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On The Cover: Artist's rendition of a wellhead at Bryan Mound in Texas which is part of the Strategic Petroleum Reserve program. This program develops underground storage areas to hold emergency supplies of petroleum. Since 1976, the Department of Energy has been involved in a major facilities development program to stockpile crude oil. The Strategic Petroleum Reserve has four underground crude oil storage sites in salt domes. These sites are organized into three distribution systems and connected by DOE pipelines to commercial crude oil pipeline networks and marine terminals for drawdown and distribution.

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Winter Fuels Report (October through March)		
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23rd-26th (monthly)	EPUB/WWW	Table H1 (Petroleum Supply Summary) and all Summary Statistics and Detailed Statistics Tables
23rd-26th (monthly)	COGIS	Table H1 (Petroleum Supply Summary), and all Summary Statistics and Detailed Statistics Tables
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Oxygenate Data		
15 working days after the report month	EPUB/WWW	Table D1 U.S. Summary Table D2 (Fuel Ethanol Production/Stocks) and Table D3 (MTBE Production/Stocks) Table D4 (MTBE Merchant and Captive)
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The *Petroleum Supply Annual* is prepared by the Energy Information Administration, Office of Oil and Gas, Kenneth A. Vagts, Director.

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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 1997 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 1997, 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 16 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 1997 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

This section includes a list of refinery shutdowns and reactivations during 1997, refinery sales during 1997, and refinery fuel use of crude oil and petroleum products during 1997. Annual U.S. refinery capacity data collection and publication normally presented each year in this section has been moved to a biennial schedule (every other year). The next year refinery capacity data collection will occur is 1999, and will present refinery capacity data as of January 1, 1999.

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 (1996 Revised Crude Oil Production) -Updated monthly and annual crude oil production statistics received after the publication of the 1996 *PSA*.

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Table S1. Crude Oil and Petroleum Products Overview, 1981 - 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
1981 Average	**10,230**	**8,572**	**1,609**	[g] **290**	[g] **-130**	**16,058**	**1,484**
1982 Average	**10,252**	**8,649**	**1,550**	**136**	**-283**	**15,296**	[g] **1,430**
1983 Average	**10,299**	**8,688**	**1,559**	[g] **214**	[g] **-234**	**15,231**	**1,454**
1984 Average	**10,554**	**8,879**	**1,630**	**199**	**81**	**15,726**	**1,556**
1985 Average	**10,636**	**8,971**	**1,609**	**50**	**-153**	**15,726**	**1,519**
1986 Average	**10,289**	**8,680**	**1,551**	**78**	**124**	**16,281**	**1,593**
1987 Average	**10,008**	**8,349**	**1,595**	**128**	**-87**	**16,665**	**1,607**
1988 Average	**9,818**	**8,140**	**1,625**	**1**	**-29**	**17,283**	**1,597**
1989 Average	**9,219**	**7,613**	**1,546**	**86**	**-129**	**17,325**	**1,581**
1990 Average	**8,994**	**7,355**	**1,559**	**-35**	**142**	**16,988**	**1,621**
1991 Average	**9,168**	**7,417**	**1,659**	**-42**	**32**	**16,714**	**1,617**
1992 Average	**8,996**	**7,171**	**1,697**	**-1**	**-68**	**17,033**	[g] **1,592**
1993 Average	**8,836**	**6,847**	**1,736**	**81**	**70**	**17,237**	**1,647**
1994 Average	**8,645**	**6,662**	**1,727**	**18**	**-2**	**17,718**	**1,653**
1995 January	8,764	6,682	1,787	-219	[g] -84	17,219	[g] 1,643
February	8,935	6,794	1,780	-49	-1,225	18,279	1,608
March	8,619	6,600	1,776	336	-552	17,484	1,601
April	8,720	6,604	1,794	-101	114	17,142	1,601
May	8,729	6,629	1,790	-132	464	17,293	1,612
June	8,607	6,579	1,740	-148	57	18,131	1,609
July	8,500	6,449	1,751	-397	897	17,147	1,624
August	8,498	6,447	1,730	-253	-73	18,044	1,614
September	8,467	6,416	1,757	-64	243	18,026	1,620
October	8,501	6,421	1,757	168	-589	17,651	1,607
November	8,662	6,585	1,797	263	-352	17,979	1,604
December	8,533	6,530	1,691	-505	-822	18,366	1,563
Average	**8,626**	**6,560**	**1,762**	**-93**	**-153**	**17,725**	**--**
1996 January	8,564	6,495	1,716	-8	-592	18,261	1,544
February	8,558	6,577	1,680	-63	-1,454	18,620	1,500
March	8,718	6,571	1,814	-132	-464	18,301	1,482
April	8,597	6,444	1,845	29	633	17,885	1,502
May	8,502	6,394	1,806	2	576	17,957	1,520
June	8,550	6,458	1,833	305	593	18,107	1,546
July	8,486	6,338	1,829	-244	358	18,211	1,550
August	8,535	6,360	1,858	-19	-130	18,658	1,545
September	8,623	6,482	1,872	-499	701	17,655	1,551
October	8,685	6,481	1,912	186	-630	19,171	1,538
November	8,730	6,476	1,915	-414	-117	18,535	1,522
December	8,738	6,506	1,876	-627	165	18,334	1,507
Average	**8,607**	**6,465**	**1,830**	**-124**	**-28**	**18,309**	**--**
1997 January	8,470	6,402	1,782	462	-679	18,554	1,501
February	8,708	6,514	1,867	-122	-557	18,398	1,482
March	8,646	6,452	1,876	520	444	17,863	1,512
April	8,604	6,441	1,824	197	4	18,559	1,518
May	8,633	6,474	1,822	230	1,172	18,293	1,561
June	8,610	6,442	1,827	-199	658	18,617	1,575
July	8,608	6,409	1,821	-343	-167	19,107	1,559
August	8,535	6,347	1,831	-283	643	18,565	1,570
September	8,679	6,486	1,845	95	642	18,562	1,592
October	8,624	6,467	1,813	393	-214	19,071	1,598
November	8,565	6,459	1,728	252	-195	18,578	1,600
December	8,662	6,531	1,773	-608	-675	19,250	1,560
Average	**8,611**	**6,452**	**1,817**	**51**	**93**	**18,620**	**--**

[a] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[b] Stocks are totals as of end of period.
[c] Includes crude oil, natural gas plant liquids, and other liquids. Beginning in 1993, fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants are also included.
[d] Includes stocks located in the Strategic Petroleum Reserve.
[e] Includes crude oil for storage in the Strategic Petroleum Reserve.
[f] Net Imports equal Imports minus Exports.
[g] In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. Bulk terminal and pipeline stocks of oxygenates were added beginning in January 1993. See Summary Statistics Explanatory Note 2.

Footnotes continued on following page.

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

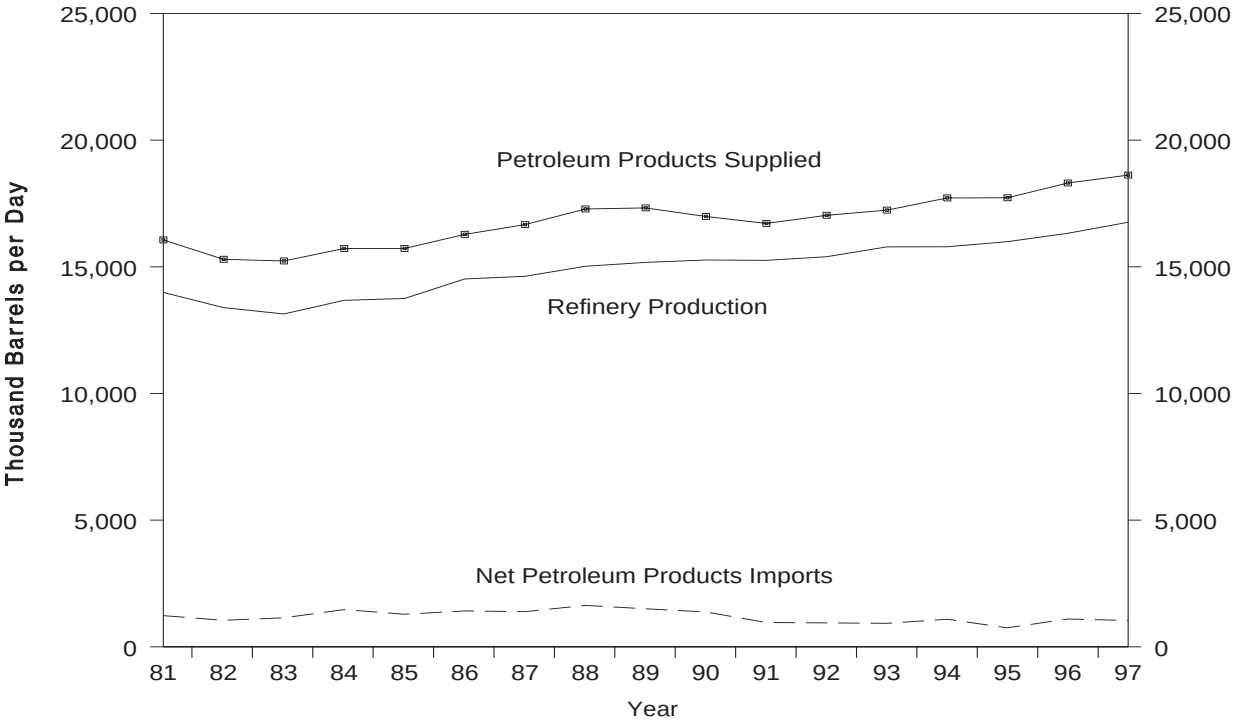
Year/Month	Imports			Exports			Net Imports[f]
	Total	Crude Oil[e]	Petroleum Products	Total	Crude Oil	Petroleum Products	
1981 Average	**5,996**	**4,396**	**1,599**	**595**	**228**	**367**	**5,401**
1982 Average	**5,113**	**3,488**	**1,625**	**815**	**236**	**579**	**4,298**
1983 Average	**5,051**	**3,329**	**1,722**	**739**	**164**	**575**	**4,312**
1984 Average	**5,437**	**3,426**	**2,011**	**722**	**181**	**541**	**4,715**
1985 Average	**5,067**	**3,201**	**1,866**	**781**	**204**	**577**	**4,286**
1986 Average	**6,224**	**4,178**	**2,045**	**785**	**154**	**631**	**5,439**
1987 Average	**6,678**	**4,674**	**2,004**	**764**	**151**	**613**	**5,914**
1988 Average	**7,402**	**5,107**	**2,295**	**815**	**155**	**661**	**6,587**
1989 Average	**8,061**	**5,843**	**2,217**	**859**	**142**	**717**	**7,202**
1990 Average	**8,018**	**5,894**	**2,123**	**857**	**109**	**748**	**7,161**
1991 Average	**7,627**	**5,782**	**1,844**	**1,001**	**116**	**885**	**6,626**
1992 Average	**7,888**	**6,083**	**1,805**	**950**	**89**	**861**	**6,938**
1993 Average	**8,620**	**6,787**	**1,833**	**1,003**	**98**	**904**	**7,618**
1994 Average	**8,996**	**7,063**	**1,933**	**942**	**99**	**843**	**8,054**
1995 January	8,015	6,505	1,509	978	113	865	7,037
February	8,345	6,546	1,799	1,062	95	967	7,283
March	9,006	7,391	1,615	948	68	880	8,059
April	8,465	7,038	1,427	998	155	842	7,467
May	8,709	7,325	1,384	876	73	803	7,832
June	9,558	7,927	1,631	919	101	818	8,639
July	8,863	7,265	1,598	895	103	792	7,969
August	9,061	7,437	1,624	821	61	759	8,240
September	9,736	8,007	1,729	805	74	731	8,930
October	8,577	7,075	1,502	962	50	912	7,615
November	9,074	7,302	1,772	1,002	118	884	8,072
December	8,612	6,916	1,696	1,135	127	1,008	7,477
Average	**8,835**	**7,230**	**1,605**	**949**	**95**	**855**	**7,886**
1996 January	9,364	7,303	2,061	1,070	89	981	8,294
February	8,390	6,612	1,778	1,048	92	956	7,342
March	9,092	7,215	1,877	867	94	773	8,225
April	9,429	7,371	2,058	976	148	828	8,453
May	10,007	8,029	1,977	891	37	854	9,116
June	9,938	7,958	1,980	895	130	766	9,043
July	9,820	7,800	2,020	945	139	806	8,876
August	9,986	8,041	1,944	896	44	852	9,090
September	9,142	7,353	1,789	1,104	147	957	8,038
October	9,837	7,701	2,136	1,045	134	911	8,792
November	9,244	7,344	1,900	1,024	172	852	8,220
December	9,417	7,307	2,110	1,013	96	917	8,404
Average	**9,478**	**7,508**	**1,971**	**981**	**110**	**871**	**8,498**
1997 January	9,763	7,492	2,271	1,038	141	897	8,725
February	9,561	7,434	2,127	1,017	229	787	8,544
March	9,833	7,754	2,079	933	136	796	8,900
April	10,114	7,987	2,127	937	92	845	9,177
May	10,818	8,653	2,165	876	26	851	9,941
June	10,736	8,759	1,978	955	57	898	9,782
July	10,008	8,178	1,830	1,012	70	942	8,996
August	10,465	8,621	1,844	1,074	110	964	9,390
September	10,537	8,840	1,697	997	122	875	9,540
October	10,792	8,927	1,865	1,066	152	914	9,726
November	9,948	8,366	1,582	934	32	901	9,014
December	9,328	7,653	1,675	1,197	131	1,066	8,130
Average	**10,162**	**8,225**	**1,936**	**1,003**	**108**	**896**	**9,158**

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.

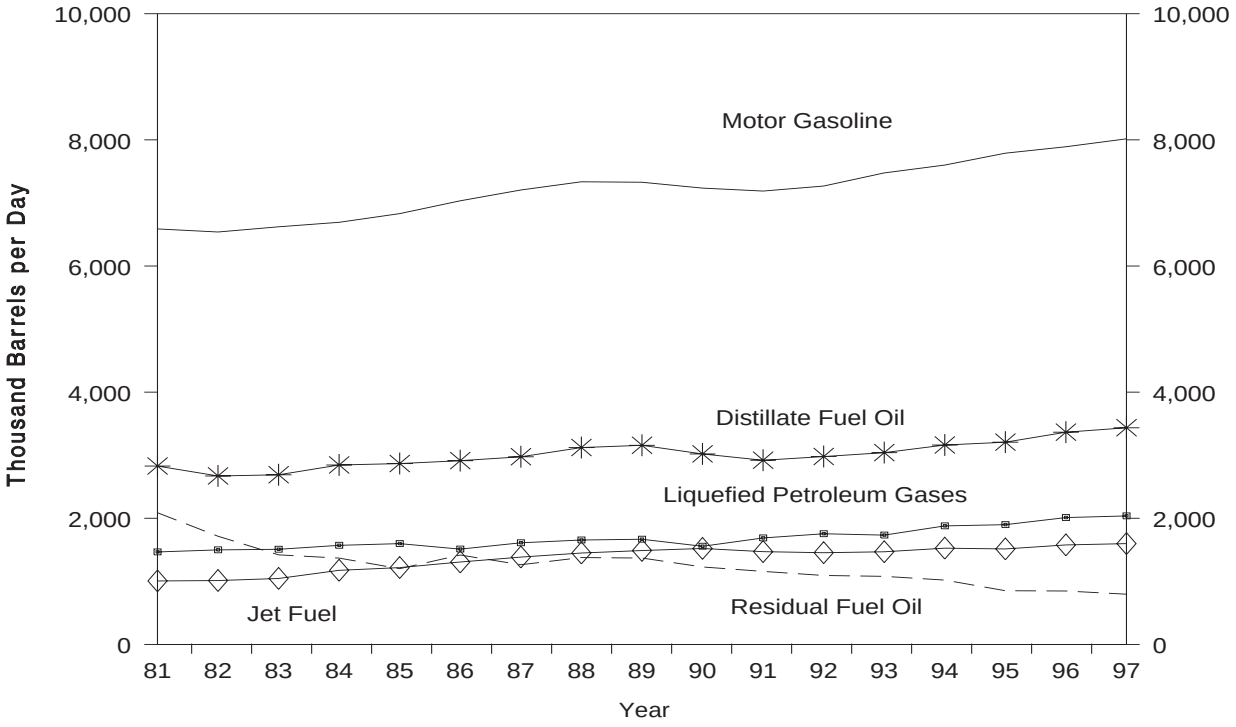
Source: See Summary Statistics Table and Figure Sources.

Figure S1. Petroleum Overview, 1981 - Present



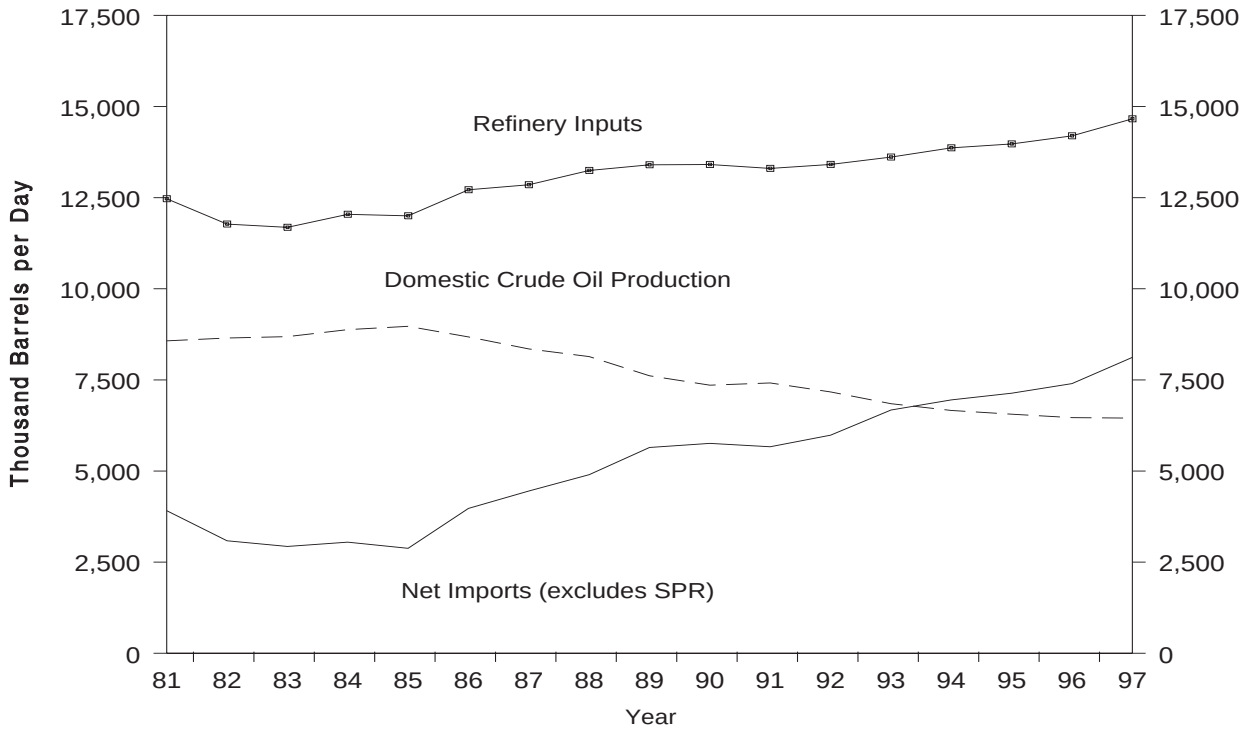
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S1. See Summary Statistics Table and Figure Sources.

Figure S2. Petroleum Products Supplied, 1981 - Present



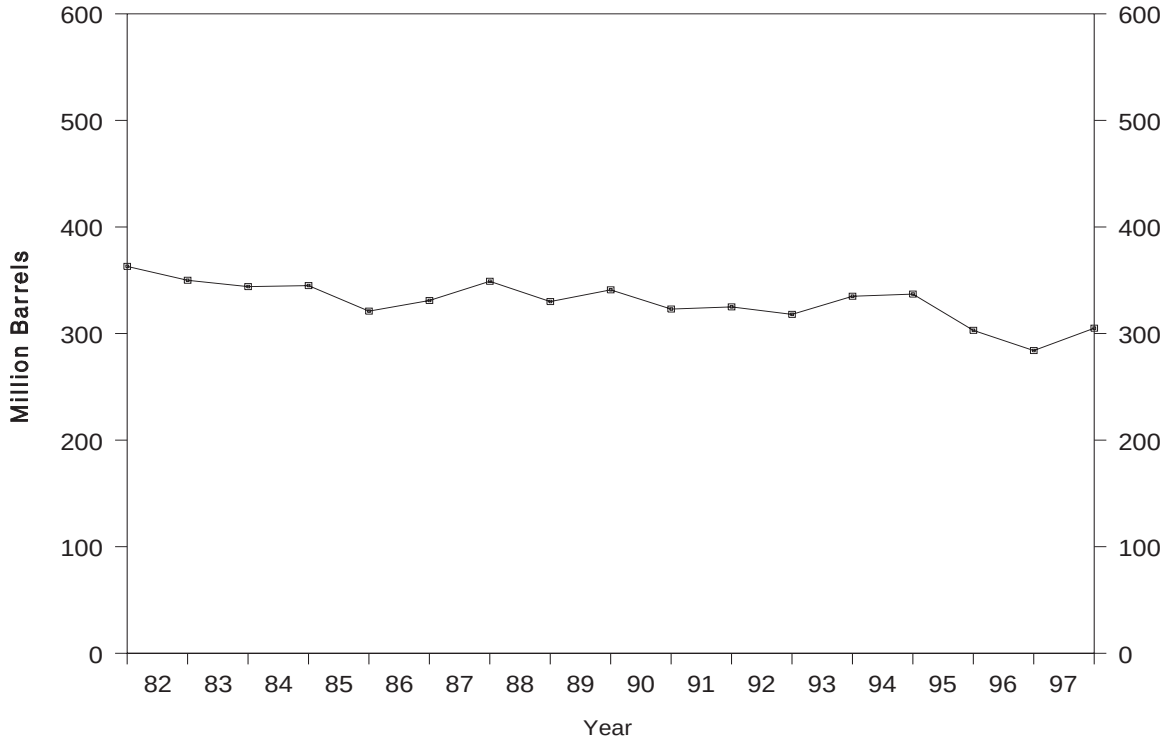
Source: Energy Information Administration, *Petroleum Supply Annual*, Tables S4 - S8. See Summary Statistics Table and Figure Sources.

Figure S3. Crude Oil Supply and Disposition, 1981 - Present



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

Figure S4. Crude Oil Ending Stocks,[1] 1981 - 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, 1981 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply						Disposition
	Field Production		Imports			Unaccounted for Crude Oil[c]	Crude Losses
	Total Domestic	Alaskan	Total	SPR	Other		
1981 Average	**8,572**	**1,609**	**4,396**	**256**	**4,141**	**83**	**5**
1982 Average	**8,649**	**1,696**	**3,488**	**165**	**3,323**	**71**	**3**
1983 Average	**8,688**	**1,714**	**3,329**	**234**	**3,096**	**114**	**2**
1984 Average	**8,879**	**1,722**	**3,426**	**197**	**3,229**	**185**	**2**
1985 Average	**8,971**	**1,825**	**3,201**	**118**	**3,083**	**145**	**1**
1986 Average	**8,680**	**1,867**	**4,178**	**48**	**4,130**	**139**	**(s)**
1987 Average	**8,349**	**1,962**	**4,674**	**73**	**4,601**	**145**	**(s)**
1988 Average	**8,140**	**2,017**	**5,107**	**51**	**5,055**	**196**	**(s)**
1989 Average	**7,613**	**1,874**	**5,843**	**56**	**5,787**	**200**	**(s)**
1990 Average	**7,355**	**1,773**	**5,894**	**27**	**5,867**	**258**	**(s)**
1991 Average	**7,417**	**1,798**	**5,782**	**0**	**5,782**	**195**	**(s)**
1992 Average	**7,171**	**1,714**	**6,083**	**10**	**6,073**	**258**	**(s)**
1993 Average	**6,847**	**1,582**	**6,787**	**15**	**6,772**	**168**	**(s)**
1994 Average	**6,662**	**1,559**	**7,063**	**12**	**7,051**	**266**	**(s)**
1995 January	6,682	1,575	6,505	0	6,505	318	(s)
February	6,794	1,578	6,546	0	6,546	78	0
March	6,600	1,525	7,391	0	7,391	-101	(s)
April	6,604	1,511	7,038	0	7,038	237	0
May	6,629	1,518	7,325	0	7,325	296	0
June	6,579	1,484	7,927	0	7,927	6	0
July	6,449	1,401	7,265	0	7,265	402	0
August	6,447	1,432	7,437	0	7,437	207	(s)
September	6,416	1,377	8,007	0	8,007	-5	0
October	6,421	1,475	7,075	0	7,075	328	(s)
November	6,585	1,472	7,302	0	7,302	334	0
December	6,530	1,466	6,916	0	6,916	193	0
Average	**6,560**	**1,484**	**7,230**	**0**	**7,230**	**193**	**(s)**
1996 January	6,495	1,444	7,303	0	7,303	20	0
February	6,577	1,482	6,612	0	6,612	413	0
March	6,571	1,454	7,215	0	7,215	-25	0
April	6,444	1,367	7,371	0	7,371	665	(s)
May	6,394	1,341	8,029	0	8,029	61	0
June	6,458	1,419	7,958	0	7,958	594	0
July	6,338	1,317	7,800	0	7,800	121	(s)
August	6,360	1,327	8,041	0	8,041	54	0
September	6,482	1,401	7,353	0	7,353	303	0
October	6,481	1,379	7,701	0	7,701	420	0
November	6,476	1,403	7,344	0	7,344	148	0
December	6,506	1,392	7,307	0	7,307	-153	0
Average	**6,465**	**1,393**	**7,508**	**0**	**7,508**	**215**	**(s)**
1997 January	6,402	1,380	7,492	0	7,492	378	0
February	6,514	1,384	7,434	0	7,434	-350	0
March	6,452	1,331	7,754	0	7,754	501	0
April	6,441	1,330	7,987	0	7,987	167	0
May	6,474	1,303	8,653	0	8,653	257	0
June	6,442	1,260	8,759	0	8,759	-170	0
July	6,409	1,238	8,178	0	8,178	136	0
August	6,347	1,200	8,621	0	8,621	130	0
September	6,486	1,276	8,840	0	8,840	199	0
October	6,467	1,286	8,927	0	8,927	5	0
November	6,459	1,278	8,366	0	8,366	164	0
December	6,531	1,290	7,653	0	7,653	267	0
Average	**6,452**	**1,296**	**8,225**	**0**	**8,225**	**145**	**0**

[a] Stocks are totals as of end of period.
[b] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[c] Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.
[d] Previously published as crude used directly.
[e] Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.
Footnotes continued on following page.

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

Year/Month		Disposition					Ending Stocks[a] (Million Barrels)		
		Stock Change[b]							
		SPR	Other	Refinery Inputs	Exports	Product Supplied	Total	SPR	Other Primary
1981	**Average**	**336**	[e]**-46**	**12,470**	**228**	[d]**58**	**594**	**230**	**363**
1982	**Average**	**174**	**-38**	**11,774**	**236**	[d]**59**	[e]**644**	**294**	[e]**350**
1983	**Average**	**234**	[e]**-20**	**11,685**	**164**	**66**	**723**	**379**	**344**
1984	**Average**	**195**	**4**	**12,044**	**181**	**64**	**796**	**451**	**345**
1985	**Average**	**117**	**-67**	**12,002**	**204**	**60**	**814**	**493**	**321**
1986	**Average**	**50**	**28**	**12,716**	**154**	**49**	**843**	**512**	**331**
1987	**Average**	**80**	**49**	**12,854**	**151**	**34**	**890**	**541**	**349**
1988	**Average**	**52**	**-51**	**13,246**	**155**	**40**	**890**	**560**	**330**
1989	**Average**	**56**	**30**	**13,401**	**142**	**28**	**921**	**580**	**341**
1990	**Average**	**16**	**-51**	**13,409**	**109**	**24**	**908**	**586**	**323**
1991	**Average**	**-47**	**5**	**13,301**	**116**	**18**	**893**	**569**	**325**
1992	**Average**	**17**	**-18**	**13,411**	**89**	**13**	**893**	**575**	**318**
1993	**Average**	**34**	**47**	**13,613**	**98**	**10**	**922**	**587**	**335**
1994	**Average**	**13**	**5**	**13,866**	**99**	**9**	**929**	**592**	**337**
1995	January	(s)	-219	13,604	113	7	922	592	330
	February	(s)	-49	13,365	95	8	921	592	329
	March	(s)	336	13,480	68	7	931	592	339
	April	(s)	-101	13,817	155	7	928	592	336
	May	(s)	-132	14,303	73	7	924	592	332
	June	(s)	-148	14,553	101	5	920	592	328
	July	(s)	-397	14,403	103	7	907	592	316
	August	(s)	-253	14,276	61	6	899	592	308
	September	(s)	-63	14,402	74	6	898	592	306
	October	(s)	169	13,598	50	8	903	592	311
	November	-1	264	13,833	118	7	911	592	319
	December	(s)	-505	14,011	127	6	895	592	303
	Average	**(s)**	**-93**	**13,973**	**95**	**7**	**--**	**--**	**--**
1996	January	(s)	-8	13,728	89	11	895	592	303
	February	(s)	-62	13,564	92	8	893	592	301
	March	-80	-52	13,793	94	7	889	589	300
	April	-88	117	14,295	148	6	890	586	303
	May	-22	24	14,439	37	7	890	586	304
	June	-45	350	14,569	130	6	899	584	314
	July	-50	-194	14,359	139	5	891	583	308
	August	-172	153	14,424	44	6	891	578	313
	September	-130	-368	14,484	147	6	876	574	302
	October	-1	187	14,277	134	5	882	574	308
	November	-127	-288	14,204	172	5	869	570	299
	December	-129	-498	14,185	96	6	850	566	284
	Average	**-71**	**-53**	**14,195**	**110**	**6**	**--**	**--**	**--**
1997	January	-75	537	13,664	141	5	864	563	301
	February	(s)	-121	13,485	229	6	861	563	297
	March	(s)	520	14,047	136	5	877	563	313
	April	(s)	197	14,303	92	3	883	563	319
	May	(s)	230	15,123	26	4	890	563	326
	June	(s)	-199	15,170	57	2	884	563	320
	July	(s)	-343	14,994	70	2	873	563	310
	August	(s)	-283	15,271	110	(s)	864	563	301
	September	(s)	95	15,308	122	(s)	867	563	304
	October	(s)	393	14,854	152	0	879	563	316
	November	(s)	252	14,706	32	0	887	563	324
	December	(s)	-607	14,928	131	0	868	563	305
	Average	**-7**	**57**	**14,662**	**108**	**2**	**--**	**--**	**--**

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, 1981 - Present
(Thousand Barrels per Day)

Year/Month		Imports from Arab-OPEC Sources							
		Algeria		Iraq		Kuwait[b]		Libya	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	**Average**	**311**	**261**	**(s)**	**0**	**0**	**0**	**319**	**317**
1982	**Average**	**170**	**90**	**3**	**3**	**5**	**2**	**26**	**23**
1983	**Average**	**240**	**176**	**10**	**10**	**14**	**7**	**0**	**0**
1984	**Average**	**323**	**194**	**12**	**12**	**36**	**24**	**1**	**0**
1985	**Average**	**187**	**84**	**46**	**46**	**21**	**4**	**4**	**0**
1986	**Average**	**271**	**78**	**81**	**81**	**68**	**28**	**0**	**0**
1987	**Average**	**295**	**115**	**83**	**82**	**84**	**70**	**0**	**0**
1988	**Average**	**300**	**58**	**345**	**343**	**92**	**80**	**0**	**0**
1989	**Average**	**269**	**60**	**449**	**441**	**157**	**155**	**0**	**0**
1990	**Average**	**280**	**63**	**518**	**514**	**86**	**79**	**0**	**0**
1991	**Average**	**253**	**44**	**0**	**0**	**6**	**6**	**0**	**0**
1992	**Average**	**196**	**24**	**0**	**0**	**51**	**39**	**0**	**0**
1993	**Average**	**220**	**24**	**0**	**0**	**353**	**344**	**0**	**0**
1994	**Average**	**243**	**21**	**0**	**0**	**312**	**307**	**0**	**0**
1995	January	153	0	0	0	130	120	0	0
	February	358	64	0	0	346	324	0	0
	March	196	19	0	0	252	252	0	0
	April	251	31	0	0	171	164	0	0
	May	163	36	0	0	208	204	0	0
	June	277	39	0	0	260	259	0	0
	July	257	11	0	0	195	195	0	0
	August	298	65	0	0	180	175	0	0
	September	250	20	0	0	187	182	0	0
	October	229	39	0	0	250	244	0	0
	November	241	0	0	0	238	238	0	0
	December	152	0	0	0	215	215	0	0
	Average	**234**	**27**	**0**	**0**	**218**	**213**	**0**	**0**
1996	January	313	38	0	0	148	145	0	0
	February	200	16	0	0	216	216	0	0
	March	241	38	0	0	127	127	0	0
	April	211	2	0	0	201	201	0	0
	May	340	0	0	0	230	230	0	0
	June	313	0	0	0	388	388	0	0
	July	305	0	0	0	266	266	0	0
	August	323	0	0	0	271	266	0	0
	September	186	0	0	0	236	236	0	0
	October	209	0	0	0	260	260	0	0
	November	214	3	0	0	228	228	0	0
	December	214	0	14	14	262	262	0	0
	Average	**256**	**8**	**1**	**1**	**236**	**235**	**0**	**0**
1997	January	282	0	0	0	209	209	0	0
	February	319	0	0	0	172	172	0	0
	March	309	0	35	35	315	315	0	0
	April	320	23	84	84	204	204	0	0
	May	290	0	102	102	128	128	0	0
	June	349	0	115	115	361	361	0	0
	July	291	0	88	88	331	331	0	0
	August	261	4	(s)	(s)	229	229	0	0
	September	259	6	0	0	322	322	0	0
	October	272	3	177	177	349	349	0	0
	November	267	7	220	220	220	220	0	0
	December	208	28	240	240	188	188	0	0
	Average	**285**	**6**	**89**	**89**	**253**	**253**	**0**	**0**

See footnotes at end of table.

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

Year/Month	Imports from Arab-OPEC Sources						Total Arab OPEC	
	Qatar		Saudi Arabia[b]		United Arab Emirates			
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981 Average	**7**	**7**	**1,129**	**1,112**	**81**	**77**	**1,848**	**1,774**
1982 Average	**7**	**7**	**552**	**530**	**92**	**81**	**854**	**736**
1983 Average	**(s)**	**0**	**337**	**321**	**30**	**18**	**632**	**533**
1984 Average	**5**	**4**	**325**	**309**	**117**	**90**	**819**	**634**
1985 Average	**(s)**	**0**	**168**	**132**	**45**	**35**	**472**	**300**
1986 Average	**13**	**12**	**685**	**618**	**44**	**38**	**1,162**	**854**
1987 Average	**0**	**0**	**751**	**642**	**61**	**56**	**1,274**	**965**
1988 Average	**0**	**0**	**1,073**	**911**	**29**	**23**	**1,839**	**1,415**
1989 Average	**2**	**2**	**1,224**	**1,116**	**28**	**21**	**2,130**	**1,794**
1990 Average	**4**	**4**	**1,339**	**1,195**	**17**	**9**	**2,244**	**1,864**
1991 Average	**0**	**0**	**1,802**	**1,703**	**3**	**2**	**2,064**	**1,754**
1992 Average	**1**	**0**	**1,720**	**1,597**	**6**	**0**	**1,974**	**1,660**
1993 Average	**1**	**0**	**1,414**	**1,282**	**14**	**12**	**2,000**	**1,661**
1994 Average	**0**	**0**	**1,402**	**1,297**	**13**	**11**	**1,970**	**1,636**
1995 January	0	0	1,309	1,251	20	20	1,613	1,391
February	0	0	1,181	1,134	13	13	1,897	1,535
March	0	0	1,535	1,410	0	0	1,983	1,681
April	0	0	1,375	1,321	0	0	1,798	1,516
May	0	0	1,281	1,237	0	0	1,653	1,477
June	0	0	1,287	1,221	12	1	1,835	1,520
July	0	0	1,265	1,165	0	0	1,716	1,371
August	0	0	1,340	1,245	20	20	1,838	1,505
September	0	0	1,474	1,357	29	0	1,941	1,559
October	0	0	1,260	1,181	14	0	1,753	1,464
November	0	0	1,429	1,326	10	10	1,918	1,574
December	0	0	1,378	1,263	0	0	1,745	1,478
Average	**0**	**0**	**1,344**	**1,260**	**10**	**5**	**1,806**	**1,505**
1996 January	0	0	1,398	1,334	0	0	1,859	1,517
February	0	0	1,128	1,053	0	0	1,544	1,285
March	0	0	1,422	1,318	0	0	1,790	1,484
April	0	0	1,288	1,200	0	0	1,700	1,403
May	0	0	1,518	1,414	0	0	2,087	1,643
June	0	0	1,138	1,035	11	11	1,850	1,433
July	0	0	1,548	1,371	4	4	2,123	1,642
August	0	0	1,477	1,333	0	0	2,070	1,599
September	0	0	1,355	1,255	0	0	1,777	1,491
October	0	0	1,357	1,209	17	17	1,844	1,486
November	0	0	1,297	1,201	0	0	1,738	1,432
December	0	0	1,400	1,236	0	0	1,889	1,511
Average	**0**	**0**	**1,363**	**1,248**	**3**	**3**	**1,859**	**1,496**
1997 January	0	0	1,344	1,253	0	0	1,835	1,462
February	0	0	1,361	1,250	0	0	1,852	1,421
March	0	0	1,292	1,157	0	0	1,950	1,506
April	15	0	1,573	1,408	0	0	2,197	1,720
May	0	0	1,475	1,333	0	0	1,996	1,564
June	0	0	1,299	1,174	6	0	2,130	1,650
July	0	0	1,313	1,188	14	0	2,037	1,607
August	0	0	1,636	1,516	0	0	2,127	1,750
September	0	0	1,599	1,511	0	0	2,180	1,839
October	16	0	1,377	1,282	0	0	2,191	1,812
November	0	0	1,308	1,257	0	0	2,015	1,704
December	15	0	1,311	1,192	0	0	1,962	1,649
Average	**4**	**0**	**1,407**	**1,293**	**2**	**0**	**2,040**	**1,641**

See footnotes at end of table.

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

Year/Month	Imports from Other-OPEC Sources							
	Ecuador[c]		Gabon		Indonesia		Iran	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981 Average	**48**	**38**	**35**	**35**	**366**	**318**	**0**	**0**
1982 Average	**42**	**32**	**40**	**40**	**248**	**226**	**35**	**35**
1983 Average	**61**	**56**	**59**	**59**	**338**	**315**	**48**	**48**
1984 Average	**55**	**47**	**58**	**57**	**343**	**304**	**10**	**10**
1985 Average	**67**	**56**	**52**	**51**	**314**	**292**	**27**	**27**
1986 Average	**77**	**64**	**26**	**25**	**318**	**297**	**19**	**19**
1987 Average	**29**	**23**	**35**	**35**	**285**	**262**	**98**	**98**
1988 Average	**47**	**33**	**16**	**15**	**205**	**186**	[g] **(s)**	[g] **(s)**
1989 Average	**89**	**80**	**50**	**49**	**183**	**158**	**0**	**0**
1990 Average	**49**	**38**	**64**	**64**	**114**	**98**	**0**	**0**
1991 Average	**63**	**53**	**84**	**84**	**111**	**102**	**32**	**32**
1992 Average	**65**	**62**	**124**	**123**	**78**	**70**	**0**	**0**
1993 Average	**81**	**78**	**152**	**151**	**81**	**65**	**0**	**0**
1994 Average	**(c)**	**(c)**	**194**	**194**	**111**	**92**	**0**	**0**
1995 January	(c)	(c)	(d)	(d)	38	38	0	0
February	(c)	(c)	(d)	(d)	129	87	0	0
March	(c)	(c)	(d)	(d)	51	29	0	0
April	(c)	(c)	(d)	(d)	95	87	0	0
May	(c)	(c)	(d)	(d)	65	36	0	0
June	(c)	(c)	(d)	(d)	96	51	0	0
July	(c)	(c)	(d)	(d)	104	96	0	0
August	(c)	(c)	(d)	(d)	122	95	0	0
September	(c)	(c)	(d)	(d)	94	66	0	0
October	(c)	(c)	(d)	(d)	87	68	0	0
November	(c)	(c)	(d)	(d)	107	73	0	0
December	(c)	(c)	(d)	(d)	72	41	0	0
Average	**(c)**	**(c)**	**(d)**	**(d)**	**88**	**64**	**0**	**0**
1996 January	(c)	(c)	(d)	(d)	52	43	0	0
February	(c)	(c)	(d)	(d)	44	43	0	0
March	(c)	(c)	(d)	(d)	58	55	0	0
April	(c)	(c)	(d)	(d)	57	57	0	0
May	(c)	(c)	(d)	(d)	49	15	0	0
June	(c)	(c)	(d)	(d)	72	65	0	0
July	(c)	(c)	(d)	(d)	56	48	0	0
August	(c)	(c)	(d)	(d)	53	49	0	0
September	(c)	(c)	(d)	(d)	26	26	0	0
October	(c)	(c)	(d)	(d)	125	82	0	0
November	(c)	(c)	(d)	(d)	36	12	0	0
December	(c)	(c)	(d)	(d)	81	32	0	0
Average	**(c)**	**(c)**	**(d)**	**(d)**	**59**	**44**	**0**	**0**
1997 January	(c)	(c)	(d)	(d)	55	38	0	0
February	(c)	(c)	(d)	(d)	51	39	0	0
March	(c)	(c)	(d)	(d)	18	15	0	0
April	(c)	(c)	(d)	(d)	40	32	0	0
May	(c)	(c)	(d)	(d)	86	86	0	0
June	(c)	(c)	(d)	(d)	57	50	0	0
July	(c)	(c)	(d)	(d)	73	66	0	0
August	(c)	(c)	(d)	(d)	24	21	0	0
September	(c)	(c)	(d)	(d)	90	83	0	0
October	(c)	(c)	(d)	(d)	42	42	0	0
November	(c)	(c)	(d)	(d)	79	74	0	0
December	(c)	(c)	(d)	(d)	84	68	0	0
Average	**(c)**	**(c)**	**(d)**	**(d)**	**58**	**51**	**0**	**0**

See footnotes at end of table.

