DOE/EIA-0340(02)/1

Petroleum Supply Annual 2002

Volume 1

June 2003

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

This report is available on the WEB at:

http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/psa_volume1.html

HOW TO OBTAIN EIA PRODUCTS AND SERVICES

For further information on the content of this report, or other EIA services, or including energy information questions, please contact EIA's **National Energy Information Center**:

National Energy Information Center (NEIC)
Energy Information Administration
EI-30, Forrestal Building
Washington, DC 20585
(202) 586-8800
(202) 586-0727 (fax)

TTY: For the hearing impaired:
(202) 586-1181

EIA's **Internet Site Services** offer nearly all EIA publications. Users can view and download selected pages or entire publications, search for information, download EIA data and analysis applications, and find out about new EIA information products and services.

Internet Addresses:
E-mail: infoctr@eia.doe.gov
World Wide Web Site: http://www.eia.doe.gov

Those EIA publications that are printed may be available free of charge from NEIC. Recent **periodicals and some one-time reports** are available from the Government Printing Office (those available at GPO have a GPO Stock No. noted below). Older reports are available from the National Technical Information Service:

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 512-1800
(202) 512-2250 (fax)

National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA, 22161
1- (800)553-6847
(703) 321-8547 (fax)

We thank the following for the use of their photographs and illustrations in this report.

Standard Oil Co., page 1 (courtesy of the American Petroleum Institute).
Phillips 66 Co., page 31 (courtesy of Phillips 66 Company).
Chevron U.S.A. Inc., page 79 (courtesy of the American Petroleum Institute).
Texaco Inc., page 119 (courtesy of Texaco Inc.).
Standard Oil Co., page 123 (courtesy of the American Petroleum Institute).
Texaco Inc., page 155 (courtesy of the American Petroleum Institute).
Atlantic Richfield Co., page 163 (courtesy of the American Petroleum Institute).

Released for printing: June 10, 2003

Data Available Electronically

Data from the *Weekly Petroleum Status Report*, *Petroleum Supply Monthly*, and the *Petroleum Supply Annual* publications as well as data from other sources are available electronically on the Energy Information Administration's World Wide Web Site, and the Comprehensive Oil and Gas Information Source (COGIS). The schedule for data release is as follows:

Publications/Sources	Information
Weekly Petroleum Status Report	
Wednesday 10:30 a.m. (weekly)	Table 1 (U.S. Balance Sheet) and Data Log (Table 14 plus 4-week averages)
Wednesday 5:00 p.m. 6th-12th (monthly)	Table H1 (Petroleum Supply Summary)
Winter Fuels Report (October through March)	
Wednesday 4:00 p.m. (weekly)	All tables and highlights
Propane Data (April through September)	
Wednesday 4:00 p.m. (weekly)	Table C1 Monthly and Weekly Figures C1-C4
Petroleum Supply Monthly	
23rd-26th (monthly)	Table H1 (Petroleum Supply Summary) and all Summary Statistics and Detailed Statistics Tables
Petroleum Supply Annual	All tables and data bases
Oxygenate Data	
15 working days after the report month	Table D1 U.S. Summary Table D2 (Fuel Ethanol Production/Stocks) Table D3 (MTBE Production/Stocks) and Table D4 (MTBE Merchant and Captive)
Imports Data	
7th-10th (preliminary)	Import data by company from the Form EIA-814, "Monthly Imports Report"
23rd-26th (final)	

COGIS= Comprehensive Oil and Gas Information Source
WWW = World Wide Web (http://www.eia.doe.gov)

Preface

The *Petroleum Supply Annual* (PSA) contains information on the supply and disposition of crude oil and petroleum products. The publication reflects data that were collected from the petroleum industry during 2002 through annual and monthly surveys. The *PSA* is divided into two volumes. This first volume contains three sections: Summary Statistics, Detailed Statistics, and Refinery Statistics; each with final annual data. The second volume contains final statistics for each month of 2002, and replaces data previously published in the *Petroleum Supply Monthly* (PSM). The tables in Volumes 1 and 2 are similarly numbered to facilitate comparison between them. Below is a description of each section in Volume 1 of the *PSA*.

Summary Statistics

This section contains a summary of the data presented each month in the *PSM* and in Volume 2 of the *PSA*. Graphs and tables are provided which show 17 years of data depicting the balance between supply, disposition and ending stocks for various commodities including crude oil, motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, propane/propylene, and liquefied petroleum gases.

Detailed Statistics

The tables contained in this section provide 2002 detailed statistics on supply and disposition, refinery operations, imports and exports, stocks, and transportation of crude oil and petroleum products. In most cases, the statistics are presented for several geographic areas — the United States (50 States and the District of Columbia), five Petroleum Administration for Defense (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.

Refinery Statistics

The tables contained in this section are compiled from the Form EIA-820 "Annual Refinery Report." Of particular note are listings of refineries and associated crude oil distillation and downstream capacities by State, including Puerto Rico and the Virgin Islands, as of January 1, 2003, as well as summaries of corporate refinery capacities and refinery storage capacities. In addition, refinery receipts of crude oil by method of transportation for 2002 are provided. Also included are fuels consumed at refineries, and lists of shutdowns, sales, reactivations, and mergers during 2002.

Appendices

Three appendices are provided to assist in understanding and interpreting the data presented in this publication. Industry terminology and product definitions are listed alphabetically in the Glossary.

- 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 (2001 Revised Crude Oil Production) -Updated monthly and annual crude oil production statistics received after the publication of the 2001 *PSA*.
- Appendix D (Northeast Heating Oil Reserve) -Contains volumes of heating oil held in terminals by the government as a reserve to reduce the risks of home heating oil shortages.

Contents

Residual Fuel Oil Historical Back Cast

During the processing of petroleum supply final year-end statistics, several revisions were made that had a significant impact on product supplied for residual fuel oil. In order to help customers who follow residual fuel oil historical trends, we are providing the table below. This table incorporates revisions from exports and imports statistics and is based in large part on estimates derived by our analysts. The affected respondents were unable to provide revised data for years prior to 2000.

Residual Fuel Oil

(Thousand Barrels, Except Where Noted)

	2000												
	Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual**
Imports	7,639	9,085	8,810	8,066	7,385	12,876	10,931	8,816	11,396	13,242	11,105	14,881	124,232
Exports	4,920	5,096	6,492	5,393	4,204	5,399	4,290	4,049	4,739	7,646	3,281	4,736	60,244
Product Supplied	22,261	23,905	20,407	22,363	21,087	28,095	31,300	26,531	27,145	31,446	27,154	36,766	318,461
Product Supplied (MB/D)	718	854	658	745	680	936	1,010	856	905	1,014	905	1,186	870
Original PSA Product Supplied (MB/D)	830	854	685	784	719	945	1,091	941	895	1,110	885	1,156	909
Difference (MB/D)	112	0	27	39	39	9	81	85	-10	96	-20	-30	39

	2001												
	Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual**
Imports	17,199	12,318	12,844	11,830	14,159	11,600	11,854	9,968	7,646	7,877	8,095	7,849	133,239
Product Supplied	36,338	26,294	29,790	30,168	29,468	28,235	29,311	26,711	20,233	24,552	21,389	19,140	321,630
Product Supplied (MB/D)	1,172	939	961	1,006	951	941	946	862	674	792	713	617	881
Original PSA Product Supplied (MB/D)	1,075	901	860	927	833	867	872	805	621	736	676	565	811
Difference (MB/D)	-97	-38	-101	-79	-118	-74	-74	-57	-53	-56	-37	-52	-70

Table S1. Crude Oil and Petroleum Products Overview, 1986 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Field Production			Stock Change[a]			Ending Stocks[b] (Million Barrels)
	Total Domestic[c]	Crude Oil	Natural Gas Plant Liquids	Crude Oil[d]	Petroleum Products	Petroleum Products Supplied	Crude Oil[d] and Petroleum Products
1986 Average	**10,289**	**8,680**	**1,551**	**78**	**124**	**16,281**	**1,593**
1987 Average	**10,008**	**8,349**	**1,595**	**128**	**-87**	**16,665**	**1,607**
1988 Average	**9,818**	**8,140**	**1,625**	**1**	**-29**	**17,283**	**1,597**
1989 Average	**9,219**	**7,613**	**1,546**	**86**	**-129**	**17,325**	**1,581**
1990 Average	**8,994**	**7,355**	**1,559**	**-35**	**142**	**16,988**	**1,621**
1991 Average	**9,168**	**7,417**	**1,659**	**-42**	**32**	**16,714**	**1,617**
1992 Average	**8,996**	**7,171**	**1,697**	**-1**	**-68**	**17,033**	[g] **1,592**
1993 Average	**8,836**	**6,847**	**1,736**	**81**	[g] **70**	**17,237**	**1,647**
1994 Average	**8,645**	**6,662**	**1,727**	**18**	**-2**	**17,718**	**1,653**
1995 Average	**8,626**	**6,560**	**1,762**	**-93**	**-153**	**17,725**	**1,563**
1996 Average	**8,607**	**6,465**	**1,830**	**-124**	**-28**	**18,309**	**1,507**
1997 Average	**8,611**	**6,452**	**1,817**	**51**	**93**	**18,620**	**1,560**
1998 Average	**8,392**	**6,252**	**1,759**	**74**	**165**	**18,917**	**1,647**
1999 Average	**8,107**	**5,881**	**1,850**	**-118**	**-304**	**19,519**	**1,493**
2000 January	8,096	5,784	1,956	21	-520	19,026	1,477
February	8,227	5,852	1,987	98	-486	19,635	1,466
March	8,256	5,918	1,987	364	-38	19,218	1,476
April	8,232	5,854	1,968	225	746	18,816	1,505
May	8,196	5,847	1,943	-294	691	19,605	1,518
June	8,106	5,823	1,922	-154	427	20,054	1,526
July	8,073	5,739	1,934	-225	666	19,696	1,540
August	8,087	5,789	1,941	197	-450	20,496	1,532
September	8,066	5,758	1,923	-347	184	19,899	1,527
October	8,151	5,809	1,919	-189	-464	19,798	1,507
November	8,089	5,833	1,876	-281	240	19,328	1,505
December	7,750	5,855	1,583	-250	-971	20,814	1,468
Average	**8,110**	**5,822**	**1,911**	**-70**	**(s)**	**19,701**	**—**
2001 January	7,528	5,799	1,398	317	38	20,092	1,479
February	7,891	5,780	1,732	-424	223	19,689	1,473
March	8,127	5,880	1,833	861	-501	19,876	1,484
April	8,062	5,863	1,831	736	513	19,729	1,522
May	8,146	5,829	1,912	-42	1,130	19,501	1,555
June	8,062	5,766	1,908	-671	929	19,561	1,563
July	8,066	5,749	1,899	164	7	19,919	1,568
August	8,062	5,725	1,955	-160	-488	20,153	1,548
September	8,128	5,709	2,034	79	944	19,016	1,579
October	8,164	5,746	2,025	142	-205	19,824	1,577
November	8,274	5,881	2,001	36	323	19,396	1,588
December	8,131	5,887	1,889	87	-133	19,003	1,586
Average	**8,054**	**5,801**	**1,868**	**99**	**227**	**19,649**	**—**
2002 January	8,068	5,848	1,827	409	-270	19,454	1,591
February	8,126	5,871	1,900	443	-951	19,444	1,576
March	8,139	5,883	1,901	248	-364	19,676	1,573
April	8,215	5,859	1,925	-120	641	19,552	1,588
May	8,317	5,924	1,936	222	504	19,728	1,611
June	8,206	5,915	1,870	-143	316	19,875	1,616
July	8,022	5,770	1,846	-362	190	20,076	1,611
August	8,205	5,811	1,937	-139	-328	20,221	1,596
September	7,748	5,411	1,898	-687	-56	19,461	1,574
October	7,645	5,363	1,875	749	-782	19,678	1,573
November	7,949	5,597	1,891	96	85	19,991	1,578
December	7,887	5,699	1,760	-234	-751	19,943	1,548
Average	**8,043**	**5,746**	**1,880**	**40**	**-145**	**19,761**	**—**

[a] A negative number indicates a decrease in stocks and a positive number indicates an increase. Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

[b] Stocks are totals as of end of period. Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

[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 1993, bulk terminal, pipeline, and merchant-producer stocks of oxygenates were added to surveys affecting stock levels and stock change calculations. See Summary Statistics Explanatory Note 2.

Footnotes continued on following page.

Table S1. Crude Oil and Petroleum Products Overview, 1986 - Present (Continued)

(Thousand Barrels per Day, Except Where Noted)

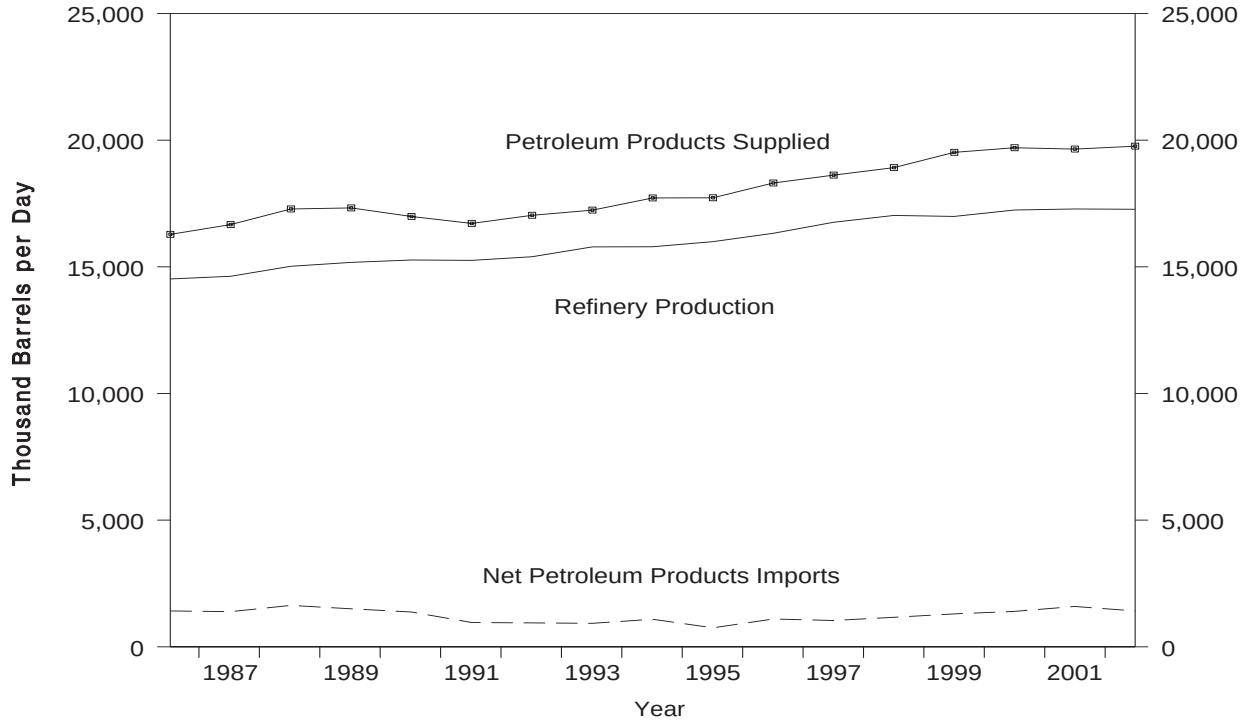
Year/Month	Imports			Exports			Net Imports[f]
	Total	Crude Oil[e]	Petroleum Products	Total	Crude Oil	Petroleum Products	
1986 Average	**6,224**	**4,178**	**2,045**	**785**	**154**	**631**	**5,439**
1987 Average	**6,678**	**4,674**	**2,004**	**764**	**151**	**613**	**5,914**
1988 Average	**7,402**	**5,107**	**2,295**	**815**	**155**	**661**	**6,587**
1989 Average	**8,061**	**5,843**	**2,217**	**859**	**142**	**717**	**7,202**
1990 Average	**8,018**	**5,894**	**2,123**	**857**	**109**	**748**	**7,161**
1991 Average	**7,627**	**5,782**	**1,844**	**1,001**	**116**	**885**	**6,626**
1992 Average	**7,888**	**6,083**	**1,805**	**950**	**89**	**861**	**6,938**
1993 Average	**8,620**	**6,787**	**1,833**	**1,003**	**98**	**904**	**7,618**
1994 Average	**8,996**	**7,063**	**1,933**	**942**	**99**	**843**	**8,054**
1995 Average	**8,835**	**7,230**	**1,605**	**949**	**95**	**855**	**7,886**
1996 Average	**9,478**	**7,508**	**1,971**	**981**	**110**	**871**	**8,498**
1997 Average	**10,162**	**8,225**	**1,936**	**1,003**	**108**	**896**	**9,158**
1998 Average	**10,708**	**8,706**	**2,002**	**945**	**110**	**835**	**9,764**
1999 Average	**10,852**	**8,731**	**2,122**	**940**	**118**	**822**	**9,912**
2000 January	10,140	7,829	2,311	1,006	176	830	9,134
February	11,003	8,318	2,684	870	30	840	10,133
March	11,052	8,790	2,261	1,159	144	1,015	9,893
April	11,558	9,341	2,217	1,131	124	1,007	10,427
May	11,415	9,085	2,331	856	34	822	10,559
June	12,032	9,533	2,499	925	9	915	11,107
July	11,588	9,398	2,190	900	15	885	10,688
August	12,173	9,939	2,234	1,073	17	1,056	11,099
September	11,900	9,484	2,416	1,059	23	1,036	10,841
October	11,290	8,969	2,321	1,292	9	1,283	9,998
November	11,309	8,913	2,396	1,108	2	1,106	10,201
December	12,053	9,229	2,824	1,095	16	1,079	10,958
Average	**11,459**	**9,071**	**2,389**	**1,040**	**50**	**990**	**10,419**
2001 January	12,555	8,933	3,623	954	18	936	11,601
February	11,643	8,609	3,035	1,004	24	980	10,639
March	12,132	9,603	2,530	938	37	901	11,194
April	12,653	10,111	2,542	942	5	937	11,711
May	12,529	9,885	2,644	1,069	64	1,005	11,461
June	11,732	9,105	2,627	976	15	960	10,756
July	11,760	9,552	2,208	879	11	868	10,881
August	11,622	9,383	2,239	1,048	28	1,020	10,573
September	11,818	9,339	2,478	825	8	817	10,993
October	11,379	9,211	2,168	946	11	935	10,432
November	11,628	9,320	2,309	960	9	951	10,669
December	10,994	8,839	2,154	1,109	12	1,097	9,885
Average	**11,871**	**9,328**	**2,543**	**971**	**20**	**951**	**10,900**
2002 January	11,088	8,709	2,380	861	11	850	10,228
February	10,904	8,753	2,151	1,175	4	1,170	9,729
March	11,198	8,799	2,399	853	8	845	10,345
April	11,765	9,301	2,464	890	8	882	10,876
May	11,769	9,323	2,446	910	7	903	10,859
June	11,753	9,324	2,429	880	5	874	10,873
July	11,624	9,184	2,440	839	33	806	10,785
August	11,890	9,544	2,346	1,138	9	1,129	10,752
September	11,075	8,797	2,278	1,015	7	1,008	10,059
October	11,893	9,532	2,361	962	4	958	10,931
November	12,268	9,654	2,613	1,026	10	1,016	11,242
December	11,100	8,741	2,359	1,272	2	1,270	9,828
Average	**11,530**	**9,140**	**2,390**	**984**	**9**	**975**	**10,546**

Footnotes continued.

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

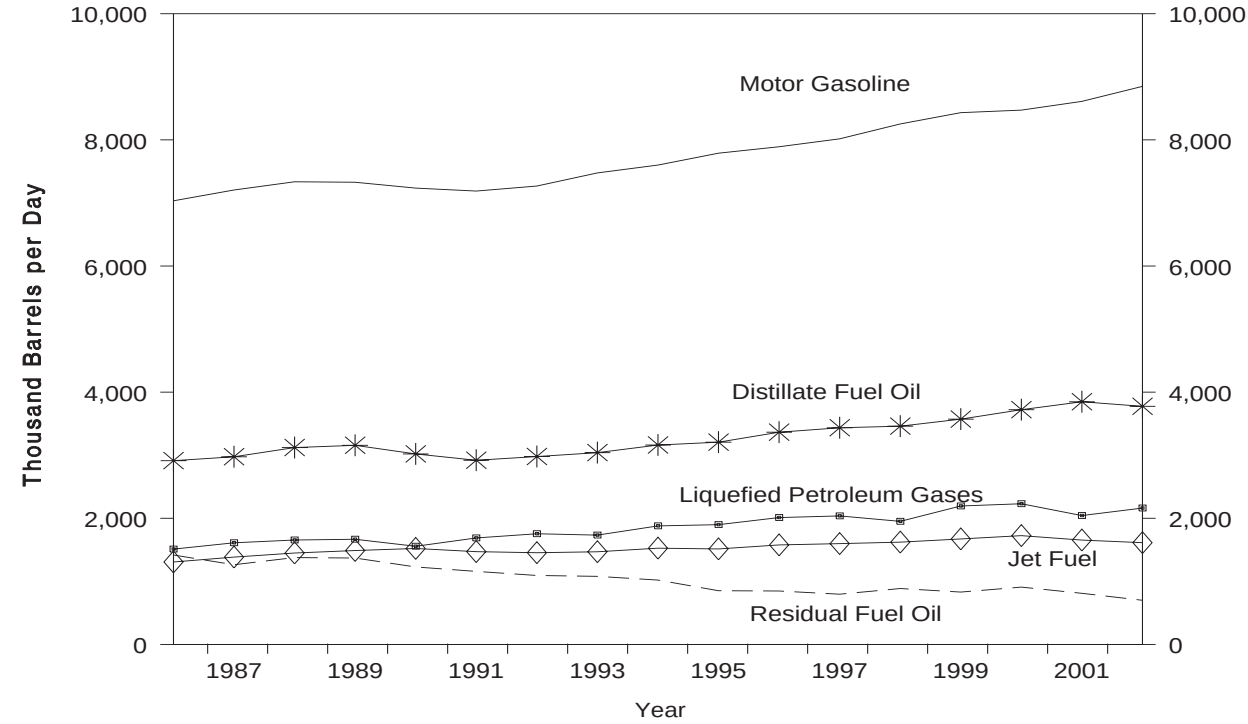
Source: See Summary Statistics Table and Figure Sources.

Figure S1. Petroleum Overview, 1986 - Present



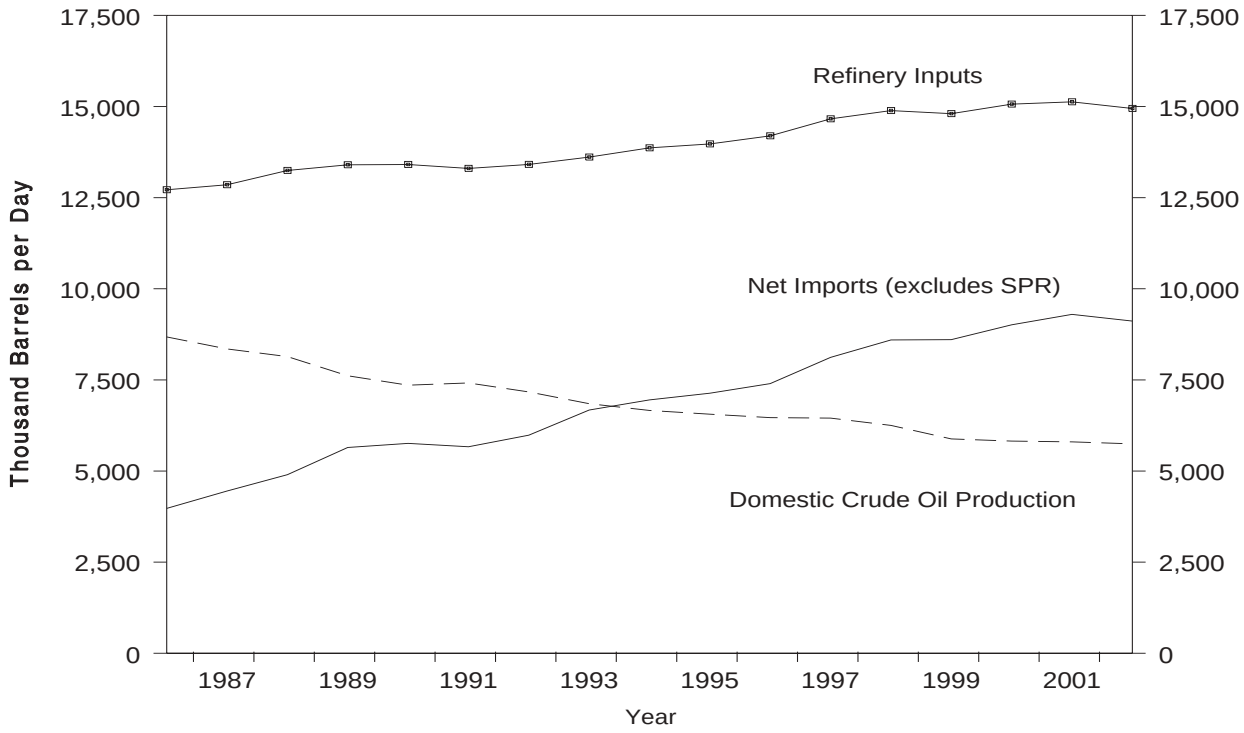
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S1. See Summary Statistics Table and Figure Sources.

Figure S2. Petroleum Products Supplied, 1986 - Present



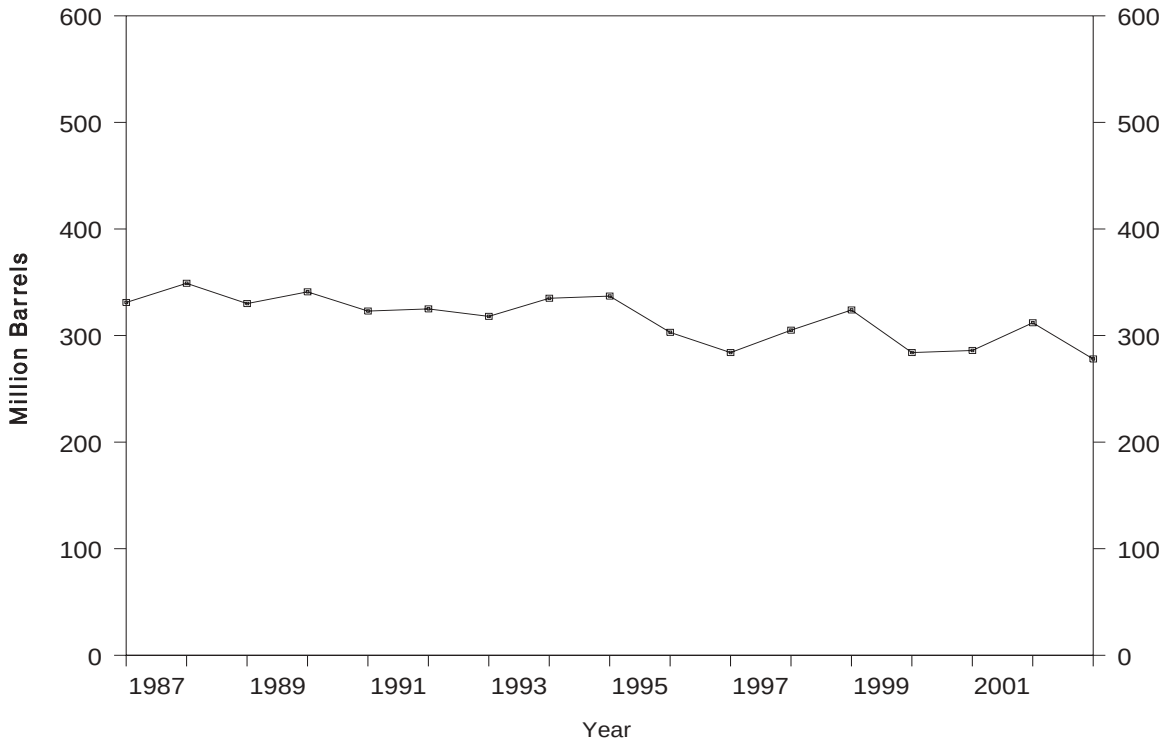
Source: Energy Information Administration, *Petroleum Supply Annual*, Tables S4 - S8. See Summary Statistics Table and Figure Sources.

Figure S3. Crude Oil Supply and Disposition, 1986 - Present



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

Figure S4. Crude Oil Ending Stocks,[1] 1986 - Present



[1]Excludes stocks held in the Strategic Petroleum Reserve (SPR).
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S2. See Summary Statistics Table and Figure Sources.

Table S2. Crude Oil Supply and Disposition, 1986 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply						Disposition
	Field Production		Imports			Unaccounted for Crude Oil[a]	Crude Losses
	Total Domestic	Alaskan	Total	SPR	Other		
1986 Average	**8,680**	**1,867**	**4,178**	**48**	**4,130**	**139**	**(s)**
1987 Average	**8,349**	**1,962**	**4,674**	**73**	**4,601**	**145**	**(s)**
1988 Average	**8,140**	**2,017**	**5,107**	**51**	**5,055**	**196**	**(s)**
1989 Average	**7,613**	**1,874**	**5,843**	**56**	**5,787**	**200**	**(s)**
1990 Average	**7,355**	**1,773**	**5,894**	**27**	**5,867**	**258**	**(s)**
1991 Average	**7,417**	**1,798**	**5,782**	**0**	**5,782**	**195**	**(s)**
1992 Average	**7,171**	**1,714**	**6,083**	**10**	**6,073**	**258**	**(s)**
1993 Average	**6,847**	**1,582**	**6,787**	**15**	**6,772**	**168**	**(s)**
1994 Average	**6,662**	**1,559**	**7,063**	**12**	**7,051**	**266**	**(s)**
1995 Average	**6,560**	**1,484**	**7,230**	**0**	**7,230**	**193**	**(s)**
1996 Average	**6,465**	**1,393**	**7,508**	**0**	**7,508**	**215**	**(s)**
1997 Average	**6,452**	**1,296**	**8,225**	**0**	**8,225**	**145**	**0**
1998 Average	**6,252**	**1,175**	**8,706**	**0**	**8,706**	**115**	**(s)**
1999 Average	**5,881**	**1,050**	**8,731**	**8**	**8,722**	**191**	**(s)**
2000 January	5,784	1,024	7,829	3	7,826	362	0
February	5,852	1,031	8,318	17	8,301	-14	0
March	5,918	1,013	8,790	0	8,790	412	0
April	5,854	1,008	9,341	0	9,341	206	0
May	5,847	966	9,085	0	9,085	303	0
June	5,823	925	9,533	16	9,518	143	0
July	5,739	913	9,398	15	9,383	471	0
August	5,789	914	9,939	0	9,939	127	0
September	5,758	892	9,484	0	9,484	-159	0
October	5,809	966	8,969	32	8,938	70	0
November	5,833	986	8,913	17	8,896	-1	0
December	5,855	1,010	9,229	0	9,229	-86	0
Average	**5,822**	**970**	**9,071**	**8**	**9,062**	**155**	**0**
2001 January	5,799	980	8,933	32	8,901	392	0
February	5,780	977	8,609	0	8,609	25	0
March	5,880	1,009	9,603	15	9,588	64	0
April	5,863	986	10,111	0	10,111	304	0
May	5,829	957	9,885	30	9,856	70	0
June	5,766	935	9,105	0	9,105	123	0
July	5,749	927	9,552	15	9,538	243	0
August	5,725	928	9,383	0	9,383	19	0
September	5,709	892	9,339	0	9,339	44	0
October	5,746	895	9,211	0	9,211	198	0
November	5,881	1,023	9,320	17	9,302	-155	0
December	5,887	1,046	8,839	18	8,821	61	0
Average	**5,801**	**963**	**9,328**	**11**	**9,318**	**117**	**0**
2002 January	5,848	1,036	8,709	33	8,675	351	0
February	5,871	1,031	8,753	59	8,694	129	0
March	5,883	1,036	8,799	0	8,799	99	0
April	5,859	1,009	9,301	0	9,301	53	0
May	5,924	1,002	9,323	16	9,307	283	0
June	5,915	1,019	9,324	17	9,307	21	0
July	5,770	931	9,184	0	9,184	146	0
August	5,811	965	9,544	0	9,544	-148	0
September	5,411	886	8,797	0	8,797	-27	0
October	5,363	983	9,532	0	9,532	161	0
November	5,597	908	9,654	34	9,620	10	0
December	5,699	1,010	8,741	34	8,707	228	0
Average	**5,746**	**984**	**9,140**	**16**	**9,124**	**110**	**0**

[a] Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.
[b] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[c] Stocks are totals as of end of period.
[d] Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.

Footnotes continued on following page.

Table S2. Crude Oil Supply and Disposition, 1986 - Present (Continued)

(Thousand Barrels per Day, Except Where Noted)

Year/Month		Disposition					Ending Stocks[c] (Million Barrels)		
		Stock Change[b]		Refinery Inputs	Exports	Product Supplied	Total	SPR[d]	Other Primary
		SPR	Other						
1986	**Average**	**50**	**28**	**12,716**	**154**	**49**	**843**	**512**	**331**
1987	**Average**	**80**	**49**	**12,854**	**151**	**34**	**890**	**541**	**349**
1988	**Average**	**52**	**-51**	**13,246**	**155**	**40**	**890**	**560**	**330**
1989	**Average**	**56**	**30**	**13,401**	**142**	**28**	**921**	**580**	**341**
1990	**Average**	**16**	**-51**	**13,409**	**109**	**24**	**908**	**586**	**323**
1991	**Average**	**-47**	**5**	**13,301**	**116**	**18**	**893**	**569**	**325**
1992	**Average**	**17**	**-18**	**13,411**	**89**	**13**	**893**	**575**	**318**
1993	**Average**	**34**	**47**	**13,613**	**98**	**10**	**922**	**587**	**335**
1994	**Average**	**13**	**5**	**13,866**	**99**	**9**	**929**	**592**	**337**
1995	**Average**	**(s)**	**-93**	**13,973**	**95**	**7**	**895**	**592**	**303**
1996	**Average**	**-71**	**-53**	**14,195**	**110**	**6**	**850**	**566**	**284**
1997	**Average**	**-7**	**57**	**14,662**	**108**	**2**	**868**	**563**	**305**
1998	**Average**	**22**	**52**	**14,889**	**110**	**0**	**895**	**571**	**324**
1999	**Average**	**-11**	**-107**	**14,804**	**118**	**0**	**852**	**567**	**284**
2000	January	41	-20	13,779	176	0	852	568	284
	February	30	68	14,028	30	0	855	569	286
	March	1	363	14,613	144	0	867	569	297
	April	0	225	15,053	124	0	873	569	304
	May	0	-294	15,494	34	0	864	569	295
	June	-17	-136	15,643	9	0	860	569	291
	July	47	-272	15,819	15	0	853	570	282
	August	33	164	15,640	17	0	859	571	287
	September	-34	-313	15,407	23	0	848	570	278
	October	-189	(s)	15,029	9	0	842	564	278
	November	-566	285	15,023	2	0	834	548	286
	December	-220	-30	15,232	16	0	826	541	286
	Average	**-73**	**3**	**15,067**	**50**	**0**	**—**	**—**	**—**
2001	January	32	285	14,789	18	0	836	542	294
	February	(s)	-424	14,813	24	0	824	542	282
	March	20	841	14,649	37	0	851	542	309
	April	2	734	15,536	5	0	873	542	331
	May	30	-71	15,763	64	0	872	543	328
	June	0	-671	15,650	15	0	852	543	308
	July	15	149	15,369	11	0	857	544	313
	August	0	-160	15,259	28	0	852	544	308
	September	34	45	15,005	8	0	854	545	309
	October	14	127	15,002	11	0	858	545	313
	November	71	-35	15,001	9	0	860	547	312
	December	94	-7	14,688	12	0	862	550	312
	Average	**26**	**73**	**15,128**	**20**	**0**	**—**	**—**	**—**
2002	January	141	268	14,487	11	0	875	555	320
	February	191	252	14,306	4	0	887	560	327
	March	50	198	14,526	8	0	895	561	334
	April	175	-295	15,325	8	0	891	567	325
	May	146	77	15,301	7	0	898	571	327
	June	173	-316	15,397	5	0	894	576	318
	July	67	-428	15,430	33	0	883	579	304
	August	121	-260	15,338	9	0	878	582	296
	September	166	-852	14,861	7	0	858	587	271
	October	77	672	14,303	4	0	881	590	291
	November	209	-113	15,155	10	0	884	596	288
	December	103	-337	14,900	2	0	877	599	278
	Average	**134**	**-94**	**14,947**	**9**	**0**	**—**	**—**	**—**

Footnotes continued.

SPR = Strategic Petroleum Reserve.

(s)=Less than 500 barrels per day.

Notes: • Crude oil includes lease condensate. • 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, 1986 - Present
(Thousand Barrels per Day)

Year/Month	Imports from Arab-OPEC Sources							
	Algeria		Iraq		Kuwait[b]		Libya	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1986 Average	**271**	**78**	**81**	**81**	**68**	**28**	**0**	**0**
1987 Average	**295**	**115**	**83**	**82**	**84**	**70**	**0**	**0**
1988 Average	**300**	**58**	**345**	**343**	**92**	**80**	**0**	**0**
1989 Average	**269**	**60**	**449**	**441**	**157**	**155**	**0**	**0**
1990 Average	**280**	**63**	**518**	**514**	**86**	**79**	**0**	**0**
1991 Average	**253**	**44**	**0**	**0**	**6**	**6**	**0**	**0**
1992 Average	**196**	**24**	**0**	**0**	**51**	**39**	**0**	**0**
1993 Average	**220**	**24**	**0**	**0**	**353**	**344**	**0**	**0**
1994 Average	**243**	**21**	**0**	**0**	**312**	**307**	**0**	**0**
1995 Average	**234**	**27**	**0**	**0**	**218**	**213**	**0**	**0**
1996 Average	**256**	**8**	**1**	**1**	**236**	**235**	**0**	**0**
1997 Average	**285**	**6**	**89**	**89**	**253**	**253**	**0**	**0**
1998 Average	**290**	**10**	**336**	**336**	**301**	**300**	**0**	**0**
1999 Average	**259**	**25**	**725**	**725**	**248**	**246**	**0**	**0**
2000 January	240	7	254	254	239	218	0	0
February	256	0	750	750	267	264	0	0
March	199	0	468	468	162	162	0	0
April	195	(s)	657	657	264	247	0	0
May	270	0	438	438	170	166	0	0
June	222	0	830	830	210	210	0	0
July	205	0	762	762	264	264	0	0
August	236	0	765	765	405	405	0	0
September	216	0	765	765	352	338	0	0
October	210	0	653	653	337	337	0	0
November	212	0	585	585	248	237	0	0
December	240	0	528	528	344	311	0	0
Average	**225**	**1**	**620**	**620**	**272**	**263**	**0**	**0**
2001 January	286	0	310	310	247	206	0	0
February	223	0	253	253	280	251	0	0
March	279	19	579	579	308	302	0	0
April	326	0	880	880	263	242	0	0
May	379	54	1,011	1,011	256	240	0	0
June	265	20	810	810	270	270	0	0
July	190	0	710	710	292	287	0	0
August	243	0	563	563	261	256	0	0
September	200	0	1,192	1,192	259	237	0	0
October	293	0	1,177	1,177	226	221	0	0
November	320	37	889	889	196	196	0	0
December	326	0	1,126	1,126	145	140	0	0
Average	**278**	**11**	**795**	**795**	**250**	**237**	**0**	**0**
2002 January	265	0	988	988	213	207	0	0
February	248	0	709	709	290	279	0	0
March	347	75	813	813	184	179	0	0
April	366	77	619	619	208	201	0	0
May	343	53	482	482	182	163	0	0
June	293	19	167	167	265	244	0	0
July	160	0	301	301	244	238	0	0
August	183	0	246	246	178	169	0	0
September	249	32	148	148	297	286	0	0
October	239	40	248	248	199	182	0	0
November	226	21	403	403	291	264	0	0
December	245	40	394	394	193	190	0	0
Average	**264**	**30**	**459**	**459**	**228**	**216**	**0**	**0**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1986 - Present (Continued)

(Thousand Barrels per Day)

Year/Month	Imports from Arab-OPEC Sources						Total Arab OPEC	
	Qatar		Saudi Arabia[b]		United Arab Emirates			
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1986 Average	**13**	**12**	**685**	**618**	**44**	**38**	**1,162**	**854**
1987 Average	**0**	**0**	**751**	**642**	**61**	**56**	**1,274**	**965**
1988 Average	**0**	**0**	**1,073**	**911**	**29**	**23**	**1,839**	**1,415**
1989 Average	**2**	**2**	**1,224**	**1,116**	**28**	**21**	**2,130**	**1,794**
1990 Average	**4**	**4**	**1,339**	**1,195**	**17**	**9**	**2,244**	**1,864**
1991 Average	**0**	**0**	**1,802**	**1,703**	**3**	**2**	**2,064**	**1,754**
1992 Average	**1**	**0**	**1,720**	**1,597**	**6**	**0**	**1,974**	**1,660**
1993 Average	**1**	**0**	**1,414**	**1,282**	**14**	**12**	**2,000**	**1,661**
1994 Average	**0**	**0**	**1,402**	**1,297**	**13**	**11**	**1,970**	**1,636**
1995 Average	**0**	**0**	**1,344**	**1,260**	**10**	**5**	**1,806**	**1,505**
1996 Average	**0**	**0**	**1,363**	**1,248**	**3**	**3**	**1,859**	**1,496**
1997 Average	**4**	**0**	**1,407**	**1,293**	**2**	**0**	**2,040**	**1,641**
1998 Average	**4**	**1**	**1,491**	**1,404**	**3**	**3**	**2,424**	**2,053**
1999 Average	**10**	**1**	**1,478**	**1,387**	**2**	**0**	**2,722**	**2,385**
2000 January	12	0	1,543	1,483	0	0	2,288	1,962
February	2	0	1,317	1,265	25	18	2,618	2,297
March	9	0	1,548	1,490	17	0	2,404	2,120
April	13	0	1,466	1,452	0	0	2,595	2,356
May	9	0	1,566	1,510	34	0	2,488	2,115
June	10	0	1,512	1,436	24	0	2,808	2,476
July	8	0	1,554	1,486	24	15	2,817	2,528
August	6	0	1,649	1,587	0	0	3,060	2,756
September	10	0	1,669	1,645	31	0	3,043	2,748
October	7	0	1,499	1,462	9	0	2,713	2,451
November	15	0	1,624	1,567	9	0	2,693	2,389
December	3	0	1,897	1,882	9	0	3,022	2,721
Average	**9**	**0**	**1,572**	**1,523**	**15**	**3**	**2,712**	**2,410**
2001 January	7	0	1,804	1,629	138	79	2,790	2,224
February	0	0	1,800	1,734	44	0	2,600	2,239
March	20	0	1,788	1,730	4	0	2,978	2,630
April	19	0	1,658	1,626	84	76	3,231	2,824
May	30	0	1,770	1,724	52	35	3,500	3,065
June	23	2	1,764	1,694	28	0	3,160	2,796
July	11	0	1,713	1,683	10	0	2,925	2,680
August	10	0	1,835	1,826	26	17	2,939	2,661
September	14	0	1,478	1,439	84	32	3,228	2,900
October	6	0	1,432	1,384	16	16	3,150	2,797
November	10	0	1,543	1,514	0	0	2,957	2,635
December	10	0	1,370	1,357	0	0	2,978	2,623
Average	**13**	**(s)**	**1,662**	**1,611**	**40**	**21**	**3,039**	**2,675**
2002 January	9	0	1,456	1,430	5	0	2,935	2,625
February	11	0	1,474	1,445	0	0	2,732	2,434
March	0	0	1,558	1,526	0	0	2,903	2,592
April	0	0	1,556	1,538	16	16	2,766	2,452
May	10	0	1,564	1,520	0	0	2,581	2,217
June	10	0	1,598	1,565	51	51	2,383	2,046
July	44	35	1,392	1,354	18	0	2,159	1,928
August	9	0	1,444	1,411	25	0	2,086	1,826
September	44	37	1,531	1,512	31	17	2,301	2,032
October	40	32	1,690	1,633	0	0	2,416	2,135
November	0	0	1,511	1,474	17	17	2,449	2,179
December	0	0	1,843	1,815	18	16	2,695	2,455
Average	**15**	**9**	**1,552**	**1,519**	**15**	**10**	**2,533**	**2,243**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1986 - Present (Continued)

(Thousand Barrels per Day)

Year/Month	Imports from Other-OPEC Sources							
	Ecuador[c]		Gabon		Indonesia		Iran	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1986 Average	**77**	**64**	**26**	**25**	**318**	**297**	**19**	**19**
1987 Average	**29**	**23**	**35**	**35**	**285**	**262**	**98**	**98**
1988 Average	**47**	**33**	**16**	**15**	**205**	**186**	**[g] (s)**	**[g] (s)**
1989 Average	**89**	**80**	**50**	**49**	**183**	**158**	**0**	**0**
1990 Average	**49**	**38**	**64**	**64**	**114**	**98**	**0**	**0**
1991 Average	**63**	**53**	**84**	**84**	**111**	**102**	**32**	**32**
1992 Average	**65**	**62**	**124**	**123**	**78**	**70**	**0**	**0**
1993 Average	**81**	**78**	**152**	**151**	**81**	**65**	**0**	**0**
1994 Average	**(c)**	**(c)**	**194**	**194**	**111**	**92**	**0**	**0**
1995 Average	**(c)**	**(c)**	**(d)**	**(d)**	**88**	**64**	**0**	**0**
1996 Average	**(c)**	**(c)**	**(d)**	**(d)**	**59**	**44**	**0**	**0**
1997 Average	**(c)**	**(c)**	**(d)**	**(d)**	**58**	**51**	**0**	**0**
1998 Average	**(c)**	**(c)**	**(d)**	**(d)**	**66**	**50**	**0**	**0**
1999 Average	**(c)**	**(c)**	**(d)**	**(d)**	**81**	**70**	**0**	**0**
2000 January	(c)	(c)	(d)	(d)	31	22	0	0
February	(c)	(c)	(d)	(d)	32	28	0	0
March	(c)	(c)	(d)	(d)	45	45	0	0
April	(c)	(c)	(d)	(d)	91	70	0	0
May	(c)	(c)	(d)	(d)	35	30	0	0
June	(c)	(c)	(d)	(d)	46	42	0	0
July	(c)	(c)	(d)	(d)	20	14	0	0
August	(c)	(c)	(d)	(d)	61	55	0	0
September	(c)	(c)	(d)	(d)	28	28	0	0
October	(c)	(c)	(d)	(d)	37	34	0	0
November	(c)	(c)	(d)	(d)	60	29	0	0
December	(c)	(c)	(d)	(d)	92	41	0	0
Average	**(c)**	**(c)**	**(d)**	**(d)**	**48**	**36**	**0**	**0**
2001 January	(c)	(c)	(d)	(d)	61	20	0	0
February	(c)	(c)	(d)	(d)	76	42	0	0
March	(c)	(c)	(d)	(d)	76	60	0	0
April	(c)	(c)	(d)	(d)	58	52	0	0
May	(c)	(c)	(d)	(d)	78	73	0	0
June	(c)	(c)	(d)	(d)	65	57	0	0
July	(c)	(c)	(d)	(d)	29	28	0	0
August	(c)	(c)	(d)	(d)	38	37	0	0
September	(c)	(c)	(d)	(d)	26	25	0	0
October	(c)	(c)	(d)	(d)	39	29	0	0
November	(c)	(c)	(d)	(d)	22	21	0	0
December	(c)	(c)	(d)	(d)	51	42	0	0
Average	**(c)**	**(c)**	**(d)**	**(d)**	**51**	**40**	**0**	**0**
2002 January	(c)	(c)	(d)	(d)	80	67	0	0
February	(c)	(c)	(d)	(d)	104	84	0	0
March	(c)	(c)	(d)	(d)	63	63	0	0
April	(c)	(c)	(d)	(d)	60	58	0	0
May	(c)	(c)	(d)	(d)	76	76	0	0
June	(c)	(c)	(d)	(d)	57	57	0	0
July	(c)	(c)	(d)	(d)	15	14	0	0
August	(c)	(c)	(d)	(d)	34	34	0	0
September	(c)	(c)	(d)	(d)	49	49	0	0
October	(c)	(c)	(d)	(d)	68	66	0	0
November	(c)	(c)	(d)	(d)	13	13	0	0
December	(c)	(c)	(d)	(d)	21	21	0	0
Average	**(c)**	**(c)**	**(d)**	**(d)**	**53**	**50**	**0**	**0**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1986 - Present (Continued)

(Thousand Barrels per Day)

Year/Month		Imports from Other-OPEC Sources						Total OPEC[c,d,e]	
		Nigeria		Venezuela		Total Other OPEC[c]			
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1986	**Average**	**440**	**437**	**793**	**416**	**1,674**	**1,259**	**2,837**	**2,113**
1987	**Average**	**535**	**529**	**804**	**488**	**1,787**	**1,435**	**3,060**	**2,400**
1988	**Average**	**618**	**607**	**794**	**439**	**1,681**	**1,281**	**3,520**	**2,696**
1989	**Average**	**815**	**800**	**873**	**495**	**2,010**	**1,582**	**4,140**	**3,376**
1990	**Average**	**800**	**784**	**1,025**	**666**	**2,052**	**1,650**	**4,296**	**3,514**
1991	**Average**	**703**	**683**	**1,035**	**668**	**2,028**	**1,622**	**4,092**	**3,377**
1992	**Average**	**681**	**665**	**1,170**	**826**	**2,117**	**1,746**	**4,092**	**3,406**
1993	**Average**	**740**	**722**	**1,300**	**1,010**	**2,354**	**2,026**	**4,354**	**3,687**
1994	**Average**	**637**	**624**	**1,334**	**1,034**	**2,277**	**1,944**	**4,247**	**3,580**
1995	**Average**	**627**	**621**	**1,480**	**1,151**	**2,196**	**1,835**	**4,002**	**3,341**
1996	**Average**	**617**	**595**	**1,676**	**1,303**	**2,353**	**1,942**	**4,211**	**3,438**
1997	**Average**	**698**	**689**	**1,773**	**1,394**	**2,529**	**2,134**	**4,569**	**3,775**
1998	**Average**	**696**	**689**	**1,719**	**1,377**	**2,481**	**2,116**	**4,905**	**4,169**
1999	**Average**	**657**	**623**	**1,493**	**1,150**	**2,231**	**1,843**	**4,953**	**4,228**
2000	January	490	439	1,360	1,051	1,881	1,512	4,169	3,474
	February	657	636	1,600	1,198	2,289	1,863	4,907	4,160
	March	1,038	1,005	1,567	1,209	2,651	2,260	5,054	4,379
	April	948	931	1,537	1,176	2,576	2,176	5,171	4,533
	May	913	902	1,468	1,102	2,416	2,035	4,904	4,150
	June	1,189	1,136	1,516	1,207	2,750	2,385	5,558	4,861
	July	895	876	1,446	1,159	2,361	2,049	5,178	4,577
	August	1,122	1,108	1,661	1,429	2,844	2,591	5,904	5,348
	September	1,020	1,008	1,378	1,075	2,426	2,112	5,470	4,859
	October	946	943	1,610	1,293	2,594	2,270	5,307	4,721
	November	851	836	1,632	1,358	2,543	2,222	5,236	4,612
	December	686	673	1,776	1,419	2,553	2,132	5,575	4,854
	Average	**896**	**875**	**1,546**	**1,223**	**2,491**	**2,134**	**5,203**	**4,544**
2001	January	881	842	1,796	1,431	2,737	2,294	5,527	4,517
	February	894	859	1,500	1,250	2,471	2,150	5,071	4,389
	March	1,076	1,057	1,702	1,384	2,854	2,501	5,832	5,131
	April	1,192	1,137	1,623	1,333	2,873	2,522	6,104	5,346
	May	988	916	1,514	1,312	2,580	2,300	6,080	5,365
	June	793	724	1,623	1,297	2,480	2,077	5,641	4,873
	July	869	834	1,685	1,445	2,583	2,308	5,509	4,987
	August	727	690	1,586	1,374	2,350	2,101	5,289	4,763
	September	1,057	994	1,282	1,041	2,365	2,060	5,593	4,960
	October	842	812	1,511	1,288	2,392	2,129	5,542	4,926
	November	696	662	1,423	1,144	2,141	1,827	5,097	4,462
	December	614	579	1,382	1,178	2,047	1,799	5,024	4,423
	Average	**885**	**842**	**1,553**	**1,291**	**2,490**	**2,173**	**5,528**	**4,848**
2002	January	565	540	1,450	1,233	2,094	1,839	5,029	4,465
	February	453	426	1,444	1,222	2,001	1,732	4,733	4,165
	March	621	590	1,404	1,148	2,088	1,802	4,991	4,394
	April	645	584	1,134	1,014	1,839	1,657	4,606	4,108
	May	591	576	1,312	1,117	1,979	1,769	4,561	3,987
	June	728	702	1,188	958	1,973	1,717	4,356	3,763
	July	607	585	1,585	1,341	2,207	1,940	4,366	3,868
	August	820	792	1,699	1,514	2,552	2,341	4,638	4,167
	September	547	489	1,556	1,302	2,152	1,839	4,452	3,871
	October	597	566	1,605	1,453	2,270	2,085	4,686	4,221
	November	596	562	1,625	1,453	2,233	2,028	4,682	4,206
	December	670	645	778	652	1,470	1,318	4,164	3,774
	Average	**621**	**589**	**1,398**	**1,201**	**2,072**	**1,840**	**4,605**	**4,083**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1986 - Present (Continued)

(Thousand Barrels per Day)

Year/Month	Imports from Non-OPEC Sources[a]											
	Angola		Australia		Bahama Islands		Brazil		Canada		China, Peoples Republic of	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1986 Average	**112**	**102**	**41**	**30**	**37**	**0**	**50**	**0**	**807**	**570**	**90**	**68**
1987 Average	**192**	**180**	**58**	**49**	**37**	**0**	**84**	**0**	**848**	**608**	**82**	**63**
1988 Average	**212**	**203**	**64**	**59**	**32**	**0**	**98**	**0**	**999**	**681**	**88**	**82**
1989 Average	**284**	**279**	**36**	**31**	**34**	**0**	**82**	**0**	**931**	**630**	**80**	**76**
1990 Average	**237**	**236**	**53**	**47**	**37**	**0**	**49**	**0**	**934**	**643**	**80**	**77**
1991 Average	**254**	**254**	**26**	**21**	**35**	**0**	**22**	**0**	**1,033**	**743**	**91**	**87**
1992 Average	**336**	**336**	**19**	**17**	**36**	**0**	**20**	**0**	**1,069**	**797**	**90**	**84**
1993 Average	**336**	**336**	**19**	**18**	**28**	**0**	**33**	**0**	**1,181**	**900**	**51**	**50**
1994 Average	**331**	**322**	**17**	**16**	**29**	**0**	**31**	**1**	**1,272**	**983**	**65**	**64**
1995 Average	**367**	**360**	**16**	**16**	**2**	**0**	**8**	**0**	**1,332**	**1,040**	**53**	**53**
1996 Average	**351**	**344**	**31**	**25**	**1**	**0**	**9**	**0**	**1,424**	**1,075**	**57**	**57**
1997 Average	**427**	**425**	**48**	**31**	**1**	**0**	**5**	**0**	**1,563**	**1,198**	**49**	**48**
1998 Average	**468**	**465**	**57**	**31**	**4**	**0**	**26**	**0**	**1,598**	**1,266**	**42**	**42**
1999 Average	**361**	**357**	**42**	**31**	**3**	**0**	**26**	**0**	**1,539**	**1,178**	**21**	**13**
2000 January	249	247	43	43	0	0	59	0	1,869	1,378	7	0
February	186	177	58	50	0	0	21	0	1,904	1,350	22	21
March	312	308	44	44	0	0	10	0	1,673	1,261	91	37
April	348	335	97	70	0	0	57	0	1,750	1,323	61	18
May	378	366	94	65	0	0	33	0	1,907	1,488	39	28
June	376	359	56	56	0	0	102	19	1,830	1,430	55	54
July	310	310	87	84	0	0	88	11	1,775	1,376	44	39
August	279	279	45	45	0	0	72	17	1,790	1,318	33	32
September	266	266	42	22	0	0	22	0	1,789	1,321	40	40
October	266	254	42	42	0	0	37	0	1,716	1,262	70	69
November	341	329	22	22	0	0	80	13	1,736	1,283	21	20
December	301	301	42	42	0	0	36	0	1,948	1,380	45	39
Average	**301**	**295**	**56**	**49**	**0**	**0**	**51**	**5**	**1,807**	**1,348**	**44**	**33**
2001 January	312	300	53	44	0	0	143	35	1,935	1,342	33	33
February	499	485	27	20	0	0	88	0	1,867	1,346	2	0
March	374	374	47	20	6	0	81	21	1,938	1,411	35	14
April	381	381	111	68	14	0	87	31	1,852	1,391	24	14
May	358	356	31	21	0	0	127	16	1,780	1,368	31	21
June	302	302	22	22	5	0	67	0	1,900	1,472	26	0
July	297	285	65	65	0	0	86	0	1,690	1,270	23	20
August	323	311	20	20	19	0	54	0	1,723	1,272	57	28
September	334	324	46	46	10	0	80	17	1,685	1,262	22	0
October	242	222	30	21	26	0	84	32	1,734	1,316	22	21
November	267	267	21	21	31	0	56	0	1,899	1,414	0	0
December	263	263	46	46	10	0	33	0	1,944	1,408	9	0
Average	**328**	**321**	**43**	**34**	**10**	**0**	**82**	**13**	**1,828**	**1,356**	**24**	**13**
2002 January	310	297	41	41	20	0	48	16	1,901	1,307	2	0
February	304	290	69	69	26	0	84	52	1,897	1,374	45	42
March	321	300	42	42	46	0	131	65	1,844	1,339	4	0
April	384	371	66	66	7	0	163	84	2,032	1,497	1	0
May	336	336	63	63	19	0	144	77	1,969	1,496	16	15
June	475	463	21	21	16	0	149	69	1,914	1,466	51	34
July	308	298	43	43	35	0	114	59	1,901	1,359	43	32
August	233	220	45	23	47	0	191	119	2,020	1,526	45	34
September	342	329	87	65	53	0	90	53	1,883	1,413	16	0
October	258	246	67	67	55	0	132	75	2,110	1,578	49	48
November	402	390	84	64	37	0	73	17	2,083	1,484	22	21
December	317	312	61	51	42	0	66	14	2,090	1,493	15	13
Average	**332**	**321**	**57**	**51**	**34**	**0**	**116**	**58**	**1,971**	**1,445**	**26**	**20**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1986 - Present (Continued)

(Thousand Barrels per Day)

Year/Month	Imports from Non-OPEC Sources[a]											
	Colombia		Ecuador[c]		Gabon[d]		Italy		Malaysia		Mexico	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1986 Average	**87**	**57**	(c)	(c)	(d)	(d)	**76**	**0**	**12**	**11**	**699**	**621**
1987 Average	**148**	**115**	(c)	(c)	(d)	(d)	**54**	**1**	**13**	**12**	**655**	**602**
1988 Average	**134**	**106**	(c)	(c)	(d)	(d)	**65**	**5**	**19**	**19**	**747**	**674**
1989 Average	**172**	**136**	(c)	(c)	(d)	(d)	**34**	**3**	**39**	**39**	**767**	**716**
1990 Average	**182**	**140**	(c)	(c)	(d)	(d)	**58**	**2**	**41**	**40**	**755**	**689**
1991 Average	**163**	**123**	(c)	(c)	(d)	(d)	**47**	**3**	**24**	**24**	**807**	**759**
1992 Average	**126**	**102**	(c)	(c)	(d)	(d)	**55**	**0**	**10**	**10**	**830**	**787**
1993 Average	**171**	**141**	(c)	(c)	(d)	(d)	**31**	**0**	**11**	**10**	**919**	**863**
1994 Average	**161**	**146**	**91**	**91**	(d)	(d)	**22**	**0**	**10**	**6**	**984**	**939**
1995 Average	**219**	**207**	**97**	**96**	**229**	**229**	**5**	**0**	**8**	**6**	**1,068**	**1,027**
1996 Average	**234**	**226**	**104**	**96**	**184**	**184**	**8**	**0**	**11**	**6**	**1,244**	**1,207**
1997 Average	**271**	**270**	**115**	**114**	**230**	**230**	**7**	**0**	**23**	**8**	**1,385**	**1,360**
1998 Average	**354**	**349**	**101**	**98**	**207**	**207**	**12**	**0**	**35**	**26**	**1,351**	**1,321**
1999 Average	**468**	**452**	**118**	**114**	**168**	**168**	**10**	**0**	**35**	**21**	**1,324**	**1,254**
2000 January	452	426	83	83	150	150	16	0	84	65	1,340	1,266
February	355	335	102	102	155	155	48	0	71	36	1,237	1,150
March	464	460	122	122	136	128	29	0	34	15	1,382	1,286
April	402	370	114	114	172	172	20	0	34	25	1,417	1,359
May	346	338	91	91	155	155	13	0	35	20	1,362	1,314
June	283	265	106	96	88	88	36	0	29	14	1,499	1,431
July	237	199	112	112	105	105	18	0	55	42	1,311	1,241
August	313	299	190	184	106	106	20	0	21	0	1,426	1,381
September	360	332	205	202	182	182	24	0	15	0	1,494	1,437
October	207	180	166	160	164	164	23	0	86	66	1,263	1,248
November	324	283	141	136	181	181	49	0	21	11	1,340	1,290
December	359	327	104	96	129	129	69	0	59	55	1,405	1,348
Average	**342**	**318**	**128**	**125**	**143**	**143**	**30**	**0**	**45**	**29**	**1,373**	**1,313**
2001 January	379	345	103	94	94	94	43	0	41	4	1,456	1,391
February	321	294	92	90	177	177	44	0	18	0	1,120	1,058
March	228	204	103	103	152	152	64	0	87	54	1,454	1,371
April	301	257	123	120	177	177	24	0	39	22	1,572	1,548
May	323	260	155	149	127	127	49	0	31	0	1,312	1,266
June	308	248	111	84	155	155	32	0	24	13	1,234	1,214
July	239	215	126	117	149	149	55	0	13	0	1,348	1,322
August	350	326	126	113	98	98	19	0	26	10	1,471	1,422
September	307	268	133	132	86	86	63	0	29	21	1,490	1,437
October	234	226	184	178	136	136	27	0	59	34	1,432	1,399
November	278	236	97	97	173	173	47	0	25	12	1,765	1,717
December	283	242	80	80	159	159	8	0	47	15	1,603	1,558
Average	**296**	**260**	**120**	**113**	**140**	**140**	**40**	**0**	**37**	**15**	**1,440**	**1,394**
2002 January	260	228	116	83	206	206	30	0	33	14	1,416	1,373
February	352	331	84	77	61	61	26	0	11	0	1,611	1,571
March	242	233	110	104	124	124	54	0	6	0	1,473	1,437
April	291	266	93	75	164	164	38	0	0	0	1,486	1,442
May	210	192	91	82	188	188	36	0	30	22	1,565	1,492
June	229	204	117	105	123	123	16	0	7	0	1,519	1,474
July	224	203	110	93	206	206	22	0	20	11	1,604	1,529
August	239	217	79	79	170	170	24	0	38	29	1,500	1,475
September	275	263	114	102	164	164	24	0	0	0	1,453	1,417
October	255	232	156	151	88	88	34	0	22	17	1,574	1,524
November	270	212	153	148	127	127	40	0	23	12	1,580	1,532
December	289	248	100	100	88	88	58	0	4	0	1,781	1,734
Average	**260**	**235**	**110**	**100**	**143**	**143**	**34**	**0**	**16**	**9**	**1,547**	**1,500**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1986 - Present (Continued)

(Thousand Barrels per Day)

Year/Month	Imports from Non-OPEC Sources[a]											
	Netherlands		Netherlands Antilles		Norway		Puerto Rico		Russia[f]		Spain	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1986 Average	**54**	**0**	**25**	**0**	**60**	**53**	**21**	**0**	**18**	**(s)**	**53**	**0**
1987 Average	**60**	**0**	**29**	**0**	**80**	**70**	**21**	**0**	**11**	**0**	**55**	**0**
1988 Average	**61**	**0**	**36**	**0**	**67**	**62**	**22**	**0**	**29**	**0**	**68**	**0**
1989 Average	**49**	**0**	**42**	**0**	**138**	**127**	**32**	**0**	**48**	**0**	**67**	**0**
1990 Average	**55**	**0**	**31**	**0**	**102**	**96**	**32**	**0**	**45**	**1**	**47**	**0**
1991 Average	**29**	**0**	**81**	**0**	**82**	**74**	**27**	**0**	**29**	**1**	**33**	**0**
1992 Average	**26**	**0**	**65**	**0**	**127**	**119**	**26**	**0**	**18**	**5**	**32**	**0**
1993 Average	**10**	**0**	**82**	**0**	**142**	**137**	**29**	**0**	**55**	**36**	**37**	**0**
1994 Average	**32**	**0**	**98**	**0**	**202**	**190**	**22**	**0**	**30**	**27**	**37**	**0**
1995 Average	**15**	**0**	**52**	**0**	**273**	**258**	**15**	**0**	**25**	**14**	**16**	**1**
1996 Average	**19**	**0**	**64**	**0**	**313**	**293**	**20**	**0**	**25**	**18**	**29**	**1**
1997 Average	**25**	**0**	**74**	**0**	**309**	**288**	**16**	**0**	**13**	**3**	**21**	**0**
1998 Average	**31**	**0**	**82**	**0**	**236**	**221**	**15**	**0**	**24**	**9**	**18**	**0**
1999 Average	**27**	**0**	**65**	**0**	**304**	**263**	**13**	**0**	**89**	**21**	**10**	**0**
2000 January	12	0	110	0	314	262	14	0	29	0	37	0
February	45	0	60	0	381	328	15	0	120	0	35	0
March	39	0	74	0	346	305	13	0	63	17	23	0
April	21	0	41	0	397	348	14	0	83	25	31	0
May	16	0	75	0	307	295	20	0	44	13	8	0
June	43	0	95	0	274	240	17	0	75	0	28	0
July	8	0	63	0	545	482	13	0	78	0	23	0
August	22	8	138	0	377	334	11	0	73	6	47	0
September	39	0	56	0	363	323	16	0	89	8	21	0
October	40	0	142	0	306	283	16	0	111	13	20	0
November	34	0	103	0	293	241	8	0	50	0	6	0
December	41	0	119	0	220	186	21	0	55	0	16	0
Average	**30**	**1**	**90**	**0**	**343**	**302**	**15**	**0**	**72**	**7**	**25**	**0**
2001 January	77	0	141	0	321	229	11	0	190	0	58	0
February	48	0	101	0	395	299	8	0	183	0	47	0
March	48	0	125	0	400	313	5	0	53	0	35	0
April	23	0	105	0	382	325	6	0	115	0	19	0
May	61	0	44	0	411	376	3	0	88	0	31	0
June	56	0	66	0	284	254	12	0	47	0	33	0
July	25	0	70	0	448	363	0	0	81	0	25	0
August	40	0	67	0	287	227	0	0	118	0	11	0
September	34	0	55	0	388	350	3	0	124	0	27	0
October	50	0	75	0	259	211	0	0	34	0	22	0
November	22	0	77	0	387	331	0	0	22	0	16	0
December	33	0	46	0	140	106	0	0	30	0	43	0
Average	**43**	**0**	**81**	**0**	**341**	**281**	**4**	**0**	**90**	**0**	**31**	**0**
2002 January	25	0	120	0	155	135	0	0	61	0	16	0
February	48	0	145	0	264	224	0	0	51	0	10	0
March	77	0	112	0	338	296	0	0	95	12	19	0
April	111	0	94	0	577	523	2	0	192	36	8	0
May	103	0	48	0	519	467	0	0	371	220	23	0
June	69	0	76	0	527	490	0	0	231	78	8	0
July	39	0	51	0	495	448	0	0	220	79	30	0
August	87	0	56	0	478	402	0	0	236	100	29	0
September	21	0	77	0	342	294	0	0	225	104	0	0
October	75	0	71	0	318	308	0	0	295	190	0	0
November	70	0	84	0	409	388	0	0	255	85	19	0
December	61	0	43	0	288	202	0	0	276	108	41	0
Average	**66**	**0**	**81**	**0**	**393**	**348**	**(s)**	**0**	**210**	**85**	**17**	**0**

See footnotes at end of table.

