Products	2,683	0	2,812	13	2,620	0	--	--	--	--	--	--	222
Product Supplied	17,208	126	17,176	141	17,709	-44	--	--	--	--	--	--	24
Crude Oil	9	0	8	0	9	0	--	--	--	--	--	--	0
Pentanes Plus	182	(s)	154	6	187	10	--	--	--	--	--	--	2
LPGs	1,583	23	1,462	57	1,632	25	--	--	--	--	--	--	25
Ethane/Ethylene	608	17	505	15	518	-6	--	--	--	--	--	--	6
Propane/Propylene	804	-3	851	20	955	39	--	--	--	--	--	--	9
Normal Butane/Butylene	144	6	62	6	107	5	--	--	--	--	--	--	7
Isobutane/Isobutylene	27	3	44	16	53	-14	--	--	--	--	--	--	3
Oth Hydrocbrns/Oxygenates ..	0	0	0	0	0	0	--	--	--	--	--	--	0
Unfinished Oils	-168	16	-310	28	-130	-4	--	--	--	--	--	--	-12
Motor Gas. Blend. Comp	0	0	0	0	0	0	--	--	--	--	--	--	0
Aviation Gas. Blend. Comp	0	0	(s)	0	(s)	0	--	--	--	--	--	--	0
Finished Motor Gasoline	7,777	11	7,885	-1	7,612	4	--	--	--	--	--	--	4
Reformulated	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	NA
Oxygenated	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	NA
Other	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	NA
Finished Aviation Gasoline	28	(s)	31	(s)	26	(s)	--	--	--	--	--	--	(s)
Jet Fuel	1,465	1	1,506	8	1,493	-6	--	--	--	--	--	--	-3
Naphtha-Type Jet	128	(s)	101	(s)	140	(s)	--	--	--	--	--	--	-1
Kerosene-Type Jet	1,337	1	1,405	8	1,352	-6	--	--	--	--	--	--	-2
Kerosene	23	0	33	(s)	39	2	--	--	--	--	--	--	(s)
Distillate Fuel Oil	2,669	1	2,797	19	3,001	-7	--	--	--	--	--	--	13
Residual Fuel Oil	1,075	4	935	3	1,205	-43	--	--	--	--	--	--	-1
Naphtha Pet. Feedstock	198	0	196	0	171	0	--	--	--	--	--	--	3
Other Oils Pet. Feedstock	408	0	390	0	390	0	--	--	--	--	--	--	-2
Special Naphthas	44	7	59	1	54	-1	--	--	--	--	--	--	(s)
Lubricants	139	10	168	3	168	-3	--	--	--	--	--	--	(s)
Waxes	19	0	20	0	21	0	--	--	--	--	--	--	(s)
Petroleum Coke	357	15	386	4	381	-4	--	--	--	--	--	--	(s)
Asphalt and Road Oil	680	27	744	14	727	-18	--	--	--	--	--	--	-2
Still Gas	685	(s)	672	(s)	674	0	--	--	--	--	--	--	-2
Miscellaneous Products	33	12	40	(s)	50	(s)	--	--	--	--	--	--	(s)

(s) = Less than 500 barrels per day.

Note: Volumes indicate cumulative changes resulting from resubmissions received for that month as of the date of this publication.

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, December 1993

Products	December 1993		November 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	2,643	85	2,538	85	27,475	75
Stocks	2,105	--	2,275	--	2,105	--
MTBE						
Production	4,465	144	4,426	148	49,552	136
Stocks	9,744	--	11,468	--	9,744	--

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	76	85	85
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	2,640	2,275	2,105
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	W	W	W
Stocks (thous. bbls.)												
1992	85	93	100	82	88	67	200	207	177	163	139	99
1993	117	64	62	41	136	112	37	157	135	82	241	162
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	74	83	83
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	1,269	981	779
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	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	468	366	554
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	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	85	70	88
West Coast (PADD V)												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	V/	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	736	617	522

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	146	148	144
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	13,818
1993	10,648	10,148	10,550	11,953	13,476	14,544	16,044	17,047	15,510	13,139	11,468	9,744
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	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	2,402	2,141	1,339
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	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	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	130	129	126
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	6,440	5,828	4,752
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	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	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	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	3,883	3,134	3,302

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 crude oil and petroleum products between refineries and ports.

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; $\text{CH}_3-(\text{CH}_2)_n-\text{OH}$ (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) $(CH_3)_3COC_2H_5$. An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

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

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

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

Exports. Shipments of 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 (C_2H_5OH) . An anhydrous denatured aliphatic alcohol intended for gasoline blending as described in Oxygenates definition.

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

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

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 (CH₃OH). 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, reformate, 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) (CH₃)₃COCH₃. 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-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

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

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

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

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

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

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

Normal Butane. See **Butane**.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, 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 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) ($\text{CH}_3)_3\text{COH}$. 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 ($\text{C}_6\text{H}_5\text{CH}_3$). 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 ($\text{C}_6\text{H}_4(\text{CH}_3)_2$). 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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