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

Year/Month		Imports from Other-OPEC Sources						Total OPEC[c,d]	
		Nigeria		Venezuela		Total Other OPEC[c]			
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	**Average**	**620**	**611**	**406**	**147**	**1,476**	**1,149**	**3,323**	**2,922**
1982	**Average**	**514**	**510**	**412**	**155**	**1,291**	**998**	**2,146**	**1,734**
1983	**Average**	**302**	**301**	**422**	**164**	**1,231**	**944**	**1,862**	**1,477**
1984	**Average**	**216**	**207**	**548**	**253**	**1,230**	**878**	**2,049**	**1,512**
1985	**Average**	**293**	**280**	**605**	**306**	**1,358**	**1,012**	**1,830**	**1,312**
1986	**Average**	**440**	**437**	**793**	**416**	**1,674**	**1,259**	**2,837**	**2,113**
1987	**Average**	**535**	**529**	**804**	**488**	**1,787**	**1,435**	**3,060**	**2,400**
1988	**Average**	**618**	**607**	**794**	**439**	**1,681**	**1,281**	**3,520**	**2,696**
1989	**Average**	**815**	**800**	**873**	**495**	**2,010**	**1,582**	**4,140**	**3,376**
1990	**Average**	**800**	**784**	**1,025**	**666**	**2,052**	**1,650**	**4,296**	**3,514**
1991	**Average**	**703**	**683**	**1,035**	**668**	**2,028**	**1,622**	**4,092**	**3,377**
1992	**Average**	**681**	**665**	**1,170**	**826**	**2,117**	**1,746**	**4,092**	**3,406**
1993	**Average**	**740**	**722**	**1,300**	**1,010**	**2,354**	**2,026**	**4,354**	**3,687**
1994	**Average**	**637**	**624**	**1,334**	**1,034**	**2,277**	**1,944**	**4,247**	**3,580**
1995	January	625	617	1,442	1,061	2,105	1,717	3,718	3,108
	February	463	463	1,439	1,083	2,031	1,633	3,929	3,168
	March	687	676	1,499	1,208	2,236	1,913	4,220	3,595
	April	467	458	1,365	1,083	1,926	1,628	3,724	3,144
	May	603	592	1,480	1,176	2,148	1,804	3,801	3,281
	June	696	696	1,479	1,209	2,271	1,956	4,106	3,476
	July	696	696	1,536	1,162	2,336	1,954	4,052	3,325
	August	482	463	1,449	1,162	2,054	1,719	3,892	3,225
	September	851	841	1,655	1,288	2,600	2,195	4,541	3,753
	October	649	649	1,453	1,159	2,189	1,876	3,942	3,340
	November	646	637	1,507	1,140	2,260	1,851	4,178	3,424
	December	652	652	1,459	1,074	2,182	1,767	3,927	3,245
	Average	**627**	**621**	**1,480**	**1,151**	**2,196**	**1,835**	**4,002**	**3,341**
1996	January	690	663	1,518	1,148	2,261	1,854	4,120	3,371
	February	647	639	1,495	1,166	2,185	1,849	3,730	3,133
	March	594	548	1,719	1,341	2,371	1,943	4,161	3,427
	April	518	497	1,732	1,288	2,307	1,842	4,007	3,245
	May	705	705	1,700	1,333	2,454	2,054	4,541	3,697
	June	711	697	1,642	1,236	2,425	1,999	4,275	3,432
	July	750	696	1,690	1,332	2,496	2,076	4,619	3,718
	August	793	785	1,749	1,431	2,595	2,265	4,665	3,865
	September	694	677	1,708	1,269	2,428	1,972	4,204	3,463
	October	521	488	1,781	1,448	2,427	2,019	4,271	3,504
	November	465	453	1,728	1,303	2,229	1,767	3,967	3,199
	December	320	298	1,641	1,324	2,042	1,654	3,931	3,166
	Average	**617**	**595**	**1,676**	**1,303**	**2,353**	**1,942**	**4,211**	**3,438**
1997	January	548	522	1,641	1,215	2,243	1,775	4,078	3,237
	February	625	620	1,601	1,262	2,278	1,920	4,130	3,341
	March	542	541	1,769	1,348	2,329	1,904	4,279	3,410
	April	756	747	1,695	1,319	2,491	2,098	4,688	3,818
	May	992	975	1,927	1,449	3,005	2,510	5,001	4,073
	June	919	919	1,893	1,508	2,869	2,478	4,999	4,128
	July	580	571	1,738	1,418	2,391	2,055	4,429	3,662
	August	882	866	1,794	1,394	2,700	2,280	4,827	4,030
	September	769	769	1,822	1,478	2,680	2,329	4,860	4,168
	October	688	675	1,991	1,605	2,722	2,323	4,913	4,134
	November	649	649	1,689	1,418	2,416	2,141	4,431	3,845
	December	423	423	1,699	1,304	2,205	1,795	4,168	3,444
	Average	**698**	**689**	**1,773**	**1,394**	**2,529**	**2,134**	**4,569**	**3,775**

See footnotes at end of table.

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

Year/Month		Imports from Non-OPEC Sources[a]											
		Angola		Australia		Bahama Islands		Brazil		Canada		China, Peoples Republic of	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	**Average**	**49**	**45**	**5**	**0**	**74**	**0**	**23**	**14**	**447**	**164**	**18**	**0**
1982	**Average**	**44**	**42**	**5**	**(s)**	**65**	**0**	**47**	**19**	**482**	**214**	**40**	**8**
1983	**Average**	**78**	**71**	**4**	**0**	**125**	**0**	**41**	**2**	**547**	**274**	**34**	**6**
1984	**Average**	**90**	**85**	**38**	**25**	**88**	**0**	**60**	**(s)**	**630**	**341**	**46**	**15**
1985	**Average**	**110**	**104**	**37**	**21**	**40**	**0**	**61**	**0**	**770**	**468**	**59**	**36**
1986	**Average**	**112**	**102**	**41**	**30**	**37**	**0**	**50**	**0**	**807**	**570**	**90**	**68**
1987	**Average**	**192**	**180**	**58**	**49**	**37**	**0**	**84**	**0**	**848**	**608**	**82**	**63**
1988	**Average**	**212**	**203**	**64**	**59**	**32**	**0**	**98**	**0**	**999**	**681**	**88**	**82**
1989	**Average**	**284**	**279**	**36**	**31**	**34**	**0**	**82**	**0**	**931**	**630**	**80**	**76**
1990	**Average**	**237**	**236**	**53**	**47**	**37**	**0**	**49**	**0**	**934**	**643**	**80**	**77**
1991	**Average**	**254**	**254**	**26**	**21**	**35**	**0**	**22**	**0**	**1,033**	**743**	**91**	**87**
1992	**Average**	**336**	**336**	**19**	**17**	**36**	**0**	**20**	**0**	**1,069**	**797**	**90**	**84**
1993	**Average**	**336**	**336**	**19**	**18**	**28**	**0**	**33**	**0**	**1,181**	**900**	**51**	**50**
1994	**Average**	**331**	**322**	**17**	**16**	**29**	**0**	**31**	**1**	**1,272**	**983**	**65**	**64**
1995	January	273	262	21	21	6	0	1	0	1,345	1,011	64	62
	February	348	335	22	22	8	0	0	0	1,311	965	21	21
	March	427	416	0	0	7	0	0	0	1,208	891	54	54
	April	412	402	33	33	0	0	0	0	1,243	999	65	65
	May	419	407	21	21	0	0	0	0	1,406	1,167	35	35
	June	371	358	10	10	0	0	0	0	1,420	1,169	26	26
	July	295	287	42	42	0	0	8	0	1,279	1,028	80	80
	August	367	355	0	0	0	0	9	0	1,345	1,058	40	40
	September	444	444	0	0	8	0	43	0	1,252	959	73	73
	October	366	366	15	15	0	0	9	0	1,300	1,057	40	40
	November	318	318	(s)	0	0	0	12	0	1,403	1,069	66	66
	December	366	366	23	23	0	0	12	0	1,471	1,099	73	73
	Average	**367**	**360**	**16**	**16**	**2**	**0**	**8**	**0**	**1,332**	**1,040**	**53**	**53**
1996	January	312	312	21	21	0	0	1	0	1,490	1,117	86	86
	February	195	195	0	0	0	0	4	0	1,413	1,026	42	42
	March	257	257	0	0	12	0	1	0	1,322	1,001	53	53
	April	244	233	22	22	0	0	(s)	0	1,427	1,030	18	18
	May	403	379	22	22	0	0	9	0	1,373	1,056	19	19
	June	356	356	56	47	1	0	10	0	1,395	1,091	37	37
	July	292	292	11	0	0	0	28	0	1,393	1,093	78	78
	August	480	456	43	43	0	0	38	0	1,393	1,042	73	73
	September	391	391	47	27	0	0	13	0	1,276	1,000	64	64
	October	502	485	79	65	0	0	1	0	1,407	1,059	36	36
	November	353	353	35	25	0	0	1	0	1,516	1,151	104	104
	December	420	405	39	21	0	0	3	0	1,675	1,232	78	78
	Average	**351**	**344**	**31**	**25**	**1**	**0**	**9**	**0**	**1,424**	**1,075**	**57**	**57**
1997	January	485	485	21	21	0	0	1	0	1,571	1,162	84	84
	February	422	422	0	0	13	0	0	0	1,605	1,155	65	65
	March	467	461	37	37	0	0	4	0	1,508	1,158	120	120
	April	435	422	22	22	0	0	0	0	1,454	1,063	46	46
	May	374	369	61	44	0	0	0	0	1,571	1,203	21	21
	June	480	480	23	23	0	0	20	0	1,546	1,184	44	44
	July	416	416	77	48	0	0	21	0	1,547	1,201	0	0
	August	323	323	91	60	0	0	4	0	1,630	1,275	42	42
	September	428	428	67	27	0	0	3	0	1,577	1,250	49	43
	October	537	537	92	53	0	0	6	0	1,503	1,175	48	47
	November	480	480	23	23	0	0	2	0	1,559	1,213	22	22
	December	286	286	59	14	0	0	0	0	1,689	1,333	45	45
	Average	**427**	**425**	**48**	**31**	**1**	**0**	**5**	**0**	**1,563**	**1,198**	**49**	**48**

See footnotes at end of table.

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

Year/Month	Imports from Non-OPEC Sources[a]											
	Colombia		Ecuador[c]		Gabon[d]		Italy		Malaysia		Mexico	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981 Average	**1**	**0**	(c)	(c)	(d)	(d)	**11**	**0**	**36**	**33**	**522**	**469**
1982 Average	**5**	**0**	(c)	(c)	(d)	(d)	**18**	**(s)**	**20**	**18**	**685**	**645**
1983 Average	**10**	**0**	(c)	(c)	(d)	(d)	**18**	**(s)**	**4**	**3**	**826**	**766**
1984 Average	**8**	**0**	(c)	(c)	(d)	(d)	**45**	**(s)**	**1**	**0**	**748**	**659**
1985 Average	**23**	**0**	(c)	(c)	(d)	(d)	**60**	**(s)**	**3**	**1**	**816**	**715**
1986 Average	**87**	**57**	(c)	(c)	(d)	(d)	**76**	**0**	**12**	**11**	**699**	**621**
1987 Average	**148**	**115**	(c)	(c)	(d)	(d)	**54**	**1**	**13**	**12**	**655**	**602**
1988 Average	**134**	**106**	(c)	(c)	(d)	(d)	**65**	**5**	**19**	**19**	**747**	**674**
1989 Average	**172**	**136**	(c)	(c)	(d)	(d)	**34**	**3**	**39**	**39**	**767**	**716**
1990 Average	**182**	**140**	(c)	(c)	(d)	(d)	**58**	**2**	**41**	**40**	**755**	**689**
1991 Average	**163**	**123**	(c)	(c)	(d)	(d)	**47**	**3**	**24**	**24**	**807**	**759**
1992 Average	**126**	**102**	(c)	(c)	(d)	(d)	**55**	**0**	**10**	**10**	**830**	**787**
1993 Average	**171**	**141**	(c)	(c)	(d)	(d)	**31**	**0**	**11**	**10**	**919**	**863**
1994 Average	**161**	**146**	**91**	**91**	(d)	(d)	**22**	**0**	**10**	**0**	**984**	**939**
1995 January	223	214	130	130	193	193	4	0	21	21	925	892
February	139	129	107	107	186	186	1	0	0	0	922	890
March	239	221	104	104	159	159	8	0	0	0	1,006	961
April	175	175	146	146	163	163	13	0	7	0	993	963
May	171	153	116	116	206	206	0	0	0	0	1,118	1,063
June	225	202	137	137	357	357	13	0	7	0	1,138	1,076
July	223	223	87	87	311	311	4	0	0	0	1,188	1,166
August	330	311	116	104	246	246	0	0	0	0	1,201	1,172
September	252	236	61	61	216	216	0	0	14	14	1,311	1,238
October	199	190	12	12	270	270	11	0	13	5	894	854
November	240	229	102	102	271	271	4	0	16	16	1,114	1,060
December	200	190	51	51	171	171	3	0	17	11	996	978
Average	**219**	**207**	**97**	**96**	**229**	**229**	**5**	**0**	**8**	**6**	**1,068**	**1,027**
1996 January	186	183	126	120	171	171	2	0	0	0	1,281	1,245
February	149	139	81	81	191	191	0	0	24	17	1,083	1,062
March	262	250	131	125	154	154	13	0	4	0	1,176	1,165
April	280	280	158	143	212	212	(s)	0	0	0	1,303	1,273
May	263	249	100	95	154	154	0	0	47	40	1,288	1,222
June	250	247	138	133	218	218	16	0	19	11	1,351	1,274
July	204	198	113	96	191	191	19	0	0	0	1,216	1,186
August	221	217	83	71	156	156	8	0	5	0	1,157	1,142
September	213	213	48	48	104	104	15	0	0	0	1,355	1,306
October	265	252	66	60	226	226	4	0	31	0	1,213	1,189
November	267	267	111	111	253	253	13	0	7	0	1,157	1,110
December	246	218	89	72	184	184	8	0	0	0	1,346	1,301
Average	**234**	**226**	**104**	**96**	**184**	**184**	**8**	**0**	**11**	**6**	**1,244**	**1,207**
1997 January	227	226	112	107	62	62	8	0	32	0	1,324	1,280
February	248	248	110	110	262	262	27	0	7	7	1,277	1,241
March	260	257	148	148	217	217	5	0	33	0	1,310	1,249
April	255	255	73	73	203	203	26	0	33	0	1,448	1,416
May	272	266	109	104	210	210	9	0	9	0	1,429	1,408
June	228	228	132	132	226	226	0	0	32	24	1,401	1,382
July	235	225	122	122	335	335	0	0	28	0	1,366	1,347
August	250	250	128	128	203	203	2	0	23	15	1,452	1,448
September	289	289	143	143	271	271	0	0	37	29	1,410	1,395
October	321	321	143	143	235	235	8	0	19	19	1,526	1,500
November	322	322	91	91	256	256	0	0	8	0	1,460	1,453
December	350	350	66	66	288	288	5	0	7	0	1,215	1,192
Average	**271**	**270**	**115**	**114**	**230**	**230**	**7**	**0**	**23**	**8**	**1,385**	**1,360**

See footnotes at end of table.

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

Year/Month		Imports from Non-OPEC Sources[a]											
		Netherlands		Netherlands Antilles		Norway		Puerto Rico		Russia[f]		Spain	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	**Average**	**30**	**(s)**	**197**	**0**	**119**	**114**	**62**	**0**	**5**	**(s)**	**1**	**(s)**
1982	**Average**	**35**	**(s)**	**175**	**0**	**102**	**102**	**50**	**0**	**1**	**0**	**3**	**(s)**
1983	**Average**	**65**	**3**	**189**	**0**	**66**	**65**	**40**	**0**	**1**	**(s)**	**2**	**(s)**
1984	**Average**	**65**	**3**	**188**	**0**	**114**	**112**	**42**	**0**	**13**	**(s)**	**11**	**0**
1985	**Average**	**58**	**0**	**40**	**0**	**32**	**31**	**28**	**0**	**8**	**(s)**	**29**	**1**
1986	**Average**	**54**	**0**	**25**	**0**	**60**	**53**	**21**	**0**	**18**	**(s)**	**53**	**0**
1987	**Average**	**60**	**0**	**29**	**0**	**80**	**70**	**21**	**0**	**11**	**0**	**55**	**0**
1988	**Average**	**61**	**0**	**36**	**0**	**67**	**62**	**22**	**0**	**29**	**0**	**68**	**0**
1989	**Average**	**49**	**0**	**42**	**0**	**138**	**127**	**32**	**0**	**48**	**0**	**67**	**0**
1990	**Average**	**55**	**0**	**31**	**0**	**102**	**96**	**32**	**0**	**45**	**1**	**47**	**0**
1991	**Average**	**29**	**0**	**81**	**0**	**82**	**74**	**27**	**0**	**29**	**1**	**33**	**0**
1992	**Average**	**26**	**0**	**65**	**0**	**127**	**119**	**26**	**0**	**18**	**5**	**32**	**0**
1993	**Average**	**10**	**0**	**82**	**0**	**142**	**137**	**29**	**0**	**55**	**36**	**37**	**0**
1994	**Average**	**32**	**0**	**98**	**0**	**202**	**190**	**22**	**0**	**30**	**27**	**37**	**0**
1995	January	0	0	60	0	195	158	6	0	0	0	7	0
	February	17	0	58	0	194	164	7	0	0	0	9	0
	March	21	0	68	0	241	209	13	0	0	0	16	0
	April	3	0	0	0	315	291	9	0	0	0	16	7
	May	24	0	86	0	292	292	19	0	12	0	25	0
	June	37	0	50	0	370	370	16	0	15	0	27	0
	July	9	0	65	0	263	256	17	0	41	32	10	0
	August	21	0	62	0	279	264	26	0	136	98	21	0
	September	0	0	33	0	364	359	12	0	50	32	27	0
	October	31	0	48	0	163	163	15	0	0	0	6	0
	November	20	0	69	0	255	255	27	0	28	0	16	0
	December	0	0	24	0	348	316	15	0	15	0	12	5
	Average	**15**	**0**	**52**	**0**	**273**	**258**	**15**	**0**	**25**	**14**	**16**	**1**
1996	January	16	0	59	0	199	178	6	0	11	0	23	0
	February	38	0	101	0	236	221	17	0	14	0	23	0
	March	35	0	35	0	284	264	24	0	18	0	58	0
	April	20	0	50	0	375	357	17	0	0	0	36	0
	May	9	0	47	0	380	364	22	0	63	63	21	0
	June	26	0	52	0	434	408	25	0	14	14	12	0
	July	7	0	45	0	375	359	25	0	42	33	47	10
	August	14	0	53	0	369	362	33	0	32	32	21	0
	September	13	0	56	0	274	254	22	0	39	37	21	0
	October	24	0	97	0	389	359	14	0	42	33	34	0
	November	18	0	79	0	249	220	20	0	0	0	33	0
	December	14	0	98	0	187	166	18	0	26	0	13	0
	Average	**19**	**0**	**64**	**0**	**313**	**293**	**20**	**0**	**25**	**18**	**29**	**1**
1997	January	40	0	94	0	244	230	18	0	21	0	31	0
	February	33	0	60	0	204	179	16	0	19	0	36	0
	March	40	0	102	0	295	276	7	0	13	0	6	0
	April	20	0	114	0	307	294	12	0	20	0	9	0
	May	13	0	116	0	388	366	21	0	0	0	23	0
	June	37	0	66	0	329	318	13	0	8	0	45	0
	July	5	0	61	0	386	360	24	0	9	0	6	0
	August	15	0	65	0	321	320	20	0	32	19	41	0
	September	54	0	71	0	285	265	14	0	0	0	21	0
	October	13	0	46	0	346	312	19	0	13	6	12	0
	November	28	0	33	0	316	276	23	0	21	7	19	0
	December	1	0	54	0	275	249	10	0	0	0	5	0
	Average	**25**	**0**	**74**	**0**	**309**	**288**	**16**	**0**	**13**	**3**	**21**	**0**

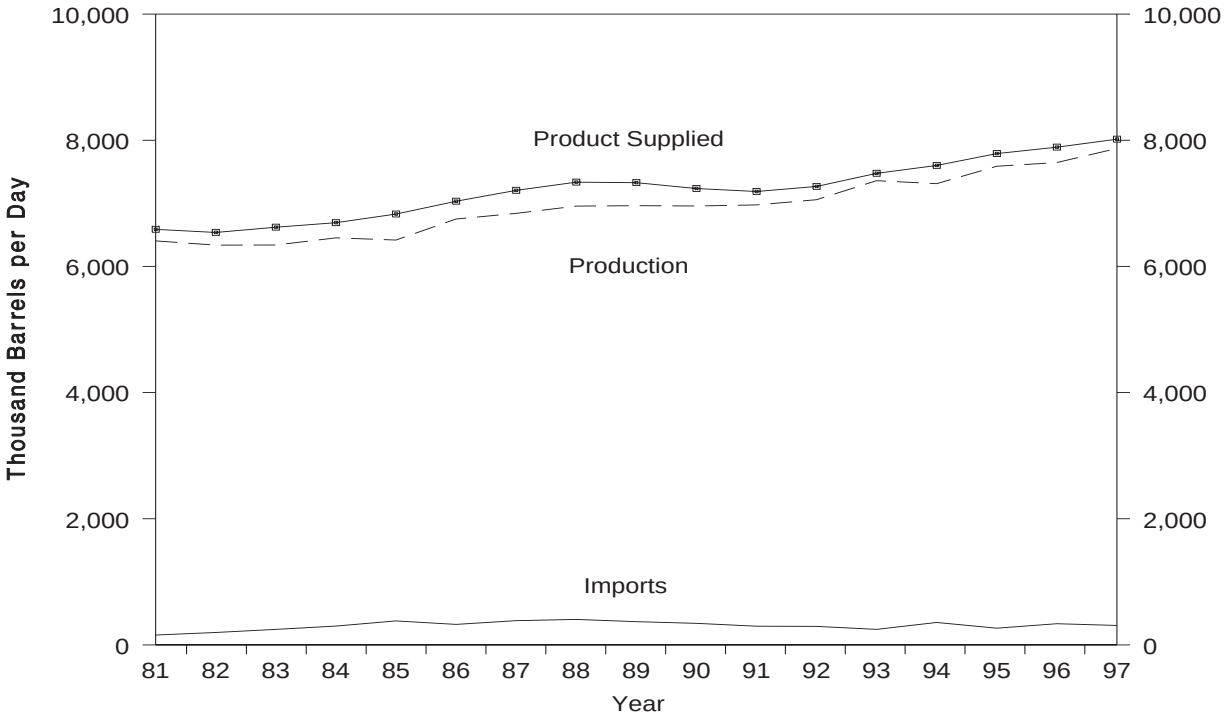
See footnotes at end of table.

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

Year/Month	Imports from Non-OPEC Sources[a]										Total Imports	
	Trinidad and Tobago		United Kingdom		Virgin Islands		Other Non-OPEC		Total Non-OPEC[c]			
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981 Average	**133**	**102**	**375**	**369**	**327**	**0**	**236**	**163**	**2,672**	**1,474**	**5,996**	**4,396**
1982 Average	**112**	**92**	**456**	**441**	**316**	**0**	**306**	**174**	**2,968**	**1,754**	**5,113**	**3,488**
1983 Average	**96**	**83**	**382**	**365**	**282**	**0**	**378**	**215**	**3,189**	**1,853**	**5,051**	**3,329**
1984 Average	**94**	**87**	**402**	**378**	**294**	**0**	**411**	**210**	**3,388**	**1,914**	**5,437**	**3,426**
1985 Average	**113**	**98**	**310**	**278**	**247**	**0**	**394**	**137**	**3,237**	**1,888**	**5,067**	**3,201**
1986 Average	**125**	**93**	**350**	**317**	**244**	**0**	**426**	**144**	**3,387**	**2,065**	**6,224**	**4,178**
1987 Average	**106**	**75**	**352**	**304**	**272**	**0**	**459**	**196**	**3,617**	**2,274**	**6,678**	**4,674**
1988 Average	**97**	**71**	**315**	**254**	**242**	**0**	**487**	**196**	**3,882**	**2,411**	**7,402**	**5,107**
1989 Average	**94**	**73**	**215**	**160**	**321**	**0**	**457**	**197**	**3,921**	**2,467**	**8,061**	**5,843**
1990 Average	**96**	**76**	**189**	**155**	**282**	**0**	**417**	**180**	**3,721**	**2,381**	**8,018**	**5,894**
1991 Average	**88**	**72**	**138**	**106**	**243**	**0**	**282**	**137**	**3,535**	**2,405**	**7,627**	**5,782**
1992 Average	**95**	**70**	**230**	**200**	**249**	**0**	**335**	**149**	**3,796**	**2,676**	**7,888**	**6,083**
1993 Average	**74**	**55**	**350**	**312**	**254**	**0**	**452**	**240**	**4,266**	**3,100**	**8,620**	**6,787**
1994 Average	**77**	**62**	**458**	**396**	**328**	**0**	**450**	**239**	**4,749**	**3,483**	**8,996**	**7,063**
1995 January	91	91	240	213	283	0	209	131	4,297	3,397	8,015	6,505
February	58	58	382	359	322	0	304	143	4,416	3,378	8,345	6,546
March	70	70	663	621	298	0	183	91	4,787	3,797	9,006	7,391
April	55	55	491	450	284	0	317	143	4,741	3,894	8,465	7,038
May	61	53	405	366	203	0	286	165	4,907	4,044	8,709	7,325
June	78	74	520	418	268	0	368	253	5,453	4,451	9,558	7,927
July	73	54	137	97	240	0	441	277	4,812	3,940	8,863	7,265
August	74	53	288	249	264	0	343	261	5,168	4,212	9,061	7,437
September	73	55	427	386	223	0	312	180	5,194	4,254	9,736	8,007
October	86	70	528	479	299	0	331	214	4,635	3,735	8,577	7,075
November	61	53	284	284	317	0	273	155	4,896	3,878	9,074	7,302
December	53	53	238	177	334	0	262	156	4,684	3,671	8,612	6,916
Average	**70**	**62**	**383**	**341**	**278**	**0**	**302**	**181**	**4,833**	**3,889**	**8,835**	**7,230**
1996 January	92	71	364	238	390	0	406	188	5,244	3,932	9,364	7,303
February	56	56	374	280	343	0	275	169	4,660	3,479	8,390	6,612
March	63	52	346	252	311	0	373	215	4,932	3,788	9,092	7,215
April	87	55	481	347	359	0	333	157	5,421	4,125	9,429	7,371
May	97	71	421	316	298	0	429	282	5,465	4,332	10,007	8,029
June	86	54	312	234	292	0	561	402	5,663	4,526	9,938	7,958
July	70	58	244	195	344	0	456	292	5,201	4,082	9,820	7,800
August	81	59	274	177	279	0	508	348	5,321	4,177	9,986	8,041
September	51	37	165	90	268	0	502	318	4,938	3,891	9,142	7,353
October	70	55	264	136	325	0	477	240	5,566	4,196	9,837	7,701
November	96	75	199	160	253	0	513	318	5,277	4,145	9,244	7,344
December	58	54	253	167	294	0	438	245	5,487	4,142	9,417	7,307
Average	**76**	**58**	**308**	**216**	**313**	**0**	**440**	**265**	**5,267**	**4,070**	**9,478**	**7,508**
1997 January	74	55	400	333	335	0	502	210	5,685	4,255	9,763	7,492
February	69	61	236	172	341	0	380	170	5,431	4,093	9,561	7,434
March	56	55	236	161	254	0	437	206	5,554	4,344	9,833	7,754
April	69	62	159	70	321	0	401	242	5,426	4,169	10,114	7,987
May	70	66	261	181	300	0	558	341	5,817	4,579	10,818	8,653
June	55	55	372	311	300	0	380	225	5,737	4,631	10,736	8,759
July	62	54	198	165	310	0	370	243	5,579	4,515	10,008	8,178
August	41	37	268	220	319	0	368	251	5,638	4,591	10,465	8,621
September	66	58	166	110	248	0	476	364	5,677	4,672	10,537	8,840
October	58	55	154	119	301	0	479	271	5,879	4,793	10,792	8,927
November	65	57	127	87	260	0	403	236	5,517	4,521	9,948	8,366
December	53	53	135	98	314	0	304	235	5,160	4,208	9,328	7,653
Average	**61**	**56**	**226**	**169**	**300**	**0**	**422**	**250**	**5,593**	**4,450**	**10,162**	**8,225**

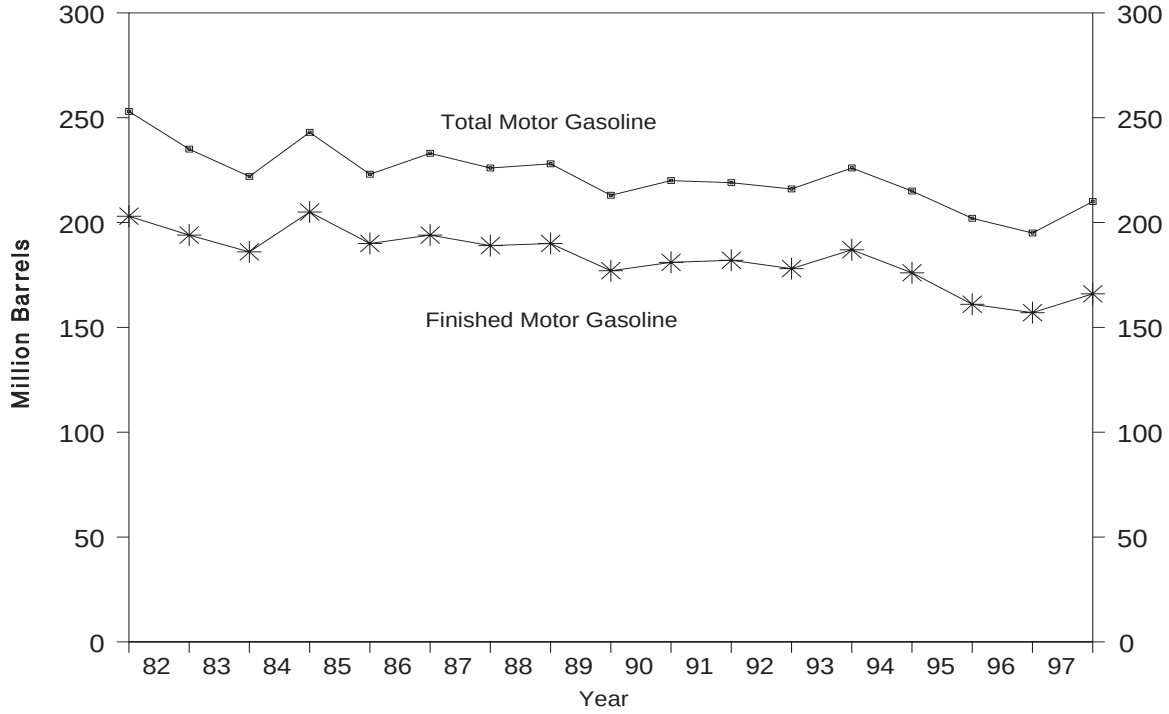
[a] Includes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC) primarily from Caribbean and West European areas as petroleum products that were refined from crude oil produced by OPEC.
[b] Imports from the Neutral Zone between 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, 1981 - Present



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

Figure S6. Motor Gasoline Ending Stocks, 1981 - Present



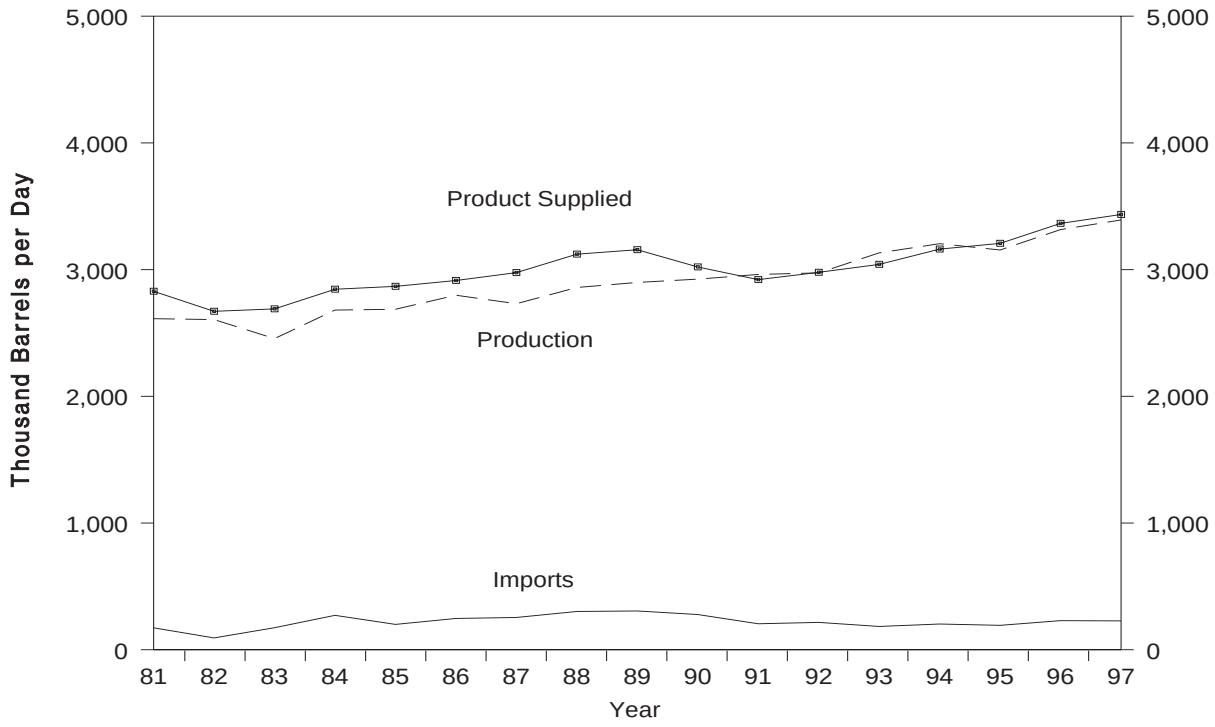
Note: Total motor gasoline includes motor gasoline blending components and finished motor gasoline.
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S4. See Summary Statistics Table and Figure Sources.