Table S3. Crude Oil and Petroleum Product Imports, 1986 - Present (Continued)

(Thousand Barrels per Day)

Year/Month	Imports from Non-OPEC Sources[a]										Total Imports	
	Trinidad and Tobago		United Kingdom		Virgin Islands		Other Non-OPEC		Total Non-OPEC[c]			
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1986 Average	**125**	**93**	**350**	**317**	**244**	**0**	**426**	**144**	**3,387**	**2,065**	**6,224**	**4,178**
1987 Average	**106**	**75**	**352**	**304**	**272**	**0**	**459**	**196**	**3,617**	**2,274**	**6,678**	**4,674**
1988 Average	**97**	**71**	**315**	**254**	**242**	**0**	**487**	**196**	**3,882**	**2,411**	**7,402**	**5,107**
1989 Average	**94**	**73**	**215**	**160**	**321**	**0**	**457**	**197**	**3,921**	**2,467**	**8,061**	**5,843**
1990 Average	**96**	**76**	**189**	**155**	**282**	**0**	**417**	**180**	**3,721**	**2,381**	**8,018**	**5,894**
1991 Average	**88**	**72**	**138**	**106**	**243**	**0**	**282**	**137**	**3,535**	**2,405**	**7,627**	**5,782**
1992 Average	**95**	**70**	**230**	**200**	**249**	**0**	**335**	**149**	**3,796**	**2,676**	**7,888**	**6,083**
1993 Average	**74**	**55**	**350**	**312**	**254**	**0**	**452**	**240**	**4,266**	**3,100**	**8,620**	**6,787**
1994 Average	**77**	**62**	**458**	**396**	**328**	**0**	**450**	**239**	**4,749**	**3,483**	**8,996**	**7,063**
1995 Average	**70**	**62**	**383**	**341**	**278**	**0**	**302**	**181**	**4,833**	**3,889**	**8,835**	**7,230**
1996 Average	**76**	**58**	**308**	**216**	**313**	**0**	**440**	**265**	**5,267**	**4,070**	**9,478**	**7,508**
1997 Average	**61**	**56**	**226**	**169**	**300**	**0**	**422**	**250**	**5,593**	**4,450**	**10,162**	**8,225**
1998 Average	**66**	**53**	**250**	**161**	**293**	**0**	**531**	**288**	**5,803**	**4,537**	**10,708**	**8,706**
1999 Average	**58**	**40**	**365**	**284**	**280**	**1**	**575**	**304**	**5,899**	**4,502**	**10,852**	**8,731**
2000 January	89	71	273	171	255	0	486	194	5,971	4,355	10,140	7,829
February	71	52	241	149	306	0	660	255	6,095	4,159	11,003	8,318
March	60	37	283	240	226	0	574	150	5,997	4,411	11,052	8,790
April	96	70	444	348	312	0	476	232	6,387	4,808	11,558	9,341
May	77	51	560	449	307	0	645	262	6,512	4,935	11,415	9,085
June	107	52	349	282	356	0	671	286	6,474	4,672	12,032	9,533
July	93	54	476	458	267	0	703	307	6,410	4,821	11,588	9,398
August	80	55	405	343	297	0	526	184	6,268	4,591	12,173	9,939
September	97	58	291	248	323	0	695	186	6,430	4,625	11,900	9,484
October	95	56	381	275	237	0	593	175	5,983	4,248	11,290	8,969
November	80	56	332	263	299	0	613	174	6,073	4,301	11,309	8,913
December	75	55	342	252	318	0	775	164	6,478	4,376	12,053	9,229
Average	**85**	**56**	**366**	**291**	**291**	**0**	**618**	**214**	**6,257**	**4,526**	**11,459**	**9,071**
2001 January	95	55	417	287	339	0	785	164	7,028	4,415	12,555	8,933
February	45	16	378	249	273	0	840	186	6,573	4,220	11,643	8,609
March	67	57	253	167	263	0	483	211	6,301	4,472	12,132	9,603
April	85	60	254	155	201	0	656	216	6,549	4,764	12,653	10,111
May	58	38	418	359	223	0	793	164	6,450	4,520	12,529	9,885
June	70	59	241	192	339	0	759	218	6,091	4,232	11,732	9,105
July	85	58	368	309	320	0	739	392	6,252	4,565	11,760	9,552
August	86	51	314	273	202	0	920	469	6,333	4,620	11,622	9,383
September	91	51	229	165	283	0	704	221	6,225	4,379	11,818	9,339
October	45	39	365	265	263	0	514	182	5,837	4,284	11,379	9,211
November	68	56	367	278	259	0	656	257	6,531	4,858	11,628	9,320
December	69	69	286	225	247	0	592	246	5,969	4,417	10,994	8,839
Average	**72**	**51**	**324**	**244**	**268**	**0**	**702**	**244**	**6,343**	**4,480**	**11,871**	**9,328**
2002 January	53	53	366	284	278	0	604	207	6,059	4,244	11,088	8,709
February	84	84	360	279	242	0	398	133	6,171	4,588	10,904	8,753
March	72	68	272	220	198	0	631	164	6,207	4,405	11,198	8,799
April	59	59	454	380	168	0	772	230	7,160	5,193	11,765	9,301
May	71	63	436	351	165	0	804	273	7,208	5,337	11,769	9,323
June	89	76	726	613	236	0	799	346	7,397	5,561	11,753	9,324
July	72	72	529	481	240	0	951	403	7,258	5,316	11,624	9,184
August	58	50	574	480	234	0	872	454	7,252	5,378	11,890	9,544
September	104	76	353	278	231	0	769	367	6,622	4,926	11,075	8,797
October	112	75	582	486	235	0	718	225	7,207	5,311	11,893	9,532
November	102	82	669	632	321	0	762	255	7,586	5,448	12,268	9,654
December	85	55	415	376	281	0	534	173	6,935	4,968	11,100	8,741
Average	**80**	**68**	**478**	**405**	**236**	**0**	**720**	**270**	**6,925**	**5,058**	**11,530**	**9,140**

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

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

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

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

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

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

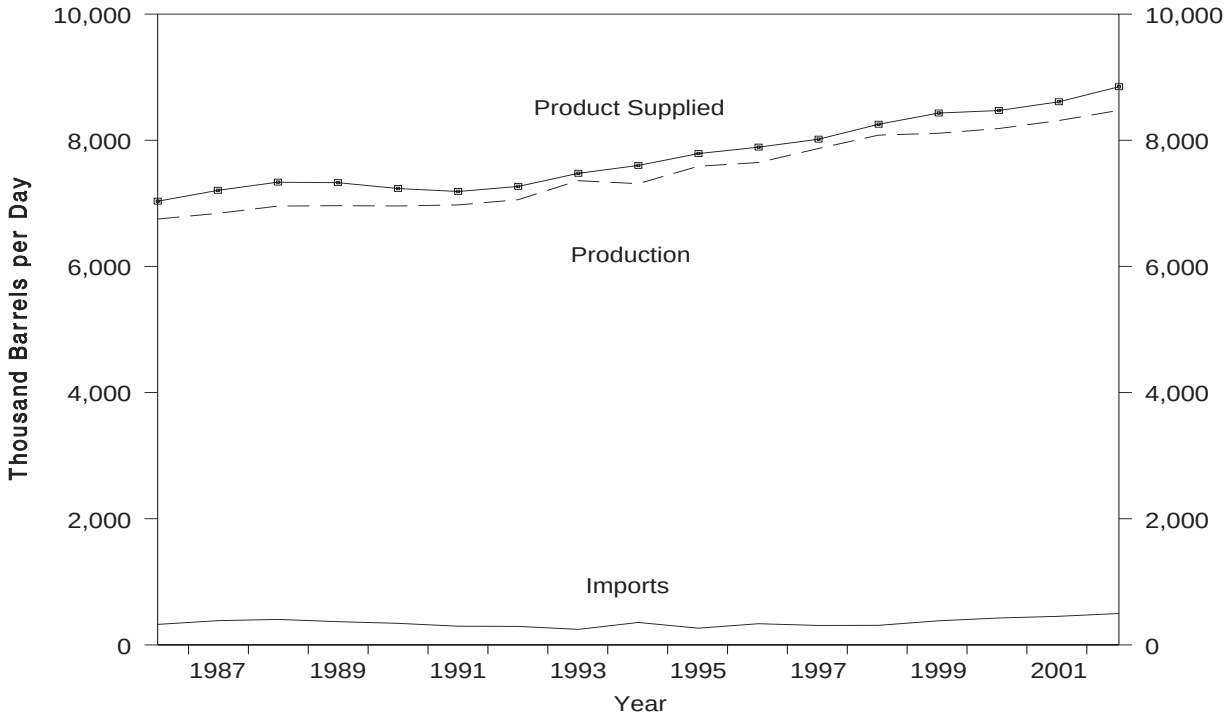
[g] A small amount of Iranian crude oil entered the United States in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

(s) = Less than 500 barrels per day.

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

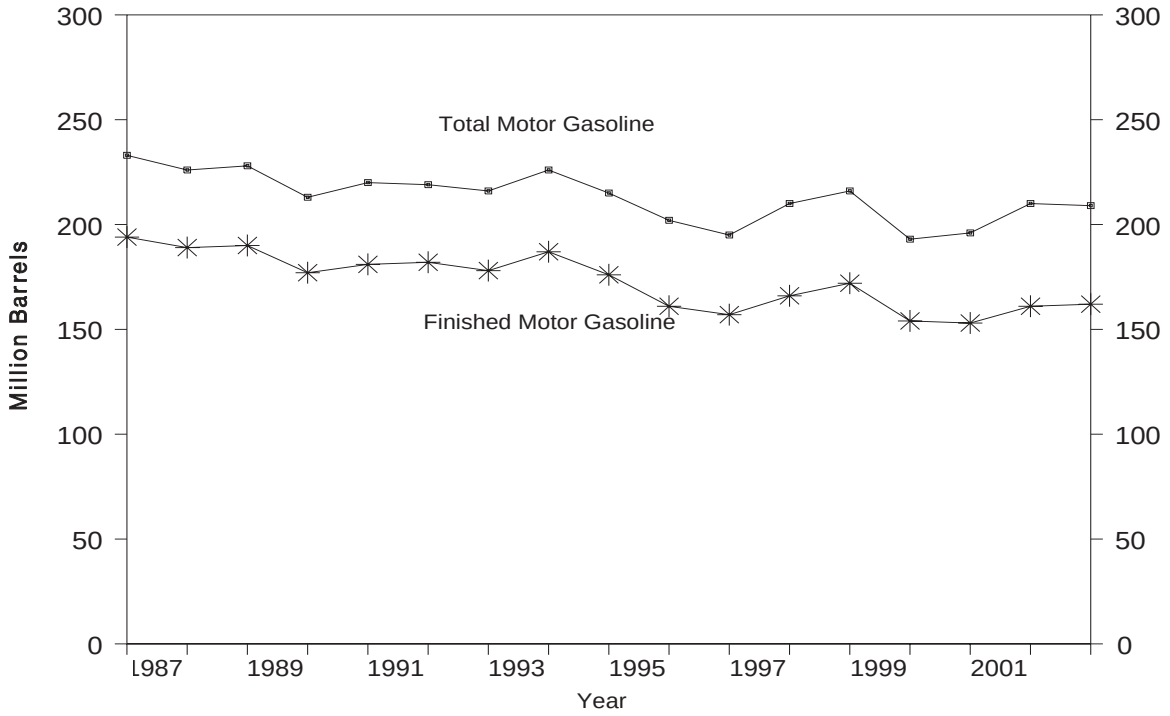
Source: See Summary Statistics Table and Figure Sources.

Figure S5. Finished Motor Gasoline Supply and Disposition, 1986 - Present



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

Figure S6. Motor Gasoline Ending Stocks, 1986 - Present



Note: Total motor gasoline includes motor gasoline blending components and finished motor gasoline.
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S4. See Summary Statistics Table and Figure Sources.

Table S4. Finished Motor Gasoline Supply and Disposition, 1986 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition			Ending Stocks[a] (Million Barrels)		Ending Stocks[a] (Million Barrels)
						Motor Gasoline		
	Total Production[b]	Imports[c]	Stock Change[c,d]	Exports	Product Supplied[b]	Total[e]	Finished	Oxygenates
1986 Average	**6,752**	**326**	**11**	**33**	**7,034**	**233**	**194**	**—**
1987 Average	**6,841**	**384**	**-15**	**35**	**7,206**	**226**	**189**	**—**
1988 Average	**6,956**	**405**	**3**	**22**	**7,336**	**228**	**190**	**—**
1989 Average	**6,963**	**369**	**-35**	**39**	**7,328**	**213**	**177**	**—**
1990 Average	**6,959**	**342**	**10**	**55**	**7,235**	**220**	**181**	**—**
1991 Average	**6,975**	**297**	**3**	**82**	**7,188**	**219**	**182**	**—**
1992 Average	**7,058**	**294**	**-11**	**96**	**7,268**	**216**	**178**	**—**
1993 Average	**7,360**	**247**	**26**	**105**	**7,476**	**226**	**187**	**13**
1994 Average	**7,312**	**356**	**-31**	**97**	**7,601**	**215**	**176**	**17**
1995 Average	**7,588**	**265**	**-40**	**104**	**7,789**	**202**	**161**	**12**
1996 Average	**7,647**	**336**	**-12**	**104**	**7,891**	**195**	**157**	**13**
1997 Average	**7,870**	**309**	**26**	**137**	**8,017**	**210**	**166**	**12**
1998 Average	**8,082**	**311**	**15**	**125**	**8,253**	**216**	**172**	**14**
1999 Average	**8,111**	**382**	**-49**	**111**	**8,431**	**193**	**154**	**14**
2000 January	7,798	343	362	127	7,653	208	165	14
February	7,658	410	-306	83	8,291	201	156	15
March	8,032	403	22	108	8,305	204	157	14
April	8,130	472	117	111	8,375	206	161	13
May	8,398	441	52	126	8,661	208	162	14
June	8,550	451	76	100	8,824	210	165	14
July	8,320	435	3	110	8,642	209	165	14
August	8,251	426	-438	194	8,921	194	151	13
September	8,358	449	106	184	8,518	197	154	13
October	8,031	381	-221	217	8,417	188	147	14
November	8,394	471	311	170	8,384	198	157	14
December	8,298	443	-120	190	8,670	196	153	12
Average	**8,186**	**427**	**-3**	**144**	**8,472**	**—**	**—**	**—**
2001 January	7,888	519	183	125	8,099	206	159	12
February	7,822	394	-146	128	8,234	206	155	12
March	8,011	346	-320	145	8,532	194	145	12
April	8,450	455	187	143	8,575	200	150	12
May	8,651	473	316	102	8,706	213	160	12
June	8,637	490	310	127	8,690	221	169	13
July	8,481	443	-229	129	9,023	209	162	13
August	8,277	415	-378	117	8,953	193	151	13
September	8,381	539	248	115	8,557	206	158	14
October	8,446	435	70	156	8,655	208	160	13
November	8,366	452	34	107	8,677	212	161	13
December	8,301	491	7	200	8,585	210	161	13
Average	**8,312**	**454**	**23**	**133**	**8,610**	**—**	**—**	**—**
2002 January	8,160	428	265	96	8,227	222	170	15
February	8,117	442	-149	102	8,607	218	166	14
March	8,072	504	-183	104	8,655	213	160	14
April	8,626	512	239	134	8,766	216	167	14
May	8,729	480	42	88	9,078	218	168	15
June	8,661	586	-25	131	9,140	217	168	15
July	8,665	526	-89	136	9,143	215	165	15
August	8,666	538	-241	133	9,313	204	157	14
September	8,320	480	1	113	8,687	206	157	13
October	8,190	465	-295	135	8,814	194	148	13
November	8,738	548	327	130	8,829	206	158	13
December	8,734	470	124	186	8,893	209	162	12
Average	**8,475**	**498**	**1**	**124**	**8,848**	**—**	**—**	**—**

[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. Refer to Appendix B, Explanatory Note 10 for 1992 new basis product supplied.

[c] Beginning in 1981, excludes blending components.

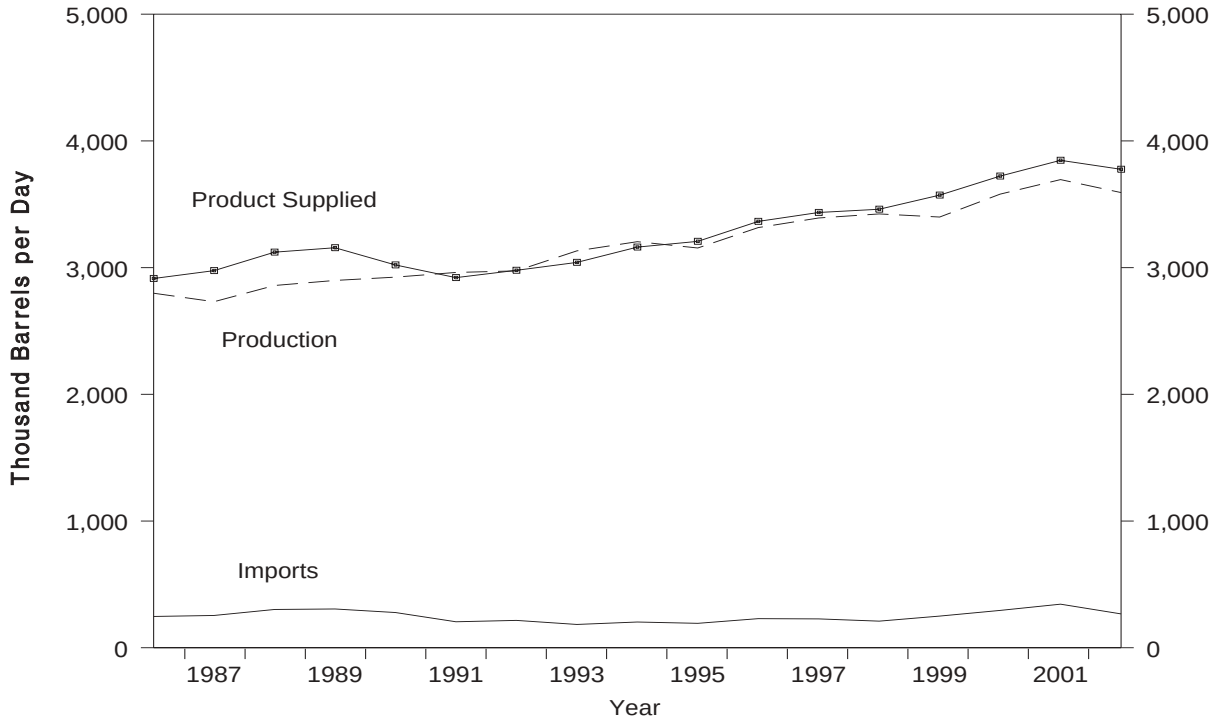
[d] A negative number indicates a decrease in stocks and a positive number indicates an increase.

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

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

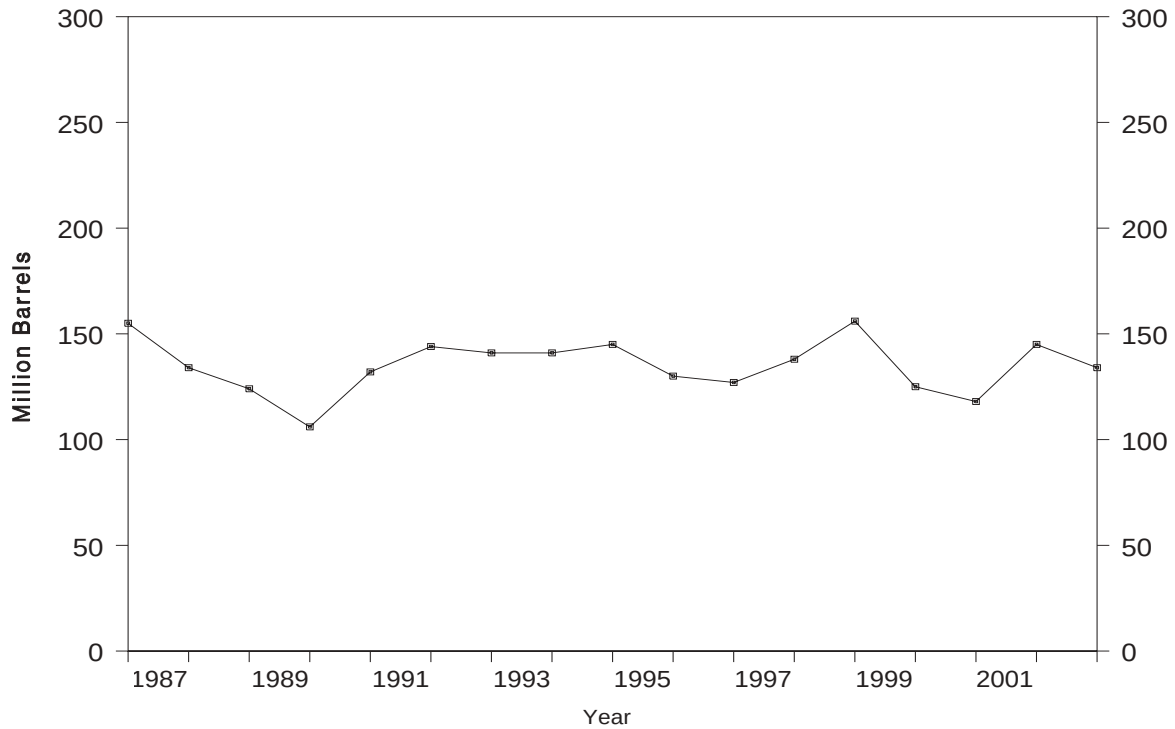
Source: See Summary Statistics Table and Figure Sources.

Figure S7. Distillate Fuel Oil Supply and Disposition, 1986 - Present



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

Figure S8. Distillate Fuel Oil Ending Stocks, 1986 - Present



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

Table S5. Distillate Fuel Oil Supply and Disposition, 1986 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition			Ending Stocks[a] (Million Barrels)		
	Total Production	Imports	Stock Change[b]	Exports	Product Supplied	Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur
1986 Average	**2,798**	**247**	**31**	**100**	**2,914**	**155**	**—**	**—**
1987 Average	**2,731**	**255**	**-56**	**66**	**2,976**	**134**	**—**	**—**
1988 Average	**2,859**	**302**	**-30**	**69**	**3,122**	**124**	**—**	**—**
1989 Average	**2,899**	**306**	**-49**	**97**	**3,157**	**106**	**—**	**—**
1990 Average	**2,925**	**278**	**73**	**109**	**3,021**	**132**	**—**	**—**
1991 Average	**2,962**	**205**	**31**	**215**	**2,921**	**144**	**—**	**—**
1992 Average	**2,974**	**216**	**-8**	**219**	**2,979**	**141**	**—**	**—**
1993 Average	**3,132**	**184**	**1**	**274**	**3,041**	**141**	**64**	**77**
1994 Average	**3,205**	**203**	**12**	**234**	**3,162**	**145**	**73**	**73**
1995 Average	**3,155**	**193**	**-41**	**183**	**3,207**	**130**	**67**	**63**
1996 Average	**3,316**	**230**	**-10**	**190**	**3,365**	**127**	**68**	**58**
1997 Average	**3,392**	**228**	**32**	**152**	**3,435**	**138**	**68**	**70**
1998 Average	**3,424**	**210**	**48**	**124**	**3,461**	**156**	**77**	**79**
1999 Average	**3,399**	**250**	**-84**	**162**	**3,572**	**125**	**69**	**56**
2000 January	3,123	218	-609	132	3,818	107	66	41
February	3,348	510	-49	112	3,794	105	64	41
March	3,342	260	-302	211	3,693	96	60	36
April	3,533	234	135	178	3,455	100	66	34
May	3,650	316	158	127	3,681	105	67	38
June	3,481	258	41	149	3,549	106	68	38
July	3,520	199	219	132	3,369	113	72	41
August	3,678	234	-67	253	3,726	111	66	44
September	3,844	283	147	194	3,786	115	68	47
October	3,774	259	66	255	3,712	117	68	49
November	3,785	332	97	191	3,829	120	71	49
December	3,872	447	-65	135	4,250	118	72	46
Average	**3,580**	**295**	**-20**	**173**	**3,722**	**—**	**—**	**—**
2001 January	3,609	789	6	67	4,325	118	68	50
February	3,612	635	-42	77	4,212	117	70	47
March	3,483	348	-387	75	4,143	105	68	37
April	3,650	288	-3	107	3,834	105	66	39
May	3,652	310	71	146	3,746	107	65	42
June	3,702	302	225	120	3,659	114	69	45
July	3,837	209	364	113	3,569	125	74	51
August	3,654	212	-102	140	3,829	122	68	54
September	3,625	317	166	152	3,624	127	72	55
October	3,796	253	62	99	3,888	129	69	60
November	3,968	244	334	132	3,746	139	76	63
December	3,744	241	180	202	3,604	145	82	62
Average	**3,695**	**344**	**73**	**119**	**3,847**	**—**	**—**	**—**
2002 January	3,508	298	-244	109	3,940	137	80	57
February	3,498	248	-248	279	3,714	130	78	52
March	3,360	234	-223	67	3,750	123	74	49
April	3,647	219	-23	68	3,821	122	74	48
May	3,709	193	149	74	3,679	127	77	50
June	3,679	204	203	93	3,587	133	79	54
July	3,561	188	22	44	3,683	134	77	57
August	3,538	205	-104	119	3,728	131	71	60
September	3,536	196	-124	127	3,730	127	68	59
October	3,380	350	-175	96	3,808	121	66	56
November	3,768	373	99	114	3,929	124	71	53
December	3,922	496	312	171	3,934	134	81	53
Average	**3,592**	**267**	**-29**	**112**	**3,776**	**—**	**—**	**—**

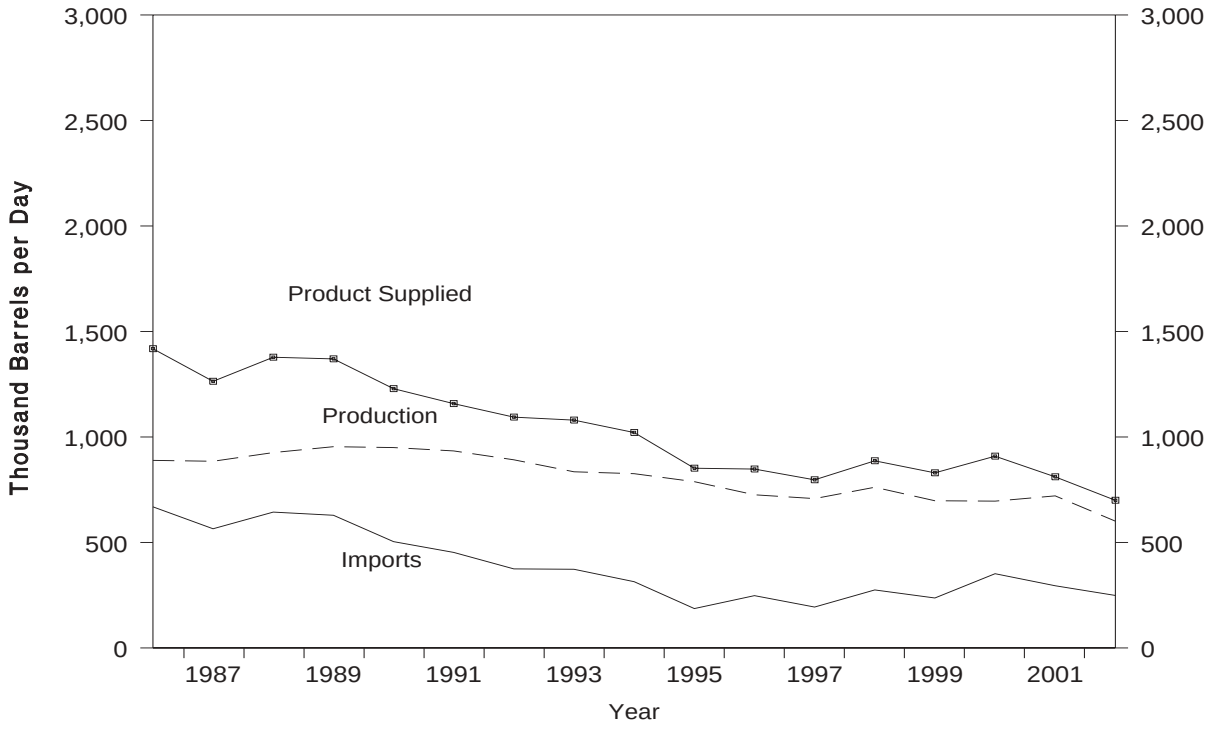
[a] Stocks are totals as of end of period. Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

[b] A negative number indicates a decrease in stocks and a positive number indicates an increase. Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

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

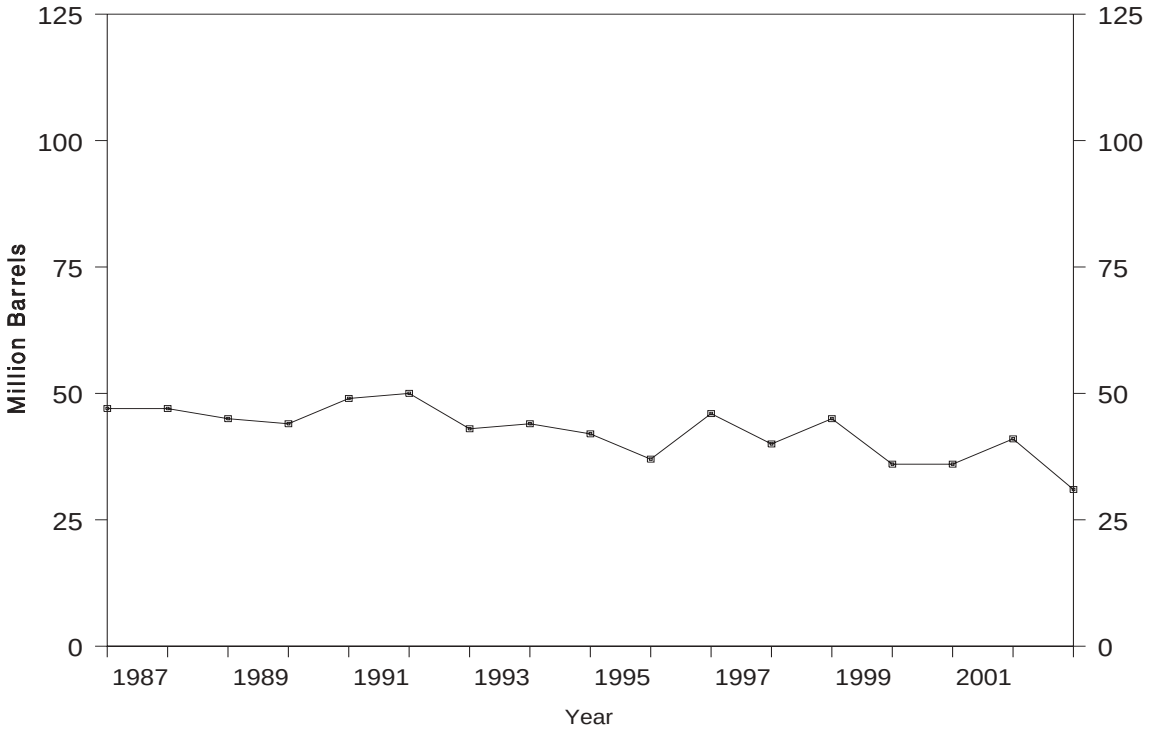
Source: See Summary Statistics Table and Figure Sources.

Figure S9. Residual Fuel Oil Supply and Disposition, 1986 - Present



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

Figure S10. Residual Fuel Oil Ending Stocks, 1986 - Present



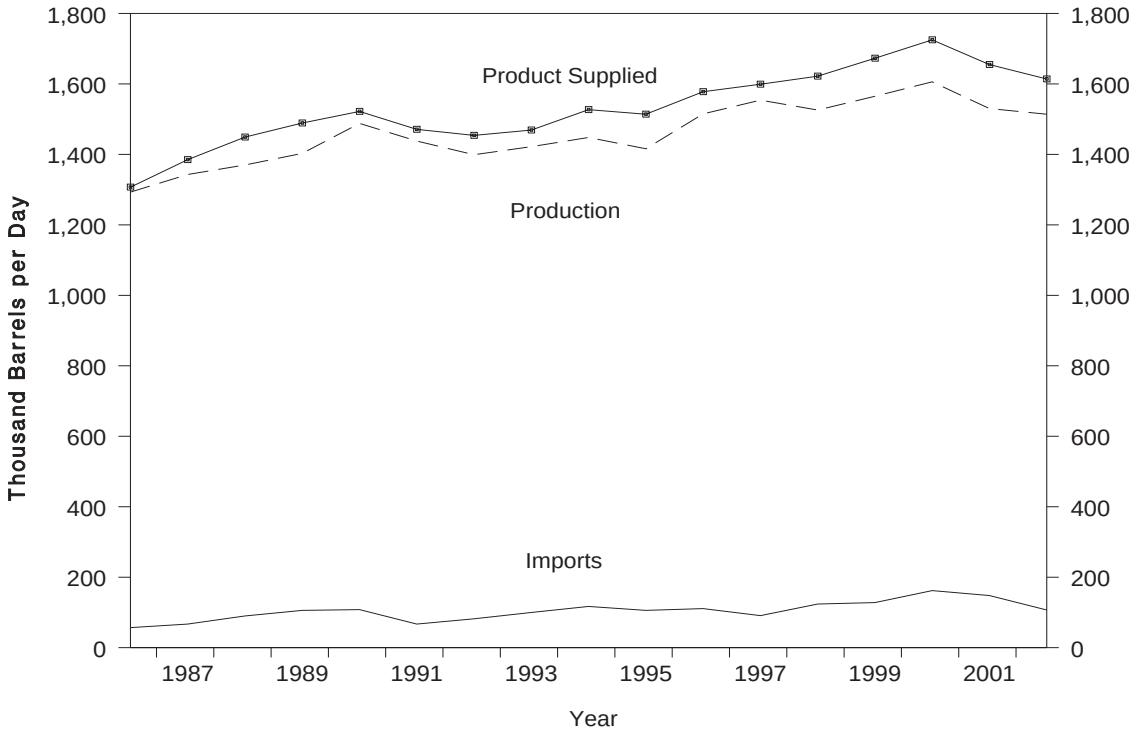
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S6. See Summary Statistics Table and Figure Sources.

Table S6. Residual Fuel Oil Supply and Disposition, 1986 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition			
	Total Production	Imports	Stock Change[a]	Exports	Product Supplied	Ending Stocks[b] (Million Barrels)
1986 Average	**889**	**669**	**-8**	**147**	**1,418**	**47**
1987 Average	**885**	**565**	**(s)**	**186**	**1,264**	**47**
1988 Average	**926**	**644**	**-8**	**200**	**1,378**	**45**
1989 Average	**954**	**629**	**-2**	**215**	**1,370**	**44**
1990 Average	**950**	**504**	**13**	**211**	**1,229**	**49**
1991 Average	**934**	**453**	**4**	**226**	**1,158**	**50**
1992 Average	**892**	**375**	**-20**	**193**	**1,094**	**43**
1993 Average	**835**	**373**	**4**	**123**	**1,080**	**44**
1994 Average	**826**	**314**	**-6**	**125**	**1,021**	**42**
1995 Average	**788**	**187**	**-13**	**136**	**852**	**37**
1996 Average	**726**	**248**	**24**	**102**	**848**	**46**
1997 Average	**708**	**194**	**-15**	**120**	**797**	**40**
1998 Average	**762**	**275**	**12**	**138**	**887**	**45**
1999 Average	**698**	**237**	**-25**	**129**	**830**	**36**
2000 January	640	336	10	137	830	36
February	627	316	-60	149	854	34
March	649	269	66	167	685	36
April	620	267	-37	139	784	35
May	640	265	63	123	719	37
June	679	390	-8	133	945	37
July	741	409	-54	113	1,091	35
August	760	333	57	94	941	37
September	702	360	19	148	895	38
October	747	497	-87	221	1,110	35
November	778	341	133	100	885	39
December	768	440	-90	143	1,156	36
Average	**696**	**352**	**1**	**139**	**909**	**—**
2001 January	809	458	31	160	1,075	37
February	743	401	44	200	901	38
March	750	313	20	183	860	39
April	817	316	21	185	927	40
May	786	339	46	246	833	41
June	783	313	19	209	867	42
July	639	309	-82	158	872	39
August	622	264	-132	214	805	35
September	653	202	72	161	621	37
October	710	198	33	139	736	38
November	685	233	33	209	676	39
December	655	200	60	231	565	41
Average	**721**	**295**	**13**	**191**	**811**	**—**
2002 January	625	233	10	138	710	41
February	613	136	-84	171	662	39
March	617	225	-151	171	821	34
April	601	296	9	159	730	35
May	582	235	-23	160	680	34
June	540	256	-38	165	669	33
July	566	245	26	171	614	34
August	583	249	-52	272	612	32
September	607	254	36	200	625	33
October	593	228	18	153	650	34
November	648	366	68	160	786	36
December	641	259	-138	205	832	31
Average	**601**	**249**	**-27**	**177**	**700**	**—**

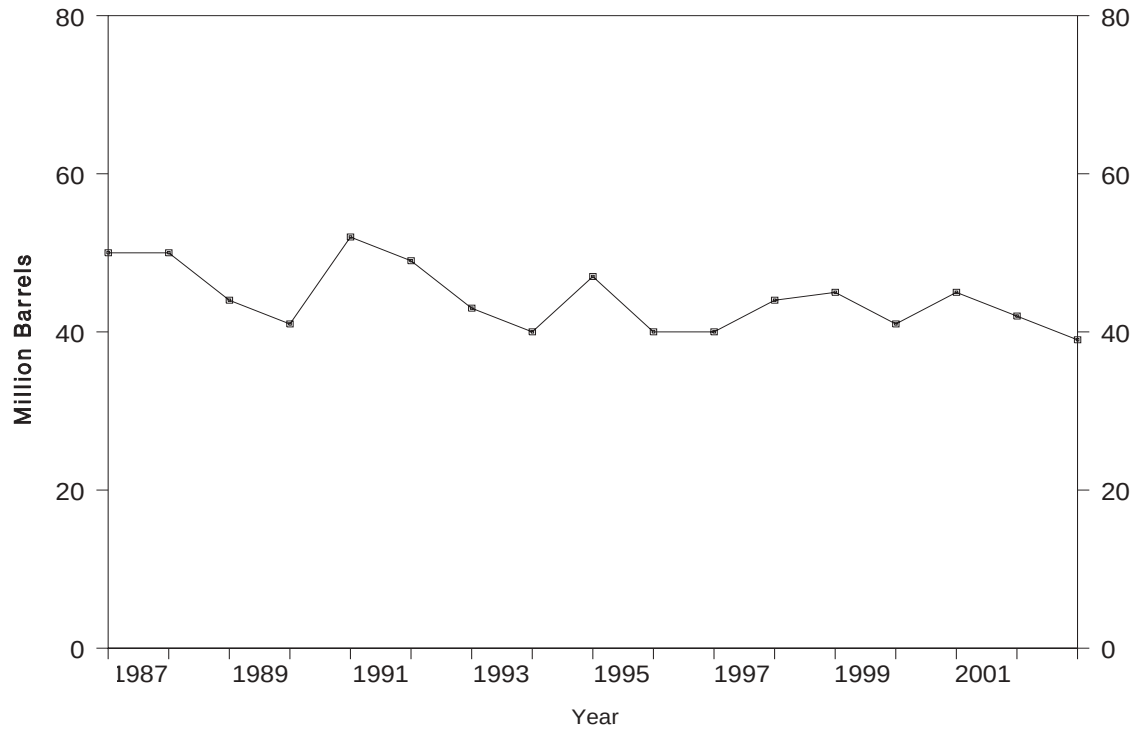
[a] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[b] Stocks are totals as of end of period.
(s)=Less than 500 barrels per day.
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.
Source: See Summary Statistics Table and Figure Sources.

Figure S11. Jet Fuel Supply and Disposition, 1986 - Present



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

Figure S12. Jet Fuel Ending Stocks, 1986 - Present



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

Table S7. Jet Fuel Supply and Disposition, 1986 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply			Disposition				Ending Stocks[a] (Million Barrels)	
	Production					Product Supplied			
	Total	Kerosene-Type	Imports	Stock Change[b]	Exports	Total	Kerosene-Type	Total	Kerosene Type
1986 Average	**1,293**	**1,097**	**57**	**25**	**18**	**1,307**	**1,105**	**50**	**43**
1987 Average	**1,343**	**1,138**	**67**	**(s)**	**24**	**1,385**	**1,181**	**50**	**42**
1988 Average	**1,370**	**1,164**	**90**	**-17**	**28**	**1,449**	**1,236**	**44**	**38**
1989 Average	**1,403**	**1,197**	**106**	**-8**	**27**	**1,489**	**1,284**	**41**	**34**
1990 Average	**1,488**	**1,311**	**108**	**31**	**43**	**1,522**	**1,340**	**52**	**46**
1991 Average	**1,438**	**1,274**	**67**	**-9**	**43**	**1,471**	**1,296**	**49**	**44**
1992 Average	**1,399**	**1,254**	**82**	**-16**	**43**	**1,454**	**1,310**	**43**	**39**
1993 Average	**1,422**	**1,309**	**100**	**-7**	**59**	**1,469**	**1,357**	**40**	**38**
1994 Average	**1,448**	**1,410**	**117**	**18**	**20**	**1,527**	**1,480**	**47**	**46**
1995 Average	**1,416**	**1,407**	**106**	**-19**	**26**	**1,514**	**1,497**	**40**	**39**
1996 Average	**1,515**	**1,513**	**111**	**(s)**	**48**	**1,578**	**1,575**	**40**	**40**
1997 Average	**1,554**	**1,554**	**91**	**11**	**35**	**1,599**	**1,598**	**44**	**44**
1998 Average	**1,526**	**1,525**	**124**	**2**	**26**	**1,622**	**1,623**	**45**	**45**
1999 Average	**1,565**	**1,565**	**128**	**-11**	**32**	**1,673**	**1,675**	**41**	**40**
2000 January	1,595	1,595	122	99	13	1,604	1,604	44	44
February	1,450	1,450	173	-70	17	1,676	1,677	42	41
March	1,561	1,561	120	-35	33	1,683	1,682	40	40
April	1,615	1,615	127	28	37	1,677	1,677	41	41
May	1,589	1,589	144	28	35	1,669	1,669	42	42
June	1,600	1,600	194	52	27	1,715	1,715	44	44
July	1,650	1,649	125	-25	21	1,779	1,779	43	43
August	1,636	1,636	221	-8	19	1,846	1,846	43	43
September	1,644	1,643	128	-13	34	1,750	1,750	42	42
October	1,645	1,645	186	12	42	1,778	1,778	43	43
November	1,620	1,620	162	-11	64	1,729	1,729	42	42
December	1,665	1,665	239	71	39	1,794	1,796	45	44
Average	**1,606**	**1,606**	**162**	**11**	**32**	**1,725**	**1,725**	**—**	**—**
2001 January	1,508	1,508	242	-20	27	1,742	1,743	44	44
February	1,497	1,497	230	-44	18	1,753	1,752	43	43
March	1,512	1,512	145	-69	41	1,685	1,685	41	41
April	1,548	1,547	153	-4	17	1,688	1,687	40	40
May	1,620	1,620	175	59	17	1,720	1,722	42	42
June	1,637	1,637	161	30	18	1,750	1,749	43	43
July	1,633	1,633	129	-27	23	1,766	1,763	42	42
August	1,597	1,597	123	-21	24	1,718	1,720	42	42
September	1,420	1,420	166	38	21	1,527	1,525	43	43
October	1,458	1,458	63	-79	31	1,569	1,568	40	40
November	1,398	1,398	104	-6	64	1,443	1,444	40	40
December	1,521	1,521	94	58	51	1,507	1,512	42	42
Average	**1,530**	**1,529**	**148**	**-7**	**29**	**1,655**	**1,656**	**—**	**—**
2002 January	1,477	1,477	99	-23	13	1,587	1,591	41	41
February	1,451	1,451	107	-15	40	1,532	1,532	41	41
March	1,505	1,505	109	31	3	1,581	1,581	42	42
April	1,492	1,491	137	-47	18	1,658	1,674	40	40
May	1,479	1,479	79	20	11	1,527	1,535	41	41
June	1,512	1,512	81	-63	9	1,647	1,656	39	39
July	1,569	1,568	92	-22	2	1,680	1,679	38	38
August	1,539	1,538	112	31	10	1,610	1,616	39	39
September	1,552	1,552	111	40	22	1,601	1,609	41	41
October	1,495	1,495	171	36	17	1,614	1,629	42	42
November	1,543	1,543	117	33	12	1,616	1,615	43	43
December	1,548	1,547	75	-113	30	1,706	1,722	39	39
Average	**1,514**	**1,514**	**107**	**-8**	**15**	**1,614**	**1,621**	**—**	**—**

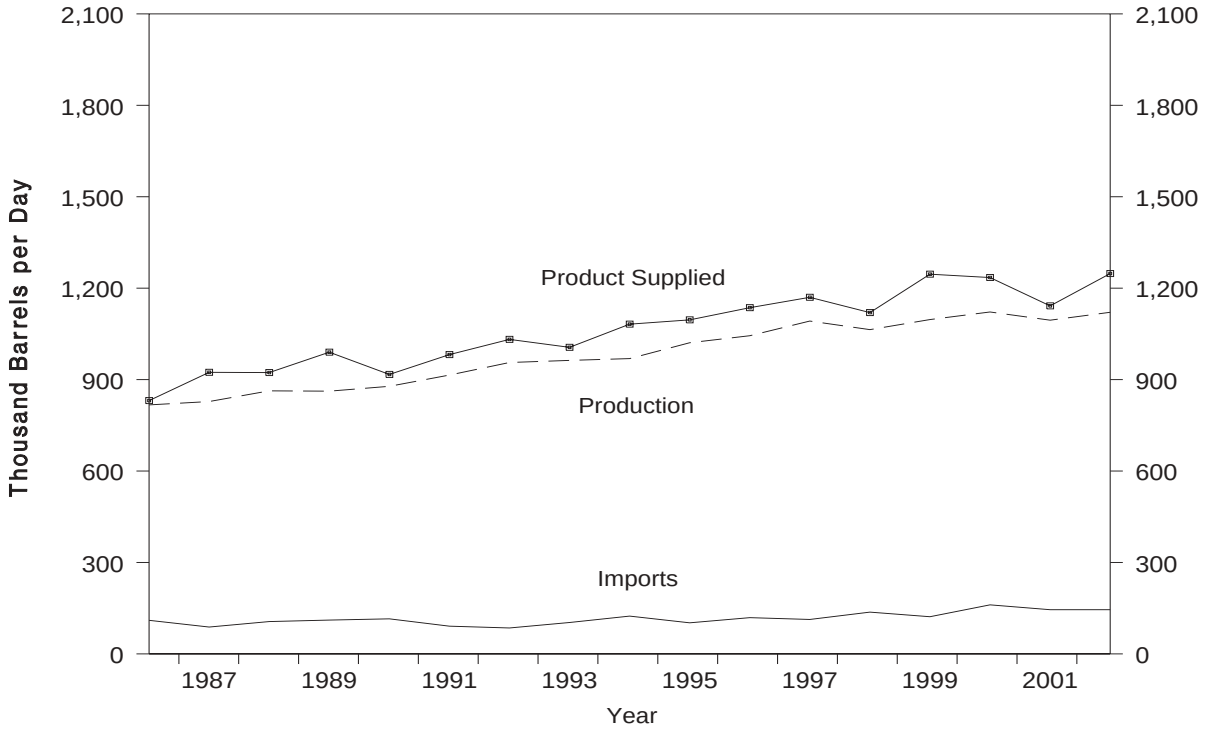
[a] Stocks are totals as of end of period.
[b] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[c] In January 1981 and 1983, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.

(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.

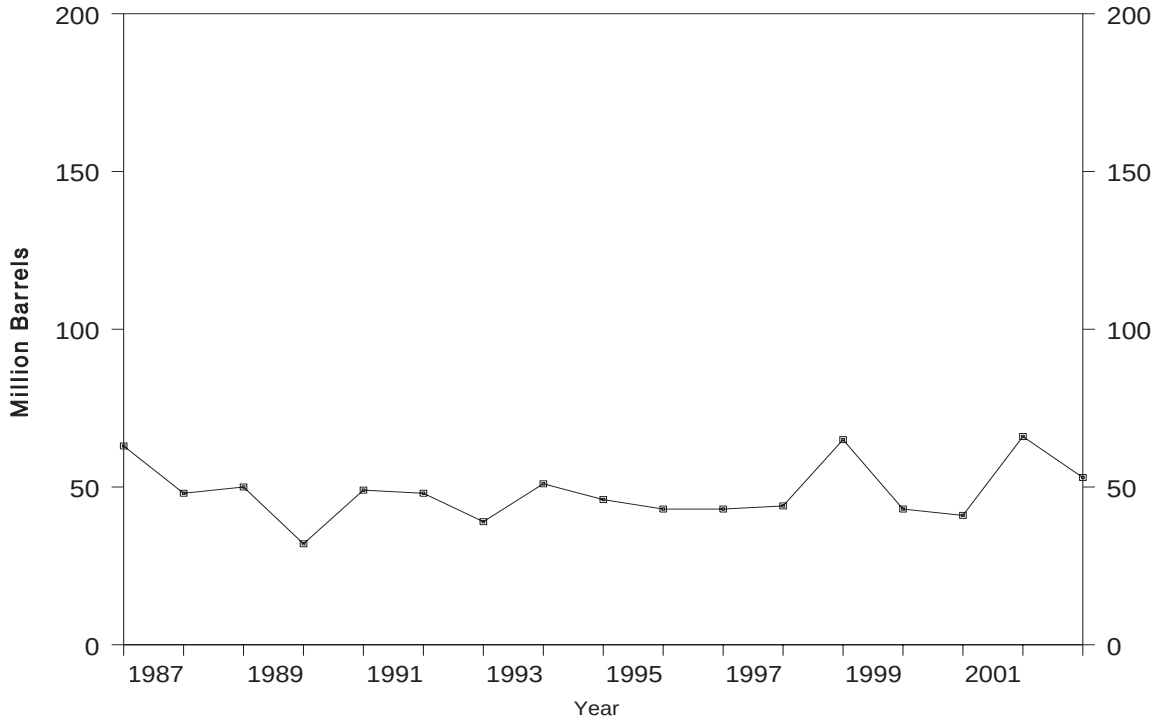
Source: See Summary Statistics Table and Figure Sources.

Figure S13. Propane/Propylene Supply and Disposition, 1986 - Present



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

Figure S14. Propane/Propylene Ending Stocks, 1986 - Present



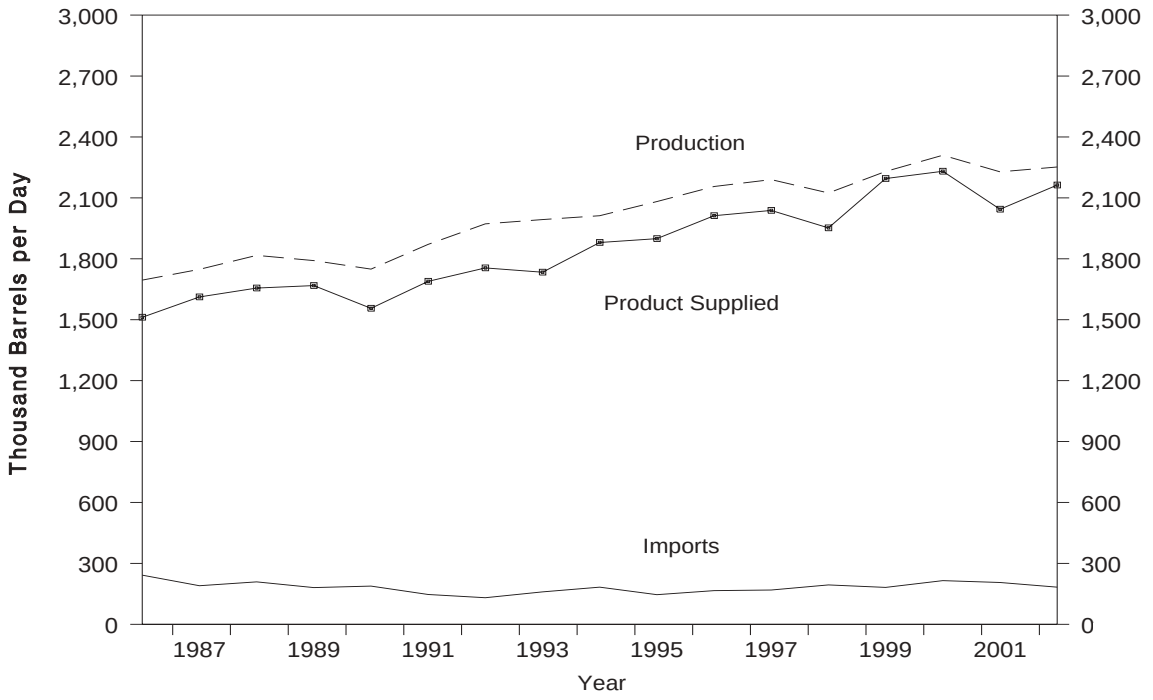
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S8. See Summary Statistics Table and Figure Sources.

Table S8. Propane/Propylene Supply and Disposition, 1986 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				
	Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Product Supplied	Ending Stocks[b] (Million Barrels)
1986 Average	**817**	**110**	**64**	**4**	**28**	**831**	**63**
1987 Average	**828**	**88**	**-41**	**8**	**24**	**924**	**48**
1988 Average	**863**	**106**	**7**	**8**	**31**	**923**	**50**
1989 Average	**862**	**111**	**-52**	**11**	**24**	**990**	**32**
1990 Average	**878**	**115**	**48**	**(s)**	**28**	**917**	**49**
1991 Average	**915**	**91**	**-3**	**(s)**	**28**	**982**	**48**
1992 Average	**956**	**85**	**-24**	**(s)**	**33**	**1,032**	**39**
1993 Average	**963**	**103**	**34**	**(s)**	**26**	**1,006**	**51**
1994 Average	**969**	**124**	**-13**	**0**	**24**	**1,082**	**46**
1995 Average	**1,021**	**102**	**-10**	**0**	**38**	**1,096**	**43**
1996 Average	**1,044**	**119**	**(s)**	**0**	**28**	**1,136**	**43**
1997 Average	**1,092**	**113**	**3**	**0**	**32**	**1,170**	**44**
1998 Average	**1,064**	**137**	**56**	**0**	**25**	**1,120**	**65**
1999 Average	**1,097**	**122**	**-59**	**0**	**33**	**1,246**	**43**
2000 January	1,133	244	-439	0	94	1,723	29
February	1,127	221	-215	0	53	1,510	23
March	1,136	142	-19	0	84	1,213	23
April	1,143	125	101	0	62	1,105	26
May	1,153	102	347	0	27	881	36
June	1,163	132	252	0	40	1,002	44
July	1,133	125	278	0	28	951	53
August	1,123	124	166	0	55	1,026	58
September	1,110	114	87	0	41	1,096	60
October	1,103	167	80	0	41	1,149	63
November	1,112	189	-97	0	55	1,343	60
December	1,031	248	-603	0	58	1,823	41
Average	**1,122**	**161**	**-5**	**0**	**53**	**1,235**	**—**
2001 January	957	312	-379	0	62	1,586	29
February	1,048	222	-155	0	41	1,383	25
March	1,072	151	-25	0	22	1,226	24
April	1,110	105	232	0	18	965	31
May	1,121	80	392	0	15	794	43
June	1,093	103	348	0	32	816	54
July	1,102	92	186	0	42	966	60
August	1,111	95	187	0	27	992	65
September	1,146	92	54	0	27	1,157	67
October	1,138	146	38	0	26	1,220	68
November	1,135	175	68	0	26	1,216	70
December	1,104	176	-145	0	35	1,390	66
Average	**1,095**	**145**	**67**	**0**	**31**	**1,142**	**—**
2002 January	1,082	201	-396	0	42	1,636	53
February	1,114	179	-391	0	87	1,597	43
March	1,111	147	-106	0	60	1,304	39
April	1,135	157	222	0	25	1,046	46
May	1,159	87	157	0	43	1,046	51
June	1,133	101	252	0	23	960	58
July	1,137	120	190	0	22	1,045	64
August	1,142	116	129	0	28	1,101	68
September	1,091	131	78	0	54	1,091	71
October	1,080	144	-176	0	74	1,327	65
November	1,143	170	-109	0	85	1,337	62
December	1,127	193	-299	0	119	1,501	53
Average	**1,121**	**145**	**-36**	**0**	**55**	**1,248**	**—**

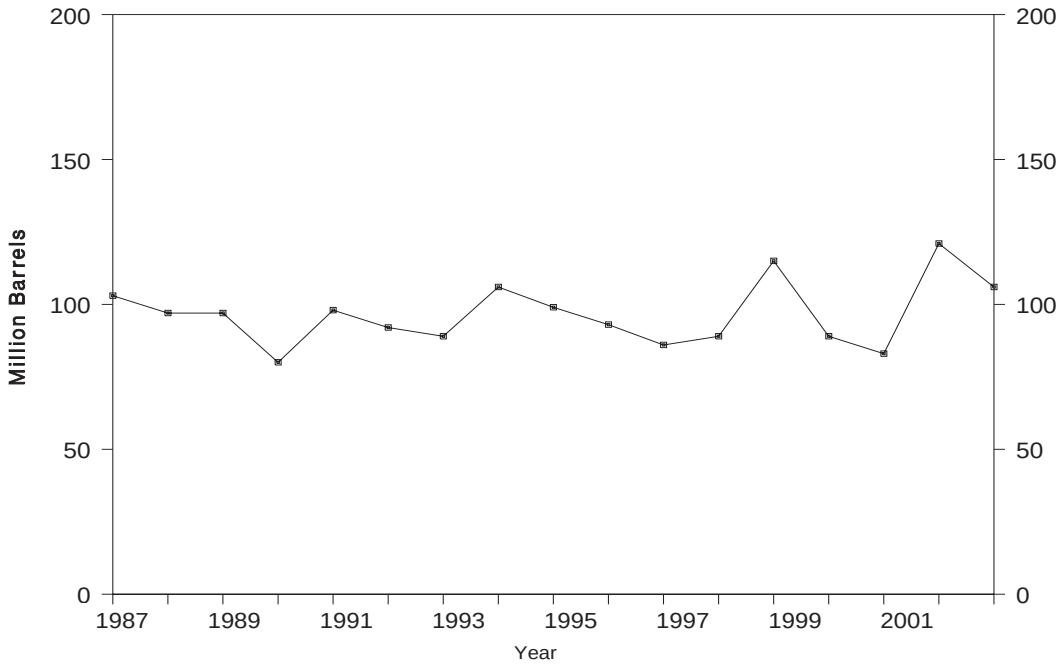
[a] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[b] Stocks are totals as of end of period.
[c] In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.
(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 S15. Liquefied Petroleum Gases Supply and Disposition, 1986 - Present



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

Figure S16. Liquefied Petroleum Gases Ending Stocks, 1986 - Present



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

Table S9. Liquefied Petroleum Gases Supply and Disposition, 1986 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				
	Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Product Supplied	Ending Stocks[b] (Million Barrels)
1986 Average	**1,695**	**242**	**80**	**302**	**42**	**1,512**	**103**
1987 Average	**1,748**	**190**	**-15**	**304**	**38**	**1,612**	**97**
1988 Average	**1,817**	**209**	**1**	**321**	**49**	**1,656**	**97**
1989 Average	**1,791**	**181**	**-47**	**315**	**35**	**1,668**	**80**
1990 Average	**1,749**	**188**	**48**	**293**	**40**	**1,556**	**98**
1991 Average	**1,871**	**147**	**-15**	**304**	**41**	**1,689**	**92**
1992 Average	**1,972**	**131**	**-10**	**309**	**49**	**1,755**	**89**
1993 Average	**1,993**	**160**	**49**	**327**	**43**	**1,734**	**106**
1994 Average	**2,012**	**183**	**-19**	**296**	**38**	**1,880**	**99**
1995 Average	**2,082**	**146**	**-17**	**289**	**58**	**1,899**	**93**
1996 Average	**2,156**	**166**	**-19**	**278**	**51**	**2,012**	**86**
1997 Average	**2,190**	**169**	**9**	**263**	**50**	**2,038**	**89**
1998 Average	**2,124**	**194**	**70**	**253**	**42**	**1,952**	**115**
1999 Average	**2,230**	**182**	**-71**	**238**	**50**	**2,195**	**89**
2000 January	2,195	315	-696	321	101	2,784	68
February	2,268	281	-359	281	81	2,546	57
March	2,395	190	6	231	109	2,239	58
April	2,524	169	330	174	75	2,114	67
May	2,530	157	548	175	38	1,927	84
June	2,528	209	410	179	69	2,079	97
July	2,511	193	486	180	63	1,976	112
August	2,479	195	333	182	76	2,084	122
September	2,259	164	84	230	62	2,046	125
October	2,169	201	-225	273	65	2,257	118
November	2,035	223	-299	342	72	2,143	109
December	1,820	283	-843	288	81	2,577	83
Average	**2,310**	**215**	**-19**	**238**	**74**	**2,231**	**—**
2001 January	1,644	349	-601	272	75	2,246	64
February	2,002	263	-140	266	59	2,081	60
March	2,221	203	75	212	33	2,105	62
April	2,380	204	288	209	35	2,053	71
May	2,484	170	696	219	31	1,709	93
June	2,423	235	589	199	56	1,815	110
July	2,412	119	363	196	51	1,920	121
August	2,448	162	432	189	34	1,956	135
September	2,356	160	158	228	35	2,095	140
October	2,234	181	-55	258	37	2,175	138
November	2,115	211	-191	312	37	2,168	132
December	2,009	217	-361	334	43	2,210	121
Average	**2,228**	**206**	**105**	**241**	**44**	**2,044**	**—**
2002 January	1,990	242	-546	323	52	2,403	104
February	2,173	225	-500	277	96	2,525	90
March	2,306	204	-115	218	64	2,343	86
April	2,455	203	516	194	32	1,916	102
May	2,488	136	379	186	67	1,992	114
June	2,409	141	403	187	31	1,929	126
July	2,421	142	353	199	33	1,979	137
August	2,475	154	347	195	46	2,041	147
September	2,210	158	36	220	67	2,045	149
October	2,083	178	-307	282	85	2,201	139
November	2,030	195	-458	334	98	2,251	125
December	1,974	216	-630	344	131	2,345	106
Average	**2,252**	**183**	**-42**	**247**	**67**	**2,163**	**—**

[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 2.

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

Source: See Summary Statistics Table and Figure Sources.

Table S10.Other Petroleum Products Supply and Disposition, 1986 - Present

(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				
	Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Products Supplied	Ending Stocks[b] (Million Barrels)
1986 Average	**2,704**	**504**	**-15**	**888**	**291**	**2,045**	**201**
1987 Average	**2,737**	**543**	**-1**	**829**	**264**	**2,187**	**200**
1988 Average	**2,773**	**645**	**22**	**799**	**294**	**2,303**	**208**
1989 Average	**2,771**	**627**	**12**	**797**	**305**	**2,285**	**213**
1990 Average	**2,842**	**705**	**-32**	**887**	**289**	**2,402**	**201**
1991 Average	**2,826**	**675**	**18**	**936**	**277**	**2,269**	**208**
1992 Average	**2,928**	**707**	**-3**	**906**	**263**	**2,470**	[c] **207**
1993 Average	**3,035**	**770**	[c] **-2**	**1,081**	**300**	**2,426**	**206**
1994 Average	**2,973**	**761**	**24**	**861**	**329**	**2,518**	**215**
1995 Average	**3,031**	**708**	**-23**	**958**	**348**	**2,457**	**206**
1996 Average	**3,108**	**879**	**-11**	**1,014**	**376**	**2,608**	**202**
1997 Average	**3,204**	**945**	**30**	**985**	**402**	**2,733**	**213**
1998 Average	**3,253**	**888**	**18**	**1,002**	**380**	**2,741**	**219**
1999 Average	**3,211**	**943**	**-64**	**1,061**	**338**	**2,819**	**196**
2000 January	2,802	977	314	808	319	2,338	206
February	2,945	994	358	710	397	2,473	216
March	3,001	1,019	205	817	387	2,612	222
April	3,146	948	174	1,041	468	2,411	228
May	3,272	1,009	-158	1,117	372	2,949	223
June	3,427	997	-143	1,188	438	2,941	218
July	3,454	828	38	959	446	2,839	220
August	3,341	826	-328	1,095	421	2,979	210
September	3,319	1,032	-159	1,192	415	2,904	205
October	3,202	797	-9	998	484	2,525	204
November	3,135	868	8	1,128	509	2,358	205
December	2,798	971	76	835	490	2,368	207
Average	**3,154**	**938**	**30**	**991**	**429**	**2,642**	**—**
2001 January	2,802	1,266	438	544	483	2,604	221
February	3,045	1,111	551	597	499	2,509	236
March	2,883	1,174	180	902	424	2,550	242
April	2,984	1,126	23	984	451	2,651	242
May	3,120	1,177	-57	1,103	465	2,787	241
June	3,229	1,126	-243	1,388	430	2,780	233
July	3,214	998	-382	1,432	393	2,769	221
August	3,197	1,062	-287	1,162	492	2,893	213
September	3,140	1,094	261	1,048	334	2,591	220
October	3,061	1,038	-236	1,060	473	2,802	213
November	3,107	1,066	119	965	402	2,686	217
December	2,858	910	-75	941	370	2,533	214
Average	**3,053**	**1,095**	**20**	**1,013**	**434**	**2,681**	**—**
2002 January	2,931	1,079	268	714	441	2,586	223
February	3,005	993	45	1,068	482	2,403	224
March	3,072	1,123	277	955	436	2,526	232
April	3,178	1,097	-53	1,195	472	2,660	231
May	3,140	1,322	-64	1,253	503	2,771	229
June	3,225	1,162	-164	1,204	445	2,903	224
July	3,295	1,246	-100	1,244	420	2,977	221
August	3,312	1,088	-309	1,240	550	2,918	211
September	3,261	1,078	-45	1,131	479	2,774	210
October	3,039	969	-59	1,005	471	2,592	208
November	3,109	1,014	16	1,024	503	2,581	209
December	3,071	844	-307	1,442	547	2,233	199
Average	**3,137**	**1,085**	**-42**	**1,123**	**479**	**2,662**	**—**

[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, pipeline, and merchant-producer stocks of oxygenates were added beginning in January 1993. See Summary Statistics Explanatory Note 2.

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, and crude oil product supplied. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.

Summary Statistics Tables and Figures Sources

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

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

- U.S. Department of Energy, Energy Information Administration (EIA), *Petroleum Supply Annual* (1986 through 2002).
- Data on crude oil production 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. Crude oil production data for 2002 reflect data received as of April 2003. Data for 2002 received after April will be published as an appendix in the following year's *Petroleum Supply Annual*.
- Data on exports of crude oil and petroleum products are received from the U.S. Bureau of the Census. Export statistics reflect 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.

Summary Statistics Explanatory Notes

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

Note 1. 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.

Currently, all except five crude oil producing States (New York, Pennsylvania, Ohio, Virginia, and West Virginia) report production on a monthly basis. These five States report crude oil on an annual basis. Estimates of monthly crude oil production for these five 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, and the Minerals Management Service. The EIA incorporates production data into its Crude Oil Production System (COPS) as the data are received from the reporting agencies. Tables S1 and S2 present the 2002 crude oil production data received by the EIA as of April 2003. Crude oil production data for 2002 received after April 2003 will be published later as an appendix in the following year's *Petroleum Supply Annual* (PSA). Table C1 of this publication presents the 2001 crude oil production a year after it was published in the *PSA* 2001.

Note 2. Frames Maintenance

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

- Crude Oil: 1982- 645 (Total) and 351 (Other Primary).
- Crude Oil and Petroleum Products: 1980- 1,425; and 1982- 1,461.
- Motor Gasoline: 1980- 263 (Total) and 214 (Finished); 1982- 244 (Total) and 202 (Finished).
- Distillate Fuel Oil: 1980- 205; and 1982- 186.
- Residual Fuel Oil: 1980- 91; and 1982- 69.
- Jet Fuel: 1980- 42 (Total) and 36 (Kerosene-type); and 1982-39 (Total) and 32 (Kerosene-type).
- Propane/Propylene: 1980- 69; and 1982- 57.
- Liquefied Petroleum Gases: 1980- 128; and 1982-102.
- Other Petroleum Products: 1980- 207; and 1982-219.

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

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

Beginning with January 1984, natural gas liquids supply and disposition data were collected on a component basis rather than a product basis. This change affected stocks reported and stock change calculations. Under the new basis, end-of-year 1983 stocks would have been:

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

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

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

Table 1. U.S. Petroleum Balance, 2002

	Commodity	Thousand Barrels	Thousand Barrels per Day
	Crude Oil		
	Field Production		
(1)	Alaska	359,335	984
(2)	Lower 48 States	1,737,789	4,761
(3)	**Total U.S.**	**2,097,124**	**5,746**
	Net Imports		
(4)	Imports (Gross Excluding Strategic Petroleum Reserve (SPR))	3,330,408	9,124
(5)	SPR Imports	5,767	16
(6)	Exports	3,296	9
(7)	**Imports (Net Including SPR)**	**3,332,879**	**9,131**
	Other Sources		
(8)	SPR Stock Change (Withdrawal (+), Addition (-))	-48,850	-134
(9)	Other Stock Change (Withdrawal (+), Addition (-))	34,366	94
(10)	Product Supplied and Losses	0	0
(11)	Unaccounted for[a]	40,011	110
(12)	**Total Other Sources**	**25,527**	**70**
(13)	**Crude Input to Refineries**	**5,455,530**	**14,947**
	(13) = (3) + (7) + (12)		
	Natural Gas Liquids (NGL)		
(14)	Field Production[b]	792,864	2,172
(15)	Net Imports[c]	5,732	16
(16)	Stock Change (Withdrawal (+), Addition (-))[c]	-205	-1
(17)	**Total NGL Supply**	**798,390**	**2,187**
	Other Liquids		
	Unfinished Oils and Gasoline Blending Components, Total		
(18)	Stock Change (Withdrawal (+), Addition (-))	14,119	39
(19)	Net Imports	261,762	717
(20)	Other Liquids New Supply(Field Production)	45,832	126
(21)	Refinery Processing Gain[a]	349,145	957
(22)	Crude Oil Product Supplied	0	0
(23)	**Total Other Liquids**	**670,858**	**1,838**
	(23) = (18) through (22)		
(24)	**Total Production of Products**	**6,924,778**	**18,972**
	(24) = (13) + (17) + (23)		
	Net Imports of Refined Products		
(25)	Imports (Gross)	580,767	1,591
(26)	Exports	331,678	909
(27)	**Imports (Net)**	**249,089**	**682**
(28)	**Total New Supply of Products**	**7,173,867**	**19,654**
	(28) = (24) + (27)		
(29)	Refined Products Stock Change (Withdrawal (+), Addition (-))	39,009	107
(30)	**Total Petroleum Products Supplied for Domestic Use**	**7,212,876**	**19,761**
	(30) = (28) + (29)		
(31)	Finished Motor Gasoline	3,229,459	8,848
(32)	Distillate Fuel Oil	1,378,206	3,776
(33)	Residual Fuel Oil	255,357	700
(34)	Jet Fuel	588,982	1,614
(35)	Liquefied Petroleum Gases	789,338	2,163
(36)	Other[d]	971,535	2,662
(37)	Crude Oil	0	0
(38)	**Total Products Supplied**	**7,212,876**	**19,761**
	(38) = (31) through (37)		
	Ending Stocks, All Oils		
(39)	Crude Oil (Excluding SPR)	277,614	—
(40)	Strategic Petroleum Reserve[e]	599,091	—
(41)	Finished Motor Gasoline	161,902	—
(42)	Distillate Fuel Oil	134,085	—
(43)	Residual Fuel Oil	31,333	—
(44)	Jet Fuel	39,179	—
(45)	Liquefied Petroleum Gases	105,708	—
(46)	Other[d]	198,998	—
(47)	**Total Stocks**	**1,547,910**	**—**
	(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.

[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.

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

[f] Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

(s) = Less than 500 barrels per day.

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, 2002

(Thousand Barrels)

Commodity	Supply				Disposition					
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil[a]	Stock Change[b]	Crude Losses	Refinery Inputs	Exports	Products Supplied[c]	Ending Stocks[d]
Crude Oil	**2,097,124**	**—**	**3,336,175**	**40,011**	**14,484**	**0**	**5,455,530**	**3,296**	**0**	**876,705**
Natural Gas Liquids and LRGs	**686,288**	**244,900**	**72,487**	**—**	**-14,987**	**—**	**156,429**	**24,444**	**837,789**	**113,285**
Pentanes Plus	109,373	—	5,870	—	205	—	66,449	138	48,451	7,577
Liquefied Petroleum Gases	576,915	244,900	66,617	—	-15,192	—	89,980	24,306	789,338	105,708
Ethane/Ethylene	255,415	9,169	138	—	-33	—	0	0	264,755	24,398
Propane/Propylene	200,298	208,909	53,090	—	-13,219	—	0	20,008	455,508	52,552
Normal Butane/Butylene	47,743	27,714	11,006	—	-2,545	—	44,848	4,298	39,862	22,213
Isobutane/Isobutylene	73,459	-892	2,383	—	605	—	45,132	0	29,213	6,545
Other Liquids	**45,832**	**—**	**285,726**	**—**	**-14,119**	**—**	**343,516**	**23,964**	**-21,803**	**135,265**
Other Hydrocarbons/Oxygenates	129,368	—	22,379	—	-984	—	140,844	11,887	0	12,178
Unfinished Oils	—	—	149,693	—	-11,934	—	184,919	0	-23,292	75,766
Motor Gasoline Blend. Comp.	-83,536	—	113,654	—	-1,198	—	19,239	12,077	0	47,194
Aviation Gasoline Blend. Comp.	—	—	0	—	-3	—	-1,486	0	1,489	127
Finished Petroleum Products	**106,576**	**6,059,720**	**514,150**	**—**	**-23,817**	**—**	**—**	**307,373**	**6,396,890**	**422,655**
Finished Motor Gasoline	106,576	2,986,747	181,894	—	443	—	—	45,315	3,229,459	161,902
Reformulated	—	981,978	85,083	—	-2,757	—	—	1,948	1,067,870	42,161
Oxygenated	230,400	107,391	0	—	237	—	—	134	337,420	615
Other	-123,824	1,897,378	96,811	—	2,963	—	—	43,232	1,824,169	119,126
Finished Aviation Gasoline	—	6,353	231	—	-98	—	—	0	6,682	1,386
Jet Fuel	—	552,583	39,225	—	-2,774	—	—	5,600	588,982	39,179
Naphtha-Type	—	72	0	—	-26	—	—	2,605	-2,507	56
Kerosene-Type	—	552,511	39,225	—	-2,748	—	—	2,995	591,489	39,123
Kerosene	—	20,772	1,883	—	75	—	—	6,763	15,817	5,463
Distillate Fuel Oil	—	1,311,151	97,603	—	-10,428	—	—	40,976	1,378,206	134,085
0.05 percent sulfur and under	—	951,087	38,945	—	-1,644	—	—	19,579	972,097	80,690
Greater than 0.05 percent sulfur	—	360,064	58,658	—	-8,784	—	—	21,397	406,109	53,395
Residual Fuel Oil	—	219,445	90,896	—	-9,714	—	—	64,698	255,357	31,333
Naphtha For Petro. Feed. Use	—	88,003	22,998	—	-4	—	—	0	111,005	2,389
Other Oils For Petro. Feed. Use	—	54,914	53,416	—	-179	—	—	0	108,509	1,333
Special Naphthas	—	18,812	6,045	—	32	—	—	5,314	19,511	2,038
Lubricants	—	63,352	2,165	—	-1,742	—	—	12,134	55,125	12,041
Waxes	—	6,322	1,017	—	284	—	—	1,245	5,810	896
Petroleum Coke	—	285,226	6,847	—	38	—	—	123,126	168,909	8,343
Asphalt and Road Oil	—	179,715	9,891	—	639	—	—	2,115	186,852	21,277
Still Gas	—	243,517	0	—	0	—	—	0	243,517	0
Miscellaneous Products	—	22,808	39	—	-389	—	—	85	23,151	990
Total	**2,935,820**	**6,304,620**	**4,208,538**	**40,011**	**-38,439**	**0**	**5,955,475**	**359,077**	**7,212,876**	**1,547,910**

[a] Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

[b] A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

[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.

[d] Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

LRG = Liquefied Refinery Gas.

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 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. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 2002

(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	**5,746**	**—**	**9,140**	**110**	**40**	**0**	**14,947**	**9**	**0**
Natural Gas Liquids and LRGs	**1,880**	**671**	**199**	**—**	**-41**	**—**	**429**	**67**	**2,295**
Pentanes Plus	300	—	16	—	1	—	182	(s)	133
Liquefied Petroleum Gases	1,581	671	183	—	-42	—	247	67	2,163
Ethane/Ethylene	700	25	(s)	—	(s)	—	0	0	725
Propane/Propylene	549	572	145	—	-36	—	0	55	1,248
Normal Butane/Butylene	131	76	30	—	-7	—	123	12	109
Isobutane/Isobutylene	201	-2	7	—	2	—	124	0	80
Other Liquids	**126**	**—**	**783**	**—**	**-39**	**—**	**941**	**66**	**-60**
Other Hydrocarbons/Oxygenates	354	—	61	—	-3	—	386	33	0
Unfinished Oils	—	—	410	—	-33	—	507	0	-64
Motor Gasoline Blend. Comp.	-229	—	311	—	-3	—	53	33	0
Aviation Gasoline Blend. Comp.	—	—	0	—	(s)	—	-4	0	4
Finished Petroleum Products	**292**	**16,602**	**1,409**	**—**	**-65**	**—**	**—**	**842**	**17,526**
Finished Motor Gasoline	292	8,183	498	—	1	—	—	124	8,848
Reformulated	—	2,690	233	—	-8	—	—	5	2,926
Oxygenated	631	294	0	—	1	—	—	(s)	924
Other	-339	5,198	265	—	8	—	—	118	4,998
Finished Aviation Gasoline	—	17	1	—	(s)	—	—	0	18
Jet Fuel	—	1,514	107	—	-8	—	—	15	1,614
Naphtha-Type	—	(s)	0	—	(s)	—	—	7	-7
Kerosene-Type	—	1,514	107	—	-8	—	—	8	1,621
Kerosene	—	57	5	—	(s)	—	—	19	43
Distillate Fuel Oil	—	3,592	267	—	-29	—	—	112	3,776
0.05 percent sulfur and under	—	2,606	107	—	-5	—	—	54	2,663
Greater than 0.05 percent sulfur	—	986	161	—	-24	—	—	59	1,113
Residual Fuel Oil	—	601	249	—	-27	—	—	177	700
Naphtha For Petro. Feed. Use	—	241	63	—	(s)	—	—	0	304
Other Oils For Petro. Feed. Use	—	150	146	—	(s)	—	—	0	297
Special Naphthas	—	52	17	—	(s)	—	—	15	53
Lubricants	—	174	6	—	-5	—	—	33	151
Waxes	—	17	3	—	1	—	—	3	16
Petroleum Coke	—	781	19	—	(s)	—	—	337	463
Asphalt and Road Oil	—	492	27	—	2	—	—	6	512
Still Gas	—	667	0	—	0	—	—	0	667
Miscellaneous Products	—	62	(s)	—	-1	—	—	(s)	63
Total	**8,043**	**17,273**	**11,530**	**110**	**-105**	**0**	**16,316**	**984**	**19,761**

[a] Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

[b] A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

[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.

LRG = Liquefied Refinery Gas.

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 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. PAD District I—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 2002
(Thousand Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]	Ending[f] Stocks
Crude Oil	**7,458**	**—**	**548,205**	**2,616**	**3,280**	**-2,862**	**0**	**562,355**	**2,066**	**0**	**10,713**
Natural Gas Liquids and LRGs	**8,287**	**17,791**	**11,224**	**—**	**35,871**	**-1,473**	**—**	**1,241**	**638**	**72,767**	**6,126**
Pentanes Plus	1,017	—	0	—	0	2	—	0	17	998	23
Liquefied Petroleum Gases	7,270	17,791	11,224	—	35,871	-1,475	—	1,241	620	71,770	6,103
Ethane/Ethylene	1,901	0	0	—	0	0	—	0	0	1,901	0
Propane/Propylene	3,653	18,096	9,399	—	34,891	-1,225	—	0	216	67,048	4,650
Normal Butane/Butylene	1,236	1,258	1,295	—	1,039	-328	—	318	404	4,434	1,149
Isobutane/Isobutylene	480	-1,563	530	—	-59	78	—	923	0	-1,613	304
Other Liquids	**-5,358**	**—**	**126,220**	**—**	**1,505**	**-2,961**	**—**	**128,997**	**2,426**	**-6,095**	**16,393**
Other Hydrocarbons/Oxygenates	23,476	—	3,247	—	0	-441	—	25,852	1,312	0	2,108
Unfinished Oils	—	—	23,316	—	227	-1,277	—	32,373	0	-7,553	7,485
Motor Gasoline Blend. Comp.	-28,833	—	99,657	—	1,278	-1,268	—	72,255	1,115	0	6,698
Aviation Gasoline Blend. Comp.	—	—	0	—	0	25	—	-1,483	0	1,458	102
Finished Petroleum Products	**30,676**	**704,223**	**370,033**	**—**	**975,661**	**-14,534**	**—**	**—**	**19,484**	**2,075,643**	**137,124**
Finished Motor Gasoline	30,676	377,014	171,239	—	570,778	-962	—	—	2,386	1,148,283	49,753
Reformulated	—	233,236	83,175	—	116,797	1,052	—	—	3	432,153	20,285
Oxygenated	18,432	6,229	0	—	0	4	—	—	(s)	24,657	57
Other	12,244	137,549	88,064	—	453,981	-2,018	—	—	2,383	691,474	29,411
Finished Aviation Gasoline	—	74	4	—	937	-4	—	—	0	1,019	153
Jet Fuel	—	31,326	17,124	—	155,919	-546	—	—	183	204,732	9,667
Naphtha-Type	—	0	0	—	235	28	—	—	155	52	28
Kerosene-Type	—	31,326	17,124	—	155,684	-574	—	—	28	204,680	9,639
Kerosene	—	4,559	1,883	—	849	298	—	—	783	6,210	3,555
Distillate Fuel Oil	—	166,959	90,092	—	232,755	-7,571	—	—	2,583	494,794	54,501
0.05 percent sulfur and under	—	85,134	32,387	—	150,622	-1,335	—	—	609	268,869	20,985
Greater than 0.05 percent sulfur	—	81,825	57,705	—	82,133	-6,236	—	—	1,975	225,924	33,516
Residual Fuel Oil	—	34,152	70,422	—	2,377	-5,230	—	—	6,946	105,235	12,527
Petrochemical Feedstocks[e]	—	5,488	3,432	—	-804	54	—	—	0	8,062	491
Special Naphthas	—	600	3,007	—	734	-29	—	—	478	3,892	81
Lubricants	—	6,112	1,065	—	6,943	-347	—	—	1,830	12,637	1,895
Waxes	—	205	501	—	0	45	—	—	357	304	193
Petroleum Coke	—	18,323	2,608	—	0	-79	—	—	3,752	17,258	265
Asphalt and Road Oil	—	35,645	8,656	—	5,154	54	—	—	135	49,266	3,981
Still Gas	—	23,322	0	—	0	0	—	—	0	23,322	0
Miscellaneous Products	—	444	0	—	19	-217	—	—	49	631	62
Total	**41,064**	**722,014**	**1,055,682**	**2,616**	**1,016,317**	**-21,830**	**0**	**692,593**	**24,614**	**2,142,315**	**170,356**

[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. Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.
[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.
[f] Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.
(s) = Less than 500 barrels.
LRG = Liquefied Refinery Gas.
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. PAD District I—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 2002

(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	**20**	**—**	**1,502**	**7**	**9**	**-8**	**0**	**1,541**	**6**	**0**
Natural Gas Liquids and LRGs	**23**	**49**	**31**	**—**	**98**	**-4**	**—**	**3**	**2**	**199**
Pentanes Plus	3	—	0	—	0	(s)	—	0	(s)	3
Liquefied Petroleum Gases	20	49	31	—	98	-4	—	3	2	197
Ethane/Ethylene	5	0	0	—	0	0	—	0	0	5
Propane/Propylene	10	50	26	—	96	-3	—	0	1	184
Normal Butane/Butylene	3	3	4	—	3	-1	—	1	1	12
Isobutane/Isobutylene	1	-4	1	—	(s)	(s)	—	3	0	-4
Other Liquids	**-15**	**—**	**346**	**—**	**4**	**-8**	**—**	**353**	**7**	**-17**
Other Hydrocarbons/Oxygenates	64	—	9	—	0	-1	—	71	4	0
Unfinished Oils	—	—	64	—	1	-3	—	89	0	-21
Motor Gasoline Blend. Comp.	-79	—	273	—	4	-3	—	198	3	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	-4	0	4
Finished Petroleum Products	**84**	**1,929**	**1,014**	**—**	**2,673**	**-40**	**—**	**—**	**53**	**5,687**
Finished Motor Gasoline	84	1,033	469	—	1,564	-3	—	—	7	3,146
Reformulated	—	639	228	—	320	3	—	—	(s)	1,184
Oxygenated	50	17	0	—	0	(s)	—	—	(s)	68
Other	34	377	241	—	1,244	-6	—	—	7	1,894
Finished Aviation Gasoline	—	(s)	(s)	—	3	(s)	—	—	0	3
Jet Fuel	—	86	47	—	427	-1	—	—	1	561
Naphtha-Type	—	0	0	—	1	(s)	—	—	(s)	(s)
Kerosene-Type	—	86	47	—	427	-2	—	—	(s)	561
Kerosene	—	12	5	—	2	1	—	—	2	17
Distillate Fuel Oil	—	457	247	—	638	-21	—	—	7	1,356
0.05 percent sulfur and under	—	233	89	—	413	-4	—	—	2	737
Greater than 0.05 percent sulfur	—	224	158	—	225	-17	—	—	5	619
Residual Fuel Oil	—	94	193	—	7	-14	—	—	19	288
Petrochemical Feedstocks[e]	—	15	9	—	-2	(s)	—	—	0	22
Special Naphthas	—	2	8	—	2	(s)	—	—	1	11
Lubricants	—	17	3	—	19	-1	—	—	5	35
Waxes	—	1	1	—	0	(s)	—	—	1	1
Petroleum Coke	—	50	7	—	0	(s)	—	—	10	47
Asphalt and Road Oil	—	98	24	—	14	(s)	—	—	(s)	135
Still Gas	—	64	0	—	0	0	—	—	0	64
Miscellaneous Products	—	1	0	—	(s)	-1	—	—	(s)	2
Total	**113**	**1,978**	**2,892**	**7**	**2,784**	**-60**	**0**	**1,898**	**67**	**5,869**

[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. Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

[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.

LRG = Liquefied Refinery Gas.

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 II—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 2002
(Thousand Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]	Ending Stocks
Crude Oil	**164,635**	**—**	**327,259**	**13,716**	**657,813**	**-9,363**	**0**	**1,171,806**	**979**	**0**	**59,572**
Natural Gas Liquids and LRGs	**111,843**	**41,948**	**44,254**	**—**	**7,116**	**-6,711**	**—**	**41,074**	**2,278**	**168,520**	**31,461**
Pentanes Plus	14,808	—	225	—	5,484	-314	—	16,238	94	4,499	1,613
Liquefied Petroleum Gases	97,035	41,948	44,029	—	1,632	-6,397	—	24,836	2,184	164,021	29,848
Ethane/Ethylene	40,297	0	138	—	-17,274	467	—	0	0	22,694	3,314
Propane/Propylene	37,820	40,783	40,436	—	11,274	-6,465	—	0	772	136,006	19,226
Normal Butane/Butylene	11,900	2,867	3,333	—	1,861	-572	—	12,233	1,412	6,888	5,697
Isobutane/Isobutylene	7,018	-1,702	122	—	5,771	173	—	12,603	0	-1,567	1,611
Other Liquids	**-36,412**	**—**	**5**	**—**	**45,039**	**-2,728**	**—**	**19,652**	**594**	**-8,886**	**24,525**
Other Hydrocarbons/Oxygenates	21,059	—	5	—	0	923	—	19,797	344	0	3,538
Unfinished Oils	—	—	0	—	866	-2,745	—	12,528	0	-8,917	10,477
Motor Gasoline Blend. Comp.	-57,470	—	0	—	44,173	-893	—	-12,655	251	0	10,505
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-13	—	-18	0	31	5
Finished Petroleum Products	**73,598**	**1,251,819**	**5,730**	**—**	**329,483**	**-4,827**	**—**	**—**	**4,087**	**1,661,370**	**93,538**
Finished Motor Gasoline	73,598	664,253	793	—	186,647	-421	—	—	25	925,687	39,240
Reformulated	—	120,881	0	—	10,123	-1,190	—	—	2	132,192	517
Oxygenated	161,280	70,770	0	—	0	127	—	—	(s)	231,923	400
Other	-87,682	472,602	793	—	176,524	642	—	—	23	561,573	38,323
Finished Aviation Gasoline	—	1,571	22	—	923	125	—	—	0	2,391	424
Jet Fuel	—	78,856	0	—	38,355	-652	—	—	1	117,862	7,003
Naphtha-Type	—	0	0	—	0	-59	—	—	1	58	0
Kerosene-Type	—	78,856	0	—	38,355	-593	—	—	(s)	117,804	7,003
Kerosene	—	3,516	0	—	79	-236	—	—	55	3,776	1,046
Distillate Fuel Oil	—	300,255	2,301	—	96,970	-2,251	—	—	87	401,690	31,532
0.05 percent sulfur and under	—	236,206	1,749	—	80,741	-1,080	—	—	86	319,690	24,282
Greater than 0.05 percent sulfur	—	64,049	552	—	16,229	-1,171	—	—	1	82,000	7,250
Residual Fuel Oil	—	20,780	283	—	-3,876	-395	—	—	469	17,113	1,596
Petrochemical Feedstocks[e]	—	6,986	489	—	1,361	3	—	—	0	8,833	372
Special Naphthas	—	6,064	752	—	621	17	—	—	10	7,410	332
Lubricants	—	5,462	615	—	4,221	-688	—	—	1,276	9,710	1,471
Waxes	—	1,293	104	—	0	34	—	—	309	1,054	93
Petroleum Coke	—	48,918	4	—	0	-574	—	—	1,012	48,484	1,205
Asphalt and Road Oil	—	62,656	357	—	4,201	111	—	—	840	66,263	8,902
Still Gas	—	46,785	0	—	0	0	—	—	0	46,785	0
Miscellaneous Products	—	4,424	10	—	-19	100	—	—	2	4,313	322
Total	**313,665**	**1,293,767**	**377,248**	**13,716**	**1,039,451**	**-23,629**	**0**	**1,232,532**	**7,939**	**1,821,004**	**209,096**

[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.
LRG = Liquefied Refinery Gas.
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 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 II—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 2002

(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	**451**	**—**	**897**	**38**	**1,802**	**-26**	**0**	**3,210**	**3**	**0**
Natural Gas Liquids and LRGs	**306**	**115**	**121**	**—**	**19**	**-18**	**—**	**113**	**6**	**462**
Pentanes Plus	41	—	1	—	15	-1	—	44	(s)	12
Liquefied Petroleum Gases	266	115	121	—	4	-18	—	68	6	449
Ethane/Ethylene	110	0	(s)	—	-47	1	—	0	0	62
Propane/Propylene	104	112	111	—	31	-18	—	0	2	373
Normal Butane/Butylene	33	8	9	—	5	-2	—	34	4	19
Isobutane/Isobutylene	19	-5	(s)	—	16	(s)	—	35	0	-4
Other Liquids	**-100**	**—**	**(s)**	**—**	**123**	**-7**	**—**	**54**	**2**	**-24**
Other Hydrocarbons/Oxygenates	58	—	(s)	—	0	3	—	54	1	0
Unfinished Oils	—	—	0	—	2	-8	—	34	0	-24
Motor Gasoline Blend. Comp.	-157	—	0	—	121	-2	—	-35	1	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	(s)	0	(s)
Finished Petroleum Products	**202**	**3,430**	**16**	**—**	**903**	**-13**	**—**	**—**	**11**	**4,552**
Finished Motor Gasoline	202	1,820	2	—	511	-1	—	—	(s)	2,536
Reformulated	—	331	0	—	28	-3	—	—	(s)	362
Oxygenated	442	194	0	—	0	(s)	—	—	(s)	635
Other	-240	1,295	2	—	484	2	—	—	(s)	1,539
Finished Aviation Gasoline	—	4	(s)	—	3	(s)	—	—	0	7
Jet Fuel	—	216	0	—	105	-2	—	—	(s)	323
Naphtha-Type	—	0	0	—	0	(s)	—	—	(s)	(s)
Kerosene-Type	—	216	0	—	105	-2	—	—	(s)	323
Kerosene	—	10	0	—	(s)	-1	—	—	(s)	10
Distillate Fuel Oil	—	823	6	—	266	-6	—	—	(s)	1,101
0.05 percent sulfur and under	—	647	5	—	221	-3	—	—	(s)	876
Greater than 0.05 percent sulfur	—	175	2	—	44	-3	—	—	(s)	225
Residual Fuel Oil	—	57	1	—	-11	-1	—	—	1	47
Petrochemical Feedstocks[e]	—	19	1	—	4	(s)	—	—	0	24
Special Naphthas	—	17	2	—	2	(s)	—	—	(s)	20
Lubricants	—	15	2	—	12	-2	—	—	3	27
Waxes	—	4	(s)	—	0	(s)	—	—	1	3
Petroleum Coke	—	134	(s)	—	0	-2	—	—	3	133
Asphalt and Road Oil	—	172	1	—	12	(s)	—	—	2	182
Still Gas	—	128	0	—	0	0	—	—	0	128
Miscellaneous Products	—	12	(s)	—	(s)	(s)	—	—	(s)	12
Total	**859**	**3,545**	**1,034**	**38**	**2,848**	**-65**	**0**	**3,377**	**22**	**4,989**

[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.
LRG = Liquefied Refinery Gas.
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 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 III—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 2002
(Thousand Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]	Ending Stocks
Crude Oil	**1,174,305**	**—**	**2,069,884**	**17,518**	**-632,135**	**34,803**	**0**	**2,594,704**	**65**	**0**	**744,095**
Natural Gas Liquids and LRGs	**460,070**	**157,187**	**11,936**	**—**	**21,289**	**-5,314**	**—**	**83,992**	**18,303**	**553,501**	**69,902**
Pentanes Plus	68,094	—	4,624	—	1,095	645	—	38,254	0	34,914	5,642
Liquefied Petroleum Gases	391,976	157,187	7,312	—	20,194	-5,959	—	45,738	18,303	518,587	64,260
Ethane/Ethylene	181,286	9,169	0	—	47,956	-560	—	0	0	238,971	20,561
Propane/Propylene	131,924	126,672	498	—	-29,296	-5,038	—	0	16,518	218,318	25,963
Normal Butane/Butylene	21,603	18,802	5,091	—	3,164	-759	—	20,148	1,785	27,486	13,596
Isobutane/Isobutylene	57,163	2,544	1,723	—	-1,630	398	—	25,590	0	33,812	4,140
Other Liquids	**54,213**	**—**	**123,702**	**—**	**-56,093**	**-5,039**	**—**	**118,528**	**18,250**	**-9,917**	**58,659**
Other Hydrocarbons/Oxygenates	52,017	—	159	—	0	-425	—	43,419	9,182	0	4,511
Unfinished Oils	—	—	114,377	—	-1,093	-3,665	—	126,866	0	-9,917	38,779
Motor Gasoline Blend. Comp.	2,195	—	9,166	—	-55,000	-935	—	-51,771	9,067	0	15,349
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-14	—	14	0	0	20
Finished Petroleum Products	**-1,043**	**2,828,576**	**89,510**	**—**	**-1,362,386**	**-185**	**—**	**—**	**201,210**	**1,353,631**	**127,597**
Finished Motor Gasoline	-1,043	1,311,721	3,744	—	-793,585	3,447	—	—	39,523	477,867	48,053
Reformulated	—	237,555	546	—	-134,454	-1,474	—	—	1,900	103,221	10,072
Oxygenated	11,520	3,303	0	—	-256	-1	—	—	8	14,560	0
Other	-12,563	1,070,863	3,198	—	-658,875	4,922	—	—	37,614	360,086	37,981
Finished Aviation Gasoline	—	3,665	0	—	-1,974	-66	—	—	0	1,757	427
Jet Fuel	—	281,360	159	—	-209,842	-227	—	—	5,409	66,495	13,144
Naphtha-Type	—	0	0	—	-235	-1	—	—	2,443	-2,677	0
Kerosene-Type	—	281,360	159	—	-209,607	-226	—	—	2,967	69,171	13,144
Kerosene	—	10,602	0	—	-664	32	—	—	901	9,005	704
Distillate Fuel Oil	—	606,843	594	—	-335,015	-807	—	—	25,004	248,225	31,946
0.05 percent sulfur and under	—	438,074	490	—	-236,334	654	—	—	14,390	187,186	22,393
Greater than 0.05 percent sulfur	—	168,769	104	—	-98,681	-1,461	—	—	10,614	61,039	9,553
Residual Fuel Oil	—	101,291	6,717	—	1,450	-4,277	—	—	43,407	70,328	11,370
Petrochemical Feedstocks[e]	—	126,121	72,103	—	-557	-232	—	—	0	197,899	2,650
Special Naphthas	—	11,626	1,623	—	-1,355	32	—	—	798	11,064	1,581
Lubricants	—	44,400	417	—	-11,489	-43	—	—	7,797	25,574	7,192
Waxes	—	3,899	82	—	0	199	—	—	427	3,355	594
Petroleum Coke	—	154,601	3,691	—	0	1,441	—	—	77,433	79,418	5,017
Asphalt and Road Oil	—	43,434	351	—	-9,355	292	—	—	503	33,635	4,415
Still Gas	—	114,383	0	—	0	0	—	—	0	114,383	0
Miscellaneous Products	—	14,630	29	—	0	24	—	—	9	14,626	504
Total	**1,687,544**	**2,985,763**	**2,295,032**	**17,518**	**-2,029,325**	**24,265**	**0**	**2,797,224**	**237,828**	**1,897,215**	**1,000,253**

[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.
LRG = Liquefied Refinery Gas.
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 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 III—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 2002

(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	**3,217**	**—**	**5,671**	**48**	**-1,732**	**95**	**0**	**7,109**	**(s)**	**0**
Natural Gas Liquids and LRGs	**1,260**	**431**	**33**	**—**	**58**	**-15**	**—**	**230**	**50**	**1,516**
Pentanes Plus	187	—	13	—	3	2	—	105	0	96
Liquefied Petroleum Gases	1,074	431	20	—	55	-16	—	125	50	1,421
Ethane/Ethylene	497	25	0	—	131	-2	—	0	0	655
Propane/Propylene	361	347	1	—	-80	-14	—	0	45	598
Normal Butane/Butylene	59	52	14	—	9	-2	—	55	5	75
Isobutane/Isobutylene	157	7	5	—	-4	1	—	70	0	93
Other Liquids	**149**	**—**	**339**	**—**	**-154**	**-14**	**—**	**325**	**50**	**-27**
Other Hydrocarbons/Oxygenates	143	—	(s)	—	0	-1	—	119	25	0
Unfinished Oils	—	—	313	—	-3	-10	—	348	0	-27
Motor Gasoline Blend. Comp.	6	—	25	—	-151	-3	—	-142	25	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	(s)	0	0
Finished Petroleum Products	**-3**	**7,750**	**245**	**—**	**-3,733**	**-1**	**—**	**—**	**551**	**3,709**
Finished Motor Gasoline	-3	3,594	10	—	-2,174	9	—	—	108	1,309
Reformulated	—	651	1	—	-368	-4	—	—	5	283
Oxygenated	32	9	0	—	-1	(s)	—	—	(s)	40
Other	-34	2,934	9	—	-1,805	13	—	—	103	987
Finished Aviation Gasoline	—	10	0	—	-5	(s)	—	—	0	5
Jet Fuel	—	771	(s)	—	-575	-1	—	—	15	182
Naphtha-Type	—	0	0	—	-1	(s)	—	—	7	-7
Kerosene-Type	—	771	(s)	—	-574	-1	—	—	8	190
Kerosene	—	29	0	—	-2	(s)	—	—	2	25
Distillate Fuel Oil	—	1,663	2	—	-918	-2	—	—	69	680
0.05 percent sulfur and under	—	1,200	1	—	-647	2	—	—	39	513
Greater than 0.05 percent sulfur	—	462	(s)	—	-270	-4	—	—	29	167
Residual Fuel Oil	—	278	18	—	4	-12	—	—	119	193
Petrochemical Feedstocks[e]	—	346	198	—	-2	-1	—	—	0	542
Special Naphthas	—	32	4	—	-4	(s)	—	—	2	30
Lubricants	—	122	1	—	-31	(s)	—	—	21	70
Waxes	—	11	(s)	—	0	1	—	—	1	9
Petroleum Coke	—	424	10	—	0	4	—	—	212	218
Asphalt and Road Oil	—	119	1	—	-26	1	—	—	1	92
Still Gas	—	313	0	—	0	0	—	—	0	313
Miscellaneous Products	—	40	(s)	—	0	(s)	—	—	(s)	40
Total	**4,623**	**8,180**	**6,288**	**48**	**-5,560**	**66**	**0**	**7,664**	**652**	**5,198**

[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.
LRG = Liquefied Refinery Gas.
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 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 IV—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 2002
(Thousand Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]	Ending Stocks
Crude Oil	**102,982**	**—**	**115,087**	**-852**	**-28,958**	**-1,490**	**0**	**189,621**	**128**	**0**	**12,521**
Natural Gas Liquids and LRGs	**78,620**	**2,153**	**3,785**	**—**	**-64,276**	**225**	**—**	**5,610**	**193**	**14,254**	**2,139**
Pentanes Plus	11,311	—	1,021	—	-6,579	44	—	1,847	27	3,835	262
Liquefied Petroleum Gases	67,309	2,153	2,764	—	-57,697	181	—	3,763	166	10,419	1,877
Ethane/Ethylene	31,881	0	0	—	-30,682	59	—	0	0	1,140	522
Propane/Propylene	22,397	3,187	1,898	—	-16,869	127	—	0	87	10,399	757
Normal Butane/Butylene	9,050	-313	858	—	-6,064	-47	—	2,154	78	1,346	374
Isobutane/Isobutylene	3,981	-721	8	—	-4,082	42	—	1,609	0	-2,465	224
Other Liquids	**4,693**	**—**	**0**	**—**	**0**	**-420**	**—**	**7,075**	**4**	**-1,966**	**4,357**
Other Hydrocarbons/Oxygenates	1,646	—	0	—	0	10	—	1,632	4	0	199
Unfinished Oils	—	—	0	—	0	-319	—	2,285	0	-1,966	2,084
Motor Gasoline Blend. Comp.	3,047	—	0	—	0	-111	—	3,158	0	0	2,074
Aviation Gasoline Blend. Comp.	—	—	0	—	0	0	—	0	0	0	0
Finished Petroleum Products	**-1,665**	**207,050**	**3,190**	**—**	**16,401**	**482**	**—**	**—**	**249**	**224,245**	**12,305**
Finished Motor Gasoline	-1,665	102,543	130	—	2,977	96	—	—	(s)	103,889	5,259
Reformulated	—	0	0	—	0	0	—	—	0	0	0
Oxygenated	13,824	9,912	0	—	0	107	—	—	0	23,629	158
Other	-15,489	92,631	130	—	2,977	-11	—	—	(s)	80,260	5,101
Finished Aviation Gasoline	—	138	148	—	114	1	—	—	0	399	37
Jet Fuel	—	9,208	14	—	13,136	-28	—	—	0	22,386	834
Naphtha-Type	—	0	0	—	0	0	—	—	0	0	0
Kerosene-Type	—	9,208	14	—	13,136	-28	—	—	0	22,386	834
Kerosene	—	703	0	—	-264	-1	—	—	0	440	80
Distillate Fuel Oil	—	57,401	2,473	—	438	384	—	—	0	59,928	3,791
0.05 percent sulfur and under	—	47,230	2,309	—	678	111	—	—	0	50,106	3,170
Greater than 0.05 percent sulfur	—	10,171	164	—	-240	273	—	—	0	9,822	621
Residual Fuel Oil	—	4,005	0	—	0	-278	—	—	22	4,261	331
Petrochemical Feedstocks[e]	—	245	0	—	0	0	—	—	0	245	0
Special Naphthas	—	0	0	—	0	0	—	—	0	0	4
Lubricants	—	0	0	—	0	0	—	—	186	-186	0
Waxes	—	929	0	—	0	9	—	—	1	919	16
Petroleum Coke	—	6,126	0	—	0	6	—	—	28	6,092	40
Asphalt and Road Oil	—	17,716	425	—	0	305	—	—	12	17,824	1,900
Still Gas	—	7,318	0	—	0	0	—	—	0	7,318	0
Miscellaneous Products	—	718	0	—	0	-12	—	—	(s)	730	13
Total	**184,631**	**209,203**	**122,062**	**-852**	**-76,833**	**-1,203**	**0**	**202,306**	**574**	**236,533**	**31,322**

[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.
LRG = Liquefied Refinery Gas.
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 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 IV—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 2002

(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	**282**	**—**	**315**	**-2**	**-79**	**-4**	**0**	**520**	**(s)**	**0**
Natural Gas Liquids and LRGs	**215**	**6**	**10**	**—**	**-176**	**1**	**—**	**15**	**1**	**39**
Pentanes Plus	31	—	3	—	-18	(s)	—	5	(s)	11
Liquefied Petroleum Gases	184	6	8	—	-158	(s)	—	10	(s)	29
Ethane/Ethylene	87	0	0	—	-84	(s)	—	0	0	3
Propane/Propylene	61	9	5	—	-46	(s)	—	0	(s)	28
Normal Butane/Butylene	25	-1	2	—	-17	(s)	—	6	(s)	4
Isobutane/Isobutylene	11	-2	(s)	—	-11	(s)	—	4	0	-7
Other Liquids	**13**	**—**	**0**	**—**	**0**	**-1**	**—**	**19**	**(s)**	**-5**
Other Hydrocarbons/Oxygenates	5	—	0	—	0	(s)	—	4	(s)	0
Unfinished Oils	—	—	0	—	0	-1	—	6	0	-5
Motor Gasoline Blend. Comp.	8	—	0	—	0	(s)	—	9	0	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	0	—	0	0	0
Finished Petroleum Products	**-5**	**567**	**9**	**—**	**45**	**1**	**—**	**—**	**1**	**614**
Finished Motor Gasoline	-5	281	(s)	—	8	(s)	—	—	(s)	285
Reformulated	—	0	0	—	0	0	—	—	0	0
Oxygenated	38	27	0	—	0	(s)	—	—	0	65
Other	-42	254	(s)	—	8	(s)	—	—	(s)	220
Finished Aviation Gasoline	—	(s)	(s)	—	(s)	(s)	—	—	0	1
Jet Fuel	—	25	(s)	—	36	(s)	—	—	0	61
Naphtha-Type	—	0	0	—	0	0	—	—	0	0
Kerosene-Type	—	25	(s)	—	36	(s)	—	—	0	61
Kerosene	—	2	0	—	-1	(s)	—	—	0	1
Distillate Fuel Oil	—	157	7	—	1	1	—	—	0	164
0.05 percent sulfur and under	—	129	6	—	2	(s)	—	—	0	137
Greater than 0.05 percent sulfur	—	28	(s)	—	-1	1	—	—	0	27
Residual Fuel Oil	—	11	0	—	0	-1	—	—	(s)	12
Petrochemical Feedstocks[e]	—	1	0	—	0	0	—	—	0	1
Special Naphthas	—	0	0	—	0	0	—	—	0	0
Lubricants	—	0	0	—	0	0	—	—	1	-1
Waxes	—	3	0	—	0	(s)	—	—	(s)	3
Petroleum Coke	—	17	0	—	0	(s)	—	—	(s)	17
Asphalt and Road Oil	—	49	1	—	0	1	—	—	(s)	49
Still Gas	—	20	0	—	0	0	—	—	0	20
Miscellaneous Products	—	2	0	—	0	(s)	—	—	(s)	2
Total	**506**	**573**	**334**	**-2**	**-211**	**-3**	**0**	**554**	**2**	**648**

[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.
LRG = Liquefied Refinery Gas.
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 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 V—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 2002

(Thousand Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]	Ending Stocks
Crude Oil	**647,745**	**—**	**275,740**	**7,013**	**0**	**-6,604**	**0**	**937,044**	**58**	**0**	**49,804**
Natural Gas Liquids and LRGs	**27,468**	**25,821**	**1,288**	**—**	**0**	**-1,714**	**—**	**24,512**	**3,033**	**28,746**	**3,657**
Pentanes Plus	14,143	—	0	—	0	-172	—	10,110	(s)	4,205	37
Liquefied Petroleum Gases	13,325	25,821	1,288	—	0	-1,542	—	14,402	3,032	24,542	3,620
Ethane/Ethylene	50	0	0	—	0	1	—	0	0	49	1
Propane/Propylene	4,504	20,171	859	—	0	-618	—	0	2,415	23,737	1,956
Normal Butane/Butylene	3,954	5,100	429	—	0	-839	—	9,995	618	-291	1,397
Isobutane/Isobutylene	4,817	550	0	—	0	-86	—	4,407	0	1,046	266
Other Liquids	**28,695**	**—**	**35,799**	**—**	**9,549**	**-2,971**	**—**	**69,264**	**2,689**	**5,061**	**31,331**
Other Hydrocarbons/Oxygenates	31,169	—	18,968	—	0	-1,051	—	50,144	1,044	0	1,822
Unfinished Oils	—	—	12,000	—	0	-3,928	—	10,867	0	5,061	16,941
Motor Gasoline Blend. Comp.	-2,474	—	4,831	—	9,549	2,009	—	8,252	1,645	0	12,568
Aviation Gasoline Blend. Comp.	—	—	0	—	0	-1	—	1	0	0	0
Finished Petroleum Products	**5,009**	**1,068,052**	**45,687**	**—**	**40,841**	**-4,753**	**—**	**—**	**82,342**	**1,082,000**	**52,091**
Finished Motor Gasoline	5,009	531,216	5,988	—	33,183	-1,717	—	—	3,381	573,732	19,597
Reformulated	—	390,306	1,362	—	7,534	-1,145	—	—	43	400,304	11,287
Oxygenated	25,344	17,177	0	—	256	0	—	—	126	42,651	0
Other	-20,335	123,733	4,626	—	25,393	-572	—	—	3,212	130,776	8,310
Finished Aviation Gasoline	—	905	57	—	0	-154	—	—	0	1,116	345
Jet Fuel	—	151,833	21,928	—	2,432	-1,321	—	—	7	177,507	8,531
Naphtha-Type	—	72	0	—	0	6	—	—	6	60	28
Kerosene-Type	—	151,761	21,928	—	2,432	-1,327	—	—	(s)	177,448	8,503
Kerosene	—	1,392	0	—	0	-18	—	—	5,025	-3,615	78
Distillate Fuel Oil	—	179,693	2,143	—	4,852	-183	—	—	13,302	173,569	12,315
0.05 percent sulfur and under	—	144,443	2,010	—	4,293	6	—	—	4,495	146,245	9,860
Greater than 0.05 percent sulfur	—	35,250	133	—	559	-189	—	—	8,807	27,324	2,455
Residual Fuel Oil	—	59,217	13,474	—	49	466	—	—	13,853	58,421	5,509
Petrochemical Feedstocks[e]	—	4,077	390	—	0	-8	—	—	0	4,475	209
Special Naphthas	—	522	663	—	0	12	—	—	4,028	-2,855	40
Lubricants	—	7,378	68	—	325	-664	—	—	1,045	7,390	1,483
Waxes	—	-4	330	—	0	-3	—	—	150	179	0
Petroleum Coke	—	57,258	544	—	0	-756	—	—	40,902	17,656	1,816
Asphalt and Road Oil	—	20,264	102	—	0	-123	—	—	625	19,864	2,079
Still Gas	—	51,709	0	—	0	0	—	—	0	51,709	0
Miscellaneous Products	—	2,592	0	—	0	-284	—	—	25	2,851	89
Total	**708,916**	**1,093,873**	**358,514**	**7,013**	**50,390**	**-16,042**	**0**	**1,030,820**	**88,121**	**1,115,808**	**136,883**

[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.
LRG = Liquefied Refinery Gas.
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 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 V — Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 2002

(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	**1,775**	**—**	**755**	**19**	**0**	**-18**	**0**	**2,567**	**(s)**	**0**
Natural Gas Liquids and LRGs	**75**	**71**	**4**	**—**	**0**	**-5**	**—**	**67**	**8**	**79**
Pentanes Plus	39	—	0	—	0	(s)	—	28	(s)	12
Liquefied Petroleum Gases	37	71	4	—	0	-4	—	39	8	67
Ethane/Ethylene	(s)	0	0	—	0	(s)	—	0	0	(s)
Propane/Propylene	12	55	2	—	0	-2	—	0	7	65
Normal Butane/Butylene	11	14	1	—	0	-2	—	27	2	-1
Isobutane/Isobutylene	13	2	0	—	0	(s)	—	12	0	3
Other Liquids	**79**	**—**	**98**	**—**	**26**	**-8**	**—**	**190**	**7**	**14**
Other Hydrocarbons/Oxygenates	85	—	52	—	0	-3	—	137	3	0
Unfinished Oils	—	—	33	—	0	-11	—	30	0	14
Motor Gasoline Blend. Comp.	-7	—	13	—	26	6	—	23	5	0
Aviation Gasoline Blend. Comp.	—	—	0	—	0	(s)	—	(s)	0	0
Finished Petroleum Products	**14**	**2,926**	**125**	**—**	**112**	**-13**	**—**	**—**	**226**	**2,964**
Finished Motor Gasoline	14	1,455	16	—	91	-5	—	—	9	1,572
Reformulated	—	1,069	4	—	21	-3	—	—	(s)	1,097
Oxygenated	69	47	0	—	1	0	—	—	(s)	117
Other	-56	339	13	—	70	-2	—	—	9	358
Finished Aviation Gasoline	—	2	(s)	—	0	(s)	—	—	0	3
Jet Fuel	—	416	60	—	7	-4	—	—	(s)	486
Naphtha-Type	—	(s)	0	—	0	(s)	—	—	(s)	(s)
Kerosene-Type	—	416	60	—	7	-4	—	—	(s)	486
Kerosene	—	4	0	—	0	(s)	—	—	14	-10
Distillate Fuel Oil	—	492	6	—	13	-1	—	—	36	476
0.05 percent sulfur and under	—	396	6	—	12	(s)	—	—	12	401
Greater than 0.05 percent sulfur	—	97	(s)	—	2	-1	—	—	24	75
Residual Fuel Oil	—	162	37	—	(s)	1	—	—	38	160
Petrochemical Feedstocks[e]	—	11	1	—	0	(s)	—	—	0	12
Special Naphthas	—	1	2	—	0	(s)	—	—	11	-8
Lubricants	—	20	(s)	—	1	-2	—	—	3	20
Waxes	—	(s)	1	—	0	(s)	—	—	(s)	(s)
Petroleum Coke	—	157	1	—	0	-2	—	—	112	48
Asphalt and Road Oil	—	56	(s)	—	0	(s)	—	—	2	54
Still Gas	—	142	0	—	0	0	—	—	0	142
Miscellaneous Products	—	7	0	—	0	-1	—	—	(s)	8
Total	**1,942**	**2,997**	**982**	**19**	**138**	**-44**	**0**	**2,824**	**241**	**3,057**

[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.
LRG = Liquefied Refinery Gas.
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 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. Production of Crude Oil by PAD District and State, 2002
(Thousand Barrels)

PAD District and State	Total	Daily Average
PAD District I	**7,458**	**20**
Florida	3,656	10
New York	165	(s)
Pennsylvania	2,233	6
Virginia	22	(s)
West Virginia	1,382	4
PAD District II	**164,635**	**451**
Illinois	12,051	33
Indiana	1,962	5
Kansas	32,721	90
Kentucky	2,679	7
Michigan	7,219	20
Missouri	95	(s)
Nebraska	2,779	8
North Dakota	30,993	85
Ohio	6,004	16
Oklahoma	66,642	183
South Dakota	1,214	3
Tennessee	275	1
PAD District III	**1,174,305**	**3,217**
Alabama	8,631	24
Arkansas	7,344	20
Louisiana[a]	93,477	256
Mississippi	18,015	49
New Mexico	67,041	184
Texas[a]	411,985	1,129
Federal Offshore PAD District III	567,810	1,556
PAD District IV	**102,982**	**282**
Colorado	17,734	49
Montana	16,855	46
Utah	13,676	37
Wyoming	54,717	150
PAD District V	**647,745**	**1,775**
Alaska[a]	359,335	984
South Alaska	11,302	31
North Slope	348,034	954
Arizona	63	(s)
California[a]	258,010	707
Nevada	553	2
Federal Offshore PAD District V	29,783	82
U.S. Total[a]	**2,097,124**	**5,746**

[a] Includes the following offshore production (thousand barrels): Alaska: State - 104,837; California: State - 16,294; Louisiana: State - 11,002; Texas: State - 1,274; U.S. Total, including Federal offshore - 731,001.