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

Year/Month		Supply		Disposition			Ending Stocks[a] (Million Barrels)		Ending Stocks (Million Barrels)
							Motor Gasoline		
		Total Production[b]	Imports[c]	Stock Change[c,d]	Exports	Product Supplied[b]	Total[e]	Finished	Oxygenates
1981	**Average**	**6,405**	**157**	**[f] -28**	**2**	**6,588**	**253**	**203**	**--**
1982	**Average**	**6,338**	**197**	**-25**	**20**	**6,539**	**[f] 235**	**[f] 194**	**--**
1983	**Average**	**6,340**	**247**	**[f] -45**	**10**	**6,622**	**222**	**186**	**--**
1984	**Average**	**6,453**	**299**	**54**	**6**	**6,693**	**243**	**205**	**--**
1985	**Average**	**6,419**	**381**	**-41**	**10**	**6,831**	**223**	**190**	**--**
1986	**Average**	**6,752**	**326**	**11**	**33**	**7,034**	**233**	**194**	**--**
1987	**Average**	**6,841**	**384**	**-15**	**35**	**7,206**	**226**	**189**	**--**
1988	**Average**	**6,956**	**405**	**3**	**22**	**7,336**	**228**	**190**	**--**
1989	**Average**	**6,963**	**369**	**-35**	**39**	**7,328**	**213**	**177**	**--**
1990	**Average**	**6,959**	**342**	**10**	**55**	**7,235**	**220**	**181**	**--**
1991	**Average**	**6,975**	**297**	**3**	**82**	**7,188**	**219**	**182**	**--**
1992	**Average**	**7,058**	**294**	**-11**	**96**	**7,268**	**216**	**178**	**--**
1993	**Average**	**7,360**	**247**	**26**	**105**	**7,476**	**226**	**187**	**13**
1994	**Average**	**7,312**	**356**	**-31**	**97**	**7,601**	**215**	**176**	**17**
1995	January	7,303	182	221	100	7,163	227	183	16
	February	7,243	223	-99	84	7,481	225	180	16
	March	7,168	336	-391	107	7,788	211	168	15
	April	7,529	235	-26	139	7,651	208	167	15
	May	7,678	286	3	67	7,894	208	167	15
	June	7,843	347	-122	91	8,220	205	163	14
	July	7,747	306	80	86	7,888	207	166	15
	August	7,642	280	-367	103	8,187	192	155	16
	September	7,785	238	143	94	7,786	199	159	15
	October	7,544	253	-106	121	7,781	197	156	14
	November	7,739	246	1	118	7,866	196	156	11
	December	7,821	244	182	141	7,742	202	161	12
	Average	**7,588**	**265**	**-40**	**104**	**7,789**	**--**	**--**	**--**
1996	January	7,370	303	240	163	7,271	215	169	12
	February	7,369	293	-10	72	7,599	214	168	12
	March	7,289	303	-327	128	7,792	203	158	13
	April	7,497	501	49	77	7,873	203	160	13
	May	7,804	414	66	81	8,071	205	162	12
	June	7,858	393	68	95	8,088	205	164	11
	July	7,924	359	-5	123	8,165	202	164	11
	August	7,796	346	-284	82	8,343	191	155	12
	September	7,606	339	215	68	7,662	200	161	11
	October	7,557	253	-396	113	8,093	189	149	11
	November	7,864	234	55	128	7,915	188	151	12
	December	7,815	298	202	117	7,794	195	157	13
	Average	**7,647**	**336**	**-12**	**104**	**7,891**	**--**	**--**	**--**
1997	January	7,307	320	250	75	7,301	208	165	13
	February	7,341	324	-114	111	7,668	204	162	13
	March	7,302	370	-247	123	7,796	200	154	14
	April	7,811	300	-70	117	8,064	197	152	13
	May	8,081	362	203	101	8,139	202	158	13
	June	8,186	387	189	96	8,288	204	164	12
	July	7,954	291	-414	164	8,496	190	151	13
	August	8,075	292	-41	175	8,233	187	150	13
	September	8,158	269	275	130	8,023	198	158	13
	October	8,037	291	1	186	8,141	200	158	12
	November	7,999	239	122	151	7,965	203	162	12
	December	8,160	265	154	206	8,065	210	166	12
	Average	**7,870**	**309**	**26**	**137**	**8,017**	**--**	**--**	**--**

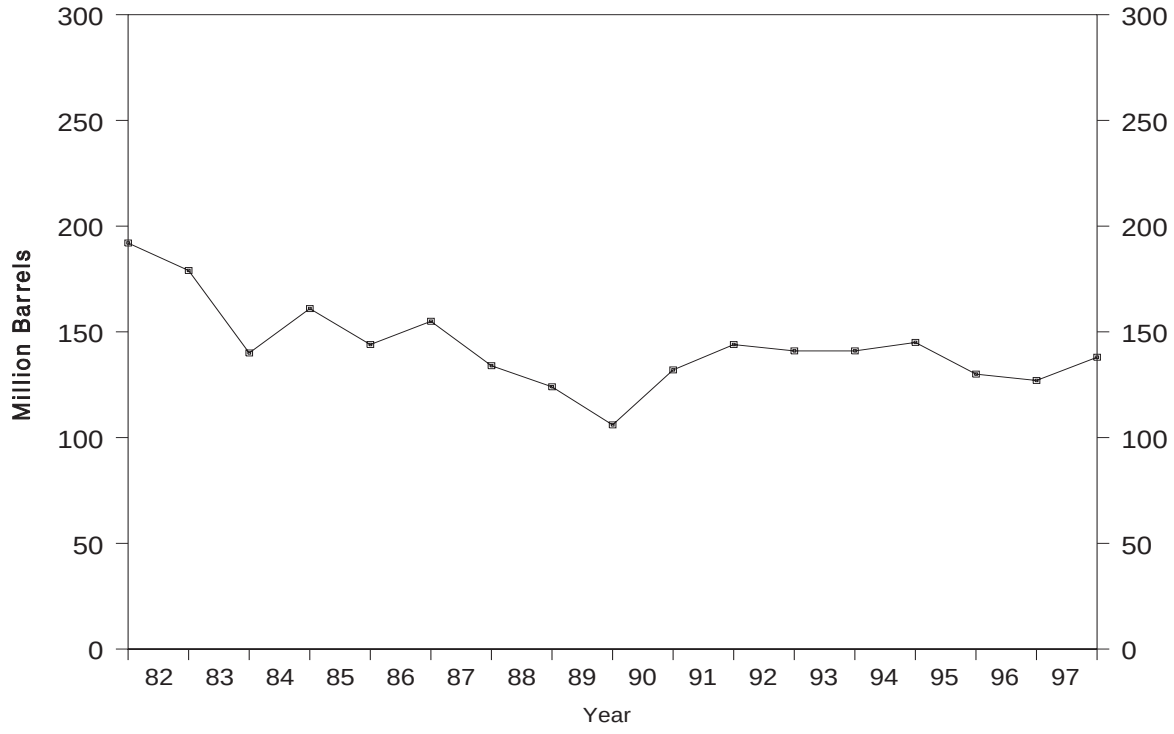
[a] Stocks are totals as of end of period.
[b] Beginning in 1993, motor gasoline production and product supplied includes blending of fuel ethanol and an adjustment to correct for the imbalance of motor gasoline blending components. Refer to Appendix B, Explanatory Note 10 for 1992 new basis product 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.
[f] In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.
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, 1981 - Present



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

Figure S8. Distillate Fuel Oil Ending Stocks, 1981 - Present



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

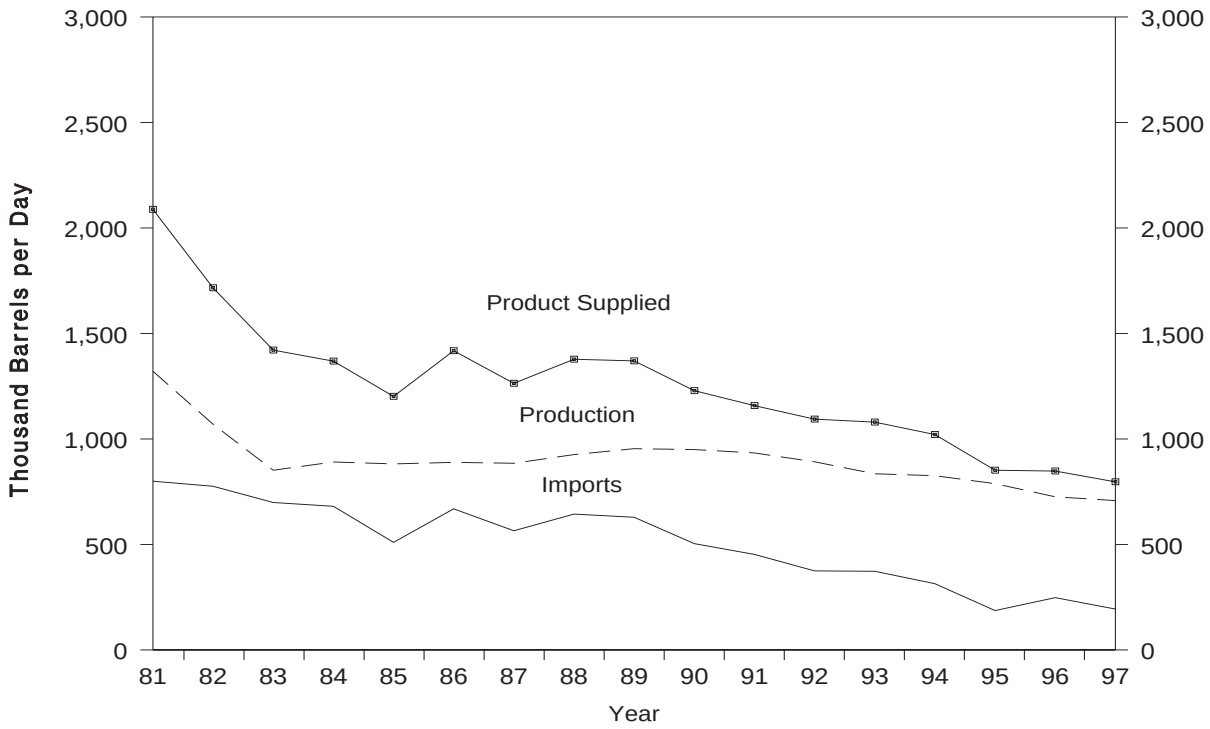
Table S5. Distillate Fuel Oil Supply and Disposition, 1981 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply[a]		Disposition			Ending Stocks[b] (Million Barrels)		
		Total Production	Imports	Stock Change[c]	Exports	Product Supplied[a]	Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur
1981	**Average**	**2,613**	**173**	[d] **-38**	**5**	**2,829**	**192**	**--**	**--**
1982	**Average**	**2,606**	**93**	**-35**	**74**	**2,671**	[d] **179**	**--**	**--**
1983	**Average**	**2,456**	**174**	[d] **-124**	**64**	**2,690**	**140**	**--**	**--**
1984	**Average**	**2,681**	**272**	**57**	**51**	**2,845**	**161**	**--**	**--**
1985	**Average**	**2,687**	**200**	**-48**	**67**	**2,868**	**144**	**--**	**--**
1986	**Average**	**2,798**	**247**	**31**	**100**	**2,914**	**155**	**--**	**--**
1987	**Average**	**2,731**	**255**	**-56**	**66**	**2,976**	**134**	**--**	**--**
1988	**Average**	**2,859**	**302**	**-30**	**69**	**3,122**	**124**	**--**	**--**
1989	**Average**	**2,899**	**306**	**-49**	**97**	**3,157**	**106**	**--**	**--**
1990	**Average**	**2,925**	**278**	**73**	**109**	**3,021**	**132**	**--**	**--**
1991	**Average**	**2,962**	**205**	**31**	**215**	**2,921**	**144**	**--**	**--**
1992	**Average**	**2,974**	**216**	**-8**	**219**	**2,979**	**141**	**--**	**--**
1993	**Average**	**3,132**	**184**	**1**	**274**	**3,041**	**141**	**64**	**77**
1994	**Average**	**3,205**	**203**	**12**	**234**	**3,162**	**145**	**73**	**73**
1995	January	3,054	313	-163	141	3,389	140	70	70
	February	2,954	289	-645	212	3,675	122	63	59
	March	3,157	188	-216	216	3,344	115	59	56
	April	3,126	125	-27	172	3,106	115	62	53
	May	3,111	109	119	202	2,899	118	62	56
	June	3,109	176	-119	137	3,267	115	60	55
	July	3,056	157	333	148	2,732	125	62	63
	August	3,145	171	189	84	3,044	131	62	69
	September	3,287	142	28	116	3,285	132	64	68
	October	3,169	162	-11	238	3,104	131	61	70
	November	3,341	262	135	236	3,233	135	65	70
	December	3,344	235	-168	298	3,449	130	67	63
	Average	**3,155**	**193**	**-41**	**183**	**3,207**	**--**	**--**	**--**
1996	January	3,105	267	-528	216	3,684	114	58	55
	February	3,133	279	-570	256	3,727	97	53	44
	March	3,107	256	-247	139	3,471	90	49	40
	April	3,300	258	13	166	3,379	90	52	38
	May	3,256	231	182	176	3,128	96	57	39
	June	3,283	185	198	81	3,189	102	60	41
	July	3,127	194	166	134	3,021	107	62	45
	August	3,280	195	112	182	3,180	110	62	49
	September	3,392	193	157	256	3,172	115	64	51
	October	3,627	246	-8	300	3,581	115	60	54
	November	3,641	205	234	171	3,442	122	65	57
	December	3,536	253	160	206	3,422	127	68	58
	Average	**3,316**	**230**	**-10**	**190**	**3,365**	**--**	**--**	**--**
1997	January	3,119	293	-508	133	3,786	111	60	51
	February	3,090	246	-197	107	3,427	105	56	49
	March	3,244	245	-137	120	3,505	101	58	43
	April	3,280	256	-134	166	3,504	97	59	39
	May	3,527	220	359	153	3,235	108	63	45
	June	3,523	219	326	174	3,243	118	65	53
	July	3,365	223	161	151	3,275	123	64	59
	August	3,439	202	320	185	3,136	133	69	64
	September	3,445	210	189	160	3,306	139	69	70
	October	3,480	213	-89	133	3,650	136	63	73
	November	3,566	175	156	149	3,435	141	68	73
	December	3,604	232	-70	192	3,714	138	68	70
	Average	**3,392**	**228**	**32**	**152**	**3,435**	**--**	**--**	**--**

[a] Excludes 10,000 barrels per day in 1981 and 1982 previously published as crude used directly.
[b] Stocks are totals as of end of period.
[c] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[d] In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new stock basis stock levels. See Summary Statistics Explanatory Note 2.

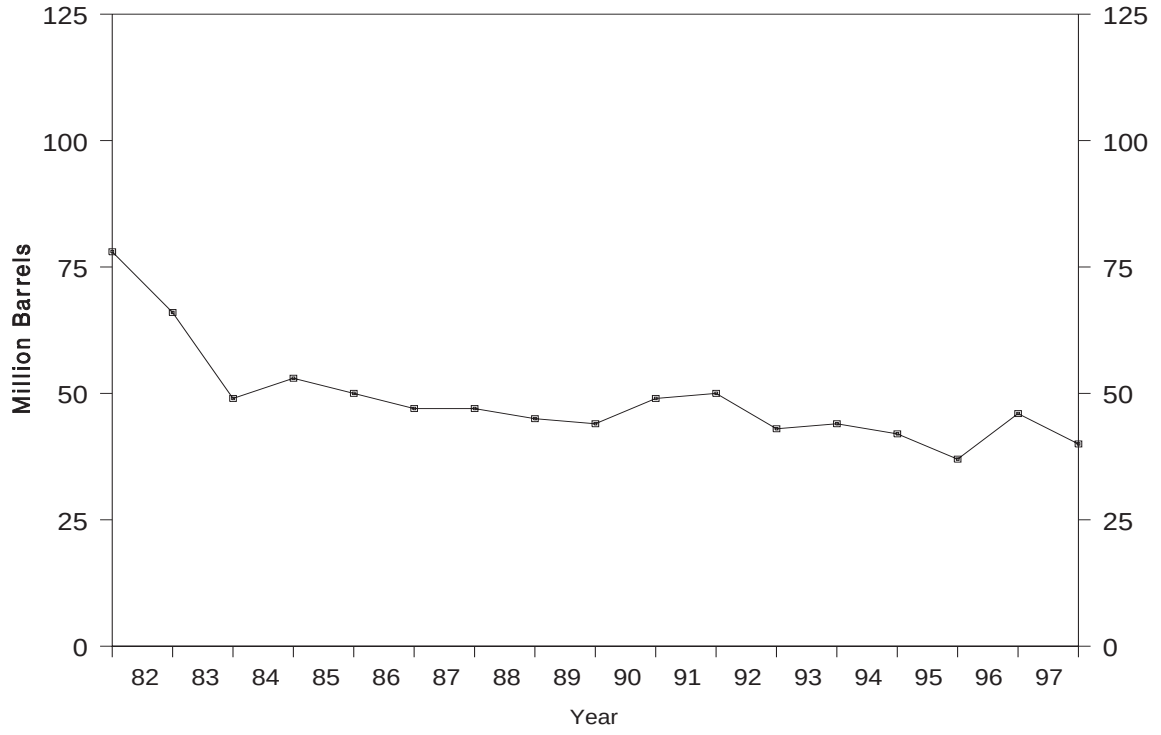
Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.
Source: See Summary Statistics Table and Figure Sources.

Figure S9. Residual Fuel Oil Supply and Disposition, 1981 - Present



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

Figure S10. Residual Fuel Oil Ending Stocks, 1981 - Present



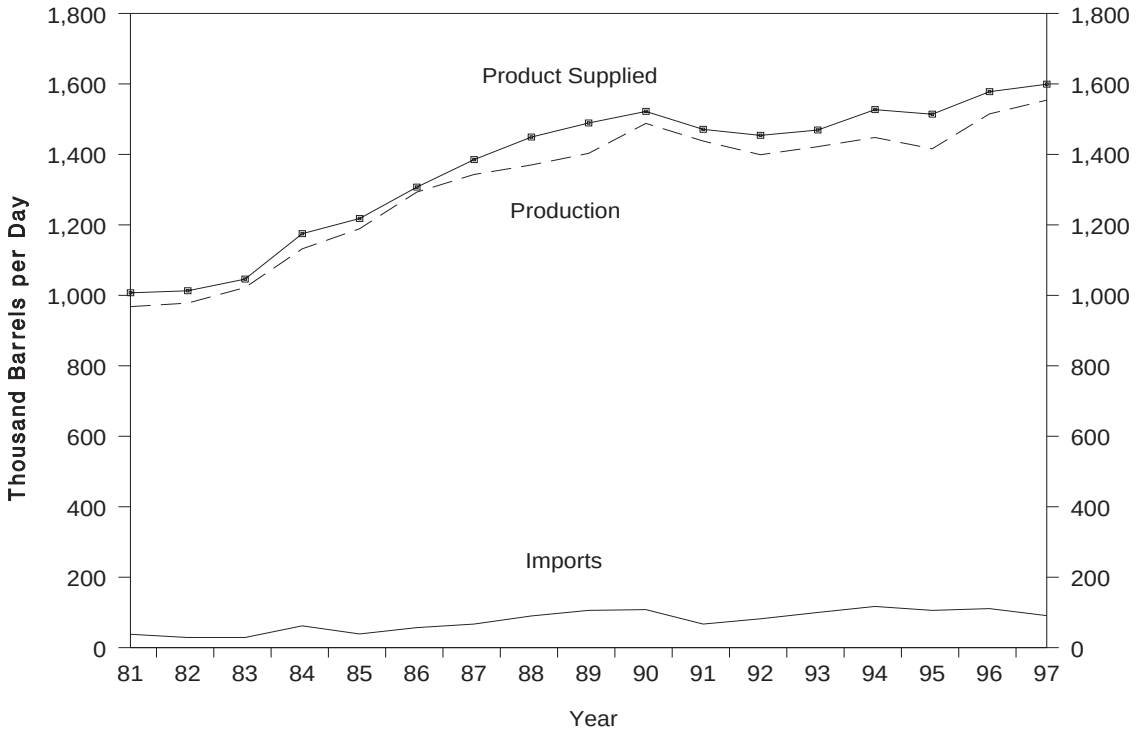
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S6. See Summary Statistics Table and Figure Sources.

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

Year/Month	Supply[a]		Disposition			Ending Stocks[c] (Million Barrels)
	Total Production	Imports	Stock Change[b]	Exports	Product Supplied[a]	
1981 Average	**1,321**	**800**	[d] **-37**	**118**	**2,088**	**78**
1982 Average	**1,070**	**776**	**-32**	**209**	**1,716**	[d] **66**
1983 Average	**852**	**699**	[d] **-55**	**185**	**1,421**	**49**
1984 Average	**891**	**681**	**12**	**190**	**1,369**	**53**
1985 Average	**882**	**510**	**-7**	**197**	**1,202**	**50**
1986 Average	**889**	**669**	**-8**	**147**	**1,418**	**47**
1987 Average	**885**	**565**	**(s)**	**186**	**1,264**	**47**
1988 Average	**926**	**644**	**-8**	**200**	**1,378**	**45**
1989 Average	**954**	**629**	**-2**	**215**	**1,370**	**44**
1990 Average	**950**	**504**	**13**	**211**	**1,229**	**49**
1991 Average	**934**	**453**	**4**	**226**	**1,158**	**50**
1992 Average	**892**	**375**	**-20**	**193**	**1,094**	**43**
1993 Average	**835**	**373**	**4**	**123**	**1,080**	**44**
1994 Average	**826**	**314**	**-6**	**125**	**1,021**	**42**
1995 January	903	204	56	203	848	44
February	776	225	-246	208	1,040	37
March	778	209	35	154	798	38
April	789	128	-22	129	810	37
May	748	177	48	115	762	39
June	746	184	-87	120	896	36
July	797	149	27	164	755	37
August	801	177	36	122	820	38
September	811	220	58	124	848	40
October	724	131	-55	84	825	38
November	705	182	-17	111	793	37
December	874	257	-8	98	1,040	37
Average	**788**	**187**	**-13**	**136**	**852**	**--**
1996 January	799	320	-54	108	1,064	36
February	798	222	-132	114	1,038	32
March	700	227	-4	95	836	32
April	671	237	69	96	743	34
May	732	203	18	89	827	34
June	731	168	21	144	735	35
July	646	335	-3	88	896	35
August	732	227	32	56	871	36
September	713	197	68	125	717	38
October	694	260	16	104	835	38
November	714	270	139	101	744	42
December	778	307	112	102	872	46
Average	**726**	**248**	**24**	**102**	**848**	**--**
1997 January	801	211	-131	171	972	42
February	795	253	-66	137	977	40
March	638	239	46	89	742	41
April	617	250	-29	105	791	41
May	618	175	-44	102	736	39
June	727	168	(s)	130	765	39
July	643	177	-119	159	781	35
August	644	187	31	80	720	36
September	687	146	-54	91	797	35
October	723	158	41	133	707	36
November	789	204	61	122	809	38
December	818	167	83	120	781	40
Average	**708**	**194**	**-15**	**120**	**797**	**--**

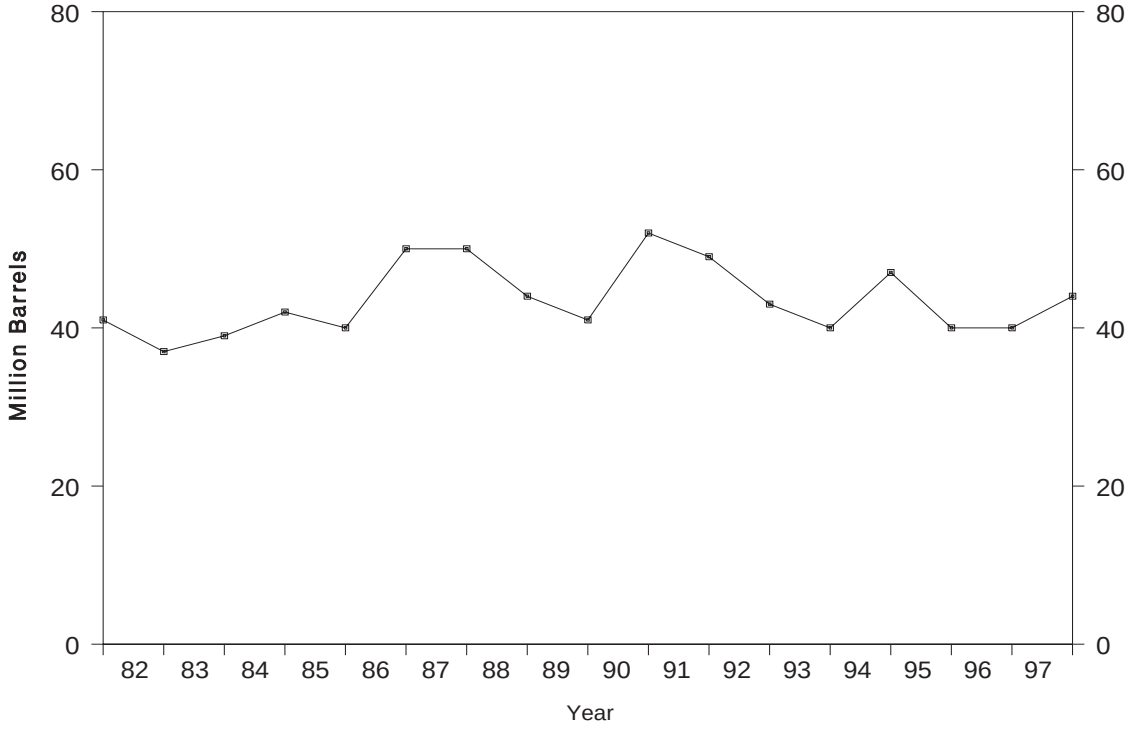
[a] Excludes 48,000 barrels per day in 1981 and 1982 previously published as crude used directly.
[b] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[c] Stocks are totals as of end of period.
[d] In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 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 S11. Jet Fuel Supply and Disposition, 1981 - Present



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

Figure S12. Jet Fuel Ending Stocks, 1981 - Present



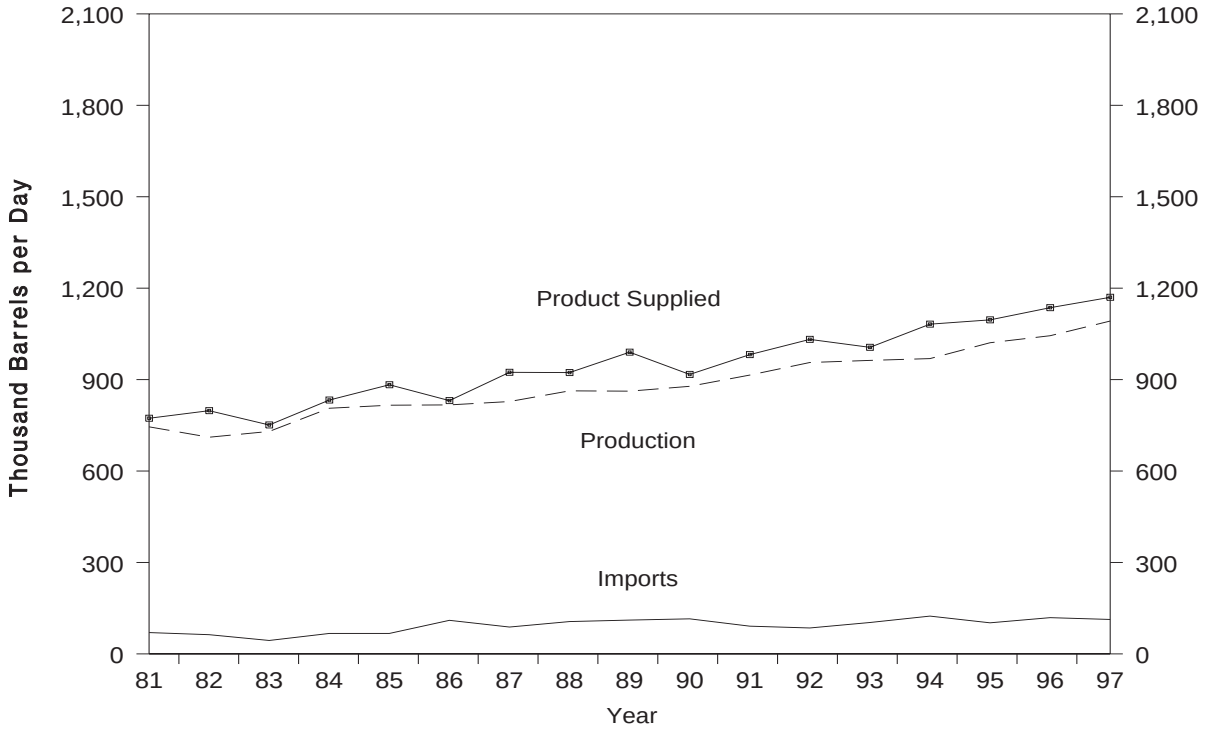
Source: Energy Information Adminstration, *Petroleum Supply Annual*, Table S7. See Summary Statistics Table and Figure Sources.

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

Year/Month	Supply			Disposition				Ending Stocks[a] (Million Barrels)	
	Production		Imports	Stock Change[b]	Exports	Product Supplied			
	Total	Kerosene-Type				Total	Kerosene-Type	Total	Kerosene Type
1981 Average	**968**	**775**	**38**	**[c] -4**	**2**	**1,007**	**809**	**41**	**34**
1982 Average	**978**	**778**	**29**	**-12**	**6**	**1,013**	**804**	**[c] 37**	**[c] 31**
1983 Average	**1,022**	**817**	**29**	**[c] (s)**	**6**	**1,046**	**839**	**39**	**32**
1984 Average	**1,132**	**919**	**62**	**9**	**9**	**1,175**	**953**	**42**	**35**
1985 Average	**1,189**	**983**	**39**	**-4**	**13**	**1,218**	**1,005**	**40**	**34**
1986 Average	**1,293**	**1,097**	**57**	**25**	**18**	**1,307**	**1,105**	**50**	**43**
1987 Average	**1,343**	**1,138**	**67**	**(s)**	**24**	**1,385**	**1,181**	**50**	**42**
1988 Average	**1,370**	**1,164**	**90**	**-17**	**28**	**1,449**	**1,236**	**44**	**38**
1989 Average	**1,403**	**1,197**	**106**	**-8**	**27**	**1,489**	**1,284**	**41**	**34**
1990 Average	**1,488**	**1,311**	**108**	**31**	**43**	**1,522**	**1,340**	**52**	**46**
1991 Average	**1,438**	**1,274**	**67**	**-9**	**43**	**1,471**	**1,296**	**49**	**44**
1992 Average	**1,399**	**1,254**	**82**	**-16**	**43**	**1,454**	**1,310**	**43**	**39**
1993 Average	**1,422**	**1,309**	**100**	**-7**	**59**	**1,469**	**1,357**	**40**	**38**
1994 Average	**1,448**	**1,410**	**117**	**18**	**20**	**1,527**	**1,480**	**47**	**46**
1995 January	1,412	1,402	79	-84	33	1,542	1,525	44	43
February	1,375	1,366	123	-43	21	1,520	1,514	43	42
March	1,281	1,272	99	-115	17	1,478	1,464	39	39
April	1,326	1,317	82	-12	5	1,414	1,402	39	38
May	1,367	1,354	104	-35	18	1,487	1,478	38	37
June	1,412	1,398	99	67	11	1,433	1,393	40	39
July	1,458	1,444	97	23	27	1,505	1,469	41	40
August	1,427	1,418	82	-23	21	1,511	1,505	40	39
September	1,465	1,459	155	44	20	1,557	1,500	41	41
October	1,426	1,422	99	-54	57	1,521	1,518	40	39
November	1,496	1,493	164	64	13	1,584	1,578	42	41
December	1,542	1,538	89	-51	63	1,619	1,618	40	39
Average	**1,416**	**1,407**	**106**	**-19**	**26**	**1,514**	**1,497**	**--**	**--**
1996 January	1,596	1,593	89	-49	111	1,624	1,607	38	38
February	1,499	1,495	100	-129	67	1,661	1,658	35	35
March	1,470	1,468	105	-24	59	1,541	1,547	34	34
April	1,466	1,464	113	51	11	1,517	1,515	36	35
May	1,419	1,418	122	39	13	1,489	1,467	37	37
June	1,514	1,512	127	71	11	1,558	1,556	39	39
July	1,496	1,493	89	-14	27	1,572	1,569	38	38
August	1,510	1,507	104	-2	34	1,582	1,580	38	38
September	1,650	1,647	159	152	51	1,606	1,604	43	43
October	1,485	1,484	126	-55	35	1,631	1,636	41	41
November	1,501	1,500	87	-45	45	1,588	1,588	40	40
December	1,575	1,574	110	(s)	115	1,570	1,573	40	40
Average	**1,515**	**1,513**	**111**	**(s)**	**48**	**1,578**	**1,575**	**--**	**--**
1997 January	1,491	1,491	100	-101	78	1,615	1,614	37	37
February	1,511	1,510	116	31	23	1,572	1,571	38	38
March	1,488	1,487	106	55	11	1,529	1,528	39	39
April	1,493	1,492	98	11	21	1,559	1,558	40	40
May	1,515	1,514	91	46	9	1,551	1,551	41	41
June	1,581	1,580	108	77	38	1,574	1,573	43	43
July	1,619	1,618	86	-14	33	1,685	1,685	43	43
August	1,580	1,579	103	7	27	1,648	1,648	43	43
September	1,593	1,592	87	78	16	1,586	1,585	46	46
October	1,581	1,580	77	19	40	1,599	1,599	46	46
November	1,609	1,608	55	8	44	1,612	1,612	46	46
December	1,588	1,588	63	-75	78	1,647	1,647	44	44
Average	**1,554**	**1,554**	**91**	**11**	**35**	**1,599**	**1,598**	**--**	**--**

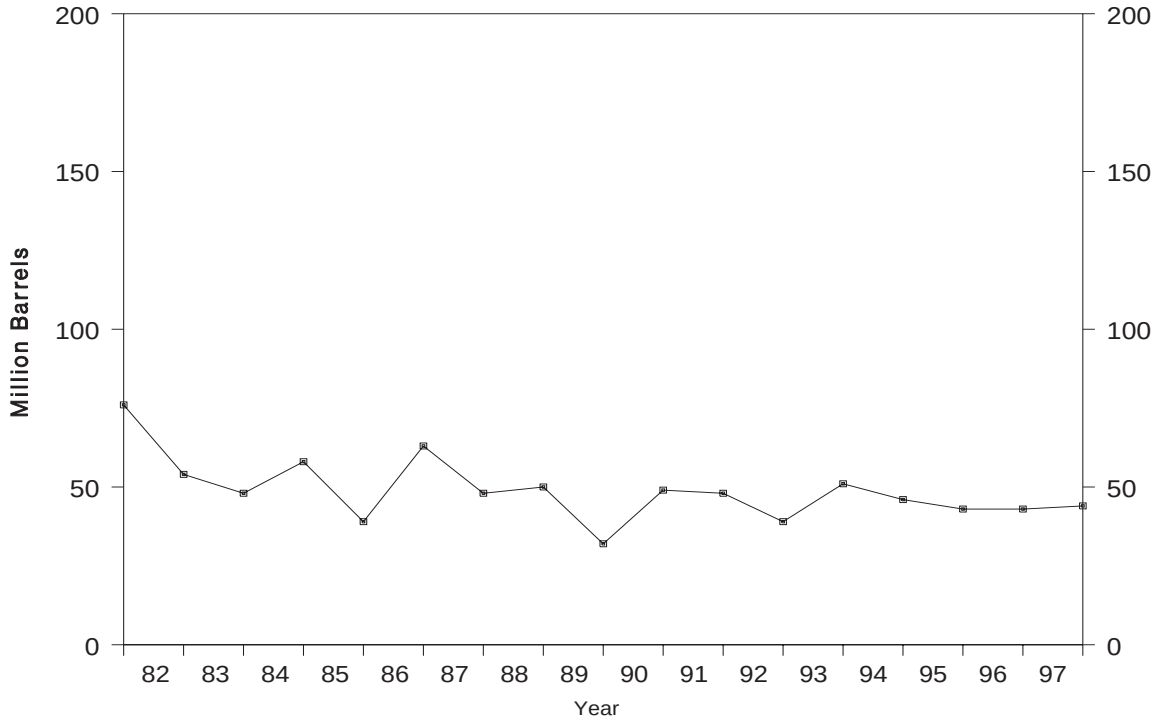
[a] Stocks are totals as of end of period.
[b] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[c] In January 1981, and 1983, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new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



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

Figure S14. Propane/Propylene Ending Stocks, 1981 - Present



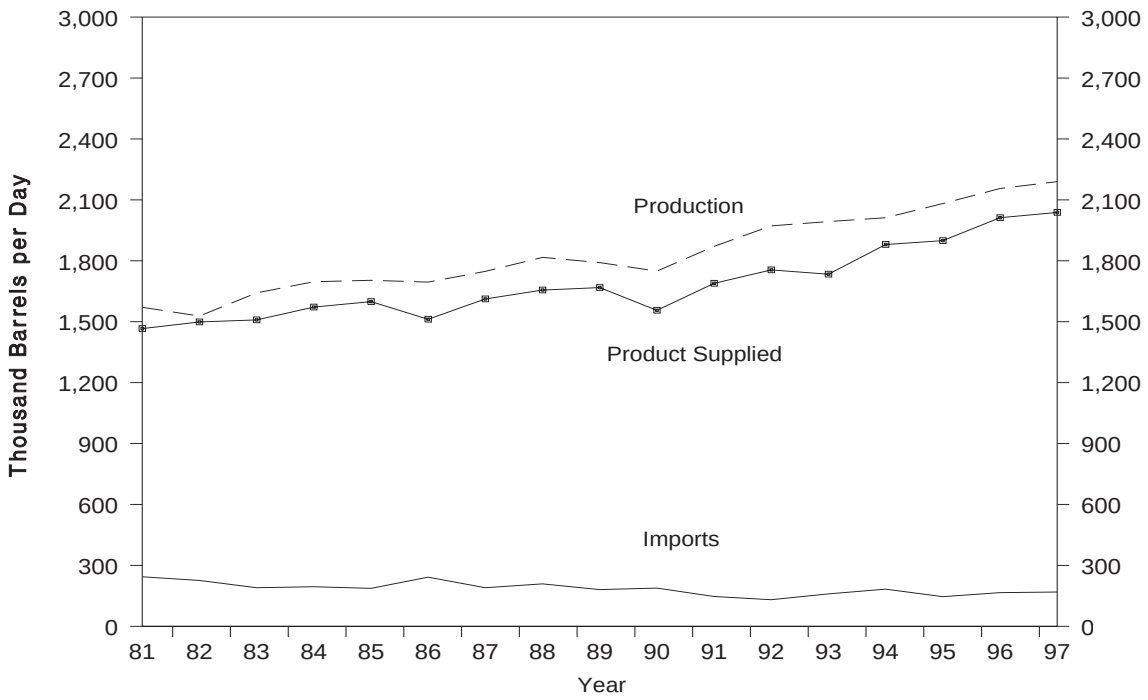
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S8. See Summary Statistics Table and Figure Sources.

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

Year/Month		Supply		Disposition				Ending Stocks[b] (Million Barrels)
		Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Product Supplied	
1981	**Average**	**745**	**70**	[c] **18**	**5**	**18**	**773**	**76**
1982	**Average**	**711**	**63**	**-59**	**4**	**31**	**798**	[c] **54**
1983	**Average**	**730**	**44**	[c] **-24**	**4**	**43**	**751**	[c] **48**
1984	**Average**	**806**	**67**	[c] **7**	**4**	**30**	**833**	**58**
1985	**Average**	**816**	**67**	**-50**	**3**	**48**	**883**	**39**
1986	**Average**	**817**	**110**	**64**	**4**	**28**	**831**	**63**
1987	**Average**	**828**	**88**	**-41**	**8**	**24**	**924**	**48**
1988	**Average**	**863**	**106**	**7**	**8**	**31**	**923**	**50**
1989	**Average**	**862**	**111**	**-52**	**11**	**24**	**990**	**32**
1990	**Average**	**878**	**115**	**48**	**(s)**	**28**	**917**	**49**
1991	**Average**	**915**	**91**	**-3**	**(s)**	**28**	**982**	**48**
1992	**Average**	**956**	**85**	**-24**	**(s)**	**33**	**1,032**	**39**
1993	**Average**	**963**	**103**	**34**	**(s)**	**26**	**1,006**	**51**
1994	**Average**	**969**	**124**	**-13**	**0**	**24**	**1,082**	**46**
1995	January	1,007	108	-349	0	55	1,409	36
	February	985	94	-362	0	100	1,341	26
	March	1,017	90	14	0	39	1,055	26
	April	1,040	107	157	0	31	958	31
	May	1,046	73	209	0	29	882	37
	June	1,042	114	188	0	27	941	43
	July	1,011	75	236	0	27	823	50
	August	1,008	107	187	0	24	905	56
	September	1,022	146	45	0	25	1,098	57
	October	999	98	-22	0	30	1,090	57
	November	1,045	76	-160	0	37	1,243	52
	December	1,033	135	-285	0	31	1,422	43
	Average	**1,021**	**102**	**-10**	**0**	**38**	**1,096**	**--**
1996	January	995	151	-353	0	30	1,468	32
	February	1,001	106	-347	0	39	1,415	22
	March	1,043	116	-1	0	25	1,135	22
	April	1,047	78	114	0	31	981	25
	May	1,048	104	209	0	21	922	32
	June	1,031	122	293	0	21	839	41
	July	1,043	114	188	0	29	940	46
	August	1,051	126	83	0	24	1,069	49
	September	1,057	95	97	0	21	1,034	52
	October	1,058	151	-37	0	29	1,218	51
	November	1,063	147	-148	0	34	1,324	46
	December	1,093	122	-106	0	31	1,289	43
	Average	**1,044**	**119**	**(s)**	**0**	**28**	**1,136**	**--**
1997	January	1,039	149	-340	0	28	1,501	32
	February	1,044	126	-276	0	42	1,404	25
	March	1,059	114	92	0	40	1,041	28
	April	1,112	109	150	0	32	1,039	32
	May	1,114	92	252	0	23	930	40
	June	1,110	88	250	0	31	916	47
	July	1,083	87	231	0	24	916	55
	August	1,095	108	172	0	24	1,007	60
	September	1,110	89	30	0	16	1,152	61
	October	1,110	122	17	0	29	1,185	61
	November	1,099	114	-223	0	48	1,388	55
	December	1,127	159	-342	0	53	1,576	44
	Average	**1,092**	**113**	**3**	**0**	**32**	**1,170**	**--**

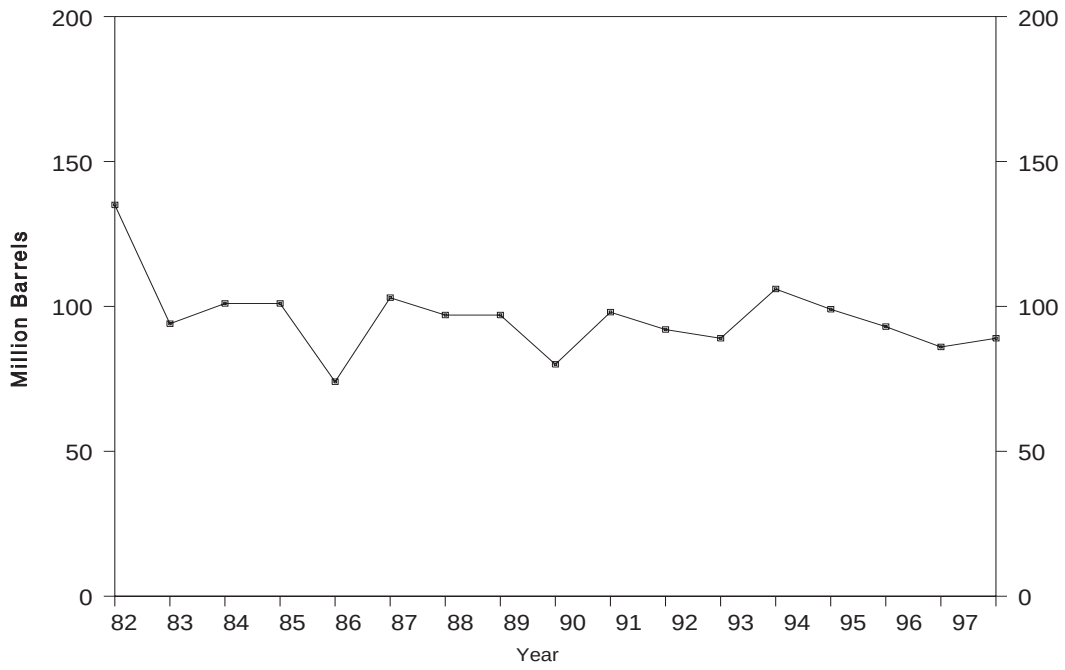
[a] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[b] Stocks are totals as of end of period.
[c] In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using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



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

Figure S16. Liquefied Petroleum Gases Ending Stocks, 1981 - 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, 1981 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply		Disposition				Ending Stocks[b] (Million Barrels)
		Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Product Supplied	
1981	**Average**	**1,571**	**244**	[c] **18**	**289**	**42**	**1,466**	**135**
1982	**Average**	**1,528**	**226**	**-111**	**300**	**65**	**1,499**	[c] **94**
1983	**Average**	**1,642**	**190**	[c] **-4**	**253**	**73**	**1,509**	[c] **101**
1984	**Average**	**1,697**	**195**	[c] **-19**	**291**	**48**	**1,572**	**101**
1985	**Average**	**1,704**	**187**	**-75**	**304**	**62**	**1,599**	**74**
1986	**Average**	**1,695**	**242**	**80**	**302**	**42**	**1,512**	**103**
1987	**Average**	**1,748**	**190**	**-15**	**304**	**38**	**1,612**	**97**
1988	**Average**	**1,817**	**209**	**1**	**321**	**49**	**1,656**	**97**
1989	**Average**	**1,791**	**181**	**-47**	**315**	**35**	**1,668**	**80**
1990	**Average**	**1,749**	**188**	**48**	**293**	**40**	**1,556**	**98**
1991	**Average**	**1,871**	**147**	**-15**	**304**	**41**	**1,689**	**92**
1992	**Average**	**1,972**	**131**	**-10**	**309**	**49**	**1,755**	**89**
1993	**Average**	**1,993**	**160**	**49**	**327**	**43**	**1,734**	**106**
1994	**Average**	**2,012**	**183**	**-19**	**296**	**38**	**1,880**	**99**
1995	January	1,952	172	-527	363	64	2,225	83
	February	1,969	134	-463	306	122	2,138	70
	March	2,126	111	170	247	57	1,763	75
	April	2,259	147	307	216	43	1,841	85
	May	2,269	115	403	211	62	1,709	97
	June	2,233	174	448	198	55	1,705	111
	July	2,203	124	488	217	41	1,581	126
	August	2,178	169	343	217	57	1,730	136
	September	2,038	195	14	300	29	1,890	137
	October	1,940	130	-245	358	35	1,921	129
	November	1,943	115	-500	407	63	2,087	114
	December	1,865	169	-680	424	67	2,223	93
	Average	**2,082**	**146**	**-17**	**289**	**58**	**1,899**	**--**
1996	January	1,906	208	-649	419	49	2,295	73
	February	1,912	138	-596	320	60	2,267	56
	March	2,181	165	15	246	38	2,047	56
	April	2,305	122	279	226	56	1,867	65
	May	2,287	156	315	215	67	1,846	74
	June	2,285	184	439	211	36	1,783	87
	July	2,264	182	385	201	72	1,787	99
	August	2,271	166	321	201	50	1,864	109
	September	2,194	150	165	260	47	1,871	114
	October	2,133	183	-103	309	37	2,073	111
	November	2,041	177	-466	377	41	2,265	97
	December	2,086	159	-352	355	56	2,186	86
	Average	**2,156**	**166**	**-19**	**278**	**51**	**2,012**	**--**
1997	January	2,009	193	-543	344	36	2,365	69
	February	2,072	178	-450	321	78	2,301	57
	March	2,210	163	214	244	62	1,854	63
	April	2,355	169	349	211	41	1,923	74
	May	2,364	161	481	200	40	1,804	89
	June	2,369	160	534	203	43	1,748	105
	July	2,331	151	433	195	56	1,798	118
	August	2,348	175	408	190	37	1,888	131
	September	2,196	150	54	247	29	2,017	133
	October	2,074	168	-100	302	42	1,998	129
	November	1,926	155	-535	345	66	2,206	113
	December	2,020	205	-770	354	74	2,567	89
	Average	**2,190**	**169**	**9**	**263**	**50**	**2,038**	**--**

[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, 1981 - Present
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply		Disposition				Ending Stocks[b] (Million Barrels)
		Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Products Supplied	
1981	**Average**	**2,771**	**188**	[c] **-42**	**723**	**197**	**2,081**	**241**
1982	**Average**	**2,475**	**305**	**-68**	**787**	**205**	**1,856**	[c] **216**
1983	**Average**	**2,437**	**382**	[c] **-6**	**712**	**236**	**1,877**	[c] **217**
1984	**Average**	**2,500**	**503**	[c] **-32**	**791**	**236**	**2,007**	**198**
1985	**Average**	**2,532**	**550**	**22**	**886**	**227**	**1,947**	**206**
1986	**Average**	**2,704**	**504**	**-15**	**888**	**291**	**2,045**	**201**
1987	**Average**	**2,737**	**543**	**-1**	**829**	**264**	**2,187**	**200**
1988	**Average**	**2,773**	**645**	**22**	**799**	**294**	**2,303**	**208**
1989	**Average**	**2,771**	**627**	**12**	**797**	**305**	**2,285**	**213**
1990	**Average**	**2,842**	**705**	**-32**	**887**	**289**	**2,402**	**201**
1991	**Average**	**2,826**	**675**	**18**	**936**	**277**	**2,269**	**208**
1992	**Average**	**2,928**	**707**	**-3**	**906**	**263**	**2,470**	[c] **207**
1993	**Average**	**3,035**	**770**	**-2**	**1,081**	**300**	**2,426**	**206**
1994	**Average**	**2,973**	**761**	**24**	**861**	**329**	**2,518**	**215**
1995	January	2,879	559	[c] 413	657	324	2,044	227
	February	2,960	806	271	758	320	2,417	235
	March	2,842	672	-35	914	329	2,306	234
	April	2,916	711	-106	1,064	355	2,313	231
	May	3,009	593	-74	801	339	2,535	229
	June	3,142	651	-130	917	403	2,604	225
	July	3,312	765	-54	1,126	326	2,679	223
	August	3,246	745	-250	1,123	372	2,746	215
	September	3,256	779	-44	1,077	348	2,654	214
	October	2,939	727	-120	919	376	2,491	210
	November	2,918	803	-35	1,003	343	2,409	209
	December	2,953	701	-97	1,125	341	2,286	206
	Average	**3,031**	**708**	**-23**	**958**	**348**	**2,457**	**--**
1996	January	2,833	873	448	613	335	2,311	220
	February	2,817	745	-18	872	388	2,320	219
	March	2,983	820	122	759	315	2,607	223
	April	3,108	828	174	841	421	2,500	228
	May	3,128	852	-45	1,010	427	2,588	227
	June	3,227	923	-203	1,207	399	2,748	221
	July	3,223	862	-170	1,131	361	2,764	216
	August	3,332	907	-311	1,289	448	2,812	206
	September	3,306	751	-56	1,083	410	2,620	204
	October	3,146	1,068	-84	1,023	323	2,952	202
	November	3,093	928	-34	1,113	366	2,576	201
	December	3,088	982	42	1,224	321	2,485	202
	Average	**3,108**	**879**	**-11**	**1,014**	**376**	**2,608**	**--**
1997	January	2,945	1,154	354	831	403	2,511	213
	February	2,953	1,010	239	944	332	2,448	220
	March	3,078	955	514	697	391	2,431	236
	April	3,136	1,054	-122	1,203	395	2,715	232
	May	3,329	1,156	127	1,089	446	2,823	236
	June	3,355	936	-468	1,345	417	2,997	222
	July	3,402	903	-214	1,069	380	3,069	215
	August	3,426	886	-83	994	460	2,940	213
	September	3,390	836	101	841	450	2,834	216
	October	3,227	957	-87	915	381	2,976	213
	November	3,078	754	-7	919	369	2,551	213
	December	3,113	744	3	981	396	2,476	213
	Average	**3,204**	**945**	**30**	**985**	**402**	**2,733**	**--**

[a] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[b] Stocks are totals as of end of period.
[c] In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. Bulk terminal and pipeline stocks of oxygenates were added beginning in January 1993. See Summary Statistics Explanatory Note 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* (1981 through 1997).
- 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 1997 reflect data received as of April 1998. Data for 1997 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 and the Conservation Committee of California Oil and Gas Producers.