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

Note: • A final revision to the State data for 2002 will appear in the 2003 Petroleum Supply Annual. • 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 EIA Reserves and Production Division estimates based on Form EIA-182, "Domestic Crude Oil First Purchase Report" data.

Revised 2001 crude oil production statistics are available in Appendix C.

Table 15. Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining Districts, 2002

(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	**833**	**7,454**	**8,287**	**24,008**	**4,351**	**83,484**	**111,843**
Pentanes Plus	83	934	1,017	1,324	1,043	12,441	14,808
Liquefied Petroleum Gases	750	6,520	7,270	22,684	3,308	71,043	97,035
Ethane	245	1,656	1,901	11,740	0	28,557	40,297
Propane	307	3,346	3,653	7,473	2,070	28,277	37,820
Normal Butane	198	1,038	1,236	1,997	1,238	8,665	11,900
Isobutane	0	480	480	1,474	0	5,544	7,018
	Stocks						
Natural Gas Liquids	**11**	**50**	**61**	**139**	**55**	**1,266**	**1,460**
Pentanes Plus	0	23	23	31	16	65	112
Liquefied Petroleum Gases	11	27	38	108	39	1,201	1,348
Ethane	0	0	0	17	0	149	166
Propane	7	21	28	51	27	879	957
Normal Butane	4	3	7	20	12	113	145
Isobutane	0	3	3	20	0	60	80

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	**209,808**	**47,884**	**122,775**	**3,585**	**76,018**	**460,070**	**78,620**	**27,468**	**686,288**
Pentanes Plus	32,981	6,812	18,628	1,149	8,524	68,094	11,311	14,143	109,373
Liquefied Petroleum Gases	176,827	41,072	104,147	2,436	67,494	391,976	67,309	13,325	576,915
Ethane	81,968	21,287	42,470	279	35,282	181,286	31,881	50	255,415
Propane	59,417	12,566	37,908	1,087	20,946	131,924	22,397	4,504	200,298
Normal Butane	22,342	-20,600	12,535	726	6,600	21,603	9,050	3,954	47,743
Isobutane	13,100	27,819	11,234	344	4,666	57,163	3,981	4,817	73,459
	Stocks								
Natural Gas Liquids	**333**	**2,507**	**808**	**25**	**76**	**3,749**	**426**	**224**	**5,920**
Pentanes Plus	79	311	361	10	12	773	99	11	1,018
Liquefied Petroleum Gases	254	2,196	447	15	64	2,976	327	213	4,902
Ethane	27	662	0	0	0	689	77	1	933
Propane	138	505	109	10	26	788	117	140	2,030
Normal Butane	80	678	266	4	23	1,051	64	63	1,330
Isobutane	9	351	72	1	15	448	69	9	609

Note: • Stocks are reported as of the end of December. • Refer to Appendix A for Refining District descriptions.
Source: Energy Information Administration (EIA) Form EIA-816, "Monthly Natural Gas Liquids Report."

Table 16. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, 2002

(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	**531,230**	**31,125**	**562,355**	**769,594**	**146,252**	**255,960**	**1,171,806**
Natural Gas Liquids	**1,241**	**0**	**1,241**	**24,933**	**2,054**	**14,087**	**41,074**
Pentanes Plus	0	0	0	6,811	816	8,611	16,238
Liquefied Petroleum Gases	1,241	0	1,241	18,122	1,238	5,476	24,836
Ethane	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0
Normal Butane	318	0	318	9,259	472	2,502	12,233
Isobutane	923	0	923	8,863	766	2,974	12,603
Other Liquids	**128,703**	**294**	**128,997**	**7,786**	**9,611**	**2,255**	**19,652**
Other Hydrocarbons/Hydrogen/Oxygenates	25,271	581	25,852	12,177	4,916	2,704	19,797
Other Hydrocarbons/Hydrogen	0	0	0	260	61	298	619
Oxygenates	W	W	25,852	11,917	4,855	2,406	19,178
Fuel Ethanol	W	W	W	W	W	W	17,969
Methanol	W	W	W	W	W	W	W
MTBE	W	W	23,989	W	W	W	W
Other Oxygenates[a]	W	W	W	W	W	W	W
Unfinished Oils (net)	32,590	-217	32,373	18,144	519	-6,135	12,528
Motor Gasoline Blend. Comp. (net)	72,325	-70	72,255	-22,517	4,176	5,686	-12,655
Aviation Gasoline Blend. Comp. (net)	-1,483	0	-1,483	-18	0	0	-18
Total Input to Refineries	**661,174**	**31,419**	**692,593**	**802,313**	**157,917**	**272,302**	**1,232,532**
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	1,439	85	1,525	2,109	402	707	3,218
Operable Capacity (daily average)	1,621	94	1,715	2,366	426	782	3,574
Operable Utilization Rate (percent)[b]	88.8	91.0	88.9	89.1	94.3	90.4	90.0
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Cracking	590	19	609	783	132	202	1,117
Catalytic Hydrocracking	39	0	39	127	0	5	131
Delayed and Fluid Coking	80	0	80	184	56	78	319
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.83	1.40	0.86	1.28	2.30	0.83	1.31
API Gravity, Weighted Average (degrees)	31.89	33.00	31.95	32.98	27.95	35.19	32.84
Operable Capacity (daily average)	**1,621**	**94**	**1,715**	**2,366**	**426**	**782**	**3,574**
Operating	1,502	94	1,596	2,272	426	782	3,480
Idle	119	0	119	94	0	0	94
Alaskan Crude Oil Receipts	**0**	**0**	**0**	**0**	**0**	**0**	**0**

See footnotes at end of table.

Table 16. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, 2002 (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	**202,258**	**1,268,310**	**1,039,428**	**53,967**	**30,741**	**2,594,704**	**189,621**	**937,044**	**5,455,530**
Natural Gas Liquids	**12,938**	**39,034**	**26,624**	**2,131**	**3,265**	**83,992**	**5,610**	**24,512**	**156,429**
Pentanes Plus	7,015	16,157	11,834	1,583	1,665	38,254	1,847	10,110	66,449
Liquefied Petroleum Gases	5,923	22,877	14,790	548	1,600	45,738	3,763	14,402	89,980
Ethane	0	0	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0	0	0
Normal Butane	5,485	7,342	7,159	162	0	20,148	2,154	9,995	44,848
Isobutane	438	15,535	7,631	386	1,600	25,590	1,609	4,407	45,132
Other Liquids	**130**	**107,058**	**15,348**	**-1,282**	**-2,726**	**118,528**	**7,075**	**69,264**	**343,516**
Other Hydrocarbons/Hydrogen/Oxygenates	1,839	27,289	13,985	0	306	43,419	1,632	50,144	140,844
Other Hydrocarbons/Hydrogen	1,419	3,293	6,147	0	0	10,859	387	10,030	21,895
Oxygenates	420	23,996	7,838	W	W	32,560	1,245	40,114	118,949
Fuel Ethanol	W	W	W	W	W	W	W	W	26,320
Methanol	W	W	W	W	W	W	W	W	13
MTBE	W	23,056	W	W	W	30,952	W	34,141	90,291
Other Oxygenates[a]	W	W	W	W	W	W	W	W	2,325
Unfinished Oils (net)	1,568	109,553	15,580	-1,088	1,253	126,866	2,285	10,867	184,919
Motor Gasoline Blend. Comp. (net)	-3,283	-29,784	-14,225	-194	-4,285	-51,771	3,158	8,252	19,239
Aviation Gasoline Blend. Comp. (net)	6	0	8	0	0	14	0	1	-1,486
Total Input to Refineries	**215,326**	**1,414,402**	**1,081,400**	**54,816**	**31,280**	**2,797,224**	**202,306**	**1,030,820**	**5,955,475**
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	557	3,438	2,875	140	84	7,094	526	2,817	15,180
Operable Capacity (daily average)	588	3,831	3,030	206	96	7,750	575	3,130	16,744
Operable Utilization Rate (percent)[b]	94.6	89.7	94.9	68.1	88.1	91.5	91.6	90.0	90.7
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Cracking	186	1,364	1,026	19	27	2,622	138	713	5,198
Catalytic Hydrocracking	47	288	224	0	0	559	12	468	1,210
Delayed and Fluid Coking	5	574	508	8	0	1,095	40	501	2,035
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.81	1.75	1.71	2.05	0.52	1.65	1.40	1.22	1.41
API Gravity, Weighted Average (degrees)	38.02	28.90	29.38	27.32	39.54	29.90	32.99	27.49	30.42
Operable Capacity (daily average)	**588**	**3,831**	**3,030**	**206**	**96**	**7,750**	**575**	**3,130**	**16,744**
Operating	588	3,822	3,012	198	96	7,716	573	3,093	16,457
Idle	0	9	18	8	0	35	2	37	287
Alaskan Crude Oil Receipts	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**347,949**	**347,949**

[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.

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 17. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, 2002

(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	17,535	256	17,791	33,540	1,972	6,436	41,948
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	17,753	343	18,096	29,808	3,310	7,665	40,783
Propane	W	W	W	20,276	W	W	W
Propylene	W	W	W	9,532	W	W	W
Normal Butane/Butylene	1,279	-21	1,258	4,038	-1,179	8	2,867
Normal Butane	W	W	W	W	W	W	W
Butylene	W	W	W	W	W	W	W
Isobutane/Isobutylene	-1,497	-66	-1,563	-306	-159	-1,237	-1,702
Isobutane	W	W	W	W	W	W	W
Isobutylene	W	W	W	W	W	W	W
Finished Motor Gasoline	364,493	12,521	377,014	430,101	85,548	148,604	664,253
Reformulated	233,236	0	233,236	94,353	18,290	8,238	120,881
Oxygenated	429	5,800	6,229	24,238	31,497	15,035	70,770
Other	130,828	6,721	137,549	311,510	35,761	125,331	472,602
Finished Aviation Gasoline	74	0	74	510	735	326	1,571
Jet Fuel	31,033	293	31,326	56,823	9,861	12,172	78,856
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	31,033	293	31,326	56,823	9,861	12,172	78,856
Commercial	31,033	205	31,238	54,762	9,388	8,468	72,618
Military	0	88	88	2,061	473	3,704	6,238
Kerosene	3,952	607	4,559	2,468	360	688	3,516
Distillate Fuel Oil	158,905	8,054	166,959	180,046	41,456	78,753	300,255
0.05 percent sulfur and under	78,279	6,855	85,134	142,597	35,213	58,396	236,206
Greater than 0.05 percent sulfur	80,626	1,199	81,825	37,449	6,243	20,357	64,049
Residual Fuel Oil	33,894	258	34,152	15,314	3,388	2,078	20,780
Less than 0.31 percent sulfur	15,845	56	15,901	0	0	0	0
0.31 to 1.00 percent sulfur	15,129	202	15,331	2,913	0	17	2,930
Greater than 1.00 percent sulfur	2,920	0	2,920	12,401	3,388	2,061	17,850
Naphtha for Petrochemical Feedstock Use	5,488	0	5,488	7,236	0	-5	7,231
Other Oils for Petrochemical Feedstock Use	0	0	0	-904	0	659	-245
Special Naphthas	342	258	600	5,840	0	224	6,064
Lubricants	3,866	2,246	6,112	2,398	0	3,064	5,462
Naphthenic	0	0	0	0	0	0	0
Paraffinic	3,866	2,246	6,112	2,398	0	3,064	5,462
Waxes	0	205	205	589	0	704	1,293
Petroleum Coke	18,017	306	18,323	30,928	8,129	9,861	48,918
Marketable	6,738	0	6,738	18,031	5,985	7,486	31,502
Catalyst	11,279	306	11,585	12,897	2,144	2,375	17,416
Asphalt and Road Oil	29,661	5,984	35,645	43,311	10,949	8,396	62,656
Still Gas	22,575	747	23,322	29,310	7,262	10,213	46,785
Miscellaneous Products	365	79	444	3,124	1,098	202	4,424
Fuel Use	0	0	0	0	0	0	0
Nonfuel Use	365	79	444	3,124	1,098	202	4,424
Total	**690,200**	**31,814**	**722,014**	**840,634**	**170,758**	**282,375**	**1,293,767**
Processing Gain(-) or Loss(+)[a]	-29,026	-395	-29,421	-38,321	-12,841	-10,073	-61,235

See footnotes at end of table.

Table 17. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, 2002 (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	9,982	90,769	54,991	735	710	157,187	2,153	25,821	244,900
Ethane/Ethylene	0	7,857	1,312	0	0	9,169	0	0	9,169
Ethane	W	W	W	W	W	W	W	W	6,923
Ethylene	W	W	W	W	W	W	W	W	2,246
Propane/Propylene	8,406	66,805	50,123	621	717	126,672	3,187	20,171	208,909
Propane	W	32,152	24,415	W	W	63,093	W	W	126,808
Propylene	W	34,653	25,708	W	W	63,579	W	W	82,101
Normal Butane/Butylene	2,323	13,465	2,907	114	-7	18,802	-313	5,100	27,714
Normal Butane	W	W	W	W	W	W	W	W	20,387
Butylene	W	W	W	W	W	W	W	W	7,327
Isobutane/Isobutylene	-747	2,642	649	0	0	2,544	-721	550	-892
Isobutane	W	W	W	W	W	W	W	W	-1,982
Isobutylene	W	W	W	W	W	W	W	W	1,090
Finished Motor Gasoline	117,704	659,274	504,333	13,480	16,930	1,311,721	102,543	531,216	2,986,747
Reformulated	7,157	181,500	48,898	0	0	237,555	0	390,306	981,978
Oxygenated	1,494	0	0	0	1,809	3,303	9,912	17,177	107,391
Other	109,053	477,774	455,435	13,480	15,121	1,070,863	92,631	123,733	1,897,378
Finished Aviation Gasoline	1,553	972	1,140	0	0	3,665	138	905	6,353
Jet Fuel	18,193	132,806	127,462	330	2,569	281,360	9,208	151,833	552,583
Naphtha-Type	0	0	0	0	0	0	0	72	72
Kerosene-Type	18,193	132,806	127,462	330	2,569	281,360	9,208	151,761	552,511
Commercial	14,535	109,829	118,673	0	0	243,037	7,350	135,583	489,826
Military	3,658	22,977	8,789	330	2,569	38,323	1,858	16,178	62,685
Kerosene	46	8,169	1,641	731	15	10,602	703	1,392	20,772
Distillate Fuel Oil	49,719	296,750	238,332	13,923	8,119	606,843	57,401	179,693	1,311,151
0.05 percent sulfur and under	39,899	257,511	127,886	4,911	7,867	438,074	47,230	144,443	951,087
Greater than 0.05 percent sulfur	9,820	39,239	110,446	9,012	252	168,769	10,171	35,250	360,064
Residual Fuel Oil	2,090	54,360	42,825	1,856	160	101,291	4,005	59,217	219,445
Less than 0.31 percent sulfur	1,142	23	6,603	0	0	7,768	412	2,249	26,330
0.31 to 1.00 percent sulfur	208	6,826	3,217	1,473	160	11,884	878	21,081	52,104
Greater than 1.00 percent sulfur	740	47,511	33,005	383	0	81,639	2,715	35,887	141,011
Naphtha for Petrochemical Feedstock Use	820	62,091	11,268	0	-8	74,171	0	1,113	88,003
Other Oils for Petrochemical Feedstock Use	1,476	26,438	24,036	0	0	51,950	245	2,964	54,914
Special Naphthas	1,641	6,162	1,659	2,164	0	11,626	0	522	18,812
Lubricants	W	21,786	W	W	W	44,400	0	7,378	63,352
Naphthenic	W	2,947	W	W	W	9,775	0	2,581	12,356
Paraffinic	W	18,839	W	W	W	34,625	0	4,797	50,996
Waxes	0	2,384	1,385	130	0	3,899	929	-4	6,322
Petroleum Coke	3,447	87,273	62,782	714	385	154,601	6,126	57,258	285,226
Marketable	332	62,921	48,902	459	0	112,614	3,578	43,720	198,152
Catalyst	3,115	24,352	13,880	255	385	41,987	2,548	13,538	87,074
Asphalt and Road Oil	6,853	10,900	11,263	12,692	1,726	43,434	17,716	20,264	179,715
Still Gas	8,876	60,640	42,414	1,542	911	114,383	7,318	51,709	243,517
Miscellaneous Products	425	7,238	6,967	0	0	14,630	718	2,592	22,808
Fuel Use	0	0	2,486	0	0	2,486	0	0	2,486
Nonfuel Use	425	7,238	4,481	0	0	12,144	718	2,592	20,322
Total	**223,207**	**1,528,012**	**1,147,514**	**55,513**	**31,517**	**2,985,763**	**209,203**	**1,093,873**	**6,304,620**
Processing Gain(-) or Loss(+)[a]	-7,881	-113,610	-66,114	-697	-237	-188,539	-6,897	-63,053	-349,145

[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 18. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, 2002

(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	**9,743**	**353**	**10,096**	**9,241**	**2,201**	**2,270**	**13,712**
Petroleum Products	**48,117**	**1,878**	**49,995**	**29,156**	**7,033**	**10,211**	**46,400**
Pentanes Plus	0	0	0	65	42	136	243
Liquefied Petroleum Gases	1,607	24	1,631	1,956	449	819	3,224
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	485	5	490	943	17	373	1,333
Normal Butane/Butylene	833	7	840	796	379	304	1,479
Isobutane/Isobutylene	289	12	301	217	53	142	412
Other Hydrocarbons/Hydrogen/Oxygenates	1,606	0	1,606	239	155	7	401
Other Hydrocarbons/Hydrogen	0	0	0	48	0	0	48
Oxygenates	W	W	1,606	191	155	7	353
Fuel Ethanol	W	W	W	W	W	W	350
Methanol	W	W	W	W	W	W	W
MTBE	W	W	1,360	W	W	W	W
Other Oxygenates [a]	W	W	W	W	W	W	W
Unfinished Oils	7,157	328	7,485	7,229	436	2,812	10,477
Naphthas and Lighter	1,472	155	1,627	2,155	89	905	3,149
Kerosene and Light Gas Oils	1,544	0	1,544	1,321	128	239	1,688
Heavy Gas Oils	2,215	163	2,378	2,024	171	693	2,888
Residuum	1,926	10	1,936	1,729	48	975	2,752
Motor Gasoline Blending Components	6,356	28	6,384	5,083	1,129	1,038	7,250
Aviation Gasoline Blending Components	102	0	102	5	0	0	5
Finished Motor Gasoline	10,728	158	10,886	3,618	1,045	1,535	6,198
Reformulated	7,117	0	7,117	0	0	0	0
Oxygenated	0	6	6	0	120	0	120
Other	3,611	152	3,763	3,618	925	1,535	6,078
Finished Aviation Gasoline	80	0	80	3	103	24	130
Jet Fuel	1,599	26	1,625	1,489	73	407	1,969
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	1,599	26	1,625	1,489	73	407	1,969
Kerosene	130	23	153	286	28	95	409
Distillate Fuel Oil	11,292	223	11,515	4,263	1,392	1,767	7,422
0.05 percent sulfur and under	2,618	154	2,772	2,915	1,083	1,205	5,203
Greater then 0.05 percent sulfur	8,674	69	8,743	1,348	309	562	2,219
Residual Fuel Oil	4,917	14	4,931	991	171	93	1,255
Less than 0.31 percent sulfur	1,343	6	1,349	0	0	0	0
0.31 to 1.00 percent sulfur	2,735	8	2,743	214	0	1	215
Greater than 1.00 percent sulfur	839	0	839	777	171	92	1,040
Naphtha for Petrochemical Feedstock Use	491	0	491	300	0	1	301
Other Oils for Petrochemical Feedstock Use	0	0	0	71	0	0	71
Special Naphthas	57	23	80	320	0	12	332
Lubricants	473	360	833	117	0	286	403
Waxes	0	193	193	43	0	50	93
Petroleum Coke (Marketable)	265	0	265	226	832	147	1,205
Asphalt and Road Oil	1,254	461	1,715	2,711	1,155	980	4,846
Miscellaneous Products	3	17	20	141	23	2	166
Total Stocks, All Oils	**57,860**	**2,231**	**60,091**	**38,397**	**9,234**	**12,481**	**60,112**

See footnotes at end of table.

Table 18. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, 2002 (Continued)

(Thousand Barrels)

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Crude Oil	**759**	**25,466**	**18,297**	**1,263**	**271**	**46,056**	**1,938**	**19,268**	**91,070**
Petroleum Products	**9,350**	**62,513**	**51,403**	**4,654**	**1,345**	**129,265**	**11,715**	**57,330**	**294,705**
Pentanes Plus	128	66	154	9	8	365	18	0	626
Liquefied Petroleum Gases	2,230	589	5,680	13	57	8,569	319	1,153	14,896
Ethane/Ethylene	148	0	0	0	0	148	0	0	148
Propane/Propylene	1,364	71	599	2	3	2,039	102	182	4,146
Normal Butane/Butylene	421	334	4,605	5	17	5,382	150	729	8,580
Isobutane/Isobutylene	297	184	476	6	37	1,000	67	242	2,022
Other Hydrocarbons/Hydrogen/Oxygenates	46	1,309	586	0	12	1,953	81	933	4,974
Other Hydrocarbons/Hydrogen	0	0	1	0	0	1	0	4	53
Oxygenates	46	1,309	585	W	W	1,952	81	929	4,921
Fuel Ethanol	W	W	W	W	W	W	W	W	552
Methanol	W	W	W	W	W	W	W	W	692
MTBE	W	842	W	W	W	1,418	W	867	3,648
Other Oxygenates [a]	W	W	W	W	W	W	W	W	29
Unfinished Oils	2,091	18,317	17,050	916	405	38,779	2,084	16,941	75,766
Naphthas and Lighter	688	5,351	4,580	445	210	11,274	447	3,304	19,801
Kerosene and Light Gas Oils	251	3,542	2,780	311	66	6,950	315	3,636	14,133
Heavy Gas Oils	421	6,960	6,919	151	129	14,580	1,016	7,145	28,007
Residuum	731	2,464	2,771	9	0	5,975	306	2,856	13,825
Motor Gasoline Blending Components	1,106	7,201	5,057	94	305	13,763	2,074	10,493	39,964
Aviation Gasoline Blending Components	5	0	15	0	0	20	0	0	127
Finished Motor Gasoline	1,407	10,730	7,118	173	120	19,548	2,737	9,474	48,843
Reformulated	49	3,563	433	0	0	4,045	0	5,747	16,909
Oxygenated	0	0	0	0	0	0	158	0	284
Other	1,358	7,167	6,685	173	120	15,503	2,579	3,727	31,650
Finished Aviation Gasoline	43	183	182	0	0	408	20	232	870
Jet Fuel	485	3,462	2,291	34	38	6,310	344	4,905	15,153
Naphtha-Type	0	0	0	0	0	0	0	19	19
Kerosene-Type	485	3,462	2,291	34	38	6,310	344	4,886	15,134
Kerosene	24	274	257	29	5	589	55	53	1,259
Distillate Fuel Oil	778	7,848	5,228	570	158	14,582	1,963	5,598	41,080
0.05 percent sulfur and under	509	5,196	2,848	167	99	8,819	1,426	4,341	22,561
Greater then 0.05 percent sulfur	269	2,652	2,380	403	59	5,763	537	1,257	18,519
Residual Fuel Oil	93	2,669	1,699	248	8	4,717	331	3,090	14,324
Less than 0.31 percent sulfur	32	0	137	0	0	169	9	530	2,057
0.31 to 1.00 percent sulfur	0	179	110	186	8	483	121	849	4,411
Greater than 1.00 percent sulfur	61	2,490	1,452	62	0	4,065	201	1,711	7,856
Naphtha for Petrochemical Feedstock Use	30	1,200	257	0	13	1,500	0	97	2,389
Other Oils for Petrochemical Feedstock Use	69	676	405	0	0	1,150	0	112	1,333
Special Naphthas	134	1,094	57	181	0	1,466	4	40	1,922
Lubricants	30	2,814	2,200	919	0	5,963	0	946	8,145
Waxes	0	241	241	112	0	594	16	0	896
Petroleum Coke (Marketable)	0	3,009	2,008	0	0	5,017	40	1,816	8,343
Asphalt and Road Oil	624	635	688	1,356	216	3,519	1,629	1,412	13,121
Miscellaneous Products	27	196	230	0	0	453	0	35	674
Total Stocks, All Oils	**10,109**	**87,979**	**69,700**	**5,917**	**1,616**	**175,321**	**13,653**	**76,598**	**385,775**

[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 end of December. • Refer to Appendix A for Refining District descriptions.

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

Table 19. Percent Refinery Yield of Petroleum Products by PAD and Refining Districts,[a] 2002

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Liquefied Refinery Gases	3.1	0.8	3.0	4.3	1.3	2.6	3.5
Finished Motor Gasoline[b]	47.1	38.9	46.7	52.7	50.7	50.5	52.0
Finished Aviation Gasoline[c]	0.3	0.0	0.3	0.1	0.5	0.1	0.1
Naphtha-Type Jet Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel	5.5	0.9	5.3	7.2	6.7	4.9	6.7
Kerosene	0.7	2.0	0.8	0.3	0.2	0.3	0.3
Distillate Fuel Oil	28.2	26.1	28.1	22.9	28.2	31.5	25.4
Residual Fuel Oil	6.0	0.8	5.7	1.9	2.3	0.8	1.8
Naphtha for Petrochemical Feedstock Use	1.0	0.0	0.9	0.9	0.0	0.0	0.6
Other Oils for Petrochemical Feedstock Use	0.0	0.0	0.0	-0.1	0.0	0.3	0.0
Special Naphthas	0.1	0.8	0.1	0.7	0.0	0.1	0.5
Lubricants	0.7	7.3	1.0	0.3	0.0	1.2	0.5
Waxes	0.0	0.7	0.0	0.1	0.0	0.3	0.1
Petroleum Coke	3.2	1.0	3.1	3.9	5.5	3.9	4.1
Asphalt and Road Oil	5.3	19.4	6.0	5.5	7.5	3.4	5.3
Still Gas	4.0	2.4	3.9	3.7	4.9	4.1	4.0
Miscellaneous Products	0.1	0.3	0.1	0.4	0.7	0.1	0.4
Processing Gain(-) or Loss(+)[d]	-5.1	-1.3	-4.9	-4.9	-8.7	-4.0	-5.2

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Liquefied Refinery Gases	4.9	6.6	5.2	1.4	2.2	5.8	1.1	2.7	4.3
Finished Motor Gasoline[b]	52.1	45.2	45.3	21.8	55.1	45.4	48.0	47.3	47.3
Finished Aviation Gasoline[c]	0.8	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1
Naphtha-Type Jet Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel	8.9	9.6	12.1	0.6	8.0	10.3	4.8	16.0	9.8
Kerosene	0.0	0.6	0.2	1.4	0.0	0.4	0.4	0.1	0.4
Distillate Fuel Oil	24.4	21.5	22.6	26.3	25.4	22.3	29.9	19.0	23.2
Residual Fuel Oil	1.0	3.9	4.1	3.5	0.5	3.7	2.1	6.2	3.9
Naphtha for Petrochemical Feedstock Use	0.4	4.5	1.1	0.0	0.0	2.7	0.0	0.1	1.6
Other Oils for Petrochemical Feedstock Use	0.7	1.9	2.3	0.0	0.0	1.9	0.1	0.3	1.0
Special Naphthas	0.8	0.4	0.2	4.1	0.0	0.4	0.0	0.1	0.3
Lubricants	0.2	1.6	1.4	13.6	0.0	1.6	0.0	0.8	1.1
Waxes	0.0	0.2	0.1	0.2	0.0	0.1	0.5	0.0	0.1
Petroleum Coke	1.7	6.3	6.0	1.4	1.2	5.7	3.2	6.0	5.1
Asphalt and Road Oil	3.4	0.8	1.1	24.0	5.4	1.6	9.2	2.1	3.2
Still Gas	4.4	4.4	4.0	2.9	2.8	4.2	3.8	5.5	4.3
Miscellaneous Products	0.2	0.5	0.7	0.0	0.0	0.5	0.4	0.3	0.4
Processing Gain(-) or Loss(+)[d]	-3.9	-8.2	-6.3	-1.3	-0.7	-6.9	-3.6	-6.7	-6.2

[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 16 and 17.

Table 20. Imports of Crude Oil and Petroleum Products by PAD District, 2002

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil[a,b]	**548,205**	**545,387**	**1,883,111**	**83,732**	**275,740**	**3,336,175**	**9,140**
Natural Gas Liquids	**11,224**	**44,254**	**11,936**	**3,785**	**1,288**	**72,487**	**199**
Pentanes Plus	0	225	4,624	1,021	0	5,870	16
Liquefied Petroleum Gases	11,224	44,029	7,312	2,764	1,288	66,617	183
Ethane	0	0	0	0	0	0	0
Ethylene	0	138	0	0	0	138	(s)
Propane	9,399	37,492	498	1,898	859	50,146	137
Propylene	0	2,944	0	0	0	2,944	8
Normal Butane	1,295	3,333	2,797	858	429	8,712	24
Butylene	0	0	2,294	0	0	2,294	6
Isobutane	530	122	1,723	8	0	2,383	7
Isobutylene	0	0	0	0	0	0	0
Other Liquids	**126,220**	**5**	**123,702**	**0**	**35,799**	**285,726**	**783**
Other Hydrocarbons/Hydrogen/Oxygenates	3,247	5	159	0	18,968	22,379	61
Other Hydrocarbons/Hydrogen	156	0	0	0	0	156	(s)
Oxygenates	3,091	5	159	0	18,968	22,223	61
Fuel Ethanol	0	5	0	0	301	306	1
MTBE	2,929	0	0	0	18,667	21,596	59
Other Oxygenates[c]	162	0	159	0	0	321	1
Unfinished Oils[a]	23,316	0	114,377	0	12,000	149,693	410
Naphthas and Lighter	322	0	9,085	0	0	9,407	26
Kerosene and Light Gas Oils	0	0	700	0	5,190	5,890	16
Heavy Gas Oils	20,869	0	70,961	0	6,157	97,987	268
Residuum	2,125	0	33,631	0	653	36,409	100
Motor Gasoline Blending Components	99,657	0	9,166	0	4,831	113,654	311
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	**370,033**	**5,730**	**89,510**	**3,190**	**45,687**	**514,150**	**1,409**
Finished Motor Gasoline	171,239	793	3,744	130	5,988	181,894	498
Reformulated	83,175	0	546	0	1,362	85,083	233
Oxygenated	0	0	0	0	0	0	0
Other	88,064	793	3,198	130	4,626	96,811	265
Finished Aviation Gasoline	4	22	0	148	57	231	1
Jet Fuel	17,124	0	159	14	21,928	39,225	107
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	17,124	0	159	14	21,928	39,225	107
Bonded Aircraft Fuel	6,476	0	159	0	15,418	22,053	60
Other	10,648	0	0	14	6,510	17,172	47
Kerosene	1,883	0	0	0	0	1,883	5
Distillate Fuel Oil	90,092	2,301	594	2,473	2,143	97,603	267
Bonded Ship Bunkers	763	0	0	0	292	1,055	3
0.05 percent sulfur and under	104	0	0	0	272	376	1
Greater than 0.05 percent sulfur	659	0	0	0	20	679	2
Other	89,329	2,301	594	2,473	1,851	96,548	265
0.05 percent sulfur and under	32,283	1,749	490	2,309	1,738	38,569	106
Greater than 0.05 percent sulfur	57,046	552	104	164	113	57,979	159
Residual Fuel Oil	70,422	283	6,717	0	13,474	90,896	249
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	70,422	283	6,717	0	13,474	90,896	249
Less than 0.31 percent sulfur	12,646	16	1,664	0	1,291	15,617	43
0.31 to 1.00 percent sulfur	17,514	174	901	0	546	19,135	52
Greater than 1.00 percent sulfur	40,262	93	4,152	0	11,637	56,144	154
Naphtha for Petrochemical Feedstock Use	3,432	484	18,692	0	390	22,998	63
Other Oils for Petrochemical Feedstock Use	0	5	53,411	0	0	53,416	146
Special Naphthas	3,007	752	1,623	0	663	6,045	17
Lubricants	1,065	615	417	0	68	2,165	6
Waxes	501	104	82	0	330	1,017	3
Petroleum Coke	2,608	4	3,691	0	544	6,847	19
Asphalt and Road Oil	8,656	357	351	425	102	9,891	27
Miscellaneous Products	0	10	29	0	0	39	(s)
Total	**1,055,682**	**595,376**	**2,108,259**	**90,707**	**358,514**	**4,208,538**	**11,530**

[a] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.
[b] Includes crude oil imported for storage in the Strategic Petroleum Reserve.
[c] Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

(s) = Less than 500 barrels per day.

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

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

Table 21. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,[a] 2002

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**818,546**	**8,749**	**30,894**	**4,385**	**2,260**	**3,331**	**678**	**952**	**411**	**0**
Algeria	10,906	8,749	29,806	772	27	264	633	952	0	0
Iraq	167,638	0	0	0	0	0	0	0	0	0
Kuwait	78,803	0	0	0	0	2,609	0	0	343	0
Qatar	3,194	0	0	0	0	0	0	0	0	0
Saudi Arabia	554,500	0	1,088	2,330	1,581	458	45	0	1	0
United Arab Emirates	3,505	0	0	1,283	652	0	0	0	67	0
Other OPEC	**671,638**	**134**	**18,029**	**6,775**	**16,077**	**4,439**	**10,656**	**13,365**	**268**	**505**
Indonesia	18,246	39	546	0	0	0	0	456	0	0
Nigeria	215,122	0	4,379	2,631	0	0	414	3,432	0	101
Venezuela	438,270	95	13,104	4,144	16,077	4,439	10,242	9,477	268	404
Non OPEC	**1,845,991**	**57,734**	**100,770**	**102,494**	**163,557**	**31,455**	**86,269**	**76,579**	**1,204**	**5,540**
Angola	117,058	0	3,316	0	0	0	0	374	0	251
Argentina	25,540	0	684	3,369	7,758	0	698	1,651	63	0
Australia	18,631	0	0	0	0	0	0	0	0	0
Bahamas	0	0	303	274	1,870	0	1,061	8,831	0	0
Belgium	0	125	13,107	3,890	7,806	0	638	45	0	61
Brazil	21,296	428	485	2,116	9,205	0	344	6,277	0	404
Brunei	3,485	0	0	0	0	0	0	0	0	0
Cameroon	4,198	0	139	0	0	0	0	344	0	0
Canada	527,304	53,694	809	12,919	51,500	1,071	40,770	12,846	886	2,552
China, People's Republic of	7,238	0	76	782	357	31	0	0	0	0
Colombia	85,783	0	1,297	129	0	762	199	5,298	0	110
Congo (Brazzaville)	8,494	250	0	0	0	0	0	1,300	0	0
Congo (Kinshasa)[d]	1,269	0	0	0	0	0	0	0	0	0
Denmark	1,223	0	0	50	0	0	0	269	0	0
Ecuador	36,491	0	695	320	0	0	0	1,936	0	188
Egypt	0	0	180	1,961	1,279	0	0	0	0	0
France	0	445	1,087	5,328	1,188	0	0	245	0	246
Gabon	52,208	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	9,816	3,755	916	0	0	0	0	45
Greece	0	0	0	548	241	0	0	0	0	0
Guatemala	8,401	0	0	0	0	0	0	0	0	0
India	0	0	0	4,031	583	0	1,299	0	0	0
Ireland	0	0	618	0	0	0	0	350	0	0
Italy	0	26	1,628	4,466	4,941	0	682	258	0	123
Ivory Coast	1,325	0	904	0	0	0	0	96	0	0
Japan	0	0	668	0	0	1,532	150	0	0	0
Korea, Republic of	0	0	41	650	2,201	10,965	535	0	0	419
Malaysia	3,219	0	375	0	103	939	141	0	0	0
Mexico	547,443	370	167	2,300	125	1,400	298	4,180	0	326
Netherlands	0	169	2,547	9,281	4,936	0	454	4,749	0	239
Netherlands Antilles	0	0	13,476	386	0	3,771	4,632	2,748	0	0
Norway	127,136	1,971	4,462	668	2,994	77	0	1,207	0	0
Oman	6,060	0	0	0	0	0	0	0	0	0
Panama	0	0	0	0	4	0	75	429	0	0
Peru	3,576	0	776	0	0	0	0	3,663	0	0
Portugal	0	0	296	1,694	1,768	0	0	0	0	0
Puerto Rico	0	0	57	0	0	0	0	0	0	0
Romania	0	0	0	4,238	1,157	0	0	0	0	0
Russia	31,047	0	18,875	11,842	1,910	0	7,352	3,712	0	0
Singapore	0	0	3,293	1,054	2,039	271	38	0	0	0
Spain	0	0	499	3,799	1,113	0	0	0	0	0
Sweden	0	0	5,075	0	122	0	208	300	0	0
Syria	783	0	3,112	0	0	0	0	0	0	0
Thailand	675	0	20	0	60	0	0	0	0	0
Trinidad and Tobago	24,663	0	577	1,805	177	0	0	1,942	0	0
Tunisia	0	0	325	27	0	0	0	0	0	0
Turkey	0	0	1,683	1,797	921	0	0	0	0	0
United Kingdom	147,935	196	3,241	8,349	13,335	5	152	981	0	240
Virgin Islands, U.S.	0	0	3,525	147	37,322	8,145	24,556	11,941	0	336
Yemen	9,977	0	0	0	0	0	0	0	0	0
Other	23,533	60	2,536	10,519	5,626	2,486	1,987	607	255	0
Total	**3,336,175**	**66,617**	**149,693**	**113,654**	**181,894**	**39,225**	**97,603**	**90,896**	**1,883**	**6,045**
Persian Gulf[e]	**807,640**	**0**	**1,088**	**3,613**	**2,233**	**3,067**	**45**	**0**	**411**	**0**

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,[a] 2002 (Continued)

(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products[c]	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	**1,397**	**39,585**	**0**	**0**	**13,268**	**105,910**	**924,456**	**2,243**	**290**	**2,533**
Algeria	1,397	39,585	0	0	3,139	85,324	96,230	30	234	264
Iraq	0	0	0	0	0	0	167,638	459	0	459
Kuwait	0	0	0	0	1,422	4,374	83,177	216	12	228
Qatar	0	0	0	0	2,198	2,198	5,392	9	6	15
Saudi Arabia	0	0	0	0	6,509	12,012	566,512	1,519	33	1,552
United Arab Emirates	0	0	0	0	0	2,002	5,507	10	5	15
Other OPEC	**3,635**	**0**	**0**	**5,344**	**5,568**	**84,795**	**756,433**	**1,840**	**232**	**2,072**
Indonesia	0	0	0	0	33	1,074	19,320	50	3	53
Nigeria	422	0	0	0	250	11,629	226,751	589	32	621
Venezuela	3,213	0	0	5,344	5,285	72,092	510,362	1,201	198	1,398
Non OPEC	**17,966**	**13,831**	**2,165**	**4,547**	**17,547**	**681,658**	**2,527,649**	**5,058**	**1,868**	**6,925**
Angola	186	0	0	0	0	4,127	121,185	321	11	332
Argentina	544	0	0	0	1,646	16,413	41,953	70	45	115
Australia	0	2,259	0	0	0	2,259	20,890	51	6	57
Bahamas	0	0	0	0	0	12,339	12,339	0	34	34
Belgium	69	0	0	0	40	25,781	25,781	0	71	71
Brazil	132	0	29	0	1,526	20,946	42,242	58	57	116
Brunei	0	0	0	0	0	0	3,485	10	0	10
Cameroon	0	0	0	0	0	483	4,681	12	1	13
Canada	1,373	1,280	1,680	3,328	7,322	192,030	719,334	1,445	526	1,971
China, People's Republic of	243	0	16	0	586	2,091	9,329	20	6	26
Colombia	1,480	0	0	0	0	9,275	95,058	235	25	260
Congo (Brazzaville)	0	0	0	0	0	1,550	10,044	23	4	28
Congo (Kinshasa)[d]	0	0	0	0	0	0	1,269	3	0	3
Denmark	0	0	0	0	0	319	1,542	3	1	4
Ecuador	632	0	0	0	0	3,771	40,262	100	10	110
Egypt	447	0	0	0	0	3,867	3,867	0	11	11
France	7	7	0	0	56	8,609	8,609	0	24	24
Gabon	0	0	0	0	0	0	52,208	143	0	143
Germany, FR	0	0	145	0	74	14,751	14,751	0	40	40
Greece	0	0	0	0	0	789	789	0	2	2
Guatemala	0	0	0	0	0	0	8,401	23	0	23
India	292	1,129	0	0	162	7,496	7,496	0	21	21
Ireland	0	0	0	0	0	968	968	0	3	3
Italy	88	0	60	0	15	12,287	12,287	0	34	34
Ivory Coast	0	0	0	0	0	1,000	2,325	4	3	6
Japan	0	0	0	0	52	2,402	2,402	0	7	7
Korea, Republic of	390	684	109	0	531	16,525	16,525	0	45	45
Malaysia	0	0	0	0	1,116	2,674	5,893	9	7	16
Mexico	7,452	7	0	155	274	17,054	564,497	1,500	47	1,547
Netherlands	730	170	0	0	686	23,961	23,961	0	66	66
Netherlands Antilles	1,275	249	0	341	2,608	29,486	29,486	0	81	81
Norway	153	4,668	0	0	0	16,200	143,336	348	44	393
Oman	0	0	0	0	0	0	6,060	17	0	17
Panama	0	0	0	0	0	508	508	0	1	1
Peru	439	0	0	0	0	4,878	8,454	10	13	23
Portugal	0	0	0	0	0	3,758	3,758	0	10	10
Puerto Rico	0	0	0	0	0	57	57	0	(s)	(s)
Romania	0	0	0	0	69	5,464	5,464	0	15	15
Russia	901	1,051	0	0	0	45,643	76,690	85	125	210
Singapore	0	0	74	0	104	6,873	6,873	0	19	19
Spain	0	0	0	723	23	6,157	6,157	0	17	17
Sweden	0	0	0	0	0	5,705	5,705	0	16	16
Syria	0	0	0	0	0	3,112	3,895	2	9	11
Thailand	0	0	52	0	57	189	864	2	1	2
Trinidad and Tobago	0	0	0	0	0	4,501	29,164	68	12	80
Tunisia	0	0	0	0	0	352	352	0	1	1
Turkey	262	0	0	0	0	4,663	4,663	0	13	13
United Kingdom	120	0	0	0	0	26,619	174,554	405	73	478
Virgin Islands, U.S.	0	0	0	0	50	86,022	86,022	0	236	236
Yemen	0	0	0	0	0	0	9,977	27	0	27
Other	751	2,327	0	0	550	27,704	51,237	64	76	140
Total	**22,998**	**53,416**	**2,165**	**9,891**	**36,383**	**872,363**	**4,208,538**	**9,140**	**2,390**	**11,530**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**10,129**	**20,586**	**828,226**	**2,213**	**56**	**2,269**

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

Table 22. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 2002

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**79,870**	**4,762**	**15,692**	**2,271**	**2,033**	**414**	**633**	**952**	**411**	**0**
Algeria	0	4,762	15,692	772	0	264	633	952	0	0
Iraq	6,657	0	0	0	0	0	0	0	0	0
Kuwait	1,097	0	0	0	0	150	0	0	343	0
Saudi Arabia	72,116	0	0	1,499	1,531	0	0	0	1	0
United Arab Emirates	0	0	0	0	502	0	0	0	67	0
Other OPEC	**135,385**	**95**	**1,369**	**5,894**	**15,842**	**3,203**	**10,656**	**9,888**	**268**	**505**
Indonesia	0	0	0	0	0	0	0	456	0	0
Nigeria	96,181	0	1,253	2,383	0	0	414	3,432	0	101
Venezuela	39,204	95	116	3,511	15,842	3,203	10,242	6,000	268	404
Non OPEC	**332,950**	**6,367**	**6,255**	**91,492**	**153,364**	**13,507**	**78,803**	**59,582**	**1,204**	**2,502**
Angola	60,827	0	172	0	0	0	0	374	0	251
Argentina	3,068	0	0	2,807	7,534	0	639	1,072	63	0
Bahamas	0	0	0	274	1,870	0	1,061	8,831	0	0
Belgium	0	0	0	3,716	7,796	0	638	0	0	0
Brazil	6,240	0	87	2,020	9,205	0	344	6,277	0	295
Cameroon	0	0	139	0	0	0	0	344	0	0
Canada	55,394	4,717	448	11,860	49,864	748	34,355	11,563	886	997
China, People's Republic of	0	0	76	139	333	0	0	0	0	0
Colombia	18,300	0	0	0	0	660	199	4,977	0	110
Congo (Brazzaville)	6,728	250	0	0	0	0	0	1,300	0	0
Denmark	1,223	0	0	50	0	0	0	202	0	0
Ecuador	6,170	0	0	154	0	0	0	267	0	188
Egypt	0	0	180	1,865	993	0	0	0	0	0
France	0	0	0	5,105	877	0	0	245	0	246
Gabon	42,728	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	373	3,079	824	0	0	0	0	0
Greece	0	0	0	548	241	0	0	0	0	0
India	0	0	0	4,031	551	0	1,299	0	0	0
Ireland	0	0	618	0	0	0	0	350	0	0
Italy	0	0	0	4,466	4,941	0	550	0	0	0
Ivory Coast	1,325	0	0	0	0	0	0	30	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	373	0	437	0	0	0
Malaysia	0	0	0	0	78	0	0	0	0	0
Mexico	17,303	0	0	1,724	125	0	298	937	0	0
Netherlands	0	0	89	8,067	4,134	0	454	1,797	0	186
Netherlands Antilles	0	0	331	0	0	3,771	4,632	2,400	0	0
Norway	68,557	1,204	0	668	2,994	77	0	1,207	0	0
Panama	0	0	0	0	0	0	0	151	0	0
Peru	1,429	0	0	0	0	0	0	1,164	0	0
Portugal	0	0	0	1,694	1,687	0	0	0	0	0
Romania	0	0	0	3,995	690	0	0	0	0	0
Russia	4,775	0	701	11,171	1,815	0	7,146	1,590	0	0
Singapore	0	0	0	281	0	0	0	0	0	0
Spain	0	0	0	3,154	1,113	0	0	0	0	0
Sweden	0	0	890	0	122	0	208	300	0	0
Trinidad and Tobago	0	0	0	1,133	125	0	0	1,621	0	0
Tunisia	0	0	0	27	0	0	0	0	0	0
Turkey	0	0	0	1,324	567	0	0	0	0	0
United Kingdom	38,883	196	1,016	8,097	12,639	5	0	981	0	229
Virgin Islands, U.S.	0	0	649	94	36,983	8,145	24,556	11,291	0	0
Other	0	0	486	9,949	4,890	101	1,987	311	255	0
Total	**548,205**	**11,224**	**23,316**	**99,657**	**171,239**	**17,124**	**90,092**	**70,422**	**1,883**	**3,007**
Persian Gulf[e]	**79,870**	**0**	**0**	**1,499**	**2,033**	**150**	**0**	**0**	**411**	**0**

See footnotes at end of table.

Table 22. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 2002 (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**	**170**	**27,338**	**107,208**	**219**	**75**	**294**
Algeria	0	0	0	0	0	23,075	23,075	0	63	63
Iraq	0	0	0	0	0	0	6,657	18	0	18
Kuwait	0	0	0	0	0	493	1,590	3	1	4
Saudi Arabia	0	0	0	0	170	3,201	75,317	198	9	206
United Arab Emirates	0	0	0	0	0	569	569	0	2	2
Other OPEC	**447**	**0**	**0**	**4,963**	**988**	**54,118**	**189,503**	**371**	**148**	**519**
Indonesia	0	0	0	0	0	456	456	0	1	1
Nigeria	98	0	0	0	0	7,681	103,862	264	21	285
Venezuela	349	0	0	4,963	988	45,981	85,185	107	126	233
Non OPEC	**2,985**	**0**	**1,065**	**3,693**	**5,202**	**426,021**	**758,971**	**912**	**1,167**	**2,079**
Angola	0	0	0	0	0	797	61,624	167	2	169
Argentina	0	0	0	0	0	12,115	15,183	8	33	42
Bahamas	0	0	0	0	0	12,036	12,036	0	33	33
Belgium	69	0	0	0	40	12,259	12,259	0	34	34
Brazil	18	0	0	0	1,250	19,496	25,736	17	53	71
Cameroon	0	0	0	0	0	483	483	0	1	1
Canada	281	0	1,065	2,629	370	119,783	175,177	152	328	480
China, People's Republic of	0	0	0	0	59	607	607	0	2	2
Colombia	377	0	0	0	0	6,323	24,623	50	17	67
Congo (Brazzaville)	0	0	0	0	0	1,550	8,278	18	4	23
Denmark	0	0	0	0	0	252	1,475	3	1	4
Ecuador	35	0	0	0	0	644	6,814	17	2	19
Egypt	0	0	0	0	0	3,038	3,038	0	8	8
France	7	0	0	0	0	6,480	6,480	0	18	18
Gabon	0	0	0	0	0	0	42,728	117	0	117
Germany, FR	0	0	0	0	74	4,350	4,350	0	12	12
Greece	0	0	0	0	0	789	789	0	2	2
India	0	0	0	0	162	6,043	6,043	0	17	17
Ireland	0	0	0	0	0	968	968	0	3	3
Italy	88	0	0	0	0	10,045	10,045	0	28	28
Ivory Coast	0	0	0	0	0	30	1,355	4	(s)	4
Japan	0	0	0	0	11	11	11	0	(s)	(s)
Korea, Republic of	0	0	0	0	0	810	810	0	2	2
Malaysia	0	0	0	0	0	78	78	0	(s)	(s)
Mexico	0	0	0	0	0	3,084	20,387	47	8	56
Netherlands	360	0	0	0	499	15,586	15,586	0	43	43
Netherlands Antilles	246	0	0	341	2,608	14,329	14,329	0	39	39
Norway	0	0	0	0	0	6,150	74,707	188	17	205
Panama	0	0	0	0	0	151	151	0	(s)	(s)
Peru	220	0	0	0	0	1,384	2,813	4	4	8
Portugal	0	0	0	0	0	3,381	3,381	0	9	9
Romania	0	0	0	0	0	4,685	4,685	0	13	13
Russia	413	0	0	0	0	22,836	27,611	13	63	76
Singapore	0	0	0	0	0	281	281	0	1	1
Spain	0	0	0	723	23	5,013	5,013	0	14	14
Sweden	0	0	0	0	0	1,520	1,520	0	4	4
Trinidad and Tobago	0	0	0	0	0	2,879	2,879	0	8	8
Tunisia	0	0	0	0	0	27	27	0	(s)	(s)
Turkey	262	0	0	0	0	2,153	2,153	0	6	6
United Kingdom	120	0	0	0	0	23,283	62,166	107	64	170
Virgin Islands, U.S.	0	0	0	0	50	81,768	81,768	0	224	224
Other	489	0	0	0	56	18,524	18,524	0	51	51
Total	**3,432**	**0**	**1,065**	**8,656**	**6,360**	**507,477**	**1,055,682**	**1,502**	**1,390**	**2,892**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**170**	**4,263**	**84,133**	**219**	**12**	**231**

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

Table 23. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 2002

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**97,412**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Algeria	5,037	0	0	0	0	0	0	0	0	0
Iraq	20,657	0	0	0	0	0	0	0	0	0
Kuwait	7,129	0	0	0	0	0	0	0	0	0
Saudi Arabia	64,589	0	0	0	0	0	0	0	0	0
Other OPEC	**35,920**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Nigeria	22,692	0	0	0	0	0	0	0	0	0
Venezuela	13,228	0	0	0	0	0	0	0	0	0
Non OPEC	**412,055**	**44,029**	**0**	**0**	**793**	**0**	**2,301**	**283**	**0**	**752**
Angola	3,529	0	0	0	0	0	0	0	0	0
Brazil	4,246	0	0	0	0	0	0	0	0	0
Canada	345,329	44,029	0	0	793	0	2,301	283	0	752
Colombia	14,323	0	0	0	0	0	0	0	0	0
Congo (Brazzaville)	522	0	0	0	0	0	0	0	0	0
Congo (Kinshasa)[d]	1,269	0	0	0	0	0	0	0	0	0
Ecuador	739	0	0	0	0	0	0	0	0	0
Gabon	500	0	0	0	0	0	0	0	0	0
Mexico	3,491	0	0	0	0	0	0	0	0	0
Norway	13,866	0	0	0	0	0	0	0	0	0
Russia	1,031	0	0	0	0	0	0	0	0	0
United Kingdom	22,310	0	0	0	0	0	0	0	0	0
Yemen	900	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total	**545,387**	**44,029**	**0**	**0**	**793**	**0**	**2,301**	**283**	**0**	**752**
Persian Gulf[e]	**92,375**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

See footnotes at end of table.