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

After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Mineral Management Service, and the Conservation Committee of California Oil and Gas Producers. 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 1997 crude oil production data received by the EIA as of April 1998. Crude oil production data for 1997 received after April 1998 will be published later as an appendix in the following year's *Petroleum Supply Annual* (PSA). Table C1 of this publication presents the 1996 crude oil production a year after it was published in the *PSA* 1996.

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, 1997

	Commodity	Thousand Barrels	Thousand Barrels per Day
	Crude Oil		
	Field Production		
(1)	Alaska	472,949	1,296
(2)	Lower 48 States	1,881,882	5,156
(3)	**Total U.S.**	**2,354,831**	**6,452**
	Net Imports		
(4)	Imports (Gross Excluding Strategic Petroleum Reserve (SPR))	3,002,299	8,225
(5)	SPR Imports	0	0
(6)	Exports	39,308	108
(7)	**Imports (Net Including SPR)**	**2,962,991**	**8,118**
	Other Sources		
(8)	SPR Stock Change (Withdrawal (+), Addition (-))	2,387	7
(9)	Other Stock Change (Withdrawal (+), Addition (-))	-20,837	-57
(10)	Product Supplied and Losses	-797	-2
(11)	Unaccounted for[a]	52,891	145
(12)	**Total Other Sources**	**33,644**	**92**
(13)	**Crude Input to Refineries**	**5,351,466**	**14,662**
	(13) = (3) + (7) + (12)		
	Natural Gas Liquids (NGL)		
(14)	Field Production[b]	709,771	1,945
(15)	Net Imports[c]	10,477	29
(16)	Stock Change (Withdrawal (+), Addition (-))[c]	651	2
(17)	**Total NGL Supply**	**720,898**	**1,975**
	Other Liquids		
	Unfinished Oils and Gasoline Blending Components, Total		
(18)	Stock Change (Withdrawal (+), Addition (-))	-5,576	-15
(19)	Net Imports	214,795	588
(20)	Other Liquids New Supply(Field Production)	78,471	215
(21)	Refinery Processing Gain[a]	310,078	850
(22)	Crude Oil Product Supplied	797	2
(23)	**Total Other Liquids**	**598,565**	**1,640**
	(23) = (18) through (22)		
(24)	**Total Production of Products**	**6,670,929**	**18,277**
	(24) = (13) + (17) + (23)		
	Net Imports of Refined Products		
(25)	Imports (Gross)	469,482	1,286
(26)	Exports	315,033	863
(27)	**Imports (Net)**	**154,449**	**423**
(28)	**Total New Supply of Products**	**6,825,379**	**18,700**
	(28) = (24) + (27)		
(29)	Refined Products Stock Change (Withdrawal (+), Addition (-))	-28,968	-79
(30)	**Total Petroleum Products Supplied for Domestic Use**	**6,796,411**	**18,620**
	(30) = (28) + (29)		
(31)	Finished Motor Gasoline	2,926,148	8,017
(32)	Distillate Fuel Oil	1,253,938	3,435
(33)	Residual Fuel Oil	290,795	797
(34)	Jet Fuel	583,463	1,599
(35)	Liquefied Petroleum Gases	743,804	2,038
(36)	Other[d]	997,465	2,733
(37)	Crude Oil	797	2
(38)	**Total Products Supplied**	**6,796,411**	**18,620**
	(38) = (31) through (37)		
	Ending Stocks, All Oils		
(39)	Crude Oil (Excluding SPR)	304,690	--
(40)	Strategic Petroleum Reserve	563,429	--
(41)	Finished Motor Gasoline	166,357	--
(42)	Distillate Fuel Oil	138,427	--
(43)	Residual Fuel Oil	40,462	--
(44)	Jet Fuel	44,043	--
(45)	Liquefied Petroleum Gases	89,481	--
(46)	Other[d]	212,870	--
(47)	**Total Stocks**	**1,559,759**	**--**
	(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.

(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, 1997
(Thousand Barrels)

Commodity	Supply				Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil[a]	Stock Change[b]	Crude Losses	Refinery Inputs	Exports	Products Supplied[c]	
Crude Oil	**2,354,831**	**--**	**3,002,299**	**52,891**	**18,450**	**0**	**5,351,466**	**39,308**	**797**	**868,119**
Natural Gas Liquids and LRGs	**663,266**	**252,168**	**74,831**	**--**	**2,617**	**--**	**151,769**	**20,882**	**814,997**	**95,196**
Pentanes Plus	116,016	--	13,129	--	-651	--	55,950	2,652	71,194	5,715
Liquefied Petroleum Gases	547,250	252,168	61,702	--	3,268	--	95,819	18,229	743,804	89,481
Ethane/Ethylene	232,617	9,673	5,922	--	1,388	--	0	0	246,824	18,907
Propane/Propylene	192,538	206,094	41,271	--	1,037	--	0	11,861	427,005	44,045
Normal Butane/Butylene	52,434	32,202	8,775	--	381	--	50,472	6,368	36,190	18,373
Isobutane/Isobutylene	69,661	4,199	5,734	--	462	--	45,347	0	33,785	8,156
Other Liquids	**78,471**	**--**	**224,060**	**--**	**5,576**	**--**	**303,557**	**9,265**	**-15,867**	**144,817**
Other Hydrocarbons/Oxygenates	106,879	--	22,098	--	-639	--	125,265	4,351	0	12,493
Unfinished Oils	--	--	128,814	--	895	--	145,580	0	-17,661	88,755
Motor Gasoline Blend. Comp.	-28,409	--	73,148	--	5,423	--	34,403	4,913	0	43,418
Aviation Gasoline Blend. Comp.	--	--	0	--	-103	--	-1,691	0	1,794	151
Finished Petroleum Products	**46,505**	**5,864,702**	**407,780**	**--**	**25,700**	**--**	**--**	**296,804**	**5,996,483**	**451,627**
Finished Motor Gasoline	46,505	2,826,051	112,837	--	9,367	--	--	49,878	2,926,148	166,357
Reformulated	--	878,200	58,641	--	5,100	--	--	79	931,662	42,931
Oxygenated	180,960	33,246	0	--	-505	--	--	341	214,370	1,082
Other	-134,455	1,914,605	54,196	--	4,772	--	--	49,457	1,780,117	122,344
Finished Aviation Gasoline	--	7,248	41	--	-575	--	--	0	7,864	1,697
Jet Fuel	--	567,295	33,109	--	4,178	--	--	12,763	583,463	44,043
Naphtha-Type	--	241	0	--	-52	--	--	76	217	34
Kerosene-Type	--	567,054	33,109	--	4,230	--	--	12,687	583,246	44,009
Kerosene	--	23,887	570	--	273	--	--	138	24,046	7,294
Distillate Fuel Oil	--	1,238,041	83,102	--	11,698	--	--	55,507	1,253,938	138,427
0.05 percent sulfur and under	--	789,287	37,599	--	-302	--	--	15,884	811,304	68,085
Greater than 0.05 percent sulfur	--	448,754	45,503	--	12,000	--	--	39,623	442,634	70,342
Residual Fuel Oil	--	258,290	70,829	--	-5,458	--	--	43,782	290,795	40,462
Naphtha For Petro. Feed. Use	--	83,560	18,681	--	35	--	--	0	102,206	1,808
Other Oils For Petro. Feed. Use	--	79,539	69,086	--	772	--	--	0	147,853	2,199
Special Naphthas	--	19,191	2,709	--	281	--	--	7,849	13,770	2,171
Lubricants	--	65,899	4,026	--	215	--	--	11,275	58,435	12,889
Waxes	--	8,372	441	--	-80	--	--	993	7,900	834
Petroleum Coke	--	251,619	386	--	2,757	--	--	111,615	137,633	9,437
Asphalt and Road Oil	--	177,019	11,862	--	1,619	--	--	2,879	184,383	22,102
Still Gas	--	241,184	0	--	0	--	--	0	241,184	0
Miscellaneous Products	--	17,507	101	--	618	--	--	125	16,865	1,907
Total	**3,143,073**	**6,116,870**	**3,708,970**	**52,891**	**52,343**	**0**	**5,806,792**	**366,258**	**6,796,411**	**1,559,759**

[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.
[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.

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, 1997
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil[a]	Stock Change[b]	Crude Losses	Refinery Inputs	Exports	Products Supplied[c]
Crude Oil	**6,452**	**--**	**8,225**	**145**	**51**	**0**	**14,662**	**108**	**2**
Natural Gas Liquids and LRGs	**1,817**	**691**	**205**	**--**	**7**	**--**	**416**	**57**	**2,233**
Pentanes Plus	318	--	36	--	-2	--	153	7	195
Liquefied Petroleum Gases	1,499	691	169	--	9	--	263	50	2,038
Ethane/Ethylene	637	27	16	--	4	--	0	0	676
Propane/Propylene	528	565	113	--	3	--	0	32	1,170
Normal Butane/Butylene	144	88	24	--	1	--	138	17	99
Isobutane/Isobutylene	191	12	16	--	1	--	124	0	93
Other Liquids	**215**	**--**	**614**	**--**	**15**	**--**	**832**	**25**	**-43**
Other Hydrocarbons/Oxygenates	293	--	61	--	-2	--	343	12	0
Unfinished Oils	--	--	353	--	2	--	399	0	-48
Motor Gasoline Blend. Comp.	-78	--	200	--	15	--	94	13	0
Aviation Gasoline Blend. Comp.	--	--	0	--	(s)	--	-5	0	5
Finished Petroleum Products	**127**	**16,068**	**1,117**	**--**	**70**	**--**	**--**	**813**	**16,429**
Finished Motor Gasoline	127	7,743	309	--	26	--	--	137	8,017
Reformulated	--	2,406	161	--	14	--	--	(s)	2,552
Oxygenated	496	91	0	--	-1	--	--	1	587
Other	-368	5,245	148	--	13	--	--	135	4,877
Finished Aviation Gasoline	--	20	(s)	--	-2	--	--	0	22
Jet Fuel	--	1,554	91	--	11	--	--	35	1,599
Naphtha-Type	--	1	0	--	(s)	--	--	(s)	1
Kerosene-Type	--	1,554	91	--	12	--	--	35	1,598
Kerosene	--	65	2	--	1	--	--	(s)	66
Distillate Fuel Oil	--	3,392	228	--	32	--	--	152	3,435
0.05 percent sulfur and under	--	2,162	103	--	-1	--	--	44	2,223
Greater than 0.05 percent sulfur	--	1,229	125	--	33	--	--	109	1,213
Residual Fuel Oil	--	708	194	--	-15	--	--	120	797
Naphtha For Petro. Feed. Use	--	229	51	--	(s)	--	--	0	280
Other Oils For Petro. Feed. Use	--	218	189	--	2	--	--	0	405
Special Naphthas	--	53	7	--	1	--	--	22	38
Lubricants	--	181	11	--	1	--	--	31	160
Waxes	--	23	1	--	(s)	--	--	3	22
Petroleum Coke	--	689	1	--	8	--	--	306	377
Asphalt and Road Oil	--	485	32	--	4	--	--	8	505
Still Gas	--	661	0	--	0	--	--	0	661
Miscellaneous Products	--	48	(s)	--	2	--	--	(s)	46
Total	**8,611**	**16,759**	**10,162**	**145**	**143**	**0**	**15,909**	**1,003**	**18,620**

[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.
[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, 1997
(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	**9,494**	**--**	**527,113**	**5,153**	**-2,953**	**-2,564**	**0**	**541,371**	**1**	**0**	**10,973**
Natural Gas Liquids and LRGs	**9,446**	**16,993**	**8,649**	**--**	**41,435**	**53**	**--**	**1,519**	**741**	**74,210**	**6,092**
Pentanes Plus	1,003	--	0	--	0	-18	--	0	25	996	12
Liquefied Petroleum Gases	8,443	16,993	8,649	--	41,435	71	--	1,519	716	73,214	6,080
Ethane/Ethylene	2,915	0	0	--	0	-1	--	0	0	2,916	0
Propane/Propylene	3,769	18,444	8,187	--	40,198	-573	--	0	447	70,724	4,305
Normal Butane/Butylene	1,317	-788	297	--	976	422	--	701	269	410	1,369
Isobutane/Isobutylene	442	-663	165	--	261	223	--	818	0	-836	406
Other Liquids	**8,196**	**--**	**88,627**	**--**	**5,385**	**513**	**--**	**121,292**	**345**	**-19,942**	**18,817**
Other Hydrocarbons/Oxygenates	19,975	--	5,271	--	0	360	--	24,846	40	0	2,236
Unfinished Oils	--	--	13,014	--	-60	341	--	34,346	0	-21,733	10,106
Motor Gasoline Blend. Comp.	-11,779	--	70,342	--	5,445	-74	--	63,777	305	0	6,396
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-114	--	-1,677	0	1,791	79
Finished Petroleum Products	**12,684**	**671,139**	**298,219**	**--**	**1,015,797**	**15,070**	**--**	**--**	**12,320**	**1,970,449**	**151,053**
Finished Motor Gasoline	12,684	350,130	107,656	--	571,105	5,772	--	--	1,188	1,034,615	50,787
Reformulated	--	224,012	56,352	--	120,357	2,209	--	--	(s)	398,512	19,462
Oxygenated	9,048	8	0	--	1,604	-78	--	--	1	10,737	280
Other	3,636	126,110	51,304	--	449,144	3,641	--	--	1,186	625,367	31,045
Finished Aviation Gasoline	--	39	3	--	723	-589	--	--	0	1,354	228
Jet Fuel	--	33,116	30,877	--	161,036	2,078	--	--	1,015	221,936	11,756
Naphtha-Type	--	0	0	--	0	0	--	--	31	-31	0
Kerosene-Type	--	33,116	30,877	--	161,036	2,078	--	--	983	221,968	11,756
Kerosene	--	3,822	495	--	2,834	104	--	--	19	7,028	4,576
Distillate Fuel Oil	--	154,771	76,162	--	250,452	12,542	--	--	2,345	466,498	59,932
0.05 percent sulfur and under	--	54,063	34,050	--	144,010	-416	--	--	191	232,348	18,663
Greater than 0.05 percent sulfur	--	100,708	42,112	--	106,442	12,958	--	--	2,154	234,150	41,269
Residual Fuel Oil	--	46,418	64,352	--	16,425	-5,033	--	--	1,340	130,888	16,747
Petrochemical Feedstocks[e]	--	5,417	2,044	--	-724	97	--	--	0	6,640	478
Special Naphthas	--	715	1,976	--	1,124	-2	--	--	167	3,650	116
Lubricants	--	6,765	3,563	--	8,313	22	--	--	1,744	16,875	2,441
Waxes	--	571	256	--	0	-167	--	--	311	683	45
Petroleum Coke	--	18,011	0	--	0	-206	--	--	3,915	14,302	267
Asphalt and Road Oil	--	28,867	10,835	--	4,509	467	--	--	225	43,519	3,591
Still Gas	--	21,716	0	--	0	0	--	--	0	21,716	0
Miscellaneous Products	--	781	0	--	0	-15	--	--	52	744	89
Total	**39,820**	**688,132**	**922,608**	**5,153**	**1,059,664**	**13,072**	**0**	**664,182**	**13,407**	**2,024,716**	**186,935**

[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 5. PAD District I—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]
Crude Oil	**26**	**--**	**1,444**	**14**	**-8**	**-7**	**0**	**1,483**	**(s)**	**0**
Natural Gas Liquids and LRGs	**26**	**47**	**24**	**--**	**114**	**(s)**	**--**	**4**	**2**	**203**
Pentanes Plus	3	--	0	--	0	(s)	--	0	(s)	3
Liquefied Petroleum Gases	23	47	24	--	114	(s)	--	4	2	201
Ethane/Ethylene	8	0	0	--	0	(s)	--	0	0	8
Propane/Propylene	10	51	22	--	110	-2	--	0	1	194
Normal Butane/Butylene	4	-2	1	--	3	1	--	2	1	1
Isobutane/Isobutylene	1	-2	(s)	--	1	1	--	2	0	-2
Other Liquids	**22**	**--**	**243**	**--**	**15**	**1**	**--**	**332**	**1**	**-55**
Other Hydrocarbons/Oxygenates	55	--	14	--	0	1	--	68	(s)	0
Unfinished Oils	--	--	36	--	(s)	1	--	94	0	-60
Motor Gasoline Blend. Comp.	-32	--	193	--	15	(s)	--	175	1	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	-5	0	5
Finished Petroleum Products	**35**	**1,839**	**817**	**--**	**2,783**	**41**	**--**	**--**	**34**	**5,398**
Finished Motor Gasoline	35	959	295	--	1,565	16	--	--	3	2,835
Reformulated	--	614	154	--	330	6	--	--	(s)	1,092
Oxygenated	25	(s)	0	--	4	(s)	--	--	(s)	29
Other	10	346	141	--	1,231	10	--	--	3	1,713
Finished Aviation Gasoline	--	(s)	(s)	--	2	-2	--	--	0	4
Jet Fuel	--	91	85	--	441	6	--	--	3	608
Naphtha-Type	--	0	0	--	0	0	--	--	(s)	(s)
Kerosene-Type	--	91	85	--	441	6	--	--	3	608
Kerosene	--	10	1	--	8	(s)	--	--	(s)	19
Distillate Fuel Oil	--	424	209	--	686	34	--	--	6	1,278
0.05 percent sulfur and under	--	148	93	--	395	-1	--	--	1	637
Greater than 0.05 percent sulfur	--	276	115	--	292	36	--	--	6	642
Residual Fuel Oil	--	127	176	--	45	-14	--	--	4	359
Petrochemical Feedstocks [e]	--	15	6	--	-2	(s)	--	--	0	18
Special Naphthas	--	2	5	--	3	(s)	--	--	(s)	10
Lubricants	--	19	10	--	23	(s)	--	--	5	46
Waxes	--	2	1	--	0	(s)	--	--	1	2
Petroleum Coke	--	49	0	--	0	-1	--	--	11	39
Asphalt and Road Oil	--	79	30	--	12	1	--	--	1	119
Still Gas	--	59	0	--	0	0	--	--	0	59
Miscellaneous Products	--	2	0	--	0	(s)	--	--	(s)	2
Total	**109**	**1,885**	**2,528**	**14**	**2,903**	**36**	**0**	**1,820**	**37**	**5,547**

[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 6. PAD District II—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]	
Crude Oil	**204,365**	**--**	**310,905**	**-3,112**	**731,769**	**10,166**	**0**	**1,222,785**	**10,975**	**0**	**73,581**
Natural Gas Liquids and LRGs	**109,286**	**47,811**	**31,757**	**--**	**2,524**	**3,107**	**--**	**32,684**	**5,088**	**150,499**	**29,519**
Pentanes Plus	15,471	--	412	--	7,413	-150	--	10,302	2,457	10,687	1,774
Liquefied Petroleum Gases	93,815	47,811	31,345	--	-4,889	3,257	--	22,382	2,631	139,812	27,745
Ethane/Ethylene	33,358	0	138	--	-23,040	-491	--	0	0	10,947	2,978
Propane/Propylene	39,876	44,853	24,982	--	15,991	4,539	--	0	901	120,262	17,972
Normal Butane/Butylene	12,854	2,042	3,621	--	-1,086	-779	--	11,597	1,729	4,884	4,802
Isobutane/Isobutylene	7,727	916	2,604	--	3,246	-12	--	10,785	0	3,720	1,993
Other Liquids	**-13,819**	**--**	**93**	**--**	**21,838**	**2,541**	**--**	**14,184**	**10**	**-8,623**	**24,786**
Other Hydrocarbons/Oxygenates	13,150	--	0	--	0	291	--	12,852	7	0	1,950
Unfinished Oils	--	--	48	--	710	475	--	8,912	0	-8,629	12,309
Motor Gasoline Blend. Comp.	-26,969	--	45	--	21,128	1,767	--	-7,566	3	0	10,491
Aviation Gasoline Blend. Comp.	--	--	0	--	0	8	--	-14	0	6	36
Finished Petroleum Products	**40,722**	**1,283,540**	**4,671**	**--**	**301,949**	**4,984**	**--**	**--**	**6,533**	**1,619,365**	**103,433**
Finished Motor Gasoline	40,722	665,485	955	--	176,176	827	--	--	284	882,227	41,886
Reformulated	--	87,471	0	--	1,691	95	--	--	0	89,067	1,195
Oxygenated	137,530	21,898	0	--	-1,718	-407	--	--	10	158,107	537
Other	-96,808	556,116	955	--	176,203	1,139	--	--	274	635,053	40,154
Finished Aviation Gasoline	--	1,411	24	--	940	-44	--	--	0	2,419	382
Jet Fuel	--	78,800	75	--	41,026	486	--	--	38	119,377	9,145
Naphtha-Type	--	15	0	--	0	-37	--	--	1	51	0
Kerosene-Type	--	78,785	75	--	41,026	523	--	--	36	119,327	9,145
Kerosene	--	6,488	0	--	187	179	--	--	20	6,476	1,587
Distillate Fuel Oil	--	307,243	1,632	--	79,350	-868	--	--	552	388,541	31,226
0.05 percent sulfur and under	--	218,322	1,175	--	69,289	-169	--	--	4	288,951	22,230
Greater than 0.05 percent sulfur	--	88,921	457	--	10,061	-699	--	--	548	99,590	8,996
Residual Fuel Oil	--	21,515	140	--	-3,131	694	--	--	681	17,149	2,585
Petrochemical Feedstocks[e]	--	15,926	402	--	1,160	150	--	--	0	17,338	363
Special Naphthas	--	5,879	347	--	651	250	--	--	411	6,216	478
Lubricants	--	8,311	259	--	2,491	120	--	--	686	10,255	1,735
Waxes	--	1,139	160	--	0	-21	--	--	187	1,133	144
Petroleum Coke	--	50,490	0	--	0	1,691	--	--	1,640	47,159	3,214
Asphalt and Road Oil	--	69,678	652	--	3,099	1,407	--	--	2,030	69,992	10,328
Still Gas	--	47,778	0	--	0	0	--	--	0	47,778	0
Miscellaneous Products	--	3,397	25	--	0	113	--	--	4	3,305	360
Total	**340,554**	**1,331,351**	**347,426**	**-3,112**	**1,058,080**	**20,798**	**0**	**1,269,653**	**22,607**	**1,761,241**	**231,319**

[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, 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]
Crude Oil	**560**	**--**	**852**	**-9**	**2,005**	**28**	**0**	**3,350**	**30**	**0**
Natural Gas Liquids and LRGs	**299**	**131**	**87**	**--**	**7**	**9**	**--**	**90**	**14**	**412**
Pentanes Plus	42	--	1	--	20	(s)	--	28	7	29
Liquefied Petroleum Gases	257	131	86	--	-13	9	--	61	7	383
Ethane/Ethylene	91	0	(s)	--	-63	-1	--	0	0	30
Propane/Propylene	109	123	68	--	44	12	--	0	2	329
Normal Butane/Butylene	35	6	10	--	-3	-2	--	32	5	13
Isobutane/Isobutylene	21	3	7	--	9	(s)	--	30	0	10
Other Liquids	**-38**	**--**	**(s)**	**--**	**60**	**7**	**--**	**39**	**(s)**	**-24**
Other Hydrocarbons/Oxygenates	36	--	0	--	0	1	--	35	(s)	0
Unfinished Oils	--	--	(s)	--	2	1	--	24	0	-24
Motor Gasoline Blend. Comp.	-74	--	(s)	--	58	5	--	-21	(s)	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	**112**	**3,517**	**13**	**--**	**827**	**14**	**--**	**--**	**18**	**4,437**
Finished Motor Gasoline	112	1,823	3	--	483	2	--	--	1	2,417
Reformulated	--	240	0	--	5	(s)	--	--	0	244
Oxygenated	377	60	0	--	-5	-1	--	--	(s)	433
Other	-265	1,524	3	--	483	3	--	--	1	1,740
Finished Aviation Gasoline	--	4	(s)	--	3	(s)	--	--	0	7
Jet Fuel	--	216	(s)	--	112	1	--	--	(s)	327
Naphtha-Type	--	(s)	0	--	0	(s)	--	--	(s)	(s)
Kerosene-Type	--	216	(s)	--	112	1	--	--	(s)	327
Kerosene	--	18	0	--	1	(s)	--	--	(s)	18
Distillate Fuel Oil	--	842	4	--	217	-2	--	--	2	1,064
0.05 percent sulfur and under	--	598	3	--	190	(s)	--	--	(s)	792
Greater than 0.05 percent sulfur	--	244	1	--	28	-2	--	--	2	273
Residual Fuel Oil	--	59	(s)	--	-9	2	--	--	2	47
Petrochemical Feedstocks [e]	--	44	1	--	3	(s)	--	--	0	48
Special Naphthas	--	16	1	--	2	1	--	--	1	17
Lubricants	--	23	1	--	7	(s)	--	--	2	28
Waxes	--	3	(s)	--	0	(s)	--	--	1	3
Petroleum Coke	--	138	0	--	0	5	--	--	4	129
Asphalt and Road Oil	--	191	2	--	8	4	--	--	6	192
Still Gas	--	131	0	--	0	0	--	--	0	131
Miscellaneous Products	--	9	(s)	--	0	(s)	--	--	(s)	9
Total	**933**	**3,648**	**952**	**-9**	**2,899**	**57**	**0**	**3,479**	**62**	**4,825**

[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, 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]	
Crude Oil	**1,197,018**	**--**	**1,950,210**	**19,059**	**-657,736**	**10,207**	**0**	**2,498,313**	**31**	**0**	**710,050**
Natural Gas Liquids and LRGs	**453,080**	**158,438**	**30,495**	**--**	**4,999**	**-1,652**	**--**	**78,554**	**8,828**	**561,282**	**53,310**
Pentanes Plus	71,732	--	12,020	--	-2,409	-524	--	29,872	161	51,834	3,678
Liquefied Petroleum Gases	381,348	158,438	18,475	--	7,408	-1,128	--	48,682	8,666	509,449	49,632
Ethane/Ethylene	176,879	9,673	5,784	--	46,213	1,887	--	0	0	236,662	15,716
Propane/Propylene	127,478	121,796	6,094	--	-43,655	-4,024	--	0	7,630	208,107	18,798
Normal Butane/Butylene	26,304	23,933	3,845	--	5,208	891	--	22,690	1,036	34,673	10,014
Isobutane/Isobutylene	50,687	3,036	2,752	--	-358	118	--	25,992	0	30,007	5,104
Other Liquids	**53,772**	**--**	**109,162**	**--**	**-28,375**	**3,251**	**--**	**118,266**	**8,331**	**4,711**	**63,377**
Other Hydrocarbons/Oxygenates	42,996	--	202	--	0	-83	--	38,986	4,295	0	5,036
Unfinished Oils	--	--	108,407	--	-268	1,812	--	101,613	0	4,714	43,290
Motor Gasoline Blend. Comp.	10,776	--	553	--	-28,107	1,518	--	-22,332	4,036	0	15,025
Aviation Gasoline Blend. Comp.	--	--	0	--	0	4	--	-1	0	-3	26
Finished Petroleum Products	**-9,328**	**2,698,833**	**93,526**	**--**	**-1,375,444**	**3,785**	**--**	**--**	**186,983**	**1,216,819**	**129,045**
Finished Motor Gasoline	-9,328	1,239,925	2,844	--	-777,283	1,922	--	--	41,374	412,862	46,480
Reformulated	--	230,851	2,289	--	-124,567	-18	--	--	0	108,591	8,632
Oxygenated	14,477	2,002	0	--	0	-1	--	--	1	16,479	0
Other	-23,805	1,007,072	555	--	-652,716	1,941	--	--	41,373	287,792	37,848
Finished Aviation Gasoline	--	4,059	0	--	-1,810	-3	--	--	0	2,252	431
Jet Fuel	--	287,571	204	--	-219,272	62	--	--	7,787	60,654	13,055
Naphtha-Type	--	9	0	--	0	1	--	--	25	-17	1
Kerosene-Type	--	287,562	204	--	-219,272	61	--	--	7,763	60,670	13,054
Kerosene	--	11,286	0	--	-2,859	57	--	--	48	8,322	968
Distillate Fuel Oil	--	561,685	0	--	-340,083	464	--	--	35,327	185,811	31,965
0.05 percent sulfur and under	--	348,889	0	--	-221,473	733	--	--	11,122	115,561	16,235
Greater than 0.05 percent sulfur	--	212,796	0	--	-118,610	-269	--	--	24,205	70,250	15,730
Residual Fuel Oil	--	109,804	4,591	--	-13,294	-748	--	--	25,089	76,760	14,745
Petrochemical Feedstocks[e]	--	137,788	84,937	--	-436	520	--	--	0	221,769	2,841
Special Naphthas	--	11,564	370	--	-1,775	22	--	--	514	9,623	1,520
Lubricants	--	42,345	204	--	-11,024	-100	--	--	7,517	24,108	6,973
Waxes	--	4,614	16	--	0	84	--	--	316	4,230	472
Petroleum Coke	--	120,876	0	--	0	954	--	--	68,686	51,236	4,094
Asphalt and Road Oil	--	44,330	321	--	-7,608	21	--	--	320	36,702	4,234
Still Gas	--	112,118	0	--	0	0	--	--	0	112,118	0
Miscellaneous Products	--	10,868	39	--	0	530	--	--	4	10,373	1,267
Total	**1,694,542**	**2,857,271**	**2,183,393**	**19,059**	**-2,056,556**	**15,591**	**0**	**2,695,133**	**204,173**	**1,782,812**	**955,782**

[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, 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]
Crude Oil	**3,280**	**--**	**5,343**	**52**	**-1,802**	**28**	**0**	**6,845**	**(s)**	**0**
Natural Gas Liquids and LRGs	**1,241**	**434**	**84**	**--**	**14**	**-5**	**--**	**215**	**24**	**1,538**
Pentanes Plus	197	--	33	--	-7	-1	--	82	(s)	142
Liquefied Petroleum Gases	1,045	434	51	--	20	-3	--	133	24	1,396
Ethane/Ethylene	485	27	16	--	127	5	--	0	0	648
Propane/Propylene	349	334	17	--	-120	-11	--	0	21	570
Normal Butane/Butylene	72	66	11	--	14	2	--	62	3	95
Isobutane/Isobutylene	139	8	8	--	-1	(s)	--	71	0	82
Other Liquids	**147**	**--**	**299**	**--**	**-78**	**9**	**--**	**324**	**23**	**13**
Other Hydrocarbons/Oxygenates	118	--	1	--	0	(s)	--	107	12	0
Unfinished Oils	--	--	297	--	-1	5	--	278	0	13
Motor Gasoline Blend. Comp.	30	--	2	--	-77	4	--	-61	11	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products	**-26**	**7,394**	**256**	**--**	**-3,768**	**10**	**--**	**--**	**512**	**3,334**
Finished Motor Gasoline	-26	3,397	8	--	-2,130	5	--	--	113	1,131
Reformulated	--	632	6	--	-341	(s)	--	--	0	298
Oxygenated	40	5	0	--	0	(s)	--	--	(s)	45
Other	-65	2,759	2	--	-1,788	5	--	--	113	788
Finished Aviation Gasoline	--	11	0	--	-5	(s)	--	--	0	6
Jet Fuel	--	788	1	--	-601	(s)	--	--	21	166
Naphtha-Type	--	(s)	0	--	0	(s)	--	--	(s)	(s)
Kerosene-Type	--	788	1	--	-601	(s)	--	--	21	166
Kerosene	--	31	0	--	-8	(s)	--	--	(s)	23
Distillate Fuel Oil	--	1,539	0	--	-932	1	--	--	97	509
0.05 percent sulfur and under	--	956	0	--	-607	2	--	--	30	317
Greater than 0.05 percent sulfur	--	583	0	--	-325	-1	--	--	66	192
Residual Fuel Oil	--	301	13	--	-36	-2	--	--	69	210
Petrochemical Feedstocks[e]	--	378	233	--	-1	1	--	--	0	608
Special Naphthas	--	32	1	--	-5	(s)	--	--	1	26
Lubricants	--	116	1	--	-30	(s)	--	--	21	66
Waxes	--	13	(s)	--	0	(s)	--	--	1	12
Petroleum Coke	--	331	0	--	0	3	--	--	188	140
Asphalt and Road Oil	--	121	1	--	-21	(s)	--	--	1	101
Still Gas	--	307	0	--	0	0	--	--	0	307
Miscellaneous Products	--	30	(s)	--	0	1	--	--	(s)	28
Total	**4,643**	**7,828**	**5,982**	**52**	**-5,634**	**43**	**0**	**7,384**	**559**	**4,884**

[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, 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]	
Crude Oil	**130,636**	**--**	**64,846**	**16,683**	**-35,545**	**1,823**	**0**	**174,797**	**1**	**0**	**12,839**
Natural Gas Liquids and LRGs	**55,992**	**2,342**	**3,832**	**--**	**-48,958**	**156**	**--**	**5,441**	**15**	**7,596**	**1,369**
Pentanes Plus	9,389	--	697	--	-5,004	57	--	1,260	8	3,757	227
Liquefied Petroleum Gases	46,603	2,342	3,135	--	-43,954	99	--	4,181	7	3,839	1,142
Ethane/Ethylene	19,451	0	0	--	-23,173	-7	--	0	0	-3,715	213
Propane/Propylene	17,166	3,427	1,978	--	-12,534	86	--	0	7	9,944	489
Normal Butane/Butylene	6,387	-550	1,012	--	-5,098	29	--	2,603	(s)	-881	306
Isobutane/Isobutylene	3,599	-535	145	--	-3,149	-9	--	1,578	0	-1,509	134
Other Liquids	**3,367**	**--**	**0**	**--**	**0**	**46**	**--**	**3,998**	**0**	**-677**	**4,349**
Other Hydrocarbons/Oxygenates	912	--	0	--	0	65	--	847	0	0	252
Unfinished Oils	--	--	0	--	0	370	--	307	0	-677	2,208
Motor Gasoline Blend. Comp.	2,455	--	0	--	0	-389	--	2,844	0	0	1,889
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products	**-2,093**	**186,965**	**3,550**	**--**	**21,220**	**172**	**--**	**--**	**170**	**209,300**	**11,361**
Finished Motor Gasoline	-2,093	92,581	234	--	3,501	232	--	--	24	93,967	4,867
Reformulated	--	0	0	--	0	0	--	--	0	0	0
Oxygenated	3,619	6,964	0	--	114	-16	--	--	18	10,695	264
Other	-5,712	85,617	234	--	3,387	248	--	--	5	83,272	4,603
Finished Aviation Gasoline	--	163	5	--	147	17	--	--	0	298	41
Jet Fuel	--	9,546	0	--	12,418	36	--	--	0	21,928	839
Naphtha-Type	--	0	0	--	0	-25	--	--	0	25	0
Kerosene-Type	--	9,546	0	--	12,418	61	--	--	0	21,903	839
Kerosene	--	884	0	--	-162	-58	--	--	(s)	780	67
Distillate Fuel Oil	--	50,277	3,256	--	5,316	-67	--	--	(s)	58,916	2,824
0.05 percent sulfur and under	--	40,798	643	--	5,228	-112	--	--	0	46,781	2,344
Greater than 0.05 percent sulfur	--	9,479	2,613	--	88	45	--	--	(s)	12,135	480
Residual Fuel Oil	--	4,664	0	--	0	167	--	--	1	4,496	592
Petrochemical Feedstocks[e]	--	234	0	--	0	1	--	--	0	233	1
Special Naphthas	--	-1	1	--	0	-1	--	--	3	-2	0
Lubricants	--	0	0	--	0	0	--	--	81	-81	0
Waxes	--	1,157	0	--	0	6	--	--	44	1,107	20
Petroleum Coke	--	5,414	0	--	0	-82	--	--	1	5,495	104
Asphalt and Road Oil	--	14,463	54	--	0	-74	--	--	16	14,575	1,992
Still Gas	--	6,910	0	--	0	0	--	--	0	6,910	0
Miscellaneous Products	--	673	0	--	0	-5	--	--	(s)	678	14
Total	**187,902**	**189,307**	**72,228**	**16,683**	**-63,283**	**2,197**	**0**	**184,236**	**186**	**216,219**	**29,918**