Table 23. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 2002 (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**	**97,412**	**267**	**0**	**267**
Algeria	0	0	0	0	0	0	5,037	14	0	14
Iraq	0	0	0	0	0	0	20,657	57	0	57
Kuwait	0	0	0	0	0	0	7,129	20	0	20
Saudi Arabia	0	0	0	0	0	0	64,589	177	0	177
Other OPEC	**0**	**0**	**0**	**185**	**0**	**185**	**36,105**	**98**	**1**	**99**
Nigeria	0	0	0	0	0	0	22,692	62	0	62
Venezuela	0	0	0	185	0	185	13,413	36	1	37
Non OPEC	**484**	**5**	**615**	**172**	**370**	**49,804**	**461,859**	**1,129**	**136**	**1,265**
Angola	0	0	0	0	0	0	3,529	10	0	10
Brazil	0	0	0	0	0	0	4,246	12	0	12
Canada	484	5	615	172	367	49,801	395,130	946	136	1,083
Colombia	0	0	0	0	0	0	14,323	39	0	39
Congo (Brazzaville)	0	0	0	0	0	0	522	1	0	1
Congo (Kinshasa)[d]	0	0	0	0	0	0	1,269	3	0	3
Ecuador	0	0	0	0	0	0	739	2	0	2
Gabon	0	0	0	0	0	0	500	1	0	1
Mexico	0	0	0	0	0	0	3,491	10	0	10
Norway	0	0	0	0	0	0	13,866	38	0	38
Russia	0	0	0	0	0	0	1,031	3	0	3
United Kingdom	0	0	0	0	0	0	22,310	61	0	61
Yemen	0	0	0	0	0	0	900	2	0	2
Other	0	0	0	0	3	3	3	0	(s)	(s)
Total	**484**	**5**	**615**	**357**	**370**	**49,989**	**595,376**	**1,494**	**137**	**1,631**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**0**	**0**	**92,375**	**253**	**0**	**253**

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

Table 24. PAD District III—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 2002

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
Arab OPEC	**553,843**	**3,987**	**12,247**	**568**	**50**	**159**	**45**	**0**	**0**	**0**
Algeria	5,869	3,987	11,159	0	0	0	0	0	0	0
Iraq	100,372	0	0	0	0	0	0	0	0	0
Kuwait	66,769	0	0	0	0	159	0	0	0	0
Saudi Arabia	380,833	0	1,088	568	50	0	45	0	0	0
Other OPEC	**480,022**	**39**	**14,025**	**633**	**235**	**0**	**0**	**307**	**0**	**0**
Indonesia	0	39	355	0	0	0	0	0	0	0
Nigeria	96,249	0	3,126	0	0	0	0	0	0	0
Venezuela	383,773	0	10,544	633	235	0	0	307	0	0
Non OPEC	**849,246**	**3,286**	**88,105**	**7,965**	**3,459**	**0**	**549**	**6,410**	**0**	**1,623**
Angola	35,150	0	3,144	0	0	0	0	0	0	0
Argentina	2,768	0	684	562	224	0	59	579	0	0
Australia	1,538	0	0	0	0	0	0	0	0	0
Bahamas	0	0	303	0	0	0	0	0	0	0
Belgium	0	125	13,107	174	0	0	0	45	0	61
Brazil	10,810	428	398	96	0	0	0	0	0	109
Brunei	322	0	0	0	0	0	0	0	0	0
Cameroon	4,198	0	0	0	0	0	0	0	0	0
Canada	21,583	896	253	0	0	0	0	115	0	380
China, People's Republic of	760	0	0	643	0	0	0	0	0	0
Colombia	50,970	0	1,297	129	0	0	0	0	0	0
Congo (Brazzaville)	1,244	0	0	0	0	0	0	0	0	0
Denmark	0	0	0	0	0	0	0	67	0	0
Ecuador	1,253	0	695	166	0	0	0	381	0	0
Egypt	0	0	0	96	253	0	0	0	0	0
France	0	445	1,087	0	311	0	0	0	0	0
Gabon	7,007	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	9,443	0	0	0	0	0	0	45
Guatemala	8,401	0	0	0	0	0	0	0	0	0
India	0	0	0	0	0	0	0	0	0	0
Italy	0	26	1,628	0	0	0	132	258	0	123
Ivory Coast	0	0	904	0	0	0	0	66	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	0	0	149	0	0	0	0	179
Malaysia	676	0	0	0	0	0	0	0	0	0
Mexico	507,716	370	167	576	0	0	0	1,403	0	326
Netherlands	0	169	2,458	1,214	272	0	0	0	0	53
Netherlands Antilles	0	0	13,145	386	0	0	0	0	0	0
Norway	40,405	767	4,462	0	0	0	0	0	0	0
Peru	1,019	0	776	0	0	0	0	428	0	0
Portugal	0	0	296	0	0	0	0	0	0	0
Puerto Rico	0	0	57	0	0	0	0	0	0	0
Romania	0	0	0	243	467	0	0	0	0	0
Russia	25,241	0	17,826	671	0	0	206	2,122	0	0
Singapore	0	0	0	641	0	0	0	0	0	0
Spain	0	0	499	645	0	0	0	0	0	0
Sweden	0	0	3,438	0	0	0	0	0	0	0
Syria	783	0	3,112	0	0	0	0	0	0	0
Trinidad and Tobago	24,663	0	577	428	52	0	0	0	0	0
Tunisia	0	0	325	0	0	0	0	0	0	0
Turkey	0	0	1,683	473	354	0	0	0	0	0
United Kingdom	86,742	0	2,225	252	696	0	152	0	0	11
Virgin Islands, U.S.	0	0	2,139	0	0	0	0	650	0	336
Yemen	1,193	0	0	0	0	0	0	0	0	0
Other	14,804	60	1,977	570	681	0	0	296	0	0
Total	**1,883,111**	**7,312**	**114,377**	**9,166**	**3,744**	**159**	**594**	**6,717**	**0**	**1,623**
Persian Gulf[e]	**547,974**	**0**	**1,088**	**568**	**50**	**159**	**45**	**0**	**0**	**0**

See footnotes at end of table.

Table 24. PAD District III—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 2002 (Continued)

(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products[c]	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	**1,397**	**39,585**	**0**	**0**	**4,561**	**62,599**	**616,442**	**1,517**	**172**	**1,689**
Algeria	1,397	39,585	0	0	3,139	59,267	65,136	16	162	178
Iraq	0	0	0	0	0	0	100,372	275	0	275
Kuwait	0	0	0	0	1,422	1,581	68,350	183	4	187
Saudi Arabia	0	0	0	0	0	1,751	382,584	1,043	5	1,048
Other OPEC	**3,188**	**0**	**0**	**196**	**994**	**19,617**	**499,639**	**1,315**	**54**	**1,369**
Indonesia	0	0	0	0	0	394	394	0	1	1
Nigeria	324	0	0	0	250	3,700	99,949	264	10	274
Venezuela	2,864	0	0	196	744	15,523	399,296	1,051	43	1,094
Non OPEC	**14,107**	**13,826**	**417**	**155**	**3,030**	**142,932**	**992,178**	**2,327**	**392**	**2,718**
Angola	186	0	0	0	0	3,330	38,480	96	9	105
Argentina	544	0	0	0	1,646	4,298	7,066	8	12	19
Australia	0	2,259	0	0	0	2,259	3,797	4	6	10
Bahamas	0	0	0	0	0	303	303	0	1	1
Belgium	0	0	0	0	0	13,512	13,512	0	37	37
Brazil	114	0	29	0	276	1,450	12,260	30	4	34
Brunei	0	0	0	0	0	0	322	1	0	1
Cameroon	0	0	0	0	0	0	4,198	12	0	12
Canada	608	1,275	0	0	251	3,778	25,361	59	10	69
China, People's Republic of	243	0	0	0	278	1,164	1,924	2	3	5
Colombia	1,103	0	0	0	0	2,529	53,499	140	7	147
Congo (Brazzaville)	0	0	0	0	0	0	1,244	3	0	3
Denmark	0	0	0	0	0	67	67	0	(s)	(s)
Ecuador	597	0	0	0	0	1,839	3,092	3	5	8
Egypt	447	0	0	0	0	796	796	0	2	2
France	0	7	0	0	56	1,906	1,906	0	5	5
Gabon	0	0	0	0	0	0	7,007	19	0	19
Germany, FR	0	0	145	0	0	9,633	9,633	0	26	26
Guatemala	0	0	0	0	0	0	8,401	23	0	23
India	292	1,129	0	0	0	1,421	1,421	0	4	4
Italy	0	0	60	0	15	2,242	2,242	0	6	6
Ivory Coast	0	0	0	0	0	970	970	0	3	3
Japan	0	0	0	0	30	30	30	0	(s)	(s)
Korea, Republic of	0	684	109	0	0	1,121	1,121	0	3	3
Malaysia	0	0	0	0	0	0	676	2	0	2
Mexico	7,452	7	0	155	274	10,730	518,446	1,391	29	1,420
Netherlands	370	170	0	0	103	4,809	4,809	0	13	13
Netherlands Antilles	1,029	249	0	0	0	14,809	14,809	0	41	41
Norway	153	4,668	0	0	0	10,050	50,455	111	28	138
Peru	219	0	0	0	0	1,423	2,442	3	4	7
Portugal	0	0	0	0	0	296	296	0	1	1
Puerto Rico	0	0	0	0	0	57	57	0	(s)	(s)
Romania	0	0	0	0	69	779	779	0	2	2
Russia	488	1,051	0	0	0	22,364	47,605	69	61	130
Singapore	0	0	74	0	0	715	715	0	2	2
Spain	0	0	0	0	0	1,144	1,144	0	3	3
Sweden	0	0	0	0	0	3,438	3,438	0	9	9
Syria	0	0	0	0	0	3,112	3,895	2	9	11
Trinidad and Tobago	0	0	0	0	0	1,057	25,720	68	3	70
Tunisia	0	0	0	0	0	325	325	0	1	1
Turkey	0	0	0	0	0	2,510	2,510	0	7	7
United Kingdom	0	0	0	0	0	3,336	90,078	238	9	247
Virgin Islands, U.S.	0	0	0	0	0	3,125	3,125	0	9	9
Yemen	0	0	0	0	0	0	1,193	3	0	3
Other	262	2,327	0	0	32	6,205	21,009	41	17	58
Total	**18,692**	**53,411**	**417**	**351**	**8,585**	**225,148**	**2,108,259**	**5,159**	**617**	**5,776**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**1,422**	**3,332**	**551,306**	**1,501**	**9**	**1,510**

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

Table 25. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 2002

(Thousand Barrels)

Country of Origin	Crude Oil[b]	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Compo-nents	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
PAD District IV										
Non OPEC	**83,732**	**2,764**	**0**	**0**	**130**	**14**	**2,473**	**0**	**0**	**0**
Canada	83,732	2,764	0	0	130	14	2,473	0	0	0
Total	**83,732**	**2,764**	**0**	**0**	**130**	**14**	**2,473**	**0**	**0**	**0**
PAD District V										
Arab OPEC	**87,421**	**0**	**2,955**	**1,546**	**177**	**2,758**	**0**	**0**	**0**	**0**
Algeria	0	0	2,955	0	27	0	0	0	0	0
Iraq	39,952	0	0	0	0	0	0	0	0	0
Kuwait	3,808	0	0	0	0	2,300	0	0	0	0
Qatar	3,194	0	0	0	0	0	0	0	0	0
Saudi Arabia	36,962	0	0	263	0	458	0	0	0	0
United Arab Emirates	3,505	0	0	1,283	150	0	0	0	0	0
Other OPEC	**20,311**	**0**	**2,635**	**248**	**0**	**1,236**	**0**	**3,170**	**0**	**0**
Indonesia	18,246	0	191	0	0	0	0	0	0	0
Nigeria	0	0	0	248	0	0	0	0	0	0
Venezuela	2,065	0	2,444	0	0	1,236	0	3,170	0	0
Non OPEC	**168,008**	**1,288**	**6,410**	**3,037**	**5,811**	**17,934**	**2,143**	**10,304**	**0**	**663**
Angola	17,552	0	0	0	0	0	0	0	0	0
Argentina	19,704	0	0	0	0	0	0	0	0	0
Australia	17,093	0	0	0	0	0	0	0	0	0
Belgium	0	0	0	0	10	0	0	0	0	0
Brunei	3,163	0	0	0	0	0	0	0	0	0
Canada	21,266	1,288	108	1,059	713	309	1,641	885	0	423
China, People's Republic of	6,478	0	0	0	24	31	0	0	0	0
Colombia	2,190	0	0	0	0	102	0	321	0	0
Ecuador	28,329	0	0	0	0	0	0	1,288	0	0
Egypt	0	0	0	0	33	0	0	0	0	0
France	0	0	0	223	0	0	0	0	0	0
Gabon	1,973	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	676	92	0	0	0	0	0
India	0	0	0	0	32	0	0	0	0	0
Japan	0	0	668	0	0	1,532	150	0	0	0
Korea, Republic of	0	0	41	650	1,679	10,965	98	0	0	240
Malaysia	2,543	0	375	0	25	939	141	0	0	0
Mexico	18,933	0	0	0	0	1,400	0	1,840	0	0
Netherlands	0	0	0	0	530	0	0	2,952	0	0
Netherlands Antilles	0	0	0	0	0	0	0	348	0	0
Norway	4,308	0	0	0	0	0	0	0	0	0
Oman	6,060	0	0	0	0	0	0	0	0	0
Panama	0	0	0	0	4	0	75	278	0	0
Peru	1,128	0	0	0	0	0	0	2,071	0	0
Portugal	0	0	0	0	81	0	0	0	0	0
Russia	0	0	348	0	95	0	0	0	0	0
Singapore	0	0	3,293	132	2,039	271	38	0	0	0
Sweden	0	0	747	0	0	0	0	0	0	0
Thailand	675	0	20	0	60	0	0	0	0	0
Trinidad and Tobago	0	0	0	244	0	0	0	321	0	0
Virgin Islands, U.S.	0	0	737	53	339	0	0	0	0	0
Yemen	7,884	0	0	0	0	0	0	0	0	0
Other	8,729	0	73	0	55	2,385	0	0	0	0
Total	**275,740**	**1,288**	**12,000**	**4,831**	**5,988**	**21,928**	**2,143**	**13,474**	**0**	**663**
Persian Gulf[e]	**87,421**	**0**	**0**	**1,546**	**150**	**2,758**	**0**	**0**	**0**	**0**

See footnotes at end of table.

Table 25. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 2002 (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**	**425**	**1,169**	**6,975**	**90,707**	**229**	**19**	**249**
Canada	0	0	0	425	1,169	6,975	90,707	229	19	249
Total	**0**	**0**	**0**	**425**	**1,169**	**6,975**	**90,707**	**229**	**19**	**249**
PAD District V										
Arab OPEC	**0**	**0**	**0**	**0**	**8,537**	**15,973**	**103,394**	**240**	**44**	**283**
Algeria	0	0	0	0	0	2,982	2,982	0	8	8
Iraq	0	0	0	0	0	0	39,952	109	0	109
Kuwait	0	0	0	0	0	2,300	6,108	10	6	17
Qatar	0	0	0	0	2,198	2,198	5,392	9	6	15
Saudi Arabia	0	0	0	0	6,339	7,060	44,022	101	19	121
United Arab Emirates	0	0	0	0	0	1,433	4,938	10	4	14
Other OPEC	**0**	**0**	**0**	**0**	**3,586**	**10,875**	**31,186**	**56**	**30**	**85**
Indonesia	0	0	0	0	33	224	18,470	50	1	51
Nigeria	0	0	0	0	0	248	248	0	1	1
Venezuela	0	0	0	0	3,553	10,403	12,468	6	29	34
Non OPEC	**390**	**0**	**68**	**102**	**7,776**	**55,926**	**223,934**	**460**	**153**	**614**
Angola	0	0	0	0	0	0	17,552	48	0	48
Argentina	0	0	0	0	0	0	19,704	54	0	54
Australia	0	0	0	0	0	0	17,093	47	0	47
Belgium	0	0	0	0	0	10	10	0	(s)	(s)
Brunei	0	0	0	0	0	0	3,163	9	0	9
Canada	0	0	0	102	5,165	11,693	32,959	58	32	90
China, People's Republic of	0	0	16	0	249	320	6,798	18	1	19
Colombia	0	0	0	0	0	423	2,613	6	1	7
Ecuador	0	0	0	0	0	1,288	29,617	78	4	81
Egypt	0	0	0	0	0	33	33	0	(s)	(s)
France	0	0	0	0	0	223	223	0	1	1
Gabon	0	0	0	0	0	0	1,973	5	0	5
Germany, FR	0	0	0	0	0	768	768	0	2	2
India	0	0	0	0	0	32	32	0	(s)	(s)
Japan	0	0	0	0	11	2,361	2,361	0	6	6
Korea, Republic of	390	0	0	0	531	14,594	14,594	0	40	40
Malaysia	0	0	0	0	1,116	2,596	5,139	7	7	14
Mexico	0	0	0	0	0	3,240	22,173	52	9	61
Netherlands	0	0	0	0	84	3,566	3,566	0	10	10
Netherlands Antilles	0	0	0	0	0	348	348	0	1	1
Norway	0	0	0	0	0	0	4,308	12	0	12
Oman	0	0	0	0	0	0	6,060	17	0	17
Panama	0	0	0	0	0	357	357	0	1	1
Peru	0	0	0	0	0	2,071	3,199	3	6	9
Portugal	0	0	0	0	0	81	81	0	(s)	(s)
Russia	0	0	0	0	0	443	443	0	1	1
Singapore	0	0	0	0	104	5,877	5,877	0	16	16
Sweden	0	0	0	0	0	747	747	0	2	2
Thailand	0	0	52	0	57	189	864	2	1	2
Trinidad and Tobago	0	0	0	0	0	565	565	0	2	2
Virgin Islands, U.S.	0	0	0	0	0	1,129	1,129	0	3	3
Yemen	0	0	0	0	0	0	7,884	22	0	22
Other	0	0	0	0	459	2,972	11,701	24	8	32
Total	**390**	**0**	**68**	**102**	**19,899**	**82,774**	**358,514**	**755**	**227**	**982**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**8,537**	**12,991**	**100,412**	**240**	**36**	**275**

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

Table 26. Imports of Residual Fuel Oil by Sulfur Content and by PAD District and State of Entry, 2002
(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	**12,646**	**17,514**	**40,262**	**70,422**
Delaware	74	0	748	822
Florida	4,812	6,794	5,981	17,587
Georgia	0	0	1,960	1,960
Maine	1,216	200	1,444	2,860
Maryland	859	671	1,461	2,991
Massachusetts	857	2,627	556	4,040
New Hampshire	0	36	455	491
New Jersey	2,918	2,237	13,417	18,572
New York	988	1,876	3,635	6,499
North Carolina	0	0	2,781	2,781
Pennsylvania	329	243	3,201	3,773
Rhode Island	39	64	25	128
South Carolina	126	108	2,690	2,924
Vermont	3	22	28	53
Virginia	425	2,636	1,880	4,941
PAD District II	**16**	**174**	**93**	**283**
Michigan	0	0	52	52
Minnesota	16	121	0	137
North Dakota	0	53	0	53
Ohio	0	0	41	41
PAD District III	**1,664**	**901**	**4,152**	**6,717**
Louisiana	200	531	1,531	2,262
Texas	1,464	370	2,621	4,455
PAD District V	**1,291**	**546**	**11,637**	**13,474**
California	321	488	11,478	12,287
Oregon	0	0	98	98
Washington	970	58	61	1,089
U.S. Total	**15,617**	**19,135**	**56,144**	**90,896**

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

Table 27. Exports of Crude Oil and Petroleum Products by PAD District, 2002

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil[a]	**2,066**	**979**	**65**	**128**	**58**	**3,296**	**9**
Natural Gas Liquids	**638**	**2,278**	**18,303**	**193**	**3,033**	**24,444**	**67**
Pentanes Plus	17	94	0	27	(s)	138	(s)
Liquefied Petroleum Gases	620	2,184	18,303	166	3,032	24,306	67
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	216	772	16,518	87	2,415	20,008	55
Normal Butane/Butylene	404	1,412	1,785	78	618	4,298	12
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	**2,426**	**594**	**18,250**	**4**	**2,689**	**23,964**	**66**
Other Hydrocarbons/Oxygenates	1,312	344	9,182	4	1,044	11,887	33
Motor Gasoline Blend. Comp.	1,115	251	9,067	0	1,645	12,077	33
Finished Petroleum Products	**19,484**	**4,087**	**201,210**	**249**	**82,342**	**307,373**	**842**
Finished Motor Gasoline	2,386	25	39,523	(s)	3,381	45,315	124
Naphtha-Type Jet Fuel	155	1	2,443	0	6	2,605	7
Kerosene-Type Jet Fuel	28	(s)	2,967	0	(s)	2,995	8
Kerosene	783	55	901	0	5,025	6,763	19
Distillate Fuel Oil	2,583	87	25,004	0	13,302	40,976	112
Residual Fuel Oil	6,946	469	43,407	22	13,853	64,698	177
Special Naphthas	478	10	798	0	4,028	5,314	15
Lubricants	1,830	1,276	7,797	186	1,045	12,134	33
Waxes	357	309	427	1	150	1,245	3
Petroleum Coke	3,752	1,012	77,433	28	40,902	123,126	337
Asphalt and Road Oil	135	840	503	12	625	2,115	6
Miscellaneous Products	49	2	9	(s)	25	85	(s)
Total	**24,614**	**7,939**	**237,828**	**574**	**88,121**	**359,077**	**984**

[a] Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries.

(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 28. Exports of Crude Oil and Petroleum Products by Destination, 2002

(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	(s)	0	0	0	86	16
Australia	0	0	141	5	0	8	1	5
Bahamas	0	0	84	129	161	0	542	2,478
Bahrain	0	0	0	(s)	0	(s)	0	130
Belgium & Luxembourg	0	0	24	3	0	0	0	(s)
Brazil	0	3	4	4	0	(s)	1,019	3
Cameroon	0	0	0	1	0	15	0	0
Canada	3,242	124	2,914	2,977	144	5,926	1,947	8,623
Chile	0	0	0	(s)	0	0	803	(s)
China, People's Republic of	0	10	2	10	0	0	1,634	310
China, Taiwan	0	0	3	19	0	10	81	269
Colombia	0	0	0	0	0	(s)	381	1
Costa Rica	0	0	20	0	0	1	743	333
Denmark	0	0	0	0	0	(s)	2	0
Dominican Republic	0	0	90	114	0	0	380	737
Ecuador	0	0	690	70	1	0	621	444
Egypt	0	0	0	0	0	0	0	0
El Salvador	0	0	596	291	20	0	439	0
Finland	0	0	0	(s)	2	164	1,009	182
France	0	0	139	7	0	(s)	813	1
French Pacific Islands	0	0	0	0	0	0	0	310
Germany, FR	0	2	(s)	0	(s)	(s)	15	2
Ghana	0	0	24	0	0	0	0	0
Greece	0	0	0	0	0	0	1	1
Guatemala	0	0	1,178	682	67	26	725	663
Guinea	0	0	0	0	1	0	172	398
Honduras	0	0	446	258	27	33	264	649
Hong Kong	0	0	0	7	0	(s)	0	440
India	0	0	1	1	0	0	0	333
Indonesia	0	0	104	0	0	0	(s)	0
Ireland	0	0	0	0	0	(s)	0	331
Israel	0	0	0	(s)	2,927	0	10	208
Italy	0	0	169	(s)	0	0	0	661
Jamaica	0	0	20	4	1	(s)	0	8,477
Japan	0	(s)	3,009	3	0	5	9	692
Korea, Republic of	0	0	604	1	0	1	255	625
Malaysia	0	0	2	3	0	0	(s)	288
Mexico	54	(s)	12,799	39,379	1,471	438	6,802	7,058
Netherlands	0	0	(s)	2	0	20	2,907	855
Netherlands Antilles	0	0	0	68	0	0	1,362	2,913
New Zealand	0	0	(s)	1	0	0	300	(s)
Nigeria	0	0	4	0	0	0	0	13
Norway	0	0	0	0	0	0	0	0
Panama	0	0	206	333	80	(s)	2,676	2,591
Peru	0	0	189	146	(s)	0	1,511	1
Philippines	0	0	96	(s)	0	0	0	41
Poland	0	0	0	0	0	0	0	0
Portugal	0	0	0	0	(s)	0	0	(s)
Puerto Rico	0	(s)	4	310	6	50	1,250	101
Russia	0	0	(s)	(s)	(s)	0	2	1
Saudi Arabia	0	0	0	0	5	0	0	(s)
Singapore	0	0	106	0	0	0	9,846	19,009
South Africa	0	0	0	0	0	0	0	0
Spain	0	0	85	0	0	1	1,505	2,680
Suriname	0	0	0	0	0	1	0	0
Sweden	0	0	0	0	0	2	(s)	0
Switzerland	0	0	91	2	0	(s)	0	(s)
Thailand	0	0	67	(s)	0	(s)	5	131
Trinidad and Tobago	0	0	(s)	(s)	(s)	0	1	2
Turkey	0	0	116	0	(s)	0	0	0
United Arab Emirates	0	0	0	0	0	0	(s)	1
United Kingdom	0	0	49	9	577	0	240	7
Uruguay	0	0	0	1	0	0	0	1
Venezuela	0	0	4	269	0	1	1	1
Virgin Islands, U.S.	0	0	78	1	0	4	0	0
Yugoslavia	0	0	0	0	0	0	0	0
Other	0	0	147	203	110	55	615	1,680
Total	**3,296**	**138**	**24,306**	**45,315**	**5,600**	**6,763**	**40,976**	**64,698**

See footnotes at end of table.

Table 28. Exports of Crude Oil and Petroleum Products by Destination, 2002 (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	6	68	1	0	8	9	193	1
Australia	9	64	4	4,308	6	5	4,554	12
Bahamas	0	42	0	2	2	811	4,250	12
Bahrain	0	1	0	122	(s)	0	254	1
Belgium & Luxembourg	8	114	9	6,629	18	174	6,978	19
Brazil	27	202	1	8,065	9	162	9,499	26
Cameroon	0	1	0	160	0	0	177	(s)
Canada	27	2,595	664	5,411	1,224	3,000	38,816	106
Chile	1	156	2	821	(s)	6	1,789	5
China, People's Republic of	4	122	8	3,145	5	30	5,280	14
China, Taiwan	11	200	3	28	2	8	636	2
Colombia	9	139	5	188	2	31	757	2
Costa Rica	(s)	99	3	354	44	141	1,739	5
Denmark	0	5	0	1,337	0	(s)	1,343	4
Dominican Republic	111	158	(s)	417	(s)	102	2,110	6
Ecuador	442	54	(s)	1	1	764	3,090	8
Egypt	18	27	0	(s)	3	(s)	47	(s)
El Salvador	279	112	(s)	0	(s)	27	1,764	5
Finland	0	3	(s)	57	3	(s)	1,420	4
France	13	106	6	3,296	2	28	4,412	12
French Pacific Islands	(s)	2	0	0	0	0	312	1
Germany, FR	7	15	22	1,149	48	22	1,283	4
Ghana	0	3	0	4	0	0	31	(s)
Greece	(s)	22	(s)	2,028	1	2	2,055	6
Guatemala	2	127	5	0	1	514	3,990	11
Guinea	0	2	0	0	0	(s)	573	2
Honduras	5	83	(s)	0	25	22	1,813	5
Hong Kong	1	37	13	(s)	1	5	503	1
India	1	194	7	343	24	89	992	3
Indonesia	0	11	2	(s)	7	65	189	1
Ireland	0	(s)	2	1,591	(s)	2	1,927	5
Israel	(s)	262	(s)	1,924	1	34	5,366	15
Italy	(s)	164	5	9,747	4	3	10,753	29
Jamaica	19	30	(s)	0	0	439	8,990	25
Japan	3,496	235	25	17,849	16	1,505	26,842	74
Korea, Republic of	238	116	5	1,829	24	214	3,913	11
Malaysia	(s)	62	5	(s)	3	5	369	1
Mexico	312	3,665	414	8,970	482	10,918	92,763	254
Netherlands	7	51	2	4,384	1	236	8,466	23
Netherlands Antilles	0	557	(s)	0	5	50	4,956	14
New Zealand	2	7	1	776	1	(s)	1,087	3
Nigeria	(s)	382	(s)	0	(s)	3	402	1
Norway	0	4	(s)	1,230	(s)	(s)	1,234	3
Panama	7	72	(s)	0	78	871	6,915	19
Peru	1	132	1	2	1	19	2,002	5
Philippines	1	17	2	(s)	0	3	159	(s)
Poland	0	1	(s)	366	0	(s)	367	1
Portugal	0	1	(s)	179	(s)	81	261	1
Puerto Rico	199	489	6	0	(s)	783	3,198	9
Russia	(s)	21	2	356	1	1	383	1
Saudi Arabia	1	26	(s)	260	0	(s)	292	1
Singapore	3	337	1	0	2	435	29,738	81
South Africa	(s)	168	(s)	1,797	1	12	1,977	5
Spain	2	53	(s)	15,482	2	1	19,810	54
Suriname	0	8	0	0	0	(s)	9	(s)
Sweden	0	7	(s)	355	(s)	2	366	1
Switzerland	0	5	(s)	49	0	1	149	(s)
Thailand	(s)	41	2	(s)	6	16	270	1
Trinidad and Tobago	0	20	1	0	2	42	69	(s)
Turkey	0	29	(s)	6,196	1	(s)	6,342	17
United Arab Emirates	(s)	44	(s)	908	4	1	960	3
United Kingdom	12	66	6	3,201	9	67	4,242	12
Uruguay	0	6	(s)	1	0	(s)	9	(s)
Venezuela	25	76	3	1,579	1	2,171	4,130	11
Virgin Islands, U.S.	0	3	(s)	0	4	(s)	90	(s)
Yugoslavia	0	5	(s)	329	(s)	1	335	1
Other	10	206	2	5,903	32	119	9,083	25
Total	**5,314**	**12,134**	**1,245**	**123,126**	**2,115**	**24,049**	**359,077**	**984**

[a] Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries.

[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 29. Net Imports of Crude Oil and Petroleum Products into the United States by Country, 2002

(Thousand Barrels per Day)

Country	Crude Oil[a]	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products[b]	Total Products	Total Crude Oil and Products
Arab OPEC	**2,243**	**24**	**6**	**9**	**2**	**3**	**1**	**(s)**	**242**	**287**	**2,529**
Algeria	30	24	(s)	1	2	3	0	(s)	205	234	264
Iraq	459	0	0	0	0	0	0	0	0	0	459
Kuwait	216	0	(s)	7	0	(s)	4	(s)	1	12	228
Qatar	9	0	0	0	0	0	0	(s)	6	6	15
Saudi Arabia	1,519	0	4	1	(s)	(s)	-1	(s)	27	32	1,551
United Arab Emirates	10	0	2	0	(s)	(s)	-2	(s)	4	3	12
Other OPEC	**1,840**	**(s)**	**43**	**12**	**29**	**37**	**-4**	**-1**	**104**	**219**	**2,059**
Indonesia	50	(s)	0	0	(s)	1	(s)	(s)	1	2	52
Nigeria	589	(s)	0	0	1	9	0	-1	21	31	620
Venezuela	1,201	(s)	43	12	28	26	-4	(s)	81	186	1,387
Non OPEC	**5,048**	**92**	**325**	**71**	**124**	**33**	**-315**	**-26**	**606**	**909**	**5,958**
Angola	321	0	0	0	0	1	(s)	(s)	10	11	332
Argentina	70	(s)	21	0	2	4	5	(s)	13	44	114
Australia	51	(s)	(s)	0	(s)	(s)	-12	(s)	6	-6	45
Bahamas	0	(s)	5	(s)	1	17	(s)	(s)	-1	22	22
Belgium & Luxembourg	0	(s)	21	0	2	(s)	-18	(s)	46	52	52
Brazil	58	1	25	0	-2	17	-21	(s)	11	31	90
Brunei	10	0	0	0	0	0	0	(s)	0	(s)	10
Cameroon	12	0	(s)	0	0	1	(s)	(s)	(s)	1	12
Canada	1,436	139	133	3	106	12	-13	-3	52	429	1,864
China, People's Republic of	20	(s)	1	(s)	-4	-1	-8	(s)	4	-9	11
China, Taiwan	0	(s)	(s)	7	(s)	-1	(s)	-1	1	6	6
Colombia	235	0	0	2	(s)	15	-1	(s)	8	23	258
Congo (Brazzaville)	23	1	0	0	0	4	0	(s)	0	4	28
Congo (Kinshasa)[c]	3	0	0	0	0	0	0	0	0	0	3
Ecuador	100	-2	(s)	(s)	-2	4	(s)	(s)	2	2	102
Egypt	0	0	4	0	0	0	(s)	(s)	7	10	10
France	0	1	3	0	-2	1	-9	(s)	18	11	11
Gabon	143	(s)	0	0	0	(s)	0	(s)	0	(s)	143
Germany, FR	0	(s)	3	(s)	(s)	(s)	-3	(s)	37	37	37
Greece	0	0	1	0	(s)	(s)	-6	(s)	1	-3	-3
Guatemala	23	-3	-2	(s)	-2	-2	0	(s)	-2	-11	12
India	0	(s)	2	0	4	-1	-1	-1	15	18	18
Italy	0	(s)	14	0	2	-1	-27	(s)	17	4	4
Jamaica	0	(s)	(s)	(s)	0	-23	0	(s)	-1	-24	-24
Japan	0	-8	(s)	4	(s)	-2	-49	-1	-12	-67	-67
Korea, Republic of	0	-2	6	30	1	-2	-5	(s)	6	35	35
Malaysia	9	(s)	(s)	3	(s)	-1	(s)	(s)	4	6	15
Mexico	1,500	-34	-108	(s)	-18	-8	-25	-10	-5	-207	1,292
Netherlands	0	(s)	14	0	-7	11	-12	(s)	37	42	42
Netherlands Antilles	0	0	(s)	10	9	(s)	7	-2	43	67	67
Norway	348	5	8	(s)	0	3	-3	(s)	27	41	389
Oman	17	0	0	0	0	0	0	(s)	(s)	(s)	17
Panama	0	-1	-1	(s)	-7	-6	0	(s)	-3	-18	-18
Peru	10	-1	(s)	(s)	-4	10	(s)	(s)	3	8	18
Puerto Rico	0	(s)	-1	(s)	-3	(s)	0	-1	-3	-9	-9
Romania	0	0	3	0	0	0	-1	(s)	12	14	14
Russia	85	(s)	5	(s)	20	10	-1	(s)	89	124	209
Syria	2	0	0	0	0	0	0	(s)	9	9	11
Spain	0	(s)	3	0	-4	-7	-42	(s)	14	-37	-37
Sweden	0	0	(s)	0	1	1	-1	(s)	14	15	15
Thailand	2	(s)	(s)	0	(s)	(s)	(s)	(s)	(s)	(s)	2
Trinidad and Tobago	68	(s)	(s)	(s)	(s)	5	0	(s)	6	12	80
Turkey	0	(s)	3	(s)	0	0	-17	(s)	10	-5	-5
United Kingdom	405	(s)	37	-2	(s)	3	-9	(s)	32	61	467
Virgin Islands, U.S.	0	(s)	102	22	67	33	0	(s)	11	235	235
Yemen	27	0	0	0	0	0	0	0	0	0	27
Other	71	-4	23	-7	-34	-63	-42	-4	63	-70	2
Total	**9,131**	**116**	**374**	**92**	**155**	**72**	**-319**	**-27**	**952**	**1,415**	**10,546**
Persian Gulf[d]	**2,213**	**0**	**6**	**8**	**(s)**	**(s)**	**(s)**	**(s)**	**38**	**52**	**2,265**

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

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

[c] Formerly Zaire.

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

(s) = Less than 500 barrels per day.

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

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

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District, 2002

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Crude Oil	**10,713**	**59,572**	**744,095**	**12,521**	**49,804**	**876,705**
Refinery	10,096	13,712	46,056	1,938	19,268	91,070
Tank Farms and Pipelines	570	45,171	85,302	9,473	24,123	164,639
Leases	47	689	13,646	1,110	669	16,161
Strategic Petroleum Reserve[*a]	0	0	599,091	0	0	599,091
Alaskan In Transit	0	0	0	0	5,744	5,744
Total Stocks, All Oils (excluding Crude Oil)	**159,643**	**149,524**	**256,158**	**18,801**	**87,079**	**671,205**
Refinery	49,995	46,400	129,265	11,715	57,330	294,705
Bulk Terminal	80,086	62,462	69,492	2,498	22,052	236,590
Pipeline	29,501	39,202	53,652	4,162	7,473	133,990
Natural Gas Processing Plant	61	1,460	3,749	426	224	5,920
Pentanes Plus	**23**	**1,613**	**5,642**	**262**	**37**	**7,577**
Refinery	0	243	365	18	0	626
Bulk Terminal	0	998	2,549	0	26	3,573
Pipeline	0	260	1,955	145	0	2,360
Natural Gas Processing Plant	23	112	773	99	11	1,018
Liquefied Petroleum Gases	**6,103**	**29,848**	**64,260**	**1,877**	**3,620**	**105,708**
Refinery	1,631	3,224	8,569	319	1,153	14,896
Bulk Terminal	2,925	18,382	38,081	242	2,254	61,884
Pipeline	1,509	6,894	14,634	989	0	24,026
Natural Gas Processing Plant	38	1,348	2,976	327	213	4,902
Ethane/Ethylene	**0**	**3,314**	**20,561**	**522**	**1**	**24,398**
Refinery	0	0	148	0	0	148
Bulk Terminal	0	1,420	16,750	0	0	18,170
Pipeline	0	1,728	2,974	445	0	5,147
Natural Gas Processing Plant	0	166	689	77	1	933
Propane/Propylene	**4,650**	**19,226**	**25,963**	**757**	**1,956**	**52,552**
Refinery	490	1,333	2,039	102	182	4,146
Bulk Terminal	2,791	13,194	14,862	240	1,634	32,721
Pipeline	1,341	3,742	8,274	298	0	13,655
Natural Gas Processing Plant	28	957	788	117	140	2,030
Normal Butane/Butylene	**1,149**	**5,697**	**13,596**	**374**	**1,397**	**22,213**
Refinery	840	1,479	5,382	150	729	8,580
Bulk Terminal	134	3,116	4,932	2	605	8,789
Pipeline	168	957	2,231	158	0	3,514
Natural Gas Processing Plant	7	145	1,051	64	63	1,330
Isobutane/Isobutylene	**304**	**1,611**	**4,140**	**224**	**266**	**6,545**
Refinery	301	412	1,000	67	242	2,022
Bulk Terminal	0	652	1,537	0	15	2,204
Pipeline	0	467	1,155	88	0	1,710
Natural Gas Processing Plant	3	80	448	69	9	609
Other Hydrocarbons/Hydrogen/Oxygenates	**2,108**	**3,538**	**4,511**	**199**	**1,822**	**12,178**
Refinery	1,606	401	1,953	81	933	4,974
Bulk Terminal	502	3,137	2,558	91	870	7,158
Pipeline	0	0	0	27	19	46
Other Hydrocarbons/Hydrogen	**0**	**48**	**1**	**0**	**4**	**53**
Refinery	0	48	1	0	4	53
Fuel Ethanol	**385**	**3,486**	**1,275**	**156**	**898**	**6,200**
Refinery	W	350	W	W	W	552
Bulk Terminal[*b]	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
ETBE	**W**	**W**	**W**	**W**	**W**	**W**
Refinery	W	W	W	W	W	W
Bulk Terminal[*b]	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Methanol	**W**	**W**	**W**	**W**	**W**	**692**
Refinery	W	W	W	W	W	692

See footnotes at end of table.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District, 2002 (Continued)

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
MTBE	**1,521**	**W**	**2,568**	**W**	**919**	**5,054**
Refinery	1,360	W	1,418	W	867	3,648
Bulk Terminal [*b]	W	W	1,150	W	51	1,405
Pipeline	W	W	0	W	1	1
Other Oxygenates [*c]	**W**	**W**	**W**	**W**	**W**	**W**
Refinery	W	W	W	W	W	W
Bulk Terminal [*b]	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Unfinished Oils	**7,485**	**10,477**	**38,779**	**2,084**	**16,941**	**75,766**
Refinery						
Naphthas and Lighter	1,627	3,149	11,274	447	3,304	19,801
Kerosene and Light Gas Oils	1,544	1,688	6,950	315	3,636	14,133
Heavy Gas Oils	2,378	2,888	14,580	1,016	7,145	28,007
Residuum	1,936	2,752	5,975	306	2,856	13,825
Motor Gasoline Blending Components	**6,698**	**10,505**	**15,349**	**2,074**	**12,568**	**47,194**
Refinery	6,384	7,250	13,763	2,074	10,493	39,964
Bulk Terminal	229	990	1,293	0	851	3,363
Pipeline	85	2,265	293	0	1,224	3,867
Aviation Gasoline Blending Components	**102**	**5**	**20**	**0**	**0**	**127**
Refinery	102	5	20	0	0	127
Finished Motor Gasoline	**49,753**	**39,240**	**48,053**	**5,259**	**19,597**	**161,902**
Refinery	10,886	6,198	19,548	2,737	9,474	48,843
Bulk Terminal	25,612	17,419	9,236	1,038	7,535	60,840
Pipeline	13,255	15,623	19,269	1,484	2,588	52,219
Reformulated	**20,285**	**517**	**10,072**	**0**	**11,287**	**42,161**
Refinery	7,117	0	4,045	0	5,747	16,909
Bulk Terminal	8,751	432	2,231	0	3,934	15,348
Pipeline	4,417	85	3,796	0	1,606	9,904
Oxygenated	**57**	**400**	**0**	**158**	**0**	**615**
Refinery	6	120	0	158	0	284
Bulk Terminal	51	109	0	0	0	160
Pipeline	0	171	0	0	0	171
Other	**29,411**	**38,323**	**37,981**	**5,101**	**8,310**	**119,126**
Refinery	3,763	6,078	15,503	2,579	3,727	31,650
Bulk Terminal	16,810	16,878	7,005	1,038	3,601	45,332
Pipeline	8,838	15,367	15,473	1,484	982	42,144
Finished Aviation Gasoline	**153**	**424**	**427**	**37**	**345**	**1,386**
Refinery	80	130	408	20	232	870
Bulk Terminal	73	241	19	11	113	457
Pipeline	0	53	0	6	0	59
Naphtha-Type Jet Fuel	**28**	**0**	**0**	**0**	**28**	**56**
Refinery	0	0	0	0	19	19
Bulk Terminal	28	0	0	0	9	37
Pipeline	0	0	0	0	0	0
Kerosene-Type Jet Fuel	**9,639**	**7,003**	**13,144**	**834**	**8,503**	**39,123**
Refinery	1,625	1,969	6,310	344	4,886	15,134
Bulk Terminal	3,830	1,677	1,142	150	2,578	9,377
Pipeline	4,184	3,357	5,692	340	1,039	14,612

See footnotes at end of table.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District, 2002 (Continued)

(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Kerosene	**3,555**	**1,046**	**704**	**80**	**78**	**5,463**
Refinery	153	409	589	55	53	1,259
Bulk Terminal	3,160	595	72	0	15	3,842
Pipeline	242	42	43	25	10	362
Distillate Fuel Oil	**54,501**	**31,532**	**31,946**	**3,791**	**12,315**	**134,085**
Refinery	11,515	7,422	14,582	1,963	5,598	41,080
Bulk Terminal	32,760	13,416	5,608	686	4,354	56,824
Pipeline	10,226	10,694	11,756	1,142	2,363	36,181
0.05 Percent Sulfur and Under	**20,985**	**24,282**	**22,393**	**3,170**	**9,860**	**80,690**
Refinery	2,772	5,203	8,819	1,426	4,341	22,561
Bulk Terminal	14,019	10,634	4,150	606	3,329	32,738
Pipeline	4,194	8,445	9,424	1,138	2,190	25,391
Greater than 0.05 Percent Sulfur	**33,516**	**7,250**	**9,553**	**621**	**2,455**	**53,395**
Refinery	8,743	2,219	5,763	537	1,257	18,519
Bulk Terminal	18,741	2,782	1,458	80	1,025	24,086
Pipeline	6,032	2,249	2,332	4	173	10,790
Residual Fuel Oil[*d]	**12,527**	**1,596**	**11,370**	**331**	**5,509**	**31,333**
Refinery	4,931	1,255	4,717	331	3,090	14,324
Bulk Terminal	7,596	341	6,653	0	2,189	16,779
Pipeline	0	0	0	0	230	230
Less than 0.31% Sulfur	**2,538**	**62**	**1,538**	**9**	**585**	**4,732**
Refinery	1,349	0	169	9	530	2,057
Bulk Terminal	1,189	62	1,369	0	55	2,675
0.31 to 1.00% Sulfur	**5,742**	**307**	**2,196**	**121**	**1,100**	**9,466**
Refinery	2,743	215	483	121	849	4,411
Bulk Terminal	2,999	92	1,713	0	251	5,055
Greater than 1.00% Sulfur	**4,247**	**1,227**	**7,636**	**201**	**3,594**	**16,905**
Refinery	839	1,040	4,065	201	1,711	7,856
Bulk Terminal	3,408	187	3,571	0	1,883	9,049
Naphtha for Petrochemical Feedstock Use	**491**	**301**	**1,500**	**0**	**97**	**2,389**
Refinery	491	301	1,500	0	97	2,389
Other Oils for Petrochemical Feedstock Use	**0**	**71**	**1,150**	**0**	**112**	**1,333**
Refinery	0	71	1,150	0	112	1,333
Special Naphthas	**81**	**332**	**1,581**	**4**	**40**	**2,038**
Refinery	80	332	1,466	4	40	1,922
Bulk Terminal	1	0	115	0	0	116
Lubricants	**1,895**	**1,471**	**7,192**	**0**	**1,483**	**12,041**
Refinery	833	403	5,963	0	946	8,145
Bulk Terminal	1,062	1,068	1,229	0	537	3,896
Waxes	**193**	**93**	**594**	**16**	**0**	**896**
Refinery	193	93	594	16	0	896
Petroleum Coke	**265**	**1,205**	**5,017**	**40**	**1,816**	**8,343**
Refinery	265	1,205	5,017	40	1,816	8,343
Asphalt and Road Oil	**3,981**	**8,902**	**4,415**	**1,900**	**2,079**	**21,277**
Refinery	1,715	4,846	3,519	1,629	1,412	13,121
Bulk Terminal	2,266	4,056	896	271	667	8,156
Miscellaneous Products	**62**	**322**	**504**	**13**	**89**	**990**
Refinery	20	166	453	0	35	674
Bulk Terminal	42	142	41	9	54	288
Pipeline	0	14	10	4	0	28
Total Stocks, All Oils	**170,356**	**209,096**	**1,000,253**	**31,322**	**136,883**	**1,547,910**

[a] Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.
[b] Includes stocks held by producers.
[c] Includes tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
[d] Sulfur content not available for stocks held by pipelines.
[e] Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.
W = Withheld to avoid disclosure of individual company data.
Note: Stocks are reported as of the end of December.
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 31. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, 2002

(Thousand Barrels)

PAD District and State	Motor Gasoline				Kerosene	Distillate Fuel Oil[a]			Residual Fuel	Propane/ Propylene
	Total	Reformulated	Oxygenated	Other		Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur		
PAD District I	**36,498**	**15,868**	**57**	**20,573**	**3,313**	**44,275**	**16,791**	**27,484**	**12,527**	**3,309**
Connecticut	949	949	0	0	163	3,023	778	2,245	123	W
Delaware, D.C., Maryland	1,909	1,483	0	426	182	3,099	1,111	1,988	2,113	W
Florida	4,915	0	0	4,915	44	2,271	1,700	571	781	555
Georgia	2,018	16	0	2,002	81	1,485	1,004	481	218	W
Maine, New Hampshire, Vermont	1,070	167	0	903	647	1,931	540	1,391	318	W
Massachusetts	1,631	1,631	0	0	114	2,038	691	1,347	357	W
New Jersey	9,276	6,946	0	2,330	616	12,642	2,751	9,891	3,740	W
New York	2,778	965	51	1,762	454	6,547	2,020	4,527	2,553	W
North Carolina	2,255	10	0	2,245	228	1,981	1,415	566	352	W
Pennsylvania	5,342	1,571	0	3,771	448	5,102	2,532	2,570	844	W
Rhode Island	565	565	0	0	W	1,036	177	859	W	W
South Carolina	1,222	10	0	1,212	122	819	583	236	W	W
Virginia	2,424	1,555	0	869	173	2,184	1,394	790	551	W
West Virginia	144	0	6	138	W	117	95	22	W	W
PAD District II	**23,617**	**432**	**229**	**22,956**	**1,004**	**20,838**	**15,837**	**5,001**	**1,596**	**15,484**
Illinois	2,658	158	0	2,500	158	3,067	2,361	706	509	644
Indiana	2,608	127	0	2,481	108	2,717	1,712	1,005	155	W
Iowa	1,317	0	0	1,317	W	1,193	1,011	182	W	W
Kansas, Nebraska	2,440	0	0	2,440	2	2,099	1,796	303	47	9,935
Kentucky	804	0	0	804	51	1,004	642	362	W	W
Michigan	2,889	0	0	2,889	200	1,288	1,036	252	60	2,601
Minnesota	1,501	0	120	1,381	W	1,348	1,209	139	95	W
Missouri	812	6	0	806	W	715	491	224	W	W
North Dakota, South Dakota	423	0	1	422	W	708	620	88	W	W
Ohio	3,107	0	0	3,107	293	2,311	1,528	783	161	W
Oklahoma	1,490	0	0	1,490	W	1,395	962	433	77	299
Tennessee	1,597	0	108	1,489	49	1,423	1,177	246	214	W
Wisconsin	1,971	141	0	1,830	W	1,570	1,292	278	73	W
PAD District III	**28,784**	**6,276**	**0**	**22,508**	**661**	**20,190**	**12,969**	**7,221**	**11,370**	**17,689**
Alabama	1,106	14	0	1,092	41	925	498	427	162	88
Arkansas	704	0	0	704	W	845	496	349	W	W
Louisiana	6,319	433	0	5,886	283	4,874	2,753	2,121	4,153	1,622
Mississippi	2,477	0	0	2,477	0	1,585	1,005	580	W	4,825
New Mexico	378	0	0	378	W	328	269	59	8	W
Texas	17,800	5,829	0	11,971	332	11,633	7,948	3,685	6,919	11,087
PAD District IV	**3,775**	**0**	**158**	**3,617**	**55**	**2,649**	**2,032**	**617**	**331**	**459**
Colorado	994	0	158	836	W	417	370	47	W	W
Idaho	334	0	0	334	W	295	215	80	W	W
Montana	1,068	0	0	1,068	W	616	616	0	88	12
Utah	504	0	0	504	W	785	360	425	57	312
Wyoming	875	0	0	875	W	536	471	65	W	107
PAD District V	**17,009**	**9,681**	**0**	**7,328**	**68**	**9,952**	**7,670**	**2,282**	**5,279**	**1,956**
Alaska	515	0	0	515	W	655	5	650	W	W
Arizona	394	0	0	394	W	526	517	9	W	W
California	10,698	9,494	0	1,204	61	5,568	5,442	126	3,106	580
Hawaii	602	0	0	602	W	465	91	374	W	W
Nevada	180	0	0	180	W	110	103	7	W	W
Oregon	1,235	0	0	1,235	W	593	489	104	243	W
Washington	3,385	187	0	3,198	W	2,035	1,023	1,012	975	43
U.S. Total	**109,683**	**32,257**	**444**	**76,982**	**5,101**	**97,904**	**55,299**	**42,605**	**31,103**	**38,897**

[a]Distillate stocks located in the "Northeast Heating Oil Reserve" are not included. For details see Appendix D.

W = Withheld to avoid disclosure of individual company data.

Notes: • Stocks are reported as of the end of December. • 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 32. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, 2002

(Thousand Barrels)

Commodity	From I to			From II to				From III to	
	II	III	V	I	III	IV	V	I	II
Crude Oil	**0**	**3,043**	**0**	**5,321**	**12,159**	**11,901**	**0**	**1,002**	**654,447**
Petroleum Products	**110,481**	**1,518**	**0**	**29,471**	**60,969**	**22,633**	**0**	**1,095,366**	**361,761**
Pentanes Plus	0	0	0	0	756	0	0	0	5,250
Liquefied Petroleum Gases	446	0	0	10,031	36,596	0	0	26,286	38,914
Unfinished Oils	204	0	0	431	1,142	0	0	0	2,235
Motor Gasoline Blending Components	417	0	0	595	505	0	0	1,100	44,856
Finished Motor Gasoline	73,799	0	0	8,448	12,735	8,798	0	635,930	135,939
Reformulated	0	0	0	0	6,042	0	0	116,797	16,165
Oxygenated	0	0	0	0	0	0	0	0	0
Other	73,799	0	0	8,448	6,693	8,798	0	519,133	119,774
Finished Aviation Gasoline	0	0	0	0	0	0	0	937	923
Jet Fuel	3,008	0	0	1,665	144	9,511	0	157,262	46,091
Naphtha-Type	0	0	0	0	0	0	0	235	0
Kerosene-Type	3,008	0	0	1,665	144	9,511	0	157,027	46,091
Kerosene	63	0	0	475	0	0	0	437	227
Distillate Fuel Oil	32,028	0	0	5,230	3,901	4,324	0	259,553	73,547
0.05 percent sulfur and under	26,051	0	0	3,031	2,669	4,324	0	173,642	59,897
Greater than 0.05 percent sulfur	5,977	0	0	2,199	1,232	0	0	85,911	13,650
Residual Fuel Oil	0	281	0	156	3,915	0	0	2,502	195
Petrochemical Feedstocks[a]	516	616	0	29	576	0	0	299	1,450
Special Naphthas	0	12	0	0	0	0	0	746	621
Lubricants	0	609	0	539	331	0	0	7,013	5,091
Waxes	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	1,853	368	0	0	3,301	6,422
Miscellaneous Products	0	0	0	19	0	0	0	0	0
Total	**110,481**	**4,561**	**0**	**34,792**	**73,128**	**34,534**	**0**	**1,096,368**	**1,016,208**

Commodity	From III to		From IV to			From V to			
	IV	V	II	III	V	I	II	III	IV
Crude Oil	**0**	**0**	**32,747**	**8,112**	**0**	**0**	**0**	**0**	**0**
Petroleum Products	**18,813**	**39,454**	**22,469**	**55,565**	**11,287**	**199**	**0**	**152**	**0**
Pentanes Plus	0	0	990	5,589	0	0	0	0	0
Liquefied Petroleum Gases	1,178	0	8,899	49,976	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	9,549	0	0	0	0	0	0	0
Finished Motor Gasoline	10,114	24,337	6,890	0	9,045	199	0	0	0
Reformulated	0	7,534	0	0	0	0	0	0	0
Oxygenated	0	256	0	0	0	0	0	0	0
Other	10,114	16,547	6,890	0	9,045	199	0	0	0
Finished Aviation Gasoline	114	0	0	0	0	0	0	0	0
Jet Fuel	4,363	2,270	576	0	162	0	0	0	0
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	4,363	2,270	576	0	162	0	0	0	0
Kerosene	0	0	264	0	0	0	0	0	0
Distillate Fuel Oil	3,044	2,772	4,850	0	2,080	0	0	0	0
0.05 percent sulfur and under	3,044	2,420	4,817	0	1,873	0	0	0	0
Greater than 0.05 percent sulfur	0	352	33	0	207	0	0	0	0
Residual Fuel Oil	0	49	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	477	0	0	0	0	0	152	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	**18,813**	**39,454**	**55,216**	**63,677**	**11,287**	**199**	**0**	**152**	**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 33. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, 2002

(Thousand Barrels)

Commodity	From I to		From II to			From III to	
	II	III	I	III	IV	I	II
Crude Oil	**0**	**3,043**	**2,479**	**12,159**	**11,901**	**0**	**654,447**
Petroleum Products	**108,705**	**0**	**12,806**	**51,719**	**22,633**	**857,497**	**306,947**
Pentanes Plus	0	0	0	756	0	0	5,250
Liquefied Petroleum Gases	446	0	10,031	36,596	0	23,413	38,914
Motor Gasoline Blending Components	150	0	595	0	0	297	41,034
Finished Motor Gasoline	73,668	0	1,140	11,347	8,798	486,453	119,254
Reformulated	0	0	0	6,042	0	107,055	9,536
Oxygenated	0	0	0	0	0	0	0
Other	73,668	0	1,140	5,305	8,798	379,398	109,718
Finished Aviation Gasoline	0	0	0	0	0	0	711
Jet Fuel	3,008	0	478	0	9,511	128,216	44,600
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	3,008	0	478	0	9,511	128,216	44,600
Kerosene	63	0	0	0	0	239	107
Distillate Fuel Oil	31,370	0	543	3,020	4,324	218,879	57,077
0.05 percent sulfur and under	25,938	0	371	2,298	4,324	143,202	50,937
Greater than 0.05 percent sulfur	5,432	0	172	722	0	75,677	6,140
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	19	0	0	0	0
Total	**108,705**	**3,043**	**15,285**	**63,878**	**34,534**	**857,497**	**961,394**

Commodity	From III to		From IV to			From V to	
	IV	V	II	III	V	III	IV
Crude Oil	**0**	**0**	**32,747**	**8,112**	**0**	**0**	**0**
Petroleum Products	**18,813**	**33,411**	**22,469**	**55,565**	**11,287**	**0**	**0**
Pentanes Plus	0	0	990	5,589	0	0	0
Liquefied Petroleum Gases	1,178	0	8,899	49,976	0	0	0
Motor Gasoline Blending Components	0	6,955	0	0	0	0	0
Finished Motor Gasoline	10,114	21,414	6,890	0	9,045	0	0
Reformulated	0	7,534	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	10,114	13,880	6,890	0	9,045	0	0
Finished Aviation Gasoline	114	0	0	0	0	0	0
Jet Fuel	4,363	2,270	576	0	162	0	0
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	4,363	2,270	576	0	162	0	0
Kerosene	0	0	264	0	0	0	0
Distillate Fuel Oil	3,044	2,772	4,850	0	2,080	0	0
0.05 percent sulfur and under	3,044	2,420	4,817	0	1,873	0	0
Greater than 0.05 percent sulfur	0	352	33	0	207	0	0
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	**18,813**	**33,411**	**55,216**	**63,677**	**11,287**	**0**	**0**

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

Table 34. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, 2002

(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**	**2,842**	**0**	**0**	**1,002**	**0**
Petroleum Products	**1,776**	**1,518**	**0**	**16,665**	**9,250**	**0**	**237,869**	**3,166**
Liquefied Petroleum Gases	0	0	0	0	0	0	2,873	0
Unfinished Oils	204	0	0	431	1,142	0	0	0
Motor Gasoline Blending Components	267	0	0	0	505	0	803	0
Finished Motor Gasoline	131	0	0	7,308	1,388	0	149,477	2,023
Reformulated	0	0	0	0	0	0	9,742	2,023
Oxygenated	0	0	0	0	0	0	0	0
Other	131	0	0	7,308	1,388	0	139,735	0
Finished Aviation Gasoline	0	0	0	0	0	0	937	22
Jet Fuel	0	0	0	1,187	144	0	29,046	0
Naphtha-Type	0	0	0	0	0	0	235	0
Kerosene-Type	0	0	0	1,187	144	0	28,811	0
Kerosene	0	0	0	475	0	0	198	80
Distillate Fuel Oil	658	0	0	4,687	881	0	40,674	1,041
0.05 percent sulfur and under	113	0	0	2,660	371	0	30,440	170
Greater then 0.05 percent sulfur	545	0	0	2,027	510	0	10,234	871
Residual Fuel Oil	0	281	0	156	3,915	0	2,502	0
Less than 0.31 percent sulfur	0	0	0	0	0	0	301	0
0.31 to 1.00 percent sulfur	0	233	0	0	0	0	7	0
Greater than 1.00 percent sulfur	0	48	0	156	3,915	0	2,194	0
Petrochemical Feedstocks[a]	516	616	0	29	576	0	299	0
Special Naphthas	0	12	0	0	0	0	746	0
Lubricants	0	609	0	539	331	0	7,013	0
Waxes	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	1,853	368	0	3,301	0
Miscellaneous Products	0	0	0	0	0	0	0	0
Total	**1,776**	**1,518**	**0**	**19,507**	**9,250**	**0**	**238,871**	**3,166**

Commodity	From III to				From V to		
	Central Atlantic	Lower Atlantic	II	V	I	II	III
Crude Oil	**1,002**	**0**	**0**	**0**	**0**	**0**	**0**
Petroleum Products	**6,674**	**228,029**	**54,814**	**6,043**	**199**	**0**	**152**
Liquefied Petroleum Gases	0	2,873	0	0	0	0	0
Unfinished Oils	0	0	2,235	0	0	0	0
Motor Gasoline Blending Components	633	170	3,822	2,594	0	0	0
Finished Motor Gasoline	1,234	146,220	16,685	2,923	199	0	0
Reformulated	340	7,379	6,629	0	0	0	0
Oxygenated	0	0	0	256	0	0	0
Other	894	138,841	10,056	2,667	199	0	0
Finished Aviation Gasoline	178	737	212	0	0	0	0
Jet Fuel	52	28,994	1,491	0	0	0	0
Naphtha-Type	0	235	0	0	0	0	0
Kerosene-Type	52	28,759	1,491	0	0	0	0
Kerosene	42	76	120	0	0	0	0
Distillate Fuel Oil	52	39,581	16,470	0	0	0	0
0.05 percent sulfur and under	52	30,218	8,960	0	0	0	0
Greater then 0.05 percent sulfur	0	9,363	7,510	0	0	0	0
Residual Fuel Oil	56	2,446	195	49	0	0	0
Less than 0.31 percent sulfur	0	301	0	49	0	0	0
0.31 to 1.00 percent sulfur	7	0	0	0	0	0	0
Greater than 1.00 percent sulfur	49	2,145	195	0	0	0	0
Petrochemical Feedstocks[a]	299	0	1,450	0	0	0	0
Special Naphthas	102	644	621	0	0	0	0
Lubricants	3,760	3,253	5,091	477	0	0	152
Waxes	0	0	0	0	0	0	0
Asphalt and Road Oil	266	3,035	6,422	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	**7,676**	**228,029**	**54,814**	**6,043**	**199**	**0**	**152**

[a] Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Source: Energy Information Administration (EIA) Form EIA-817, "Monthly Tanker and Barge Movement Report."