[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, 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]
Crude Oil	**358**	**--**	**178**	**46**	**-97**	**5**	**0**	**479**	**(s)**	**0**
Natural Gas Liquids and LRGs	**153**	**6**	**10**	**--**	**-134**	**(s)**	**--**	**15**	**(s)**	**21**
Pentanes Plus	26	--	2	--	-14	(s)	--	3	(s)	10
Liquefied Petroleum Gases	128	6	9	--	-120	(s)	--	11	(s)	11
Ethane/Ethylene	53	0	0	--	-63	(s)	--	0	0	-10
Propane/Propylene	47	9	5	--	-34	(s)	--	0	(s)	27
Normal Butane/Butylene	17	-2	3	--	-14	(s)	--	7	(s)	-2
Isobutane/Isobutylene	10	-1	(s)	--	-9	(s)	--	4	0	-4
Other Liquids	**9**	**--**	**0**	**--**	**0**	**(s)**	**--**	**11**	**0**	**-2**
Other Hydrocarbons/Oxygenates	2	--	0	--	0	(s)	--	2	0	0
Unfinished Oils	--	--	0	--	0	1	--	1	0	-2
Motor Gasoline Blend. Comp.	7	--	0	--	0	-1	--	8	0	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products	**-6**	**512**	**10**	**--**	**58**	**(s)**	**--**	**--**	**(s)**	**573**
Finished Motor Gasoline	-6	254	1	--	10	1	--	--	(s)	257
Reformulated	--	0	0	--	0	0	--	--	0	0
Oxygenated	10	19	0	--	(s)	(s)	--	--	(s)	29
Other	-16	235	1	--	9	1	--	--	(s)	228
Finished Aviation Gasoline	--	(s)	(s)	--	(s)	(s)	--	--	0	1
Jet Fuel	--	26	0	--	34	(s)	--	--	0	60
Naphtha-Type	--	0	0	--	0	(s)	--	--	0	(s)
Kerosene-Type	--	26	0	--	34	(s)	--	--	0	60
Kerosene	--	2	0	--	(s)	(s)	--	--	(s)	2
Distillate Fuel Oil	--	138	9	--	15	(s)	--	--	(s)	161
0.05 percent sulfur and under	--	112	2	--	14	(s)	--	--	0	128
Greater than 0.05 percent sulfur	--	26	7	--	(s)	(s)	--	--	(s)	33
Residual Fuel Oil	--	13	0	--	0	(s)	--	--	(s)	12
Petrochemical Feedstocks[e]	--	1	0	--	0	(s)	--	--	0	1
Special Naphthas	--	(s)	(s)	--	0	(s)	--	--	(s)	(s)
Lubricants	--	0	0	--	0	0	--	--	(s)	(s)
Waxes	--	3	0	--	0	(s)	--	--	(s)	3
Petroleum Coke	--	15	0	--	0	(s)	--	--	(s)	15
Asphalt and Road Oil	--	40	(s)	--	0	(s)	--	--	(s)	40
Still Gas	--	19	0	--	0	0	--	--	0	19
Miscellaneous Products	--	2	0	--	0	(s)	--	--	(s)	2
Total	**515**	**519**	**198**	**46**	**-173**	**6**	**0**	**505**	**1**	**592**

[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, 1997
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]	
Crude Oil	**813,317**	**--**	**149,225**	**15,108**	**-35,535**	**-1,182**	**0**	**914,200**	**28,300**	**797**	**60,676**
Natural Gas Liquids and LRGs	**35,462**	**26,584**	**98**	**--**	**0**	**953**	**--**	**33,571**	**6,209**	**21,411**	**4,906**
Pentanes Plus	18,421	--	0	--	0	-16	--	14,516	1	3,920	24
Liquefied Petroleum Gases	17,041	26,584	98	--	0	969	--	19,055	6,208	17,491	4,882
Ethane/Ethylene	14	0	0	--	0	0	--	0	0	14	0
Propane/Propylene	4,249	17,574	30	--	0	1,009	--	0	2,876	17,968	2,481
Normal Butane/Butylene	5,572	7,565	0	--	0	-182	--	12,881	3,333	-2,895	1,882
Isobutane/Isobutylene	7,206	1,445	68	--	0	142	--	6,174	0	2,403	519
Other Liquids	**26,955**	**--**	**26,178**	**--**	**1,152**	**-775**	**--**	**45,817**	**579**	**8,664**	**33,488**
Other Hydrocarbons/Oxygenates	29,846	--	16,625	--	0	-1,272	--	47,734	9	0	3,019
Unfinished Oils	--	--	7,345	--	-382	-2,103	--	402	0	8,664	20,842
Motor Gasoline Blend. Comp.	-2,892	--	2,208	--	1,534	2,601	--	-2,320	569	0	9,617
Aviation Gasoline Blend. Comp.	--	--	0	--	0	-1	--	1	0	0	10
Finished Petroleum Products	**4,520**	**1,024,225**	**7,814**	**--**	**36,478**	**1,689**	**--**	**--**	**90,797**	**980,551**	**56,735**
Finished Motor Gasoline	4,520	477,930	1,148	--	26,501	614	--	--	7,008	502,477	22,337
Reformulated	--	335,866	0	--	2,519	2,814	--	--	79	335,492	13,642
Oxygenated	16,286	2,374	0	--	0	-3	--	--	311	18,352	1
Other	-11,766	139,690	1,148	--	23,982	-2,197	--	--	6,618	148,633	8,694
Finished Aviation Gasoline	--	1,576	9	--	0	44	--	--	0	1,541	615
Jet Fuel	--	158,262	1,953	--	4,792	1,516	--	--	3,923	159,568	9,248
Naphtha-Type	--	217	0	--	0	9	--	--	18	190	33
Kerosene-Type	--	158,045	1,953	--	4,792	1,507	--	--	3,905	159,378	9,215
Kerosene	--	1,407	75	--	0	-9	--	--	50	1,441	96
Distillate Fuel Oil	--	164,065	2,052	--	4,965	-373	--	--	17,282	154,173	12,480
0.05 percent sulfur and under	--	127,215	1,731	--	2,946	-338	--	--	4,567	127,663	8,613
Greater than 0.05 percent sulfur	--	36,850	321	--	2,019	-35	--	--	12,716	26,509	3,867
Residual Fuel Oil	--	75,889	1,746	--	0	-538	--	--	16,671	61,502	5,793
Petrochemical Feedstocks[e]	--	3,734	384	--	0	39	--	--	0	4,079	324
Special Naphthas	--	1,034	15	--	0	12	--	--	6,754	-5,717	57
Lubricants	--	8,478	0	--	220	173	--	--	1,245	7,280	1,740
Waxes	--	891	9	--	0	18	--	--	136	746	153
Petroleum Coke	--	56,828	386	--	0	400	--	--	37,374	19,440	1,758
Asphalt and Road Oil	--	19,681	0	--	0	-202	--	--	289	19,594	1,957
Still Gas	--	52,662	0	--	0	0	--	--	0	52,662	0
Miscellaneous Products	--	1,788	37	--	0	-5	--	--	64	1,766	177
Total	**880,254**	**1,050,809**	**183,315**	**15,108**	**2,095**	**685**	**0**	**993,588**	**125,885**	**1,011,423**	**155,805**

[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, 1997
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry[a]	Unaccounted For Crude Oil[b]	Net Receipts	Stock Change[c]	Crude Losses	Refinery Inputs	Exports	Products Supplied[d]
Crude Oil	**2,228**	**--**	**409**	**41**	**-97**	**-3**	**0**	**2,505**	**78**	**2**
Natural Gas Liquids and LRGs	**97**	**73**	**(s)**	**--**	**0**	**3**	**--**	**92**	**17**	**59**
Pentanes Plus	50	--	0	--	0	(s)	--	40	(s)	11
Liquefied Petroleum Gases	47	73	(s)	--	0	3	--	52	17	48
Ethane/Ethylene	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene	12	48	(s)	--	0	3	--	0	8	49
Normal Butane/Butylene	15	21	0	--	0	(s)	--	35	9	-8
Isobutane/Isobutylene	20	4	(s)	--	0	(s)	--	17	0	7
Other Liquids	**74**	**--**	**72**	**--**	**3**	**-2**	**--**	**126**	**2**	**24**
Other Hydrocarbons/Oxygenates	82	--	46	--	0	-3	--	131	(s)	0
Unfinished Oils	--	--	20	--	-1	-6	--	1	0	24
Motor Gasoline Blend. Comp.	-8	--	6	--	4	7	--	-6	2	0
Aviation Gasoline Blend. Comp.	--	--	0	--	0	(s)	--	(s)	0	0
Finished Petroleum Products	**12**	**2,806**	**21**	**--**	**100**	**5**	**--**	**--**	**249**	**2,686**
Finished Motor Gasoline	12	1,309	3	--	73	2	--	--	19	1,377
Reformulated	--	920	0	--	7	8	--	--	(s)	919
Oxygenated	45	7	0	--	0	(s)	--	--	1	50
Other	-32	383	3	--	66	-6	--	--	18	407
Finished Aviation Gasoline	--	4	(s)	--	0	(s)	--	--	0	4
Jet Fuel	--	434	5	--	13	4	--	--	11	437
Naphtha-Type	--	1	0	--	0	(s)	--	--	(s)	1
Kerosene-Type	--	433	5	--	13	4	--	--	11	437
Kerosene	--	4	(s)	--	0	(s)	--	--	(s)	4
Distillate Fuel Oil	--	449	6	--	14	-1	--	--	47	422
0.05 percent sulfur and under	--	349	5	--	8	-1	--	--	13	350
Greater than 0.05 percent sulfur	--	101	1	--	6	(s)	--	--	35	73
Residual Fuel Oil	--	208	5	--	0	-1	--	--	46	168
Petrochemical Feedstocks[e]	--	10	1	--	0	(s)	--	--	0	11
Special Naphthas	--	3	(s)	--	0	(s)	--	--	19	-16
Lubricants	--	23	0	--	1	(s)	--	--	3	20
Waxes	--	2	(s)	--	0	(s)	--	--	(s)	2
Petroleum Coke	--	156	1	--	0	1	--	--	102	53
Asphalt and Road Oil	--	54	0	--	0	-1	--	--	1	54
Still Gas	--	144	0	--	0	0	--	--	0	144
Miscellaneous Products	--	5	(s)	--	0	(s)	--	--	(s)	5
Total	**2,412**	**2,879**	**502**	**41**	**6**	**2**	**0**	**2,722**	**345**	**2,771**

[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, 1997
(Thousand Barrels)

PAD District and State	Total	Daily Average
PAD District I	**9,494**	**26**
Florida	6,381	17
New York	276	1
Pennsylvania	1,320	4
Virginia	10	(s)
West Virginia	1,508	4
PAD District II	**204,365**	**560**
Illinois	16,115	44
Indiana	2,430	7
Kansas	39,836	109
Kentucky	2,988	8
Michigan	10,052	28
Missouri	114	(s)
Nebraska	3,337	9
North Dakota	35,833	98
Ohio	8,593	24
Oklahoma	83,365	228
South Dakota	1,334	4
Tennessee	367	1
PAD District III	**1,197,018**	**3,280**
Alabama	14,831	41
Arkansas	8,429	23
Louisiana[a]	134,134	367
Mississippi	21,037	58
New Mexico	69,835	191
Texas[a]	536,584	1,470
Federal Offshore PAD District III	412,169	1,129
PAD District IV	**130,636**	**358**
Colorado	25,616	70
Montana	15,527	43
Utah	19,317	53
Wyoming	70,176	192
PAD District V	**813,317**	**2,228**
Alaska[a]	472,949	1,296
South Alaska	12,234	34
North Slope	460,716	1,262
Arizona	82	(s)
California[a]	285,172	781
Nevada	980	3
Federal Offshore PAD District V	54,134	148
U.S. Total[a]	**2,354,831**	**6,452**

[a] Includes the following offshore production (thousand barrels): Alaska: State - 90,100; California: State - 21,495; Louisiana: State - 22,736; Texas: State -1,060; U.S. Total, including Federal offshore - 601,693.

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

Note: • Crude oil production data for Alabama, Arkansas, California, Colorado, Federal Offshore PAD District III, Illinois, Indiana, Kansas, Kentucky, Michigan, Mississippi, Montana, Nebraska, New Mexico, New York, Ohio, Oklahoma, South Dakota, Texas, Utah, and Wyoming are changed from those reported in the *Petroleum Supply Monthly* during 1997. • Crude oil production data for Arkansas, Federal Offshore PAD District III, Kansas, Montana, New Mexico, and Utah were estimated based on first purchaser monthly crude oil volumes collected on Form EIA-182, "Domestic Crude Oil First Purchase Report." • Annual crude oil production for New York and Ohio was prorated by month based on first purchaser monthly crude oil volumes collected on Form EIA-182. • A final revision to the State data for 1998 will appear in the 1998 *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 the Conservation Committee of California Oil and Gas Producers.

Revised 1996 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, 1997
(Thousand Barrels)

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
	Net Production						
Natural Gas Liquids	**1,596**	**7,850**	**9,446**	**6,686**	**3,887**	**98,713**	**109,286**
Pentanes Plus	146	857	1,003	1,147	1,026	13,298	15,471
Liquefied Petroleum Gases	1,450	6,993	8,443	5,539	2,861	85,415	93,815
Ethane	575	2,340	2,915	1,405	0	31,953	33,358
Propane	534	3,235	3,769	2,527	1,771	35,578	39,876
Normal Butane	341	976	1,317	866	1,090	10,898	12,854
Isobutane	0	442	442	741	0	6,986	7,727
	Stocks						
Natural Gas Liquids	**8**	**35**	**43**	**102**	**41**	**1,217**	**1,360**
Pentanes Plus	0	3	3	13	9	202	224
Liquefied Petroleum Gases	8	32	40	89	32	1,015	1,136
Ethane	0	0	0	17	0	150	167
Propane	3	25	28	39	21	464	524
Normal Butane	5	4	9	15	11	275	301
Isobutane	0	3	3	18	0	126	144

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	**220,787**	**47,294**	**102,290**	**8,298**	**74,411**	**453,080**	**55,992**	**35,462**	**663,266**
Pentanes Plus	36,496	6,897	17,497	2,604	8,238	71,732	9,389	18,421	116,016
Liquefied Petroleum Gases	184,291	40,397	84,793	5,694	66,173	381,348	46,603	17,041	547,250
Ethane	83,067	22,304	35,856	927	34,725	176,879	19,451	14	232,617
Propane	63,638	11,480	29,361	2,518	20,481	127,478	17,166	4,249	192,538
Normal Butane	26,259	-18,738	9,984	1,488	7,311	26,304	6,387	5,572	52,434
Isobutane	11,327	25,351	9,592	761	3,656	50,687	3,599	7,206	69,661
	Stocks								
Natural Gas Liquids	**214**	**346**	**835**	**65**	**97**	**1,557**	**309**	**159**	**3,428**
Pentanes Plus	95	126	231	27	4	483	150	20	880
Liquefied Petroleum Gases	119	220	604	38	93	1,074	159	139	2,548
Ethane	8	49	0	0	0	57	2	0	226
Propane	71	36	59	18	60	244	92	96	984
Normal Butane	30	67	290	12	24	423	51	15	799
Isobutane	10	68	255	8	9	350	14	28	539

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, 1997

(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	**508,755**	**32,616**	**541,371**	**823,332**	**154,808**	**244,645**	**1,222,785**
Natural Gas Liquids	**1,519**	**0**	**1,519**	**18,846**	**2,669**	**11,169**	**32,684**
Pentanes Plus	0	0	0	2,438	1,065	6,799	10,302
Liquefied Petroleum Gases	1,519	0	1,519	16,408	1,604	4,370	22,382
Ethane	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0
Normal Butane	701	0	701	8,432	859	2,306	11,597
Isobutane	818	0	818	7,976	745	2,064	10,785
Other Liquids	**120,841**	**451**	**121,292**	**18,965**	**3,660**	**-8,441**	**14,184**
Other Hydrocarbons/Hydrogen/Oxygenates	24,838	8	24,846	9,229	2,477	1,146	12,852
Other Hydrocarbons/Hydrogen	14	0	14	410	0	335	745
Oxygenates	W	W	24,832	8,819	2,477	811	12,107
Fuel Ethanol	W	W	W	W	W	W	10,222
Methanol	W	W	W	W	W	W	W
MTBE	W	W	23,584	W	W	W	W
Other Oxygenates[a]	W	W	W	W	W	W	W
Unfinished Oils (net)	33,890	456	34,346	19,130	-167	-10,051	8,912
Motor Gasoline Blend. Comp. (net)	63,790	-13	63,777	-9,380	1,350	464	-7,566
Aviation Gasoline Blend. Comp. (net)	-1,677	0	-1,677	-14	0	0	-14
Total Input to Refineries	**631,115**	**33,067**	**664,182**	**861,143**	**161,137**	**247,373**	**1,269,653**
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	1,361	90	1,450	2,310	425	677	3,411
Operable Capacity (daily average)	1,516	97	1,614	2,341	413	695	3,449
Operable Utilization Rate (percent)[b]	89.8	92.1	89.9	98.7	102.8	97.4	98.9
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Cracking	592	16	608	811	134	192	1,137
Catalytic Hydrocracking	41	2	43	133	0	5	138
Delayed and Fluid Coking	80	0	80	185	64	71	320
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.94	0.96	0.94	1.17	2.20	0.80	1.23
API Gravity, Weighted Average (degrees)	32.93	34.62	33.03	33.32	29.19	35.91	33.31
Operable Capacity (daily average)	**1,516**	**97**	**1,614**	**2,341**	**413**	**695**	**3,449**
Operating	1,387	97	1,485	2,341	413	695	3,449
Idle	129	0	129	0	0	0	0
Alaskan Crude Oil Receipts	**0**	**0**	**0**	**3,112**	**0**	**0**	**3,112**

See footnotes at end of table.

Table 16. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, 1997 (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	**215,081**	**1,208,367**	**977,869**	**65,365**	**31,631**	**2,498,313**	**174,797**	**914,200**	**5,351,466**
Natural Gas Liquids	**10,891**	**36,731**	**25,892**	**2,349**	**2,691**	**78,554**	**5,441**	**33,571**	**151,769**
Pentanes Plus	5,620	16,459	4,321	1,902	1,570	29,872	1,260	14,516	55,950
Liquefied Petroleum Gases	5,271	20,272	21,571	447	1,121	48,682	4,181	19,055	95,819
Ethane	0	0	0	0	0	0	0	0	0
Propane	0	0	0	0	0	0	0	0	0
Normal Butane	4,432	7,308	10,831	92	27	22,690	2,603	12,881	50,472
Isobutane	839	12,964	10,740	355	1,094	25,992	1,578	6,174	45,347
Other Liquids	**-1,954**	**84,032**	**38,050**	**-1,544**	**-318**	**118,266**	**3,998**	**45,817**	**303,557**
Other Hydrocarbons/Hydrogen/Oxygenates	1,644	25,489	11,520	3	330	38,986	847	47,734	125,265
Other Hydrocarbons/Hydrogen	1,363	4,804	6,476	0	0	12,643	43	9,531	22,976
Oxygenates	281	20,685	5,044	W	W	26,343	804	38,203	102,289
Fuel Ethanol	W	W	W	W	W	W	W	W	11,803
Methanol	W	W	W	W	W	W	W	W	496
MTBE	W	19,442	W	W	W	24,148	W	36,583	86,240
Other Oxygenates[a]	W	W	W	W	W	W	W	W	3,750
Unfinished Oils (net)	-1,930	77,991	26,870	-1,152	-166	101,613	307	402	145,580
Motor Gasoline Blend. Comp. (net)	-1,660	-19,448	-347	-395	-482	-22,332	2,844	-2,320	34,403
Aviation Gasoline Blend. Comp. (net)	-8	0	7	0	0	-1	0	1	-1,691
Total Input to Refineries	**224,018**	**1,329,130**	**1,041,811**	**66,170**	**34,004**	**2,695,133**	**184,236**	**993,588**	**5,806,792**
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	589	3,305	2,701	170	87	6,851	483	2,642	14,838
Operable Capacity (daily average)	621	3,424	2,752	201	95	7,092	520	2,919	15,594
Operable Utilization Rate (percent)[b]	94.7	96.5	98.2	84.8	91.6	96.6	92.9	90.5	95.2
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Cracking	183	1,313	966	24	26	2,512	155	714	5,126
Catalytic Hydrocracking	36	231	198	0	0	465	3	405	1,055
Delayed and Fluid Coking	5	372	387	9	0	773	40	478	1,691
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.75	1.39	1.38	1.69	0.55	1.33	1.38	1.24	1.25
API Gravity, Weighted Average (degrees)	38.29	30.54	30.56	30.70	38.76	31.32	33.10	26.08	31.07
Operable Capacity (daily average)	**621**	**3,424**	**2,752**	**201**	**95**	**7,092**	**520**	**2,919**	**15,594**
Operating	621	3,391	2,741	201	95	7,048	520	2,871	15,373
Idle	0	34	11	0	0	44	0	48	221
Alaskan Crude Oil Receipts	**0**	**227**	**0**	**0**	**158**	**385**	**0**	**446,001**	**449,498**

[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, 1997

(Thousand Barrels)

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Liquefied Refinery Gases	16,433	560	16,993	37,285	3,543	6,983	47,811
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	17,986	458	18,444	33,513	3,997	7,343	44,853
Propane	W	W	W	25,565	W	W	W
Propylene	W	W	W	7,948	W	W	W
Normal Butane/Butylene	-924	136	-788	2,435	-371	-22	2,042
Normal Butane	W	W	W	W	W	W	W
Butylene	W	W	W	W	W	W	W
Isobutane/Isobutylene	-629	-34	-663	1,337	-83	-338	916
Isobutane	W	W	W	W	W	W	W
Isobutylene	W	W	W	W	W	W	W
Finished Motor Gasoline	337,783	12,347	350,130	452,178	84,888	128,419	665,485
Reformulated	224,012	0	224,012	78,303	9,168	0	87,471
Oxygenated	8	0	8	6,518	15,096	284	21,898
Other	113,763	12,347	126,110	367,357	60,624	128,135	556,116
Finished Aviation Gasoline	39	0	39	705	370	336	1,411
Jet Fuel	32,735	381	33,116	54,583	11,394	12,823	78,800
Naphtha-Type	0	0	0	15	0	0	15
Kerosene-Type	32,735	381	33,116	54,568	11,394	12,823	78,785
Commercial	32,735	287	33,022	52,152	10,478	11,243	73,873
Military	0	94	94	2,416	916	1,580	4,912
Kerosene	2,880	942	3,822	4,633	729	1,126	6,488
Distillate Fuel Oil	146,058	8,713	154,771	194,254	38,642	74,347	307,243
0.05 percent sulfur and under	46,952	7,111	54,063	133,706	29,657	54,959	218,322
Greater than 0.05 percent sulfur	99,106	1,602	100,708	60,548	8,985	19,388	88,921
Residual Fuel Oil	45,494	924	46,418	16,442	4,023	1,050	21,515
Less than 0.31 percent sulfur	16,383	411	16,794	49	0	0	49
0.31 to 1.00 percent sulfur	24,621	513	25,134	4,054	0	12	4,066
Greater than 1.00 percent sulfur	4,490	0	4,490	12,339	4,023	1,038	17,400
Naphtha for Petrochemical Feedstock Use	5,417	0	5,417	6,770	0	302	7,072
Other Oils for Petrochemical Feedstock Use	0	0	0	8,087	0	767	8,854
Special Naphthas	414	301	715	5,039	0	840	5,879
Lubricants	4,189	2,576	6,765	5,362	0	2,949	8,311
Naphthenic	0	0	0	0	0	0	0
Paraffinic	4,189	2,576	6,765	5,362	0	2,949	8,311
Waxes	0	571	571	644	0	495	1,139
Petroleum Coke	17,716	295	18,011	31,499	9,561	9,430	50,490
Marketable	7,014	0	7,014	18,450	7,559	7,107	33,116
Catalyst	10,702	295	10,997	13,049	2,002	2,323	17,374
Asphalt and Road Oil	24,392	4,475	28,867	49,217	12,551	7,910	69,678
Still Gas	20,712	1,004	21,716	33,164	5,355	9,259	47,778
Miscellaneous Products	305	476	781	1,930	889	578	3,397
Fuel Use	0	0	0	0	0	0	0
Nonfuel Use	305	476	781	1,930	889	578	3,397
Total	**654,567**	**33,565**	**688,132**	**901,792**	**171,945**	**257,614**	**1,331,351**
Processing Gain(-) or Loss(+)[a]	-23,452	-498	-23,950	-40,649	-10,808	-10,241	-61,698

See footnotes at end of table.

Table 17. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, 1997 (Continued)

(Thousand Barrels)

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Liquefied Refinery Gases	10,634	91,344	54,938	629	893	158,438	2,342	26,584	252,168
Ethane/Ethylene	383	7,506	1,784	0	0	9,673	0	0	9,673
Ethane	W	W	W	W	W	W	W	W	7,843
Ethylene	W	W	W	W	W	W	W	W	1,830
Propane/Propylene	7,908	66,781	45,515	935	657	121,796	3,427	17,574	206,094
Propane	W	30,578	28,515	W	W	65,396	W	W	133,557
Propylene	W	36,203	17,000	W	W	56,400	W	W	72,537
Normal Butane/Butylene	2,714	14,690	6,522	-195	202	23,933	-550	7,565	32,202
Normal Butane	W	W	W	W	W	W	W	W	31,985
Butylene	W	W	W	W	W	W	W	W	217
Isobutane/Isobutylene	-371	2,367	1,117	-111	34	3,036	-535	1,445	4,199
Isobutane	W	W	W	W	W	W	W	W	3,039
Isobutylene	W	W	W	W	W	W	W	W	1,160
Finished Motor Gasoline	119,296	604,215	479,197	18,126	19,091	1,239,925	92,581	477,930	2,826,051
Reformulated	8,019	170,599	52,233	0	0	230,851	0	335,866	878,200
Oxygenated	388	0	324	0	1,290	2,002	6,964	2,374	33,246
Other	110,889	433,616	426,640	18,126	17,801	1,007,072	85,617	139,690	1,914,605
Finished Aviation Gasoline	1,444	1,609	1,006	0	0	4,059	163	1,576	7,248
Jet Fuel	20,210	124,658	137,169	3,224	2,310	287,571	9,546	158,262	567,295
Naphtha-Type	9	0	0	0	0	9	0	217	241
Kerosene-Type	20,201	124,658	137,169	3,224	2,310	287,562	9,546	158,045	567,054
Commercial	14,366	112,729	128,967	2,495	0	258,557	7,826	141,274	514,552
Military	5,835	11,929	8,202	729	2,310	29,005	1,720	16,771	52,502
Kerosene	72	8,407	2,081	719	7	11,286	884	1,407	23,887
Distillate Fuel Oil	53,732	265,778	218,206	15,318	8,651	561,685	50,277	164,065	1,238,041
0.05 percent sulfur and under	39,748	184,405	108,689	7,748	8,299	348,889	40,798	127,215	789,287
Greater than 0.05 percent sulfur	13,984	81,373	109,517	7,570	352	212,796	9,479	36,850	448,754
Residual Fuel Oil	3,506	57,598	45,880	2,548	272	109,804	4,664	75,889	258,290
Less than 0.31 percent sulfur	1,395	91	4,381	0	0	5,867	959	2,421	26,090
0.31 to 1.00 percent sulfur	1,354	13,092	8,573	2,244	272	25,535	1,257	19,342	75,334
Greater than 1.00 percent sulfur	757	44,415	32,926	304	0	78,402	2,448	54,126	156,866
Naphtha for Petrochemical Feedstock Use	1,302	57,704	10,761	0	12	69,779	0	1,292	83,560
Other Oils for Petrochemical Feedstock Use	1,704	37,252	29,053	0	0	68,009	234	2,442	79,539
Special Naphthas	1,146	7,125	1,662	1,631	0	11,564	-1	1,034	19,191
Lubricants	W	20,541	W	W	W	42,345	0	8,478	65,899
Naphthenic	W	4,275	W	W	W	10,762	0	3,622	14,384
Paraffinic	W	16,266	W	W	W	31,583	0	4,856	51,515
Waxes	55	2,500	1,046	1,013	0	4,614	1,157	891	8,372
Petroleum Coke	3,491	64,247	51,982	916	240	120,876	5,414	56,828	251,619
Marketable	375	41,374	38,180	680	0	80,609	3,082	43,504	167,325
Catalyst	3,116	22,873	13,802	236	240	40,267	2,332	13,324	84,294
Asphalt and Road Oil	6,237	11,646	12,098	12,775	1,574	44,330	14,463	19,681	177,019
Still Gas	8,945	60,772	39,384	2,083	934	112,118	6,910	52,662	241,184
Miscellaneous Products	760	4,522	5,586	0	0	10,868	673	1,788	17,507
Fuel Use	238	0	2,131	0	0	2,369	0	-321	2,048
Nonfuel Use	522	4,522	3,455	0	0	8,499	673	2,109	15,459
Total	**233,074**	**1,419,918**	**1,103,611**	**66,684**	**33,984**	**2,857,271**	**189,307**	**1,050,809**	**6,116,870**
Processing Gain(-) or Loss(+)[a]	-9,056	-90,788	-61,800	-514	20	-162,138	-5,071	-57,221	-310,078

[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, 1997

(Thousand Barrels)

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Crude Oil	**9,601**	**541**	**10,142**	**8,206**	**1,790**	**2,826**	**12,822**
Petroleum Products	**53,974**	**2,602**	**56,576**	**37,830**	**10,195**	**12,775**	**60,800**
Pentanes Plus	0	0	0	4	219	223	446
Liquefied Petroleum Gases	1,890	14	1,904	2,266	382	1,063	3,711
Ethane/Ethylene	0	0	0	3	0	0	3
Propane/Propylene	527	3	530	1,422	26	620	2,068
Normal Butane/Butylene	962	9	971	545	281	296	1,122
Isobutane/Isobutylene	401	2	403	296	75	147	518
Other Hydrocarbons/Hydrogen/Oxygenates	2,010	7	2,017	336	129	57	522
Other Hydrocarbons/Hydrogen	0	0	0	19	0	0	19
Oxygenates	W	W	2,017	317	129	57	503
Fuel Ethanol	W	W	W	W	W	W	302
Methanol	W	W	W	W	W	W	W
MTBE	W	W	1,574	W	W	W	W
Other Oxygenates [a]	W	W	W	W	W	W	W
Unfinished Oils	9,384	722	10,106	7,858	535	3,916	12,309
Naphthas and Lighter	1,771	332	2,103	2,262	202	959	3,423
Kerosene and Light Gas Oils	2,784	4	2,788	1,325	66	253	1,644
Heavy Gas Oils	3,805	332	4,137	2,405	259	1,817	4,481
Residuum	1,024	54	1,078	1,866	8	887	2,761
Motor Gasoline Blending Components	6,071	38	6,109	6,225	1,204	1,122	8,551
Aviation Gasoline Blending Components	79	0	79	36	0	0	36
Finished Motor Gasoline	9,266	303	9,569	5,724	1,199	2,057	8,980
Reformulated	5,038	0	5,038	311	0	0	311
Oxygenated	0	9	9	113	291	0	404
Other	4,228	294	4,522	5,300	908	2,057	8,265
Finished Aviation Gasoline	41	0	41	42	35	44	121
Jet Fuel	1,517	25	1,542	2,528	130	459	3,117
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	1,517	25	1,542	2,528	130	459	3,117
Kerosene	936	45	981	298	175	117	590
Distillate Fuel Oil	15,732	317	16,049	5,733	1,942	1,799	9,474
0.05 percent sulfur and under	2,408	287	2,695	3,503	1,159	1,205	5,867
Greater then 0.05 percent sulfur	13,324	30	13,354	2,230	783	594	3,607
Residual Fuel Oil	5,039	59	5,098	1,277	378	101	1,756
Less than 0.31 percent sulfur	1,452	39	1,491	0	0	0	0
0.31 to 1.00 percent sulfur	2,119	20	2,139	225	0	1	226
Greater than 1.00 percent sulfur	1,468	0	1,468	1,052	378	100	1,530
Naphtha for Petrochemical Feedstock Use	478	0	478	144	0	3	147
Other Oils for Petrochemical Feedstock Use	0	0	0	216	0	0	216
Special Naphthas	52	34	86	453	0	25	478
Lubricants	424	275	699	789	0	0	789
Waxes	0	45	45	102	0	42	144
Petroleum Coke (Marketable)	267	0	267	768	2,175	271	3,214
Asphalt and Road Oil	783	679	1,462	2,933	1,675	1,454	6,062
Miscellaneous Products	5	39	44	98	17	22	137
Total Stocks, All Oils	**63,575**	**3,143**	**66,718**	**46,036**	**11,985**	**15,601**	**73,622**

See footnotes at end of table.

Table 18. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, 1997 (Continued)

(Thousand Barrels)

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Crude Oil	**887**	**25,748**	**17,250**	**1,095**	**406**	**45,386**	**2,266**	**20,047**	**90,663**
Petroleum Products	**11,162**	**65,253**	**52,164**	**4,410**	**1,832**	**134,821**	**11,603**	**66,431**	**330,231**
Pentanes Plus	121	69	23	12	11	236	10	0	692
Liquefied Petroleum Gases	2,095	2,926	3,139	46	75	8,281	378	1,167	15,441
Ethane/Ethylene	45	644	0	0	0	689	0	0	692
Propane/Propylene	1,059	922	775	6	6	2,768	117	231	5,714
Normal Butane/Butylene	601	845	1,774	16	42	3,278	180	585	6,136
Isobutane/Isobutylene	390	515	590	24	27	1,546	81	351	2,899
Other Hydrocarbons/Hydrogen/Oxygenates	28	1,376	797	8	4	2,213	85	2,318	7,155
Other Hydrocarbons/Hydrogen	0	0	1	0	0	1	0	13	33
Oxygenates	28	1,376	796	W	W	2,212	85	2,305	7,122
Fuel Ethanol	W	W	W	W	W	W	W	W	424
Methanol	W	W	W	W	W	W	W	W	753
MTBE	W	1,093	W	W	W	1,815	W	2,281	5,849
Other Oxygenates [a]	W	W	W	W	W	W	W	W	96
Unfinished Oils	2,849	22,092	16,690	957	702	43,290	2,208	20,842	88,755
Naphthas and Lighter	1,038	5,716	3,764	206	197	10,921	353	3,633	20,433
Kerosene and Light Gas Oils	322	3,054	2,384	305	93	6,158	416	4,505	15,511
Heavy Gas Oils	1,142	7,674	7,212	414	412	16,854	863	9,681	36,016
Residuum	347	5,648	3,330	32	0	9,357	576	3,023	16,795
Motor Gasoline Blending Components	1,348	6,435	5,528	172	355	13,838	1,889	8,248	38,635
Aviation Gasoline Blending Components	11	0	15	0	0	26	0	10	151
Finished Motor Gasoline	1,735	9,007	7,366	230	159	18,497	2,287	12,424	51,757
Reformulated	33	2,714	406	0	0	3,153	0	8,051	16,553
Oxygenated	0	0	0	0	0	0	115	0	528
Other	1,702	6,293	6,960	230	159	15,344	2,172	4,373	34,676
Finished Aviation Gasoline	70	145	162	0	0	377	29	340	908
Jet Fuel	498	3,361	3,051	86	58	7,054	402	5,121	17,236
Naphtha-Type	1	0	0	0	0	1	0	33	34
Kerosene-Type	497	3,361	3,051	86	58	7,053	402	5,088	17,202
Kerosene	18	228	213	32	14	505	40	84	2,200
Distillate Fuel Oil	1,151	8,304	5,185	516	197	15,353	1,668	6,453	48,997
0.05 percent sulfur and under	591	3,658	2,145	227	144	6,765	1,292	4,470	21,089
Greater then 0.05 percent sulfur	560	4,646	3,040	289	53	8,588	376	1,983	27,908
Residual Fuel Oil	226	3,657	2,556	169	23	6,631	592	4,174	18,251
Less than 0.31 percent sulfur	25	6	53	0	0	84	23	522	2,120
0.31 to 1.00 percent sulfur	92	714	491	113	23	1,433	399	715	4,912
Greater than 1.00 percent sulfur	109	2,937	2,012	56	0	5,114	170	2,937	11,219
Naphtha for Petrochemical Feedstock Use	28	593	375	0	27	1,023	0	160	1,808
Other Oils for Petrochemical Feedstock Use	71	1,173	574	0	0	1,818	1	164	2,199
Special Naphthas	84	1,075	51	86	0	1,296	0	57	1,917
Lubricants	21	2,599	1,996	855	0	5,471	0	1,195	8,154
Waxes	4	252	189	27	0	472	20	153	834
Petroleum Coke (Marketable)	0	1,309	2,785	0	0	4,094	104	1,758	9,437
Asphalt and Road Oil	785	536	785	1,214	207	3,527	1,890	1,651	14,592
Miscellaneous Products	19	116	684	0	0	819	0	112	1,112
Total Stocks, All Oils	**12,049**	**91,001**	**69,414**	**5,505**	**2,238**	**180,207**	**13,869**	**86,478**	**420,894**

[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] 1997

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Liquefied Refinery Gases	3.0	1.7	3.0	4.4	2.3	3.0	3.9
Finished Motor Gasoline[b]	45.6	37.3	45.2	51.5	50.7	49.3	50.9
Finished Aviation Gasoline[c]	0.3	0.0	0.3	0.1	0.2	0.1	0.1
Naphtha-Type Jet Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel	6.0	1.2	5.8	6.5	7.4	5.5	6.4
Kerosene	0.5	2.8	0.7	0.5	0.5	0.5	0.5
Distillate Fuel Oil	26.9	26.3	26.9	23.1	25.0	31.7	24.9
Residual Fuel Oil	8.4	2.8	8.1	2.0	2.6	0.4	1.7
Naphtha for Petrochemical Feedstock Use	1.0	0.0	0.9	0.8	0.0	0.1	0.6
Other Oils for Petrochemical Feedstock Use	0.0	0.0	0.0	1.0	0.0	0.3	0.7
Special Naphthas	0.1	0.9	0.1	0.6	0.0	0.4	0.5
Lubricants	0.8	7.8	1.2	0.6	0.0	1.3	0.7
Waxes	0.0	1.7	0.1	0.1	0.0	0.2	0.1
Petroleum Coke	3.3	0.9	3.1	3.7	6.2	4.0	4.1
Asphalt and Road Oil	4.5	13.5	5.0	5.8	8.1	3.4	5.7
Still Gas	3.8	3.0	3.8	3.9	3.5	3.9	3.9
Miscellaneous Products	0.1	1.4	0.1	0.2	0.6	0.2	0.3
Processing Gain(-) or Loss(+)[d]	-4.3	-1.5	-4.2	-4.8	-7.0	-4.4	-5.0

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Liquefied Refinery Gases	5.0	7.1	5.5	1.0	2.8	6.1	1.3	2.9	4.6
Finished Motor Gasoline[b]	50.9	43.6	44.0	25.2	52.6	44.0	47.7	43.6	45.7
Finished Aviation Gasoline[c]	0.7	0.1	0.1	0.0	0.0	0.2	0.1	0.2	0.2
Naphtha-Type Jet Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel	9.5	9.7	13.7	5.0	7.3	11.1	5.5	17.3	10.3
Kerosene	0.0	0.7	0.2	1.1	0.0	0.4	0.5	0.2	0.4
Distillate Fuel Oil	25.2	20.7	21.7	23.9	27.5	21.6	28.7	17.9	22.5
Residual Fuel Oil	1.6	4.5	4.6	4.0	0.9	4.2	2.7	8.3	4.7
Naphtha for Petrochemical Feedstock Use	0.6	4.5	1.1	0.0	0.0	2.7	0.0	0.1	1.5
Other Oils for Petrochemical Feedstock Use	0.8	2.9	2.9	0.0	0.0	2.6	0.1	0.3	1.4
Special Naphthas	0.5	0.6	0.2	2.5	0.0	0.4	0.0	0.1	0.3
Lubricants	0.3	1.6	1.3	12.0	0.0	1.6	0.0	0.9	1.2
Waxes	0.0	0.2	0.1	1.6	0.0	0.2	0.7	0.1	0.2
Petroleum Coke	1.6	5.0	5.2	1.4	0.8	4.6	3.1	6.2	4.6
Asphalt and Road Oil	2.9	0.9	1.2	19.9	5.0	1.7	8.3	2.2	3.2
Still Gas	4.2	4.7	3.9	3.2	3.0	4.3	3.9	5.8	4.4
Miscellaneous Products	0.4	0.4	0.6	0.0	0.0	0.4	0.4	0.2	0.3
Processing Gain(-) or Loss(+)[d]	-4.2	-7.1	-6.2	-0.8	0.1	-6.2	-2.9	-6.3	-5.6

[a] Based on crude oil input and net reruns of unfinished oils.
[b] Based on total finished motor gasoline output minus net input of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and oxygenates.
[c] Based on finished aviation gasoline output minus net input of aviation gasoline blending components.
[d] Represents the difference between input and production.
Notes: • Totals may not equal sum of components due to independent rounding. • Refer to Appendix A for Refining District descriptions.
Sources: Calculated from data on Tables 16 and 17.

Table 20. Imports of Crude Oil and Petroleum Products by PAD District, 1997
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil[a,b]	**528,144**	**596,411**	**1,683,236**	**45,283**	**149,225**	**3,002,299**	**8,225**
Natural Gas Liquids	**8,649**	**31,757**	**30,495**	**3,832**	**98**	**74,831**	**205**
Pentanes Plus	0	412	12,020	697	0	13,129	36
Liquefied Petroleum Gases	8,649	31,345	18,475	3,135	98	61,702	169
Ethane	0	0	5,784	0	0	5,784	16
Ethylene	0	138	0	0	0	138	(s)
Propane	8,187	22,852	5,880	1,978	30	38,927	107
Propylene	0	2,130	214	0	0	2,344	6
Normal Butane	297	3,621	3,845	1,012	0	8,775	24
Butylene	0	0	0	0	0	0	0
Isobutane	165	2,604	2,752	145	68	5,734	16
Isobutylene	0	0	0	0	0	0	0
Other Liquids	**88,627**	**93**	**109,162**	**0**	**26,178**	**224,060**	**614**
Other Hydrocarbons/Hydrogen/Oxygenates	5,271	0	202	0	16,625	22,098	61
Other Hydrocarbons/Hydrogen	0	0	0	0	0	0	0
Oxygenates	5,271	0	202	0	16,625	22,098	61
Fuel Ethanol	0	0	0	0	85	85	(s)
MTBE	5,271	0	44	0	16,540	21,855	60
Other Oxygenates[c]	0	0	158	0	0	158	(s)
Unfinished Oils[a]	13,014	48	108,407	0	7,345	128,814	353
Naphthas and Lighter	2,244	48	17,486	0	650	20,428	56
Kerosene and Light Gas Oils	0	0	0	0	0	0	0
Heavy Gas Oils	10,650	0	49,443	0	206	60,299	165
Residuum	120	0	41,478	0	6,489	48,087	132
Motor Gasoline Blending Components	70,342	45	553	0	2,208	73,148	200
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
Finished Petroleum Products	**298,219**	**4,671**	**93,526**	**3,550**	**7,814**	**407,780**	**1,117**
Finished Motor Gasoline	107,656	955	2,844	234	1,148	112,837	309
Reformulated	56,352	0	2,289	0	0	58,641	161
Oxygenated	0	0	0	0	0	0	0
Other	51,304	955	555	234	1,148	54,196	148
Finished Aviation Gasoline	3	24	0	5	9	41	(s)
Jet Fuel	30,877	75	204	0	1,953	33,109	91
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	30,877	75	204	0	1,953	33,109	91
Bonded Aircraft Fuel	19,040	0	0	0	163	19,203	53
Other	11,837	75	204	0	1,790	13,906	38
Kerosene	495	0	0	0	75	570	2
Distillate Fuel Oil	76,162	1,632	0	3,256	2,052	83,102	228
Bonded Ship Bunkers	0	0	0	19	318	337	1
0.05 percent sulfur and under	0	0	0	19	0	19	(s)
Greater than 0.05 percent sulfur	0	0	0	0	318	318	1
Other	76,162	1,632	0	3,237	1,734	82,765	227
0.05 percent sulfur and under	34,050	1,175	0	624	1,731	37,580	103
Greater than 0.05 percent sulfur	42,112	457	0	2,613	3	45,185	124
Residual Fuel Oil	64,352	140	4,591	0	1,746	70,829	194
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	64,352	140	4,591	0	1,746	70,829	194
Less than 0.31 percent sulfur	14,775	99	469	0	1,581	16,924	46
0.31 to 1.00 percent sulfur	11,578	0	1,223	0	0	12,801	35
Greater than 1.00 percent sulfur	37,999	41	2,899	0	165	41,104	113
Naphtha for Petrochemical Feedstock Use	2,044	402	16,199	0	36	18,681	51
Other Oils for Petrochemical Feedstock Use	0	0	68,738	0	348	69,086	189
Special Naphthas	1,976	347	370	1	15	2,709	7
Lubricants	3,563	259	204	0	0	4,026	11
Waxes	256	160	16	0	9	441	1
Petroleum Coke	0	0	0	0	386	386	1
Asphalt and Road Oil	10,835	652	321	54	0	11,862	32
Miscellaneous Products	0	25	39	0	37	101	(s)
Total	**923,639**	**632,932**	**1,916,419**	**52,665**	**183,315**	**3,708,970**	**10,162**

[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] 1997
(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	**599,047**	**11,322**	**34,809**	**882**	**10,709**	**0**	**447**	**12,083**	**63**	**0**
Algeria	2,195	11,322	16,395	222	0	0	381	9,365	0	0
Iraq	32,530	0	0	0	0	0	0	0	0	0
Kuwait	92,229	0	0	0	0	0	0	0	0	0
Qatar	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	472,093	0	17,798	660	10,709	0	66	2,718	63	0
United Arab Emirates	0	0	616	0	0	0	0	0	0	0
Other OPEC	**778,995**	**4,145**	**35,555**	**19,041**	**15,880**	**14,251**	**18,723**	**21,540**	**7**	**0**
Indonesia	18,657	0	961	0	0	0	0	1,663	0	0
Nigeria	251,608	0	1,160	515	0	0	0	1,308	0	0
Venezuela	508,730	4,145	33,434	18,526	15,880	14,251	18,723	18,569	7	0
Non OPEC	**1,624,257**	**46,235**	**58,450**	**53,225**	**86,248**	**18,858**	**63,932**	**37,206**	**500**	**2,709**
Angola	155,298	0	349	0	0	0	0	0	0	0
Argentina	25,053	0	614	1,088	0	0	189	370	0	0
Australia	11,405	0	0	0	0	0	0	0	0	0
Bahama Islands	0	0	350	0	0	0	0	0	0	0
Belgium	0	0	5,337	3,562	911	0	0	484	0	0
Benin	440	0	0	0	0	0	0	0	0	0
Brazil	0	133	0	917	490	0	0	77	0	66
Cameroon	0	0	0	0	0	0	0	1,675	0	0
Canada	437,396	44,847	2,084	2,651	28,148	1,159	30,505	8,957	425	2,643
China, People's Republic of	17,612	0	0	10	222	0	0	0	0	0
Colombia	98,461	0	161	0	0	0	0	456	0	0
Congo (Brazzaville)	17,178	0	0	0	0	0	0	0	0	0
Congo (Kinshasa)[d]	7,599	0	0	0	0	0	0	0	0	0
Denmark	226	0	0	0	0	0	0	0	0	0
Ecuador	41,567	0	140	0	0	0	0	172	0	0
Egypt	12,989	0	100	0	0	0	0	0	0	0
France	0	0	3,310	3,678	1,424	0	0	210	0	0
Gabon	84,109	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	903	828	397	0	0	631	0	0
Guatemala	6,121	0	0	0	0	0	0	0	0	0
India	0	0	233	0	0	0	0	0	0	0
Ireland	0	0	0	0	0	0	0	342	0	0
Italy	0	0	51	1,718	905	0	0	0	0	0
Ivory Coast	0	0	499	0	0	0	0	120	0	0
Japan	0	0	0	227	0	121	0	0	0	0
Korea, Republic of	0	0	365	0	0	768	0	0	0	0
Malaysia	2,850	0	2,276	0	0	0	106	627	0	0
Mexico	496,275	197	0	1,709	0	205	0	0	0	0
Netherlands	0	0	3,147	2,953	1,256	0	0	201	0	0
Netherlands Antilles	0	0	11,818	1,485	1,012	8,542	0	787	0	0
New Zealand	0	0	0	0	0	0	0	0	0	0
Norway	105,048	1,058	2,170	120	1,918	0	0	430	0	0
Oman	1,511	0	2,430	0	0	0	0	0	0	0
Panama	0	0	0	0	0	0	0	135	0	0
Peru	11,195	0	260	0	141	0	0	0	0	0
Portugal	0	0	0	1,115	3,069	0	0	0	0	0
Puerto Rico	0	0	0	0	175	0	0	0	0	0
Romania	0	0	514	2,369	61	0	0	0	0	0
Russia	955	0	671	2,249	173	0	330	347	0	0
Singapore	0	0	3,685	0	0	0	0	0	0	0
Spain	0	0	3,001	2,025	860	0	0	710	0	0
Sweden	0	0	938	949	309	0	0	421	0	0
Thailand	0	0	0	0	459	0	0	0	0	0
Trinidad and Tobago	20,300	0	349	1,271	0	0	0	234	0	0
Tunisia	0	0	0	0	0	0	0	198	0	0
Turkey	0	0	230	0	0	0	0	0	0	0
United Kingdom	61,700	0	540	14,268	4,613	0	6	1,434	0	0
Virgin Islands	0	0	10,410	2,416	38,885	8,063	32,715	16,545	75	0
Yemen	0	0	0	0	0	0	0	304	0	0
Other	8,969	0	1,515	5,617	820	0	81	1,339	0	0
Total	**3,002,299**	**61,702**	**128,814**	**73,148**	**112,837**	**33,109**	**83,102**	**70,829**	**570**	**2,709**
Persian Gulf[e]	**596,852**	**0**	**18,414**	**660**	**10,709**	**0**	**66**	**2,718**	**63**	**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] 1997 (Continued)

(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products[c]	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	**2,727**	**51,293**	**0**	**0**	**21,176**	**145,511**	**744,558**	**1,641**	**399**	**2,040**
Algeria	2,727	49,891	0	0	11,590	101,893	104,088	6	279	285
Iraq	0	0	0	0	0	0	32,530	89	0	89
Kuwait	0	0	0	0	0	0	92,229	253	0	253
Qatar	0	1,402	0	0	0	1,402	1,402	0	4	4
Saudi Arabia	0	0	0	0	9,586	41,600	513,693	1,293	114	1,407
United Arab Emirates	0	0	0	0	0	616	616	0	2	2
Other OPEC	**4,610**	**309**	**0**	**5,869**	**4,042**	**143,972**	**922,967**	**2,134**	**394**	**2,529**
Indonesia	0	0	0	0	0	2,624	21,281	51	7	58
Nigeria	0	0	0	0	0	2,983	254,591	689	8	698
Venezuela	4,610	309	0	5,869	4,042	138,365	647,095	1,394	379	1,773
Non OPEC	**11,344**	**17,484**	**4,026**	**5,993**	**10,978**	**417,188**	**2,041,445**	**4,450**	**1,143**	**5,593**
Angola	376	0	0	0	0	725	156,023	425	2	427
Argentina	211	0	0	0	0	2,472	27,525	69	7	75
Australia	0	6,216	0	0	0	6,216	17,621	31	17	48
Bahama Islands	0	0	0	0	0	350	350	0	1	1
Belgium	367	0	0	0	0	10,661	10,661	0	29	29
Benin	0	0	0	0	0	0	440	1	0	1
Brazil	62	0	0	0	97	1,842	1,842	0	5	5
Cameroon	0	0	0	0	0	1,675	1,675	0	5	5
Canada	1,106	348	731	3,046	6,556	133,206	570,602	1,198	365	1,563
China, People's Republic of	0	0	0	0	0	232	17,844	48	1	49
Colombia	0	0	0	0	0	617	99,078	270	2	271
Congo (Brazzaville)	0	0	0	0	0	0	17,178	47	0	47
Congo (Kinshasa)[d]	0	0	0	0	0	0	7,599	21	0	21
Denmark	0	0	0	0	0	0	226	1	0	1
Ecuador	0	0	0	0	0	312	41,879	114	1	115
Egypt	255	228	0	0	0	583	13,572	36	2	37
France	66	0	35	0	1,464	10,187	10,187	0	28	28
Gabon	0	0	0	0	0	0	84,109	230	0	230
Germany, FR	302	0	0	0	66	3,127	3,127	0	9	9
Guatemala	0	0	0	0	0	0	6,121	17	0	17
India	380	1,091	0	0	0	1,704	1,704	0	5	5
Ireland	0	0	0	0	0	342	342	0	1	1
Italy	21	0	0	0	0	2,695	2,695	0	7	7
Ivory Coast	0	0	0	0	0	619	619	0	2	2
Japan	33	0	0	0	55	436	436	0	1	1
Korea, Republic of	122	0	0	0	244	1,499	1,499	0	4	4
Malaysia	0	1,872	0	0	483	5,364	8,214	8	15	23
Mexico	3,413	2,032	169	1,601	9	9,335	505,610	1,360	26	1,385
Netherlands	596	0	0	0	852	9,005	9,005	0	25	25
Netherlands Antilles	647	2,372	0	241	0	26,904	26,904	0	74	74
New Zealand	0	498	0	0	0	498	498	0	1	1
Norway	0	1,989	0	0	0	7,685	112,733	288	21	309
Oman	0	0	0	0	0	2,430	3,941	4	7	11
Panama	0	0	0	0	0	135	135	0	(s)	(s)
Peru	0	0	0	0	0	401	11,596	31	1	32
Portugal	0	0	0	0	53	4,237	4,237	0	12	12
Puerto Rico	2,755	0	3,091	0	0	6,021	6,021	0	16	16
Romania	0	0	0	0	0	2,944	2,944	0	8	8
Russia	0	0	0	0	0	3,770	4,725	3	10	13
Singapore	0	0	0	0	632	4,317	4,317	0	12	12
Spain	22	0	0	1,105	0	7,723	7,723	0	21	21
Sweden	0	0	0	0	0	2,617	2,617	0	7	7
Thailand	29	0	0	0	0	488	488	0	1	1
Trinidad and Tobago	113	135	0	0	0	2,102	22,402	56	6	61
Tunisia	241	0	0	0	0	439	439	0	1	1
Turkey	0	0	0	0	0	230	230	0	1	1
United Kingdom	0	0	0	0	0	20,861	82,561	169	57	226
Virgin Islands	110	0	0	0	312	109,531	109,531	0	300	300
Yemen	0	0	0	0	0	304	304	0	1	1
Other	117	703	0	0	155	10,347	19,316	25	28	53
Total	**18,681**	**69,086**	**4,026**	**11,862**	**36,196**	**706,671**	**3,708,970**	**8,225**	**1,936**	**10,162**
Persian Gulf[e]	**0**	**1,402**	**0**	**0**	**9,586**	**43,618**	**640,470**	**1,635**	**120**	**1,755**

[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] 1997
(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	**56,284**	**4,347**	**0**	**882**	**10,709**	**0**	**447**	**9,277**	**0**	**0**
Algeria	605	4,347	0	222	0	0	381	9,023	0	0
Kuwait	243	0	0	0	0	0	0	0	0	0
Saudi Arabia	55,436	0	0	660	10,709	0	66	254	0	0
Other OPEC	**169,019**	**251**	**364**	**18,503**	**15,880**	**13,976**	**18,723**	**19,929**	**7**	**0**
Indonesia	0	0	0	0	0	0	0	709	0	0
Nigeria	104,384	0	0	441	0	0	0	1,215	0	0
Venezuela	64,635	251	364	18,062	15,880	13,976	18,723	18,005	7	0
Non OPEC	**302,841**	**4,051**	**12,650**	**50,957**	**81,067**	**16,901**	**56,992**	**35,146**	**488**	**1,976**
Angola	82,860	0	0	0	0	0	0	0	0	0
Argentina	2,562	0	0	1,088	0	0	189	370	0	0
Belgium	0	0	391	3,562	911	0	0	484	0	0
Brazil	0	0	0	902	490	0	0	77	0	0
Cameroon	0	0	0	0	0	0	0	1,040	0	0
Canada	22,996	2,993	277	2,606	26,781	1,132	24,831	8,817	413	1,976
China, People's Republic of	2,535	0	0	0	0	0	0	0	0	0
Colombia	19,348	0	0	0	0	0	0	456	0	0
Congo (Brazzaville)	6,081	0	0	0	0	0	0	0	0	0
Congo (Kinshasa)[d]	3,522	0	0	0	0	0	0	0	0	0
Ecuador	12,942	0	0	0	0	0	0	172	0	0
Egypt	10,509	0	0	0	0	0	0	0	0	0
France	0	0	0	3,678	1,424	0	0	210	0	0
Gabon	38,550	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	0	828	397	0	0	631	0	0
Ireland	0	0	0	0	0	0	0	342	0	0
Italy	0	0	51	1,718	905	0	0	0	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Mexico	8,423	0	0	1,709	0	0	0	0	0	0
Netherlands	0	0	0	2,841	1,256	0	0	201	0	0
Netherlands Antilles	0	0	1,288	1,485	1,012	8,401	0	787	0	0
Norway	68,978	1,058	0	120	1,918	0	0	430	0	0
Panama	0	0	0	0	0	0	0	135	0	0
Peru	714	0	0	0	141	0	0	0	0	0
Portugal	0	0	0	1,115	225	0	0	0	0	0
Puerto Rico	0	0	0	0	175	0	0	0	0	0
Romania	0	0	514	2,369	61	0	0	0	0	0
Russia	0	0	439	2,249	173	0	330	347	0	0
Spain	0	0	0	2,025	860	0	0	710	0	0
Sweden	0	0	0	949	309	0	0	421	0	0
Trinidad and Tobago	0	0	0	1,271	0	0	0	234	0	0
United Kingdom	22,474	0	0	14,268	4,613	0	6	1,434	0	0
Virgin Islands	0	0	9,690	2,416	38,596	7,368	31,555	16,545	75	0
Other	347	0	0	3,758	820	0	81	1,303	0	0
Total	**528,144**	**8,649**	**13,014**	**70,342**	**107,656**	**30,877**	**76,162**	**64,352**	**495**	**1,976**
Persian Gulf[e]	**55,679**	**0**	**0**	**660**	**10,709**	**0**	**66**	**254**	**0**	**0**

See footnotes at end of table.

Table 22. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 1997 (Continued)

(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products[c]	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	**0**	**0**	**0**	**0**	**1,014**	**26,676**	**82,960**	**154**	**73**	**227**
Algeria	0	0	0	0	0	13,973	14,578	2	38	40
Kuwait	0	0	0	0	0	0	243	1	0	1
Saudi Arabia	0	0	0	0	1,014	12,703	68,139	152	35	187
Other OPEC	**0**	**0**	**0**	**5,548**	**1,794**	**94,975**	**263,994**	**463**	**260**	**723**
Indonesia	0	0	0	0	0	709	709	0	2	2
Nigeria	0	0	0	0	0	1,656	106,040	286	5	291
Venezuela	0	0	0	5,548	1,794	92,610	157,245	177	254	431
Non OPEC	**2,044**	**0**	**3,563**	**5,287**	**2,722**	**273,844**	**576,685**	**830**	**750**	**1,580**
Angola	0	0	0	0	0	0	82,860	227	0	227
Argentina	0	0	0	0	0	1,647	4,209	7	5	12
Belgium	0	0	0	0	0	5,348	5,348	0	15	15
Brazil	0	0	0	0	53	1,522	1,522	0	4	4
Cameroon	0	0	0	0	0	1,040	1,040	0	3	3
Canada	90	0	472	2,340	126	72,854	95,850	63	200	263
China, People's Republic of	0	0	0	0	0	0	2,535	7	0	7
Colombia	0	0	0	0	0	456	19,804	53	1	54
Congo (Brazzaville)	0	0	0	0	0	0	6,081	17	0	17
Congo (Kinshasa)[d]	0	0	0	0	0	0	3,522	10	0	10
Ecuador	0	0	0	0	0	172	13,114	35	(s)	36
Egypt	0	0	0	0	0	0	10,509	29	0	29
France	9	0	0	0	1,306	6,627	6,627	0	18	18
Gabon	0	0	0	0	0	0	38,550	106	0	106
Germany, FR	0	0	0	0	63	1,919	1,919	0	5	5
Ireland	0	0	0	0	0	342	342	0	1	1
Italy	0	0	0	0	0	2,674	2,674	0	7	7
Japan	8	0	0	0	16	24	24	0	(s)	(s)
Mexico	0	0	0	1,601	0	3,310	11,733	23	9	32
Netherlands	0	0	0	0	739	5,037	5,037	0	14	14
Netherlands Antilles	0	0	0	241	0	13,214	13,214	0	36	36
Norway	0	0	0	0	0	3,526	72,504	189	10	199
Panama	0	0	0	0	0	135	135	0	(s)	(s)
Peru	0	0	0	0	0	141	855	2	(s)	2
Portugal	0	0	0	0	53	1,393	1,393	0	4	4
Puerto Rico	1,937	0	3,091	0	0	5,203	5,203	0	14	14
Romania	0	0	0	0	0	2,944	2,944	0	8	8
Russia	0	0	0	0	0	3,538	3,538	0	10	10
Spain	0	0	0	1,105	0	4,700	4,700	0	13	13
Sweden	0	0	0	0	0	1,679	1,679	0	5	5
Trinidad and Tobago	0	0	0	0	0	1,505	1,505	0	4	4
United Kingdom	0	0	0	0	0	20,321	42,795	62	56	117
Virgin Islands	0	0	0	0	312	106,557	106,557	0	292	292
Other	0	0	0	0	54	6,016	6,363	1	16	17
Total	**2,044**	**0**	**3,563**	**10,835**	**5,530**	**395,495**	**923,639**	**1,447**	**1,084**	**2,531**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**1,014**	**12,703**	**68,382**	**153**	**35**	**187**

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

Table 23. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 1997
(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	**62,012**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Iraq	2,521	0	0	0	0	0	0	0	0	0
Kuwait	17,518	0	0	0	0	0	0	0	0	0
Saudi Arabia	41,973	0	0	0	0	0	0	0	0	0
Other OPEC	**96,742**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Nigeria	38,978	0	0	0	0	0	0	0	0	0
Venezuela	57,764	0	0	0	0	0	0	0	0	0
Non OPEC	**437,657**	**31,345**	**48**	**45**	**955**	**75**	**1,632**	**140**	**0**	**347**
Angola	19,620	0	0	0	0	0	0	0	0	0
Argentina	2,640	0	0	0	0	0	0	0	0	0
Canada	330,416	31,345	48	45	955	0	1,632	140	0	347
Colombia	24,059	0	0	0	0	0	0	0	0	0
Congo (Brazzaville)	1,522	0	0	0	0	0	0	0	0	0
Ecuador	6,185	0	0	0	0	0	0	0	0	0
Mexico	38,738	0	0	0	0	0	0	0	0	0
Norway	5,550	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	3,122	0	0	0	0	0	0	0	0	0
United Kingdom	5,297	0	0	0	0	0	0	0	0	0
Virgin Islands	0	0	0	0	0	75	0	0	0	0
Other	508	0	0	0	0	0	0	0	0	0
Total	**596,411**	**31,345**	**48**	**45**	**955**	**75**	**1,632**	**140**	**0**	**347**
Persian Gulf[e]	**62,012**	**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] 1997 (Continued)

(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products[c]	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	**0**	**0**	**0**	**0**	**0**	**0**	**62,012**	**170**	**0**	**170**
Iraq	0	0	0	0	0	0	2,521	7	0	7
Kuwait	0	0	0	0	0	0	17,518	48	0	48
Saudi Arabia	0	0	0	0	0	0	41,973	115	0	115
Other OPEC	**0**	**0**	**0**	**0**	**0**	**0**	**96,742**	**265**	**0**	**265**
Nigeria	0	0	0	0	0	0	38,978	107	0	107
Venezuela	0	0	0	0	0	0	57,764	158	0	158
Non OPEC	**402**	**0**	**259**	**652**	**621**	**36,521**	**474,178**	**1,199**	**100**	**1,299**
Angola	0	0	0	0	0	0	19,620	54	0	54
Argentina	0	0	0	0	0	0	2,640	7	0	7
Canada	402	0	259	652	618	36,443	366,859	905	100	1,005
Colombia	0	0	0	0	0	0	24,059	66	0	66
Congo (Brazzaville)	0	0	0	0	0	0	1,522	4	0	4
Ecuador	0	0	0	0	0	0	6,185	17	0	17
Mexico	0	0	0	0	0	0	38,738	106	0	106
Norway	0	0	0	0	0	0	5,550	15	0	15
Trinidad and Tobago	0	0	0	0	0	0	3,122	9	0	9
United Kingdom	0	0	0	0	0	0	5,297	15	0	15
Virgin Islands	0	0	0	0	0	75	75	0	(s)	(s)
Other	0	0	0	0	3	3	511	1	(s)	1
Total	**402**	**0**	**259**	**652**	**621**	**36,521**	**632,932**	**1,634**	**100**	**1,734**
Persian Gulf[e]	**0**	**0**	**0**	**0**	**0**	**0**	**62,012**	**170**	**0**	**170**

[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] 1997
(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	**454,202**	**6,975**	**34,809**	**0**	**0**	**0**	**0**	**2,806**	**0**	**0**
Algeria	1,590	6,975	16,395	0	0	0	0	342	0	0
Iraq	17,102	0	0	0	0	0	0	0	0	0
Kuwait	66,112	0	0	0	0	0	0	0	0	0
Qatar	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	369,398	0	17,798	0	0	0	0	2,464	0	0
United Arab Emirates	0	0	616	0	0	0	0	0	0	0
Other OPEC	**488,605**	**3,894**	**34,094**	**538**	**0**	**0**	**0**	**492**	**0**	**0**
Indonesia	982	0	528	0	0	0	0	0	0	0
Nigeria	108,246	0	1,160	74	0	0	0	93	0	0
Venezuela	379,377	3,894	32,406	464	0	0	0	399	0	0
Non OPEC	**740,429**	**7,606**	**39,504**	**15**	**2,844**	**204**	**0**	**1,293**	**0**	**370**
Angola	52,818	0	349	0	0	0	0	0	0	0
Argentina	10,295	0	614	0	0	0	0	0	0	0
Australia	0	0	0	0	0	0	0	0	0	0
Bahama Islands	0	0	350	0	0	0	0	0	0	0
Belgium	0	0	4,946	0	0	0	0	0	0	0
Brazil	0	133	0	15	0	0	0	0	0	66
Cameroon	0	0	0	0	0	0	0	635	0	0
Canada	896	7,276	1,692	0	0	0	0	0	0	304
China, People's Republic of	6,938	0	0	0	0	0	0	0	0	0
Colombia	52,347	0	161	0	0	0	0	0	0	0
Congo (Brazzaville)	9,575	0	0	0	0	0	0	0	0	0
Congo (Kinshasa)[d]	4,077	0	0	0	0	0	0	0	0	0
Denmark	226	0	0	0	0	0	0	0	0	0
Ecuador	12,888	0	140	0	0	0	0	0	0	0
Egypt	2,480	0	100	0	0	0	0	0	0	0
France	0	0	3,310	0	0	0	0	0	0	0
Gabon	45,559	0	0	0	0	0	0	0	0	0
Germany, FR	0	0	903	0	0	0	0	0	0	0
Guatemala	6,121	0	0	0	0	0	0	0	0	0
India	0	0	233	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0	0
Ivory Coast	0	0	499	0	0	0	0	120	0	0
Japan	0	0	0	0	0	0	0	0	0	0
Korea, Republic of	0	0	365	0	0	0	0	0	0	0
Malaysia	1,622	0	0	0	0	0	0	0	0	0
Mexico	444,110	197	0	0	0	204	0	0	0	0
Netherlands	0	0	3,147	0	0	0	0	0	0	0
Netherlands Antilles	0	0	10,184	0	0	0	0	0	0	0
New Zealand	0	0	0	0	0	0	0	0	0	0
Norway	30,520	0	2,170	0	0	0	0	0	0	0
Oman	0	0	2,430	0	0	0	0	0	0	0
Peru	4,919	0	260	0	0	0	0	0	0	0
Portugal	0	0	0	0	2,844	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0	0	0	0
Russia	955	0	232	0	0	0	0	0	0	0
Singapore	0	0	408	0	0	0	0	0	0	0
Spain	0	0	2,719	0	0	0	0	0	0	0
Sweden	0	0	938	0	0	0	0	0	0	0
Thailand	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	17,178	0	349	0	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0	0	198	0	0
Turkey	0	0	230	0	0	0	0	0	0	0
United Kingdom	33,929	0	540	0	0	0	0	0	0	0
Virgin Islands	0	0	720	0	0	0	0	0	0	0
Yemen	0	0	0	0	0	0	0	304	0	0
Other	2,536	0	1,515	0	0	0	0	36	0	0
Total	**1,683,236**	**18,475**	**108,407**	**553**	**2,844**	**204**	**0**	**4,591**	**0**	**370**
Persian Gulf[e]	**452,612**	**0**	**18,414**	**0**	**0**	**0**	**0**	**2,464**	**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] 1997 (Continued)

(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products[c]	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Arab OPEC	**2,727**	**51,293**	**0**	**0**	**11,590**	**110,200**	**564,402**	**1,244**	**302**	**1,546**
Algeria	2,727	49,891	0	0	11,590	87,920	89,510	4	241	245
Iraq	0	0	0	0	0	0	17,102	47	0	47
Kuwait	0	0	0	0	0	0	66,112	181	0	181
Qatar	0	1,402	0	0	0	1,402	1,402	0	4	4
Saudi Arabia	0	0	0	0	0	20,262	389,660	1,012	56	1,068
United Arab Emirates	0	0	0	0	0	616	616	0	2	2
Other OPEC	**4,610**	**309**	**0**	**321**	**0**	**44,258**	**532,863**	**1,339**	**121**	**1,460**
Indonesia	0	0	0	0	0	528	1,510	3	1	4
Nigeria	0	0	0	0	0	1,327	109,573	297	4	300
Venezuela	4,610	309	0	321	0	42,403	421,780	1,039	116	1,156
Non OPEC	**8,862**	**17,136**	**204**	**0**	**687**	**78,725**	**819,154**	**2,029**	**216**	**2,244**
Angola	376	0	0	0	0	725	53,543	145	2	147
Argentina	211	0	0	0	0	825	11,120	28	2	30
Australia	0	6,216	0	0	0	6,216	6,216	0	17	17
Bahama Islands	0	0	0	0	0	350	350	0	1	1
Belgium	367	0	0	0	0	5,313	5,313	0	15	15
Brazil	62	0	0	0	44	320	320	0	1	1
Cameroon	0	0	0	0	0	635	635	0	2	2
Canada	614	0	0	0	0	9,886	10,782	2	27	30
China, People's Republic of	0	0	0	0	0	0	6,938	19	0	19
Colombia	0	0	0	0	0	161	52,508	143	(s)	144
Congo (Brazzaville)	0	0	0	0	0	0	9,575	26	0	26
Congo (Kinshasa)[d]	0	0	0	0	0	0	4,077	11	0	11
Denmark	0	0	0	0	0	0	226	1	0	1
Ecuador	0	0	0	0	0	140	13,028	35	(s)	36
Egypt	255	228	0	0	0	583	3,063	7	2	8
France	57	0	35	0	158	3,560	3,560	0	10	10
Gabon	0	0	0	0	0	0	45,559	125	0	125
Germany, FR	302	0	0	0	3	1,208	1,208	0	3	3
Guatemala	0	0	0	0	0	0	6,121	17	0	17
India	380	1,091	0	0	0	1,704	1,704	0	5	5
Italy	21	0	0	0	0	21	21	0	(s)	(s)
Ivory Coast	0	0	0	0	0	619	619	0	2	2
Japan	25	0	0	0	39	64	64	0	(s)	(s)
Korea, Republic of	86	0	0	0	0	451	451	0	1	1
Malaysia	0	1,872	0	0	430	2,302	3,924	4	6	11
Mexico	3,413	2,032	169	0	0	6,015	450,125	1,217	16	1,233
Netherlands	596	0	0	0	0	3,743	3,743	0	10	10
Netherlands Antilles	647	2,372	0	0	0	13,203	13,203	0	36	36
New Zealand	0	498	0	0	0	498	498	0	1	1
Norway	0	1,989	0	0	0	4,159	34,679	84	11	95
Oman	0	0	0	0	0	2,430	2,430	0	7	7
Peru	0	0	0	0	0	260	5,179	13	1	14
Portugal	0	0	0	0	0	2,844	2,844	0	8	8
Puerto Rico	818	0	0	0	0	818	818	0	2	2
Russia	0	0	0	0	0	232	1,187	3	1	3
Singapore	0	0	0	0	0	408	408	0	1	1
Spain	22	0	0	0	0	2,741	2,741	0	8	8
Sweden	0	0	0	0	0	938	938	0	3	3
Thailand	29	0	0	0	0	29	29	0	(s)	(s)
Trinidad and Tobago	113	135	0	0	0	597	17,775	47	2	49
Tunisia	241	0	0	0	0	439	439	0	1	1
Turkey	0	0	0	0	0	230	230	0	1	1
United Kingdom	0	0	0	0	0	540	34,469	93	1	94
Virgin Islands	110	0	0	0	0	830	830	0	2	2
Yemen	0	0	0	0	0	304	304	0	1	1
Other	117	703	0	0	13	2,384	4,920	7	7	13
Total	**16,199**	**68,738**	**204**	**321**	**12,277**	**233,183**	**1,916,419**	**4,612**	**639**	**5,250**
Persian Gulf[e]	**0**	**1,402**	**0**	**0**	**0**	**22,280**	**474,892**	**1,240**	**61**	**1,301**

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

Table 25. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin,[a] 1997
(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	**45,283**	**3,135**	**0**	**0**	**234**	**0**	**3,256**	**0**	**0**	**1**
Canada	45,283	3,135	0	0	234	0	3,256	0	0	1
Total	**45,283**	**3,135**	**0**	**0**	**234**	**0**	**3,256**	**0**	**0**	**1**
	PAD District V									
Arab OPEC	**26,549**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**63**	**0**
Iraq	12,907	0	0	0	0	0	0	0	0	0
Kuwait	8,356	0	0	0	0	0	0	0	0	0
Saudi Arabia	5,286	0	0	0	0	0	0	0	63	0
Other OPEC	**24,629**	**0**	**1,097**	**0**	**0**	**275**	**0**	**1,119**	**0**	**0**
Indonesia	17,675	0	433	0	0	0	0	954	0	0
Venezuela	6,954	0	664	0	0	275	0	165	0	0
Non OPEC	**98,047**	**98**	**6,248**	**2,208**	**1,148**	**1,678**	**2,052**	**627**	**12**	**15**
Argentina	9,556	0	0	0	0	0	0	0	0	0
Australia	11,405	0	0	0	0	0	0	0	0	0
Canada	37,805	98	67	0	178	27	786	0	12	15
China, People's Republic of	8,139	0	0	10	222	0	0	0	0	0
Colombia	2,707	0	0	0	0	0	0	0	0	0
Ecuador	9,552	0	0	0	0	0	0	0	0	0
Japan	0	0	0	227	0	121	0	0	0	0
Korea, Republic of	0	0	0	0	0	768	0	0	0	0
Malaysia	1,228	0	2,276	0	0	0	106	627	0	0
Mexico	5,004	0	0	0	0	1	0	0	0	0
Netherlands	0	0	0	112	0	0	0	0	0	0
Netherlands Antilles	0	0	346	0	0	141	0	0	0	0
Oman	1,511	0	0	0	0	0	0	0	0	0
Peru	5,562	0	0	0	0	0	0	0	0	0
Singapore	0	0	3,277	0	0	0	0	0	0	0
Spain	0	0	282	0	0	0	0	0	0	0
Thailand	0	0	0	0	459	0	0	0	0	0
Virgin Islands	0	0	0	0	289	620	1,160	0	0	0
Other	5,578	0	0	1,859	0	0	0	0	0	0
Total	**149,225**	**98**	**7,345**	**2,208**	**1,148**	**1,953**	**2,052**	**1,746**	**75**	**15**
Persian Gulf [e]	**26,549**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**63**	**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] 1997 (Continued)

(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products[c]	Total Products	Total Crude Oil and Products	Daily Average Crude Oil	Daily Average Products	Daily Average Total
PAD District IV										
Non OPEC	**0**	**0**	**0**	**54**	**702**	**7,382**	**52,665**	**124**	**20**	**144**
Canada	0	0	0	54	702	7,382	52,665	124	20	144
Total	**0**	**0**	**0**	**54**	**702**	**7,382**	**52,665**	**124**	**20**	**144**
PAD District V										
Arab OPEC	**0**	**0**	**0**	**0**	**8,572**	**8,635**	**35,184**	**73**	**24**	**96**
Iraq	0	0	0	0	0	0	12,907	35	0	35
Kuwait	0	0	0	0	0	0	8,356	23	0	23
Saudi Arabia	0	0	0	0	8,572	8,635	13,921	14	24	38
Other OPEC	**0**	**0**	**0**	**0**	**2,248**	**4,739**	**29,368**	**67**	**13**	**80**
Indonesia	0	0	0	0	0	1,387	19,062	48	4	52
Venezuela	0	0	0	0	2,248	3,352	10,306	19	9	28
Non OPEC	**36**	**348**	**0**	**0**	**6,246**	**20,716**	**118,763**	**269**	**57**	**325**
Argentina	0	0	0	0	0	0	9,556	26	0	26
Australia	0	0	0	0	0	0	11,405	31	0	31
Canada	0	348	0	0	5,110	6,641	44,446	104	18	122
China, People's Republic of	0	0	0	0	0	232	8,371	22	1	23
Colombia	0	0	0	0	0	0	2,707	7	0	7
Ecuador	0	0	0	0	0	0	9,552	26	0	26
Japan	0	0	0	0	0	348	348	0	1	1
Korea, Republic of	36	0	0	0	244	1,048	1,048	0	3	3
Malaysia	0	0	0	0	53	3,062	4,290	3	8	12
Mexico	0	0	0	0	9	10	5,014	14	(s)	14
Netherlands	0	0	0	0	113	225	225	0	1	1
Netherlands Antilles	0	0	0	0	0	487	487	0	1	1
Oman	0	0	0	0	0	0	1,511	4	0	4
Peru	0	0	0	0	0	0	5,562	15	0	15
Singapore	0	0	0	0	632	3,909	3,909	0	11	11
Spain	0	0	0	0	0	282	282	0	1	1
Thailand	0	0	0	0	0	459	459	0	1	1
Virgin Islands	0	0	0	0	0	2,069	2,069	0	6	6
Other	0	0	0	0	85	1,944	7,522	15	5	21
Total	**36**	**348**	**0**	**0**	**17,066**	**34,090**	**183,315**	**409**	**93**	**502**
Persian Gulf [e]	**0**	**0**	**0**	**0**	**8,572**	**8,635**	**35,184**	**73**	**24**	**96**

[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 26. Imports of Residual Fuel Oil by Sulfur Content and by PAD District and State of Entry, 1997
(Thousand Barrels)

PAD District and State of Entry	Residual Fuel Oil			
	Less than 0.31% Sulfur	0.31 to 1.00% Sulfur	Greater than 1.00% Sulfur	Total
PAD District I	**14,775**	**11,578**	**37,999**	**64,352**
Connecticut	0	0	91	91
Delaware	0	116	1,829	1,945
Florida	305	0	7,390	7,695
Georgia	0	0	1,528	1,528
Maine	788	0	2,824	3,612
Maryland	0	1,038	730	1,768
Massachusetts	40	1,927	735	2,702
New Hampshire	0	0	97	97
New Jersey	7,506	3,737	7,900	19,143
New York	5,684	3,000	3,857	12,541
North Carolina	0	0	4,411	4,411
Pennsylvania	452	869	1,980	3,301
South Carolina	0	263	2,271	2,534
Vermont	0	5	16	21
Virginia	0	623	2,340	2,963
PAD District II	**99**	**0**	**41**	**140**
Illinois	21	0	0	21
Michigan	78	0	41	119
PAD District III	**469**	**1,223**	**2,899**	**4,591**
Louisiana	469	1,223	226	1,918
Mississippi	0	0	2,272	2,272
Texas	0	0	401	401
PAD District V	**1,581**	**0**	**165**	**1,746**
California	724	0	165	889
Hawaii	857	0	0	857
U.S. Total	**16,924**	**12,801**	**41,104**	**70,829**

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

Table 27. Exports of Crude Oil and Petroleum Products by PAD District, 1997
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil[a]	**1**	**10,975**	**31**	**1**	**28,300**	**39,308**	**108**
Natural Gas Liquids	**741**	**5,088**	**8,828**	**15**	**6,209**	**20,882**	**57**
Pentanes Plus	25	2,457	161	8	1	2,652	7
Liquefied Petroleum Gases	716	2,631	8,666	7	6,208	18,229	50
Ethane/Ethylene	0	0	0	0	0	0	0
Propane/Propylene	447	901	7,630	7	2,876	11,861	32
Normal Butane/Butylene	269	1,729	1,036	(s)	3,333	6,368	17
Isobutane/Isobutylene	0	0	0	0	0	0	0
Other Liquids	**345**	**10**	**8,331**	**0**	**579**	**9,265**	**25**
Other Hydrocarbons/Oxygenates	40	7	4,295	0	9	4,351	12
Motor Gasoline Blend. Comp.	305	3	4,036	0	569	4,913	13
Finished Petroleum Products	**12,320**	**6,533**	**186,983**	**170**	**90,797**	**296,804**	**813**
Finished Motor Gasoline	1,188	284	41,374	24	7,008	49,878	137
Naphtha-Type Jet Fuel	31	1	25	0	18	76	(s)
Kerosene-Type Jet Fuel	983	36	7,763	0	3,905	12,687	35
Kerosene	19	20	48	(s)	50	138	(s)
Distillate Fuel Oil	2,345	552	35,327	(s)	17,282	55,507	152
Residual Fuel Oil	1,340	681	25,089	1	16,671	43,782	120
Special Naphthas	167	411	514	3	6,754	7,849	22
Lubricants	1,744	686	7,517	81	1,245	11,275	31
Waxes	311	187	316	44	136	993	3
Petroleum Coke	3,915	1,640	68,686	1	37,374	111,615	306
Asphalt and Road Oil	225	2,030	320	16	289	2,879	8
Miscellaneous Products	52	4	4	(s)	64	125	(s)
Total	**13,407**	**22,607**	**204,173**	**186**	**125,885**	**366,258**	**1,003**

[a] Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) certain domestically produced crude oil destined for Canada; and (3) shipments to U.S. territories, and California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

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

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

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

Table 28. Exports of Crude Oil and Petroleum Products by Destination, 1997
(Thousand Barrels)

Destination	Crude Oil[a]	Pentanes Plus	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Kerosene	Distillate Fuel Oil	Residual Fuel Oil
Argentina	0	0	2	0	206	0	802	0
Australia	0	0	14	4	0	1	20	2
Bahama Islands	0	(s)	132	288	107	1	1,311	532
Bahrain	0	0	0	0	0	0	(s)	0
Belgium & Luxembourg	0	0	3	1	0	0	11	399
Brazil	0	0	1	0	1,686	0	2,460	0
Cameroon	0	0	0	1	0	0	1	0
Canada	11,009	2,480	2,871	3,098	4,317	43	3,358	5,872
Chile	0	0	186	1,646	98	(s)	2,767	151
China, People's Republic of	5,470	0	772	0	0	3	2,591	565
China, Taiwan	2,570	0	1	783	(s)	(s)	530	61
Colombia	0	0	294	3,756	2	(s)	9	0
Costa Rica	0	0	(s)	126	20	0	416	159
Denmark	0	0	0	0	0	(s)	8	0
Dominican Republic	0	5	487	88	0	0	333	558
Ecuador	0	0	56	655	35	2	2,533	0
Egypt	0	0	0	0	0	0	(s)	0
El Salvador	0	3	280	642	45	0	1,084	115
Finland	0	0	0	0	438	0	249	0
France	0	0	136	0	(s)	0	306	178
French Pacific Islands	0	(s)	0	0	0	0	350	0
Germany, FR	0	0	0	(s)	0	0	18	0
Ghana	0	0	0	0	0	0	0	0
Greece	0	0	(s)	0	0	0	4	0
Guatemala	0	0	26	1,961	214	10	1,233	627
Guinea	0	0	0	0	(s)	0	1	0
Honduras	0	0	24	1,097	288	0	2,218	682
Hong Kong	0	(s)	(s)	0	3	(s)	340	266
India	0	0	0	0	0	0	436	0
Indonesia	0	0	0	0	0	3	4	0
Ireland	0	0	0	0	0	0	4	(s)
Israel	0	0	4	(s)	1,526	0	389	1
Italy	0	0	3	(s)	0	0	303	272
Jamaica	0	0	172	1	75	(s)	4	8,686
Japan	4,026	0	261	225	887	1	1,260	646
Korea, Republic of	12,209	0	783	(s)	190	15	2,694	482
Malaysia	0	0	(s)	(s)	0	0	21	0
Mexico	6	(s)	10,887	32,746	51	28	7,779	13,515
Netherlands	0	0	0	0	101	0	4,880	398
Netherlands Antilles	0	0	0	384	0	0	1,592	924
New Zealand	0	0	(s)	169	(s)	0	3	(s)
Nigeria	0	0	0	0	1,154	0	213	0
Norway	0	0	3	0	0	0	1	(s)
Panama	0	161	190	196	231	0	3,245	3,211
Peru	0	0	1	110	165	0	19	0
Philippines	0	0	0	0	0	0	410	0
Poland	0	0	0	0	0	0	(s)	0
Portugal	0	0	188	0	0	0	(s)	0
Puerto Rico	0	0	8	521	3	0	882	10
Russia	0	0	(s)	411	0	0	556	4
Saudi Arabia	0	0	2	0	0	0	54	0
Singapore	0	0	1	0	0	0	5,335	3,966
South Africa	0	0	(s)	0	0	0	1	(s)
Spain	0	0	310	0	(s)	0	321	(s)
Suriname	0	0	0	0	0	0	0	0
Sweden	0	1	0	1	0	5	7	0
Switzerland	0	0	0	0	0	0	1	0
Thailand	0	0	0	0	0	0	274	162
Trinidad and Tobago	0	0	4	1	0	0	5	1
Turkey	0	0	(s)	0	0	0	403	0
United Arab Emirates	0	0	1	0	0	0	346	0
United Kingdom	0	(s)	26	3	794	(s)	29	35
Uruguay	0	0	0	1	1	0	0	0
Venezuela	0	0	1	314	32	23	675	232
Virgin Islands	3,956	0	0	0	0	0	(s)	0
Yugoslavia	0	0	0	0	0	0	0	3
Other	63	1	99	649	94	2	407	1,062
Total	**39,308**	**2,652**	**18,229**	**49,878**	**12,763**	**138**	**55,507**	**43,782**

See footnotes at end of table.