Table 35. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, 2002

(Thousand Barrels)

Commodity	PAD District I			PAD District II		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	**6,323**	**3,043**	**3,280**	**687,194**	**29,381**	**657,813**
Petroleum Products	**1,125,036**	**111,999**	**1,013,037**	**494,711**	**113,073**	**381,638**
Pentanes Plus	0	0	0	6,240	756	5,484
Liquefied Petroleum Gases	36,317	446	35,871	48,259	46,627	1,632
Ethane/Ethylene	0	0	0	5,070	22,344	-17,274
Propane/Propylene	34,901	10	34,891	29,934	18,660	11,274
Normal Butane/Butylene	1,375	336	1,039	6,292	4,431	1,861
Isobutane/Isobutylene	41	100	-59	6,963	1,192	5,771
Unfinished Oils	431	204	227	2,439	1,573	866
Motor Gasoline Blending Components	1,695	417	1,278	45,273	1,100	44,173
Finished Motor Gasoline	644,577	73,799	570,778	216,628	29,981	186,647
Reformulated	116,797	0	116,797	16,165	6,042	10,123
Oxygenated	0	0	0	0	0	0
Other	527,780	73,799	453,981	200,463	23,939	176,524
Finished Aviation Gasoline	937	0	937	923	0	923
Jet Fuel	158,927	3,008	155,919	49,675	11,320	38,355
Naphtha-Type	235	0	235	0	0	0
Kerosene-Type	158,692	3,008	155,684	49,675	11,320	38,355
Kerosene	912	63	849	554	475	79
Distillate Fuel Oil	264,783	32,028	232,755	110,425	13,455	96,970
0.05 percent sulfur and under	176,673	26,051	150,622	90,765	10,024	80,741
Greater than 0.05 percent sulfur	88,110	5,977	82,133	19,660	3,431	16,229
Residual Fuel Oil	2,658	281	2,377	195	4,071	-3,876
Petrochemical Feedstocks[a]	328	1,132	-804	1,966	605	1,361
Special Naphthas	746	12	734	621	0	621
Lubricants	7,552	609	6,943	5,091	870	4,221
Waxes	0	0	0	0	0	0
Asphalt and Road Oil	5,154	0	5,154	6,422	2,221	4,201
Miscellaneous Products	19	0	19	0	19	-19
Total	**1,131,359**	**115,042**	**1,016,317**	**1,181,905**	**142,454**	**1,039,451**

Commodity	PAD District III			PAD District IV			PAD District V		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	**23,314**	**655,449**	**-632,135**	**11,901**	**40,859**	**-28,958**	**0**	**0**	**0**
Petroleum Products	**118,204**	**1,515,394**	**-1,397,190**	**41,446**	**89,321**	**-47,875**	**50,741**	**351**	**50,390**
Pentanes Plus	6,345	5,250	1,095	0	6,579	-6,579	0	0	0
Liquefied Petroleum Gases	86,572	66,378	20,194	1,178	58,875	-57,697	0	0	0
Ethane/Ethylene	50,478	2,522	47,956	0	30,682	-30,682	0	0	0
Propane/Propylene	23,395	52,691	-29,296	1,135	18,004	-16,869	0	0	0
Normal Butane/Butylene	8,049	4,885	3,164	31	6,095	-6,064	0	0	0
Isobutane/Isobutylene	4,650	6,280	-1,630	12	4,094	-4,082	0	0	0
Unfinished Oils	1,142	2,235	-1,093	0	0	0	0	0	0
Motor Gasoline Blending Components	505	55,505	-55,000	0	0	0	9,549	0	9,549
Finished Motor Gasoline	12,735	806,320	-793,585	18,912	15,935	2,977	33,382	199	33,183
Reformulated	6,042	140,496	-134,454	0	0	0	7,534	0	7,534
Oxygenated	0	256	-256	0	0	0	256	0	256
Other	6,693	665,568	-658,875	18,912	15,935	2,977	25,592	199	25,393
Finished Aviation Gasoline	0	1,974	-1,974	114	0	114	0	0	0
Jet Fuel	144	209,986	-209,842	13,874	738	13,136	2,432	0	2,432
Naphtha-Type	0	235	-235	0	0	0	0	0	0
Kerosene-Type	144	209,751	-209,607	13,874	738	13,136	2,432	0	2,432
Kerosene	0	664	-664	0	264	-264	0	0	0
Distillate Fuel Oil	3,901	338,916	-335,015	7,368	6,930	438	4,852	0	4,852
0.05 percent sulfur and under	2,669	239,003	-236,334	7,368	6,690	678	4,293	0	4,293
Greater than 0.05 percent sulfur	1,232	99,913	-98,681	0	240	-240	559	0	559
Residual Fuel Oil	4,196	2,746	1,450	0	0	0	49	0	49
Petrochemical Feedstocks[a]	1,192	1,749	-557	0	0	0	0	0	0
Special Naphthas	12	1,367	-1,355	0	0	0	0	0	0
Lubricants	1,092	12,581	-11,489	0	0	0	477	152	325
Waxes	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	368	9,723	-9,355	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0	0	0
Total	**141,518**	**2,170,843**	**-2,029,325**	**53,347**	**130,180**	**-76,833**	**50,741**	**351**	**50,390**

[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 36. Number and Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 2003

PAD District and State	Number of Operable Refineries			Atmospheric Crude Oil Distillation Capacity					
				Barrels per Calendar Day			Barrels per Stream Day		
	Total	Operating	Idle[a]	Total	Operating	Idle	Total	Operating	Idle
PAD District I	**16**	**13**	**3**	**1,708,687**	**1,570,687**	**138,000**	**1,800,800**	**1,655,300**	**145,500**
Delaware	1	1	0	175,000	175,000	0	180,000	180,000	0
Georgia	2	1	1	33,400	5,400	28,000	40,000	8,000	32,000
New Jersey	6	4	2	662,287	552,287	110,000	690,500	577,000	113,500
Pennsylvania	5	5	0	760,000	760,000	0	808,500	808,500	0
Virginia	1	1	0	58,600	58,600	0	61,800	61,800	0
West Virginia	1	1	0	19,400	19,400	0	20,000	20,000	0
PAD District II	**26**	**26**	**0**	**3,518,400**	**3,518,400**	**0**	**3,715,049**	**3,715,049**	**0**
Illinois	4	4	0	878,300	878,300	0	929,700	929,700	0
Indiana	2	2	0	433,000	433,000	0	444,000	444,000	0
Kansas	3	3	0	296,200	296,200	0	310,000	310,000	0
Kentucky	2	2	0	227,500	227,500	0	253,300	253,300	0
Michigan	1	1	0	74,000	74,000	0	76,000	76,000	0
Minnesota	2	2	0	335,000	335,000	0	369,000	369,000	0
North Dakota	1	1	0	58,000	58,000	0	60,000	60,000	0
Ohio	4	4	0	531,500	531,500	0	549,000	549,000	0
Oklahoma	5	5	0	471,900	471,900	0	504,049	504,049	0
Tennessee	1	1	0	180,000	180,000	0	182,000	182,000	0
Wisconsin	1	1	0	33,000	33,000	0	38,000	38,000	0
PAD District III	**55**	**54**	**1**	**7,807,948**	**7,707,948**	**100,000**	**8,241,078**	**8,138,078**	**103,000**
Alabama	3	3	0	130,000	130,000	0	142,000	142,000	0
Arkansas	2	2	0	69,800	69,800	0	74,800	74,800	0
Louisiana	17	17	0	2,718,920	2,718,920	0	2,867,355	2,867,355	0
Mississippi	4	4	0	364,800	364,800	0	393,300	393,300	0
New Mexico	3	3	0	95,600	95,600	0	101,107	101,107	0
Texas	26	25	1	4,428,828	4,328,828	100,000	4,662,516	4,559,516	103,000
PAD District IV	**16**	**16**	**0**	**577,700**	**577,700**	**0**	**610,600**	**610,600**	**0**
Colorado	2	2	0	87,000	87,000	0	94,000	94,000	0
Montana	4	4	0	180,000	180,000	0	188,800	188,800	0
Utah	5	5	0	162,700	162,700	0	172,500	172,500	0
Wyoming	5	5	0	148,000	148,000	0	155,300	155,300	0
PAD District V	**36**	**36**	**0**	**3,144,635**	**3,109,235**	**35,400**	**3,307,563**	**3,266,063**	**41,500**
Alaska	6	6	0	358,978	358,978	0	405,713	405,713	0
California	21	21	0	2,011,807	1,989,807	22,000	2,104,100	2,077,100	27,000
Hawaii	2	2	0	147,500	147,500	0	152,000	152,000	0
Nevada	1	1	0	5,000	5,000	0	5,000	5,000	0
Oregon	1	1	0	0	0	0	0	0	0
Washington	5	5	0	621,350	607,950	13,400	640,750	626,250	14,500
U.S. Total	**149**	**145**	**4**	**16,757,370**	**16,483,970**	**273,400**	**17,675,090**	**17,385,090**	**290,000**
Puerto Rico	2	1	1	111,500	69,500	42,000	124,400	76,400	48,000
Virgin Islands	1	1	0	470,000	345,000	125,000	495,000	360,000	135,000

See footnotes at end of table.

Table 36. Number and Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 2003 (Continued)

PAD District and State	Downstream Charge Capacity (Barrels per Stream Day)							
	Vacuum Distillation	Thermal Cracking	Catalytic Cracking		Catalytic Hydro-cracking	Catalytic Reforming	Catalytic Hydro-treating	Fuels Solvent Deasphalting
			Fresh	Recycled				
PAD District I	**738,900**	**90,000**	**728,200**	**7,000**	**42,000**	**312,300**	**1,004,960**	**21,000**
Delaware	102,000	46,500	77,000	4,000	20,000	41,000	186,000	0
Georgia	0	0	0	0	0	0	0	0
New Jersey	291,000	24,500	317,500	0	0	84,000	317,500	21,000
Pennsylvania	300,000	0	305,500	1,000	22,000	171,800	460,300	0
Virginia	37,300	19,000	28,200	2,000	0	12,100	30,860	0
West Virginia	8,600	0	0	0	0	3,400	10,300	0
PAD District II	**1,477,700**	**384,800**	**1,248,811**	**13,550**	**151,700**	**893,964**	**2,596,630**	**17,850**
Illinois	376,900	126,400	309,000	3,000	60,500	241,200	624,266	0
Indiana	255,000	36,000	173,200	4,200	0	96,500	311,800	0
Kansas	123,000	58,000	89,200	500	0	69,000	272,400	0
Kentucky	97,000	0	105,000	0	0	51,000	208,800	13,000
Michigan	38,000	0	29,000	0	0	20,000	51,300	0
Minnesota	232,000	70,000	111,000	0	0	72,800	385,000	0
North Dakota	0	0	26,000	3,600	0	12,100	24,600	0
Ohio	153,500	58,500	190,000	0	85,200	164,500	273,100	0
Oklahoma	181,800	35,900	135,411	2,250	6,000	122,864	315,564	4,850
Tennessee	0	0	70,000	0	0	36,000	113,000	0
Wisconsin	20,500	0	11,000	0	0	8,000	16,800	0
PAD District III	**3,729,975**	**1,243,600**	**3,045,710**	**49,000**	**843,700**	**1,839,800**	**5,987,100**	**222,400**
Alabama	60,400	14,000	0	0	0	27,200	78,500	0
Arkansas	29,400	0	19,900	0	0	13,600	54,600	7,400
Louisiana	1,234,000	490,500	1,122,600	11,000	207,100	556,500	1,801,250	41,000
Mississippi	310,875	75,000	68,000	0	167,000	96,000	168,300	0
New Mexico	23,000	0	34,300	3,500	0	25,800	67,300	0
Texas	2,072,300	664,100	1,800,910	34,500	469,600	1,120,700	3,817,150	174,000
PAD District IV	**229,300**	**46,850**	**191,000**	**5,690**	**16,600**	**127,780**	**382,950**	**9,040**
Colorado	32,500	0	28,600	2,000	0	20,700	48,200	0
Montana	90,200	28,350	57,000	990	5,600	40,530	162,000	4,000
Utah	44,000	8,500	55,900	2,200	0	35,000	75,100	5,040
Wyoming	62,600	10,000	49,500	500	11,000	31,550	97,650	0
PAD District V	**1,612,500**	**611,700**	**838,400**	**4,000**	**589,800**	**603,590**	**2,015,440**	**80,000**
Alaska	25,800	0	0	0	12,500	12,000	12,000	0
California	1,204,200	509,000	682,300	1,000	501,300	434,300	1,676,000	50,000
Hawaii	74,300	13,000	22,000	0	18,000	13,000	14,500	0
Nevada	5,000	0	0	0	0	0	0	0
Oregon	12,000	0	0	0	0	0	0	0
Washington	291,200	89,700	134,100	3,000	58,000	144,290	312,940	30,000
U.S. Total	**7,788,375**	**2,376,950**	**6,052,121**	**79,240**	**1,643,800**	**3,777,434**	**11,987,080**	**350,290**
Puerto Rico	57,000	0	14,200	0	18,000	26,500	47,400	0
Virgin Islands	225,000	103,000	145,000	0	0	115,000	405,000	0

[a] Refineries where distillation units were completely idle but not permanently shutdown on January 1, 2003.
Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 37. Production Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 2003
(Barrels per Stream Day, Except Where Noted)

PAD District and State	Production Capacity							
	Alkylates	Aromatics	Asphalt and Road Oil	Isomers	Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons/day)
PAD District I	**108,200**	**20,900**	**141,380**	**30,900**	**20,145**	**21,980**	**84**	**1,290**
Delaware	11,700	1,400	0	6,000	0	9,080	55	596
Georgia	0	0	29,400	0	0	0	0	0
New Jersey	38,200	7,500	91,500	13,100	12,000	7,500	21	283
Pennsylvania	54,100	12,000	20,000	11,800	2,945	0	7	371
Virginia	4,200	0	0	0	0	5,400	0	39
West Virginia	0	0	480	0	5,200	0	1	1
PAD District II	**262,168**	**63,400**	**303,331**	**174,397**	**18,200**	**112,000**	**391**	**5,191**
Illinois	84,000	13,500	65,500	14,000	0	38,270	57	1,717
Indiana	37,700	17,000	65,700	28,200	0	13,400	31	550
Kansas	28,000	3,000	0	27,300	0	18,000	6	457
Kentucky	14,000	11,700	23,000	13,000	9,400	0	0	448
Michigan	4,100	0	22,000	0	0	0	0	147
Minnesota	17,500	0	62,000	36,000	0	22,000	123	1,103
North Dakota	4,400	0	0	0	0	0	0	17
Ohio	28,000	18,200	23,500	26,000	0	12,700	128	524
Oklahoma	30,968	0	34,131	21,897	8,800	7,630	46	172
Tennessee	12,000	0	0	6,000	0	0	0	43
Wisconsin	1,500	0	7,500	2,000	0	0	0	13
PAD District III	**583,050**	**227,100**	**239,975**	**337,496**	**151,695**	**359,237**	**1,399**	**17,908**
Alabama	0	0	25,200	3,200	0	2,500	6	115
Arkansas	4,900	0	11,200	6,500	5,000	0	3	157
Louisiana	208,900	26,500	62,575	120,990	62,800	129,231	192	5,635
Mississippi	18,600	21,000	39,700	0	11,400	22,080	238	1,300
New Mexico	8,600	0	6,400	14,073	0	0	0	142
Texas	342,050	179,600	94,900	192,733	72,495	205,426	960	10,559
PAD District IV	**42,154**	**0**	**69,400**	**15,420**	**0**	**11,548**	**91**	**674**
Colorado	0	0	11,200	1,046	0	0	0	118
Montana	16,500	0	32,500	5,950	0	6,600	58	372
Utah	15,600	0	3,300	7,400	0	1,748	1	53
Wyoming	10,054	0	22,400	1,024	0	3,200	32	131
PAD District V	**195,000**	**4,300**	**118,833**	**120,700**	**26,400**	**141,410**	**1,300**	**4,703**
Alaska	0	2,800	5,000	4,000	0	0	13	20
California	161,700	1,500	74,183	98,500	26,400	125,410	1,138	4,196
Hawaii	5,000	0	15,750	3,200	0	0	21	34
Nevada	0	0	2,000	0	0	0	0	0
Oregon	0	0	8,400	0	0	0	0	0
Washington	28,300	0	13,500	15,000	0	16,000	128	453
U.S. Total	**1,190,572**	**315,700**	**872,919**	**678,913**	**216,440**	**646,175**	**3,265**	**29,766**
Puerto Rico	0	0	1,000	0	0	0	22	101
Virgin Islands	20,000	20,000	0	18,000	0	19,000	0	550

MMcfd = Million cubic feet per day.
Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Directory of Operable Petroleum Refineries on Tables 38 and 39

Refiner	State(s)[a]
Age Refining, Inc.	TX
Alon USA LP	TX
Amerada Hess Corp.	NJ
American Refining Group Inc.	PA
Atofina Petrochemicals Inc.	TX
BP Expl (Alaska) Inc	AK
BP Products North America, Inc.	IN, OH, TX
BP West Coast Products LLC	CA, WA
Big West Oil Co.	UT
Calcasieu Refining Co.	LA
Calumet Lubricants Co. LP	LA
Caribbean Petroleum Corp.	PR
Cenex Harvest States Coop	MT
Chalmette Refining LLC	LA
Chevron U.S.A. Inc.	CA, HI, MS, NJ, OR, TX, UT
Citgo Asphalt Refining Co.	GA, NJ
Citgo Petroleum Corp.	LA
Citgo Refining & Chemical Inc.	TX
Coastal Eagle Point Oil Co.	NJ
Coastal Mobile Refg Co.	AL
Colorado Refg Co.	CO
Conoco Inc	CO, LA, MT, OK
Countrymark Cooperative Inc.	IN
Cross Oil Refining and Mktg, Inc.	AR
Crown Central Petro Corp	TX
Deer Park Refg Ltd Ptnrshp	TX
Diamond Shamrock Refg & Mktg	TX
Edgington Oil Co.	CA
Ergon Refining Inc.	MS
Ergon West Virginia Inc.	WV
ExxonMobil Refg & Supply Co.	CA, IL, LA, MT, TX
Farmland Industries Inc.	KS
Flint Hills Resources LP	MN, TX
Foreland Refining Corp.	NV
Frontier Refg Inc.	WY
Frontier Refining & Marketing Inc.	KS
Giant Industries Inc.	NM
Giant Refining Co.	NM
Giant Yorktown Refg	VA
Greka Energy	CA
Haltermann Products	TX
Hovensa LLC	VI
Hunt Refining Co.	AL
Kern Oil & Refining Co.	CA
La Gloria Oil & Gas Co	TX
Lion Oil Co.	AR
Little America Refining Co.	WY
Lunday Thagard	CA
Lyondell Citgo Refining Co. Ltd.	TX
Marathon Ashland Petro LLC	IL, KY, LA, MI, MN, OH, TX
Montana Refining Co.	MT
Motiva Enterprises LLC	DE, LA, TX
Murphy Oil U.S.A. Inc.	LA, WI
NCRA	KS
Navajo Refining Co.	NM
Orion Refining Corp.	LA
PDV Midwest Refining LLC	IL
Paramount Petroleum Corp.	CA
Petro Star Inc.	AK
Phillips 66 Co.	CA, IL, LA, NJ, PA, TX, UT, WA
Phillips Alaska, Inc.	AK
Placid Refining Co.	LA
Premcor Refg Group Inc	OH, TX
San Joaquin Refining Co Inc.	CA
Shell Chem LP	AL,LA
Shell Chem Yabucoa Inc.	PR
Shell Oil Products US	CA, WA
Silver Eagle Refining	UT, WY
Sinclair Oil Corp.	OK, WY
Somerset Refinery Inc.	KY
South Hampton Refining Co.	TX
Southland Oil Co.	MS
Sunoco Inc.	OH, OK, PA
Sunoco Inc. (R&M)	PA
TPI Petro Inc.	OK
Tenby Inc.	CA
Tesoro Hawaii Corp.	HI
Tesoro Petroleum Corp.	AK
Tesoro Refg & Mktg Co	CA
Tesoro West Coast	ND, UT, WA
Trigeant LTD	TX
U.S. Oil & Refining Co.	WA
Ultramar Inc.	CA
United Refining Co.	PA
Valero Refining Co. California	CA
Valero Refining Co. Louisiana	LA
Valero Refining Co. New Jersey	NJ
Valero Refining Co. Texas	TX
Williams Alaska Petro Inc.	AK
Williams Refining LLC	TN
Wynnewood Refining Co.	OK
Wyoming Refining Co.	WY
Young Refining Corp.	GA

[a]Includes Puerto Rico (PR) and Virgin Islands (VI).

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Alabama	**130,000**	**0**	**142,000**	**0**	**60,400**	**14,000**	**0**	**0**	**0**
Coastal Mobile Refg Co.									
Chickasaw	16,500	0	22,000	0	15,400	0	0	0	0
Hunt Refining Co.									
Tuscaloosa	33,500	0	35,000	0	15,000	14,000	0	0	0
Shell Chem LP									
Saraland	80,000	0	85,000	0	30,000	0	0	0	0
Alaska	**358,978**	**0**	**405,713**	**0**	**25,800**	**0**	**0**	**0**	**0**
BP Expl (Alaska) Inc									
Prudhoe Bay	12,500	0	14,200	0	0	0	0	0	0
Petro Star Inc.									
North Pole	15,850	0	18,000	0	0	0	0	0	0
Valdez	46,700	0	50,000	0	0	0	0	0	0
Phillips Alaska, Inc.									
Kuparuk	14,000	0	16,000	0	0	0	0	0	0
Tesoro Petroleum Corp.									
Kenai	72,000	0	80,000	0	19,800	0	0	0	0
Williams Alaska Petro Inc.									
North Pole	197,928	0	227,513	0	6,000	0	0	0	0
Arkansas	**69,800**	**0**	**74,800**	**0**	**29,400**	**0**	**0**	**0**	**0**
Cross Oil Refining and Mktg, Inc.									
Smackover	6,800	0	7,000	0	3,500	0	0	0	0
Lion Oil Co.									
El Dorado	63,000	0	67,800	0	25,900	0	0	0	0
California	**1,989,807**	**22,000**	**2,077,100**	**27,000**	**1,204,200**	**404,000**	**100,000**	**5,000**	**0**
BP West Coast Products LLC									
Los Angeles	260,000	0	260,500	0	130,000	65,000	0	0	0
Chevron U.S.A. Inc.									
El Segundo	260,000	0	273,000	0	137,000	66,000	0	0	0
Richmond	225,000	0	240,000	0	115,000	0	0	0	0
Edgington Oil Co.									
Long Beach	14,000	12,000	25,000	15,000	0	0	0	0	0
ExxonMobil Refg & Supply Co.									
Torrance	149,000	0	155,100	0	102,300	54,100	0	0	0
Greka Energy									
Santa Maria	9,500	0	10,000	0	10,000	0	0	0	0
Kern Oil & Refining Co.									
Bakersfield	24,700	0	25,000	0	0	0	0	0	0
Lunday Thagard									
South Gate	8,500	0	10,000	0	7,000	0	0	0	0
Paramount Petroleum Corp.									
Paramount	50,000	0	53,000	0	30,000	0	0	0	0
Phillips 66 Co.									
Arroyo Grande	41,800	0	44,000	0	33,600	23,400	0	0	0
Rodeo	73,200	0	77,000	0	40,000	22,000	0	0	0
Wilmington	136,600	0	137,500	0	82,000	53,000	0	0	0
San Joaquin Refining Co Inc.									
Bakersfield	14,300	10,000	15,000	12,000	14,300	0	0	5,000	0
Shell Oil Products US (Formerly Equilon Enterprises LLC)									
Bakersfield	66,000	0	68,000	0	40,000	22,000	0	0	0
Martinez	159,250	0	162,500	0	108,500	26,000	22,500	0	0
Wilmington	98,500	0	107,500	0	62,000	43,500	0	0	0
Tenby Inc.									
Oxnard	2,800	0	4,000	0	0	0	0	0	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Alabama	**0**	**0**	**0**	**7,200**	**20,000**	**9,000**	**27,500**	**42,000**	**0**	**0**
Chickasaw	0	0	0	0	0	0	0	0	0	0
Tuscaloosa	0	0	0	7,200	0	9,000	9,000	12,000	0	0
Saraland	0	0	0	0	20,000	0	18,500	30,000	0	0
Alaska	**0**	**0**	**12,500**	**12,000**	**0**	**0**	**12,000**	**0**	**0**	**0**
Prudhoe Bay	0	0	0	0	0	0	0	0	0	0
North Pole	0	0	0	0	0	0	0	0	0	0
Valdez	0	0	0	0	0	0	0	0	0	0
Kuparuk	0	0	0	0	0	0	0	0	0	0
Kenai	0	0	12,500	12,000	0	0	12,000	0	0	0
North Pole	0	0	0	0	0	0	0	0	0	0
Arkansas	**19,900**	**0**	**0**	**13,600**	**0**	**21,000**	**20,000**	**8,600**	**5,000**	**7,400**
Smackover	0	0	0	0	0	0	0	0	5,000	0
El Dorado	19,900	0	0	13,600	0	21,000	20,000	8,600	0	7,400
California	**682,300**	**1,000**	**501,300**	**189,300**	**245,000**	**629,900**	**489,900**	**413,900**	**142,300**	**50,000**
Los Angeles	96,000	0	45,700	0	52,000	90,000	40,000	30,000	16,000	0
El Segundo	65,000	0	49,000	42,000	0	72,000	73,500	60,000	15,000	0
Richmond	70,000	0	154,000	62,000	0	0	55,000	95,000	26,000	50,000
Long Beach	0	0	0	0	0	0	0	0	0	0
Torrance	95,000	0	24,900	0	20,000	104,100	24,100	18,000	0	0
Santa Maria	0	0	0	0	0	0	0	0	0	0
Bakersfield	0	0	0	0	3,300	0	5,000	9,000	0	0
South Gate	0	0	0	0	0	0	0	0	0	0
Paramount	0	0	0	0	8,500	10,800	9,500	8,000	0	0
Arroyo Grande	0	0	0	0	0	0	0	0	0	0
Rodeo	0	0	35,000	0	32,000	0	21,000	23,000	0	0
Wilmington	50,000	0	27,000	0	38,000	52,000	53,000	36,000	0	0
Bakersfield	0	0	0	0	0	0	0	3,000	0	0
Bakersfield	0	0	24,000	16,300	0	21,000	13,800	0	12,000	0
Martinez	73,000	0	38,000	31,000	0	77,000	28,000	24,000	41,100	0
Wilmington	36,000	0	32,000	0	34,000	37,000	35,000	15,000	10,500	0
Oxnard	0	0	0	0	0	0	0	0	0	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Tesoro Refg & Mktg Co (Formerly Ultramar Inc.)									
Martinez	166,000	0	170,000	0	153,000	0	48,000	0	0
Ultramar Inc.									
Wilmington	80,887	0	81,000	0	45,000	29,000	0	0	0
Valero Refining Co. California									
Benicia	144,000	0	153,000	0	89,500	0	29,500	0	0
Wilmington	5,770	0	6,000	0	5,000	0	0	0	0
Colorado	**87,000**	**0**	**94,000**	**0**	**32,500**	**0**	**0**	**0**	**0**
Colorado Refg Co.									
Commerce City	27,000	0	32,000	0	7,500	0	0	0	0
Conoco Inc									
Commerce City	60,000	0	62,000	0	25,000	0	0	0	0
Delaware	**175,000**	**0**	**180,000**	**0**	**102,000**	**0**	**46,500**	**0**	**0**
Motiva Enterprises LLC									
Delaware City	175,000	0	180,000	0	102,000	0	46,500	0	0
Georgia	**5,400**	**28,000**	**8,000**	**32,000**	**0**	**0**	**0**	**0**	**0**
Citgo Asphalt Refining Co.									
Savannah	0	28,000	0	32,000	0	0	0	0	0
Young Refining Corp.									
Douglasville	5,400	0	8,000	0	0	0	0	0	0
Hawaii	**147,500**	**0**	**152,000**	**0**	**74,300**	**0**	**0**	**13,000**	**0**
Chevron U.S.A. Inc.									
Honolulu	54,000	0	57,000	0	31,300	0	0	0	0
Tesoro Hawaii Corp.									
Ewa Beach	93,500	0	95,000	0	43,000	0	0	13,000	0
Illinois	**878,300**	**0**	**929,700**	**0**	**376,900**	**126,400**	**0**	**0**	**0**
ExxonMobil Refg & Supply Co.									
Joliet	238,000	0	247,700	0	117,700	58,500	0	0	0
Marathon Ashland Petro LLC									
Robinson	192,000	0	205,000	0	65,200	28,900	0	0	0
PDV Midwest Refining LLC									
Lemont (Chicago)	160,000	0	167,000	0	75,000	39,000	0	0	0
Phillips 66 Co.									
Wood River	288,300	0	310,000	0	119,000	0	0	0	0
Indiana	**433,000**	**0**	**444,000**	**0**	**255,000**	**36,000**	**0**	**0**	**0**
BP Products North America, Inc.									
Whiting	410,000	0	420,000	0	247,000	36,000	0	0	0
Countrymark Cooperative Inc.									
Mount Vernon	23,000	0	24,000	0	8,000	0	0	0	0
Kansas	**296,200**	**0**	**310,000**	**0**	**123,000**	**58,000**	**0**	**0**	**0**
Farmland Industries Inc.									
Coffeyville	112,000	0	115,000	0	50,000	18,000	0	0	0
Frontier Refining & Marketing Inc.									
El Dorado	103,000	0	110,000	0	39,000	18,000	0	0	0
NCRA									
McPherson	81,200	0	85,000	0	34,000	22,000	0	0	0
Kentucky	**227,500**	**0**	**253,300**	**0**	**97,000**	**0**	**0**	**0**	**0**
Marathon Ashland Petro LLC									
Catlettsburg	222,000	0	247,000	0	97,000	0	0	0	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Martinez	70,000	1,000	35,000	22,000	20,000	65,000	25,000	33,000	0	0
Wilmington	52,000	0	0	16,000	0	62,000	32,000	32,000	0	0
Benicia	75,300	0	36,700	0	37,200	39,000	75,000	27,900	21,700	0
Wilmington	0	0	0	0	0	0	0	0	0	0
Colorado	**28,600**	**2,000**	**0**	**20,700**	**0**	**14,500**	**20,700**	**13,000**	**0**	**0**
Commerce City	9,500	2,000	0	10,500	0	0	10,500	0	0	0
Commerce City	19,100	0	0	10,200	0	14,500	10,200	13,000	0	0
Delaware	**77,000**	**4,000**	**20,000**	**41,000**	**0**	**0**	**78,000**	**75,000**	**33,000**	**0**
Delaware City	77,000	4,000	20,000	41,000	0	0	78,000	75,000	33,000	0
Georgia	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Savannah	0	0	0	0	0	0	0	0	0	0
Douglasville	0	0	0	0	0	0	0	0	0	0
Hawaii	**22,000**	**0**	**18,000**	**13,000**	**0**	**0**	**11,000**	**0**	**3,500**	**0**
Honolulu	22,000	0	0	0	0	0	0	0	3,500	0
Ewa Beach	0	0	18,000	13,000	0	0	11,000	0	0	0
Illinois	**309,000**	**3,000**	**60,500**	**194,000**	**47,200**	**29,000**	**278,266**	**286,500**	**30,500**	**0**
Joliet	98,000	0	0	44,000	0	0	93,500	86,000	0	0
Robinson	53,000	0	27,000	75,000	0	0	60,000	70,000	0	0
Lemont (Chicago)	64,000	3,000	0	0	31,200	0	60,766	50,500	0	0
Wood River	94,000	0	33,500	75,000	16,000	29,000	64,000	80,000	30,500	0
Indiana	**173,200**	**4,200**	**0**	**6,500**	**90,000**	**101,300**	**127,500**	**83,000**	**0**	**0**
Whiting	165,000	4,000	0	0	90,000	101,300	117,500	83,000	0	0
Mount Vernon	8,200	200	0	6,500	0	0	10,000	0	0	0
Kansas	**89,200**	**500**	**0**	**30,000**	**39,000**	**45,000**	**106,500**	**108,900**	**12,000**	**0**
Coffeyville	30,000	0	0	0	17,000	0	30,000	35,000	0	0
El Dorado	37,200	0	0	7,500	22,000	45,000	42,000	35,900	0	0
McPherson	22,000	500	0	22,500	0	0	34,500	38,000	12,000	0
Kentucky	**105,000**	**0**	**0**	**50,000**	**1,000**	**45,000**	**52,300**	**88,000**	**23,500**	**13,000**
Catlettsburg	105,000	0	0	50,000	0	45,000	51,000	88,000	23,500	13,000

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Somerset Refinery Inc.									
Somerset	5,500	0	6,300	0	0	0	0	0	0
Louisiana	**2,718,920**	**0**	**2,867,355**	**0**	**1,234,000**	**479,900**	**0**	**0**	**10,600**
Calcasieu Refining Co.									
Lake Charles	29,400	0	30,000	0	0	0	0	0	0
Calumet Lubricants Co. LP									
Cotton Valley	13,020	0	14,000	0	0	0	0	0	0
Princeton	8,300	0	8,655	0	7,000	0	0	0	0
Shreveport	46,200	0	50,000	0	24,300	0	0	0	0
Chalmette Refining LLC									
Chalmette	182,500	0	190,200	0	106,000	34,500	0	0	0
Citgo Petroleum Corp.									
Lake Charles	324,300	0	338,000	0	88,000	107,000	0	0	0
Conoco Inc.									
Westlake	252,000	0	260,000	0	132,000	52,000	0	0	10,600
ExxonMobil Refg & Supply Co.									
Baton Rouge	491,500	0	512,000	0	229,500	113,500	0	0	0
Marathon Ashland Petro LLC									
Garyville	232,000	0	254,000	0	125,000	34,500	0	0	0
Motiva Enterprises LLC									
Convent	235,000	0	255,000	0	119,400	0	0	0	0
Norco	219,700	0	242,000	0	86,000	25,000	0	0	0
Murphy Oil U.S.A. Inc.									
Meraux	95,000	0	110,000	0	50,000	0	0	0	0
Orion Refining Corp.									
Norco (Good Hope)	155,000	0	161,000	0	95,000	88,000	0	0	0
Phillips 66 Co.									
Belle Chasse	253,500	0	257,000	0	92,000	25,400	0	0	0
Placid Refining Co.									
Port Allen	48,500	0	49,500	0	20,000	0	0	0	0
Shell Chem LP									
Saint Rose	55,000	0	56,000	0	28,000	0	0	0	0
Valero Refining Co. Louisiana									
Krotz Springs	78,000	0	80,000	0	31,800	0	0	0	0
Michigan	**74,000**	**0**	**76,000**	**0**	**38,000**	**0**	**0**	**0**	**0**
Marathon Ashland Petro LLC									
Detroit	74,000	0	76,000	0	38,000	0	0	0	0
Minnesota	**335,000**	**0**	**369,000**	**0**	**232,000**	**70,000**	**0**	**0**	**0**
Flint Hills Resources LP									
Saint Paul	265,000	0	290,000	0	200,000	70,000	0	0	0
Marathon Ashland Petro LLC									
Saint Paul Park	70,000	0	79,000	0	32,000	0	0	0	0
Mississippi	**364,800**	**0**	**393,300**	**0**	**310,875**	**75,000**	**0**	**0**	**0**
Chevron U.S.A. Inc.									
Pascagoula	325,000	0	350,000	0	286,000	75,000	0	0	0
Ergon Refining Inc.									
Vicksburg	23,000	0	24,300	0	18,000	0	0	0	0
Southland Oil Co.									
Lumberton	5,800	0	6,500	0	0	0	0	0	0
Sandersville	11,000	0	12,500	0	6,875	0	0	0	0
Montana	**180,000**	**0**	**188,800**	**0**	**90,200**	**19,450**	**8,900**	**0**	**0**
Cenex Harvest States Coop									
Laurel	55,000	0	58,000	0	27,850	0	0	0	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Somerset	0	0	0	0	1,000	0	1,300	0	0	0
Louisiana	**1,122,600**	**11,000**	**207,100**	**354,900**	**201,600**	**395,500**	**644,050**	**608,200**	**153,500**	**41,000**
Lake Charles	0	0	0	0	0	0	0	0	0	0
Cotton Valley	0	0	0	0	0	0	4,750	0	0	0
Princeton	0	0	0	0	0	0	0	0	8,500	0
Shreveport	3,500	7,000	0	8,000	0	8,000	8,000	8,000	1,200	0
Chalmette	71,600	0	20,000	18,900	29,400	58,000	40,000	29,800	0	0
Lake Charles	147,000	0	44,000	64,000	52,800	75,000	123,000	37,500	45,500	0
Westlake	49,000	0	28,000	48,000	0	50,000	51,500	85,500	12,500	0
Baton Rouge	239,000	0	25,000	74,000	0	0	158,000	90,000	69,800	0
Garyville	121,000	0	0	49,000	0	106,000	50,000	71,000	0	36,000
Convent	92,000	0	52,000	0	40,000	36,000	41,000	100,800	0	0
Norco	120,000	0	38,100	40,000	22,000	0	38,500	47,000	0	0
Meraux	38,000	0	0	18,000	0	27,500	22,000	15,000	0	0
Norco (Good Hope)	91,000	0	0	25,000	0	35,000	35,000	40,000	16,000	0
Belle Chasse	97,500	2,000	0	0	44,400	0	48,300	70,100	0	0
Port Allen	19,000	2,000	0	10,000	0	0	10,000	13,500	0	5,000
Saint Rose	0	0	0	0	0	0	0	0	0	0
Krotz Springs	34,000	0	0	0	13,000	0	14,000	0	0	0
Michigan	**29,000**	**0**	**0**	**20,000**	**0**	**17,400**	**15,000**	**18,900**	**0**	**0**
Detroit	29,000	0	0	20,000	0	17,400	15,000	18,900	0	0
Minnesota	**111,000**	**0**	**0**	**59,000**	**13,800**	**128,000**	**126,000**	**131,000**	**0**	**0**
Saint Paul	85,000	0	0	38,000	13,800	102,000	105,000	102,000	0	0
Saint Paul Park	26,000	0	0	21,000	0	26,000	21,000	29,000	0	0
Mississippi	**68,000**	**0**	**167,000**	**62,000**	**34,000**	**0**	**54,800**	**65,500**	**48,000**	**0**
Pascagoula	68,000	0	167,000	62,000	34,000	0	54,800	65,500	36,000	0
Vicksburg	0	0	0	0	0	0	0	0	12,000	0
Lumberton	0	0	0	0	0	0	0	0	0	0
Sandersville	0	0	0	0	0	0	0	0	0	0
Montana	**57,000**	**990**	**5,600**	**12,000**	**28,530**	**41,500**	**46,800**	**66,200**	**7,500**	**4,000**
Laurel	13,500	0	0	12,000	0	16,000	16,000	16,000	0	4,000

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Conoco Inc									
Billings	60,000	0	63,000	0	30,000	19,450	0	0	0
ExxonMobil Refg & Supply Co.									
Billings	58,000	0	60,500	0	28,900	0	8,900	0	0
Montana Refining Co.									
Great Falls	7,000	0	7,300	0	3,450	0	0	0	0
Nevada	**5,000**	**0**	**5,000**	**0**	**5,000**	**0**	**0**	**0**	**0**
Foreland Refining Corp.									
Eagle Springs	5,000	0	5,000	0	5,000	0	0	0	0
New Jersey	**552,287**	**110,000**	**577,000**	**113,500**	**291,000**	**24,500**	**0**	**0**	**0**
Amerada Hess Corp.									
Port Reading	0	0	0	0	0	0	0	0	0
Chevron U.S.A. Inc.									
Perth Amboy	0	80,000	0	83,000	47,000	0	0	0	0
Citgo Asphalt Refining Co.									
Paulsboro	0	30,000	0	30,500	40,000	0	0	0	0
Coastal Eagle Point Oil Co.									
Westville	142,287	0	146,000	0	49,000	0	0	0	0
Phillips 66 Co.									
Linden	250,000	0	265,000	0	65,000	0	0	0	0
Valero Refining Co. New Jersey									
Paulsboro	160,000	0	166,000	0	90,000	24,500	0	0	0
New Mexico	**95,600**	**0**	**101,107**	**0**	**23,000**	**0**	**0**	**0**	**0**
Giant Industries Inc.									
Bloomfield	16,800	0	18,107	0	0	0	0	0	0
Giant Refining Co.									
Gallup	20,800	0	21,000	0	0	0	0	0	0
Navajo Refining Co.									
Artesia	58,000	0	62,000	0	23,000	0	0	0	0
North Dakota	**58,000**	**0**	**60,000**	**0**	**0**	**0**	**0**	**0**	**0**
Tesoro West Coast									
Mandan	58,000	0	60,000	0	0	0	0	0	0
Ohio	**531,500**	**0**	**549,000**	**0**	**153,500**	**58,500**	**0**	**0**	**0**
BP Products North America, Inc.									
Toledo	157,000	0	160,000	0	71,500	36,000	0	0	0
Marathon Ashland Petro LLC									
Canton	73,000	0	74,000	0	30,000	0	0	0	0
Premcor Refg Group Inc									
Lima	161,500	0	165,000	0	52,000	22,500	0	0	0
Sunoco Inc.									
Toledo	140,000	0	150,000	0	0	0	0	0	0
Oklahoma	**471,900**	**0**	**504,049**	**0**	**181,800**	**35,900**	**0**	**0**	**0**
Conoco Inc									
Ponca City	194,000	0	198,950	0	76,800	26,900	0	0	0
Sinclair Oil Corp.									
Tulsa	65,695	0	74,599	0	27,000	0	0	0	0
Sunoco Inc.									
Tulsa	85,000	0	90,000	0	29,000	9,000	0	0	0
TPI Petro Inc.									
Ardmore	74,705	0	85,000	0	32,000	0	0	0	0
Wynnewood Refining Co.									
Wynnewood	52,500	0	55,500	0	17,000	0	0	0	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Billings	20,500	990	0	0	15,000	22,500	17,200	22,800	0	0
Billings	20,600	0	5,600	0	12,500	0	12,500	24,400	7,500	0
Great Falls	2,400	0	0	0	1,030	3,000	1,100	3,000	0	0
Nevada	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Eagle Springs	0	0	0	0	0	0	0	0	0	0
New Jersey	**317,500**	**0**	**0**	**59,000**	**25,000**	**46,000**	**85,000**	**147,000**	**39,500**	**21,000**
Port Reading	62,500	0	0	0	0	0	0	0	0	0
Perth Amboy	0	0	0	0	0	0	0	0	0	0
Paulsboro	0	0	0	0	0	0	0	0	0	0
Westville	55,000	0	0	30,000	0	0	30,000	18,000	11,000	0
Linden	145,000	0	0	29,000	0	46,000	30,000	83,000	0	21,000
Paulsboro	55,000	0	0	0	25,000	0	25,000	46,000	28,500	0
New Mexico	**34,300**	**3,500**	**0**	**15,000**	**10,800**	**0**	**34,800**	**32,500**	**0**	**0**
Bloomfield	6,000	500	0	0	4,000	0	4,000	3,000	0	0
Gallup	8,500	3,000	0	0	6,800	0	6,800	3,000	0	0
Artesia	19,800	0	0	15,000	0	0	24,000	26,500	0	0
North Dakota	**26,000**	**3,600**	**0**	**0**	**12,100**	**0**	**12,600**	**12,000**	**0**	**0**
Mandan	26,000	3,600	0	0	12,100	0	12,600	12,000	0	0
Ohio	**190,000**	**0**	**85,200**	**18,000**	**146,500**	**68,000**	**180,600**	**24,500**	**0**	**0**
Toledo	60,000	0	31,000	0	43,000	42,000	40,000	15,500	0	0
Canton	24,000	0	0	18,000	0	26,000	25,000	9,000	0	0
Lima	40,000	0	26,000	0	55,500	0	63,000	0	0	0
Toledo	66,000	0	28,200	0	48,000	0	52,600	0	0	0
Oklahoma	**135,411**	**2,250**	**6,000**	**33,964**	**88,900**	**54,200**	**135,860**	**102,704**	**22,800**	**4,850**
Ponca City	65,365	0	0	0	52,100	23,000	52,100	51,900	12,300	0
Tulsa	23,746	2,250	0	0	16,800	0	20,000	17,628	0	0
Tulsa	0	0	0	0	20,000	0	25,000	0	10,500	0
Ardmore	26,300	0	0	19,964	0	31,200	25,760	33,176	0	0
Wynnewood	20,000	0	6,000	14,000	0	0	13,000	0	0	4,850

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Oregon	**0**	**0**	**0**	**0**	**12,000**	**0**	**0**	**0**	**0**
Chevron U.S.A. Inc.									
Portland (Willbridge)	0	0	0	0	12,000	0	0	0	0
Pennsylvania	**760,000**	**0**	**808,500**	**0**	**300,000**	**0**	**0**	**0**	**0**
American Refining Group Inc.									
Bradford	10,000	0	10,500	0	0	0	0	0	0
Phillips 66 Co.									
Trainer	180,000	0	190,000	0	73,000	0	0	0	0
Sunoco Inc.									
Marcus Hook	175,000	0	185,000	0	36,000	0	0	0	0
Sunoco Inc. (R&M)									
Philadelphia	330,000	0	355,000	0	160,000	0	0	0	0
United Refining Co.									
Warren	65,000	0	68,000	0	31,000	0	0	0	0
Tennessee	**180,000**	**0**	**182,000**	**0**	**0**	**0**	**0**	**0**	**0**
Williams Refining LLC									
Memphis	180,000	0	182,000	0	0	0	0	0	0
Texas	**4,328,828**	**100,000**	**4,559,516**	**103,000**	**2,072,300**	**622,100**	**42,000**	**0**	**0**
Age Refining, Inc.									
San Antonio	10,200	0	13,500	0	0	0	0	0	0
Alon USA LP									
Big Spring	58,500	0	61,000	0	24,000	0	0	0	0
Atofina Petrochemicals Inc.									
Port Arthur	175,068	0	180,000	0	52,000	0	0	0	0
BP Products North America, Inc.									
Texas City	437,000	0	460,000	0	240,000	44,400	0	0	0
Chevron U.S.A. Inc.									
El Paso	90,000	0	102,000	0	43,000	0	0	0	0
Citgo Refining & Chemical Inc.									
Corpus Christi	156,000	0	165,000	0	75,000	42,000	0	0	0
Crown Central Petro Corp									
Pasadena	0	100,000	0	103,000	38,000	12,500	0	0	0
Deer Park Refg Ltd Ptnrshp									
Deer Park	333,700	0	340,000	0	185,500	85,000	0	0	0
Diamond Shamrock Refg & Mktg									
Sunray (McKee)	155,000	0	160,000	0	50,000	0	0	0	0
Three Rivers	90,000	0	97,000	0	35,000	0	0	0	0
ExxonMobil Refg & Supply Co.									
Baytown	523,000	0	545,000	0	263,000	42,000	42,000	0	0
Beaumont	348,500	0	363,100	0	146,800	50,700	0	0	0
Flint Hills Resources LP									
Corpus Christi	259,980	0	305,000	0	87,500	13,000	0	0	0
Haltermann Products									
Channelview	880	0	1,100	0	0	0	0	0	0
La Gloria Oil & Gas Co									
Tyler	55,000	0	60,000	0	15,000	6,000	0	0	0
Lyondell Citgo Refining Co. Ltd.									
Houston	270,200	0	283,000	0	192,500	101,500	0	0	0
Marathon Ashland Petro LLC									
Texas City	72,000	0	76,000	0	0	0	0	0	0
Motiva Enterprises LLC									
Port Arthur	250,000	0	265,000	0	123,000	56,000	0	0	0
Phillips 66 Co.									
Borger	143,800	0	150,500	0	0	0	0	0	0
Sweeny	213,000	0	223,000	0	117,000	66,000	0	0	0
Premcor Refg Group Inc									
Port Arthur	255,000	0	260,000	0	110,000	85,000	0	0	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Oregon	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Portland (Willbridge)	0	0	0	0	0	0	0	0	0	0
Pennsylvania	**305,500**	**1,000**	**22,000**	**50,000**	**121,800**	**64,000**	**212,300**	**184,000**	**0**	**0**
Bradford	0	0	0	0	1,800	0	3,300	0	0	0
Trainer	52,000	0	22,000	50,000	0	40,000	54,000	42,000	0	0
Marcus Hook	105,000	0	0	0	20,000	0	45,000	40,000	0	0
Philadelphia	123,500	0	0	0	86,000	24,000	88,000	79,000	0	0
Warren	25,000	1,000	0	0	14,000	0	22,000	23,000	0	0
Tennessee	**70,000**	**0**	**0**	**36,000**	**0**	**0**	**60,000**	**53,000**	**0**	**0**
Memphis	70,000	0	0	36,000	0	0	60,000	53,000	0	0
Texas	**1,800,910**	**34,500**	**469,600**	**869,200**	**251,500**	**757,100**	**1,283,100**	**1,389,650**	**387,300**	**174,000**
San Antonio	0	0	0	0	0	0	0	0	0	0
Big Spring	25,000	0	0	21,000	0	6,500	25,500	22,750	2,500	10,000
Port Arthur	67,000	0	11,000	37,600	0	30,700	45,500	42,000	0	19,500
Texas City	220,600	4,300	121,400	63,000	75,000	96,600	141,000	139,000	0	17,000
El Paso	30,000	0	0	22,700	0	0	23,100	21,500	0	0
Corpus Christi	80,000	0	0	50,000	0	70,000	50,000	49,000	0	0
Pasadena	56,000	0	0	23,000	0	0	28,000	7,000	16,000	0
Deer Park	70,000	5,000	67,000	47,000	24,000	80,000	80,000	74,000	41,000	0
Sunray (McKee)	55,000	0	30,200	28,500	18,500	0	36,000	34,000	0	16,500
Three Rivers	24,000	0	30,000	22,000	11,000	15,000	22,000	31,000	0	10,000
Baytown	213,000	8,000	27,500	126,000	0	110,000	152,000	226,500	26,500	48,000
Beaumont	113,500	0	65,000	154,900	0	0	150,800	116,800	32,200	0
Corpus Christi	104,160	0	11,500	52,000	18,000	47,000	80,800	73,000	0	0
Channelview	0	0	0	0	0	0	0	0	0	0
Tyler	20,250	0	0	13,000	4,500	0	20,000	12,000	0	0
Houston	100,000	0	0	0	42,000	103,000	90,900	105,000	4,100	0
Texas City	51,000	0	0	0	11,000	0	0	0	0	0
Port Arthur	90,000	0	22,000	48,000	0	24,000	94,000	91,000	0	0
Borger	60,000	5,200	0	0	26,000	0	26,500	45,000	66,000	0
Sweeny	99,400	12,000	0	36,000	0	81,300	65,500	64,600	0	0
Port Arthur	65,000	0	35,000	50,000	0	65,000	50,000	90,000	23,000	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
South Hampton Refining Co.									
Silsbee	0	0	0	0	0	0	0	0	0
Trigeant LTD									
Corpus Christi	0	0	0	0	29,000	0	0	0	0
Valero Refining Co. Texas									
Corpus Christi	134,000	0	138,000	0	97,000	18,000	0	0	0
Houston	83,000	0	85,000	0	39,000	0	0	0	0
Texas City	215,000	0	226,316	0	110,000	0	0	0	0
Utah	**162,700**	**0**	**172,500**	**0**	**44,000**	**8,500**	**0**	**0**	**0**
Big West Oil Co.									
North Salt Lake	24,000	0	25,000	0	5,000	0	0	0	0
Chevron U.S.A. Inc.									
Salt Lake City	45,000	0	49,000	0	27,500	8,500	0	0	0
Phillips 66 Co.									
Woods Cross	24,700	0	26,000	0	5,500	0	0	0	0
Silver Eagle Refining (Formerly Inland Refining Inc)									
Woods Cross	11,000	0	12,500	0	6,000	0	0	0	0
Tesoro West Coast									
Salt Lake City	58,000	0	60,000	0	0	0	0	0	0
Virginia	**58,600**	**0**	**61,800**	**0**	**37,300**	**19,000**	**0**	**0**	**0**
Giant Yorktown Refg (Formerly BP Products North America, Inc.)									
Yorktown	58,600	0	61,800	0	37,300	19,000	0	0	0
Washington	**607,950**	**13,400**	**626,250**	**14,500**	**291,200**	**89,700**	**0**	**0**	**0**
BP West Coast Products LLC									
Ferndale (Cherry Point)	225,000	0	232,000	0	106,000	64,000	0	0	0
Phillips 66 Co.									
Ferndale	92,000	0	95,000	0	48,800	0	0	0	0
Shell Oil Products US (Formerly Equilon Enterprises LLC)									
Anacortes	140,800	4,200	143,000	4,500	62,300	25,700	0	0	0
Tesoro West Coast									
Anacortes	115,000	0	120,000	0	47,000	0	0	0	0
U.S. Oil & Refining Co.									
Tacoma	35,150	9,200	36,250	10,000	27,100	0	0	0	0
West Virginia	**19,400**	**0**	**20,000**	**0**	**8,600**	**0**	**0**	**0**	**0**
Ergon West Virginia Inc.									
Newell (Congo)	19,400	0	20,000	0	8,600	0	0	0	0
Wisconsin	**33,000**	**0**	**38,000**	**0**	**20,500**	**0**	**0**	**0**	**0**
Murphy Oil U.S.A. Inc.									
Superior	33,000	0	38,000	0	20,500	0	0	0	0
Wyoming	**148,000**	**0**	**155,300**	**0**	**62,600**	**10,000**	**0**	**0**	**0**
Frontier Refg Inc.									
Cheyenne	46,000	0	50,000	0	25,000	10,000	0	0	0
Little America Refining Co.									
Evansville (Casper)	24,500	0	25,500	0	5,600	0	0	0	0
Silver Eagle Refining									
Evanston	3,000	0	3,300	0	0	0	0	0	0
Sinclair Oil Corp.									
Sinclair	62,000	0	64,000	0	32,000	0	0	0	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Silsbee	0	0	0	1,500	0	0	4,000	0	2,000	0
Corpus Christi	0	0	0	0	0	0	0	0	0	0
Corpus Christi	112,000	0	49,000	59,000	10,000	28,000	66,000	24,000	74,000	0
Houston	65,000	0	0	0	11,500	0	12,000	33,500	0	18,000
Texas City	80,000	0	0	14,000	0	0	19,500	88,000	100,000	35,000
Utah	**55,900**	**2,200**	**0**	**0**	**35,000**	**0**	**41,700**	**26,200**	**7,200**	**5,040**
North Salt Lake	10,000	0	0	0	5,500	0	7,000	7,000	0	0
Salt Lake City	14,000	0	0	0	8,000	0	8,300	13,300	7,200	0
Woods Cross	8,900	0	0	0	7,700	0	12,600	1,900	0	5,040
Woods Cross	0	0	0	0	2,200	0	2,200	4,000	0	0
Salt Lake City	23,000	2,200	0	0	11,600	0	11,600	0	0	0
Virginia	**28,200**	**2,000**	**0**	**0**	**12,100**	**0**	**11,900**	**18,960**	**0**	**0**
Yorktown	28,200	2,000	0	0	12,100	0	11,900	18,960	0	0
Washington	**134,100**	**3,000**	**58,000**	**43,330**	**100,960**	**7,600**	**144,300**	**118,300**	**42,740**	**30,000**
Ferndale (Cherry Point)	0	0	58,000	0	63,000	0	53,000	26,000	0	0
Ferndale	31,200	0	0	17,330	0	0	18,000	41,200	0	0
Anacortes	57,900	0	0	0	31,760	0	31,800	16,000	42,740	0
Anacortes	45,000	3,000	0	26,000	0	7,600	34,000	29,300	0	30,000
Tacoma	0	0	0	0	6,200	0	7,500	5,800	0	0
West Virginia	**0**	**0**	**0**	**3,400**	**0**	**6,100**	**4,200**	**0**	**0**	**0**
Newell (Congo)	0	0	0	3,400	0	6,100	4,200	0	0	0
Wisconsin	**11,000**	**0**	**0**	**8,000**	**0**	**0**	**9,000**	**7,800**	**0**	**0**
Superior	11,000	0	0	8,000	0	0	9,000	7,800	0	0
Wyoming	**49,500**	**500**	**11,000**	**7,600**	**23,950**	**15,000**	**35,150**	**44,500**	**3,000**	**0**
Cheyenne	12,000	0	0	7,600	0	0	8,900	16,500	0	0
Evansville (Casper)	10,500	500	0	0	6,000	0	7,200	8,000	0	0
Evanston	0	0	0	0	2,150	0	3,250	0	0	0
Sinclair	21,500	0	11,000	0	12,500	15,000	12,500	16,000	3,000	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Wyoming Refining Co.									
Newcastle	12,500	0	12,500	0	0	0	0	0	0
U.S. Total	**16,483,970**	**273,400**	**17,385,090**	**290,000**	**7,788,375**	**2,150,950**	**197,400**	**18,000**	**10,600**
Puerto Rico	**69,500**	**42,000**	**76,400**	**48,000**	**57,000**	**0**	**0**	**0**	**0**
Caribbean Petroleum Corp.									
Bayamon	0	42,000	0	48,000	22,000	0	0	0	0
Shell Chem Yabucoa Inc									
Yabucoa	69,500	0	76,400	0	35,000	0	0	0	0
Virgin Islands	**345,000**	**125,000**	**360,000**	**135,000**	**225,000**	**58,000**	**0**	**45,000**	**0**
Hovensa LLC									
Kingshill (St Croix)	345,000	125,000	360,000	135,000	225,000	58,000	0	45,000	0

See footnotes at end of table.

Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Newcastle	5,500	0	0	0	3,300	0	3,300	4,000	0	0
U.S. Total	**6,052,121**	**79,240**	**1,643,800**	**2,228,694**	**1,548,740**	**2,495,100**	**4,360,826**	**4,169,814**	**961,340**	**350,290**
Puerto Rico	**14,200**	**0**	**18,000**	**20,000**	**6,500**	**0**	**26,800**	**20,600**	**0**	**0**
Bayamon	14,200	0	0	0	6,500	0	6,800	11,000	0	0
Yabucoa	0	0	18,000	20,000	0	0	20,000	9,600	0	0
Virgin Islands	**145,000**	**0**	**0**	**90,000**	**25,000**	**135,000**	**115,000**	**155,000**	**0**	**0**
Kingshill (St Croix)	145,000	0	0	90,000	25,000	135,000	115,000	155,000	0	0

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2003
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
Alabama	**0**	**0**	**25,200**	**1,200**	**2,000**	**0**	**2,500**	**6**	**115**
Coastal Mobile Refg Co.									
Chickasaw	0	0	13,200	0	0	0	0	0	0
Hunt Refining Co.									
Tuscaloosa	0	0	12,000	0	0	0	2,500	6	80
Shell Chem LP									
Saraland	0	0	0	1,200	2,000	0	0	0	35
Alaska	**0**	**2,800**	**5,000**	**0**	**4,000**	**0**	**0**	**13**	**20**
Tesoro Petroleum Corp.									
Kenai	0	0	2,000	0	4,000	0	0	13	20
Williams Alaska Petro Inc.									
North Pole	0	2,800	3,000	0	0	0	0	0	0
Arkansas	**4,900**	**0**	**11,200**	**0**	**6,500**	**5,000**	**0**	**3**	**157**
Cross Oil Refining and Mktg, Inc.									
Smackover	0	0	1,500	0	0	5,000	0	3	0
Lion Oil Co.									
El Dorado	4,900	0	9,700	0	6,500	0	0	0	157
California	**161,700**	**1,500**	**74,183**	**28,300**	**70,200**	**26,400**	**125,410**	**1,138**	**4,196**
BP West Coast Products LLC									
Los Angeles	15,000	0	0	0	0	0	12,900	105	350
Chevron U.S.A. Inc.									
El Segundo	24,500	0	0	4,000	20,000	0	18,400	147	600
Richmond	21,000	0	0	6,000	28,000	18,500	0	185	448
Edgington Oil Co.									
Long Beach	0	0	10,750	0	0	0	0	0	0
ExxonMobil Refg & Supply Co.									
Torrance	24,000	0	0	0	0	0	17,725	138	440
Greka Energy									
Santa Maria	0	0	6,000	0	0	0	0	0	0
Kern Oil & Refining Co.									
Bakersfield	0	0	0	0	0	0	0	0	5
Lunday Thagard									
South Gate	0	0	5,833	0	0	0	0	0	0
Paramount Petroleum Corp.									
Paramount	0	0	16,500	0	0	0	0	0	0
Phillips 66 Co.									
Arroyo Grande	0	0	0	0	0	0	5,500	0	110
Rodeo	0	0	0	0	9,400	0	5,200	84	310
Wilmington	9,900	0	0	3,100	12,800	0	16,800	105	370
San Joaquin Refining Co Inc.									
Bakersfield	0	1,500	6,500	0	0	4,000	0	4	3
Shell Oil Products US									
(Formerly Equilon Enterprises LLC)									
Bakersfield	0	0	0	700	0	0	6,000	25	105
Martinez	11,000	0	15,000	0	0	3,900	8,385	107	437
Wilmington	12,500	0	0	7,500	0	0	10,000	15	285
Tenby Inc.									
Oxnard	0	0	1,600	0	0	0	0	0	0
Tesoro Refg & Mktg Co									
(Formerly Ultramar Inc.)									
Martinez	14,000	0	0	0	0	0	8,600	82	200
Ultramar Inc.									
Wilmington	14,000	0	0	7,000	0	0	9,500	0	230

See footnotes at end of table.

Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
Valero Refining Co. California									
Benicia	15,800	0	9,000	0	0	0	6,400	141	303
Wilmington	0	0	3,000	0	0	0	0	0	0
Colorado	**0**	**0**	**11,200**	**1,046**	**0**	**0**	**0**	**0**	**118**
Colorado Refg Co.									
Commerce City	0	0	0	1,046	0	0	0	0	4
Conoco Inc									
Commerce City	0	0	11,200	0	0	0	0	0	114
Delaware	**11,700**	**1,400**	**0**	**6,000**	**0**	**0**	**9,080**	**55**	**596**
Motiva Enterprises LLC									
Delaware City	11,700	1,400	0	6,000	0	0	9,080	55	596
Georgia	**0**	**0**	**29,400**	**0**	**0**	**0**	**0**	**0**	**0**
Citgo Asphalt Refining Co.									
Savannah	0	0	24,000	0	0	0	0	0	0
Young Refining Corp.									
Douglasville	0	0	5,400	0	0	0	0	0	0
Hawaii	**5,000**	**0**	**15,750**	**3,200**	**0**	**0**	**0**	**21**	**34**
Chevron U.S.A. Inc.									
Honolulu	5,000	0	15,000	3,200	0	0	0	3	0
Tesoro Hawaii Corp.									
Ewa Beach	0	0	750	0	0	0	0	18	34
Illinois	**84,000**	**13,500**	**65,500**	**0**	**14,000**	**0**	**38,270**	**57**	**1,717**
ExxonMobil Refg & Supply Co.									
Joliet	28,000	0	10,500	0	0	0	18,500	0	661
Marathon Ashland Petro LLC									
Robinson	13,000	0	0	0	14,000	0	7,000	0	202
PDV Midwest Refining LLC									
Lemont (Chicago)	21,000	9,000	0	0	0	0	12,770	0	350
Phillips 66 Co.									
Wood River	22,000	4,500	55,000	0	0	0	0	57	504
Indiana	**37,700**	**17,000**	**65,700**	**0**	**28,200**	**0**	**13,400**	**31**	**550**
BP Products North America, Inc.									
Whiting	36,000	17,000	63,000	0	26,000	0	13,400	31	550
Countrymark Cooperative Inc.									
Mount Vernon	1,700	0	2,700	0	2,200	0	0	0	0
Kansas	**28,000**	**3,000**	**0**	**4,300**	**23,000**	**0**	**18,000**	**6**	**457**
Farmland Industries Inc.									
Coffeyville	8,500	0	0	0	0	0	7,000	0	146
Frontier Refining & Marketing Inc.									
El Dorado	12,500	3,000	0	1,500	12,500	0	5,000	6	230
NCRA									
McPherson	7,000	0	0	2,800	10,500	0	6,000	0	81
Kentucky	**14,000**	**11,700**	**23,000**	**0**	**13,000**	**9,400**	**0**	**0**	**448**
Marathon Ashland Petro LLC									
Catlettsburg	14,000	11,700	23,000	0	13,000	9,400	0	0	448

See footnotes at end of table.

Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
Louisiana	**208,900**	**26,500**	**62,575**	**43,770**	**77,220**	**62,800**	**129,231**	**192**	**5,635**
Calcasieu Refining Co.									
Lake Charles	0	0	0	2,800	0	0	0	0	0
Calumet Lubricants Co. LP									
Cotton Valley	0	0	0	0	500	0	0	0	0
Princeton	0	0	2,000	0	0	7,000	0	5	3
Shreveport	4,500	0	575	4,000	0	9,000	0	6	10
Chalmette Refining LLC									
Chalmette	13,100	10,200	0	10,000	10,000	0	11,000	0	1,075
Citgo Petroleum Corp.									
Lake Charles	22,000	4,000	0	0	28,000	11,000	26,500	0	640
Conoco Inc.									
Westlake	6,000	0	0	0	0	20,000	22,500	0	440
ExxonMobil Refg & Supply Co.									
Baton Rouge	35,900	0	0	0	0	15,800	27,042	24	744
Marathon Ashland Petro LLC									
Garyville	31,000	0	42,000	24,000	20,000	0	12,800	0	1,176
Motiva Enterprises LLC									
Convent	16,500	0	0	0	12,500	0	0	63	728
Norco	16,400	0	0	0	0	0	5,600	60	165
Murphy Oil U.S.A. Inc.									
Meraux	8,500	0	18,000	0	0	0	0	0	69
Orion Refining Corp.									
Norco (Good Hope)	13,000	0	0	0	0	0	18,500	33	410
Phillips 66 Co.									
Belle Chasse	38,000	12,300	0	0	0	0	5,289	1	125
Placid Refining Co.									
Port Allen	4,000	0	0	0	0	0	0	0	28
Valero Refining Co. Louisiana									
Krotz Springs	0	0	0	2,970	6,220	0	0	0	22
Michigan	**4,100**	**0**	**22,000**	**0**	**0**	**0**	**0**	**0**	**147**
Marathon Ashland Petro LLC									
Detroit	4,100	0	22,000	0	0	0	0	0	147
Minnesota	**17,500**	**0**	**62,000**	**9,000**	**27,000**	**0**	**22,000**	**123**	**1,103**
Flint Hills Resources LP									
Saint Paul	12,000	0	50,000	7,000	20,000	0	22,000	113	1,000
Marathon Ashland Petro LLC									
Saint Paul Park	5,500	0	12,000	2,000	7,000	0	0	10	103
Mississippi	**18,600**	**21,000**	**39,700**	**0**	**0**	**11,400**	**22,080**	**238**	**1,300**
Chevron U.S.A. Inc.									
Pascagoula	18,600	21,000	20,000	0	0	0	22,080	230	1,300
Ergon Refining Inc.									
Vicksburg	0	0	10,000	0	0	11,400	0	8	0
Southland Oil Co.									
Lumberton	0	0	3,575	0	0	0	0	0	0
Sandersville	0	0	6,125	0	0	0	0	0	0
Montana	**16,500**	**0**	**32,500**	**5,250**	**700**	**0**	**6,600**	**58**	**372**
Cenex Harvest States Coop									
Laurel	4,000	0	16,800	1,250	0	0	0	12	130
Conoco Inc									
Billings	7,500	0	0	4,000	0	0	4,500	20	242
ExxonMobil Refg & Supply Co.									
Billings	4,300	0	12,700	0	0	0	2,100	24	0

See footnotes at end of table.

Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
Montana Refining Co.									
Great Falls	700	0	3,000	0	700	0	0	2	0
Nevada	**0**	**0**	**2,000**	**0**	**0**	**0**	**0**	**0**	**0**
Foreland Refining Corp.									
Eagle Springs	0	0	2,000	0	0	0	0	0	0
New Jersey	**38,200**	**7,500**	**91,500**	**3,100**	**10,000**	**12,000**	**7,500**	**21**	**283**
Amerada Hess Corp.									
Port Reading	7,000	0	0	0	0	0	0	0	10
Chevron U.S.A. Inc.									
Perth Amboy	0	0	35,000	0	0	0	0	0	0
Citgo Asphalt Refining Co.									
Paulsboro	0	0	42,000	0	0	0	0	0	0
Coastal Eagle Point Oil Co.									
Westville	4,000	7,500	0	0	10,000	0	0	0	15
Phillips 66 Co.									
Linden	16,000	0	0	3,100	0	0	0	12	100
Valero Refining Co. New Jersey									
Paulsboro	11,200	0	14,500	0	0	12,000	7,500	9	158
New Mexico	**8,600**	**0**	**6,400**	**533**	**13,540**	**0**	**0**	**0**	**142**
Giant Industries Inc.									
Bloomfield	0	0	0	533	0	0	0	0	2
Giant Refining Co.									
Gallup	1,800	0	0	0	4,000	0	0	0	2
Navajo Refining Co.									
Artesia	6,800	0	6,400	0	9,540	0	0	0	138
North Dakota	**4,400**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**
Tesoro West Coast									
Mandan	4,400	0	0	0	0	0	0	0	17
Ohio	**28,000**	**18,200**	**23,500**	**4,500**	**21,500**	**0**	**12,700**	**128**	**524**
BP Products North America, Inc.									
Toledo	11,500	0	12,000	0	0	0	8,700	33	300
Marathon Ashland Petro LLC									
Canton	7,000	0	11,500	0	4,000	0	0	0	110
Premcor Refg Group Inc									
Lima	0	9,200	0	4,500	17,500	0	4,000	58	52
Sunoco Inc.									
Toledo	9,500	9,000	0	0	0	0	0	37	62
Oklahoma	**30,968**	**0**	**34,131**	**9,100**	**12,797**	**8,800**	**7,630**	**46**	**172**
Conoco Inc									
Ponca City	14,700	0	0	8,200	0	0	5,680	11	34
Sinclair Oil Corp.									
Tulsa	4,868	0	15,216	0	8,797	0	0	0	28
Sunoco Inc.									
Tulsa	0	0	0	900	0	8,800	1,950	0	0
TPI Petro Inc.									
Ardmore	6,400	0	12,915	0	0	0	0	26	110
Wynnewood Refining Co.									
Wynnewood	5,000	0	6,000	0	4,000	0	0	9	0

See footnotes at end of table.

Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
Oregon	**0**	**0**	**8,400**	**0**	**0**	**0**	**0**	**0**	**0**
Chevron U.S.A. Inc.									
Portland (Willbridge)	0	0	8,400	0	0	0	0	0	0
Pennsylvania	**54,100**	**12,000**	**20,000**	**5,000**	**6,800**	**2,945**	**0**	**7**	**371**
American Refining Group Inc.									
Bradford	0	0	0	0	0	2,945	0	0	0
Phillips 66 Co.									
Trainer	12,000	0	0	0	0	0	0	0	41
Sunoco Inc.									
Marcus Hook	12,000	8,000	0	0	0	0	0	7	0
Sunoco Inc. (R&M)									
Philadelphia	26,000	4,000	0	5,000	0	0	0	0	260
United Refining Co.									
Warren	4,100	0	20,000	0	6,800	0	0	0	70
Tennessee	**12,000**	**0**	**0**	**0**	**6,000**	**0**	**0**	**0**	**43**
Williams Refining LLC									
Memphis	12,000	0	0	0	6,000	0	0	0	43
Texas	**342,050**	**179,600**	**94,900**	**79,300**	**113,433**	**72,495**	**205,426**	**960**	**10,559**
Age Refining, Inc.									
San Antonio	0	1,200	0	100	0	0	0	0	0
Alon USA LP									
Big Spring	5,000	1,000	7,600	0	0	0	0	0	130
Atofina Petrochemicals Inc.									
Port Arthur	5,500	13,600	8,200	0	9,333	0	0	0	300
BP Products North America, Inc.									
Texas City	62,000	45,000	0	18,000	28,000	0	20,400	210	1,400
Chevron U.S.A. Inc.									
El Paso	9,000	0	5,600	3,200	0	0	0	0	33
Citgo Refining & Chemical Inc.									
Corpus Christi	19,000	22,000	0	0	0	0	15,500	0	351
Crown Central Petro Corp									
Pasadena	10,000	0	0	0	0	0	2,200	0	28
Deer Park Refg Ltd Ptnrshp									
Deer Park	16,900	0	4,700	0	0	12,000	30,000	108	1,150
Diamond Shamrock Refg & Mktg									
Sunray (McKee)	9,500	0	12,000	6,800	0	0	0	0	82
Three Rivers	6,500	10,500	0	3,000	0	1,800	0	12	62
ExxonMobil Refg & Supply Co.									
Baytown	31,000	0	0	0	0	20,300	17,500	143	1,828
Beaumont	16,300	0	0	11,200	25,800	12,500	15,885	52	636
Flint Hills Resources LP									
Corpus Christi	13,800	37,100	0	4,900	2,200	0	3,625	10	233
La Gloria Oil & Gas Co									
Tyler	4,700	0	0	500	0	0	1,500	0	15
Lyondell Citgo Refining Co. Ltd.									
Houston	11,250	11,200	0	0	0	3,895	26,200	0	803
Marathon Ashland Petro LLC									
Texas City	13,500	2,500	0	0	0	0	0	0	0
Motiva Enterprises LLC									
Port Arthur	20,000	0	0	0	0	22,000	15,616	0	600
Phillips 66 Co.									
Borger	14,000	0	0	11,000	18,000	0	0	68	340
Sweeny	16,600	13,000	0	0	10,100	0	21,000	155	532

See footnotes at end of table.

Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
Premcor Refg Group Inc									
Port Arthur	17,500	0	0	3,600	0	0	27,000	0	467
South Hampton Refining Co.									
Silsbee	0	1,100	0	0	1,000	0	0	2	0
Trigeant LTD									
Corpus Christi	0	0	16,000	0	0	0	0	0	0
Valero Refining Co. Texas									
Corpus Christi	17,000	21,000	38,000	17,000	12,000	0	9,000	195	869
Houston	11,000	400	2,800	0	0	0	0	5	110
Texas City	12,000	0	0	0	7,000	0	0	0	590
Utah	**15,600**	**0**	**3,300**	**2,700**	**4,700**	**0**	**1,748**	**1**	**53**
Big West Oil Co.									
North Salt Lake	1,800	0	0	1,400	1,700	0	0	0	4
Chevron U.S.A. Inc.									
Salt Lake City	5,600	0	0	1,300	0	0	1,748	0	21
Phillips 66 Co.									
Woods Cross	2,200	0	1,800	0	3,000	0	0	0	10
Silver Eagle Refining (Formerly Inland Refining Inc)									
Woods Cross	0	0	1,500	0	0	0	0	1	0
Tesoro West Coast									
Salt Lake City	6,000	0	0	0	0	0	0	0	18
Virginia	**4,200**	**0**	**0**	**0**	**0**	**0**	**5,400**	**0**	**39**
Giant Yorktown Refg (Formerly BP Products North America, Inc.)									
Yorktown	4,200	0	0	0	0	0	5,400	0	39
Washington	**28,300**	**0**	**13,500**	**12,300**	**2,700**	**0**	**16,000**	**128**	**453**
BP West Coast Products LLC									
Ferndale (Cherry Point)	0	0	0	6,000	0	0	7,600	128	242
Phillips 66 Co.									
Ferndale	5,500	0	0	2,700	0	0	0	0	46
Shell Oil Products US (Formerly Equilon Enterprises LLC)									
Anacortes	10,400	0	0	0	0	0	8,400	0	155
Tesoro West Coast									
Anacortes	12,400	0	5,500	3,600	0	0	0	0	0
U.S. Oil & Refining Co.									
Tacoma	0	0	8,000	0	2,700	0	0	0	10
West Virginia	**0**	**0**	**480**	**0**	**0**	**5,200**	**0**	**1**	**1**
Ergon West Virginia Inc.									
Newell (Congo)	0	0	480	0	0	5,200	0	1	1
Wisconsin	**1,500**	**0**	**7,500**	**0**	**2,000**	**0**	**0**	**0**	**13**
Murphy Oil U.S.A. Inc.									
Superior	1,500	0	7,500	0	2,000	0	0	0	13
Wyoming	**10,054**	**0**	**22,400**	**24**	**1,000**	**0**	**3,200**	**32**	**131**
Frontier Refg Inc.									
Cheyenne	4,200	0	10,000	0	0	0	3,200	6	80
Little America Refining Co.									
Evansville (Casper)	0	0	4,400	0	0	0	0	0	0

See footnotes at end of table.

Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2003 (Continued)
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
Silver Eagle Refining									
Evanston	0	0	0	0	1,000	0	0	0	0
Sinclair Oil Corp.									
Sinclair	4,500	0	8,000	0	0	0	0	26	47
Wyoming Refining Co.									
Newcastle	1,354	0	0	24	0	0	0	0	4
U.S. Total	**1,190,572**	**315,700**	**872,919**	**218,623**	**460,290**	**216,440**	**646,175**	**3,265**	**29,766**
Puerto Rico	**0**	**0**	**1,000**	**0**	**0**	**0**	**0**	**22**	**101**
Caribbean Petroleum Corp.									
Bayamon	0	0	1,000	0	0	0	0	0	33
Shell Chem Yabucoa Inc									
Yabucoa	0	0	0	0	0	0	0	22	68
Virgin Islands	**20,000**	**20,000**	**0**	**0**	**18,000**	**0**	**19,000**	**0**	**550**
Hovensa LLC									
Kingshill (St Croix)	20,000	20,000	0	0	18,000	0	19,000	0	550

[a] Includes former Huntway Refining Co. refinery at Benecia.
[b] Includes former Coastal Corp. refinery at Corpus Christi.
MMcfd = Million cubic feet per day.
Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 40. Refiners' Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2003

CORPORATION / Refiner / Location	Barrels per Calendar Day
Companies with Capacity Over 100,000 bbl/cd	
CONOCOPHILLIPS CO[a]	2,276,900
Phillips 66 Co.	
Wood River, Illinois	288,300
Belle Chasse, Louisiana	253,500
Linden, New Jersey	250,000
Sweeny, Texas	213,000
Trainer, Pennsylvania	180,000
Borger, Texas	143,800
Wilmington, California	136,600
Ferndale, Washington	92,000
Rodeo, California	73,200
Arroyo Grande, California	41,800
Woods Cross, Utah	24,700
Conoco Inc	
Westlake, Louisiana[b]	252,000
Ponca City, Oklahoma[b]	194,000
Commerce City, Colorado[b]	60,000
Billings, Montana[b]	60,000
Phillips Alaska, Inc.	
Kuparuk, Alaska	14,000
EXXON MOBIL CORP	1,808,000
ExxonMobil Refg & Supply Co.	
Baytown, Texas	523,000
Baton Rouge, Louisiana	491,500
Beaumont, Texas	348,500
Joliet, Illinois	238,000
Torrance, California	149,000
Billings, Montana	58,000
BP PLC	1,501,500
BP Products North America, Inc.	
Texas City, Texas	437,000
Whiting, Indiana	410,000
Toledo, Ohio	157,000
BP West Coast Products LLC	
Los Angeles, California	260,000
Ferndale (Cherry Point), Washington	225,000
BP Expl (Alaska) Inc	
Prudhoe Bay, Alaska	12,500
VALERO ENERGY CORP	1,247,362
Valero Refining Co. Texas	
Texas City, Texas	215,000
Corpus Christi, Texas	134,000
Houston, Texas	83,000
Diamond Shamrock Refg & Mktg	
Sunray (McKee), Texas	155,000
Three Rivers, Texas	90,000
Valero Refining Co. New Jersey	
Paulsboro, New Jersey	160,000
Valero Refining Co. California	
Benicia, California	144,000
Wilmington, California	5,770
Ultramar Inc.	
Wilmington, California	80,887
Valero Refining Co. Louisiana	
Krotz Springs, Louisiana	78,000
TPI Petro Inc.	
Ardmore, Oklahoma	74,705
Colorado Refg Co.	
Commerce City, Colorado	27,000
CHEVRON TEXACO	1,079,000
Chevron U.S.A. Inc.	
Pascagoula, Mississippi	325,000
El Segundo, California	260,000
Richmond, California	225,000
El Paso, Texas	90,000
Perth Amboy, New Jersey	80,000
Honolulu, Hawaii	54,000
Salt Lake City, Utah	45,000
MARATHON OIL CORP	935,000
Marathon Ashland Petro LLC	
Garyville, Louisiana	232,000
Catlettsburg, Kentucky	222,000
Robinson, Illinois	192,000
Detroit, Michigan	74,000
Canton, Ohio	73,000
Texas City, Texas	72,000
Saint Paul Park, Minnesota	70,000
MOTIVA ENTERPRISES LLC	879,700
Port Arthur, Texas	250,000
Convent, Louisiana	235,000
Norco, Louisiana	219,700
Delaware City, Delaware	175,000
SUNOCO INC	730,000
Sunoco Inc.	
Marcus Hook, Pennsylvania	175,000
Toledo, Ohio	140,000
Tulsa, Oklahoma	85,000
Sunoco Inc. (R&M)	
Philadelphia, Pennsylvania	330,000
PDV AMERICA INC	698,300
Citgo Petroleum Corp.	
Lake Charles, Louisiana	324,300
PDV Midwest Refining LLC	
Lemont (Chicago), Illinois	160,000
Citgo Refining & Chemical Inc.	
Corpus Christi, Texas	156,000
Citgo Asphalt Refining Co.	
Paulsboro, New Jersey	30,000
Savannah, Georgia	28,000

See footnotes at end of table.

Table 40. Refiners' Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2003 (Continued)

CORPORATION / Refiner / Location	Barrels per Calendar Day
ROYAL DUTCH SHELL GP	603,750
Shell Oil Products US[c]	
Martinez, California	159,250
Anacortes, Washington	145,000
Wilmington, California	98,500
Bakersfield, California	66,000
Shell Chemical LP	
Saraland, Alabama	80,000
Saint Rose, Louisiana	55,000
TESORO PETRO CORP	562,500
Tesoro West Coast	
Anacortes, Washington	115,000
Salt Lake City, Utah	58,000
Mandan, North Dakota	58,000
Tesoro Refg & Mktg Co	
Martinez, California[d]	166,000
Tesoro Hawaii Corp.	
Ewa Beach, Hawaii	93,500
Tesoro Petroleum Corp.	
Kenai, Alaska	72,000
KOCH INDUS INC	524,980
Flint Hills Resources LP	
Saint Paul, Minnesota	265,000
Corpus Christi, Texas	259,980
BLACKSTONE GROUP LP	416,500
Premcor Refg Group Inc	
Port Arthur, Texas	255,000
Lima, Ohio	161,500
WILLIAMS CO, THE	377,928
Williams Alaska Petro Inc.	
North Pole, Alaska	197,928
Williams Refining LLC	
Memphis, Tennessee	180,000
DEER PARK REFG LTD PTNRSHP	
Deer Park, Texas	333,700
LYONDELL PETROCHEM CO	
Lyondell Citgo Refining Co. Ltd.	
Houston, Texas	270,200
CHALMETTE REFINING LLC	
Chalmette, Louisiana	182,500
TOTALFINAELF SA	
Atofina Petrochemicals Inc.	
Port Arthur, Texas	175,068
EL PASO CORP	158,787
Coastal Eagle Point Oil Co.	
Westville, New Jersey	142,287
Coastal Mobile Refg Co.	
Chickasaw, Alabama	16,500
CROWN CENTRAL PETRO CORP	155,000
Crown Central Petroleum Corp.	
Pasadena, Texas	100,000
La Gloria Oil & Gas Co.	
Tyler, Texas	55,000
ORION REFINING CORP	
Orion Refining Corp.	
Norco (Good Hope), Louisiana	155,000
SINCLAIR OIL CORP	152,195
Sinclair Oil Corp.	
Tulsa, Oklahoma	65,695
Sinclair, Wyoming	62,000
Little America Refining Co.	
Evansville (Casper), Wyoming	24,500
FRONTIER OIL CORP	149,000
Frontier Refining & Marketing Inc.	
El Dorado, Kansas	103,000
Frontier Refg Inc.	
Cheyenne, Wyoming	46,000
CENEX HARVEST STATES COOP	136,200
NCRA	
McPherson, Kansas	81,200
Cenex Harvest States Coop	
Laurel, Montana	55,000
MURPHY OIL CORP	128,000
Murphy Oil U.S.A. Inc.	
Meraux, Louisiana	95,000
Superior, Wisconsin	33,000
FARMLAND INDUSTRIES INC	
Farmland Industries Inc.	
Coffeyville, Kansas	112,000
ERGON INC	105,400
Lion Oil Co.	
El Dorado, Arkansas	63,000
Ergon Refining Inc.	
Vicksburg, Mississippi	23,000
Ergon West Virginia Inc.	
Newell (Congo), West Virginia	19,400
Total	**15,854,470**

See footnotes at end of table.

Table 40. Refiners' Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2003 (Continued)

CORPORATION / Refiner / Location	Barrels per Calendar Day
Companies with Capacity 30,001 to 100,000 bbl/cd	
GIANT INDUS INC	96,200
Giant Yorktown Refg[e]	
Yorktown, Virginia	58,600
Giant Refining Co.	
Gallup, New Mexico	20,800
Giant Industries Inc.	
Bloomfield, New Mexico	16,800
CALUMET LUBRICANTS CO LP	67,520
Calumet Lubricants Co. LP	
Shreveport, Louisiana	46,200
Cotton Valley, Louisiana	13,020
Princeton, Louisiana	8,300
HOLLY CORP	65,000
Navajo Refining Co.	
Artesia, New Mexico	58,000
Montana Refining Co.	
Great Falls, Montana	7,000
UNITED REFINING INC	
United Refining Co.	
Warren, Pennsylvania	65,000
PETRO STAR INC	62,550
Petro Star Inc.	
Valdez, Alaska	46,700
North Pole, Alaska	15,850
ALON USA ENERGY INC	
Alon USA LP	
Big Spring, Texas	58,500
GARY WILLIAMS CO	
Wynnewood Refining Co.	
Wynnewood, Oklahoma	52,500
PARAMOUNT ACQUISITION CORP	
Paramount Petroleum Corp.	
Paramount, California	50,000
PLACID REFINING CO	
Placid Refining Co.	
Port Allen, Louisiana	48,500
TIME OIL CO	
U.S. Oil & Refining Co.	
Tacoma, Washington	44,350
HUNT CONSLD INC	
Hunt Refining Co.	
Tuscaloosa, Alabama	33,500
Total	**643,620**
Companies with Capacity 10,001 to 30,000 bbl/cd	
TRANSWORLD OIL USA INC	
Calcasieu Refining Co.	
Lake Charles, Louisiana	29,400
APEX OIL CO INC	
Edgington Oil Co.	
Long Beach, California	26,000
KERN OIL & REFINING CO	
Kern Oil & Refining Co.	
Bakersfield, California	24,700
SAN JOAQUIN REFINING CO INC	
San Joaquin Refining Co Inc.	
Bakersfield, California	24,300
FLYING J INC	
Big West Oil Co.	
North Salt Lake, Utah	24,000
COUNTRYMARK COOPERATIVE INC	
Countrymark Cooperative Inc.	
Mount Vernon, Indiana	23,000
SOUTHLAND OIL CORP	16,800
Southland Oil Co.	
Sandersville, Mississippi	11,000
Lumberton, Mississippi	5,800
SILVER EAGLE REFINING	14,000
Silver Eagle Refining	
Woods Cross, Utah[f]	11,000
Evanston, Wyoming	3,000

See footnotes at end of table.

Table 40. Refiners' Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2003 (Continued)

CORPORATION / Refiner / Location	Barrels per Calendar Day
WYOMING REFINING CO	
Wyoming Refining Co.	
Newcastle, Wyoming	12,500
AGE REFINING & MARKETING	
Age Refining, Inc.	
San Antonio, Texas	10,200
Total	**204,900**
Companies with Capacity 10,000 bbl/cd or Less	
AMERICAN REFINING GROUP INC	
American Refining Group Inc.	
Bradford, Pennsylvania	10,000
GREKA ENERGY	
Santa Maria, California	9,500
WORLD OIL CO	
Lunday Thagard	
South Gate, California	8,500
CROSS OIL & REFINING CO INC	
Cross Oil Refining and Mktg, Inc.	
Smackover, Arkansas	6,800
SOMERSET REFINERY INC	
Somerset Refinery Inc.	
Somerset, Kentucky	5,500
YOUNG REFINING CORP	
Young Refining Corp.	
Douglasville, Georgia	5,400
FORELAND REFINING CORP	
Foreland Refining Corp.	
Eagle Springs, Nevada	5,000
OIL HOLDING INC	
Tenby Inc.	
Oxnard, California	2,800
DOW CHEM USA	
Haltermann Products	
Channelview, Texas	880
Total	**54,380**
U.S. Total	**16,757,370**

[a] Formerly Phillips Petro Co.
[b] Formerly owned by Conoco Inc.
[c] Formerly Equilon Enterprises LLC.
[d] Formerly owned by Valero Energy Corp.
[e] Formerly owned by BP PLC.
[f] Formerly Inland Refining Inc.
Source:Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 41. Operable Crude Oil and Downstream Charge Capacity of Petroleum Refineries, January 1, 1981 to January 1, 2003

(Thousand Barrels per Stream Day, Except Where Noted)

Year/PAD District	Atmospheric Crude Oil Distillation	Downstream Charge Capacity							
		Vacuum Distillation	Thermal Cracking	Catalytic Cracking		Catalytic Hydro-cracking	Catalytic Reforming	Catalytic Hydro-treating	Fuels Solvent Deasphalting
				Fresh	Recycled				
JAN 1, 1981	19,763	7,033	1,587	5,543	594	909	4,098	8,487	NA
JAN 1, 1982	19,018	7,197	1,782	5,474	562	892	3,966	8,539	NA
JAN 1, 1983	17,871	7,180	1,715	5,402	488	883	3,918	8,354	NA
JAN 1, 1984	17,059	7,165	1,852	5,310	492	952	3,907	9,009	NA
JAN 1, 1985	16,504	6,998	1,858	5,232	507	1,053	3,750	8,897	NA
JAN 1, 1986	16,346	6,892	1,880	5,214	463	1,125	3,744	8,791	NA
JAN 1, 1987	16,460	6,935	1,928	5,251	466	1,189	3,805	9,083	230
JAN 1, 1988	16,825	7,198	2,080	5,424	381	1,202	3,891	9,170	240
JAN 1, 1989	16,568	7,225	2,073	5,324	326	1,238	3,911	9,440	245
JAN 1, 1990	16,507	7,245	2,108	5,441	314	1,282	3,896	9,537	279
JAN 1, 1991	16,557	7,276	2,158	5,559	304	1,308	3,926	9,676	271
JAN 1, 1992	16,633	7,172	2,100	5,608	280	1,363	3,907	9,644	276
JAN 1, 1993	15,935	6,892	2,082	5,540	244	1,397	3,728	9,677	269
JAN 1, 1994	15,904	6,892	2,107	5,586	191	1,376	3,875	10,616	261
JAN 1, 1995	16,326	7,248	2,123	5,583	169	1,386	3,867	10,916	251
JAN 1, 1997	16,287	7,349	2,050	5,595	155	1,388	3,727	11,041	275
JAN 1, 1999	17,155	7,538	2,046	5,920	153	1,552	3,779	11,461	318
JAN 1, 2000	17,393	7,617	2,163	5,949	99	1,576	3,770	11,440	351
JAN 1, 2001	17,511	7,798	2,277	5,983	86	1,615	3,797	11,673	350
JAN 1, 2002	17,676	7,779	2,329	5,989	80	1,633	3,753	11,845	362
JAN 1, 2003	17,675	7,788	2,377	6,052	79	1,644	3,777	11,987	350
PADD I	1,801	739	90	728	7	42	312	1,005	21
PADD II	3,715	1,478	385	1,249	14	152	894	2,597	18
PADD III	8,241	3,730	1,244	3,046	49	844	1,840	5,987	222
PADD IV	611	229	47	191	6	17	128	383	9
PADD V	3,308	1,613	612	838	4	590	604	2,015	80
JAN 1, 2004	17,675	7,864	2,444	6,038	79	1,575	3,784	12,394	344
PADD I	1,801	749	90	728	7	42	314	1,050	22
PADD II	3,715	1,496	385	1,242	14	152	894	2,634	18
PADD III	8,241	3,778	1,311	3,039	49	775	1,844	6,282	215
PADD IV	611	229	47	191	6	17	129	384	9
PADD V	3,308	1,613	612	838	4	590	604	2,044	80
2003-2004 (Net Change)	0	76	67	-14	0	-69	7	407	-6
PADD I	0	10	0	0	0	0	2	45	1
PADD II	0	18	0	-7	0	0	0	37	0
PADD III	0	48	67	-7	0	-69	4	295	-7
PADD IV	0	0	0	0	0	0	1	1	0
PADD V	0	0	0	0	0	0	0	29	0

[a]Projected data from refiners.
NA = Not available.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report." See Explanatory Note 3 for details.

Table 42. Operable Production Capacity of Petroleum Refineries, January 1, 1981 to January 1, 2003

(Thousand Barrels per Stream Day, Except Where Noted)

Year/PAD District	Production Capacity							
	Alkylates	Aromatics	Asphalt and Road Oil	Isomers	Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons/day)
JAN 1, 1981	974	299	765	131	234	276	2,054	NA
JAN 1, 1982	984	290	740	162	242	267	1,944	NA
JAN 1, 1983	960	237	722	212	241	296	2,298	NA
JAN 1, 1984	945	218	800	208	241	407	2,444	NA
JAN 1, 1985	917	215	767	219	243	424	2,572	NA
JAN 1, 1986	941	276	804	258	246	356	2,357	NA
JAN 1, 1987	974	287	788	326	250	364	2,569	23,806
JAN 1, 1988	993	289	788	465	232	368	2,418	27,639
JAN 1, 1989	1,015	290	823	469	230	333	2,501	28,369
JAN 1, 1990	1,030	290	844	456	232	341	2,607	24,202
JAN 1, 1991	1,077	292	866	490	229	367	2,527	23,875
JAN 1, 1992	1,095	290	812	494	217	356	2,644	23,811
JAN 1, 1993	1,083	286	814	499	217	393	2,674	25,940
JAN 1, 1994	1,086	278	793	499	213	410	2,940	24,554
JAN 1, 1995	1,105	285	846	502	217	427	3,139	24,885
JAN 1, 1997	1,120	288	872	577	244	458	3,052	26,466
JAN 1, 1999	1,172	302	846	667	233	441	3,104	26,423
JAN 1, 2000	1,185	315	886	643	218	464	3,143	26,645
JAN 1, 2001	1,191	318	900	654	214	538	3,230	27,446
JAN 1, 2002	1,181	313	917	658	218	548	3,244	29,107
JAN 1, 2003	1,191	316	873	679	216	646	3,265	29,766
PADD I	108	21	141	31	20	22	84	1,290
PADD II	262	63	303	174	18	112	391	5,191
PADD III	583	227	240	337	152	359	1,399	17,908
PADD IV	42	0	69	15	0	12	91	674
PADD V	195	4	119	121	26	141	1,300	4,703
JAN 1, 2004	1,193	329	886	679	216	657	3,265	30,185
PADD I	108	21	141	31	20	22	84	1,290
PADD II	265	63	310	175	18	112	391	5,191
PADD III	583	240	240	337	152	370	1,399	18,327
PADD IV	42	0	69	15	0	12	91	674
PADD V	195	4	125	121	26	141	1,300	4,703
2003-2004 (Net Change)	3	13	13	(s)	0	11	0	419
PADD I	0	0	0	0	0	0	0	0
PADD II	3	0	7	(s)	0	0	0	0
PADD III	0	13	0	0	0	11	0	419
PADD IV	0	0	0	0	0	0	0	0
PADD V	0	0	6	0	0	0	0	0

[a]Projected data from refiners.

NA = Not available. MMcfd = Million cubic feet per day; (s) = Less than 500 barrels per stream day.

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

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report." See Explanatory Note 3 for details.

Table 43. Working Storage Capacity[a] at Operable Refineries by PAD District as of January 1, 2003
(Thousand Barrels)

Commodity	PAD Districts					United States
	I	II	III	IV	V	
Crude Oil	**23,989**	**20,408**	**77,657**	**3,527**	**36,311**	**161,892**
Liquefied Petroleum Products	**3,439**	**7,947**	**20,596**	**483**	**1,834**	**34,299**
Propane/Propylene	916	3,585	7,470	168	197	12,336
Normal Butane/Butylene	2,523	4,362	13,126	315	1,637	21,963
Other Liquids	**10,507**	**13,230**	**30,312**	**3,723**	**18,597**	**76,369**
Oxygenates	1,904	83	2,862	104	2,250	7,203
Fuel Ethanol	0	80	27	104	22	233
Methanol	241	3	553	0	143	940
MTBE	1,663	0	2,130	0	2,061	5,854
Other Oxygenates	0	0	152	0	24	176
Gasoline Blending Components	8,603	13,147	27,450	3,619	16,347	69,166
Petroleum Products	**47,946**	**80,315**	**192,408**	**16,452**	**77,732**	**414,853**
Finished Motor Gasoline	9,360	16,235	27,272	3,599	12,687	69,153
Reformulated	5,537	1,274	4,887	0	6,760	18,458
Oxygenated	21	0	0	152	0	173
Other Finished	3,802	14,961	22,385	3,447	5,927	50,522
Jet Fuel	2,571	3,771	10,154	763	6,059	23,318
Naphtha-Type	0	22	5	95	45	167
Kerosene-Type	2,571	3,749	10,149	668	6,014	23,151
Kerosene	452	1,084	1,422	125	77	3,160
Distillate Fuel Oil	10,965	15,109	27,862	3,141	9,724	66,801
0.05 percent sulfur and under	4,145	9,960	16,149	2,265	6,718	39,237
Greater than 0.05 percent sulfur	6,820	5,149	11,713	876	3,006	27,564
Residual Fuel Oil	2,811	4,005	9,944	825	6,051	23,636
Lubricants	2,403	729	10,839	0	2,225	16,196
Asphalt and Road Oil	3,506	10,840	6,676	3,572	3,206	27,800
Other Products	15,878	28,542	98,239	4,427	37,703	184,789
Total	**85,881**	**121,900**	**320,973**	**24,185**	**134,474**	**687,413**

[a] The difference in volume between the maximum safe fill capacity and tank bottoms.
[b] 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).
[c] Includes ethane/ethylene, isobutane/isobutylene, pentanes plus, other hydrocarbons, hydrogen, unfinished oils, finished aviation gasoline, special naphthas, wax, petroleum coke, still gas, petrochemical feedstocks and miscellaneous products.
Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 44. Shell Storage Capacity[a] at Operable Refineries by PAD District as of January 1, 2003
(Thousand Barrels)

Commodity	PAD Districts					United States
	I	II	III	IV	V	
Crude Oil	**27,917**	**24,045**	**90,293**	**3,976**	**40,404**	**186,635**
Liquefied Petroleum Products	**3,794**	**8,359**	**22,654**	**506**	**2,004**	**37,317**
Propane/Propylene	1,003	3,804	7,885	178	213	13,083
Normal Butane/Butylene	2,791	4,555	14,769	328	1,791	24,234
Other Liquids	**12,144**	**15,155**	**34,592**	**4,109**	**27,140**	**93,140**
Oxygenates	2,149	98	3,340	124	2,564	8,275
Fuel Ethanol	0	94	30	124	26	274
Methanol	265	4	650	0	171	1,090
MTBE	1,884	0	2,478	0	2,340	6,702
Other Oxygenates	0	0	182	0	27	209
Gasoline Blending Components	9,995	15,057	31,252	3,985	24,576	84,865
Petroleum Products	**54,374**	**88,878**	**215,976**	**17,969**	**87,640**	**464,837**
Finished Motor Gasoline	10,835	18,154	31,186	4,066	14,473	78,714
Reformulated	6,464	1,469	5,510	0	7,879	21,322
Oxygenated	23	0	0	170	0	193
Other Finished	4,348	16,685	25,676	3,896	6,594	57,199
Jet Fuel	2,864	4,172	11,378	833	6,853	26,100
Naphtha-Type	0	24	5	114	49	192
Kerosene-Type	2,864	4,148	11,373	719	6,804	25,908
Kerosene	473	1,175	1,572	136	103	3,459
Distillate Fuel Oil	11,980	16,315	30,557	3,402	10,716	72,970
0.05 percent sulfur and under	4,474	10,763	17,791	2,448	7,480	42,956
Greater than 0.05 percent sulfur	7,506	5,552	12,766	954	3,236	30,014
Residual Fuel Oil	3,122	4,397	11,199	918	6,959	26,595
Lubricants	2,526	819	11,807	0	2,326	17,478
Asphalt and Road Oil	3,848	12,010	7,240	3,808	3,507	30,413
Other Products	18,726	31,836	111,037	4,806	42,703	209,108
Total	**98,229**	**136,437**	**363,515**	**26,560**	**157,188**	**781,929**

[a] The design capacity of the tank.
[b] 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).
[c] Includes ethane/ethylene, isobutane/isobutylene, pentanes plus, other hydrocarbons, hydrogen, unfinished oils, finished aviation gasoline, special naphthas, wax, petroleum coke, still gas, petrochemical feedstocks and miscellaneous products.
Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 45. Capacity and Fresh Feed Input to Selected Downstream Units at U.S. Refineries, 2001-2003
(Barrels per Calendar Day, Expect Where Noted)

PAD District/Item	2001	2002	2003	2001	2002	2003
	PAD DISTRICT I			PAD DISTRICT II		
Cokers						
Capacity	85,600	87,100	87,100	374,516	375,926	363,931
Inputs	84,597	80,208	—	351,268	318,556	—
Catalytic Crackers						
Capacity	684,400	682,700	691,207	1,215,569	1,183,031	1,166,361
Inputs	621,460	608,858	—	1,110,129	1,108,002	—
Hydrocrackers						
Capacity	38,000	38,000	38,000	145,300	139,200	139,200
Inputs	35,827	38,973	—	139,989	131,463	—
	PAD DISTRICT III			PAD DISTRICT IV		
Cokers						
Capacity	1,009,325	1,085,750	1,133,340	40,900	40,900	42,700
Inputs	998,784	1,094,625	—	40,170	40,490	—
Catalytic Crackers						
Capacity	2,771,910	2,815,638	2,848,858	171,630	171,666	180,555
Inputs	2,561,518	2,621,910	—	132,052	137,729	—
Hydrocrackers						
Capacity	735,700	747,600	765,069	15,500	15,500	15,500
Inputs	527,438	558,934	—	3,992	12,282	—
	PAD DISTRICT V			U.S. TOTAL		
Cokers						
Capacity	559,395	558,595	545,950	2,069,736	2,148,271	2,173,021
Inputs	488,126	501,003	—	1,962,945	2,034,882	—
Catalytic Crackers						
Capacity	795,310	793,126	784,900	5,638,819	5,646,161	5,671,881
Inputs	709,759	712,562	—	5,134,918	5,198,101	—
Hydrocrackers						
Capacity	507,194	510,200	507,850	1,441,694	1,450,500	1,439,619
Inputs	469,485	467,964	—	1,176,732	1,209,616	—

Note: Capacities are as of January 1 of the indicated year.
Sources: Capacities are from the Energy Information Administration Form EIA-820, "Annual Refinery Report." See Explanatory Note 3 for details. Inputs are from the Energy Information Administration Form EIA-810, "Monthly Refinery Report.

Table 46. Refinery Receipts of Crude Oil by Method of Transportation by PAD District, 2002

(Thousand Barrels)

Method	PAD Districts					United States
	I	II	III	IV	V	
Pipeline						
Domestic	2,479	621,660	703,758	93,939	341,378	1,763,214
Foreign	21,446	544,281	374,361	84,129	21,004	1,045,221
Tanker						
Domestic	0	0	145	0	338,818	338,963
Foreign	450,253	0	1,411,036	0	237,352	2,098,641
Barge						
Domestic	2,842	529	51,454	0	1,159	55,984
Foreign	77,502	0	33,040	0	13,887	124,429
Tank Cars						
Domestic	2,667	0	1,079	0	3,796	7,542
Foreign	0	0	0	0	0	0
Trucks						
Domestic	2,924	4,822	22,387	12,466	8,453	51,052
Foreign	0	0	0	0	0	0
Total						
Domestic	10,912	627,011	778,823	106,405	693,604	2,216,755
Foreign	549,201	544,281	1,818,437	84,129	272,243	3,268,291

Source: Energy Information Administration (EIA), Form EIA-820, “Annual Refinery Report.”

Table 47. Fuel Consumed at Refineries by PAD District, 2002

(Thousand Barrels, Except Where Noted)

Commodity	PAD Districts					United States
	I	II	III	IV	V	
2002						
Crude Oil	0	0	0	0	0	0
Liquefied Petroleum Gases	282	1,034	846	44	1,232	3,438
Distillate Fuel Oil	480	68	84	0	208	840
Residual Fuel Oil	1,836	1,871	0	205	902	4,814
Still Gas	21,377	46,100	113,967	7,321	44,465	233,230
Marketable Petroleum Coke	243	0	86	133	702	1,164
Catalyst Petroleum Coke	11,585	17,416	41,987	2,548	13,538	87,074
Natural Gas (million cubic feet)	39,150	96,180	458,652	21,274	136,783	752,039
Coal (thousand short tons)	W	W	W	W	W	31
Purchased Electricity (million kWh)	3,282	8,933	16,145	1,581	4,780	34,721
Purchased Steam (million pounds)	4,112	5,220	32,342	744	16,731	59,149
Hydrogen (million cubic feet)	0	0	0	0	0	0
Other Products	368	1,230	1,351	834	1,426	5,209

Note: Includes volumes used as fuel at refineries and all nonprocessing losses of crude oil and petroleum products (e.g., spills, fire losses, contamination, etc.)

[a]Includes pentanes plus, other hydrocarbons, oxygenates, unfinished oils, gasoline, special naphthas, jet fuel, lubricants, asphalt, road oil, and miscellaneous products.

W = Withheld to avoid disclosure of individual company data.

Source: Form EIA-820,"Annual Refinery Report" and Form EIA-810, “Monthly Refinery Report”.

Table 48. Shutdown and Reactivated Refineries During 2002

PAD District / Refinery	Location	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)	Total Downstream Charge Capacity (bbl/sd)	Date Operable	Date of Last Operation	Date Shutdown
SHUTDOWNS						
PAD District II		**64,000**	**116,700**			
Premcor Refining Group	Hartford, IL	64,000	116,700	01/48	09/02	10/02
PAD District III		**30,000**	**15,000**			
American International	Lake Charles, LA	30,000	15,000	07/01	09/01	01/02
PAD District V		**0**	**17,400**			
Foreland Refining Corp	Tonapah, NV	0	3,000	09/98	02/01	01/02
Tricor Refining LLC	Bakersfield, CA	0	14,400	01/48	07/01	01/02
Total U.S. Shutdowns		**94,000**	**149,100**			
PAD District VI		**0**	**93,200**			
Chevron Phillips Chem PR Core	Guayama, PR	0	93,200	01/70	03/01	01/02

bbl/cd=Barrels per calendar day.
bbl/sd=Barrels per stream day.
Sources: Energy Information Administration (EIA) Form EIA-810, “Monthly Refinery Report” and Form EIA-820, “Annual Refinery Report.”

Table 49. Refinery Sales During 2002

Former Corporation / Refiner	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)[a]	New Corporation / Refiner	Date of Sale
BP PLC/BP Products North America, Inc.		**Giant Industries Inc./Giant Yorktown Refg**	**5/02**
Yorktown, VA	58,600		
Conoco, Inc.		**ConocoPhillips Co./Conoco, Inc.**	**8/02**
Billings, MT	60,000		
Commerce City, CO	60,000		
Ponca City, OK	194,000		
Westlake, LA	252,000		
Valero Energy Corp./Ultramar, Inc.		**Tesoro Petro Corp/Tesoro Refg & Mktg Co.**	**5/02**
Martinez, CA	166,000		

[a]bbl/cd = Barrels per calendar day. As of January 1, 2003.
Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and Form EIA-820, "Annual Refinery Report."

District Descriptions and Maps

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

PAD District I

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

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

Sub-PAD District I

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

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

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

PAD District II

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

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

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

PAD District III

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

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

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

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

New Mexico: The State of New Mexico.

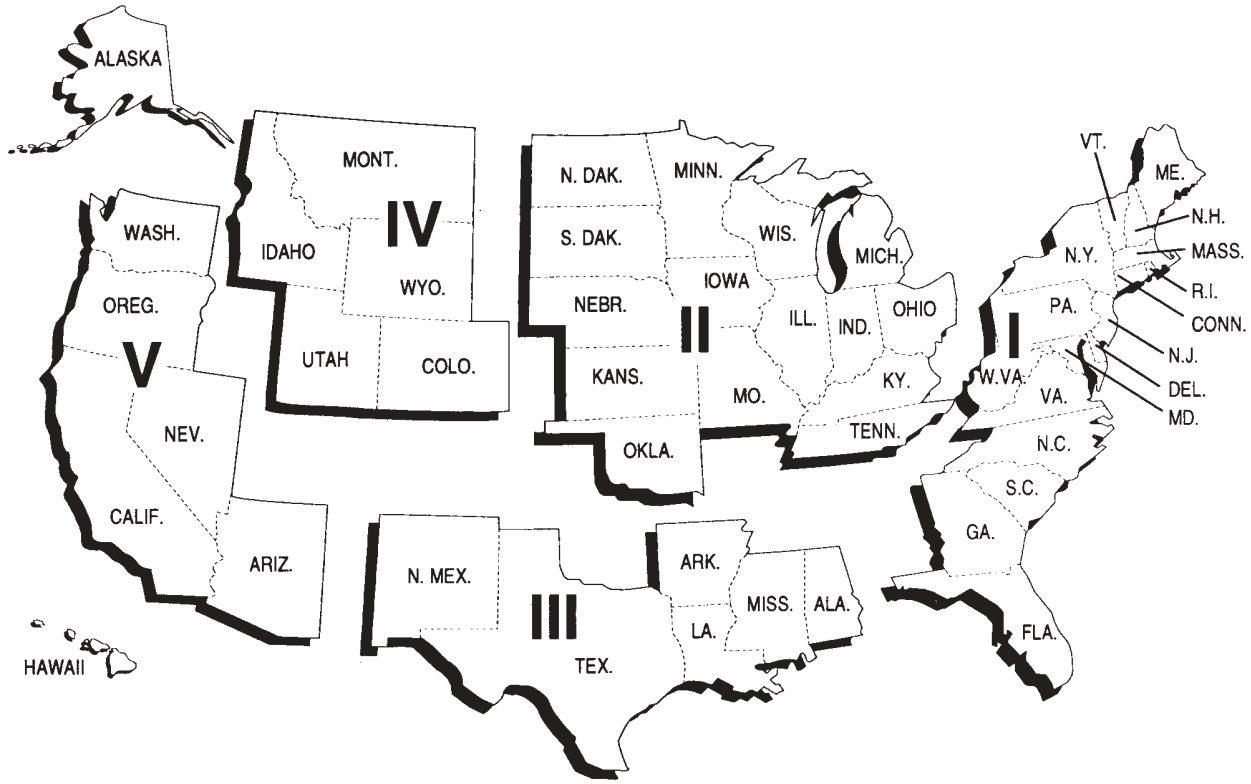
PAD District IV

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

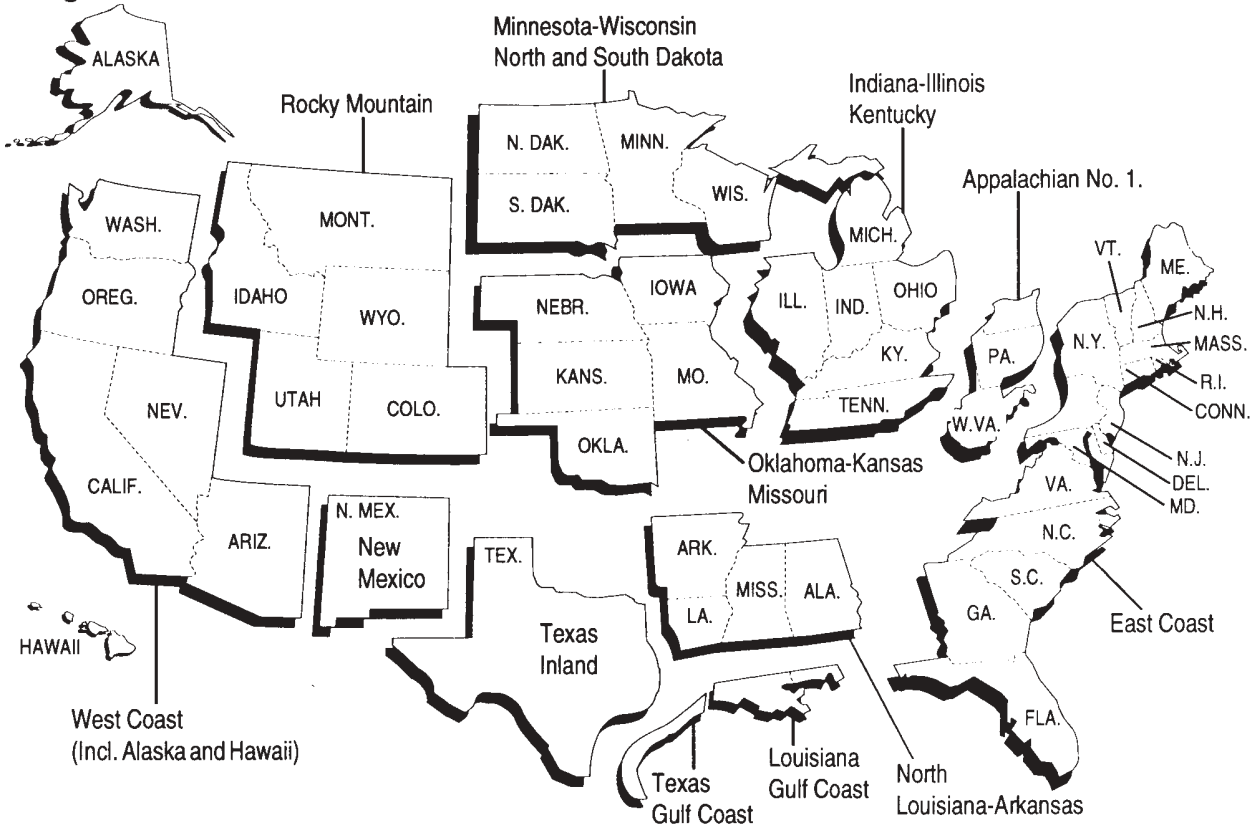
PAD District V

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

Petroleum Administration for Defense (PAD) Districts



Refining Districts



Explanatory Notes

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

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 -819M	"Monthly Oxygenate Telephone 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 pro-

pane. 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). During the non-heating season (April through September) data are collected on end-of-month stocks only. These data are published in the *WPSR*.

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

Summary information on the revision error between preliminary and final data is published once a year in the *PSM* feature article entitled, "Accuracy of Petroleum Supply Data."

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

The Form EIA-819A, "Annual Oxygenate Capacity Report," was used to collect data on current and projected production capacity of oxygenates and annual production and end-of-year inventories of fuel ethanol. This survey, which was last conducted for January 1, 1995 and published in the *Petroleum Supply Annual* 1994, has been eliminated.

The Form EIA-820, "Annual Refinery Report," is used to collect data on refinery fuel use and consumption of steam and electricity, refinery receipts of crude oil by method of transportation, operable capacity for atmospheric crude oil distillation units and downstream units, as well as production capacity and storage capacity for petroleum products. In 1996, this survey was moved to a biennial schedule (every other year). No surveys were conducted for January 1, 1996 and January 1, 1998 data. The survey was again conducted in January 1999 and reverted to an annual schedule January 1, 2000. This survey is described in more detail in Explanatory Note 3.

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 and crude oil stocks and movements. The collection systems were further expanded in 1925 to include natural gas plant liquids production and storage, imports of crude oil and petroleum products and storage and movement of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS was the first effort to make them all consistent and comparable. The forms that comprise the MPSRS are:

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

Respondent Frame

Form EIA-810, "Monthly Refinery Report" - Operators of all operating and idle petroleum refineries and blending plants located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. Approximately 410 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. Approximately 320 respondents report on the Form EIA-811.

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

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

Form EIA-814, "Monthly Imports Report" - All companies, including subsidiary or affiliated companies, that import crude oil or petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia and must be reported. A report is required only if there has been an import during the month unless the importer has been selected as part of a sample to report every month regardless of activity. Approximately 180 respondents report on the Form EIA-814.

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

Form EIA-817, "Monthly Tanker and Barge Movement Report" - All companies that have custody of crude oil or petroleum products transported by tanker or barge between Petroleum Administration for Defense (PAD) Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker or barge. Also, companies which lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 40 respondents report on the Form EIA-817.

Form EIA-819M, "Monthly Oxygenate Telephone Report" - The sample of companies that report on the EIA-819M are selected from the universe of companies that report on the MPSRS surveys and from the universe of fuel ethanol producers who reported on the Form EIA-819A, "Annual Oxygenate Capacity Report", in 1995. 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 85 respondents report on the Form EIA-819M.