Table 28. Exports of Crude Oil and Petroleum Products by Destination, 1997 (Continued)
(Thousand Barrels)

Destination	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products[b]	Crude Oil and Products	
							Total	Daily Average
Argentina	4	129	7	53	3	1	1,206	3
Australia	1	91	8	3,568	5	(s)	3,714	10
Bahama Islands	(s)	31	0	0	21	(s)	2,423	7
Bahrain	0	1	0	589	(s)	0	590	2
Belgium & Luxembourg	2	98	3	7,316	6	5	7,845	21
Brazil	27	330	6	1,101	7	5	5,623	15
Cameroon	0	(s)	0	91	0	0	93	(s)
Canada	488	1,630	473	5,572	2,247	92	43,551	119
Chile	6	231	3	656	(s)	(s)	5,745	16
China, People's Republic of	28	66	3	0	2	(s)	9,500	26
China, Taiwan	10	339	5	34	1	2	4,336	12
Colombia	3	121	7	7	3	8	4,209	12
Costa Rica	8	236	2	(s)	(s)	1	968	3
Denmark	0	1	1	1,086	1	(s)	1,098	3
Dominican Republic	10	178	1	163	(s)	21	1,845	5
Ecuador	(s)	244	(s)	0	(s)	50	3,575	10
Egypt	1	8	(s)	(s)	2	0	12	(s)
El Salvador	4	36	1	0	0	2	2,212	6
Finland	0	9	0	0	(s)	(s)	697	2
France	22	30	21	3,228	8	1	3,931	11
French Pacific Islands	40	1	0	0	0	0	391	1
Germany, FR	2	45	47	1,452	64	3	1,632	4
Ghana	0	3	0	479	0	0	482	1
Greece	(s)	31	(s)	1,976	1	(s)	2,012	6
Guatemala	13	104	7	0	0	10	4,204	12
Guinea	0	13	0	0	0	0	14	(s)
Honduras	6	107	2	0	2	(s)	4,426	12
Hong Kong	3	82	8	0	1	1	704	2
India	2	518	8	1,608	27	3	2,602	7
Indonesia	1	29	1	307	4	5	353	1
Ireland	2	1	2	724	0	7	741	2
Israel	(s)	31	(s)	1,263	1	(s)	3,215	9
Italy	0	70	6	10,352	7	2	11,013	30
Jamaica	13	63	1	246	0	114	9,378	26
Japan	6,654	284	43	19,974	18	546	34,825	95
Korea, Republic of	1	97	11	1,754	7	5	18,250	50
Malaysia	(s)	39	2	4	(s)	2	70	(s)
Mexico	76	2,029	269	2,669	217	5,375	75,646	207
Netherlands	42	48	3	9,536	29	23	15,058	41
Netherlands Antilles	0	554	1	0	1	0	3,455	9
New Zealand	(s)	20	(s)	679	(s)	(s)	874	2
Nigeria	0	149	0	0	1	(s)	1,517	4
Norway	(s)	4	(s)	995	(s)	(s)	1,005	3
Panama	0	312	1	(s)	44	0	7,591	21
Peru	1	46	2	(s)	(s)	1	345	1
Philippines	(s)	41	6	9	1	1	467	1
Poland	0	2	0	0	0	0	2	(s)
Portugal	0	1	(s)	1,515	(s)	(s)	1,704	5
Puerto Rico	325	209	3	0	(s)	492	2,455	7
Russia	1	72	(s)	0	0	0	1,045	3
Saudi Arabia	(s)	14	1	183	(s)	(s)	256	1
Singapore	1	371	3	54	4	1	9,735	27
South Africa	(s)	157	1	1,148	1	(s)	1,309	4
Spain	(s)	150	4	14,482	3	0	15,270	42
Suriname	0	7	0	0	0	0	7	(s)
Sweden	0	13	2	495	0	(s)	524	1
Switzerland	16	4	(s)	0	0	(s)	21	(s)
Thailand	3	86	3	6	12	4	550	2
Trinidad and Tobago	6	481	1	(s)	1	1	499	1
Turkey	(s)	66	(s)	5,777	1	0	6,247	17
United Arab Emirates	1	624	(s)	985	1	(s)	1,958	5
United Kingdom	1	103	8	3,497	47	3	4,546	12
Uruguay	1	33	(s)	0	(s)	(s)	35	(s)
Venezuela	3	41	4	1,946	58	2,277	5,606	15
Virgin Islands	0	1	0	0	(s)	296	4,254	12
Yugoslavia	0	5	(s)	57	0	0	65	(s)
Other	20	303	3	3,978	22	26	6,729	18
Total	**7,849**	**11,275**	**993**	**111,615**	**2,879**	**9,389**	**366,258**	**1,003**

[a] Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) certain domestically produced crude oil destined for Canada; and (3) shipments to U.S. territories, and California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

[b] Includes miscellaneous products, motor gasoline blending components, and other hydrocarbons and oxygenates.

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

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

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

Table 29. Net Imports of Crude Oil and Petroleum Products into the United States by Country, 1997
(Thousand Barrels per Day)

Country	Crude Oil[a]	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products[b]	Total Products	Total Crude Oil and Products
Arab OPEC	**1,641**	**31**	**29**	**0**	**(s)**	**33**	**-3**	**-2**	**304**	**393**	**2,034**
Algeria	6	31	0	0	1	26	0	(s)	221	279	285
Iraq	89	0	0	0	0	0	0	0	0	0	89
Kuwait	253	(s)	0	0	(s)	0	(s)	(s)	(s)	(s)	253
Qatar	0	0	0	0	0	0	0	(s)	4	4	4
Saudi Arabia	1,293	(s)	29	0	(s)	7	-1	(s)	77	113	1,407
United Arab Emirates	0	(s)	0	0	-1	0	-3	-2	2	-4	-4
Other OPEC	**2,134**	**11**	**43**	**36**	**49**	**58**	**-6**	**-1**	**184**	**374**	**2,508**
Indonesia	51	0	0	0	(s)	5	-1	(s)	3	6	57
Nigeria	689	0	0	-3	-1	4	0	(s)	5	4	693
Venezuela	1,394	11	43	39	49	50	-5	(s)	177	364	1,758
Non OPEC	**4,342**	**77**	**101**	**20**	**27**	**-17**	**-295**	**-17**	**380**	**274**	**4,616**
Angola	425	0	0	0	0	0	0	(s)	2	2	427
Argentina	69	(s)	0	-1	-2	1	(s)	(s)	5	3	72
Australia	31	(s)	(s)	0	(s)	(s)	-10	(s)	17	7	38
Bahama Islands	0	(s)	-1	(s)	-4	-1	0	(s)	1	-6	-6
Belgium & Luxembourg	0	(s)	2	0	(s)	(s)	-20	(s)	25	8	8
Benin	1	0	0	0	0	0	0	0	0	0	1
Brazil	0	(s)	1	-5	-7	(s)	-3	-1	3	-10	-10
Brunei	0	0	0	0	(s)	0	0	(s)	0	(s)	(s)
Cameroon	0	0	(s)	0	(s)	5	(s)	(s)	0	4	4
Canada	1,168	115	69	-9	74	8	-14	-2	35	276	1,444
China, People's Republic of	33	-2	1	0	-7	-2	0	(s)	(s)	-10	23
China, Taiwan	-7	(s)	-2	(s)	-1	(s)	(s)	-1	(s)	-5	-12
Colombia	270	-1	-10	(s)	(s)	1	(s)	(s)	(s)	-10	260
Congo (Brazzaville)	47	0	0	0	0	0	0	(s)	0	(s)	47
Congo (Kinshasa)[c]	21	0	0	0	0	0	0	(s)	0	(s)	21
Ecuador	114	(s)	-2	(s)	-7	(s)	0	-1	(s)	-9	105
Egypt	36	0	0	0	(s)	0	(s)	(s)	2	2	37
France	0	(s)	4	(s)	-1	(s)	-9	(s)	23	17	17
Gabon	230	0	0	0	0	0	0	(s)	0	(s)	230
Germany, FR	0	0	1	0	(s)	2	-4	(s)	5	4	4
Greece	0	(s)	0	0	(s)	0	-5	(s)	(s)	-6	-6
Guatemala	17	(s)	-5	-1	-3	-2	0	(s)	(s)	-12	5
India	0	0	0	0	-1	0	-4	-1	5	-2	-2
Italy	0	(s)	2	0	-1	-1	-28	(s)	5	-23	-23
Jamaica	0	(s)	(s)	(s)	(s)	-24	-1	(s)	(s)	-26	-26
Japan	-11	-1	-1	-2	-3	-2	-55	-1	-19	-83	-94
Korea, Republic of	-33	-2	(s)	2	-7	-1	-5	(s)	2	-12	-46
Malaysia	8	(s)	(s)	0	(s)	2	(s)	(s)	13	15	22
Mexico	1,360	-29	-90	(s)	-21	-37	-7	-5	8	-182	1,178
Netherlands	0	0	3	(s)	-13	-1	-26	(s)	20	-17	-17
Netherlands Antilles	0	0	2	23	-4	(s)	0	-2	45	64	64
Norway	288	3	5	0	(s)	1	-3	(s)	12	18	306
Oman	4	(s)	0	0	0	0	0	(s)	7	7	11
Panama	0	-1	-1	-1	-9	-8	(s)	-1	-1	-20	-20
Peru	31	(s)	(s)	(s)	(s)	0	(s)	(s)	1	(s)	31
Puerto Rico	0	(s)	-1	(s)	-2	(s)	0	8	5	10	10
Romania	0	0	(s)	0	(s)	-1	-1	(s)	8	6	6
Russia	3	(s)	-1	0	-1	1	0	(s)	8	7	10
Syria	0	(s)	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Spain	0	-1	2	(s)	-1	2	-40	(s)	17	-21	-21
Sweden	0	0	1	0	(s)	1	-1	(s)	5	6	6
Thailand	0	0	1	0	-1	(s)	(s)	(s)	(s)	(s)	(s)
Trinidad and Tobago	56	(s)	(s)	0	(s)	1	(s)	-1	5	4	60
Turkey	0	(s)	0	0	-1	0	-16	(s)	1	-16	-16
United Kingdom	169	(s)	13	-2	(s)	4	-10	(s)	40	45	214
Virgin Islands	-11	0	107	22	90	45	0	(s)	36	299	288
Yemen	0	0	0	0	0	1	0	0	0	1	1
Other	25	-3	-1	-7	-39	-12	-33	-5	40	-61	-36
Total	**8,118**	**119**	**172**	**56**	**76**	**74**	**-305**	**-20**	**868**	**1,040**	**9,158**
Persian Gulf[d]	**1,635**	**(s)**	**29**	**0**	**-1**	**7**	**-5**	**-2**	**83**	**112**	**1,747**

[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, 1997
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Crude Oil	**10,973**	**73,581**	**710,050**	**12,839**	**60,676**	**868,119**
Refinery	10,142	12,822	45,386	2,266	20,047	90,663
Tank Farms and Pipelines	811	59,677	87,480	9,698	30,914	188,580
Leases	20	1,082	13,755	875	858	16,590
Strategic Petroleum Reserve	0	0	563,429	0	0	563,429
Alaskan In Transit	0	0	0	0	8,857	8,857
Total Stocks, All Oils (excluding Crude Oil)	**175,962**	**157,738**	**245,732**	**17,079**	**95,129**	**691,640**
Refinery	56,576	60,800	134,821	11,603	66,431	330,231
Bulk Terminal	89,804	60,003	62,365	2,425	21,917	236,514
Pipeline	29,539	35,575	46,989	2,742	6,622	121,467
Natural Gas Processing Plant	43	1,360	1,557	309	159	3,428
Pentanes Plus	**12**	**1,774**	**3,678**	**227**	**24**	**5,715**
Refinery	0	446	236	10	0	692
Bulk Terminal	9	626	1,999	3	4	2,641
Pipeline	0	478	960	64	0	1,502
Natural Gas Processing Plant	3	224	483	150	20	880
Liquefied Petroleum Gases	**6,080**	**27,745**	**49,632**	**1,142**	**4,882**	**89,481**
Refinery	1,904	3,711	8,281	378	1,167	15,441
Bulk Terminal	2,181	15,134	28,912	133	3,576	49,936
Pipeline	1,955	7,764	11,365	472	0	21,556
Natural Gas Processing Plant	40	1,136	1,074	159	139	2,548
Ethane/Ethylene	**0**	**2,978**	**15,716**	**213**	**0**	**18,907**
Refinery	0	3	689	0	0	692
Bulk Terminal	0	1,106	11,767	0	0	12,873
Pipeline	0	1,702	3,203	211	0	5,116
Natural Gas Processing Plant	0	167	57	2	0	226
Propane/Propylene	**4,305**	**17,972**	**18,798**	**489**	**2,481**	**44,045**
Refinery	530	2,068	2,768	117	231	5,714
Bulk Terminal	1,866	11,318	10,369	129	2,154	25,836
Pipeline	1,881	4,062	5,417	151	0	11,511
Natural Gas Processing Plant	28	524	244	92	96	984
Normal Butane/Butylene	**1,369**	**4,802**	**10,014**	**306**	**1,882**	**18,373**
Refinery	971	1,122	3,278	180	585	6,136
Bulk Terminal	315	1,862	4,251	4	1,282	7,714
Pipeline	74	1,517	2,062	71	0	3,724
Natural Gas Processing Plant	9	301	423	51	15	799
Isobutane/Isobutylene	**406**	**1,993**	**5,104**	**134**	**519**	**8,156**
Refinery	403	518	1,546	81	351	2,899
Bulk Terminal	0	848	2,525	0	140	3,513
Pipeline	0	483	683	39	0	1,205
Natural Gas Processing Plant	3	144	350	14	28	539
Other Hydrocarbons/Hydrogen/Oxygenates	**2,236**	**1,950**	**5,036**	**252**	**3,019**	**12,493**
Refinery	2,017	522	2,213	85	2,318	7,155
Bulk Terminal	219	1,394	2,488	151	555	4,807
Pipeline	0	34	335	16	146	531
Other Hydrocarbons/Hydrogen	**0**	**19**	**1**	**0**	**13**	**33**
Refinery	0	19	1	0	13	33
Fuel Ethanol	**142**	**1,696**	**398**	**123**	**566**	**2,925**
Refinery	W	302	W	W	W	424
Bulk Terminal [a]	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
ETBE	**W**	**W**	**W**	**W**	**W**	**W**
Refinery	W	W	W	W	W	W
Bulk Terminal	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Methanol	**W**	**W**	**W**	**W**	**W**	**753**
Refinery	W	W	W	W	W	753

See footnotes at end of table.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District, 1997 (Continued)
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
MTBE	**1,694**	**W**	**3,796**	**W**	**2,431**	**8,229**
Refinery	1,574	W	1,815	W	2,281	5,849
Bulk Terminal	W	W	1,704	W	25	1,944
Pipeline	W	W	277	W	125	436
Other Oxygenates [b]	**W**	**W**	**W**	**W**	**W**	**W**
Refinery	W	W	W	W	W	W
Bulk Terminal	W	W	W	W	W	W
Pipeline	W	W	W	W	W	W
Unfinished Oils	**10,106**	**12,309**	**43,290**	**2,208**	**20,842**	**88,755**
Refinery						
Naphthas and Lighter	2,103	3,423	10,921	353	3,633	20,433
Kerosene and Light Gas Oils	2,788	1,644	6,158	416	4,505	15,511
Heavy Gas Oils	4,137	4,481	16,854	863	9,681	36,016
Residuum	1,078	2,761	9,357	576	3,023	16,795
Motor Gasoline Blending Components	**6,396**	**10,491**	**15,025**	**1,889**	**9,617**	**43,418**
Refinery	6,109	8,551	13,838	1,889	8,248	38,635
Bulk Terminal	287	556	632	0	285	1,760
Pipeline	0	1,384	555	0	1,084	3,023
Aviation Gasoline Blending Components	**79**	**36**	**26**	**0**	**10**	**151**
Refinery	79	36	26	0	10	151
Finished Motor Gasoline	**50,787**	**41,886**	**46,480**	**4,867**	**22,337**	**166,357**
Refinery	9,569	8,980	18,497	2,287	12,424	51,757
Bulk Terminal	26,842	19,127	9,508	1,132	7,610	64,219
Pipeline	14,376	13,779	18,475	1,448	2,303	50,381
Reformulated	**19,462**	**1,195**	**8,632**	**0**	**13,642**	**42,931**
Refinery	5,038	311	3,153	0	8,051	16,553
Bulk Terminal	10,285	639	1,880	0	4,017	16,821
Pipeline	4,139	245	3,599	0	1,574	9,557
Oxygenated	**280**	**537**	**0**	**264**	**1**	**1,082**
Refinery	9	404	0	115	0	528
Bulk Terminal	175	133	0	149	1	458
Pipeline	96	0	0	0	0	96
Other	**31,045**	**40,154**	**37,848**	**4,603**	**8,694**	**122,344**
Refinery	4,522	8,265	15,344	2,172	4,373	34,676
Bulk Terminal	16,382	18,355	7,628	983	3,592	46,940
Pipeline	10,141	13,534	14,876	1,448	729	40,728
Finished Aviation Gasoline	**228**	**382**	**431**	**41**	**615**	**1,697**
Refinery	41	121	377	29	340	908
Bulk Terminal	187	222	54	5	275	743
Pipeline	0	39	0	7	0	46
Naphtha-Type Jet Fuel	**0**	**0**	**1**	**0**	**33**	**34**
Refinery	0	0	1	0	33	34
Bulk Terminal	0	0	0	0	0	0
Pipeline	0	0	0	0	0	0
Kerosene-Type Jet Fuel	**11,756**	**9,145**	**13,054**	**839**	**9,215**	**44,009**
Refinery	1,542	3,117	7,053	402	5,088	17,202
Bulk Terminal	5,541	2,150	1,763	206	2,823	12,483
Pipeline	4,673	3,878	4,238	231	1,304	14,324

See footnotes at end of table.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District, 1997 (Continued)
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
Kerosene	**4,576**	**1,587**	**968**	**67**	**96**	**7,294**
Refinery	981	590	505	40	84	2,200
Bulk Terminal	3,212	930	199	0	7	4,348
Pipeline	383	67	264	27	5	746
Distillate Fuel Oil	**59,932**	**31,226**	**31,965**	**2,824**	**12,480**	**138,427**
Refinery	16,049	9,474	15,353	1,668	6,453	48,997
Bulk Terminal	35,731	13,702	5,832	681	4,448	60,394
Pipeline	8,152	8,050	10,780	475	1,579	29,036
0.05 Percent Sulfur and Under	**18,663**	**22,230**	**16,235**	**2,344**	**8,613**	**68,085**
Refinery	2,695	5,867	6,765	1,292	4,470	21,089
Bulk Terminal	12,439	10,196	3,567	630	2,851	29,683
Pipeline	3,529	6,167	5,903	422	1,292	17,313
Greater than 0.05 Percent Sulfur	**41,269**	**8,996**	**15,730**	**480**	**3,867**	**70,342**
Refinery	13,354	3,607	8,588	376	1,983	27,908
Bulk Terminal	23,292	3,506	2,265	51	1,597	30,711
Pipeline	4,623	1,883	4,877	53	287	11,723
Residual Fuel Oil[c]	**16,747**	**2,585**	**14,745**	**592**	**5,793**	**40,462**
Refinery	5,098	1,756	6,631	592	4,174	18,251
Bulk Terminal	11,649	829	8,114	0	1,418	22,010
Pipeline	0	0	0	0	201	201
Less than 0.31% Sulfur	**4,347**	**126**	**342**	**23**	**524**	**5,362**
Refinery	1,491	0	84	23	522	2,120
Bulk Terminal	2,856	126	258	0	2	3,242
0.31 to 1.00% Sulfur	**6,666**	**441**	**3,230**	**399**	**980**	**11,716**
Refinery	2,139	226	1,433	399	715	4,912
Bulk Terminal	4,527	215	1,797	0	265	6,804
Greater than 1.00% Sulfur	**5,734**	**2,018**	**11,173**	**170**	**4,088**	**23,183**
Refinery	1,468	1,530	5,114	170	2,937	11,219
Bulk Terminal	4,266	488	6,059	0	1,151	11,964
Naphtha for Petrochemical Feedstock Use	**478**	**147**	**1,023**	**0**	**160**	**1,808**
Refinery	478	147	1,023	0	160	1,808
Other Oils for Petrochemical Feedstock Use	**0**	**216**	**1,818**	**1**	**164**	**2,199**
Refinery	0	216	1,818	1	164	2,199
Special Naphthas	**116**	**478**	**1,520**	**0**	**57**	**2,171**
Refinery	86	478	1,296	0	57	1,917
Bulk Terminal	30	0	224	0	0	254
Lubricants	**2,441**	**1,735**	**6,973**	**0**	**1,740**	**12,889**
Refinery	699	789	5,471	0	1,195	8,154
Bulk Terminal	1,742	946	1,502	0	545	4,735
Waxes	**45**	**144**	**472**	**20**	**153**	**834**
Refinery	45	144	472	20	153	834
Petroleum Coke	**267**	**3,214**	**4,094**	**104**	**1,758**	**9,437**
Refinery	267	3,214	4,094	104	1,758	9,437
Asphalt and Road Oil	**3,591**	**10,328**	**4,234**	**1,992**	**1,957**	**22,102**
Refinery	1,462	6,062	3,527	1,890	1,651	14,592
Bulk Terminal	2,129	4,266	707	102	306	7,510
Miscellaneous Products	**89**	**360**	**1,267**	**14**	**177**	**1,907**
Refinery	44	137	819	0	112	1,112
Bulk Terminal	45	121	431	12	65	674
Pipeline	0	102	17	2	0	121
Total Stocks, All Oils	**186,935**	**231,319**	**955,782**	**29,918**	**155,805**	**1,559,759**

[a] Includes stocks held by producers.
[b] Includes tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers Intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
[c] Sulfur content not available for stocks held by pipelines.
W = Withheld to avoid disclosure of individual company data.
Note: Stocks are reported as of the 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, 1997

(Thousand Barrels)

PAD District and State	Motor Gasoline				Kerosene	Distillate Fuel Oil			Residual Fuel	Propane/ Propylene
	Total	Reformulated	Oxygenated	Other		Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur		
PAD District I	**36,411**	**15,323**	**184**	**20,904**	**4,193**	**51,780**	**15,134**	**36,646**	**16,747**	**2,424**
Connecticut	1,229	1,229	0	0	123	4,963	794	4,169	102	W
Delaware, D.C., Maryland	1,849	1,568	0	281	122	2,685	837	1,848	2,386	W
Florida	5,147	0	0	5,147	90	2,195	1,284	911	1,071	31
Georgia	1,746	0	0	1,746	39	1,312	892	420	195	W
Maine, New Hampshire, Vermont	901	561	0	340	624	2,264	701	1,563	400	W
Massachusetts	1,463	1,463	0	0	242	3,494	705	2,789	921	W
New Jersey	8,336	5,791	0	2,545	565	14,385	2,837	11,548	5,674	W
New York	3,244	1,172	158	1,914	1,111	7,909	1,455	6,454	2,553	W
North Carolina	2,687	0	0	2,687	203	2,027	1,185	842	518	W
Pennsylvania	4,844	1,226	17	3,601	825	6,486	2,436	4,050	1,236	W
Rhode Island	595	595	0	0	W	716	88	628	W	W
South Carolina	1,335	0	0	1,335	110	927	578	349	W	W
Virginia	2,906	1,718	0	1,188	122	2,267	1,222	1,045	1,039	W
West Virginia	129	0	9	120	W	150	120	30	W	W
PAD District II	**28,107**	**950**	**537**	**26,620**	**1,520**	**23,176**	**16,063**	**7,113**	**2,585**	**13,910**
Illinois	3,312	275	0	3,037	199	3,602	2,603	999	930	662
Indiana	3,207	147	9	3,051	215	2,951	1,643	1,308	227	W
Iowa	1,257	0	0	1,257	W	1,502	1,272	230	W	W
Kansas, Nebraska	2,895	0	0	2,895	14	2,126	1,658	468	14	8,461
Kentucky	1,345	287	113	945	139	1,254	609	645	W	W
Michigan	3,126	0	0	3,126	140	1,813	1,318	495	89	2,450
Minnesota	1,592	0	291	1,301	W	2,214	1,898	316	334	W
Missouri	1,339	0	0	1,339	W	923	762	161	W	W
North Dakota, South Dakota	653	0	1	652	W	703	429	274	W	W
Ohio	3,583	26	6	3,551	443	1,906	1,184	722	251	W
Oklahoma	2,092	0	3	2,089	W	1,113	804	309	187	222
Tennessee	1,836	0	114	1,722	57	1,254	863	391	268	W
Wisconsin	1,870	215	0	1,655	W	1,815	1,020	795	61	W
PAD District III	**28,005**	**5,033**	**0**	**22,972**	**704**	**21,185**	**10,332**	**10,853**	**14,745**	**13,381**
Alabama	1,322	0	0	1,322	47	955	487	468	284	112
Arkansas	911	0	0	911	W	689	330	359	W	W
Louisiana	6,856	406	0	6,450	269	4,948	1,914	3,034	4,717	1,609
Mississippi	2,710	0	0	2,710	128	1,724	861	863	W	4,034
New Mexico	410	0	0	410	W	297	244	53	23	W
Texas	15,796	4,627	0	11,169	246	12,572	6,496	6,076	9,369	7,515
PAD District IV	**3,419**	**0**	**264**	**3,155**	**40**	**2,349**	**1,922**	**427**	**592**	**338**
Colorado	925	0	264	661	W	448	408	40	W	W
Idaho	280	0	0	280	W	235	189	46	W	W
Montana	1,006	0	0	1,006	W	655	655	0	57	20
Utah	565	0	0	565	W	563	276	287	63	231
Wyoming	643	0	0	643	W	448	394	54	W	53
PAD District V	**20,034**	**12,068**	**1**	**7,965**	**91**	**10,901**	**7,321**	**3,580**	**5,592**	**2,481**
Alaska	541	0	0	541	W	992	48	944	W	W
Arizona	732	243	0	489	W	378	336	42	W	W
California	13,901	11,825	0	2,076	84	5,186	4,588	598	2,821	686
Hawaii	789	0	0	789	W	549	104	445	W	W
Nevada	226	0	0	226	W	187	175	12	W	W
Oregon	1,068	0	1	1,067	W	939	748	191	237	W
Washington	2,777	0	0	2,777	W	2,670	1,322	1,348	1,068	412
U.S. Total	**115,976**	**33,374**	**986**	**81,616**	**6,548**	**109,391**	**50,772**	**58,619**	**40,261**	**32,534**

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, 1997
(Thousand Barrels)

Commodity	From I to			From II to				From III to	
	II	III	V	I	III	IV	V	I	II
Crude Oil	**0**	**5,256**	**0**	**2,303**	**12,228**	**9,587**	**0**	**0**	**721,106**
Petroleum Products	**105,084**	**982**	**0**	**40,029**	**72,457**	**35,658**	**0**	**1,128,654**	**343,616**
Pentanes Plus	0	0	0	0	2,794	7	0	0	8,310
Liquefied Petroleum Gases	40	0	0	12,853	54,125	1,033	0	28,622	47,785
Unfinished Oils	310	41	0	291	726	0	0	0	1,417
Motor Gasoline Blending Components	28	290	0	14	97	0	0	5,749	21,211
Finished Motor Gasoline	69,139	0	0	14,754	9,023	13,765	0	625,490	139,361
Reformulated	25	0	0	0	6,450	0	0	120,382	8,116
Oxygenated	15	0	0	1,619	0	114	0	0	0
Other	69,099	0	0	13,135	2,573	13,651	0	505,108	131,245
Finished Aviation Gasoline	0	0	0	0	0	147	0	723	1,087
Jet Fuel	3,600	0	0	1,150	1	12,256	0	163,486	50,698
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	3,600	0	0	1,150	1	12,256	0	163,486	50,698
Kerosene	294	0	0	504	0	0	0	2,624	235
Distillate Fuel Oil	30,835	1	0	7,484	2,781	8,450	0	273,804	64,191
0.05 percent sulfur and under	24,030	1	0	2,784	2,488	8,306	0	165,257	55,798
Greater than 0.05 percent sulfur	6,805	0	0	4,700	293	144	0	108,547	8,393
Residual Fuel Oil	12	414	0	636	2,598	0	0	16,215	91
Petrochemical Feedstocks[a]	724	0	0	0	0	0	0	0	436
Special Naphthas	0	33	0	10	45	0	0	1,147	706
Lubricants	69	203	0	579	267	0	0	8,006	3,268
Waxes	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	33	0	0	1,754	0	0	0	2,788	4,820
Miscellaneous Products	0	0	0	0	0	0	0	0	0
Total	**105,084**	**6,238**	**0**	**42,332**	**84,685**	**45,245**	**0**	**1,128,654**	**1,064,722**

Commodity	From III to		From IV to			From V to			
	IV	V	II	III	V	I	II	III	IV
Crude Oil	**0**	**0**	**34,781**	**10,351**	**0**	**0**	**0**	**35,535**	**0**
Petroleum Products	**5,665**	**28,411**	**25,755**	**32,797**	**10,509**	**0**	**0**	**1,290**	**0**
Pentanes Plus	0	0	1,904	3,107	0	0	0	0	0
Liquefied Petroleum Gases	0	0	15,297	29,690	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0	382	0
Motor Gasoline Blending Components	0	1,844	0	0	0	0	0	310	0
Finished Motor Gasoline	4,302	17,391	5,218	0	9,348	0	0	238	0
Reformulated	0	2,519	0	0	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0	0	0
Other	4,302	14,872	5,218	0	9,348	0	0	238	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	0
Jet Fuel	1,011	4,172	135	0	714	0	0	94	0
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	1,011	4,172	135	0	714	0	0	94	0
Kerosene	0	0	162	0	0	0	0	0	0
Distillate Fuel Oil	352	4,518	3,039	0	447	0	0	0	0
0.05 percent sulfur and under	352	2,555	3,039	0	391	0	0	0	0
Greater than 0.05 percent sulfur	0	1,963	0	0	56	0	0	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0
Petrochemical Feedstocks[a]	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	0	0	0
Lubricants	0	486	0	0	0	0	0	266	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	**5,665**	**28,411**	**60,536**	**43,148**	**10,509**	**0**	**0**	**36,825**	**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, 1997
(Thousand Barrels)

Commodity	From I to		From II to			From III to	
	II	III	I	III	IV	I	II
Crude Oil	**0**	**5,256**	**846**	**12,228**	**9,587**	**0**	**721,106**
Petroleum Products	**103,758**	**1**	**21,070**	**66,103**	**35,658**	**838,012**	**298,639**
Pentanes Plus	0	0	0	2,794	7	0	8,310
Liquefied Petroleum Gases	0	0	12,847	54,125	1,033	25,815	47,785
Motor Gasoline Blending Components	0	0	14	0	0	331	20,861
Finished Motor Gasoline	69,103	0	6,027	8,245	13,765	462,781	117,612
Reformulated	25	0	0	6,450	0	116,803	6,474
Oxygenated	0	0	0	0	114	0	0
Other	69,078	0	6,027	1,795	13,651	345,978	111,138
Finished Aviation Gasoline	0	0	0	0	147	0	857
Jet Fuel	3,600	0	569	1	12,256	129,118	48,808
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	3,600	0	569	1	12,256	129,118	48,808
Kerosene	294	0	24	0	0	1,097	169
Distillate Fuel Oil	30,761	1	1,589	938	8,450	218,870	54,237
0.05 percent sulfur and under	24,030	1	435	735	8,306	130,317	49,993
Greater than 0.05 percent sulfur	6,731	0	1,154	203	144	88,553	4,244
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	**103,758**	**5,257**	**21,916**	**78,331**	**45,245**	**838,012**	**1,019,745**

Commodity	From III to		From IV to			From V to	
	IV	V	II	III	V	III	IV
Crude Oil	**0**	**0**	**34,781**	**10,351**	**0**	**35,535**	**0**
Petroleum Products	**5,665**	**25,704**	**25,755**	**32,797**	**10,509**	**0**	**0**
Pentanes Plus	0	0	1,904	3,107	0	0	0
Liquefied Petroleum Gases	0	0	15,297	29,690	0	0	0
Motor Gasoline Blending Components	0	1,295	0	0	0	0	0
Finished Motor Gasoline	4,302	16,340	5,218	0	9,348	0	0
Reformulated	0	1,724	0	0	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	4,302	14,616	5,218	0	9,348	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0
Jet Fuel	1,011	4,003	135	0	714	0	0
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	1,011	4,003	135	0	714	0	0
Kerosene	0	0	162	0	0	0	0
Distillate Fuel Oil	352	4,066	3,039	0	447	0	0
0.05 percent sulfur and under	352	2,555	3,039	0	391	0	0
Greater than 0.05 percent sulfur	0	1,511	0	0	56	0	0
Residual Fuel Oil	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	**5,665**	**25,704**	**60,536**	**43,148**	**10,509**	**35,535**	**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, 1997

(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**	**1,457**	**0**	**0**	**0**	**0**
Petroleum Products	**1,326**	**981**	**0**	**18,959**	**6,354**	**0**	**290,642**	**9,379**
Liquefied Petroleum Gases	40	0	0	6	0	0	2,807	0
Unfinished Oils	310	41	0	291	726	0	0	0
Motor Gasoline Blending Components	28	290	0	0	97	0	5,418	0
Finished Motor Gasoline	36	0	0	8,727	778	0	162,709	2,315
Reformulated	0	0	0	0	0	0	3,579	2,315
Oxygenated	15	0	0	1,619	0	0	0	0
Other	21	0	0	7,108	778	0	159,130	0
Finished Aviation Gasoline	0	0	0	0	0	0	723	30
Jet Fuel	0	0	0	581	0	0	34,368	104
Naphtha-Type	0	0	0	0	0	0	0	0
Kerosene-Type	0	0	0	581	0	0	34,368	104
Kerosene	0	0	0	480	0	0	1,527	267
Distillate Fuel Oil	74	0	0	5,895	1,843	0	54,934	5,826
0.05 percent sulfur and under	0	0	0	2,349	1,753	0	34,940	1,105
Greater then 0.05 percent sulfur	74	0	0	3,546	90	0	19,994	4,721
Residual Fuel Oil	12	414	0	636	2,598	0	16,215	699
Less than 0.31 percent sulfur	0	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur	0	0	0	0	0	0	0	0
Greater than 1.00 percent sulfur	12	414	0	636	2,598	0	16,215	699
Petrochemical Feedstocks[a]	724	0	0	0	0	0	0	0
Special Naphthas	0	33	0	10	45	0	1,147	0
Lubricants	69	203	0	579	267	0	8,006	0
Waxes	0	0	0	0	0	0	0	0
Asphalt and Road Oil	33	0	0	1,754	0	0	2,788	138
Miscellaneous Products	0	0	0	0	0	0	0	0
Total	**1,326**	**981**	**0**	**20,416**	**6,354**	**0**	**290,642**	**9,379**

Commodity	From III to				From V to		
	Central Atlantic	Lower Atlantic	II	V	I	II	III
Crude Oil	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Petroleum Products	**18,971**	**262,292**	**44,977**	**2,707**	**0**	**0**	**1,290**
Liquefied Petroleum Gases	0	2,807	0	0	0	0	0
Unfinished Oils	0	0	1,417	0	0	0	382
Motor Gasoline Blending Components	4,955	463	350	549	0	0	310
Finished Motor Gasoline	3,245	157,149	21,749	1,051	0	0	238
Reformulated	1,190	74	1,642	795	0	0	0
Oxygenated	0	0	0	0	0	0	0
Other	2,055	157,075	20,107	256	0	0	238
Finished Aviation Gasoline	172	521	230	0	0	0	0
Jet Fuel	583	33,681	1,890	169	0	0	94
Naphtha-Type	0	0	0	0	0	0	0
Kerosene-Type	583	33,681	1,890	169	0	0	94
Kerosene	638	622	66	0	0	0	0
Distillate Fuel Oil	4,065	45,043	9,954	452	0	0	0
0.05 percent sulfur and under	1,798	32,037	5,805	0	0	0	0
Greater then 0.05 percent sulfur	2,267	13,006	4,149	452	0	0	0
Residual Fuel Oil	1,399	14,117	91	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	1,399	14,117	91	0	0	0	0
Petrochemical Feedstocks[a]	0	0	436	0	0	0	0
Special Naphthas	0	1,147	706	0	0	0	0
Lubricants	3,549	4,457	3,268	486	0	0	266
Waxes	0	0	0	0	0	0	0
Asphalt and Road Oil	365	2,285	4,820	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0
Total	**18,971**	**262,292**	**44,977**	**2,707**	**0**	**0**	**1,290**

[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, 1997
(Thousand Barrels)

Commodity	PAD District I			PAD District II		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	**2,303**	**5,256**	**-2,953**	**755,887**	**24,118**	**731,769**
Petroleum Products	**1,168,683**	**106,066**	**1,062,617**	**474,455**	**148,144**	**326,311**
Pentanes Plus	0	0	0	10,214	2,801	7,413
Liquefied Petroleum Gases	41,475	40	41,435	63,122	68,011	-4,889
Ethane/Ethylene	0	0	0	8,989	32,029	-23,040
Propane/Propylene	40,198	0	40,198	40,673	24,682	15,991
Normal Butane/Butylene	1,016	40	976	8,062	9,148	-1,086
Isobutane/Isobutylene	261	0	261	5,398	2,152	3,246
Unfinished Oils	291	351	-60	1,727	1,017	710
Motor Gasoline Blending Components	5,763	318	5,445	21,239	111	21,128
Finished Motor Gasoline	640,244	69,139	571,105	213,718	37,542	176,176
Reformulated	120,382	25	120,357	8,141	6,450	1,691
Oxygenated	1,619	15	1,604	15	1,733	-1,718
Other	518,243	69,099	449,144	205,562	29,359	176,203
Finished Aviation Gasoline	723	0	723	1,087	147	940
Jet Fuel	164,636	3,600	161,036	54,433	13,407	41,026
Naphtha-Type	0	0	0	0	0	0
Kerosene-Type	164,636	3,600	161,036	54,433	13,407	41,026
Kerosene	3,128	294	2,834	691	504	187
Distillate Fuel Oil	281,288	30,836	250,452	98,065	18,715	79,350
0.05 percent sulfur and under	168,041	24,031	144,010	82,867	13,578	69,289
Greater than 0.05 percent sulfur	113,247	6,805	106,442	15,198	5,137	10,061
Residual Fuel Oil	16,851	426	16,425	103	3,234	-3,131
Petrochemical Feedstocks[a]	0	724	-724	1,160	0	1,160
Special Naphthas	1,157	33	1,124	706	55	651
Lubricants	8,585	272	8,313	3,337	846	2,491
Waxes	0	0	0	0	0	0
Asphalt and Road Oil	4,542	33	4,509	4,853	1,754	3,099
Miscellaneous Products	0	0	0	0	0	0
Total	**1,170,986**	**111,322**	**1,059,664**	**1,230,342**	**172,262**	**1,058,080**

Commodity	PAD District III			PAD District IV			PAD District V		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	**63,370**	**721,106**	**-657,736**	**9,587**	**45,132**	**-35,545**	**0**	**35,535**	**-35,535**
Petroleum Products	**107,526**	**1,506,346**	**-1,398,820**	**41,323**	**69,061**	**-27,738**	**38,920**	**1,290**	**37,630**
Pentanes Plus	5,901	8,310	-2,409	7	5,011	-5,004	0	0	0
Liquefied Petroleum Gases	83,815	76,407	7,408	1,033	44,987	-43,954	0	0	0
Ethane/Ethylene	48,916	2,703	46,213	0	23,173	-23,173	0	0	0
Propane/Propylene	19,672	63,327	-43,655	981	13,515	-12,534	0	0	0
Normal Butane/Butylene	11,164	5,956	5,208	19	5,117	-5,098	0	0	0
Isobutane/Isobutylene	4,063	4,421	-358	33	3,182	-3,149	0	0	0
Unfinished Oils	1,149	1,417	-268	0	0	0	0	382	-382
Motor Gasoline Blending Components	697	28,804	-28,107	0	0	0	1,844	310	1,534
Finished Motor Gasoline	9,261	786,544	-777,283	18,067	14,566	3,501	26,739	238	26,501
Reformulated	6,450	131,017	-124,567	0	0	0	2,519	0	2,519
Oxygenated	0	0	0	114	0	114	0	0	0
Other	2,811	655,527	-652,716	17,953	14,566	3,387	24,220	238	23,982
Finished Aviation Gasoline	0	1,810	-1,810	147	0	147	0	0	0
Jet Fuel	95	219,367	-219,272	13,267	849	12,418	4,886	94	4,792
Naphtha-Type	0	0	0	0	0	0	0	0	0
Kerosene-Type	95	219,367	-219,272	13,267	849	12,418	4,886	94	4,792
Kerosene	0	2,859	-2,859	0	162	-162	0	0	0
Distillate Fuel Oil	2,782	342,865	-340,083	8,802	3,486	5,316	4,965	0	4,965
0.05 percent sulfur and under	2,489	223,962	-221,473	8,658	3,430	5,228	2,946	0	2,946
Greater than 0.05 percent sulfur	293	118,903	-118,610	144	56	88	2,019	0	2,019
Residual Fuel Oil	3,012	16,306	-13,294	0	0	0	0	0	0
Petrochemical Feedstocks[a]	0	436	-436	0	0	0	0	0	0
Special Naphthas	78	1,853	-1,775	0	0	0	0	0	0
Lubricants	736	11,760	-11,024	0	0	0	486	266	220
Waxes	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	7,608	-7,608	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	0	0	0	0
Total	**170,896**	**2,227,452**	**-2,056,556**	**50,910**	**114,193**	**-63,283**	**38,920**	**36,825**	**2,095**

[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. Refinery Fuel Use and Losses by PAD District, 1997
(Thousand Barrels)

Commodity	PAD Districts					United States
	I	II	III	IV	V	
Crude Oil	0	0	0	0	0	0
Liquefied Petroleum Gases	156	1,323	650	39	999	3,167
Distillate Fuel Oil	234	113	84	0	290	721
Residual Fuel Oil	2,338	2,886	1,379	405	808	7,816
Still Gas	18,490	46,926	118,216	6,782	48,751	239,165
Marketable Petroleum Coke	1,520	24	82	141	907	2,674
Catalyst Petroleum Coke	10,997	17,374	40,267	2,332	13,324	84,294
Other Products	159	1,539	3,347	694	941	6,680

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.). Other products includes miscellaneous products; finished motor gasoline; pentanes plus; unfinished oils, other hydrocarbons, hydrogen, and oxygenates; asphalt and road oil, motor gasoline blending components; lubricants; jet fuel; aviation gasoline; and special naphthas.
Source: Energy Information Administration (EIA), Form EIA-810, "Monthly Refinery Report."

Table 37. Shutdown and Reactivated Refineries During 1997

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 III		**37,100**	**20,100**			
Gold Line Refg. LTD	Lake Charles, LA	27,600	18,000	12/78	05/97	04/97
Canal Refg. Co.	Church Point, LA	9,500	2,100	01/52	05/97	06/97
PAD District V		**50,000**	**62,400**			
Pacific Refg. Co.	Hercules, CA	50,000	62,400	01/68	07/95	09/97
Total U.S. Shutdowns		**87,100**	**82,500**			
REACTIVATIONS						
PAD District I						
Tosco Refining Company	Trainer, PA	172,000	340,000	a	——-	——-
PAD District III						
Gold Line Refg. LTD (Formerly Cas Refg. Co.)	Jennings, LA	12,000	NA	04/97	——-	——-
OTHER						
PAD District I						
Astor Corp/ Petrowax Refining Division	Farmers Valley, PA (Smethport)	——-	3,750	a	b	b

[a] Refinery was operable prior to 1948.
[b] Wax processing facility, no longer operating as a refinery.
NA=Not Available.
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 38. Refinery Sales During 1997

Former Owner	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)	New Owner	Date of Sale
Astor Corp. Emlenton, PA	**0**	**AlliedSignal**	**10/97**
Astor Corp. Farmers Valley, PA	**0**	**AlliedSignal**	**10/97**
Diamond Shamrock Refg. & Mktg. McKee, TX	**140,000**	**Ultramar Diamond Shamrock Corp.**	**01/97**
Diamond Shamrock Refg. & Mktg. Three Rivers, TX	**83,000**	**Ultramar Diamond Shamrock Corp.**	**01/97**
Howell Corp. Channelview, TX	**1,400**	**Specified Fuels & Chemicals LLC**	**12/97**
Quaker State Corp. Congo, WV	**11,500**	**Ergon Inc.**	**07/97**
Salomon Inc. **Basis Petro Inc.** Krotz Springs, LA	**60,000**	**Valero Energy Corp.**	**05/97**
Salomon Inc. **Basis Petro Inc.** Houston, TX	**71,000**	**Valero Energy Corp.**	**05/97**
Salomon Inc. **Basis Petro Inc.** Texas City, TX	**148,600**	**Valero Energy Corp.**	**05/97**
The Uno-Ven Co. Lemont, IL	**153,700**	**PDV America Inc.**	**05/97**
Trizachhahm Corp. **Clark Refg. & Mktg.** Blue Island, IL	**80,515**	**The Blackstone Group LP**	**11/97**
Trizachhahm Corp. **Clark Refg. & Mktg.** Hartford, IL	**64,000**	**The Blackstone Group LP**	**11/97**
Trizachhahm Corp. **Clark Refg. & Mktg.** Port Arthur, TX	**203,500**	**The Blackstone Group LP**	**11/97**
Ultramar Corp. Wilmington, CA	**68,000**	**Ultramar Diamond Shamrock Corp.**	**01/97**
Unocal Corp. San Francisco, CA	**76,000**	**Tosco Corp.**	**04/97**
Unocal Corp. Los Angeles, CA	**127,500**	**Tosco Corp.**	**04/97**
Unocal Corp. Santa Maria, CA	**40,000**	**Tosco Corp.**	**04/97**
Witco Corp. Bradford, PA	**10,000**	**American Refining Group Inc.**	**04/97**
Witco Corp. Oildale, CA	**0**	**Golden Bear Oil Specialty**	**08/97**

bbl/cd = Barrels per calendar day.
Source: Energy Information Administration (EIA) Form EIA-810, “Monthly Refinery Report.”

Appendix A

District Descriptions and Maps

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

PAD District I

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

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

Sub-PAD District I

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

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

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

PAD District II

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

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

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

PAD District III

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

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

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

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

New Mexico: The State of New Mexico.

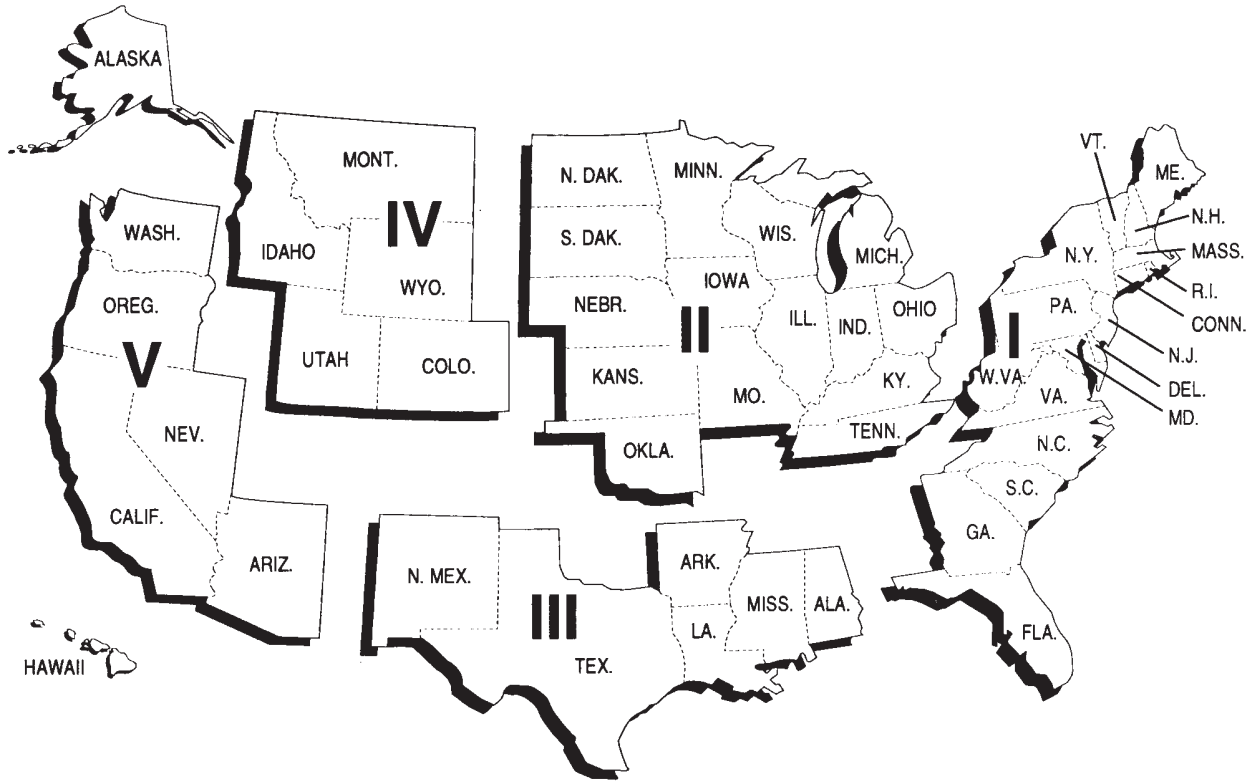
PAD District IV

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

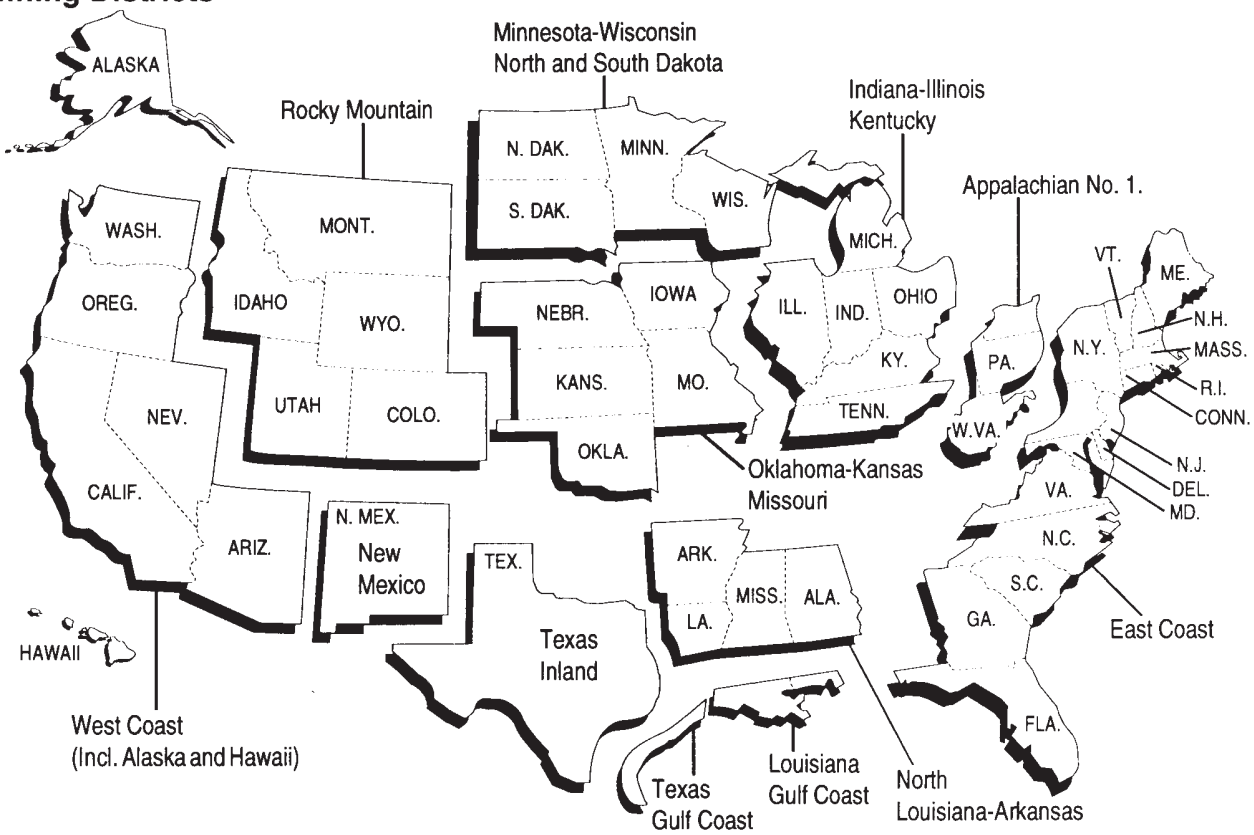
PAD District V

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

Petroleum Administration for Defense (PAD) Districts



Refining Districts



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
- Note 2. Monthly Petroleum Supply Reporting System
- Note 3. Form EIA-820: Biennial Refinery Report
- Note 4. Technical Notes for Detailed Statistics Tables
- Note 5. Domestic Crude Oil Production
- Note 6. Export Data
- Note 7. Quality Control and Data Revision
- Note 8. Frames Maintenance
- Note 9. Descriptive Monthly Statistics
- Note 10. Practical Limitations of Data Collection Efforts
- Note 11. 1981 Changes in the Petroleum Supply Reporting System
- Note 12. 1983 Changes in the Petroleum Supply Reporting System
- Note 13. 1984 Changes in the Petroleum Supply Reporting System
- Note 14. 1985 Changes in the Petroleum Supply Reporting System
- Note 15. 1986 Changes in the Petroleum Supply Reporting System
- Note 16. 1987 Changes in the Petroleum Supply Reporting System
- Note 17. 1989 Changes in the Petroleum Supply Reporting System
- Note 18. 1990 Changes in the Petroleum Supply Reporting System
- Note 19. 1993 Changes in the Petroleum Supply Reporting System
- Note 20. 1994 Changes in the Petroleum Supply Reporting System
- Note 21. 1995 Changes in the Petroleum Supply Reporting System
- Note 22. 1997 Changes in the Petroleum Supply Reporting System
- Note 23. Motor Gasoline Blending Plants

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	“Biennial Refinery Report”

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

The Form EIA-807, “Propane Telephone Survey,” is used to collect data on production, stocks, and imports of 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) and published in the *Winter Fuels Report*. During the non-heating season (April through September) data are collected on end-of-month stocks only. These data are published in the *WPSR*.

Forms EIA-810 through 814, 816, and 817 comprise the MPSRS. These surveys are used to collect detailed refinery/blender and natural gas plant operations data; refinery/blender, bulk terminal, 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 last article was published in the December 1997 issue and evaluated the accuracy of the data for 1996 compared with previous years.

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, "Biennial 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). The survey was last conducted in January 1997. 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 260 respondents report on the Form EIA-810.

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

barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. Approximately 320 respondents report on the Form EIA-811.

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

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

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

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

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

Form EIA-819M, "Monthly Oxygenate Telephone Report" - The sample of companies that report on the EIA-819M are selected from the universe of companies that report on the MPSRS surveys and from the universe of 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 pipeline. Intermediate movements for pipeline systems operating in more than two PAD Districts are included.

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

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

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

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

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

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

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

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect data on production, stocks, and imports of oxygenates. Data on end-of-month stocks are reported on a custody basis regardless of ownership. Data are reported on a PAD District basis.

Collection Methods

Except for the EIA- 819M, survey forms for the MPSRS can be submitted by mail, facsimile, or electronic transmission. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month. Data 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 98 to 100 percent. Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

Data Imputation

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

Confidentiality

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the 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)

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: Biennial 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, 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 to 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, 1998 .

In 1997, respondents were not required to submit data for crude oil and petroleum products consumed at refineries during 1996. 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 remains.

Respondent Frame

The respondent frame consists of all operating and idle petroleum refineries (including new refineries under con-

Refinery cat-cracker.

struction), located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. As of January 1, 1998, there were 162 refineries and 51 motor gasoline blending plants in the 50 States. A list of motor gasoline blending plants operating during 1997 is provided in Explanatory Note 23.

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 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. For the January 1, 1997 survey, there was one nonrespondent.

Data Imputation

Imputation is performed for companies that fail to file prior to the publication deadline. For the January 1, 1997 survey, there was one nonrespondent, and their total operable capacity is estimated to be about 0.1 percent of the U.S. total. 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 1: Fuel, Electricity, and Steam Consumed for all Purposes at Refineries

Data for crude oil, distillate and residual fuel oil, liquefied petroleum gases, still gas, and marketable and catalyst petroleum coke are based upon data reported on the monthly Form EIA-810.

Estimates for natural gas, coal, electricity and steam are taken directly from data reported on the previous year's annual Form EIA-820.

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 1997 is about 2.0 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 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) 1996, Volume 1, Tables 38, 39, and 40.

Other data 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, "Biennial 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 State conservation agencies and the Mineral 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 two crude oil producing States (New York and Ohio) report production on a monthly basis. These two States report crude oil production on an annual basis. Estimates of monthly crude oil production for these two States are made by the EIA using data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report."

After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Minerals Management Service and the Conservation Committee of California Oil and Gas Producers. 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 1997 crude oil production data received by the EIA as of April 1998. Crude oil production data for 1997 received after April 1998 will be published later as an appendix in the following year's *Petroleum Supply Annual (PSA)*. Table Cl of this publication presents the 1996 crude oil production a year after it was published in the *PSA* 1996.

Note 6. Export Data

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

Census export statistics used in the *Petroleum Supply 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 Supply Division is performed each year. The results of this data comparison are published once a year in the *Petroleum Supply Monthly* (PSM) feature article, "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 (25th day following the end of the report month) become nonrespondents for that particular report period and are contacted by phone to obtain the current month's data. Respondents who are chronically late (i.e., 3 consecutive months) are notified by EIA either by letter or telephone.

Nonresponse

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

Note 8. Frames Maintenance

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

The activities for frames maintenance are conducted on a monthly and annual basis. Monthly frames maintenance procedures focus on examining several frequently published industry periodicals that report changes in status (births, deaths, sales, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status, and information received from survey systems operated by other offices. Survey managers review these sources 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 PSD periodically conducts a comprehensive frames investigation. These investigations result in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series data published from these respondents. The results

of this frame study are usually implemented in January to provide a full year under the same frame.

Changes in Survey Frames

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

Table B2. Impact of New Respondents to December 1985 PSM Data

	Refinery Production (thousand barrels per day)		Stocks[a] (thousand barrels)	
Product	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.

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).

(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 under-reported 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.

Table B3. Descriptive Statistics for Selected Petroleum Supply Variables[1], 1997

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Refinery Gross Input to Atmospheric Crude Oil Distillation Units												
Respondents	256	253	252	248	248	248	249	250	246	247	247	246
Nonzero Respondents	151	152	153	155	156	155	155	153	154	154	153	151
Average	2827	2505	2868	2800	3027	2961	3038	3133	3026	3045	2929	3118
Standard Deviation	2936	2556	2948	3008	3093	3007	3056	3093	3068	3095	3019	3145
Refinery Crude Oil Input												
Respondents	256	253	252	248	248	248	249	250	246	247	247	246
Nonzero Respondents	161	161	164	164	165	164	165	163	162	163	162	159
Average	2631	2345	2655	2616	2841	2775	2817	2904	2835	2825	2723	2910
Standard Deviation	2889	2529	2911	2962	3059	2960	3017	3059	3033	3055	2977	3104
Refinery Finished Motor Gasoline Gross Production												
Respondents	256	253	252	248	248	248	249	250	246	247	247	246
Nonzero Respondents	166	169	167	165	162	163	164	159	167	170	165	167
Average	1374	1206	1363	1403	1528	1485	1478	1553	1443	1444	1427	1496
Standard Deviation	1406	1260	1453	1510	1578	1526	1537	1534	1527	1614	1536	1589
Refinery Distillate Fuel Oil Gross Production												
Respondents	256	253	252	248	248	248	249	250	246	247	247	246
Nonzero Respondents	154	153	151	154	153	153	153	152	153	155	152	153
Average	668	602	711	681	757	729	728	748	716	735	741	765
Standard Deviation	725	630	749	757	781	755	750	762	737	782	760	789
Refinery Residual Fuel Oil Gross Production												
Respondents	256	253	252	248	248	248	249	250	246	247	247	246
Nonzero Respondents	115	110	106	106	107	108	110	107	106	108	112	110
Average	220	209	198	187	195	207	187	194	202	214	214	237
Standard Deviation	332	296	268	268	266	278	252	255	278	300	285	301
Refinery Finished Gasoline Stocks												
Respondents	256	253	252	248	248	248	249	250	246	247	247	246
Nonzero Respondents	168	167	166	169	170	171	169	171	168	169	167	167
Average	301	283	290	269	267	282	259	258	281	285	289	310
Standard Deviation	299	278	320	322	317	308	263	268	299	310	300	320
Bulk Terminal Finished Motor Gasoline Stocks												
Respondents	313	311	311	312	312	312	309	306	302	304	305	305
Nonzero Respondents	140	141	141	138	136	137	137	137	137	136	138	137
Average	466	453	399	422	456	474	431	428	452	449	470	469
Standard Deviation	908	877	785	820	885	937	837	871	896	882	904	878
Pipeline Finished Motor Gasoline Stocks												
Respondents	82	82	82	82	82	81	81	81	81	81	81	81
Nonzero Respondents	52	52	52	52	52	52	52	51	52	51	52	52
Average	941	970	952	925	976	971	923	920	935	955	933	969
Standard Deviation	1929	2072	2026	2043	2179	2084	2027	2015	2054	2127	2125	2141
Refinery Distillate Fuel Oil Stocks												
Respondents	256	253	252	248	248	248	249	250	246	247	247	246
Nonzero Respondents	199	199	196	197	198	199	198	200	200	200	200	200
Average	187	194	193	178	195	215	221	236	240	231	254	245
Standard Deviation	220	265	275	232	304	308	338	448	440	441	460	428
Bulk Terminal Distillate Fuel Oil Stocks												
Respondents	313	311	311	312	312	312	309	306	302	304	305	305
Nonzero Respondents	196	196	193	192	188	189	191	189	190	187	190	192
Average	241	223	199	184	227	247	264	301	321	317	314	315
Standard Deviation	537	483	407	397	482	497	528	622	694	724	688	693
Pipeline Distillate Fuel Oil Stocks												
Respondents	82	82	82	82	82	81	81	81	81	81	81	81
Nonzero Respondents	54	55	54	53	52	53	53	53	53	51	52	53
Average	494	420	462	503	519	540	544	544	560	596	579	548
Standard Deviation	1352	1011	1105	1227	1228	1395	1371	1437	1459	1589	1564	1530
Refinery Residual Fuel Oil Stocks												
Respondents	256	253	252	248	248	248	249	250	246	247	247	246
Nonzero Respondents	127	126	126	124	124	124	123	122	124	124	126	124
Average	137	142	142	141	123	132	130	132	120	130	146	147
Standard Deviation	191	199	197	211	170	171	201	217	176	192	246	231
Bulk Terminal Residual Fuel Oil Stocks												
Respondents	313	311	311	312	312	312	309	306	302	304	305	305
Nonzero Respondents	61	61	62	60	60	60	61	60	60	60	59	58
Average	398	363	373	384	396	378	318	334	328	327	326	379
Standard Deviation	741	719	745	773	790	778	642	681	655	717	674	813
Refinery Crude Oil Stocks												
Respondents	256	253	252	248	248	248	249	250	246	247	247	246
Nonzero Respondents	164	164	163	164	163	163	161	161	162	162	162	162
Average	591	579	600	608	637	619	612	579	605	614	629	560
Standard Deviation	696	664	678	668	700	670	677	663	686	689	740	624
Pipeline/Tank Farm Crude Oil Stocks												
Respondents	177	176	177	177	177	179	179	179	177	177	175	174
Nonzero Respondents	125	126	125	125	125	122	123	124	124	123	122	122
Average	1360	1392	1526	1551	1576	1574	1493	1459	1464	1555	1601	1546
Standard Deviation	2643	2788	3023	3060	3159	3130	2976	2921	2931	3077	3195	3088

[1] The respondent data on this table excludes 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	90	82	82	74
Motor Gas Blending	33	-7	27	58	51	82	98	98	81	-16	56	113	57
Product Supplied	6,980	7,275	7,395	7,564	7,644	7,922	7,884	7,975	7,615	7,548	7,464	7,924	7,601
1995													
Fuel Ethanol Adj	66	66	79	74	58	81	49	36	57	72	91	58	65
Motor Gas Blending	8	37	56	86	131	113	46	110	35	89	28	29	64
Product Supplied	7,163	7,481	7,788	7,651	7,894	8,220	7,888	8,187	7,786	7,781	7,866	7,742	7,789
1996													
Fuel Ethanol Adj	58	53	50	37	27	14	9	20	22	36	43	39	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

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

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*.

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.

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

Table 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.

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					•

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

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	—	—

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 portion. This has not been done for Alaskan crude oil because refiners are unable to identify these volumes for accounting purposes. As a result, the NGL production in Alaska has been credited directly toward product supplied and also toward product supplied from refinery production when the refiner processes the crude oil-NGL mixture. In addition, the reporting of the commingled stream as crude oil by the refiner has overstated crude oil inputs and resulted in an increase in unaccounted for crude oil equal to the volume of NGL in the crude oil.

To offset this reporting error, an adjustment was 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

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

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.
- The next year collection of refinery capacity data will occur is 1999 and will present refinery capacity data as of January 1, 1999.

Note 23. Motor Gasoline Blending Plants Operating During 1997

Amoco Oil Co.
Forest View, IL
Milwaukee, WI

Ashland Oil Inc.
Clarksville, IN
Covington, KY

Clark Refg. & Mktg. Inc.
Blue Island, IL
Milwaukee, WI

Citgo Petroleum Corp.
East Chicago, IN
Linden, NJ
Milwaukee, WI
Mt. Prospect, IL
Richmond, VA
Selma, NC

GATX Terminals Corp.
Carteret, NJ
Pasadena, TX
Staten Island, NY

Getty Petro. Corp.
East Providence, RI
New Haven, CT
Newark, NJ
Rensselaer, NY
Harrisburg, PA

Global Petroleum Corp.
Revere, MA

Golden West Refining Co.
Sante Fe Springs, CA

Hartford/WoodRiver Term.
Hartford, IL

Int'l Matex Tank Term.
Bayonne, NJ

Itochu International Inc.
Sewaren, NJ

Marathon Oil Co.
Hammond, IN
Mt. Prospect, IL
Willow Springs, IL

Mobil Oil Corp.
Arlington Heights, IL
Hammond, IN
Lockport, IL

New Haven Term, Inc.
East Haven,CT

Northville Industries Corp.
Linden, NJ

Oiltanking Houston Inc.
Houston, TX

Phillips 66 Co.
Forsythe, IL
East Chicago, IN

Phillips Pipeline Co.
Denver, CO
East Saint Louis, IL

Santa Fe Pacific Pipeline
Phoenix, AZ

Shell Oil Co.
Argo, IL
Carson, CA
Des Plaines, IL

Sinclair Oil Corp.
Denver, CO

Stolthaven Inc.
Perth Amboy, NJ

Texaco Inc.
Phoenix, AZ
Tucson, AZ

Unocal Corp.
Beaumont, TX

Westec Petro. Inc.
Denver, CO

Westfrac Inc. Blending
Grand Junction, CO

Williams Pipeline Co.
Des Moines, IA
Iowa City, IA

Appendix C

Table C1. Revised[a] Crude Oil Production by PAD District and State, 1996
(Thousand Barrels)

PAD District and State	January	February	March	April	May	June	July
PAD District I	**701**	**649**	**769**	**868**	**874**	**844**	**892**
Florida	447	385	474	553	560	544	579
New York	20	19	23	28	26	25	28
Pennsylvania	119	125	136	149	148	137	142
Virginia	1	1	1	2	1	1	1
West Virginia	113	119	135	137	139	136	142
PAD District II	**17,355**	**16,394**	**16,627**	**18,270**	**17,488**	**16,815**	**17,555**
Illinois	1,225	1,110	1,375	1,260	1,310	1,295	1,310
Indiana	212	201	202	216	196	194	224
Kansas	3,468	3,382	3,425	3,546	3,619	3,409	3,573
Kentucky	328	383	84	463	276	272	389
Michigan	1,016	902	214	1,592	877	924	1,052
Missouri	10	8	11	10	10	10	10
Nebraska	298	284	306	293	298	296	300
North Dakota	2,565	2,419	2,663	2,618	2,708	2,674	2,807
Ohio	673	678	727	778	712	611	654
Oklahoma	7,424	6,894	7,480	7,354	7,341	6,996	7,096
South Dakota	104	101	110	107	107	103	107
Tennessee	31	32	30	35	32	31	34
PAD District III	**98,389**	**92,476**	**99,385**	**96,076**	**98,714**	**98,605**	**97,512**
Alabama	1,461	1,305	1,500	1,449	1,459	1,394	1,394
Arkansas	821	731	806	782	796	763	747
Louisiana[b]	10,323	10,375	11,538	11,628	11,438	11,015	11,204
Mississippi	1,638	1,522	1,708	1,627	1,617	1,532	1,620
New Mexico	6,434	5,952	5,933	6,124	6,175	5,816	5,990
Texas[b]	46,721	43,421	47,044	45,295	46,331	44,336	45,425
Federal Offshore Padd III	30,991	29,170	30,857	29,171	30,898	33,751	31,131
PAD District IV	**11,412**	**10,819**	**11,220**	**10,944**	**11,018**	**10,720**	**11,053**
Colorado	2,108	1,984	2,062	2,062	2,010	1,990	2,077
Montana	1,289	1,240	1,355	1,331	1,377	1,329	1,385
Utah	1,669	1,555	1,647	1,602	1,635	1,564	1,623
Wyoming	6,345	6,041	6,155	5,948	5,995	5,837	5,968
PAD District V	**74,373**	**70,983**	**75,219**	**69,445**	**71,067**	**71,479**	**70,169**
Alaska[b]	44,767	42,988	45,086	41,014	41,573	42,581	40,821
South Alaska I	1,380	1,225	1,294	1,228	1,262	1,201	1,243
North Slope 4III	3,387	41,763	43,792	39,786	40,311	41,380	39,578
Arizona	6	5	6	6	6	8	8
California[b]	23,740	22,245	23,968	22,753	24,068	23,325	23,865
Nevada	99	91	91	90	89	86	87
Federal Offshore Padd V	5,761	5,654	6,067	5,582	5,330	5,479	5,388
U.S. Total[b]	**202,230**	**191,321**	**203,219**	**195,603**	**199,161**	**198,463**	**197,181**
Daily Average[b]	**6,524**	**6,833**	**6,555**	**6,520**	**6,425**	**6,615**	**6,361**

This table contains updates on 1996 crude oil production statistics published in the *Petroleum Supply Annual* (PSA), 1996.

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 1996 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 1996, and are not subject to further revision by the EIA.

Table C1. Revised[a] Crude Oil Production by PAD District and State, 1996 (Continued)
(Thousand Barrels)

PAD District and State	August	September	October	November	December	Total	Daily Average
PAD District I	**861**	**823**	**867**	**835**	**866**	**9,849**	**27**
Florida	565	537	541	539	569	6,292	17
New York	25	31	30	25	28	309	1
Pennsylvania	148	139	156	146	145	1,692	5
Virginia	1	1	1	1	1	13	(s)
West Virginia	122	114	139	124	123	1,544	4
PAD District II	**17,049**	**17,006**	**17,459**	**16,272**	**17,246**	**205,538**	**563**
Illinois	1,400	1,390	1,360	1,350	1,290	15,675	43
Indiana	218	214	226	197	223	2,523	7
Kansas	3,497	3,432	3,607	3,144	3,499	41,599	114
Kentucky	1	431	279	261	280	3,448	9
Michigan	822	837	743	1,024	736	10,740	29
Missouri	9	9	10	10	9	115	(s)
Nebraska	297	291	302	287	290	3,541	10
North Dakota	2,820	2,761	2,872	2,674	2,734	32,317	89
Ohio	654	698	744	662	714	8,305	23
Oklahoma	7,194	6,810	7,178	6,532	7,336	85,636	235
South Dakota	105	104	104	102	103	1,257	3
Tennessee	31	30	34	29	32	381	1
PAD District III	**98,737**	**95,826**	**97,348**	**96,476**	**99,562**	**1,169,108**	**3,203**
Alabama	1,446	1,364	1,417	1,334	1,343	16,868	46
Arkansas	762	728	716	721	717	9,088	25
Louisiana[b]	12,011	11,148	11,264	10,961	11,457	134,363	368
Mississippi	1,623	1,593	1,740	1,646	1,668	19,535	54
New Mexico	6,083	5,905	5,652	5,886	6,054	72,004	197
Texas[b]	45,249	44,112	45,879	44,492	45,885	544,191	1,491
Federal Offshore Padd III	31,562	30,975	30,680	31,435	32,438	373,059	1,022
PAD District IV	**11,308**	**11,109**	**11,268**	**11,070**	**11,273**	**133,213**	**365**
Colorado	1,954	1,967	2,032	1,952	1,971	24,170	66
Montana	1,393	1,354	1,427	1,344	1,350	16,173	44
Utah	1,636	1,638	1,696	1,616	1,622	19,503	53
Wyoming	6,325	6,151	6,113	6,158	6,331	73,368	201
PAD District V	**70,463**	**70,382**	**72,612**	**70,445**	**72,099**	**858,736**	**2,353**
Alaska[b]	41,126	42,019	43,521	42,104	43,166	510,766	1,399
South Alaska I	1,168	1,140	1,178	1,119	1,148	14,586	40
North Slope 4III	39,958	40,879	42,343	40,985	42,018	496,179	1,359
Arizona	8	8	8	8	6	84	(s)
California[b]	24,082	23,235	23,888	23,379	23,862	282,409	774
Nevada	86	89	90	78	82	1,058	3
Federal Offshore Padd V	5,161	5,031	5,106	4,877	4,983	64,419	176
U.S. Total[b]	**198,418**	**195,147**	**199,554**	**195,099**	**201,047**	**2,376,444**	**6,511**
Daily Average[b]	**6,401**	**6,505**	**6,437**	**6,503**	**6,485**	**6,511**	**-**

[a] Data are based upon revisions received as of April 1998.

[b] Includes the following offshore production (thousand barrels): Alaska: State - 96,122; California: State - 20,032; Louisiana: State - 22,774; Texas: State - 1,081; U.S. Total, including Federal Offshore - 577,488.

Note: • Production data are revised from those published in the Petroleum Supply Annual 1996 for the following States: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Federal Offshore PAD District III, Federal Offshore PAD District V, Florida, Illinois, Indiana, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, New York, North Dakota, Ohio, Oklahoma, South Dakota, Texas, Utah, West Virginia, and Wyoming. • Annual crude oil production for New York, and Pennsylvania was prorated by month based on first purchaser monthly crude oil volumes collected on Form EIA-182, "Domestic Crude oil First Purchase Report." Pennsylvania data are based on EIA estimate from form EIA-182. • Totals may not equal sum of components due to independent rounding.

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

Definitions of Petroleum Products and Other Terms

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

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

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

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

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

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

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

Asphalt. A dark-brown-to-black cement-like material containing bitumens as the predominant constituent obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Atmospheric Crude Oil Distillation. The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600° to 750° F (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

Aviation Gasoline (Finished). All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

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

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, still gas and wax to barrels are given in the definitions of these products.

Barrels Per Calendar Day. The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations:

the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;

the types and grades of inputs to be processed;

the types and grades of products expected to be manufactured;

the environmental constraints associated with refinery operations;

the reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and

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

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

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

Blending Components. See Motor or Aviation Gasoline Blending Components.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

No. 2 Distillate. A petroleum distillate which meets the specifications for No. 2 heating or fuel oil as defined in ASTM D 396 and/or the specifications for No. 2 diesel fuel as defined in ASTM Specification D 975 with distillation temperatures of 540° and 640° F at the 90-

percent recovery point, and kinematic viscosities between 2.0 and 4.3 centistokes at 100° F.

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

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

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

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

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

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

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

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

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

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

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

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

Examples:

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

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

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

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

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

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

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

Gross Input to Atmospheric Crude Oil Distillation Units. Total input to atmospheric crude oil distillation units.

Includes all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

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

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

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

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

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

Isobutane. See **Butane.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Example:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290° F at the 20-percent recovery point and 470° F at the 90-percent point, meeting Military Specification MIL-T-5624L

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

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

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

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

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

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

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

Normal Butane. See **Butane.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

RBOB. "Reformulated Gasoline Blendstock for Oxygenate Blending" is a motor gasoline blending component which, when blended with a specified type and percentage of oxygenate, meets the definition of reformulated gasoline.

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

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

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

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

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

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

Residual Fuel Oil. The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specification D396. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; No. 6, which includes Bunker C fuel oil, and is used for commercial and industrial heating, electricity generation and to power ships.

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

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

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

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

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

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

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

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

Sulfur. A yellowish nonmetallic element, sometimes known as "brimstone".

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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