Sampling

The sampling procedure used for the survey Form EIA-819M is the cut-off method and is performed using software developed for EIA's Survey Methods Group. 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 the previous year. Companies are chosen for the sample beginning with the largest and adding companies until the sample covers approximately 90 percent of the total for each oxygenate product and supply type by geographic region (PAD Districts I through V).

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 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 pipe-

line. 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 collection for the EIA-819M begins on the seventh working day of each month. Data are solicited by telephone or transmitted to the EIA by facsimile. Receipt of the reports are monitored using an automated respondent mailing list. Telephone follow-up calls are made to nonrespondents prior to the publication deadline.

Response Rate

The response rate is generally 95 to 100 percent. Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

Data Imputation

Imputation is performed for companies that fail to file Forms EIA-810 through 813, 816, and 819M. For such companies, previous monthly values are used for current values. On the EIA-819M, data are aggregated for each geographic region. Estimation factors, which are derived from the previous year's data, are then applied to each cell to generate published estimates. Data for nonrespondents on the Forms EIA-814 and 817 are not imputed because these data series, by respondent, are highly variable.

Confidentiality

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the 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 are suppressed on Table 16, "Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts" to avoid disclosure of company identifiable data.

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

- Table 16, "Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts," (inputs of oxygenates)
- Table 18, "Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts," (stocks of oxygenates)
- Table 30, "Stocks of Crude Oil and Petroleum Products by PAD District," (stocks of oxygenates)
- Table 31, "Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products," (all products)
- Table 47, "Fuel Consumed at Refineries by PAD District"

With the exception of the tables listed above, the tables in the *PSA* 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. Form EIA-820: Annual Refinery Report

Refinery capacity data collection was begun in 1918 by the Bureau of Mines, then in the Department of Commerce, and was operated on a voluntary basis until 1980. In 1980, the mandatory Energy Information Administration (EIA) Form EIA-177, *Capacity of Petroleum Refineries*, was implemented. Information on refining capacity was expanded to include not only current year operations, but two-year projections, and refinery input/production data. Working storage capacity data was also added to the form and product categories were added for total coverage. Information on refinery downstream facilities was expanded to include a breakdown of thermal operations and to add vacuum distillation, catalytic hydrorefining and hydrotreating. Production capacity was also added to include information on isomerization, alkylation, aromatics, asphalt/road oil, coking, lubricants and hydrogen.

In 1983, the form was revised to improve the consistency and quality of the data collected by the EIA and redesignated as Form EIA-820, "Annual Refinery Report." Two sections for data previously reported monthly were added: (1) refinery receipts of crude oil by method of transportation, and (2) fuels consumed for all purposes at refineries. Also, the second year projections on refining capacity were eliminated. As a result of a study conducted by the EIA evaluating motor gasoline data collected by the Federal Highway Administration (FHWA) and by the EIA, motor gasoline blending plants were included for the first

time in the respondent frame in order to produce more accurate statistics on the production of motor gasoline.

In 1987, the form was revised to reduce respondent burden and to better reflect current refinery operations through updated terminology. Information on projected input/production of refinery processing facilities was deleted. Several categories under catalytic hydrotreating were combined: naphtha and reformer feeds were combined into a single category as well as residual fuel oil and other. Thermal cracking types, gas oil and "other" were also combined into a single category. Catalytic reforming types, conventional and bi-metallic were replaced with low and high pressure processing units. Two new categories were added: fuels solvent deasphalting was added to downstream charge capacity and sulfur recovery was added to production capacity.

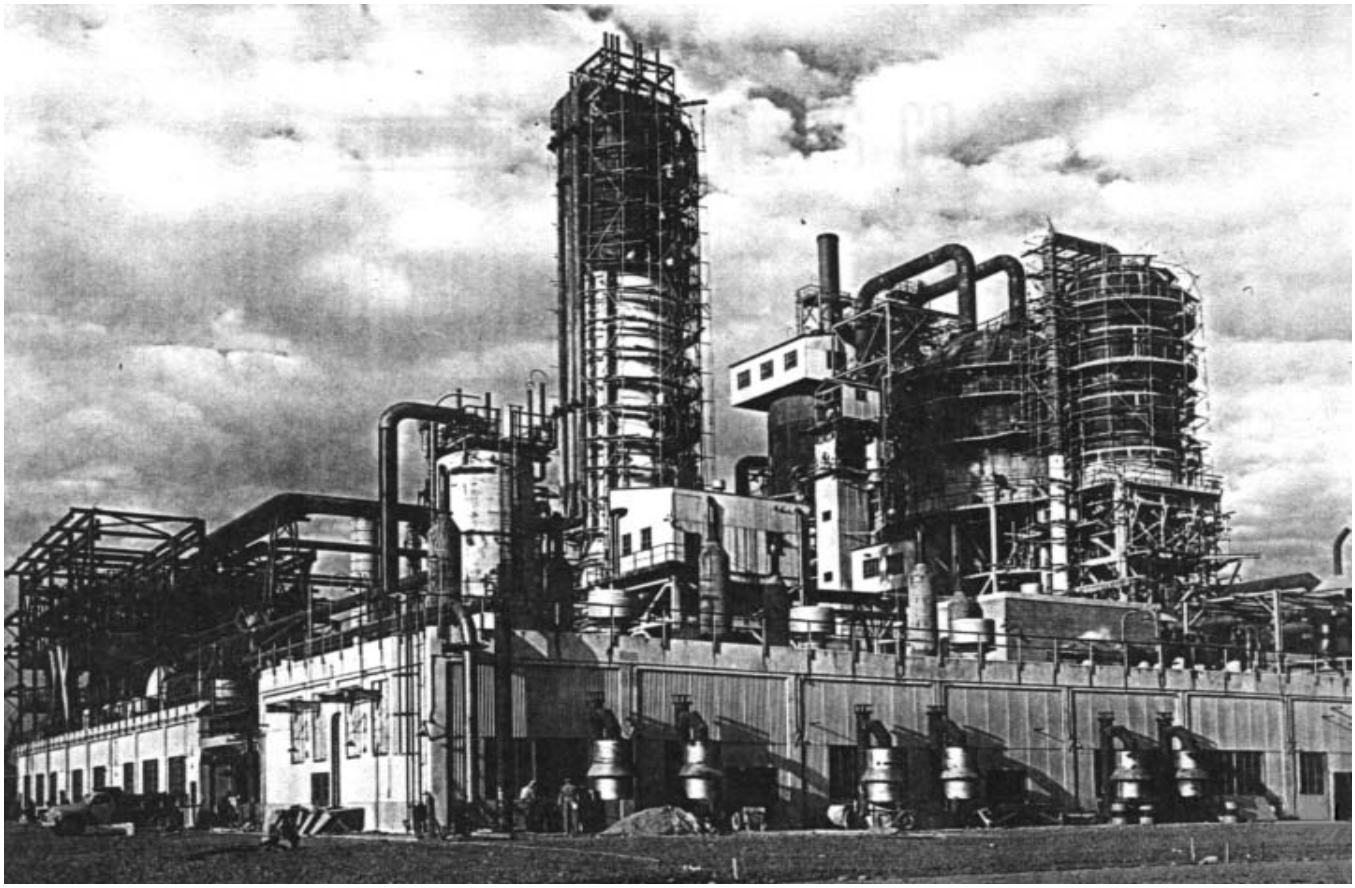
In 1994, the form was revised to enable EIA to calculate utilization rates for certain downstream processing units and to reflect storage capacity of fuels mandated by the Clean Air Act Amendments of 1990. Additions to the form included calendar day downstream charge capacity for fluid and delayed coking, catalytic cracking, and catalytic hydrocracking. Also storage capacity categories for reformulated, oxygenated, and other finished motor gasoline were added, as well as oxygenate storage capacity and separate categories for high and low sulfur distillate fuel oil.

In 1995, motor gasoline blending plants were dropped from the survey frame, since by this time, the only section of the form that applied to them was working and shell storage capacity. Also in 1995, a decision was made to no longer collect storage capacity from shutdown refineries; therefore, these refineries were also eliminated from the survey frame.

In 1996, the survey was moved to a biennial schedule (every other year) and was renamed "Biennial Refinery Report." The survey was not conducted for January 1, 1996 or January 1, 1998.

Respondents were not required to submit data for crude oil and petroleum products consumed at refineries during 1995 and 1997. These data are available from the Form EIA-810, "Monthly Refinery Report." The requirement to submit data for refinery consumption of natural gas, coal, and purchased steam and electricity on the Form EIA-820 remained.

In 2000, the survey was moved to an annual schedule.



Refinery cat-cracker.

Respondent Frame

The respondent frame consists of all operating and idle petroleum refineries (including new refineries under construction), located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. As of January 1, 2003, there were 152 refineries.

The respondent frame is maintained by monitoring the monthly Form EIA-810, "Monthly Refinery Report," and industry publications for changes and developments in the petroleum industry such as refinery sales, mergers and new operations.

Description of Survey Form

The Form EIA-820 is used to collect data on fuels consumed for all purposes at the refinery during the preceding year; refinery receipts of crude oil by method of transportation during the preceding year; current and next year projections for operable atmospheric crude oil distillation capacity, downstream charge capacity and production capacity; and current year working and shell storage capacity for crude oil and petroleum products at the refinery.

Collection Methods

The Form EIA-820 is sent to respondents in December. Survey forms can be submitted by electronic mail or facsimile. Completed forms are required to be postmarked by the 15th day of February of the current report year. Receipt of the reports is monitored using an automated respondent mailing list. Telephone follow-up calls are made to secure responses from those companies failing to report by February 15th.

Response Rate

The response rate for the Form EIA-820 is normally very high. Data are estimated and non-compliance procedures are implemented for those companies still not reporting data by close-out for the report year.

Data Imputation

Imputation is performed for companies that fail to file prior to the publication deadline. For the January 1, 2003 survey, there were no nonrespondents. When nonresponse occurs, values for these companies are imputed from data reported on the most recent year's Form EIA-820 and/or from data reported on Form EIA-810, "Monthly Refinery Report," for that company. For most surveyed items, the value imputed for nonrespondents is the value that company reported on the Form EIA-820 for the most recent year. For three categories of information however, the imputed value is also based on their data from the Form EIA-810 as follows:

Section 2: Refinery Receipts of Crude Oil by Method of Transportation

The imputation methodology for this section is based on data reported on both the monthly Form EIA-810 and the annual Form EIA-820. Annual refinery receipts of domestic and foreign crude oil for a nonrespondent are imputed by aggregating the values for the refinery on the monthly survey. These values are allocated to the method of transportation by using the percentages reported for the refinery in the previous year. The difference between the values reported on the two surveys by all respondents in 2000 was about 2.4 percent.

Section 3: Operable and Storage Capacity as of January 1

Operable atmospheric crude oil distillation capacity in barrels per calendar day is collected on the monthly Form EIA-810 as of the first day of each month and on the annual Form EIA-820 as of January 1. As part of the editing process for the Form EIA-820, these two values are compared. Companies are contacted and any discrepancies are resolved by the time of publication. Imputed values for operable atmospheric crude oil distillation capacity in barrels per calendar day are taken directly from the January Form EIA-810. A barrels per stream day capacity is then derived by dividing the reported barrels per calendar day capacity by .95.

Current year and projected year data for downstream charge capacity, production capacity, and data for working and shell storage capacity are taken directly from the previous year's annual report.

Confidentiality

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the Energy Information Administration to provide company-specific data to the Department of Justice, or to any other 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.

Information on operable atmospheric crude oil distillation capacity, downstream charge capacity, and production capacity (Sections 3, 4 and 5) on Form EIA-820 are not

considered as confidential, and historically have not been treated as such. Company identifiable data are published in the *Petroleum Supply Annual* (PSA) 2002, Volume 1, Tables 38, 39, and 40.

Other data (Sections 1, 2, 6 and respondent information) on the Form EIA-820 are kept confidential and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C.552, Department of Energy (DOE) regulations, 10 C.F.R.1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C.1905.

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.

The data collected on Form EIA-820, "Annual Refinery Report," is used to report aggregate statistics on and conduct analyses of the operation of U.S. petroleum refineries. The data appear in EIA publications such as *PSA*, and the *Annual Energy Review.* Company specific data are also provided to other DOE offices for the purpose of examining specific refinery operations in the context of emergency response planning and actual emergencies.

The tables pertaining to refinery receipts of crude oil by method of transportation and fuels consumed at the refinery published in the *PSA* 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.

Quality Control

There are two types of errors usually associated with data produced from a survey -sampling errors and nonsampling errors. Because estimates from the Form EIA-820 survey are based on a complete census of the frame of petroleum refineries, there is no sampling error in the data presented in this report. The data, however, are subject to nonsampling errors. Nonsampling errors are those which can arise from: (1) the inability to obtain data from all companies in the frame or sample (nonresponse) and the method used to account for nonresponses; (2) definitional difficulties and/or improperly worded questions which lead to different interpretations; (3) mistakes in recording or coding the data obtained from respondents; and (4) other errors of collection, response, coverage, and estimation. Quality control procedures are employed in the collection and editing operations to minimize misrepresentation and misreporting. Nonresponse follow-up procedures are employed to reduce the number of nonrespondents, and procedures employed to impute missing data, introduce a minimal amount of error, given the relatively small volume of imputed data.

Resubmissions

Resubmissions are required whenever an error greater than 5 percent of the true value is discovered. In the event of a reporting error, company reports are updated after contact with the company and are followed up by corrected report resubmissions. Late submissions or resubmissions received after the publication date are entered into a "working" file. This file contains the most up-to-date data for the Form EIA-820 and is used to edit next year's data.

Note 4. Technical Notes for Detailed Statistics Tables

The detailed statistics tables in the Petroleum Supply Annual provide complete supply and demand information for the previous 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 various State agencies and the Minerals Management Service of the U.S. Department of the Interior. Refer to Explanatory Note 5 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 10 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 alcohol, 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 the prior year'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 products 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/alcohol 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 5. 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. Currently, all except five crude oil producing States (New York, Pennsylvania, Ohio, Virginia and West Virginia) report production on a monthly basis. These five States report crude oil production on an annual basis. Estimates of monthly crude oil production for these five 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 and the Minerals Management Service. The EIA incorporates production data into its Crude Oil Production System (COPS) as the data are received from the reporting agencies. EIA publications show portions of this database at specific points in time. Table 14 of this publication presents the 2002 crude oil production data received by the EIA as of April 2003. Crude oil production data for 2002 received after April 2003 will be published later as an appendix in the following year's *Petroleum Supply Annual (PSA)*. Table Cl of this publication presents the 2001 crude oil production a year after it was published in the *PSA* 2001.

Note 6. Export Data

Each month the Energy Information Administration (EIA) receives electronic files 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 Annual* 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 7. Quality Control and Data Revision

Quality Control

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

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

Sampling and Nonsampling Errors

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

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

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

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

Monthly data are compared to weekly data on a regular basis. Discrepancies between weekly and monthly data are documented and respondents are called when discrepancies are either large (usually over 300 thousand barrels) or consistent (e.g., weekly data are always lower than monthly data). In addition, a comparison of the data collected on the PSRS with other similar data series from sources outside of the Petroleum Division is performed each year. The results of this data comparison are published once a year in the *Petroleum Supply Monthly* (PSM)

feature article, "Comparisons of Independent Petroleum Supply Statistics."

Sampling errors are those errors that occur when survey estimates are based on a sample rather than being derived from a complete census of the frame. The 819M data, which are based on sample estimates, serve as leading indicators of the PSRS monthly data for oxygenates. To assess the accuracy of the 819M statistics, data are compared with the monthly aggregate data for the EIA-810, 811, and 812 surveys. Although monthly data are still subject to error, they have been thoroughly reviewed and edited, and are considered to be the most accurate data available.

Data Revision

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

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 (20th calendar 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 8. Frames Maintenance

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

The activities for frames maintenance are conducted on a monthly and annual basis. Monthly frames maintenance procedures focus on examining several frequently published industry periodicals that report changes in status (births, deaths, sales, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status, and information received from survey systems operated by other offices. Survey managers review these sources to monitor changes in company operations and to develop lists of potential respondents. These activities assure coverage of the reporting universe and maintain accurate facility information on addresses and ownership.

Annual frames maintenance focuses on re-evaluating the "must submit" companies filing the Form EIA-814 and reviewing the sample frame for the Form EIA-819M, "Monthly Oxygenate Telephone Report."

To supplement the monthly and annual frames maintenance activities and to provide more comprehensive coverage, the PD periodically conducts a comprehensive frames investigation. These investigations result in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Changes in Survey Frames

Beginning in January 1981, the Energy Information Administration (EIA) expanded its universe to include nonrefinery 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 11 for further discussion.

In January 1981, 1983, and 1984 numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock change calculations. Table B1 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 B2 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 18, "Stocks of Crude Oil and Petroleum Products by PAD District," of the *Petroleum Supply Annual*, 1986 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.

Table B1. New Basis Stocks[1]
(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	1,454
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
Propane/Propylene	69	57	55
Liquefied Petroleum Gases	128	102	108
Other Petroleum Products	207	219	210

[1] Stocks as of December 31.

Note 9. Descriptive Monthly Statistics

The universe of each of the Petroleum Supply surveys (refinery, bulk terminal, pipeline, crude oil stock, import, etc.) is relatively small and ever-changing due to company formations, shutdowns, mergers and splits. The frequency distributions of the petroleum supply variables are non-normal, highly variable, positive skewed and leptokurtic; that is, there are many small units and few large ones. Zeros often dominate the responses; that is, not all of the sampling units produce and/or store all products.

The statistics described in Table B3 were calculated from the 1996 monthly surveys and display the following petroleum supply variables:

(1) The number of active sampling units (respondents).

Table B2. 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.

(2) The number of sampling units reporting nonzero values (nonzero respondents).

(3) The average of nonzero values reported in thousand barrels (average).

(4) The standard deviation of nonzero values reported in thousand barrels (standard deviation).

Note 10. Practical Limitations of Data Collection Efforts

Crude Oil Lease Stock Adjustment

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

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

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

Trans Alaskan Pipeline System Adjustment

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

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

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

Finished Motor Gasoline Product Supplied Adjustment

Beginning with the reporting of January 1993 data, adjustments were made to the product supplied series for finished motor gasoline. It was recognized that motor gasoline statistics published by the EIA through 1992 were underreported because the reporting system was not collecting all fuel ethanol and motor gasoline blending components being blended downstream from the refinery. The EIA was able to quantify these volumes and make corrective adjustments for 1992 in 1993 (refer to Table B4 in the 1994 *PSA*).

Fuel Ethanol Adjustment

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

Beginning in January 1993, an estimate for the missing fuel ethanol blended into motor gasoline was calculated (refer to Table B4). This estimate was calculated as production (from the EIA-819M, "Monthly Oxygenate Telephone Report"), plus imports (from the EIA-814, "Monthly Imports Report"), minus inputs at refineries (from the EIA-810, "Monthly Refinery Report"), plus or minus stock change (from the EIA-819M survey). This estimate for the amount of fuel ethanol blended into motor gasoline was added to Table 1 for Natural Gas Liquids Field Production (line 14) and in the Field Production column for finished motor gasoline in Tables 2 through 13 published in the *PSA*.

Table B3. Descriptive Statistics for Selected Petroleum Supply Variables[1], 2002

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Refinery Gross Input to Atmospheric Crude Oil Distillation Units												
Respondents	278	279	279	278	278	279	315	339	344	349	349	353
Nonzero Respondents	141	144	144	145	144	146	146	146	146	144	144	143
Average	3230	2821	3170	3225	3300	3208	3326	3306	3113	3146	3222	3299
Standard Deviation	3217	2868	3075	3158	3262	3156	3203	3210	3023	3081	3206	3280
Refinery Crude Oil Input												
Respondents	278	279	279	278	278	279	315	339	344	349	349	353
Nonzero Respondents	148	152	152	152	151	152	152	152	152	150	149	149
Average	3034	2635	2962	3025	3141	3039	3147	3128	2933	2956	3051	3100
Standard Deviation	3210	2851	3072	3124	3234	3138	3150	3187	2975	3034	3179	3246
Refinery Finished Motor Gasoline Gross Production												
Respondents	278	279	279	278	278	279	315	339	344	349	349	353
Nonzero Respondents	206	202	201	197	194	196	225	242	253	266	269	270
Average	1209	1104	1230	1280	1342	1286	1182	1118	1001	981	994	1022
Standard Deviation	1500	1361	1532	1586	1641	1568	1562	1507	1408	1395	1449	1486
Refinery Distillate Fuel Oil Gross Production												
Respondents	278	279	279	278	278	279	315	339	344	349	349	353
Nonzero Respondents	141	143	140	146	143	144	145	144	144	144	143	144
Average	783	700	759	760	819	778	773	770	744	737	797	850
Standard Deviation	788	705	731	746	810	757	730	719	710	725	789	864
Refinery Residual Fuel Oil Gross Production												
Respondents	278	279	279	278	278	279	315	339	344	349	349	353
Nonzero Respondents	103	106	104	104	103	100	98	103	101	101	99	103
Average	197	170	191	178	187	172	189	185	190	190	207	199
Standard Deviation	249	224	263	239	267	212	230	230	264	271	304	265
Refinery Finished Gasoline Stocks												
Respondents	278	279	279	278	278	279	315	339	344	349	349	353
Nonzero Respondents	164	163	162	164	165	163	166	166	163	163	163	153
Average	307	307	297	300	290	291	287	279	284	261	284	319
Standard Deviation	313	324	294	321	305	318	305	291	307	283	297	356
Bulk Terminal Finished Motor Gasoline Stocks												
Respondents	241	240	240	241	241	240	241	241	241	241	240	241
Nonzero Respondents	109	108	108	109	109	108	110	109	108	109	109	109
Average	624	591	554	570	599	604	564	526	567	513	546	558
Standard Deviation	1211	1131	1047	1088	1176	1154	1091	1041	1097	1016	1074	1059
Pipeline Finished Motor Gasoline Stocks												
Respondents	82	83	82	82	82	83	83	83	83	83	83	83
Nonzero Respondents	50	51	51	51	50	49	50	50	51	51	50	49
Average	1027	1012	1017	1091	1103	1120	1103	1076	978	975	1046	1066
Standard Deviation	2154	1994	2040	2278	2167	2189	2210	2119	1950	2026	2165	2153
Refinery Distillate Fuel Oil Stocks												
Respondents	278	279	279	278	278	279	315	339	344	349	349	353
Nonzero Respondents	188	186	188	186	187	186	186	186	187	187	186	177
Average	227	224	207	228	220	223	225	227	224	214	217	232
Standard Deviation	383	356	327	379	375	400	392	419	371	355	346	365
Bulk Terminal Distillate Fuel Oil Stocks												
Respondents	241	240	240	241	241	240	241	241	241	241	240	241
Nonzero Respondents	149	149	149	149	149	150	152	153	152	149	151	152
Average	411	374	356	327	340	383	391	369	361	340	355	374
Standard Deviation	786	723	668	626	632	754	793	730	709	674	697	727
Pipeline Distillate Fuel Oil Stocks												
Respondents	82	83	82	82	82	83	83	83	83	83	83	83
Nonzero Respondents	51	53	49	52	52	53	53	52	51	52	53	52
Average	647	615	635	600	678	644	612	613	592	590	575	696
Standard Deviation	1528	1469	1441	1442	1676	1648	1449	1460	1345	1348	1361	1757
Refinery Residual Fuel Oil Stocks												
Respondents	278	279	279	278	278	279	315	339	344	349	349	353
Nonzero Respondents	116	116	117	117	116	116	116	117	117	118	119	117
Average	148	142	122	142	136	124	140	125	125	125	127	122
Standard Deviation	263	230	179	245	215	205	257	228	200	215	237	236
Bulk Terminal Residual Fuel Oil Stocks												
Respondents	241	240	240	241	241	240	241	241	241	241	240	241
Nonzero Respondents	47	47	47	47	47	47	46	47	46	46	45	45
Average	513	477	425	381	384	388	375	368	399	409	453	373
Standard Deviation	890	770	730	665	657	682	596	664	674	751	733	625
Refinery Crude Oil Stocks												
Respondents	278	279	279	278	278	279	315	339	344	349	349	353
Nonzero Respondents	153	153	153	153	153	153	153	153	153	153	153	153
Average	618	696	709	712	736	680	691	676	603	655	610	595
Standard Deviation	648	717	749	721	778	728	728	737	654	733	679	624
Pipeline/Tank Farm Crude Oil Stocks												
Respondents	157	158	155	154	153	153	154	154	154	153	153	153
Nonzero Respondents	104	105	102	102	102	101	103	103	103	102	103	103
Average	1929	1867	1975	1898	1889	1892	1702	1671	1516	1656	1666	1598
Standard Deviation	4427	4366	5090	4817	4883	4930	4312	3651	3337	3786	3882	3631

[1] The respondent averages and standard deviations exclude zero reporting companies.

Table B4. Finished Motor Gasoline Product Supplied Adjustment, 1993 to Present (Thousand Barrels per Day)

Item/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1993													
Fuel Ethanol Adj	61	67	70	61	58	63	62	48	68	69	84	81	66
Motor Gas Blending	-59	-61	15	-32	-3	-5	-19	54	79	-72	-72	48	-10
Product Supplied	6,639	7,112	7,389	7,435	7,585	7,700	7,785	7,864	7,607	7,382	7,533	7,661	7,476
1994													
Fuel Ethanol Adj	86	73	76	71	69	63	65	73	59	89	82	82	74
Motor Gas Blending	33	-7	27	58	51	82	98	98	81	-16	56	113	57
Product Supplied	6,980	7,275	7,395	7,564	7,644	7,922	7,884	7,975	7,615	7,548	7,464	7,924	7,601
1995													
Fuel Ethanol Adj	66	66	79	74	58	81	49	36	57	72	91	58	65
Motor Gas Blending	8	37	56	86	131	113	46	110	35	89	28	29	64
Product Supplied	7,163	7,481	7,788	7,651	7,894	8,220	7,888	8,187	7,786	7,781	7,866	7,742	7,789
1996													
Fuel Ethanol Adj	58	53	49	37	27	14	9	20	23	36	44	38	34
Motor Gas Blending	61	75	(s)	-8	43	48	103	52	21	80	60	43	48
Product Supplied	7,271	7,599	7,792	7,873	8,071	8,088	8,165	8,343	7,662	8,093	7,915	7,794	7,891
1997													
Fuel Ethanol Adj	39	50	51	46	48	38	59	37	47	69	50	61	50
Motor Gas Blending	-20	61	-27	87	73	113	89	95	115	107	165	80	78
Product Supplied	7,301	7,668	7,796	8,064	8,139	8,288	8,496	8,233	8,023	8,141	7,965	8,065	8,017
1998													
Fuel Ethanol Adj	66	55	61	55	42	50	49	58	62	71	55	75	58
Motor Gas Blending	84	39	117	140	142	246	111	88	171	89	145	205	132
Product Supplied	7,618	7,711	8,004	8,312	8,279	8,520	8,680	8,568	8,310	8,378	8,167	8,451	8,253
1999													
Fuel Ethanol Adj	57	52	52	53	50	59	43	54	55	64	66	72	56
Motor Gas Blending	81	-13	20	134	46	214	192	128	102	212	156	165	120
Product Supplied	7,701	8,031	8,128	8,506	8,420	8,886	8,942	8,579	8,305	8,542	8,240	8,859	8,431
2000													
Fuel Ethanol Adj	60	47	62	62	76	52	68	73	66	74	73	76	66
Motor Gas Blending	255	208	178	158	198	125	80	158	155	107	83	319	169
Product Supplied	7,653	8,291	8,305	8,375	8,661	8,825	8,642	8,921	8,518	8,417	8,384	8,670	8,472
2001													
Fuel Ethanol Adj	80	65	61	59	64	40	96	52	71	93	63	58	67
Motor Gas Blending	264	121	289	303	196	210	213	245	196	193	175	252	222
Product Supplied	8,099	8,234	8,532	8,575	8,706	8,690	9,023	8,953	8,557	8,655	8,677	8,585	8,610
2002													
Fuel Ethanol Adj	60	68	40	75	78	66	66	48	56	58	80	62	63
Motor Gas Blending	184	214	174	233	339	287	269	252	177	172	208	235	229
Product Supplied	8,227	8,607	8,655	8,766	9,078	9,140	9,143	9,313	8,687	8,814	8,829	8,893	8,848

Note: Totals may not equal sum of components due to independent rounding.
Source: • Energy Information Administration, *Petroleum Supply Annual*, Volumes I and II.

An estimate for the total amount of gasohol produced with the ethanol is given as 10 times the estimated fuel ethanol blended (this assumes a 10 percent ethanol blend). This amount is added to the column labeled field production of "oxygenated gasoline" and subtracted from the field production of "other" finished gasoline. The PAD District level detail was obtained by allocating the national level estimates according to the percent of gasohol sales from the U.S. Department of Transportation, Federal Highway Administration, Monthly Motor Fuel Reported by States, 1991.

Motor Gasoline Blending Component Adjustment

Prior to 1993, the EIA published a "product supplied" for motor gasoline blending components. Since these components are to be blended into finished motor gasoline, there is no actual demand for this intermediate product. The EIA corrected this series by including the quantity of "product supplied" for motor gasoline blending components with "other" finished motor gasoline. This change was accomplished in Tables 2 through 13 by adding product supplied for motor gasoline blending components to

the column labeled field production of "other" motor gasoline, and subtracting it from the field production column for "motor gasoline blending components."

Fuel Ethanol Stock Adjustment

Total end-of-month stocks of fuel ethanol are underreported in the PSRS because of the inability to collect data from downstream fuel ethanol motor gasoline blenders. Total stocks of fuel ethanol are assumed to be those reported by ethanol producers on the Form EIA-819M, "Monthly Oxygenate Telephone Report." The difference between the stocks reported on the EIA-819M and the stocks reported in the PSRS (from refiners, bulk terminal and pipeline operators) is added to the stocks shown for bulk terminals. If the stocks for the PSRS are higher than those reported on the EIA-819M, no adjustment is made.

Note 11. 1981 Changes in the Petroleum Supply Reporting System

Petroleum statistics 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 B5 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.

Table B5. 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.

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.

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 B6 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.

Table B6. 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

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.

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 (Total) and 380 million barrels (Other Primary).

Note 12. 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.
- Number 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 401 degrees end-point and other-oils equal to or greater than 401 degrees end-point on Form EIA-817.
- Data aggregation for Petroleum Administration for Defense District (PADD) I was divided into three subdistricts on Forms EIA-812 and 817.
- Detailed categories of Gross Input to Crude Oil Distillation Units were eliminated, and only Total Gross Inputs are collected on Form EIA-810.
- Waterborne movements of crude oil and petroleum products between PADDs, on Form EIA-817, no longer reflect shipping and receiving States.
- Reporting of production and stocks of Number 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 13. 1984 Changes in the Petroleum Supply Reporting System

In January 1984, a number of changes in the reporting of natural gas liquids (NGLs) 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 B7 shows the product category under the new and old basis. 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 (Liquefied Petroleum Gases) and 210 million barrels (Other Petroleum Products).

Table B7. 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 B8. 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	—	—

A fifth survey, Form EIA-814, "Monthly Imports Report" (formerly Form ERA-60), was not modified. Therefore, in order 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 B8 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 B8 are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by Petroleum Administration for Defense Districts of exportation, due to the wide variation of components included in the mixed streams.

Note 14. 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 4-8) and by *PAD District of Processing* (Table 14).

The tables in the *Petroleum Supply Annual* that were changed due to the inclusion of inter-PAD District pipeline movements of crude oil are listed below:

- Tables 4 through 8, "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 20, "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 21, "Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts."
  - A line was added to report crude oil movements.
- Table 23, "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 15. 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* and were subsequently published in the *Petroleum Supply Annual* (PSA). Refer to Explanatory Note 8 for a detailed description of frames maintenance and updates.

Changes in Data Collection

- The unit of measure used on Form EIA-814, "Monthly Imports Report," has been changed from barrels to thousands of barrels.
- Unfinished oil imports data, previously reported as one product on the Form EIA-814, are now reported separately under four classifications. These classifications are:
  - 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-814.

Changes in Publication Tables

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

- Table 11, "Refinery Input of Crude Oil and Petroleum Products by PAD District."
  - Alaskan crude oil receipts were shown separately.
- Table 12, "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.
- Table 14, "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.
- Table 15, "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 18, "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 16. 1987 Changes in the Petroleum Supply Reporting System

Several changes to the Petroleum Supply Reporting System 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* (PSA).

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 *PSA* Tables 10 through 13, 18, 24, and 25.
- Fresh feed inputs to catalytic cracking units, hydrocracking units, and cokers were added to Table 11, "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 *PSA* statistics. The principal differences in the *PSA* 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 17. 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 are subsequently reflected in the *Petroleum Supply Annual* (PSA) publication.

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 the 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 the Form EIA-816, "Monthly Natural Gas Liquids Report."
- Fractionators were required to report only end-of-month stocks of NGLs on the 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 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 por-

Table B9. Conversion Table for 1989 PSA

Table Numbers									
Old	New	Old	New	Old	New	Old	New	Old	New
1	1	NA	9	12, 24	17	15	25	21	33
2	2	7	10	18, 25	18	27	26	22, 26	34
3	3	NA	11	13	19	16	27	23	35
4	4	8	12	14, 27	20	17	28		
NA	5	NA	13	15	21	NA	29		
5	6	9	14	15	22	18, 25	30		
NA	7	10	15	15	23	19	31		
6	8	11	16	15	24	20	32		

NA = Not Applicable

tion. 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 developed affecting 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*.

Changes in Publication Tables

- "Stock Withdrawal" was renamed "Stock Change" and was moved from Supply to Disposition in Tables 2 through 13. 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 2-13, 17, 18, 20, 32-35.
- PAD District Supply and Disposition tables (Tables 4 through 13) now display liquefied petroleum gases on a component basis.
- A table showing net imports by country for the current month (Table 29) was added.
- Table numbers were changed as a result of data additions and table reorganization. Table B9 is provided to show the new to old table numbers for the detailed statistics tables.
- Table 15, "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 on Table 10 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 17, "Net Refinery Production of Finished Petroleum Products by PAD and Refining District."
  - 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 24, was added.
- Table 18, "Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining District."
  - Stocks at refineries by Refining District were added from Table 18.
  - Stocks of residual fuel oil by percent sulfur content, previously published as Table 25, were added.

- Tables 21 through 25, “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.

- Table 20,"Imports of Crude Oil and Petroleum Products by PAD District."

  – Sulfur content categories for residual fuel oil, previously published as Table 27, were added.

- Table 28, “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 30, “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 Table 18.

  – Sulfur content categories for residual fuel oil, previously published as Table 25, were added.

Note 18. 1990 Changes in the Petroleum Supply Reporting System

Beginning with the May 1990 issue of the *Petroleum Supply Monthly* (PSM), 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 is also reflected in the corresponding table in the *Petroleum Supply Annual* (PSA).

Beginning with the 1991 March issue of the *PSM*, several changes were made to the Petroleum Supply Reporting System to provide additional data and to improve the usefulness of the publication. Although these changes were made in 1991, these changes have been incorporated into the 1990 *PSA* to provide consistent energy information.

Changes in Publication Tables

Summary Statistics Tables

- A new table (Table S7) has been added to display jet fuel supply and disposition.

- Table S8, “Other Petroleum Products Supply and Disposition” has been redesignated as Table S9. Jet fuel data are no longer included. Historical data have been revised to exclude jet fuel.

- Table S3, “Crude Oil and Petroleum Product Imports” has been expanded to display all Organization of Petroleum Exporting Countries (OPEC) and additional Non-OPEC countries. A separate column for crude oil imports has also been added for each country.

- Time periods have been included in table titles.

Figures

- Time periods have been included in figure titles.

- Sources have been provided for each figure.

- Bar graphs used to display end-of-month stocks have been replaced with line graphs.

Sources

The sources and explanatory notes for this section have been updated and are now located at the end of the Summary Statistics section.

Detailed Statistics Tables

- Table 1, “U.S. Petroleum Balance”

  – A line has been added to display jet fuel as a separate category for Total Products Supplied and Total Stocks (Lines 34 and 44, respectively).

- Imports of Crude Oil and Petroleum Products by PAD District

  – Residual fuel oil sulfur categories have been added.

- Imports of Crude Oil and Petroleum Products by Country of Origin

  – Residual fuel oil sulfur categories by country of origin have been eliminated. These categories are now reported on a PAD District basis.

  – Separate daily average columns have been added for crude oil and petroleum products.

Note 19. 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 are 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 oxygenates 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.

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 13. Supply and Disposition
  - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
  - Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/Hydrogen/Oxygenates for clarification.
  - 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 16. 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 17. 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, 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.

- Table 18. 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.

- Table 20. 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 21-25. 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.

- Table 27. 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.

- Table 28. Exports by Destination

  – Miscellaneous products category has been renamed Other Products to accommodate exports of other hydrocarbons/ oxygenates and motor gasoline blending components.

- Table 29. 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 30. 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 31. 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 32. 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 33. 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 34. 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 35. 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 (PSM)

- 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 oxygenates 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 oxygenates 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 oxygenates 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.

Note 20. 1994 Changes in the Petroleum Supply Reporting System

Effective with January 1994 data, several enhancements were made to the tables to reflect changes in the petroleum industry and to provide more meaningful petroleum statistics. These changes primarily affect data reported for imports, exports, and product supplied.

- On December 31, 1992, Ecuador withdrew as a member of the Organization of Petroleum Exporting Countries (OPEC). As of January 1994, imports of petroleum from Ecuador now appear under imports from Non-OPEC sources. No revision was made to 1993 data. This change is evident in Tables S3 and 35 through 44, 49 and 50.
- Exports data are now published for oxygenates and the sub-categories of finished motor gasoline (reformulated, oxygenated, and other) and distillate fuel oil (0.05% sulfur and under, and greater than 0.05% sulfur).
- Product supplied is now calculated for reformulated, oxygenated, and other finished motor gasoline as well as the sulfur categories of distillate fuel oil (0.05% sulfur and under, and greater than 0.05% sulfur).

Note 21. 1995 Changes in the Petroleum Supply Reporting System

- Annual U.S. refinery capacity data collection and publication normally presented each year in Volume 1 of the PSA has been moved to a biennial schedule (every other year). Collection and publication of January 1, 1996 refinery capacity data did not occur.
- Annual U.S. oxygenate production capacity data collection and publication normally presented each year in Volume 1 of the *PSA* has been eliminated. This information was first collected by EIA to effectively monitor the transition of reformulated motor gasoline into the market.

Note 22. 1997 Changes in the Petroleum Supply Reporting System

- During 1997, Zaire became the Democratic Republic of the Congo. Zaire has been changed to read Congo (Kinshasa). This change is evident in Tables 21 through 25, and Table 29.

Note 23. 1999 Changes in the Petroleum Supply Reporting System

- U.S. refinery capacity data collection and publication presented in Volume 1 of the *PSA* has been moved back to an annual schedule, effective with January 1, 2000 data.

Appendix C

Table C1. Revised[a] Crude Oil Production by PAD District and State, 2001
(Thousand Barrels)

PAD District and State	January	February	March	April	May	June	July
PAD District I	**747**	**654**	**709**	**702**	**751**	**697**	**689**
Florida	427	359	388	383	393	360	356
New York	13	14	15	15	17	16	19
Pennsylvania	184	166	181	178	206	194	184
Virginia	1	2	1	1	1	(s)	1
West Virginia	122	115	124	125	133	126	129
PAD District II	**13,991**	**12,716**	**14,729**	**14,101**	**14,224**	**13,982**	**14,263**
Illinois	932	861	963	926	1,003	901	926
Indiana	167	158	175	168	188	127	176
Kansas	2,747	2,381	2,973	2,763	2,803	2,804	2,758
Kentucky	212	227	266	267	288	243	258
Michigan	517	485	505	490	484	636	639
Missouri	7	7	8	8	8	8	8
Nebraska	251	224	251	241	255	247	240
North Dakota	2,764	2,480	2,738	2,634	2,731	2,568	2,674
Ohio	543	500	537	513	520	509	491
Oklahoma	5,711	5,266	6,175	5,949	5,803	5,806	5,950
South Dakota	105	97	106	103	105	101	109
Tennessee	35	31	34	40	36	33	35
PAD District III	**100,939**	**90,405**	**101,665**	**100,064**	**101,987**	**97,294**	**100,687**
Alabama	829	735	818	789	798	740	784
Arkansas	645	603	650	657	652	626	645
Louisiana[b]	8,738	8,191	9,044	8,838	9,200	8,791	9,033
Mississippi	1,684	1,544	1,727	1,764	1,711	1,573	1,594
New Mexico	5,852	5,449	5,866	5,754	5,922	5,530	5,734
Texas[b]	37,042	33,292	36,625	35,496	36,210	34,620	35,746
Federal Offshore Padd III	46,149	40,591	46,935	46,766	47,493	45,415	47,152
PAD District IV	**9,188**	**8,253**	**9,328**	**8,959**	**9,204**	**8,855**	**9,118**
Colorado	1,599	1,413	1,711	1,584	1,593	1,602	1,631
Montana	1,330	1,196	1,349	1,291	1,359	1,309	1,350
Utah	1,259	1,150	1,308	1,282	1,328	1,268	1,288
Wyoming	5,001	4,493	4,959	4,801	4,924	4,676	4,850
PAD District V	**55,405**	**50,438**	**56,802**	**53,909**	**54,531**	**52,023**	**53,536**
Alaska[b]	30,384	27,367	31,271	29,594	29,669	28,045	28,725
South Alaska	870	759	896	845	952	890	1,093
North Slope	29,515	26,608	30,375	28,750	28,717	27,155	27,632
Arizona	3	3	3	4	7	5	7
California[b]	22,148	20,300	22,422	21,675	21,968	21,406	22,163
Nevada	47	45	49	49	50	46	49
Federal Offshore Padd V	2,823	2,724	3,057	2,586	2,836	2,521	2,591
U.S. Total[b]	**180,270**	**162,467**	**183,232**	**177,734**	**180,697**	**172,850**	**178,292**
Daily Average[b]	**5,815**	**5,802**	**5,911**	**5,924**	**5,829**	**5,762**	**5,751**

This table contains updates on 2001 crude oil production statistics published in the *Petroleum Supply Annual* (PSA), 2001.

Statistics on crude oil production for States and for Federal offshore areas are reported to the Energy Information Administration (EIA) by State government agencies and by the Minerals Management Service, U.S. Department of the Interior. These data are updated periodically by the reporting agencies and are received by the EIA on an ongoing basis. At the time of publication of the 2001 PSA, the EIA had not received complete and/or updated statistics on crude oil production for several States. This table is provided to inform the user of updated monthly and annual crude oil production statistics for 2001, and are not subject to further revision by the EIA.

Table C1. Revised[a] Crude Oil Production by PAD District and State, 2001 (Continued)
(Thousand Barrels)

PAD District and State	August	September	October	November	December	Total	Daily Average
PAD District I	**717**	**684**	**705**	**657**	**641**	**8,352**	**23**
Florida	367	372	351	337	332	4,426	12
New York	16	14	16	16	13	183	1
Pennsylvania	196	178	204	180	182	2,233	6
Virginia	1	1	1	(s)	1	11	(s)
West Virginia	135	119	134	124	114	1,499	4
PAD District II	**14,002**	**13,349**	**14,349**	**13,587**	**14,043**	**167,338**	**458**
Illinois	962	853	959	907	922	11,115	30
Indiana	194	138	186	173	173	2,023	6
Kansas	2,825	2,596	2,762	2,640	2,684	32,736	90
Kentucky	259	216	263	240	230	2,970	8
Michigan	592	628	835	786	778	7,374	20
Missouri	8	8	7	7	7	90	(s)
Nebraska	248	242	250	236	237	2,922	8
North Dakota	2,675	2,582	2,655	2,562	2,630	31,693	87
Ohio	537	450	490	476	485	6,050	17
Oklahoma	5,562	5,501	5,807	5,430	5,765	68,725	188
South Dakota	109	105	107	104	104	1,255	3
Tennessee	31	30	28	26	28	386	1
PAD District III	**98,241**	**98,377**	**103,374**	**97,905**	**102,253**	**1,193,192**	**3,269**
Alabama	787	772	789	758	747	9,346	26
Arkansas	640	610	635	624	598	7,584	21
Louisiana[b]	8,740	8,482	8,760	8,513	8,589	104,918	287
Mississippi	1,558	1,536	1,707	1,502	1,628	19,530	54
New Mexico	5,819	5,644	5,960	5,678	5,789	68,998	189
Texas[b]	35,632	34,159	35,904	34,356	35,711	424,793	1,164
Federal Offshore Padd III	45,065	47,174	49,620	46,472	49,192	558,023	1,529
PAD District IV	**9,117**	**8,978**	**9,260**	**8,896**	**9,209**	**108,364**	**297**
Colorado	1,675	1,642	1,735	1,623	1,745	19,554	54
Montana	1,414	1,385	1,435	1,412	1,458	16,287	45
Utah	1,263	1,227	1,258	1,205	1,250	15,088	41
Wyoming	4,765	4,724	4,832	4,656	4,756	57,436	157
PAD District V	**53,834**	**50,962**	**52,291**	**54,917**	**57,254**	**645,901**	**1,770**
Alaska[b]	28,768	26,749	27,734	30,686	32,416	351,409	963
South Alaska	1,077	1,009	1,052	1,018	1,039	11,498	32
North Slope	27,691	25,740	26,682	29,668	31,378	339,911	931
Arizona	7	6	4	5	5	60	(s)
California[b]	22,121	21,391	21,807	21,355	21,913	260,667	714
Nevada	48	46	48	46	49	571	2
Federal Offshore Padd V	2,890	2,770	2,697	2,825	2,872	33,193	91
U.S. Total[b]	**175,911**	**172,350**	**179,980**	**175,963**	**183,401**	**2,123,148**	**5,817**
Daily Average[b]	**5,675**	**5,745**	**5,806**	**5,865**	**5,916**	**5,817**	**-**

[a] Data are based upon revisions received as of April 2003.

[b] Includes the following offshore production (thousand barrels): Alaska: State - 79,547; California: State - 16,972; Louisiana: State - 12,654; Texas: State - 875; U.S. Total, including Federal Offshore -701,265.

(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: Sources: State government agencies, U.S. Department of the Interior, Minerals Management Service, and EIA Reserves and Production Division estimates based on Form EIA-182, "Domestic Crude Oil First Purchase Report" data.

Appendix D

Northeast Heating Oil Reserve

On July 10, 2000, President Clinton directed the Department of Energy to establish the Northeast Heating Oil Reserve. The reserve is intended to reduce the risks presented by home heating oil shortages, such as the ones experienced in December 1996 and January-February 2000.

Maximum inventory of heating oil in the reserve is two million barrels. The Department of Energy believes that a two-million-barrel reserve will provide relief from weather-related shortages for approximately ten days, which is the time for ships to bring heating oil from the Gulf of Mexico to New York Harbor. Inventory for the reserve was acquired by exchanging crude oil from the Strategic Petroleum Reserve for heating oil to be delivered to the storage facilities.

For more information on the Northeast Heating Oil Reserve, please contact Mr. Nathan Harvey from the Office of Petroleum Reserves at (202) 586-4734.

Northeast Heating Oil Reserve inventories classified as "Distillate Fuel Oil - Greater than 0.05 percent sulfur" are not considered to be in the commercial sector and therefore are excluded from distillate fuel oil supply and disposition statistics in Energy Information Administration publications, such as the *Weekly Petroleum Status Report*, *Petroleum Supply Monthly*, and *This Week in Petroleum* (TWIP) on EIA's Home Page.

Northeast Heating Oil Reserve
(Thousand Barrels)

Terminal Operator	Location	December 31, 2002
First Reserve Terminal (Hess)	Woodbridge, NJ	1,000
Williams Energy Services (formerly Wyatt Morgan Stanley)	New Haven, CT	500
Motiva Enterprises LLC (Equiva)	New Haven, CT	350
Motiva Enterprises LLC (Equiva)	Providence, RI	150
Total		**2,000**

Source: Energy Information Administration.

Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH_3-(CH_2)n-OH (e.g., methanol, ethanol, and tertiary butyl alcohol).

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

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

API Gravity. An arbitrary scale expressing the gravity ordensity of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

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

The higher the API gravity, the lighter the compound. Light crudes generally exceed 38 degrees API and heavy crudes are commonly labeled as all crudes with an API gravity of 22 degrees or below. Intermediate crudes fall in the range of 22 degrees to 38 degrees API gravity.

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

Asphalt. A dark-brown-to-black cement-like material containing bitumens as the predominant constituent obtained by petroleum processing; used primarily for road construction. It 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. *Note:* 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^{o} to 750^{o} F (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

Aviation Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. *Note:* Data on blending components are not counted in data on finished aviation gasoline.

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

Barrel. A unit of volume equal to 42 U.S. gallons.

Barrels Per Calendar Day. The amount of input that a distillation facility can process under usual operating conditions. The amount is expressed in terms of capacity during a 24-hour period and reduces the maximum processing capability of all units at the facility under continuous operation (see **Barrels per Stream Day**) to account for the following limitations that may delay, interrupt, or slow down production:

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 due to such conditions as routine inspection, maintenance, repairs, and turnaround; and

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

Barrels Per Stream Day. The maximum number of barrels of input that a distillation facility can process within a 24-hour period when running at full capacity under optimal crude and product slate conditions with no allowance for downtime.

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

Blending Components. See Motor or Aviation Gasoline Blending Components.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

gasoline. Catalytic reforming is reported in two categories. They are:

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

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

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

Coal. A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

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

Conventional Gasoline. See **Other Finished Motor Gasoline.**

Crude Oil. A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include:

Small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included;

Small amounts of nonhydrocarbons produced from oil, such as sulfur and various metals;

Drip gases, and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oi lis refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

Crude oil is considered as either domestic or foreign, according to the following:

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

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

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

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

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

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

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

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

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery.

Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

No. 1 Distillate. A light petroleum distillate that can be used as either a diesel fuel (see ***No. 1 Diesel Fuel***) or a fuel oil. See ***No. 1 Fuel Oil***.

No. 1 Diesel Fuel. A light distillate fuel oil that has distillation temperatures of 550 degrees Fahrenheit at the 90-percent point and meets the specifications defined in ASTM Specification D 975. It is used in high-speed diesel engines generally operated under frequent speed and load changes, such as those in city buses and similar vehicles. See ***No. 1 Distillate***.

No. 1 Fuel Oil. A light distillate fuel oil that has distillation temperatures of 400 degrees Fahrenheit at the 10-percent recovery point and 550 degrees Fahrenheit at the 90-percent point and meets the specifications defined in ASTM Specification D 396. It is used primarily as fuel for portable outdoor stoves and portable outdoor heaters. See ***No. 1 Distillate***.

No. 2 Distillate. A petroleum distillate that can be used as either a diesel fuel (see ***No. 2 Diesel Fuel***) or a fuel oil. See ***No. 2 Fuel Oil***.

No. 2 Diesel Fuel. A fuel that has distillation temperatures of 500 degrees Fahrenheit at the 10-percent recovery point and 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 975. It is used in high speed diesel engines that are generally operated under uniform speed and load conditions, such as those in railroad locomotives, trucks, and automobiles. See ***No. 2 Distillate.***

Low Sulfur No. 2 Diesel Fuel. No. 2 diesel fuel that has a sulfur level no higher than 0.05 percent by weight. It is used primarily in motor vehicle diesel engines for on-highway use.

High Sulfur No. 2 Diesel Fuel. No. 2 diesel fuel that has a sulfur level above 0.05 percent by weight.

No. 2 Fuel Oil (Heating Oil). A distillate fuel oil that has distillation temperatures of 400 degrees Fahrenheit at the 10-percent recovery point and 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used in atomizing type burners for domestic heating or for moderate capacity commercial/industrial burner units. See ***No. 2 Distillate.***

No. 4 Fuel. A distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms with ASTM Specification D 396 or Federal Specification VV-F-815C and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities. It also includes No. 4 diesel fuel used for low- and medium-speed diesel engines and conforms to ASTM Specification D 975.

No. 4 Diesel Fuel. See **No. 4 Fuel.**

No. 4 Fuel Oil. See **No. 4 Fuel.**

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) ($CH_3)_3C0C_2H_5$. An oxygenate blend stock formed by the catalytic etherfication 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^{o} F. It is extracted from natural gas and refinery gas streams.

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

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

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

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, new supply of other hydrocarbons/

oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.

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

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

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

Examples:

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

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

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

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

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

Gasohol. A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration of 10 percent or less by volume. Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside carbon monoxide nonattainment areas are included in data on oxygenated gasoline. See **Oxygenates**.

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^{o} to 1000^{o} F.

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

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

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

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

Isobutane. See **Butane.**

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

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

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

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

Kerosene. A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for

use as a light source when burned in wick-fed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil. **See Kerosene-Type Jet Fuel.**

Kerosene-Type Jet Fuel. A kerosene-based product having a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used for commercial and military turbojet and turboprop aircraft engines.

Commercial. Kerosene-type jet fuel intended for use in commercial aircraft.

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

Lease Condensate. A mixture consisting primarily of pentanes and heavier hydrocarbons which is recovered as a liquid from natural gas in lease separation facilities. This category excludes natural gas liquids, such as butane and propane, which are recovered at downstream natural gas processing plants or facilities. **See Natural Gas Liquids**.

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

Liquefied Petroleum Gases (LPG). A group of hydrocarbon-based gases derived from crude oil refining or nautral gas fractionation. They include: ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene. For convenience of transportation, these gases are liquefied through pressurization.

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. Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacture of other products, or used as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Lubricants include all grades of lubricating oils from spindle oil to cylinder oil and those used in greases.

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

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

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

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

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

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D 4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 158 degrees Fahrenheit at the 10 percent recovery point to 365 to 374 degrees Fahrenheit at the 90 percent recovery point. "Motor Gasoline" includes conventional gasoline; all types of oxygenated gasoline, including gasohol; and reformulated gasoline, but excludes aviation gasoline. *Note:* Volumetric data on blending components, such as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

Reformulated Gasoline. Finished motor gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. *Note:* This category includes oxygenated fuels program reformulated gasoline (OPRG) but excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Oxygenated Gasoline (Including Gasohol). Finished motor gasoline, other than reformulated gasoline, having an oxygen content of 2.7 percent or higher by weight. Includes gasohol. *Note:* Oxygenated gasoline excludes oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB).

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

Other Finished or Conventional Gasoline. Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. *Note:* This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

Motor Gasoline Blending. Mechanical mixing of motor gasoline blending components, and oxygenates when required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

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

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

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

Naphtha Less Than 401^{o} F. See **Petrochemical Feedstocks.**

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range having an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees Fahrenheit, and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used primarily for military turbojet and turboprop aircraft engines because it has a lower freeze point than other aviation fuels and meets engine requirements at high altitudes and speeds.

Natural Gas. A gaseous mixture of hydrocarbon compounds, the primary one being **methane**.

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 Liquids. Those hydrocarbons in natural gas that are separated from the gas as liquids through the process of absorption, condensation, adsorption, or other methods in gas processing or cycling plants. Generally such liquids consist of propane and heavier hydrocarbons and are commonly referred to as lease condensate, natural gasoline, and liquefied petroleum gases. Natural gas liquids include natural gas plant liquids (primarily ethane, propane, butane, and isobutane; see **Natural Gas Plant Liquids**) and lease condensate (primarily pentanes produced from natural gas at lease separators and field facilities; see **Lease Condensate)**.

Natural Gas Plant Liquids. Those hydrocarbons in natural gas that are separated as liquids at natural gas processing plants, fractionating and cycling plants, and, in some instances, field facilities. Lease condensate is excluded. Products obtained include ethane; liquefied petroleum gases (propane, butanes, propane-butane mixtures, ethane-propane mixtures); isopentane; and other small quantities of finished products, such as motor gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

Natural Gas Processing Plant. Facilities designed to recover natural gas liquids from a stream of natural gas that may or may not have passed through lease separators and/or field separation facilities. These facilities control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

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

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

Normal Butane. See **Butane.**

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

Prior to January 1, 1993, Ecuador was a member of OPEC. Prior to January 1995, Gabon was a member of OPEC.

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

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

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

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

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

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

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

Other Oils Equal To or Greater Than 401^{o} 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. Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. Ethanol, Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

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^{o} F" and "Other Oils Equal To or Greater Than 401^{o} F."

Naphtha Less Than 401^{o} F *A* naphtha with a boiling range of less than 401^{o} F that is intended for use as a petrochemical feedstock.

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

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

Petroleum Coke. A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst

coke. The conversion is 5 barrels (of 42 U.S. gallons each) per short ton. Coke from petroleum has a heating value of 6.024 million Btu per barrel.

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

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

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

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

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

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

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

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

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

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

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

Propylene (C_3H_6). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

RBOB (Reformulated Gasoline BIendstock for Oxygenate Blending). A motor gasoline blending component which, when blended with a specified type and percentage of oxygenate, meets the definition of reformulated gasoline.

Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and oxygenates.

Refinery Input, Crude Oil. Total crude oil (domestic plus foreign) input to crude oil distillation units and other refinery processing units (cokers, etc.).

Refinery Input, Total. The raw materials and intermediate materials processed at refineries to produce finished petroleum products. They include crude oil, products of natural gas processing plants, unfinished oils, other hydrocarbons and oxygenates, motor gasoline and aviation gasoline blending components and finished petroleum products.

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

Refinery Yield. Refinery yield (expressed as a percentage) represents the percent of finished product produced from input of crude oil and net input of unfinished oils. It is calculated by dividing the sum of crude oil and net unfinished input into the individual net production of finished products. Before calculating the yield for finished motor gasoline, the input of natural gas liquids, other hydrocarbons and oxygenates, and net input of motor gasoline blending components must be subtracted from the net production of finished motor gasoline. Before calculating the yield for finished aviation gasoline, input of aviation gasoline blending components must be subtracted from the net production of finished aviation gasoline.

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

Residual Fuel Oil. A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government service and inshore powerplants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

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

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

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

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

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

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

Stock Change. The difference between stocks at the beginning of the reporting period and stocks at the end of the reporting period. *Note:* A negative number indicates a decrease (i.e., a drawdown) in stocks and a positive number indicates an increase (i.e., a buildup) in stocks during the reporting period.

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

Sulfur. A yellowish nonmetallic element, sometimes known as "brimstone." It is present at various levels of concentration in many fossil fuels whose combustion releases sulfur compounds that are considered harmful to the environment. Some of the most commonly used fossil fuels are categorized according to their sulfur content, with lower sulfur fuels usually selling at a higher price. *Note:* No. 2 Distillate fuel is currently reported as having either a 0.05 percent or lower sulfur level for on-highway vehicle use or a greater than 0.05 percent sulfur level for off-highway use, home heating oil, and commercial and industrial uses. Residual fuel, regardless of use, is classified as having either no more than 1 percent sulfur or greater than 1 percent sulfur. Coal is also classified as being low- sulfur at concentrations of 1 percent or less or high-sulfur at concentrations greater than 1 percent.

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 etherfication of isoamylene with methanol.

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

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

TBA (Tertiary butyl alcohol) $(CH_3)_3COH$. An alcohol primarily used as a chemical feedstock, a solvent or feedstock for isobutylene production for MTBE; produced as

a co-product of propylene oxide production or by direct hydration of isobutylene.

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

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

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

Unfinished Oils. All oils requiring further processing, except those requiring only mechanical blending. Unfinished oils are produced by partial refining of crude oil and include naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

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

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

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

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

Wax. *A* solid or semi-solid material consisting of a mixture of hydrocarbons obtained or derived from petroleum fractions, or through a Fischer-Tropsch type process, in which the straight chained paraffin series predominates. This includes all marketable wax, whether crude or refined, with a congealing point (ASTM D 938) between 100 and 200^{o} F and a maximum oil content (ASTM D 3235) of 50 weight percent.

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

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